Environmental Group Australia

Mirvac Residential (NSW) Developments Pty Ltd

Phase 2 Assessment Detailed Site Investigation

Western Sydney University - Milperra Campus,
Bullecourt Avenue, Milperra NSW

Report No:
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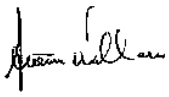
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DOCUMENT RECORD

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Document Title:	Phase 2 Assessment - Detailed Site Investigation, Western Sydney University – Milperra Campus, Milperra NSW
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Client Name:	Mirvac Residential (NSW) Developments Pty Ltd
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Prepared by Environmental Group Australia (EGA) Pty Ltd ABN: 83 671 599 143

EXECUTIVE SUMMARY

Environmental Group Australia (EGA) was engaged by Mirvac Residential (NSW) Developments Pty Ltd (the client), to undertake a Phase 2 Assessment Detailed Site Investigation for the site located at Western Sydney University – Milperra Campus, Milperra NSW (refer **Figure 1** with the 'site' boundaries outlined in **Figure 2**).

EGA has the following project appreciation:

- The entirety of the site covers an area of approximately 19.64 ha;
- The site was formerly utilised as a university campus with on-site accommodation, open space parkland, playing fields and associated infrastructure;
- The demolition of on-site structures as part of the redevelopment of site was completed across 2024 and 2025;
- The site is proposed for redevelopment comprising a low-density residential land use setting;
- Historically the site has been utilised for agricultural activities with rural-residential structures;
- A Detailed Site Investigation (DSI) was carried out for the site in December 2019 and January 2020 by Alliance Geotechnical (AG), which identified five (5) areas of environmental concern;
- A Remedial Action Plan (RAP) was prepared for the site by AG in January 2020, which identified four (4) data gaps requiring further assessment;
- A Phase 2 Assessment Detailed Site Investigation was required to address data gaps identified within AG 2022;
- Non-friable asbestos impacted soils encountered structure footprints (AEC05) during completion of the demolition scope for site across 2024 and 2025 were partially remediated to facilitate continuation of the works in those areas. These partial remediation works generated approximately 7,626 m^3 of non-friable asbestos impacted spoil which is stockpiled on site atop a geofabric layer;
- Non-friable asbestos impacted soils associated with AEC02 were partially excavated during construction of a sediment basin in the south of site. These partial remediation works generated approximately 4,156 m^3 of non-friable asbestos impacted spoil which is stockpiled on site atop a geofabric layer;
- The Phase 2 Assessment Detailed Site Investigation was partially completed in January 2024 for AEC01, AEC02 and AEC03 with sampling of AEC05 in July 2025 following completion of the demolition scope for site.

The objectives of this project were to:

- Determine the type, extent and level of contamination at the site as a result of past and current land use activities;
- Provide advice on whether the site would be suitable (in the context of land contamination) for the proposed land use setting; and
- Provide recommendations for further investigation, management and/or remediation (if warranted).

EGA undertook the following scope of works to achieve the project objective:

- Review of the previous contamination assessment prepared for the site and identify data gaps that need to be addressed;
- The preparation of a Sampling and Analysis Quality Plan (SAQP);
- Laboratory analysis of selected samples collected during the field investigation; and
- An assessment of the contamination status of the fill materials within the site and the recommendation of any further remedial requirements associated with the redevelopment of the site (if necessary).

Based on EGA's assessment of the desktop review information, fieldwork data and laboratory analytical data, in the context of the proposed redevelopment scenario, EGA makes the following conclusions:

- The detected concentrations of the contaminants of potential concern returned from the soils assessed within AEC05 are considered unlikely to present:
    - An unacceptable direct contact human health exposure risk;
    - An unacceptable vapour intrusion human health exposure risk;
    - A petroleum hydrocarbon management limit risk; or
    - An unacceptable ecological exposure risk.
- AEC01a was not accessible at the time of this data gap assessment and requires assessment within a future assessment prior to the start of remediation works;
- 6,500 m^2 of AEC05 associated with the footprints of the childcare centre and asphalt car parking within the north of site was not accessible at the time of the data gap assessment and requires assessment within a future assessment prior to the start of remediation works;
- Friable and Non-friable Asbestos Containing Materials (ACM) were identified within AEC01 during this assessment and previous contamination assessments undertaken;
- Friable and Non-Friable Asbestos Containing Materials (ACM) were identified within AEC02 during this assessment and previous contamination assessments undertaken;
- Non-Friable Asbestos Containing Materials (ACM) were identified within AEC03 during this assessment and previous contamination assessments undertaken;
- Non-Friable Asbestos Containing Materials (ACM) were identified within portions of AEC05 during this assessment and previous contamination assessments undertaken;
- Approximately 11,782 m^3 of stockpiled non-friable asbestos impacted spoil generated from partial remediation works within AEC02 and AEC05 requires further management/remediation;
- Stockpiled non-friable asbestos impacted soils associated with AEC05 require further characterisation to confirm their suitability chemically for treatment and re-use within site;
- Surficial asbestos identified within AEC01, AEC02 and AEC03 currently presents an unacceptable aesthetics risk and require further management / remediation;
- Based on the assessments undertaken as part of this investigation, EGA has concluded that the site has friable and non-friable asbestos impacted soil materials requiring remediation and further management;
- Non-friable asbestos impacted soil materials associated with AEC01, AEC02, AEC03 and AEC05 are suitable for treatment and re-use within site at depths unlikely to be disturbed as part of future site uses once the concentration of ACM has been reduced to below 0.01% w/w;
- Friable asbestos associated with AEC01 and AEC02 will require disposal off-site to a licensed waste receiving facility;
- An updated Remedial Action Plan is required to outline the remediation methodologies required to remediate the newly identified extents of contamination identified;
- Subject to remediation of the identified Areas of Environmental Concern and further assessment of data gap areas, the site can be made suitable for the proposed low-density residential development.

Based on the conclusions stated above and the background data gathered during the course of this investigation, EGA recommends:

- An updated site-wide Remedial Action Plan (RAP) is required to outline the remediation methodologies required to remediate the newly identified extents of asbestos contamination identified; and

- A supplementary contamination assessment is required within AEC01a, AEC04, AEC05, AEC06 and AEC07 prior to the start of remedial works in those areas.

This report, including its conclusions and recommendations, must be read in conjunction with the limitations presented in **Section 17.**

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ABBREVIATIONS

ANZECC	Australian and New Zealand Environment and Conservation Council
Bgs	Below ground surface
BTEX	Benzene, Toluene, Ethylbenzene, Xylene
Btoc	Below top of casing
CoC	Chain of Custody
CSM	Conceptual Site Model
DSI	Detailed Site Investigation
EIL	Ecological Investigation Level
ESL	Ecological Screening Level
EPA	Environment Protection Authority
HIL	Health Investigation Levels
HSL	Health Screening Levels
IL	Investigation Levels
LOR	[Laboratory] Limit of reporting
NATA	National Association of Testing Laboratories
N/A	Not applicable
ND	Not detected
NEPC	National Environment Protection Council
NEPM	National Environment Protection Measure
NSW EPA	NSW Environment Protection Authority
OCP	Organochlorine Pesticide
OPP	Organophosphorus Pesticide
PAH	Polycyclic aromatic hydrocarbon
PCB	Polychlorinated biphenyl
PID	Photo-ionisation detector
PSH	Phase separated hydrocarbon
PSI	Preliminary Site Investigation
QA/QC	Quality assurance/Quality control
RPD	Relative percentage difference
SAQP	Sampling Analysis and Quality Plan
EGA	Sydney Environmental Group Pty Ltd
SVOC	Semi-volatile organic compound
TPH	Total petroleum hydrocarbon
USCS	Unified Soil Classification System
UST	Underground storage tank
VOC	Volatile organic compound

1 INTRODUCTION

1.1 Background

Environmental Group Australia (EGA) was engaged by Mirvac Residential (NSW) Developments Pty Ltd (the client), to undertake a Phase 2 Assessment Detailed Site Investigation for the site located at Western Sydney University – Milperra Campus, Milperra NSW (refer **Figure 1** with the 'site' boundaries outlined in **Figure 2**).

EGA has the following project appreciation:

- The entirety of the site covers an area of approximately 19.64 ha;
- The site was formerly utilised as a university campus with on-site accommodation, open space parkland, playing fields and associated infrastructure;
- The demolition of on-site structures as part of the redevelopment of site was completed across 2024 and 2025;
- The site is proposed for redevelopment comprising a low-density residential land use setting;
- Historically the site has been utilised for agricultural activities with rural-residential structures;
- A Detailed Site Investigation (DSI) was carried out for the site in December 2019 and January 2020 by Alliance Geotechnical (AG), which identified five (5) areas of environmental concern;
- A Remedial Action Plan (RAP) was prepared for the site by AG in January 2020, which identified four (4) data gaps requiring further assessment;
- A Phase 2 Assessment Detailed Site Investigation was required to address data gaps identified within AG 2022;
- Non-friable asbestos impacted soils encountered within structure footprints (AEC05) during completion of the demolition scope for site across 2024 and 2025 were partially remediated to facilitate continuation of the works in those areas. These partial remediation works generated approximately 7,626 m3 of non-friable asbestos impacted spoil which is stockpiled on site atop a geofabric layer;
- Non-friable asbestos impacted soils associated with AEC02 were partially excavated during construction of a sediment basin in the south of site. These partial remediation works generated approximately 4,156 m3 of non-friable asbestos impacted spoil which is stockpiled on site atop a geofabric layer;
- The Phase 2 Assessment Detailed Site Investigation was partially completed in January 2024 for AEC01, AEC02 and AEC03 with sampling of AEC05 in July 2025 following completion of the demolition scope for site.

1.2 Proposed Development

The project will be delivered in stages and across two separate SSDA Projects, and comprises the construction of up to 430 dwelling houses, dual occupancies and attached dwellings, three (3) public parks, new roads and shared paths, civil infrastructure, a car park, and the management of conservation land. As the proposed future site use is redevelopment under a low-density residential setting, EGA considers it appropriate to adopt the 'HIL A – Low-Density Residential' per guidance provided in Section 2.2 of Schedule B (1) of the National Environment Protection Measure (Assessment of Site Contamination) 2013 (NEPM ASC 2013), in order to assess the site for any future proposed land use as well as the current land use.

Currently under the *State Environmental Planning Policy (SEPP) (Resilience and Hazards)* - a consent authority must not consent to the carrying out of any redevelopment unless it has considered whether the land is contaminated. An appropriately qualified consultant is required to undertake a Phase 2 Contamination Assessment of the site (including assessment outside of building structures, all carparks, gardens, parks and hardstand) to identified contamination within the site and satisfy Clause 4.6 and 4.7 of SEPP and Council planning policies.

1.3 Objectives

The objectives of this project were to:

- Determine the type, extent and level of contamination at the site as a result of past and current land use activities;
- Provide advice on whether the site would be suitable (in the context of land contamination) for the proposed land use setting; and
- Provide recommendations for further investigation, management and/or remediation (if warranted).

1.4 Scope of Work

EGA undertook the following scope of works to achieve the project objective:

- Review of the previous contamination assessment prepared for the site and identify data gaps that need to be addressed;
- The preparation of a Sampling and Analysis Quality Plan (SAQP);
- Laboratory analysis of selected soil samples collected during the field investigation; and
- An assessment of the contamination status of the fill materials within the site and the recommendation of any further remedial requirements associated with the redevelopment of the site.

2 SITE IDENTIFICATION

The site identification details and associated information are presented in **Table 2.1.**

Table 2.1. Site Identification Information

Attribute	Description
Street Address	Western Sydney University – Milperra Campus, Bullecourt Avenue, Milperra NSW
Lot and Deposited Plan (DP)	Lot 2 DP1291984 Lot 1 DP101147
Geographical Coordinates	33°56'25.876" S 150°59'26.563" E (Centre of site)
Site Area	19.64 ha
Investigation Area Size	AEC01 ≈ 1.3 ha AEC01a ≈ 1 ha AEC02 ≈ 1.7 ha AEC03 ≈ 3.2 ha AEC05 ≈ 3.7 ha
Local Government Area (LGA)	City of Canterbury-Bankstown
Parish	Bankstown
County	Cumberland
Zoning	RE1 - Public Recreation R1 - General Residential C2 - Environmental Conservation E1 - Local Centre *Canterbury-Bankstown Local Environmental Plan 2023*

The locality of the site is set out in **Figure 1**.

The general layout and boundary of the site is set out in **Figure 2**.

3 GEOLOGY, ACID SULFATE SOILS, TOPOGRAPHY AND HYDROGEOLOGY

Regional geology, topography, soil landscape and hydrogeological information are presented in **Table 3.1.**

Table 3.1. Regional Setting Information

Attribute	Description
Geology	A review of the Environment NSW 'eSpade V2.1' web application (environment.nsw.gov.au/eSpade2WebApp, accessed 10 January 2024), indicated that the site is likely to be underlain by Wianamatta Group Ashfield Shale defined as laminite and dark grey siltstone, Bringelly Shale defined as shale with occasional calcareous claystone, laminite and infrequent coal, and Minchinbury Sandstone defined as fine to medium-grained quartz lithic sandstone.
Acid Sulfate Soils	A review of the acid sulfate soil risk mapping layer accessed on the Environment NSW 'eSpade V2.1' web application (accessed 10 January 2024), indicated that the site lies in an area mapped as ***'No Known Occurrence'*** with respect to acid sulfate soils. This infers that land management activities are not likely to be affected by acid sulfate soil materials. Further assessment of acid sulfate soils in the context of this investigation is considered by EGA as not warranted.
Topography	Generally, the local landscape consists of gently undulating rises on Wianamatta Group Shale with local relief 10 – 30 m and slopes generally >5% but occasionally up to 10%.The site topography slopes downwards from the north-east to south-west corner. EGA understands that the site is located at an elevation approximately 3 m to 22 m Australian Height Datum (AHD).
Hydrology and Hydrogeology	Surface water courses proximal to the site include an unnamed tributary of Kelso Creek, located approximately 300 m south of the site, Kelso Creek located approximately 600 m south of the site, and Georges River located approximately 1.3 km south-west of the site. Based on distances to the nearest surface water course and the site topography, groundwater flow in the vicinity of the subject area within the site is considered likely to be towards the south-west. A review of the NSW Office of Water groundwater database undertaken on 16 February 2024 indicated there are seven (7) registered groundwater features located within a 500m radius of the north-eastern portion of the site; • GW113993 – groundwater monitoring bore, final drill depth 4.00 metres below ground level (mBGL), standing water level (SWL) not specified, located approximately 105 m east of the site; • GW113998 – groundwater monitoring bore, final drill depth 4.50 mBGL, SWL not specified, located approximately 150 m east of the site; • GW113994 – groundwater monitoring bore, final drill depth 5.20 mBGL, SWL not specified, located approximately 145 m east of the site; • GW113997 – groundwater monitoring bore, final drill depth 12.50 mBGL, SWL not specified, located approximately 240 m east of the site; • GW113999 – groundwater monitoring bore, final drill depth 7.00 mBGL, SWL not specified, located approximately 250 m east of the site; • GW113995 – groundwater monitoring bore, final drill depth 4.00 mBGL, SWL not specified, located approximately 278 m east of the site; and • GW113996 – groundwater monitoring bore, final drill depth 4.00 mBGL, SWL not specified, located approximately 307 m east of the site.
Adjacent Sensitive Receptors	A review of the Bureau of Meteorology Groundwater Dependent Ecosystem Map was undertaken to determine the closest sensitive ecological receptors. The closest highly dependent groundwater ecosystem was the Georges River, located approximately 1.3 km south-west of the site. The closest sensitive human receptors are the residential properties surrounding the site's boundary and any future onsite construction workers / builders.

4 Aerial Imagery

A review of selected historical aerial imagery (obtained from NSW Spatial Services, portal.spatial.nsw.gov.au and Nearmap) of the site was undertaken (Provided in **Appendix D**). Observations made of the imagery considered relevant to this investigation, are presented in **Table 4.1.1** below.

4.1 Aerial Imagery

Table 4.1.1 Aerial Imagery Observations

Image Date	Site Features	Surrounding Land Use Settings
1943	Farming / Agricultural. The site appears clear with farming / agricultural infrastructure present, particularly along the western side of the site.	Farming / Agricultural.
1947	Farming / Agricultural. Further farming / agricultural infrastructure and buildings have been constructed, with farming activities more prevalent.	Farming / Agricultural. Further farming / infrastructure development across the greater area.
1965	Farming / Agricultural Many of the buildings within the western portion of the site have been demolished, while farming activities are still evident. A larger structure has been constructed on eastern central portion of the site.	The surrounding area is becoming extensively developed with numerous industrial style buildings constructed on the north and east of the site, with residential development toward the east and west of the site. A large dam has been constructed in the southwestern portion of the site. Kelso Landfill located to the south of site commences operation.
1971	Further demolition of previous structures. The site no longer appears to be used for agricultural purposes, but is mostly vacant.	Industrial infrastructure observed to the north and east of site. Residential present to the west. The surrounding areas are now primarily residential to the west and south east, and industrial to the eastern and northern areas of the site.
1975	Redevelopment Construction of what looks to be the first university campus building is underway. The remainder of the western structures have been demolished.	Industrial and Residential. No major changes to the surrounding areas.
1978	University Campus The first university campus building has been constructed, with associated car park space. Some evidence of earthworks are present south of the building within the southern central / western portion of the site.	Industrial and Residential. No significant changes.
1984	University Campus No significant change from the previous aerial. Some minor earthworks to the south, in the area of the current oval, are still prevalent.	Industrial and Residential. No significant changes.
1986	University Campus Additional buildings have been constructed within the site, as well as car parking areas. A tennis court has been constructed in the southern portion of the site.	Industrial and Residential. No significant changes.

Image Date	Site Features	Surrounding Land Use Settings
1991	University Campus Additional buildings have been constructed within the site. Asphalt car parking areas have been constructed. A tennis court has been constructed in the southern portion of the site, and the previous dam has been filled in.	Industrial and Residential. Construction of the M5 along the southern boundary of site observed.
1998	University Campus No significant change. Some demolition of the eastern building has been carried out.	Industrial and Residential. No significant changes.
2004	University Campus Additional construction of buildings in the north-western portion of the site, as well as the eastern portion of the site.	Industrial and Residential. No significant changes.
2009	University Campus Additional construction of buildings in the north-western portion of the site.	Industrial and Residential. No significant changes.
2011	University Campus Major earthworks associated with construction of student accommodation is evident. Movement of soil materials, particularly to the southwestern and southeastern portions of the site, is evident.	Industrial and Residential. No significant changes.
2012	University Campus Construction of student accommodation is nearing completion. Further evidence of movement of soil materials to the southern portions of the site is observed.	Industrial and Residential. No significant changes.
2014	University Campus Additional construction of buildings within the western portion of the site. Construction of childcare centre in the northeastern portion of the site.	Industrial and Residential. No significant changes.
2018	University Campus No significant changes.	Industrial and Residential. No significant changes.
2024	University Campus No significant changes.	Industrial and Residential. No significant changes. Earthworks associated with construction of new industrial warehouses evident east of the site.

The aerial imagery review indicated a high potential for land contaminating activities to have occurred across the site related to uncontrolled demolition of residential / farming infrastructure, and importation of fill materials during construction of the main university building(s) and car park(s).

Neighbouring industrial land-uses to the north and east of site posed a potential source of groundwater contamination, warranting further assessment.

Putrescible waste accepted by the landfill to the south of site poses a potential source of land-fill gas within the southern portion of site, warranting further assessment.

5 PREVIOUS ASSESSMENTS

EGA note that Coffey (2011), Noel Arnold and Associates (NAA 2011), EIS (2016) and JBS&G (2018) were not provided for review by EGA. As such, EGA have relied on the information outlined within AG (2022) for a summary of the works undertaken. The following reports have been prepared for the site:

- Coffey (Coffey 2011), 'Phase 2 Environmental Site Assessment – Student Residence Development University of Western Sydney, Bankstown Campus', dated 25 August 2011, Ref: GEOTLCOV24163AG-AB;
- Noel Arnold and Associates (NAA 2011), 'Soil Contamination Investigation, University of Western Sydney – Bankstown Campus Bullecourt Avenue, Milperra NSW', dated October 2011, Ref: SJ0085:95458;
- Environmental Investigation Services (EIS 2016), 'Preliminary Contamination Screening and Waste Classification, Proposed Oval Facilities, UWS Bankstown Campus, 2 Bullecourt Avenue, Milperra' dated 7 April 2016, no report ref provided;
- JBS&G (JBS&G 2018), 'Phase 1 Environmental Assessment Report, Bullecourt Avenue, Milperra NSW', dated 30 January 2020, Ref: 9996-ER-1-1;
- Alliance Geotechnical (AG 2020), 'Detailed Site Investigation, Western Sydney University – Milperra Campus, Bullecourt Avenue, Milperra NSW', dated 30 January 2020, Ref: 9996-ER-1-1;
- Alliance Geotechnical (AG 2022), 'Remedial Action Plan, Western Sydney University – Milperra Campus, Bullecourt Avenue, Milperra NSW', dated 30 January 2020, Ref: 9996-ER-2-1.

A summary of the previous contamination assessments is provided in **Sections 5.1** to **5.6** below.

5.1 Coffey 2011, Phase 2 Environmental Site Assessment

For the purposes of this Phase 2 Environmental Site Assessment (P2 ESA), Coffey assumed the site boundary comprised approximately 1.5ha. At the time of reporting, it was subsequently understood that the proposed student residence development was to extend further to the east and cover an area of approximately 3ha.

Coffey understood that UWS required a P2 ESA to support a development application (DA) to Bankstown City Council.

The objectives of the assessment were to:

- Assess the acid sulfate soil status of the site based on a review of risk map and field observations;
- Assess the contamination status of the site by undertaking sampling and testing of soil; and
- Provide recommendations for further investigation/remediation requirements (if any) for the site to be suitable for the proposed student accommodation development.

The scope of work undertaken included:

- Fieldwork including soil sampling;
- Laboratory testing; and
- Data assessment and reporting.

Based on the site history information and visual observations, a number of Areas of Environmental Concern (AECs) and Chemicals of Potential Concern (COPCs) were identified. The identified AECs and associated CoPCs are presented in **Table 5.1.1** overleaf.

Table 5.1.1 AECs and associated COPC

Potential Areas of Concern	Chemicals of Potential Concern	Extent of Contamination
Southern end of the site – building rubble burial	TPH, PAH, Metals, Asbestos	Building rubble was buried up to 3 m to 4 m below the site surface.
Former farm dam – potential contaminated fill	TPH, BTEX, PAH, OCP, Metals, Asbestos	Potentially contaminated fill could have been used to backfill the dam
Whole site – use of pesticides for pest/weed control	OCP, Metals	Chemical application (such as pesticides) was commonly used in historical farming activities. Contamination, if present, is likely to be localised near the surface and minor.
Whole site – hazardous building materials	Asbestos, Lead	Historical fam sheds/houses could contain asbestos and lead paint. Weathering, leaching and spreading (during demolition) of material would likely to be localised in the near surface.
Existing Building Footprints (inaccessible)	Uncontrolled Filling	Metals, PAH, BTEX, TRH, PCB, OCP/OPP, Phenols and Asbestos

A total of twenty-five (25) boreholes were cored across the site on 11 and 12 July 2011, and samples submitted to a NATA accredited laboratory for analysis of CoPC.

Analytical results indicated the contaminant concentrations were less than the adopted site criteria, with the exception of:

- Asbestos, which was detected at six (6) locations across the site.

Coffey recommended additional assessment to be undertaken to further characterise the asbestos impact and to assist in the selection of remedial/management options.

5.2 NAA 2011, Soil Contamination Investigation

NAA was commissioned by JDH Architects to undertake a Soil Contamination Investigation (SCI) in an area in the northeast of the Bankstown Campus at the University of Western Sydney - Bankstown Campus located at Bullecourt Avenue, Milperra NSW (the site). The portion of the site investigated in NAA (2011) was approximately 2,500m2 in area and resided to the north of the existing P2 car park at the Bankstown Campus. The proposed redevelopment comprised construction of a single storey childcare facility with adjacent car parking facilities.

The objectives of the SCI were to provide information on the extent and nature of contamination (if any) within the fill/soil material at the site and to assess the suitability of the site for the proposed land-use as a childcare facility.

NAA undertook the following scope of works to achieve the project objectives:

- Prepare a safe work method statement for works to be conducted at the site;
- Complete a site inspection and a comprehensive site walkover;
- Conduct grid-based sampling pattern by the hand augering of eight locations within the boundaries of the site. Hand augering was undertaken to a maximum depth of approximately 1.2m below ground surface with sampling conducted at varying depths through the fill/soil profile;

- Collect seventeen (17) soil samples;
- Conduct NATA-certified laboratory-based analysis of soil; and
- Prepare a SCI report.

Based on the findings of the investigation, NAA concluded the following:

- Hotspots of lead contamination at locations BH3 0.0-0.2m and S2 0.0-0.1m were identified during an intrusive investigation previously undertaken by Coffey (AG were not provided this report);
- Concentrations of cadmium (BH3 0.0-0.2m) and zinc (BH3 0.0-0.2m, S2 0.0-0.1m and S7 0.0-0.1m) have been found to exceed the adopted Provisional Phytotoxicity Investigation Levels (PPIL);
- The site was unsuitable for the proposed land use as a childcare facility due to the presence of hotspots of lead contamination which may present a risk to human health if not appropriately managed;
- Exceedances of PPILs have also been reported at these locations and can be addressed as part of the management of the lead hotspots; and
- A marginal exceedance of zinc concentrations when compared with the PPIL was recorded at S7 0.0-0.1m. Given the marginal nature of this exceedance, it does not impact upon the suitability of the site for the proposal land use as a childcare facility.

Based on these conclusions, NAA 2011 made the following recommendations:

- Given the shallow nature of the impacted material, it was assumed that this material will be excavated and removed from site during the course of site preparation works (e.g. stripping back of topsoil material) for the purposes of redevelopment;
- Fill/soils to be removed offsite for disposal should be classified in accordance with NSW EPA Waste Classification Guidelines (2014) and should be disposed of at an appropriately licenced landfill facility;
- Following site preparation works, a suitably qualified Environmental Consultant should return to site to collect validation samples of the area of concern (in vicinity of BH3, S2 and S7) in order to confirm acceptable residual concentrations of heavy metals are present with respect to the adopted HIL and PPIL and that the site is suitable for the intended land use; and
- If it is determined that site preparation works will not result in the excavation and removal of the shallow material at BH3 0.0-0.2m and S2 0.0-0.1m, remediation works will be required. In this event, it is recommended that a Remedial Action Plan (RAP) be developed to address remediation of the hotspots of contamination identified.

5.3 EIS 2016, Preliminary Contamination Screening and Waste Classification

Burtenshaw Scoufis Architecture + Interiors commissioned Environmental Investigation Services (EIS) to assign a waste classification to in-situ soil adjacent to the west of the athletics track located at 2 Bullecourt Avenue, Milperra NSW.

The aim of the investigation was to assess soil contamination issues at the site and to provide a waste classification for the material to be excavated for the proposed oval development.

The scope of work included the following:

- Review of available geological information;
- Soil sampling from three boreholes;
- Interpretation of the analytical results against the adopted Site Assessment Criteria (SAC); and
- Preparation of a letter report presenting the results of the investigation.

All results were below the site assessment criteria (SAC) adopted for the site. Overlying fill soils were classified as General Solid Waste (Non-putrescible) and underlying natural soils were classified as Virgin

Excavated Natural Material (VENM). Based on this data, EIS concluded that the risk of widespread significant soil contamination in the development area was relatively low. The fill and natural soil material assessed was considered by EIS to be suitable for re-use on the subject site, provided it meets geotechnical and earthwork requirements.

5.4 JBS&G 2018, Phase 1 Environmental Assessment Report

JBS&G Australia Pty Ltd (JBS&G) was engaged by Western Sydney University (WSU) (the client) to prepare a Phase 1 Environmental Assessment Report for the WSU Milperra Campus located off Bullecourt Avenue, Milperra NSW (the site). Based on current Master Plan concepts for the Milperra Campus, JBS&G understood WSU intends to create an integrated living and working precinct with a range of land uses including medium to high density residential, mixed use, retail, community, open space and conservation areas at the site.

The objective of the investigation was to assess the potential for contamination relating to historical and current land use activities at the site to constrain the intended development objectives, and to make recommendations for further investigations and or remediation to achieve intended land uses of the development.

To meet the project objectives, JBS&G carried out the following scope of works:

- Review of available council documentation, aerial photographs, legal title information, EPA records and heritage records to identify areas of environmental concern (AECs) and associated contaminants of potential concern (CoPC);
- Review of site setting including topography, hydrology, hydrogeology and geology;
- Review of records of environmental incidents or former environmental licences held by the NSW EPA;
- A detailed site inspection of accessible areas to identify potential AECs and CoPC not identified in the historical record review;
- Development and documentation of a conceptual site model (CSM);
- Limited soil sampling and analysis of soil samples for a range of CoPC;
- Assessment of soil sampling and analysis results against EPA endorsed guideline criteria for residential land use; and
- Preparation of the Phase 1 Environmental Site Assessment report in general accordance with guidelines made or approved by the NSW EPA.

Surrounding land use at the time of JBS&Gs site walk over was comprised of the following:

- North: Bullecourt Avenue with commercial / industrial land-use beyond including a service station to the north-west;
- East: Mount Saint Joseph's High School and Horsley Road with commercial / industrial land-use beyond;
- South: The South Western Motorway (M5) with Kelso Landfill beyond; and
- West: Ashford Avenue with residential land-use beyond.

A SafeWork NSW search of the Stored Chemical Information Database (SCID) and the microfiche records held by SafeWork was requested. Information provided by SafeWork NSW included details on a number of abandoned (2) underground storage tanks (USTs) formerly located in the central eastern section of the site. Review of the SafeWork NSW documentation indicated the 2 x 2,500L USTs were removed on Friday 19 December 1997 by Email Petroleum Systems.

Based on site history review and observations during the site walkover, JBS&G identified the following AEC and associated CoPC presented in **Table 5.4.1** below.

Table 5.4.1 AECs and associated COPCs

Areas of Environmental Concern (AECs)	Contaminants of Potential Concern (CoPCs)
Demolition of historical site structure that may have contained hazardous building materials	Heavy metals, lead and asbestos
Surface soils impacted with herbicides/pesticides due to the maintenance of site from noxious weeds/pests	OCPs
Fill materials across the site, potential imported to site	Heavy metals, TRH, BTEX, PAH, OCPs, PCBs and asbestos
Burial area (fill material)	Heavy metals, TRH, BTEX, PAH, VOCs
Landfill gas along the southern boundary adjacent the Kelso Landfill	Methane and other landfill gases (LFG)

Based on the unidentified sources of fill material potentially imported to the site to backfill/raise topographic features and the potential for fill material at the site to contain waste materials associated with demolition of historical buildings potentially containing asbestos and/or lead paint, fill materials must be considered a potential contaminated medium. Due to the age of some existing site structures, it is possible that they may contain hazardous building materials including asbestos and lead based paints. Soils immediately surrounding buildings are considered as potentially contaminated medium.

In addition, buildings containing asbestos and / or lead paint which may have been demolished without appropriate controls may have also impacted surface soils. Surface soils must also therefore be considered a potential contaminated medium.

Based on the suspected depth of groundwater >8 m bgs, the likelihood of contamination of groundwater as a result of activities at the site is considered to be low. Based on the presence of the landfill site to the south and the nearby commercial/industrial properties to the north and east, there is potential for groundwater to be impacted as a result of offsite activities.

Given the relatively close proximity of the landfill to the south of the site, landfill gas has the potential to be a contaminated medium in the southern portion of the site.

JBS&G carried out a limited detailed site inspection and investigation. During the detailed site inspection JBS&G noted the observation of topography for potential adjustments in ground levels due to filling, presence of waste material such as asbestos containing material (ACM) on the ground surface and on external surfaces of structures and potential chemical/fuel storage, use or spillage.

On 23 August 2017, ten surface samples were collected from the site using a hand auger and forwarded to a NATA accredited laboratory for analysis of heavy metals, PAH, asbestos (NEPM 500ml) and OCPs. During soil sampling, a geotechnical fabric layer was identified below the ground surface at sampling point SS10.

Analytical results indicated the contaminant concentrations were less than the adopted site criteria, with the exception of:

- SS10 – asbestos fibres/fibrous asbestos (AF/FA) detected at 0.02% w/w above the adopted HSL site criteria 0.001% w/w.

Based on the findings of this investigation, JBS&G made the following conclusions:

- The site has historically been used for a combination of agricultural and residential uses prior to development of the university;

- There is the potential for impacts to soil as a result of the demolition of former building structures potentially containing hazardous building materials, including asbestos and lead paint. This was confirmed by the identification of asbestos at sampling point SS10 and review of the Coffey 2011 Phase 2 Environmental Site Assessment Report, which also identified and recommended management of asbestos in soil;
- There is the potential for presence of imported fill material of unknown origin to have been used during historical construction activities at the site; and
- Based on the presence of the landfill site to the south and the nearby commercial industrial properties to the north, northwest and east, there is considered to be a potential for contaminated groundwater and landfill gas migration to have impacted the site.

Based on these conclusions, JBS&G recommended a detailed site investigation (DSI) is undertaken for the site in order to assess the extent and degree of contamination at the site and to provide an assessment of risk posed by site contaminants to human and environmental health. In addition to the DSI, JBS&G recommended a hazardous building material survey be completed prior to commencement of redevelopment works such that materials identified as comprising lead paint and or asbestos may be appropriately managed with regard to exposure risks to site workers and future building occupants.

5.5 AG 2020, Detailed Site Investigation

Alliance Geotechnical Pty Ltd (AG) was engaged by Mirvac Residential (NSW) Developments Pty Ltd to conduct a Stage 2 Detailed Site Investigation (DSI) for the property located at Western Sydney University – Milperra Campus, Milperra NSW.

AG had the following project appreciation:

- The site was an active campus of Western Sydney University;
- The investigation was limited to areas outside of building structures and discretion was required in active areas of the site;
- The site was proposed for rezoning and subdivision to facilitate residential development. It was understood that this will comprise demolition of the existing university campus and construction of a low-density residential development; and
- A Detailed Site Investigation was required to accompany the development application.

The primary objectives of this investigation were;

- To assess the potential for contamination to be present on the site in available / accessible areas as a result of past and current land use activities;
- To provide advice on whether the site would be suitable (in the context of land contamination) for the proposed land use setting; and
- To provide recommendations for further investigation, management and/or remediation (if warranted).

AG undertook the following activities to address the project objectives:

- A desktop review of relevant information pertaining to the site;
- A site walkover to understand current site conditions;
- Conduct an intrusive site investigation via hydraulic excavator, drill rig and hand auger to establish ground conditions, facilitate the collection of representative soil and groundwater samples and install groundwater monitoring wells;
- Laboratory analysis of selected soil and groundwater samples collected during the field investigation; and
- An assessment of the contamination status of the site and preparation of a DSI in accordance with the Guidelines for Consultants Reporting on Contaminated Sites, 2011.

Based on evidence assessed as part of the investigation, AG made the following conclusions;

- The detected concentrations of contaminants of potential concern in groundwater are considered unlikely to present a risk to surrounding aquatic environments;
- The detected concentrations of contaminants of potential concern in groundwater are considered unsuitable for discharge to municipal stormwater without further treatment / assessment;
- The detected concentrations of contaminants of potential concern in the soil samples analysed are considered unlikely to present a risk an unacceptable direct contact human health exposure risk;
- The detected concentrations of asbestos fines / friable asbestos and non-friable asbestos containing materials in the soil samples analysed are considered likely to present a risk an unacceptable direct contact human health exposure risk;
- The detected concentrations of contaminants of potential concern in the soil samples analysed are considered unlikely to present a risk an unacceptable inhalation / vapour intrusion exposure risk;
- The detected concentrations of contaminants of potential concern in the soil samples analysed are considered unlikely to present a risk an unacceptable TPH management limit exposure risk; and
- The detected concentrations of contaminants of potential concern in the soil samples analysed are considered unlikely to present a risk an unacceptable aesthetic risk.

The following areas of environmental concern were identified:

Table 5.5.1 Areas of Environmental Concern (AG 2020)

ID	Area of Environmental Concern	Land Use Activity	Contaminants of Potential Concern
AEC01	Friable / Non-Friable Asbestos and Heavy Metal impacted Surficial and Fill Soils	Uncontrolled Filling	Asbestos, Lead, Cadmium and Zinc
AEC02	Friable Asbestos impacted Fill Soils	Uncontrolled Filling	Asbestos
AEC03	Non-Friable Asbestos impacted Surficial and Fill Soils	Uncontrolled Filling	Asbestos
AEC04	Potential Underground Storage of Petroleum Products Onsite (JBS&G 2018)	Uncontrolled Fuel / Oil Spillage	Metals, PAH, BTEX and TRH
AEC05	Existing Building Footprints (inaccessible)	Uncontrolled Filling	Metals, PAH, BTEX, TRH, PCB, OCP/OPP, Phenols and Asbestos

Based upon conclusions made, AG recommended the following;

- A further supplementary contamination assessment should be considered to further understanding of nature and extent of contamination identified onsite and address data gaps presented by building footprints, inaccessible areas and building footprints;
- Preparation of a Remedial Action Plan (RAP) is required to detail the works needed to adequately delineate, remediate and validate the areas of concern that present an unacceptable contamination risk;
- If groundwater is expected to be encountered during the proposed development, a groundwater management plan would be required;
- The preparation of any supplementary contamination assessments, remedial action plans and/or groundwater management plans should be completed by an appropriately experienced environmental consultant;

- As per NSW WHS Regulations, any removal of friable asbestos requires the engagement of a Class A licensed asbestos removalist and a pre-notification to SafeWork NSW, with accompanying air monitoring during the works and clearances post completion to be conducted by a licensed asbestos assessor (LAA);
- Following remediation of the identified contamination, validation sampling and a site validation report will be required to confirm the effectiveness of the remedial works; and
- Any soil proposed for disposal should be classified and disposed of as per the NSW EPA Waste Classification Guidelines, 2014 with all disposal documentation retained by the client for inclusion within the site validation report.

5.6 AG 2022 – Remedial Action Plan

Alliance Geotechnical Pty Ltd (AG) was engaged by Mirvac Residential (NSW) Developments Pty Ltd to prepare a Remedial Action Plan (RAP) for the property located at Western Sydney University – Milperra Campus, Milperra NSW.

AG had the following project appreciation:

- The site was an active campus of Western Sydney University;
- The investigation was limited to areas outside of building structures and discretion was required in active areas of the site;
- The site was proposed for rezoning and subdivision to facilitate residential development. It was understood that this will comprise demolition of the existing university campus and construction of a low-density residential development; and
- A Detailed Site Investigation (DSI) was carried out for the site by AG in 2020, which recommended a supplementary contamination assessment to understand the nature and extent of contamination identified onsite and address data gaps presented by building footprints, previous contamination assessments and inaccessible areas of environmental concern; and
- The DSI also concluded that a RAP be prepared in order to detail the works needed to adequately delineate, remediate and validate the areas of concern that present an unacceptable contamination assessment.

The following Sampling Analysis Quality Plan (SAQP) was prepared for the data gap assessment required prior to remediation works.

Table 5.6.1 Data Gap Assessment SAQP (AG 2022)

ID	Area of Environmental Concern	Area (m^2)	Methodology	Analytes
Detailed Asbestos Gravimetric Assessment				
AEC01	Friable / Non-Friable Asbestos impacted Surficial and Fill Soils	12,800	Forty-six (46) sampling points, 10 L sample required every 1 m from surface, 500 ml sub-sample for quantitative asbestos analysis.	Asbestos
AEC02	Friable Asbestos impacted Fill Soils	17,100	Fifty-four (54) sampling points, 10 L sample required every 1 m from surface, 500 ml sub-sample for quantitative asbestos analysis.	Asbestos
AEC03	Non-Friable Asbestos impacted Surficial and Fill Soils	18,240	Eighty-four (84) sampling points, 10 L sample required every 1 m from surface, 500 ml sub-sample for quantitative asbestos analysis.	Asbestos
Remaining areas of site	Potential Asbestos impacted Soils	80,000	Forty-seven (47) sampling points, 10 L sample required every 1 m from surface, 500 ml sub-sample for quantitative asbestos analysis.	Asbestos

ID	Area of Environmental Concern	Area (m^2)	Methodology	Analytes
Heavy Metal / Asbestos Gravimetric Assessment				
AEC01a	Heavy Metal impacted Surficial and Fill Soils	1,000	Six (6) sampling points, 10 L sample required every 1 m from surface, 500 ml sub-sample for quantitative asbestos analysis.	Lead, Cadmium and Zinc
Chemical Characterisation / Asbestos Gravimetric Assessment				
AEC05	Post Demolition Assessment	37,000		

Based on the data reviewed during the preparation of the RAP, AG concluded the land could be made suitable for the proposed future land use subject to completion of the following;

- Preparation of a SAQP prior to commencement of data gap assessment;
- Implementation of the strategies, methodologies and measures set out in this RAP;
- Should newly identified unacceptable land contamination risks be identified during supplementary assessment works, an addendum to this RAP may be required. The addendum should be prepared by a suitably experienced environmental consultant;
- Prior to any removal of soils from site for offsite disposal during remedial works, waste classification for those soils should be prepared by a suitably experienced environmental consultant. Residual impacted fill materials must also be appropriately characterised as per the strategy outlined in this RAP;
- AG recommends that any waste classifications, remediation monitoring and validation works be undertaken by a suitably experienced environmental consultant;
- It is recognised that contamination risks may remain on the site. If so, a LT-EMP will document areas where residual contamination is present on the site, and information on management measures that have been adopted. Provisions contained in the LT-EMP will need to have a mechanism to be legally enforceable and will be publicly notified. A revised RAP will be prepared to document where and how management measures will be implemented, and how a LTEMP can be made legally enforceable.

6 DATA INTEGRITY ASEGASSMENT

EGA has relied on the following sources of data while undertaking this investigation:

- EGA's field observations during the site walkover;
- City of Canterbury-Bankstown;
- Department of Land and Water Conservations;
- Department of Minerals and Energy;
- Department of Primary Industries – Water;
- Australian Soil Resource Information System;
- Google Earth;
- National Environment Protection Council;
- Nearmap;
- NSW Environment Protection Authority;
- NSW Land and Property Information; and
- Previous Contamination Assessments.

Based on EGA's experience and professional judgement, the data obtained from the sources relied upon, is considered to be adequately precise, accurate, representative, complete and comparable within the objectives of this investigation and for the purpose of drawing conclusions regarding land contamination risks at the site.

7 CONCEPTUAL SITE MODEL DEVELOPMENT

7.1 Potential Areas of Environmental Concern

The review of site history, previous contamination assessments and site walkover observations were assessed within the objectives of this investigation and in the context of the proposed development works. That assessment identified areas of environmental concern (AEC) and contaminants of potential concern (COPC) which have the potential to be present on site. The AEC identified and associated COPC are presented in **Table 7.1.1.**

Table 7.1.1 PAEC and COPC

ID	Area of Environmental Concern	Land Use Activity	Contaminants of Potential Concern
AEC01	Friable / Non-Friable Asbestos Impacted Fill Soils	Uncontrolled Filling	Asbestos
AEC01a	Lead, Cadmium and Zinc Impacted Fill Soils	Uncontrolled Filling	Lead, Cadmium and Zinc
AEC02	Friable Asbestos Impacted Fill Soils	Uncontrolled Filling	Asbestos
AEC03	Non-Friable Asbestos Impacted Fill Soils	Uncontrolled Filling	Asbestos
AEC04*	Former Underground Storage or Petroleum-Based Product Onsite	Unleaded Petrol & Diesel Tanks	Heavy Metals, TRH, PAH, VOC/SVOC, Phenols
AEC05	Building Footprints	Uncontrolled Filling	Metals, PAH, BTEX, TRH, PCB and Asbestos
AEC06*	Migration of Landfill Gas	Landfill Activities South of the Site	Methane, Carbon Dioxide, Carbon monoxide, Hydrogen sulphide
AEC07*	Adjacent Industrial Land Use to the North and North-East of the Site	Industrial Activities North and North-East of the Site	Heavy Metals, TRH, BTEX, PAH, VOC, OCP/OPP, PCB, PFAS, inorganic compounds
AEC08	Risk of redundant fibre cement conduits and septic tanks within the site footprint	Former rural residential land-uses	Metals, PAH, BTEX, TRH, Asbestos, OCPs, E.Coli and Thermotolerant Coliforms
AEC09	Risk of asbestos contamination within the site footprint	Former rural residential land-use Historical importation of fill materials Hazardous building materials Historical demolition of on-site structures	Asbestos

Notes: *Not subject to assessment as part of this investigation, will require further investigation and management in-line with the site RAP.

The potential contamination pathways are considered to be as follows:

- Inhalation/ingestion of contaminants released in dust during redevelopment by site workers;
- Direct contact, ingestion or inhalation of soil by future site inhabitants; and
- Migration of landfill gases through pressure gradients or dissolved in groundwater.

Relevant potential receptors are considered to include:

- Onsite construction and maintenance workers;
- Third parties during construction (adjacent site users and adjacent residents);
- Onsite flora and fauna;
- Groundwater and surface water;
- Future residents/end users; and
- Neighbouring residential land users.

7.2 Land Use Setting

EGA understands that the site was originally utilised within a rural residential land-use setting before development of the educational establishment which pre-dated the current development. On-site structures have been demolished as part of the redevelopment of site. The site is proposed for redevelopment within a low-density residential land use setting.

As the proposed future site use is redevelopment under a low-density residential land use setting, EGA considers it appropriate to adopt the 'HIL A – Low-Density Residential' per guidance provided in Section 2.2 of Schedule B (1) of the National Environment Protection Measure (Assessment of Site Contamination) 2013 (NEPM ASC 2013), in order to assess the site for any future proposed land use as well as the current land use.

7.3 Drinking Water Use

There are no groundwater bores onsite or within a 500 m radius of the site, registered for drinking water use. Additionally, the salinity of the groundwater within Sydney shales is known to be largely above the levels suitable for drinking. Therefore, further assessment of this groundwater drinking water value is considered not warranted.

7.4 Recreational Water Use

Surface water courses proximal to the site includes Kelso Creek, located approximately 300 m south of the site, Kelso Creek located approximately 600 m south of the site, and Georges River located approximately 1.3 km south-west of the site.

Based on the previous contamination assessments, there is limited concern for contaminants of concern reaching nearby waterways and as such, this value will not be considered further during this assessment.

7.5 Aquatic Ecosystems

Surface water courses proximal to the site include Kelso Creek, located approximately 300 m south of the site, Kelso Creek located approximately 600 m south of the site, and Georges River located approximately 1.3 km south-west of the site.

Based on the previous contamination assessments, there is limited concern for contaminants of concern reaching nearby waterways and as such, this value will not be considered further during this assessment.

7.6 Direct Contact – Human Health

EGA notes that the proposed development includes building footprints and hardstand pavement areas across some of the site, which would act as a direct contact barrier between potential land contamination and onsite receptors during operation of the site. However, it is understood that majority of the site will remain as open space / landscaping areas.

The open space turfed / landscaping areas would act as a direct contact barrier assuming intrusive disturbance of the physical barrier was not undertaken following installation. During construction, the public and construction employees, may complete the direct contact exposure pathway between potential contamination and receptors.

Previously identified heavy metals impacts within the north-east of site present an unacceptable direct contact risk and require further management in the form of remediation.

EGA recommends a pragmatic approach during the course of any required intrusive / excavation works. If contamination is suspected, works should stop, an unexpected finds protocol should be followed and further investigation of the fill materials should be carried out by a suitably qualified environmental consultant.

7.7 Inhalation / Vapour Intrusion – Human Health

In order for a potentially unacceptable inhalation / vapour intrusion human health exposure risk to exist, a primary vapour source (e.g. underground storage tank) or secondary vapour source (e.g. significantly contaminated soil or groundwater) must be present onsite. JBS&G (2018) noted that two 2,500L underground storage tanks previously located within the site were removed in 1997, further consideration to the vapour intrusion risk is necessary in assessing the residual risk that may be posed by the surrounding soils.

Review of the previous contamination assessments indicated a moderate likelihood for a potential primary source of landfill gases to be present immediately adjacent to the site associated with Kelso Landfill. Further assessment of the human health inhalation risk posed by migration of potential landfill gases from the landfill require further assessment (refer to **section 7.11**).

The historical evidence reviewed indicated a high likelihood for the presence of asbestos containing materials to be present at the site in the form of friable and non-friable asbestos throughout the site footprint. As such, further investigation is warranted as part of this data gap assessment, to determine the presence and extent of the asbestos contamination at the site.

7.8 Aesthetics

The aesthetic criteria adopted for the site comprises the following:

- Fill material remaining on-site to contain no demolition or other types of anthropogenic material greater than trace quantities (>5%);
- No odorous or stained materials remaining on-site; and
- No remains of dead animals remain on-site.

Redundant services, conduits, septic systems to be removed where encountered and any staining/odours associated with these are to also be removed.

EGA notes that the proposed development includes building footprints and hardstand pavement areas across some of the site, which would act as a direct contact barrier. The open space turfed areas would act as a direct contact barrier assuming intrusive disturbance of the physical barrier was not undertaken following installation.

During construction, the public and construction employees, may complete an aesthetics exposure pathway between potential contamination and receptors.

Due to the known presence of asbestos containing materials on-site within surficial and fill soils, further consideration of this value is warranted.

7.9 Ecological Health - Terrestrial Ecosystems

Section 3.4.2 of Schedule B1 NEPM ASC 2013, advises a pragmatic risk-based approach should be taken in applying ecological investigation levels and ecological screening levels in residential and commercial / industrial land use settings.

EGA notes that the proposed development would include landscaped areas on site as it is understood majority of the site will remain undeveloped.

Due to the presence of these areas and the presence of elevated heavy metals within soil materials at the site, further consideration to onsite and adjacent ecological receptors is warranted.

7.10 Management Limits for Petroleum Hydrocarbon Compounds

NEPM ASC 2013 notes that there are a number of policy considerations which reflect the nature and properties of petroleum hydrocarbons:

- Formation of observable light non-aqueous phase liquids (LNAPL);
- Fire and explosive hazards; and
- Effects on buried infrastructure (e.g. penetration of or damage to, in-ground services by hydrocarbons).

Schedule B1 of NEPM ASC 2013 includes 'management limits' to avoid or minimise these potential effects. Application of the management limits requires consideration of site-specific factors such as the depth of building basements and services and depth to groundwater, to determine the maximum depth to which the limits should apply. NEPM ASC 2013 also notes that management limits may have less relevance at operating industrial sites which have no or limited sensitive receptors in the area of potential impact, and when management limits are exceeded, further site-specific assessment and management may enable any identified risk to be addressed.

7.11 Landfill Gas

Putrescible waste accepted by the Kelso Landfill located to the south of site poses a potential source of Landfill gases within the southern portion of site. Landfill gases have the potential to migrate along pressure driven flows, as well as traveling in groundwater once dissolved. These pathways have not been investigated and require further assessment in the form of landfill ground gas monitoring within the south of site.

8 SITE ASSESSMENT CRITERIA

Taking into consideration the objectives of this project, and the conceptual site model and land use setting presented in **Section 7** of this project, the following assessment criteria have been adopted for this project:

- Human health direct contact – HILs in Table 1A (1) in NEPM ASC 2013 and HSLs in Table A4 of CRC Care Technical Report no. 10 appendix A. Part 1: Technical development document (2011);
- Human health inhalation/vapour intrusion – HSLs in Table 1 (A) in NEPM ASC 2013;
- Human health (asbestos) – absence / presence for preliminary screening, and no visible ACM on surface;
- Petroleum hydrocarbon compounds (management limits) – Table 1 B (7) of NEPM ASC 2013;
- Ecological Investigation and Screening Levels as calculated per NEPM ASC 2013 Table 1 (B) 1-6; and
- Aesthetics – no highly malodorous site media (e.g. strong residual petroleum hydrocarbon odours, hydrogen sulphide in site media, organosulfur compounds), no hydrocarbon sheen on surface water, no discoloured chemical deposits or soil staining with chemical waste other than of a very minor nature, no large monolithic deposits of otherwise low risk material (e.g. gypsum as powder or plasterboard, cement kiln dust), no presence of putrescible refuse including material that may generate hazardous levels of methane such as a deep-fill profile of green waste or large quantities of timber waste, and no soils containing residue from animal burial (e.g. former abattoir sites).

A summary of the site adopted criteria utilised for this assessment, is presented in **Appendix B**.

9 DATA QUALITY OBJECTIVES

NEPM ASC 2013 provides guidance on the development of data quality objectives (DQO) using a seven-step process. The DQO for this project are set out in **Sections 9.1** to **9.7** of this report. EGA notes AG (2022) outlined Validation Data Quality Objectives for validation works and as such, EGA has adopted those DQOs for the detailed site investigation.

9.1 Step 1: State the problem

The first step involves summarising the contamination problem that requires new environmental data and identifying resources available to solve the problem.

The objectives of this project are to:

- Assess the potential for contamination to be present on the site as a result of past and current land use activities;
- Provide advice on whether the site would be suitable (in the context of land contamination) for the proposed land use setting; and
- Provide recommendations for further investigation, management and/or remediation (if warranted).

The project is being undertaken because:

- The site is proposed for low-density residential development, comprising removal of existing structures and redevelopment; and
- Asbestos containing materials have been detected within previous contamination assessments and the full extent and condition of the materials is currently unknown;
- A Supplementary Contamination Assessment to address data gaps identified within AG (2022) to further inform remediation strategies.

The project team identified for this project consists of suitably experienced environmental consultants from EGA.

The regulatory authorities identified for this project include NSW EPA and City of Canterbury-Bankstown.

9.2 Step 2: Identify the decision/goal of the study

The second step involves identifying decisions that need to be made about the contamination problem and the new environmental data required to make them.

The decisions that need to be made during this project include:

- Is the environmental data collected for the project, suitable for assessing relevant land contamination exposure risks?
- Do the concentrations of identified contaminants of potential concern (COPC) present an unacceptable exposure risk to identified receptors, for the proposed land use setting?
- Is the site suitable for the proposed land use setting, in the context of land contamination?

9.3 Step 3: Identify the information inputs

The third step involves identifying the information needed to support decisions and whether new environmental data will be needed.

The inputs required to make the decisions set out in **Section 9.2** for this project, will include:

- Data obtained during searches of the site's history;
- The nature and extent of sampling at the site, including both density and distribution;
- Samples of relevant site media;
- The measured physical and/or chemical parameters of the site media samples (including field screening and laboratory analysis, where relevant); and
- Assessment criteria adopted for each of the media sampled.

The site adopted criteria is presented in **Section 8** and **Appendix B**.

9.4 Step 4: Define the boundaries of the study

The fourth step involves specifying the spatial and temporal aspects of the environmental media that the data must represent to support decisions.

The spatial extent of the project will be limited to the subject investigation area as defined by its boundaries (refer **Figure 2**).

The temporal boundaries of the project include:

- The project timeframe presented in the EGA proposal for this project;
- Unacceptable weather conditions at the time of undertaking fieldwork, including rainfall, cold and/or heat;
- Access availability of the site (to be defined by the site owner/representative); and
- Availability of EGA field staff (typically normal daylight working hours, Monday to Friday).

The lateral extent that contamination is expected to be distributed across, based on the conceptual site model, is defined by the inferred boundaries of the areas of environmental concern (AEC).

The vertical extent that contamination is expected to be distributed across, based on the conceptual site model and the project scope, is likely to be limited to shallow soils and fill material within the site.

The scale of the decisions required will be based on the entire site.

Constraints which may affect the carrying out of this project may include access limitations, presence of above and below ground infrastructure, and hazards creating health and safety risks.

9.5 Step 5: Develop the analytical approach (or decision rule)

The fifth step involves defining the parameter of interest, specifying the action level, and integrating information from Steps 1 to 4 into a single statement that gives a logical basis for choosing between alternative actions.

9.5.1 Rinsate Blanks

Only disposable sampling equipment will be used during the field works on the day. As such, no rinsate blank will be collected.

9.5.2 Trip Spikes and Trip Blank Samples

One trip spike and trip blank sample will be used and scheduled for analysis, if site samples being collected that day are being analysed for volatile contaminants of concern (typically BTEX and/or TRH).

9.5.3 Field Duplicates and Field Triplicates

Field duplicate and field triplicates will be collected at a rate of one per twenty (5%) site samples collected. The duplicates and triplicates collected will be analysed for at least one of the analytes that the parent sample of the duplicate/triplicate is being scheduled for analysis for (with the exception of asbestos).

The relative percent difference (RPD) of concentrations of relevant analytes, between the parent sample and the duplicate/triplicate will be calculated.

9.5.4 Laboratory Analysis Quality Assurance / Quality Control

The analytical laboratory QA/QC program will typically include laboratory method blank samples, matrix spike samples, surrogate spike samples, laboratory control samples, and laboratory duplicate samples.

9.5.5 If/Then Decision Rules

EGA has adopted the following 'if/then' decision rules for this project:

- If the result of the assessment of field data and laboratory analytical data is considered acceptable, then that field data and laboratory analytical data is suitable for interpretation within the scope of this project; and
- If the field data and laboratory analytical data is within the constraints of the assessment criteria adopted for this project (refer **Section 9.3**), then the contamination exposure risks to identified receptors, are considered acceptable.

In the event the assessment of field data and/or laboratory analytical data results in the data being not suitable for interpretation, then EGA will determine if additional data is required to allow interpretation to be undertaken.

In the event that field data and/or laboratory analytical data exceeds the assessment criteria adopted for this project (refer **Section 9.3**), EGA will undertake an assessment of the exceedance in the context of the project objectives to determine if additional data is required and whether management and/or remediation is required.

9.6 Step 6: Specify the performance or acceptance criteria

The sixth step involves specifying the decision maker's acceptable limits on decision errors, which are used to establish performance goals for limiting uncertainties in the data. When assessing contaminated land, there are generally two types of errors in decision making:

- Contamination exposure risks for a specific land use setting are acceptable, when they are not; and
- Contamination exposure risks for a specific land use setting are not acceptable, when they are.

EGA will mitigate the risk of decision error by:

- Assignment of fieldwork tasks to suitably experienced EGA consulting staff, and suitably experienced contractors;
- Assignment of laboratory analytical tasks to reputable NATA accredited laboratories; and
- Assignment of data interpretation tasks to suitably experienced EGA consulting staff and outsourcing to technical experts where required.

EGA will also adopt a range of data quality indicators (DQI) to facilitate assessment of the completeness, comparability, representativeness, precision and accuracy (bias).

Table 9.6.1 Performance and Acceptance Criteria Summary

Completeness			
Field Considerations	**Assessment Criterion**	**Laboratory Considerations**	**Assessment Criterion**
Critical locations sampled	Refer **Section 9.7.1**	Critical samples analysed according to DQO	Refer **Section 9.7.6**
Critical samples collected	Refer **Section 9.7.1**	Analytes analysed according to DQO	Refer **Section 9.7.6**
SOPs appropriate and complied with	100%	Appropriate laboratory analytical methods and LORs	Refer **Section 9.7.6**
Field documentation complete	All sampling point logs, calibration logs and chain of custody forms	Sample documentation complete	All sample receipt advices, all certificates of analysis
		Sample extraction and holding times complied with	Refer **Section 9.7.7**
Comparability			
Field Considerations	**Assessment Criterion**	**Laboratory Considerations**	**Assessment Criterion**
Same SOPs used on each occasion	100%	Same analytical methods used by primary laboratory	Refer **Section 9.7.7**
Climatic conditions	Samples stored in insulated containers with ice, immediately after collection	Same LORs at primary laboratory	Refer **Section 9.7.7**
Same types of samples collected, and handled/preserved in same manner	All soil samples same size, all stored in insulated containers with ice	Same laboratory for primary sample analysis	All primary samples to Eurofins | MGT
		Same analytical measurement units	Refer **Section 9.7.7**
Representativeness			
Field Considerations	**Assessment Criterion**	**Laboratory Considerations**	**Assessment Criterion**
Appropriate media sampled according to DQO	Refer **Section 9.7.6**	Samples analysed according to DQO	Refer **Section 9.7.6**
Media identified in DQO sampled	Refer **Section 9.7.6**		
Precision			
Field Considerations	**Assessment Criterion**	**Laboratory Considerations**	**Assessment Criterion**
Field duplicate / triplicate RPD	Minimum 5% duplicates and triplicates No limit for analytical results <10 times LOR 50% for analytical results 10-20 times LOR 30% for analytical results >10 times LOR	Laboratory duplicates	No exceedances of laboratory acceptance criteria
SOPs appropriate and complied with	100%		
Accuracy (bias)			
Field Considerations	**Assessment Criterion**	**Laboratory Considerations**	**Assessment Criterion**
Field trip spikes	Recoveries between 60% and 140%	Matrix spike recovery	No exceedances of laboratory acceptance criteria
Field trip blanks	Analyte concentration <LOR	Surrogate spike recovery	No exceedances of laboratory acceptance criteria

9.7 Step 7: Develop the plan for obtaining data

The seventh step involves identifying the most resource effective sampling and analysis design for generating the data that is required to satisfy the DQOs.

9.7.1 Sampling Point Density and Locations

The boundaries of areas of environmental concern 'AEC01', 'AEC02', 'AEC03' and 'AEC05' investigated as part of this assessment were taken from the AG 2020 remedial action plan. These areas are illustrated in figure 2.

Table A in NSW EPA *Sampling Design Guidelines* (2022) provides guidance on minimum sampling point densities required for site characterisation, based on detecting circular hot spots by using a systematic sampling pattern. This guidance assumes the investigator has little knowledge about the probable locations of the contamination, the distribution of the contamination is expected to be random (e.g. land fill sites) or the distribution of the contamination is expected to be fairly homogenous (e.g. agricultural lands).

However, Section 3.1 of NSW EPA *Sampling Design Guidelines* (2022) states that a judgemental sampling pattern can be used where there is enough information on the probable locations of contamination. Further to this, Section 6.2.1 of NEPM ASC 2013 states that the number and location or sampling points is based on knowledge of the site and professional judgement. Sampling should be localised to known or potentially contaminated areas identified from knowledge of the site either from site history or an earlier phase of site investigation. Judgemental sampling can be used to investigate sub-surface contamination issues in site assessment.

The *Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia, May 2021*, Western Australia Department of Health (DOH (2021)) indicates that where the 'likelihood of asbestos' is assessed as "suspect" the investigation regimen should include a sampling density that is the same as that set out in Table 2 of NSW EPA *Sampling Design Guidelines* (2022) for assessing asbestos. A "Suspect" likely hood of asbestos is adopted in the presence of uncontrolled fill with building waste, dumped waste material and/or demolished structure footprints within the investigation area, which was considered appropriate for the assessment of structure footprints (AEC05) within the site.

A sampling density double that set out in Table 2 of NSW EPA *Sampling Design Guidelines* (2022) was adopted for the assessment of the broader AEC01, AEC02 and AEC03 areas. This is in-line with the guidance provided for assessing 'likely' asbestos contamination as asbestos containing materials had previously been identified in these areas.

Sampling densities outlined within AG (2020) were amended to meet a double density for areas 'likely' to be asbestos-impacted and as such, the following sampling densities were met for each AEC assessed:

- Twenty-three (23) samples will be collected from AEC01 to address an area of 12,800 m^2;
    - An additional twenty-four (24) samples to further delineate friable asbestos previously identified in six locations;
- Fifty-four (54) samples will be collected from AEC02 to address an area of 17,100 m^2;
- Eighty-four (84) samples will be collected from AEC03 to address an area of 31,740 m^2;
- Six (6) samples will be collected from AEC01a to address an area of 1,000 m^2; and
- Fouty-seven (47) samples will be collected from AEC05 to address an area of 37,000 m^2.

The locations of the sampling points are set out in **Figures 3** to **6**, which were guided by the Areas of Environmental Concern detailed within the AG (2020) reporting.

Further assessment of AEC01a, AEC04, AEC06 and AEC07 did not form part of the scope of this assessment and will require further investigation as part of future works completed for site.

The above sampling methodology has been designed to identify and characterise known and potential asbestos impacts as far as is practicable. EGA notes that the risk of asbestos in fill materials is present across the entire site footprint as a results of historical land uses, importation of fill, hazardous building materials and historical demolition activities. This risk cannot be closed out entirely through sampling alone, vigilance will be required during the remediation and bulk earthworks scopes for site where unexpected finds, if present outside of the impacts identified during this assessment, are likely to be encountered.

9.7.2 Sampling Methodology

The sampling point methodology presented in **Table 9.7.1** was used for this project. The methodology is based on a range of factors considered relevant to this project, including:

- The identified contaminants of potential concern;
- The suspected laydown mechanisms for those contaminants of concern;
- The suspected likely depth of contamination; and
- Site specific constraints which affect the type of sampling techniques suited to the site.

Table 9.7.1 Proposed Sampling Methodology

AEC	Area	Sampling Point ID	Method	Target Depth of Sampling Point (m bgl)
AEC01	Non-Friable Asbestos impacted Surficial and Fill Soils	'AEC01-TP01' to 'AEC01-TP23'	3.5 t Excavator	1.0 m bgl, practical refusal or 0.3 m into inferred natural material, whichever occurs first.
	Friable Asbestos impacted Fill Soils	'EBH1-01' to 'EBH1-04' 'EBH2-01' to 'EBH2-04', 'EBH3-01' to 'EBH3-04', 'EBH5-01' to 'EBH5-04', 'SS10-01' to 'SS10-04' and 'BH39-01' to 'BH39-04'	3.5 t Excavator	Samples collected 1m to the north, south, east and west of previous sampling locations 'EBH1', 'EBH2', 'EBH3', 'EBH5', 'SS10' and 'BH39' targeting the depth of identified friable asbestos impacts
AEC01a	Heavy Metal impacted Surficial and Fill Soils	'AEC01a-TP01' to 'AEC01a-TP06'	3.5 t Excavator	1.0 m bgl, practical refusal or 0.3 m into inferred natural material, whichever occurs first.
AEC02	Friable Asbestos impacted Fill Soils	'AEC02-TP01' to 'AEC02-TP54'	3.5 t Excavator	1.0 m bgl, practical refusal or 0.3 m into inferred natural material, whichever occurs first.
AEC03	Non-Friable Asbestos impacted Surficial and Fill Soils	'AEC03-TP01' to 'AEC03-TP84'	3.5 t Excavator	1.0 m bgl, practical refusal or 0.3 m into inferred natural material, whichever occurs first.
AEC05	Existing Building Footprints	'AEC05-TP01' to 'AEC05-TP47'	20 t Excavator	1.0 m bgl, practical refusal or 0.3 m into inferred natural material, whichever occurs first.

Reference will also be made to Table 5 in WA DOH (2021) for the sampling and screening of fill soils for the presence of asbestos, where practical. The application of asbestos screening criteria published in NEPM ASC 2013 may be limited.

Test pits are to be advanced using a hydraulic excavator fitted with an excavator bucket with teeth. Spoil excavated from each test pit will be spread adjacent to the test pit location for the purposes of visual assessment and sampling. The spreading of soil materials allowed for further visual inspection and assessment of the presence of foreign material concentrations and type.

Samples for potential analysis will be collected from the near surface and in areas of observed contamination. Each soil sample is to be collected using a new clean pair of nitrile gloves and placed in the appropriate sample containers provided by the laboratory.

Samples targeting friable asbestos soils within AEC01 will be collected from the depths of the previously identified impacts. Additionally, 10L soil samples were collected and screened for ACM > 7 mm at sampling locations advanced within AEC01, AEC02 and AEC03.

The selection of samples for laboratory analyses will be based upon olfactory and visual observations of contamination. Soil jars are to be labelled with sample identification (sample location and depth), date and name of sampler.

Upon completion of the soil sampling, the test pits are to be backfilled with the excavated material.

Soil logs will be maintained in the field by an EGA environmental scientist for all exploratory locations. Field observations such as lithology, odours, staining, depth of water etc. are to be noted on the logs.

9.7.3 Identification, Storage and Handling of Samples

Sample identifiers will be used for each sample collected, based on the sampling point number and the depth/interval the sample was collected from, e.g. a sample collected from TP03 at a depth of 0.2m below ground level, would be identified as TP03-0.2.

Project samples will be stored in laboratory prepared glass and plastic containers (and zip lock bags if collected for asbestos or acid sulfate soil assessment).

Soil samples analysed for organic contaminants of concern (and acid sulfate soil samples) will be placed in insulated container/s with ice.

Samples will be transported to the relevant analytical laboratory, with chain of custody (COC) documentation that includes the following information:

- EGA project identification number;
- Each sample identifier;
- Date each sample was collected;
- Sample type (e.g. soil or water);
- Container type/s for each sample collected;
- Preservation method used for each sample (e.g. ice);
- Analytical requirements for each sample and turnaround times; and
- Date and time of dispatch and receipt of samples (including signatures).

9.7.4 Decontamination

All sampling equipment used during the soil investigation consisted of location specific nitrile gloves, as such decontamination was deemed unnecessary. To avoid cross contamination via the excavator bucket, samples were collected from the centre of the soil formation, ensuring to avoid sampling materials which had come into contact with the excavator bucket.

Non-disposable equipment (if required) used during the investigation will be decontaminated before and in between sampling events, to mitigate potential for cross contamination between samples collected. The decontamination methodology to be adopted for this project will include:

- Washing relevant sampling equipment using potable water with a phosphate free detergent (i.e. Decon 90 or similar) mixed into water;
- Rinsing the washed non-disposable sampling equipment with distilled or de-ionised water; and
- Air drying as required.

9.7.5 Laboratory Selection

The analytical laboratories used for this project will be National Association of Testing Australia (NATA) accredited for the analysis undertaken.

9.7.6 Laboratory Analytical Schedule

Project samples will be scheduled for NATA accredited laboratory analysis, using a combination of:

- Observations made in the field of the media sampled; and
- The contaminants of potential concern (COPC) identified for the area of environmental concern that the sample was collected from.

9.7.7 Laboratory Holding Times, Analytical Methods and Limits of Reporting

The laboratory holding times, analytical methods and limits of reporting (LOR) being used for this project, are presented in **Table 9.7.2** and **9.7.3.**

Table 9.7.2 Laboratory Holding Times (Primary Laboratory – ALS)

Analyte	Holding Time	Analytical Method	Limit of Reporting (mg/kg)
Asbestos	No limit	PLM/Disp. Stain.	Absence / presence
Asbestos	No limit	WA-DER	0.001% w/w
BTEX and TPH C6-C10	14 days	USEPA 8260	0.2-0.5
Metals	6 months	USEPA 200.8/3050/6010B	0.1-3
TPH >C10-C40	14 days	USEPA 8270	20-100
OCP/OPP	14 days	USEPA 8270	0.1-0.2/0.2-1
PAH	14 days	USEPA 8270	0.1

Table 9.7.3 Laboratory Holding Times (Secondary Laboratory – Eurofins)

Analyte	Holding Time	Analytical Method	Limit of Reporting (mg/kg)
Asbestos	No limit	AS4964:2004	0.01 % w/w (qualitative)
Asbestos	No limit	Inhouse Method	0.001% w/w
BTEX and TRH C6-C10	14 days	NEPM Schedule B3	0.1-20
Metals	6 months	USEPA 6010, 6020	0.1-5
TRH >C10-C40	14 days	NEPM Schedule B3	20-100
OCP	14 days	USEPA 8081	0.2
PAH	14 days	USEPA 8270	0.1-0.5

10 DETAILED SITE INVESTIGATION METHODOLOGY

Soil sampling and analysis were undertaken with reference to the following documents:

- NSW EPA 2022. *Contaminated Sites Sampling Design Guidelines,* NSW Environment Protection Authority.
- NEPM ASC 2013 *'National Environment Protection (Assessment of Site Contamination) Measure. Schedule B (2) Guideline on Data Collection, Sample Design and Reporting.'* National Environmental Protection Council, Adelaide.
- ASC NEPM 2013 *National Environment Protection (Assessment of Site Contamination) Measure 2013 Schedule B (1) Investigation Levels for Soil and Groundwater*.

10.1 Scope of Fieldworks

To clarify and quantify the existence of the potential contaminants, an indicative sampling analysis and quality plan (SAQP) was developed.

The site works were performed across multiple sampling events; 9, 10, 11, 12 and 19 January 2024, 3, 9, 15 and 29 April 2025, 9 May 2025 and 21 July 2025 in accordance with the SAQP and supervised by EGA environmental scientist at all times.

The scope of the investigation was developed based upon the findings of the previous contamination assessments and the SAQP subsequently developed. Based upon this approach the following scope of works was performed:

- Completion of a site-specific Safe Work Method Statement in accordance with EGA health and safety policy;
- Collection of a 10 L sample screened for asbestos containing materials greater than 7 mm from each sampling location;
- Completion of one-hundred and twenty-four (124) soil sampling locations within the cleared subject area (via 3.5 tonne excavator);
- Completion of forty-six (46) soil sampling location within the building footprint (via 20 tonne excavator);
- Collection of discrete soil samples every 1.0 m recovered or change of strata from the soil test pits; and
- Analysis of two-hundred and eight (208) primary soil samples; and
- Although recognised as a potential contaminant pathway, groundwater was not assessed in the current investigations but is planned for assessment in further works.

11 FIELDWORK

11.1 Soil Sampling

11.1.1 AEC01, AEC02 and AEC03 – Friable and Non-Friable Asbestos Impacts

Soil sampling was undertaken by EGA on 9, 10, 11, 12 and 19 January 2024. A total of one-hundred and seventy (124) test pits were advanced across the accessible areas of site using a 3.5 tonne excavator:

- Twenty (20) samples were collected from AEC01 (TP01, TP04–TP11, TP13–16, TP19-20, TP23);
- Fifty-two (52) samples were collected from AEC02 (TP01-TP52); and
- Fifty-two (52) samples were collected from AEC03 (TP02-TP10, TP18-TP24, TP27-30, TP32-34, TP57-58, TP60-64, TP70-73, TP75-80, TP84).

Samples for potential quantitative asbestos analysis were collected from the near surface, and in areas of observed contamination, varying in depth from 0.1 m to 0.4 m below ground surface level (BGSL) in line with the recommended sampling density outlined within the Western Australia Department of Health, Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia (2021).

A 10L bulk soil sample was collected from each test pit. Each 10 L soil sample was screened using a 7 mm aperture sieve. Oversized materials retained in sieve were visually assessed for potential asbestos containing materials (ACM). Potential ACM greater than 7mm was weighed and placed in separate laboratory supplied zip lock bags. A separate additional 500 mL sample was also collected from unaltered soils and placed in separate laboratory supplied zip lock bags.

Each soil sample was collected using a new clean pair of nitrile gloves and placed in the appropriate plastic zip-lock bags provided by the laboratory. The bags were labelled with the project number, sample identifier and date the samples were collected on. The location of each sampling point established was marked on a site plan set out in **Figures 3, 4** and **5**.

Upon completion of the sampling, each test pit was backfilled with excavated soils at the completion of the sampling task at each sampling point. Soil test pit logs were maintained in the field by an EGA environmental scientist for all exploratory locations. Field observations such as lithology, odours, staining, depth of water etc. were noted on the logs. The logs are presented in **Appendix A**.

At the time of fieldworks, AEC01a was not investigated due to the proximity to sensitive receptors (active onsite childcare facility). AEC01a will require investigation in a future data gap assessment.

Potions of AEC03 were inaccessible at the time of this assessment and will require investigation in a future data gap assessment.

Roads and services within the site were to be preserved for accessibility during the demolition process. As such, EGA could not access / sample where hardstand or potential services were located.

11.1.2 AEC01 – Friable Asbestos Delineation Sampling

Previously identified friable asbestos impacts in borehole locations ‘EBH1’, ‘EBH2’, ‘EBH3’, and ‘EBH5’ were considered likely to be the result of mechanical excavation via bore holing and not representative of the condition of asbestos materials in the surrounding soils. ‘SS10’ and ‘BH39’ comprised of weathered surficial fibre cement fragments and are not considered representative of the condition of fibre cement materials throughout the fill profile. As such, further assessment was undertaken to adequately characterise and delineate identified friable hotspots.

Delineation of friable asbestos impacts identified in previous contamination assessments was undertaken on 28 October 2024. Four (4) sampling locations were advanced within a 1 m step-out to the north, south,

east and west of previously identified friable asbestos locations ('EBH2', 'EBH3', 'EBH5', 'SS10' and 'BH39') at the identified depth of the identified impact. One location 'EBH1' was not able to be sampled due to concerns regarding a tree protection zone which prevented intrusive sampling, these soils will need to be assessed prior to remediation within AEC01.

A 10L bulk soil sample was collected from each test pit. Each 10 L soil sample was screened using a 7 mm aperture sieve. Oversized materials retained in sieve were visually assessed for potential asbestos containing materials (ACM). Potential ACM greater than 7mm was weighed and placed in separate laboratory supplied zip lock bags. A separate additional 500 mL sample was also collected from unaltered soils and placed in separate laboratory supplied zip lock bags.

Each soil sample was collected using a new clean pair of nitrile gloves and placed in the appropriate plastic zip-lock bags provided by the laboratory. The bags were labelled with the project number, sample identifier and date the samples were collected on. The location of each sampling point established was marked on a site plan set out in **Figures 3.**

Upon completion of the sampling, each test pit was backfilled with excavated soils at the completion of the sampling task at each sampling point. Soil test pit logs were maintained in the field by an EGA environmental scientist for all exploratory locations. Field observations such as lithology, odours, staining, depth of water etc. were noted on the logs. The logs are presented in **Appendix A**.

A total of twenty (20) soil samples to ('EBH2-01' to 'EBH2-04', 'EBH3-01' to 'EBH3-04', 'EBH5-01' to 'EBH5-04', 'SS10-01' to 'SS10-04' and 'BH39-01' to 'BH39-04' were collected during the supplementary investigation from the *in-situ* soil materials. All twenty (20) samples underwent quantitative asbestos analysis (NEPM WA DOH (0.001% w/w) Asbestos).

11.1.3 AEC05 – Uncharacterised Fill Materials Beneath On-site Structures

Onsite structures were demolished in stages as part of the redevelopment of site across 2024 and 2025. As these works were completed, test pits were advanced throughout the former building footprints (AEC05). Soil sampling was undertaken by EGA on 3, 9, 15 and 29 April 2025, 9 May 2025 and 21 July 2025. A total of forty-six (46) test pits were advanced within the AEC05 (TP01 to TP05 and TP07 to TP47) using a 20 tonne excavator to a depth of 4.0m bgs. Samples for potential analysis were collected from the near surface, at 1.0 m intervals within the soil profile or with change of strata, and in areas of observed contamination.

Samples for potential quantitative asbestos analysis were collected from the near surface, and in areas of observed contamination, varying in depth from 0.1 m to 4.0 m below ground surface level (BGSL) in line with the recommended sampling density outlined within the Western Australia Department of Health, Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia (2021).

Each soil sample was collected using a new clean pair of nitrile gloves and placed in the appropriate acid rinsed sample containers and plastic zip-lock bags provided by the laboratory. The containers and bags were labelled with the project number, sample identifier and date the samples were collected on. The location of each sampling point established was marked on a site plan set out in **Figure 6**.

Upon completion of the sampling, each test pit was backfilled with excavated soils at the completion of the sampling task at each sampling point. Soil test pit logs were maintained in the field by an EGA environmental scientist for all exploratory locations. Field observations such as lithology, odours, staining, depth of water etc. were noted on the logs. The logs are presented in **Appendix A**.

The portions of AEC05 associated with the childcare centre and asphalt hardstand in the north of site are yet to be demolished, the soils within these areas remain inaccessible and will require further assessment.

One (1) sampling location within the west of site ('TP06') could not be accessed at the time of the assessment and will be captured as part of future investigation works proposed for the site.

11.2 Site Geology

Observations were made of soils encountered during sampling field work. These observations were recorded on environmental test pit logs. A copy of these logs is presented in **Appendix A**.

11.2.1 AEC01

Widespread filling was observed across AEC01 ranging from depths of 0.0 – 1.3 m. Soils generally consisted of:

- FILL: 0.0 – 1.3 m BGL – Clayey SAND, coarse grained, medium to dark brown, dry to moist
- Inferred NATURAL: 1.1 CLAY, medium plasticity, grey with red mottling and moist.

Natural was only encountered within two sampling locations (TP04 and TP05). Excavation was terminated for all other sampling locations around 1m due to refusal from compacted fill.

Foreign materials observed comprised of Terracotta, brick, glass and gravels which were generally encountered at depths between 0.3 and 0.5 m bsgl.



Site Photograph 11.2.1 General soil stratigraphy encountered within AEC01, as observed within 'TP23' on 19 January 2024.

11.2.2 AEC02

Widespread filling was observed across AEC02 ranging from depths of 0.0 – 1.7 m. Soils generally consisted of:

- FILL: 0.0 – 0.5 m BGL – Clayey SAND, coarse grained, grey to brown, dry to moist.
- FILL: 0.5 – 1.1+ m BGL – CLAY, low plasticity, red to orange to grey, dry to moist.
- Inferred NATURAL: 1.1 CLAY, medium plasticity, grey with red mottling and moist.

Natural bedrock was encountered within three sampling location (TP33, TP34 and TP45). Excavation for all other sampling locations was terminated from approximately 1.0 – 1.7 m due to refusal from compacted fill or excavator extent.

Foreign materials observed within fill comprised of terracotta, metal, glass, brick, plastic and geotextile fabric which were generally encountered at depths ranging from 0.1 and 0.5 m bgsl.

Areas of deeper fill materials impacted by foreign materials were encountered within sampling locations TP21, TP35 and TP39 at depths of 0.8 – 1.0 m.



Site Photograph 11.2.1. General soil stratigraphy encountered within AEC02, as observed within 'TP28' on 9 January 2024.

11.2.3 AEC03

Widespread filling was observed across AEC03 ranging from depths of 0.0 – 1.8 m. Soils generally consisted of:

- FILL: 0.0 – 0.6 m BGL – Clayey SAND, coarse to fine grained, medium to dark brown, dry to moist
- FILL: 0.6 – 1.0 m BGL – CLAY, low plasticity, brown to orange, dry to moist.
- Inferred NATURAL: 0.8 m + BGL – CLAY, low plasticity, orange to brown, dry.

Natural was encountered within eleven sampling locations (TP05, TP08, TP09, TP12, TP18, TP19, TP21, TP27, TP28 and TP63). Bedrock was encountered at three sampling locations (TP73, TP77 and TP79). Excavation was terminated for all other sampling locations around 1m due to refusal from compacted fill.

Foreign materials observed comprised of brick, plastic, glass, terracotta and concrete which were generally encountered at depths between 0.0 and 0.5 m bsgl.



Site Photograph 11.2.2. General soil stratigraphy encountered within AEC03, as observed within 'TP06' on 11 January 2024.



Site Photograph 11.2.3. General soil stratigraphy encountered within AEC03, as observed within 'TP06' on 11 January 2024.

11.2.4 AEC05

Widespread filling was observed across AEC05 ranging from depths of 0.0 – 3.0 m. Soils generally consisted of:

- FILL: 0.0 – 0.7 m BGL – Sandy CLAY, low plasticity, medium brown to grey, dry to moist with gravels.
- Inferred NATURAL: 0.7 m + CLAY, low to medium plasticity, orange to red with grey mottling and dry to moist.

Natural was encountered throughout the majority of the sampling locations (38 locations), with bedrock encountered with four sampling locations (TP07, TP08, TP18 and TP20).

Foreign materials observed comprised of crushed concrete, brick, plastic, PVC, metal, terracotta and gravels which were generally encountered at depths between 0.0 and 0.5 m bsgl.

Areas of deeper fill materials were encountered within sampling locations TP25, TP18, TP17 and TP10 at depths up to 3.0 m. foreign materials were not observed in the fill materials beneath 0.5 m bsgl.



Site Photograph 11.2.4. General soil stratigraphy encountered within AEC05, as observed within 'TP12' on 3 April 2025.

11.3 Odours

Olfactory evidence of contamination was not observed across the site or within any soil materials encountered during the investigation.

11.4 Staining

Visual evidence of staining was not observed across the site or within any of the soil samples collected.

11.5 Potential Asbestos Containing Materials

A Hazardous Building Material Survey was undertaken prior to this assessment and as such, potential asbestos containing materials within building structures on-site have been identified and outlined.

During the demolition works completed prior to the assessment of building footprints with AEC05 unexpected finds were encountered comprising fibre cement fragments in shallow fill soils. The asbestos impacted soils were encountered throughout the footprints of 'Structure 1', 'Building 5' and 'Building 10'. The impacted areas were assessed by EGA (refer to **Appendix E**) and 'make safe' works completed to facilitate the continuation of demolition. These areas which have been illustrated in **Figure 10** are still considered to present a potential asbestos risk to future site users and will require further remediation and validation in-line with the sites RAP.

At the completion of the demolition scope for the site, a suitably qualified occupational hygienist completed a visual inspection of the site surface. The visual assessment was completed over two days using a systematic grid base pattern at two-metre spacings, covering an area of 80,000 m^3 comprising a route of 36 kms. No asbestos containing materials were observed atop the surface soils of site during the visual inspection. Vegetation was present within portions of the inspection area, however all structure footprints and transit routes utilised for stockpiling soils associated with AEC05 were un-obstructed. The clearance was limited to the soil surface as raking was not undertaken, asbestos is known to be present within both in-situ fill materials and stockpiles soils within the inspection area. The clearance reports are presented in **Appendix E**.

Visual evidence of potential asbestos containing materials (PACM) in the form of fibre cement fragments were observed within test pits advanced across all four (4) areas of environmental concern accessible and assessed as part of this assessment. PACM was encountered in soils ranging in depth from 0.0 – 1.4 m below ground level. A summary of sampling locations where PACM was observed is presented in **Table 11.5.1**.

Table 11.5.1 Locations of observed PACM

AEC	Sampling Location
EGA – 2024/2025	
AEC01	TP14, TP16, TP17 and TP23
AEC02	TP01, TP06, TP11, TP12, TP19, TP20, TP22, TP27, TP28, TP35, TP38, TP39, TP42 TP47, TP48
AEC03	TP19, TP28, TP42, TP57, TP68, TP70, TP72
AEC05	TP09, TP35, TP46
Coffey - 2011	
AEC01	EBH1, EBH2, EBH3, EBH5,
AEC02	BH24, BH25
JBS&G - 2018	
AEC01	SS01
Alliance - 2020	
AEC02	TP09, BH21, TP/BH101
AEC03	TP53, TP56, BH59

11.6 Stockpiled Soils

Non-friable asbestos impacted soils encountered within AEC05 during completion of the demolition scope for site across 2024 and 2025 were partially remediated to facilitate continuation of the works in those areas. These partial remediation works generated approximately 7,626 m^3 of non-friable asbestos impacted spoil which is stockpiled on site atop a geofabric layer throughout the north and south of site. As these materials were excavated and stockpiled prior to the completion of supplementary assessment works within AEC05 they cannot be considered characterised, as such sampling will be required to confirm their suitability for treatment and re-use on-site.

Non-friable asbestos impacted soils associated with AEC02 were partially excavated during construction of a sediment basin in the south of site. These partial remediation works generated approximately 4,156 m^3 of non-friable asbestos impacted spoil which is stockpiled on site atop a geofabric layer.

Stockpiled soils are outlined within **figure 8** and **figure 10** and are considered to be impacted with non-friable asbestos fibre cement fragments. Stockpiled soils were noted to be both situated atop a layer of geofabric, and covered over with a layer of geofabric (refer to **Appendix F** for photographic record of stockpiled soils).

Stockpile ID	Figure	Approximate Estimated Volume (m^3)
AEC02		
AEC02-SP01	Figure 8	3,164
AEC02-SP02	Figure 8	992
AEC05		
AEC05-SP01	Figure 8	600
AEC05-SP02	Figure 8	98
AEC05-SP03	Figure 8	105
AEC05-SP04	Figure 8	275
AEC05-SP05	Figure 8	5,010
AEC05-SP06	Figure 10	70
AEC05-SP07	Figure 10	140
AEC05-SP08	Figure 10	70
AEC05-SP09	Figure 10	130
AEC05-SP10	Figure 10	25
AEC05-SP11	Figure 10	40
AEC05-SP12	Figure 10	415
AEC05-SP13	Figure 10	265
AEC05-SP14	Figure 10	80
AEC05-SP15	Figure 10	3
AEC05-SP16	Figure 10	60
AEC05-SP17	Figure 10	215
AEC05-SP18	Figure 10	25



Site Photograph 11.6.1 View of stockpiled soils located within the north-west of site, as observed 14 May 2025 facing north.



Site Photograph 11.6.2 View of stockpiled soils located within the centre of site, as observed 14 May 2025 facing west.



Site Photograph 11.6.3 View of stockpiled soils located within the south-west of site, as observed 14 May 2025 facing south.

12 LABORATORY ANALYSIS

All samples collected were transported to the analytical laboratory, using chain of custody (COC) protocols. A selection of these samples was scheduled for analysis, with reference to the relevant COPC identified for the AEC that the samples were collected from.

All soil samples were forwarded to the NATA accredited laboratory for analysis of the analytes listed below. Eurofins Environment and ALS Global were used for the analysis of primary samples.

Table 11.6.1 details the analysis undertaken for samples collected during the investigation.

Table 11.6.1 Laboratory Analytical Schedule

Sample ID	Analytical Suite							
	TRH	BTEX	PAH	OCP	PCBs	Heavy Metals[1]	Asbestos Bulk ID	Asbestos WA DOH (0.001%)
AEC01 TP17-0.2-0.3, TP18-0.2-0.3, TP21-0.2-0.3, TP22-0.2-0.3 (*collected 11/01/2024*)								
TP01-0.2-0.3, TP04-0.2-0.3, TP05-0.2-0.3, TP06-0.2-0.3, TP07-0.2-0.3, TP08-0.2-0.3, TP09-0.2-0.3, TP10-0.2-0.3, TP11-0.2-0.3, TP13-0.2-0.3, TP14-0.2-0.3, TP15-0.2-0.3, TP16-0.2-0.3, TP19-0.2-0.3, TP20-0.2-0.3, TP23-0.2-0.3 *(collected 19/01/2024)*								X
EBH2-01, EBH2-02, EBH2-03, EBH2-04, EBH3-01, EBH3-02, EBH3-03, EBH3-04, EBH5-01, EBH5-02, EBH5-03, EBH5-04, SS10-01, SS10-02, SS10-03, SS10-04, BH39-01, BH39-02, BH39-03, BH39-04 *(collected 28/8/24)*								
AEC02 TP01-0.2-0.3, TP02-0.2-0.3, TP03-0.2-0.3, TP04-0.2-0.3, TP05-0.2-0.3, TP06-0.2-0.3, TP07-0.2-0.3, TP08-0.2-0.3, TP09-0.2-0.3, TP10-0.2-0.3, TP11-0.2-0.3, TP12-0.2-0.3 *(collected 11/01/2024)*								
TP13-0.2-0.3, TP14-0.2-0.3, TP15-0.2-0.3, TP16-0.2-0.3, TP17-0.2-0.3, TP18-0.2-0.3, TP19-0.2-0.3, TP20-0.2-0.3, TP21-0.2-0.3, TP22-0.2-0.3, TP23-0.2-0.3, TP24-0.2-0.3, TP25-0.2-0.3, TP26-0.2-0.3, TP27-0.2-0.3, TP28-0.2-0.3, TP29-0.2-0.3, TP30-0.2-0.3, TP31-0.2-0.3, TP32-0.2-0.3, TP33-0.2-0.3, TP34-0.2-0.3, TP35-0.2-0.3, TP36-0.2-0.3, TP37-0.2-0.3, TP38-0.2-0.3, TP39-0.2-0.3, TP40-0.2-0.3, TP41-0.2-0.3, TP42-0.2-0.3, TP43-0.2-0.3, TP44-0.2-0.3, TP45-0.2-0.3, TP46-0.2-0.3, TP47-0.2-0.3, TP48-0.2-0.3, TP49-0.2-0.3, TP50-0.2-0.3, TP51-0.2-0.3, TP52-0.2-0.3 *(collected 12/01/2024)*								X

Sample ID	Analytical Suite							
	TRH	BTEX	PAH	OCP	PCBs	Heavy Metals[1]	Asbestos Bulk ID	Asbestos WA DOH (0.001%)
AEC03 TP02-0.2-0.3, TP03-0.2-0.3, TP04-0.2-0.3, TP05-0.2-0.3, TP06-0.2-0.3, TP07-0.2-0.3, TP08-0.2-0.3, TP09-0.2-0.3, TP10-0.2-0.3, TP12-0.2-0.3, TP18-0.2-0.3, TP19-0.2-0.3, TP20-0.2-0.3, TP21-0.2-0.3, TP22-0.2-0.3, TP23-0.2-0.3, TP24-0.2-0.3, TP27-0.2-0.3, TP28-0.2-0.3 (*collected 9/01/2024)* TP29-0.2-0.3, TP30-0.2-0.3, TP32-0.2-0.3, TP33-0.2-0.3, TP34-0.2-0.3, TP35-0.2-0.3, TP39-0.2-0.3, TP40-0.2-0.3, TP41-0.2-0.3, TP42-0.2-0.3, TP43-0.2-0.3, TP44-0.2-0.3, TP57-0.2-0.3, TP58-0.2-0.3, TP60-0.2-0.3, TP61-0.2-0.3, TP62-0.2-0.3, TP63-0.2-0.3, TP64-0.2-0.3, TP66-0.2-0.3, TP67-0.2-0.3, TP68-0.2-0.3, TP70-0.2-0.3, TP71-0.2-0.3, TP72-0.2-0.3, TP73-0.2-0.3, TP75-0.2-0.3 (*collected 10/01/2024*) TP76-0.2-0.3, TP77-0.2-0.3, TP78-0.2-0.3, TP79-0.2-0.3, TP80-0.2-0.3, TP84-0.2-0.3 (*collected 11/01/2024*)								X
AEC02-TP35-FC (*collected 10/01/2024)* TP46-FC (*collected 21/07/2025)*							X	

Sample ID	Analytical Suite							
	TRH	BTEX	PAH	OCP	PCBs	Heavy Metals[1]	Asbestos Bulk ID	Asbestos WA DOH (0.001%)
AEC05 TP01-0.1-0.2, TP02-0.1-0.2, TP03-0.1-0.2, TP04-0.1-0.2, TP05-0.1-0.2 (*collected 9/05/2025)* TP07-0.1-0.2, TP07-1.0-1.1, TP07-2.0-2.1, TP08-0.1-0.2, TP08-1.0-1.1, TP08-2.0-2.1, TP10-0.1-0.2, TP10-1.0-1.1, TP10-2.0-2.1, TP18-0.1-0.2, TP18_1.0-1.1, TP18-2.0-2.1, TP19-0.1-0.2, TP19-1.0-1.1, TP19-2.0-2.1, TP20-0.1-0.2, TP20-1.0-1.1, TP20-2.0-2.1, TP25-1.0-1.1, TP25-2.0-2.1, TP28-0.1-0.2, TP28-0.3-0.4, TP28-1.0-1.1, TP28-2.0-2.1 (*collected 15/04/2025)* TP09-0.1-0.2, TP09-0.2-0.3, TP11-0.1-0.2, TP11-0.4-0.5, TP12-0.1-0.2, TP12-0.9-1.0, TP13-0.1-0.2, TP13-0.3-0.4, TP13-0.6-0.7, TP13-1.5-1.6, TP14-0.1-0.2, TP14-0.4-0.5, TP14-0.8-0.9, TP15-0.1-0.2, TP15-0.4-0.5, TP15-0.6-0.7, TP15-0.9-1.0, TP16-0.1-0.2, TP16-0.4-0.5, TP17-0.1-0.2, TP17-1.0-1.1, TP17-2.0-2.1, (*collected 3/04/2025)* TP21-0-0.1, (*collected 9/04/2025)* TP22-1.1-1.2, TP22-0.1-0.2, TP23-0.1-0.2, TP24-0.1-0.2, TP25-0.1-0.2, TP25-0.2-0.3, TP25-0.4-0.5, TP26-0.1-0.2, TP26-1.1-1.2, TP27-0.1-0.2, TP29-0.1-0.2, TP30-0.1-0.2, TP30-1.1-1.2, TP31-0.1-0.2, TP32-0.1-0.2, TP32-0.5-0.6, TP33-0.1-0.2, TP34-0.1-0.2, TP35-0.1-0.2, TP36-0.1-0.2, TP37-0.1-0.2, TP38-0.1-0.2, TP39-0.1-0.2, TP40-0.1-0.2, TP41-0.1-0.2, TP42-0.1-0.2, TP43-0.1-0.2, TP44-0.1-0.2, TP44-1.1-1.2, TP45-0.1-0.2, TP46-0.1-0.2, TP47-0.1-0.2 (*collected 21/07/2025)*	X	X	X	X	X	X	X	
TRIP BLANK / TRIP SPIKE		X						
DUP01, DUP01A *(collected on 03/04/2025)* DUP01, DUP01A *(collected on 21/07/2025)* DUP02, DUP02A *(collected 15/04/25)* DUP03, DUP03A *(collected 09/05/25)*			X			X		

[1] 8 Metals: As, Cd, Cr, Cu, Hg, Ni, Pb, Zn; [2] Semi-quantitative asbestos identified per AS4986:2004

A copy of the analytical laboratory certificates of analysis, is presented in **Appendix C.**

The sample analytical results were tabulated and presented in the attached **Results Tables**.

13 DATA QUALITY INDICATOR ASSESSMENT

13.1 Completeness

An assessment of the completeness of data collected was undertaken, and the results presented in **Table 13.1.1**.

Table 13.1.1 Completeness DQI

Field Considerations	Target	Actual	Comment
Critical locations sampled	214	170	Test pits omitted in AEC03 and AEC01a during fieldworks due to the presence of buried service alignment and existing hardstand barriers. These areas are excluded as part of this assessment and will be subject to characterisation as part of future works. One location (TP06) omitted from the assessment completed within AEC05 which is to be included as part of the future assessment scope for the site. Performance against indicator considered acceptable.
Critical samples collected	214	208	Performance against indicator considered acceptable.
SOPs appropriate and complied with	100%	100%	Performance against indicator considered acceptable.
Field documentation complete	All sampling point logs, calibration logs and chain of custody forms	All sampling point logs, calibration logs and chain of custody forms	Performance against indicator considered acceptable.
Laboratory Considerations	**Target**	**Actual**	**Comment**
Critical samples analysed according to DQO	Refer **Section 9.7.6**	100%	Performance against indicator considered acceptable.
Analytes analysed according to DQO	Refer **Section 9.7.6**	100%	Performance against indicator considered acceptable.
Appropriate laboratory analytical methods and LORs	Refer **Section 9.7.7**	100%	Performance against indicator considered acceptable.
Sample documentation complete	All sample receipt advices, all certificates of analysis	100%	Performance against indicator considered acceptable.
Sample extraction and holding times complied with	Refer **Section 9.7.7**	100%	Performance against indicator considered acceptable.

The data collected is considered to be adequately complete within the objectives and constraints of the project.

13.2 Comparability

An assessment of the comparability of data collected was undertaken, and the results presented in **Table 13.2.1**

Table 13.2.1 Comparability DQI

Field Considerations	Target	Actual	Comment
Same SOPs used on each occasion	100%	100%	Performance against indicator considered acceptable.
Climatic conditions	Samples stored in insulated containers with ice, immediately after collection	100%	Performance against indicator considered acceptable.
Same types of samples collected, and handled/preserved in same manner	All soil samples same size, all stored in insulated containers with ice	100%	Performance against indicator considered acceptable.
Laboratory Considerations	**Target**	**Actual**	**Comment**
Same analytical methods used by primary laboratory	Refer **Section 9.7.7**	100%	Performance against indicator considered acceptable.
Same LORs at primary laboratory	Refer **Section 9.7.7**	100%	Performance against indicator considered acceptable.
Same laboratory for primary sample analysis	All primary samples to Eurofins MGT	100%	Performance against indicator considered acceptable.
Same analytical measurement units	Refer **Section 9.7.7**	100%	Performance against indicator considered acceptable.

The data collected is considered to be adequately comparable within the objectives and constraints of the project.

13.3 Representativeness

An assessment of the representativeness of data collected was undertaken, and the results presented in **Table 13.3.1.**

Table 13.3.1 Representativeness DQI

Field Considerations	Target	Actual	Comment
Appropriate media sampled according to DQO	Refer **Section 9.7.2**	100%	Performance against indicator considered acceptable.
Media identified in DQO sampled	Refer **Section 9.7.2**	100%	Performance against indicator considered acceptable.
Laboratory Considerations	**Target**	**Actual**	**Comment**
Samples analysed according to DQO	Refer **Section 9.7.6**	Refer comments	Performance against indicator considered acceptable.

The data collected is considered to be adequately complete within the objectives and constraints of the project.

13.4 Precision

An assessment of the precision of data collected was undertaken, and the results presented in **Table 13.4.1.**

Table 13.4.1 Precision DQI

Field Considerations	Target	Actual	Comment
Field duplicate / triplicate RPD	Minimum 5% duplicates and triplicates	6.0%	No field duplicates / triplicates collected for samples were submitted for quantitative asbestos analysis.
	No limit for analytical results <10 times LOR	N/A	Parent duplicate/triplicate relationships for samples collected within AEC05 are as follows:
	50% for analytical results 10-20 times LOR	One (1) RPD exceedance for Zinc between: 'TP11-0.4-0.5' and 'DUP01'	DUP01/01A – TP11-0.4-0.3 *(collected on 03/04/2025)*;
			DUP01/01A – TP47-0.1-0.2 *(collected on 21/07/2025)*;
	30% for analytical results >20 times LOR	N/A	DUP02/02A – TP10-0.1-0.2 *(collected on 15/04/2025)*; and
			DUP03/03A – TP01-0.1-0.2 *(collected on 09/05/2025)*
			RPD exceedance attributed to the heterogeneity of the fill materials and laboratory sampling techniques.
			Performance against indicator considered acceptable.
SOPs appropriate and complied with	100%	100%	Performance against indicator considered acceptable.
Laboratory Considerations	**Target**	**Actual**	**Comment**
Laboratory duplicates	No exceedances of laboratory acceptance criteria	Nil	Performance against indicator considered acceptable.

The data collected is considered to be adequately precise within the objectives and constraints of the project.

13.5 Accuracy

An assessment of the precision of data collected was undertaken, and the results presented in **Table 13.5.1.**

Table 13.5.1 Accuracy DQI

Field Considerations	Target	Actual	Comment
Field trip blanks	Analyte concentration <LOR	Nil	No field blanks submitted as samples were not submitted for TRH/BTEXN analytes.
Field trip spike	Recoveries between 60% and 140%	Nil	No field spikes submitted as samples were not submitted for TRH/BTEXN analytes.
Laboratory Considerations	**Target**	**Actual**	**Comment**
Laboratory method blank	No exceedances of laboratory acceptance criteria	No exceedances of laboratory acceptance criteria	Performance against indicator considered acceptable.
Matrix spike recovery	No exceedances of laboratory acceptance criteria	No exceedances of laboratory acceptance criteria	Performance against indicator considered acceptable.
Surrogate spike recovery	No exceedances of laboratory acceptance criteria	No exceedances of laboratory acceptance criteria	Performance against indicator considered acceptable.
Laboratory control sample recovery	No exceedances of laboratory acceptance criteria	No exceedances of laboratory acceptance criteria	Performance against indicator considered acceptable.

The data collected is considered to be adequately accurate within the objectives and constraints of the project.

14 DISCUSSION

A discussion on comparison of laboratory analytical results and field observations, in the context of the assessment criteria adopted for this project, is presented in **Sections 14.1** to **14.3.**

14.1 AEC01

14.1.1 Human Health (Residential A) – Asbestos

Asbestos Fines and Friable Asbestos
As part of the sampling completed during this assessment, friable Asbestos (FA) / Asbestos Fines (AF) was detected in samples 'AEC01-TP05-0.2-0.3' (0.00022%) and AEC01-TP17-0.2-0.3' (0.00032%), however, AF / FA was not detected in soil samples above the laboratory limit of reporting or adopted health screening level (0.001 % w/w).

As part of previous assessments friable asbestos has been detected within AEC01 in the following locations 'BH39' (0.043 % w/w, AG 2020), 'EBH1', 'EBH2', 'EBH3', 'EBH5' (Coffey 2011) and 'SS10' (0.02 % w/w, JBS&G 2018). The concentrations of AF detected within Coffey (2011) were not provided to EGA at the time of the assessment and as such, the conservative assumption that the concentrations were above the adopted site criteria (0.001 % w/w) has been adopted.

AF / FA was not detected in soil samples above the laboratory limit of reporting or adopted health screening level (0.001 % w/w) in the delineation samples advanced around 'EBH2', 'EBH3', 'EBH5', 'SS10' and 'BH39'. EGA have taken the position that the previously identified friable asbestos detections were likely the result of mechanical damage to fibre cement fragments in soil during auguring.

Non-Friable Asbestos
Non-Friable Asbestos was not detected in the soil samples above the laboratory limit of reporting or adopted health screening level (0.01 % w/w) with the exception of sample 'AEC01-TP23-0.2-0.3' (0.058%).

Non-friable asbestos containing materials (ACM) were observed within shallow fill soils within the investigation areas. Following a review of the site history, EGA attributes ACM contamination across the site to be the legacy of historical uncontrolled filling. Chrysotile and crocidolite asbestos was detected within the one (1) representative fibre cement sample collected and submitted to the laboratory for analysis ('AEC02-TP35-FC') which is considered to be representative of the fragments identified within 'AEC01-TP23-0.2-0.3'.

The gravimetric approach set out in Section 4.10 of NEPM (2013) was used to quantify the concentrations of non-friable asbestos containing materials in soil. To calculate the weight (%w/w of asbestos in soil), EGA assumed 15% asbestos by weight in cement bonded asbestos fragments, and an assumed soil density of 1.65kg/L. These assumed values are considered to be adequately conservative within the context of this project. The sample size was 10 L, based on guidance in Section 4.10 of NEPM (2013). The estimation formula in Section 4.10 of NEPM (2013) is:

$$\%\ w/w\ \text{asbestos in soil} = \frac{\%\ \text{asbestos content} \times \text{Non-friable ACM (kg)}}{\text{soil volume (L)} \times \text{soil density (kg/L)}}$$

Presumed asbestos fibre cement fragments were observed within the following sample locations. The results of the calculations performed using this formula, are presented in **Table 14.1.1** below.

Table 14.1.1 Results of gravimetric estimation of non-friable asbestos contamination in soil.

Sample ID	Weight of non-friable ACM (g)	% w/w asbestos in soil	Health Screening Level (0.01% w/w)
AEC01-TP17-0.2-0.3	25	0.033	Unacceptable

14.1.2 Asbestos Contamination Extent within AEC01

The extents of the friable asbestos contamination within AEC01 was found to be limited to the soils immediately adjacent (conservatively 5 m x 5m) sampling locations 'EBH2', 'EBH3', 'EBH5', 'SS10' and 'BH39'. Sample location 'EBH1' was not delineated and will require further assessment but is presumed to follow a similar distribution.

The extents of the non-friable asbestos contamination within AEC01 covers an area of approximately 3,315 m^2 to an approximate depth of 0.5 m bgsl. EGA note that during remediation works at the site, visual observations and results of validation sampling may indicate the presence of asbestos which may increase the extent of the AEC, however, are of the opinion that the extents outlined within **Figure 6** are representative of the extents expected on-site.

14.1.3 Aesthetics

There was no evidence of waste storage observed during fieldworks. Minor concentrations of foreign materials were observed within fill materials during the assessment, in addition to the presence of AF/FA within surficial soils at former sampling location 'SS10' (JBS&G 2018). As such further aesthetics management is warranted.

14.2 AEC02

14.2.1 Human Health (Residential A) – Asbestos

Asbestos Fines and Friable Asbestos
Friable Asbestos (FA) / Asbestos Fines (AF was detected in sample 'AEC02-TP11-0.2-0.3' (0.00023%), however, AF / FA was not detected in soil samples above the laboratory limit of reporting or adopted health screening level (0.001 % w/w). However, friable asbestos was detected within previous sampling locations 'BH21' (< 0.001 % w/w, AG 2020) and 'EBH24', 'EBH25' (Coffey 2011).

Non-Friable Asbestos
Non-Friable Asbestos was not detected in the soil samples above the laboratory limit of reporting or adopted health screening level (0.01 % w/w).

Non-friable asbestos containing materials (ACM) were observed within shallow fill soils within the investigation areas. Following a review of the site history, EGA attributes ACM contamination across the site to be the legacy of historic uncontrolled filling. Chrysotile and crocidolite asbestos was detected within the one (1) representative fibre cement sample collected and submitted to the laboratory for analysis ('AEC02-TP35-FC').

The gravimetric approach set out in Section 4.10 of NEPM (2013) was used to quantify the concentrations of non-friable asbestos containing materials in soil. To calculate the weight (%w/w of asbestos in soil), EGA assumed 15% asbestos by weight in cement bonded asbestos fragments, and an assumed soil density of 1.65kg/L. These assumed values are considered to be adequately conservative within the context of this project. The sample size was 10 L, based on guidance in Section 4.10 of NEPM (2013). The estimation formula in Section 4.10 of NEPM (2013) is:

$$\%\ w/w\ asbestos\ in\ soil = \frac{\%\ asbestos\ content \times Non\text{-}friable\ ACM\ (kg)}{soil\ volume\ (L) \times soil\ density\ (kg/L)}$$

Presumed asbestos fibre cement fragments were observed within the following sample locations. The results of the calculations performed using this formula, are presented in **Table 14.2.1** below.

Table 14.2.1 Results of gravimetric estimation of non-friable asbestos contamination in soil.

Sample ID	Weight of non-friable ACM (g)	% w/w asbestos in soil	Health Screening Level (0.01% w/w)
AEC02-TP01-0.2-0.3	130	**0.15**	**Unacceptable**
AEC02-TP06-0.2-0.3	4	0.004	Acceptable
AEC02-TP11-0.2-0.3	321	**0.37**	**Unacceptable**
AEC02-TP19-0.2-0.3	6	**0.01**	**Unacceptable**
AEC02-TP20-0.2-0.3	28	**0.03**	**Unacceptable**
AEC02-TP22-0.2-0.3	3	0.003	Acceptable
AEC02-TP27-0.2-0.3	27	**0.03**	**Unacceptable**
AEC02-TP35-0.2-0.3	3	0.003	Acceptable
AEC02-TP38-0.2-0.3	10	**0.01**	**Unacceptable**
AEC02-TP39-0.2-0.3	16	**0.02**	**Unacceptable**
AEC02-TP47-0.2-0.3	276	**0.30**	**Unacceptable**
AEC02-TP48-0.2-0.3	18	**0.02**	**Unacceptable**

14.2.2 Asbestos Contamination Extent within AEC02

During the construction of a sediment basin within the south of site, excavation within the AEC02 area resulted in approximately 4,156 m^3 of non-friable asbestos impacted spoil. These materials are stockpiled atop geofabric in the south of site (refer to figure 8), these materials are considered to be impacted within non-friable asbestos and as such further management and remediation will be required.

Prior to the construction of the sediment basin, friable asbestos associated with sampling locations ‘EBH24’ and ‘EBH25’ (Coffee 2011) was excavated and disposed off-site to a licensed waste receiving facility (refer to appendix E).

The extents of the AF/FA asbestos contamination within AEC02 covers an area of approximately 200 m^2 to an approximate depth of 0.5 m bgsl within the vicinity of ‘EBH25’ (Coffey 2011) and 1.2 m bgsl within the vicinity of ‘EBH24’ (Coffey 2011). The extents of non-friable asbestos contamination within AEC02 covers an area of approximately 10,425 m^2 and extends to an approximate depth of 0.5m bgsl. EGA note that during remediation works at the site, visual observations and results of validation sampling may indicate the presence of asbestos which may increase the extent of the AEC, however, are of the opinion that the extents outlined within **Figure 7** are representative of the extents expected on-site.

14.2.3 Aesthetics

Minor concentrations of foreign materials were observed within fill materials during the assessment, in addition to the presence of asbestos containing materials within surficial soil materials ‘TP09’ and ‘TP/BH101’ (AG 2020). As such further aesthetics management is warranted.

14.3 AEC03

14.3.1 Human Health (Residential A) – Asbestos

<u>Asbestos Fines and Friable Asbestos</u>
Friable Asbestos (FA) / Asbestos Fines (AF) was not detected within any soil samples within AEC03.

<u>Non-Friable Asbestos</u>
Non-Friable Asbestos was not detected in the soil samples above the laboratory limit of reporting or adopted health screening level (0.01 % w/w).

Non-friable asbestos containing materials (ACM) were observed within shallow fill soils within the investigation areas. Following a review of the site history, EGA attributes ACM contamination across the site to be the legacy of historic uncontrolled filling. Chrysotile and crocidolite asbestos was detected within the one (1) representative fibre cement sample collected and submitted to the laboratory for analysis ('AEC02-TP35-FC') which is considered to be representative of the fragments identified during this assessment.

The concentrations of ACM detected within AG (2020) were not provided to EGA at the time of the assessment and as such, the conservative assumption that the concentrations were above the adopted site criteria (0.01 % w/w) has been adopted.

The gravimetric approach set out in Section 4.10 of NEPM (2013) was used to quantify the concentrations of non-friable asbestos containing materials in soil. To calculate the weight (%w/w of asbestos in soil), EGA assumed 15% asbestos by weight in cement bonded asbestos fragments, and an assumed soil density of 1.65kg/L. These assumed values are considered to be adequately conservative within the context of this project. The sample size was 10 L, based on guidance in Section 4.10 of NEPM (2013). The estimation formula in Section 4.10 of NEPM (2013) is:

$$\%\ \text{w/w asbestos in soil} = \frac{\%\ \text{asbestos content} \times \text{Non-friable ACM (kg)}}{\text{soil volume (L)} \times \text{soil density (kg/L)}}$$

Presumed asbestos fibre cement fragments were observed within the following sample locations. The results of the calculations performed using this formula, are presented in **Table 14.3.1** below.

Table 14.3.1 Results of gravimetric estimation of non-friable asbestos contamination in soil.

Sample ID	Weight of non-friable ACM (g)	% w/w asbestos in soil	Health Screening Level (0.01% w/w)
AEC03-TP19-0.2-0.3	66	**0.08**	**Unacceptable**
AEC03-TP28-0.2-0.3	209	**0.19**	**Unacceptable**
AEC03-TP42-0.2-0.3	5	**0.01**	**Unacceptable**
AEC03-TP57-0.2-0.3	51	**0.05**	**Unacceptable**
AEC03-TP68-0.2-0.3	310	**0.34**	**Unacceptable**
AEC03-TP70-0.2-0.3	152	**0.16**	**Unacceptable**
AEC03-TP71-0.2-0.3	2	0.002	Acceptable

14.3.2 Asbestos Contamination Extent within AEC03

The extent of non-friable asbestos contamination within AEC03 covers an area of approximately 1,185 m^2 to a depth of approximately 0.5 m bgsl. EGA note that during remediation works at the site, visual observations and results of validation sampling may indicate the presence of asbestos which may increase the extent of the AEC, however, are of the opinion that the extents outlined within **Figure 9** are representative of the extents expected on-site.

14.3.3 Aesthetics

Minor concentrations of foreign materials were observed within fill materials during the assessment, in addition to the presence of asbestos containing materials within surficial soil materials 'BH59' (AG 2020). As such, further aesthetics management is warranted.

14.4 AEC05

Forty-six sampling locations were advanced across the accessible portions of AEC05, no chemical concentrations were returned from the soils assessed above the human health or ecological criteria's.

14.4.1 Human Health – Direct Contact (HIL / HSL A – Residential)

BTEX
The concentration of benzene, toluene, ethyl benzene, xylenes, and naphthalene in the soil samples analysed was less than the site adopted criteria (HSL-A) for human health risk via the vapour intrusion exposure pathway.

Heavy Metals
The concentration of heavy metals (arsenic, cadmium, chromium, copper, lead, nickel, zinc and mercury) in the soil samples analysed was less than the laboratory limit of reporting or site adopted criteria (HIL-A) for human health risk via the direct contact exposure pathway.

TRH
The concentration of total recoverable hydrocarbons (C_6-C_{10}>C_{10}-C_{16}, >C_{16}-C_{34} and >C_{34}-C_{40}) in the soil samples analysed, was less than the laboratory limit of reporting or site adopted criteria (HSL-A) for vapour intrusion exposure.

OCP
The concentration of organochlorine pesticide (OCP) compounds detected in the soil samples analysed was less than the laboratory limit of reporting or site adopted criteria (HIL-A) for human health risk via the direct contact exposure pathway.

PAHs
The concentrations of PAHs detected in the soil samples analysed, were less than the applicable adopted direct contact human health exposure criteria.

PCB
The concentration of PCBs detected in the soil samples analysed was less than the laboratory limit of reporting or site adopted criteria (HIL-A) for human health risk via the direct contact exposure pathway.

14.4.2 Human Health – Inhalation / Vapour Intrusion (HSL A – Residential)

Asbestos Fines and Friable Asbestos
Friable Asbestos (FA) / Asbestos Fines (AF) was not detected within any soil samples within AEC03.

Non-Friable Asbestos
Non-Friable Asbestos was not detected in the soil samples above the laboratory limit of reporting or adopted health screening level (0.01 % w/w).

Non-friable asbestos containing fibre cement fragments were observed within shallow fill soils within the investigation area at three (3) sampling locations (TP09, TP35 and TP46). Following a review of the site history, EGA attributes ACM contamination across the site to be the legacy of historic uncontrolled filling.

TRH
The concentrations of TRH C_6-C_{10} (minus BTEX) and >C_{10}-C_{16} (minus naphthalene) detected in the soil samples analysed, were less than the applicable adopted inhalation / vapour intrusion human health exposure criteria.

BTEX
The concentrations of benzene, toluene, ethyl benzene and xylenes detected in the soil samples analysed, were less than the applicable adopted inhalation / vapour intrusion human health exposure criteria.

PAHs
The concentrations of naphthalene detected in the soil samples analysed, were less than the applicable adopted inhalation / vapour intrusion human health exposure criteria

14.4.3 TPH Management Limits (Residential)

The concentrations of TRH C_6-C_{10}, >C_{10}-C_{16}, >C_{16}-C_{34} and >C_{34}-C_{40} detected in the soil samples analysed, were less than the applicable adopted TRH management limits or less than laboratory limits of reporting.

14.4.4 Aesthetics

No significant aesthetic impacts were identified within the site with the exception of the non-friable asbestos identified within 'TP19' and chemical and waste storage. It is presumed that these will be reported prior to redevelopment works.

14.4.5 Terrestrial Ecosystem

Ecological Screening Levels (ESLs)
The concentrations of relevant contaminants of concern detected in the soil samples analysed were less than the applicable adopted ecological screening levels (ESL).

Ecological Investigations Levels (EILs)
The concentrations of relevant contaminants of concern detected in the soil samples analysed were less than the applicable adopted site-specific ecological investigation levels (EIL).

14.4.6 Asbestos Contamination Extent within AEC05

During the demolition works completed prior to the assessment of building footprints with AEC05 unexpected finds were encountered comprising fibre cement fragments in shallow fill soils. The asbestos impacted soils were encountered throughout the footprints of 'Structure 1', 'Building 5' and 'Building 10'. The impacted areas were assessed by EGA (refer to Appendix E) and 'make safe' works completed to facilitate the continuation of demolition.

Approximately 2,262 m^3 of non-friable asbestos impacted spoil was generated during the 'make safe' works completed within AEC05. These materials are stockpiled within site atop geofabric (refer to **figure 8** and **10**) and will require further remediation and validation in-line with the sites RAP. As these materials were excavated and stockpiled prior to the assessment completed within AEC05 these soils cannot be considered characterised, further sampling will be required to confirm their suitability for treatment and re-use within site.

The extent of non-friable asbestos contamination within AEC05 covers an area of approximately 14,050 m^2 to a depth of up to 1.3 m bgsl. EGA note that the distribution of asbestos within AEC05 was sporadic and varied in depth, as such remediation will be guided by observations of the supervising environmental consultant. During remediation works, visual observations and results of validation sampling may indicate or rule out the presence of asbestos, which may increase or decrease the extent of the AEC from that of the extents outlined within **Figure 10**.

15 REVISED CONCEPTUAL SITE MODEL

15.1 Areas of Environmental Concern

Following a review of site history and subsequent intrusive field analysis, the extent of previously identified areas of environmental concern (AEC) and contaminants of potential concern (COPC) have been identified. The AECs identified and associated COPC are presented in **Table 15.1.1** below and **Figure 11.**

Table 15.1.1 Areas of Environmental Concern and Contaminants of Potential Concern

ID	Area of Environmental Concern	Contaminants of Concern	Affected mediums	Exposure risk	Proposed Remedial Strategy
AEC01	Friable Asbestos Impacted Fill Soils	Friable Asbestos	Soil	Human Health & Aesthetics	Off-site disposal
	Non-Friable Asbestos Impacted Fill Soils	Non-Friable Asbestos	Soil	Human Health & Aesthetics	Off-site disposal
AEC01a	Lead, Cadmium and Zinc Impacted Fill Soils	Lead, Cadmium and Zinc	Soil	Human Health and Ecological Health	Off-site disposal
AEC02	Friable Asbestos Impacted Fill Soils	Friable Asbestos	Soil	Human Health & Aesthetics	Off-site disposal
	Non-Friable Asbestos Impacted Fill Soils	Non-Friable Asbestos	Soil	Human Health & Aesthetics	Remediation and on-site reuse at depth
	Stockpiled Non-Friable Asbestos Impacted Soils	Non-Friable Asbestos	Soil	Human Health & Aesthetics	Remediation and on-site reuse at depth
AEC03	Non-Friable Asbestos Impacted Fill Soils	Asbestos	Soil	Human Health & Aesthetics	Remediation and on-site reuse at depth
AEC04*	Former Underground Storage or Petroleum-Based Product Onsite	Heavy Metals, TRH, PAH, VOC/SVOC, Phenols	Soil and Groundwater	Human Health & Ecological	TBC
AEC05	Building Footprints (pending assessment)	Metals, PAH, BTEX, TRH, PCB, OCP/OPP, Phenols and Asbestos	Soil	Human Health & Aesthetics	TBC
	Building Footprints (Assessed)	Asbestos	Soil	Human Health	Remediation and on-site reuse at depth
	Stockpiled Non-Friable Asbestos Impacted Soils	Non-Friable Asbestos	Soil	Human Health & Aesthetics	Remediation and on-site reuse at depth
AEC06*	Migration of Landfill Gas	Methane, Carbon Dioxide, Carbon monoxide, Hydrogen sulphide	Ground Gas	Human Health	Assessment and Management if Required

ID	Area of Environmental Concern	Contaminants of Concern	Affected mediums	Exposure risk	Proposed Remedial Strategy
AEC07*	Adjacent Industrial Land Use to the North and North-East of the Site	Heavy Metals, TRH, BTEX, PAH, VOC, OCP/OPP, PCB, PFAS, inorganic compounds	Groundwater	Human Health & Ecological	Assessment and Management if Required
AEC08	Risk of redundant fibre cement conduits and septic tanks within the site footprint	Metals, PAH, BTEX, TRH, Asbestos, OCPs, E.Coli and Thermotolerant Coliforms	Soil	Human Health and Ecological	TBC
AEC09	Risk of asbestos contamination within the site footprint	Asbestos	Soil	Human Health and Ecological	TBC

Notes: *Not subject to assessment as part of this investigation, will require further investigation and management in-line with the site RAP.

The potential contamination pathways are considered to be as follows:

- Inhalation/ingestion of contaminants released in dust during future development by site workers;
- Migration of landfill gases through pressure gradients or dissolved in groundwater; and
- Inhalation of contaminants during future use by site occupiers.

Relevant potential receptors are considered to include:

- Onsite construction and maintenance workers;
- Third parties during construction (adjacent site users and adjacent residents);
- Future residents/end users; and
- Neighbouring residential land users.

Table 15.1.2 Areas of Environmental Concern and Approximate Extent

ID	Area of Environmental Concern	Approximate Extent
AEC01	Friable Asbestos Impacted Fill Soils	6 areas x (25 m^2 x 0.5 m bgsl) Total ≈ 75 m^3 / 135 tonnes
	Non-Friable Asbestos Impacted Fill Soils	Total Area: ≈ 3,950 m^2 x 0.5 m bgsl 1,975 m^3 / 3,555 tonnes
AEC01a	Lead, Cadmium and Zinc Impacted Fill Soils	Total Area: ≈ 1,000 m^2 x 0.25 m bgsl 250 m^3 / 450 tonnes *(Extent may vary following supplementary assessment)*
AEC02	Friable Asbestos Impacted Fill Soils	2 areas x (25 m^2 x 0.5 m bgsl) Total ≈ 25 m^3 / 45 tonnes
	Non-Friable Asbestos Impacted Fill Soils	In-situ Area: ≈ 10,425 m^2 x 0.5 m bgsl 5,212.5 m^3 / 9,382.5 tonnes
	Stockpiled Non-Friable Asbestos Impacted Soils	Stockpiled: *4,156 m^3 / 7,480 tonnes*
AEC03	Non-Friable Asbestos Impacted Fill Soils	Total Area: ≈ 15,480 m^2 x 0.6 m bgsl 9,288 m^3 / 16,718 tonnes
AEC04*	Former Underground Storage or Petroleum-Based Product Onsite	*To be confirmed following supplementary assessment*
AEC05	Building Footprints (pending assessment)	*To be confirmed following supplementary assessment*
	Building Footprints (Assessed)	In-situ Area: ≈ *14,050 m^2 x 0.6 m bgsl (average depth)* *8,430 m^3 / 15,174 tonnes*
	Stockpiled Non-Friable Asbestos Impacted Soils	Stockpiled: *7,626 m^3 / 13,726 tonnes*
AEC06*	Migration of Landfill Gas	Southern Portion of Site *To be confirmed following supplementary assessment*
AEC07*	Adjacent Industrial Land Use to the North and North-East of the Site	Site Footprint *To be confirmed following supplementary assessment*
AEC08	Risk of redundant fibre cement conduits and septic tanks within the site footprint	Site Footprint
AEC09	Risk of asbestos contamination within the site footprint	Site Footprint

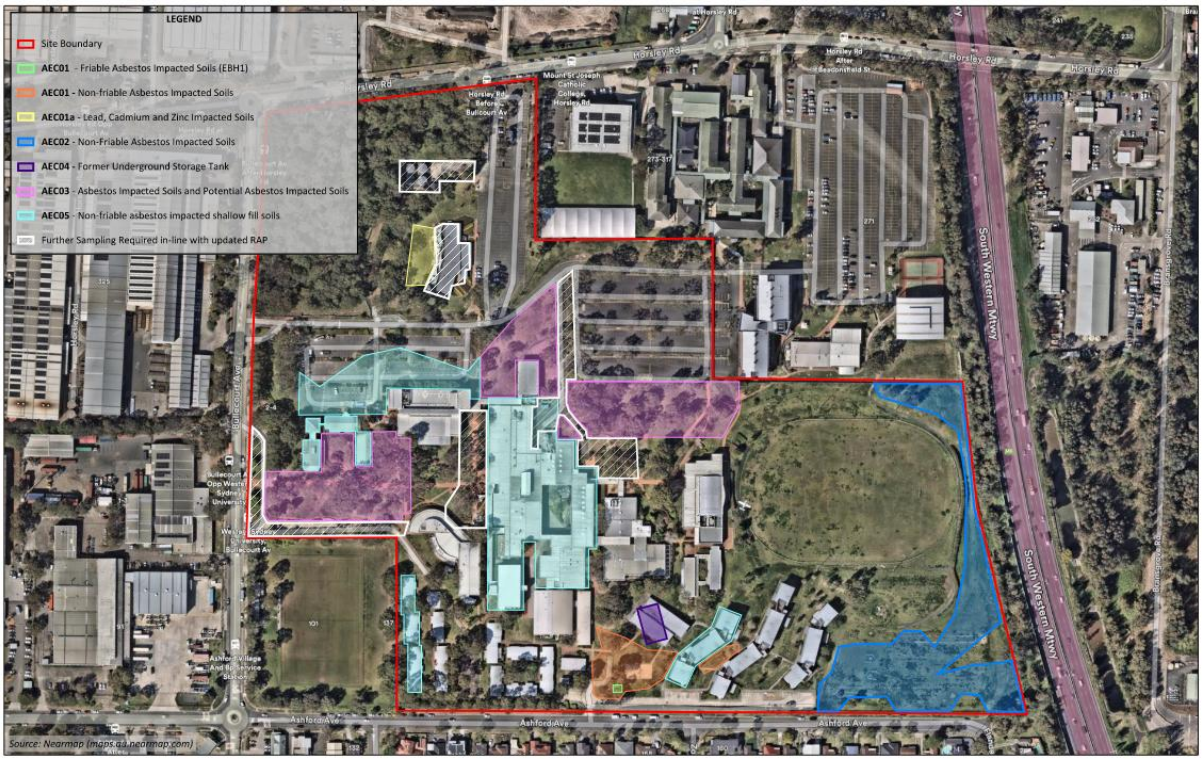


Figure 1 Extent of aeras of environmental concern



Figure 2 Partial remediation works undertaken to date 6 August 2025
(AEC05 areas illustrated only partially remediated, further works are required).

16 CONCLUSIONS AND RECOMMENDATIONS

Based on EGA's assessment of the desktop review information, fieldwork data and laboratory analytical data, in the context of the proposed redevelopment scenario, EGA makes the following conclusions:

- The detected concentrations of the contaminants of potential concern returned from the soils assessed within AEC05 are considered unlikely to present:
    - An unacceptable direct contact human health exposure risk;
    - An unacceptable vapour intrusion human health exposure risk;
    - A petroleum hydrocarbon management limit risk; or
    - An unacceptable ecological exposure risk.
- AEC01a was not accessible at the time of this data gap assessment and requires assessment within a future assessment prior to the start of remediation works;
- 6,500 m^2 of AEC05 associated with the footprints of the childcare centre and asphalt car parking within the north of site was not accessible at the time of the data gap assessment and requires assessment within a future assessment prior to the start of remediation works;
- Friable and Non-friable Asbestos Containing Materials (ACM) were identified within AEC01 during this assessment and previous contamination assessments undertaken;
- Friable and Non-Friable Asbestos Containing Materials (ACM) were identified within AEC02 during this assessment and previous contamination assessments undertaken;
- Non-Friable Asbestos Containing Materials (ACM) were identified within AEC03 during this assessment and previous contamination assessments undertaken;
- Non-Friable Asbestos Containing Materials (ACM) were identified within portions of AEC05 during this assessment and previous contamination assessments undertaken;
- Approximately 11,782 m^3 of stockpiled non-friable asbestos impacted spoil generated from partial remediation works within AEC02 and AEC05 requires further management/remediation;
- Stockpiled non-friable asbestos impacted soils associated with AEC05 require further characterisation to confirm their suitability chemically for treatment and re-use within site;
- Surficial asbestos identified within AEC01, AEC02 and AEC03 currently presents an unacceptable aesthetics risk and require further management / remediation;
- Based on the assessments undertaken as part of this investigation, EGA has concluded that the site has friable and non-friable asbestos impacted soil materials requiring remediation and further management;
- Non-friable asbestos impacted soil materials associated with AEC01, AEC02, AEC03 and AEC05 are suitable for treatment and re-use within site at depths unlikely to be disturbed as part of future site uses once the concentration of ACM has been reduced to below 0.01% w/w;
- Friable asbestos associated with AEC01 and AEC02 will require disposal off-site to a licensed waste receiving facility;
- An updated Remedial Action Plan is required to outline the remediation methodologies required to remediate the newly identified extents of contamination identified;

- Subject to remediation of the identified Areas of Environmental Concern and further assessment of data gap areas, the site can be made suitable for the proposed low-density residential development.

Based on the conclusions stated above and the background data gathered during the course of this investigation, EGA recommends:

- An updated site-wide Remedial Action Plan (RAP) is required to outline the remediation methodologies required to remediate the newly identified extents of asbestos contamination identified; and

- A supplementary contamination assessment is required within AEC01a, AEC04, AEC05, AEC06 and AEC07 prior to the start of remedial works in those areas.

This report, including its conclusions and recommendations, must be read in conjunction with the limitations presented in **Section 17.**

17 STATEMENT OF LIMITATIONS

The findings presented in this report are based on specific searches of relevant, government historical databases and anecdotal information that were made available during the course of this investigation. To the best of our knowledge, these observations represent a reasonable interpretation of the general condition of the site at the time of report completion.

This report has been prepared solely for the use of the client to whom it is addressed, and no other party is entitled to rely on its findings.

No warranties are made as to the information provided in this report. All conclusions and recommendations made in this report are of the professional opinions of personnel involved with the project and while normal checking of the accuracy of data has been conducted, any circumstances outside the scope of this report or which are not made known to personnel and which may impact on those opinions is not the responsibility of Sydney Environmental Group Pty Ltd. Should information become available regarding conditions at the site including previously unknown sources of contamination, EGA reserves the right to review the report in the context of the additional information.

This report must be reviewed in its entirety and in conjunction with the objectives, scope and terms applicable to EGA's engagement. The report must not be used for any purpose other than the purpose specified at the time EGA was engaged to prepare the report.

Logs, figures, and drawings are generated for this report based on individual EGA consultant interpretations of nominated data, as well as observations made at the time site walkover/s were completed.

Data and/or information presented in this report must not be redrawn for its inclusion in other reports, plans or documents, nor should that data and/or information be separated from this report in any way.

Should additional information that may impact on the findings of this report be encountered or site conditions change, EGA reserves the right to review and amend this report.

18 REFERENCES

Coffey (Coffey 2011), 'Phase 2 Environmental Site Assessment – Student Residence Development University of Western Sydney, Bankstown Campus', dated 25 August 2011, Ref: GEOTLCOV24163AG-AB;

Noel Arnold and Associates (NAA 2011), 'Soil Contamination Investigation, University of Western Sydney – Bankstown Campus Bullecourt Avenue, Milperra NSW', dated October 2011, Ref: SJ0085:95458;

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JBS&G (JBS&G 2018), 'Phase 1 Environmental Assessment Report, Bullecourt Avenue, Milperra NSW', dated 30 January 2020, Ref: 9996-ER-1-1;

Alliance Geotechnical (AG 2020), 'Detailed Site Investigation, Western Sydney University – Milperra Campus, Bullecourt Avenue, Milperra NSW', dated 30 January 2020, Ref: 9996-ER-1-1; and

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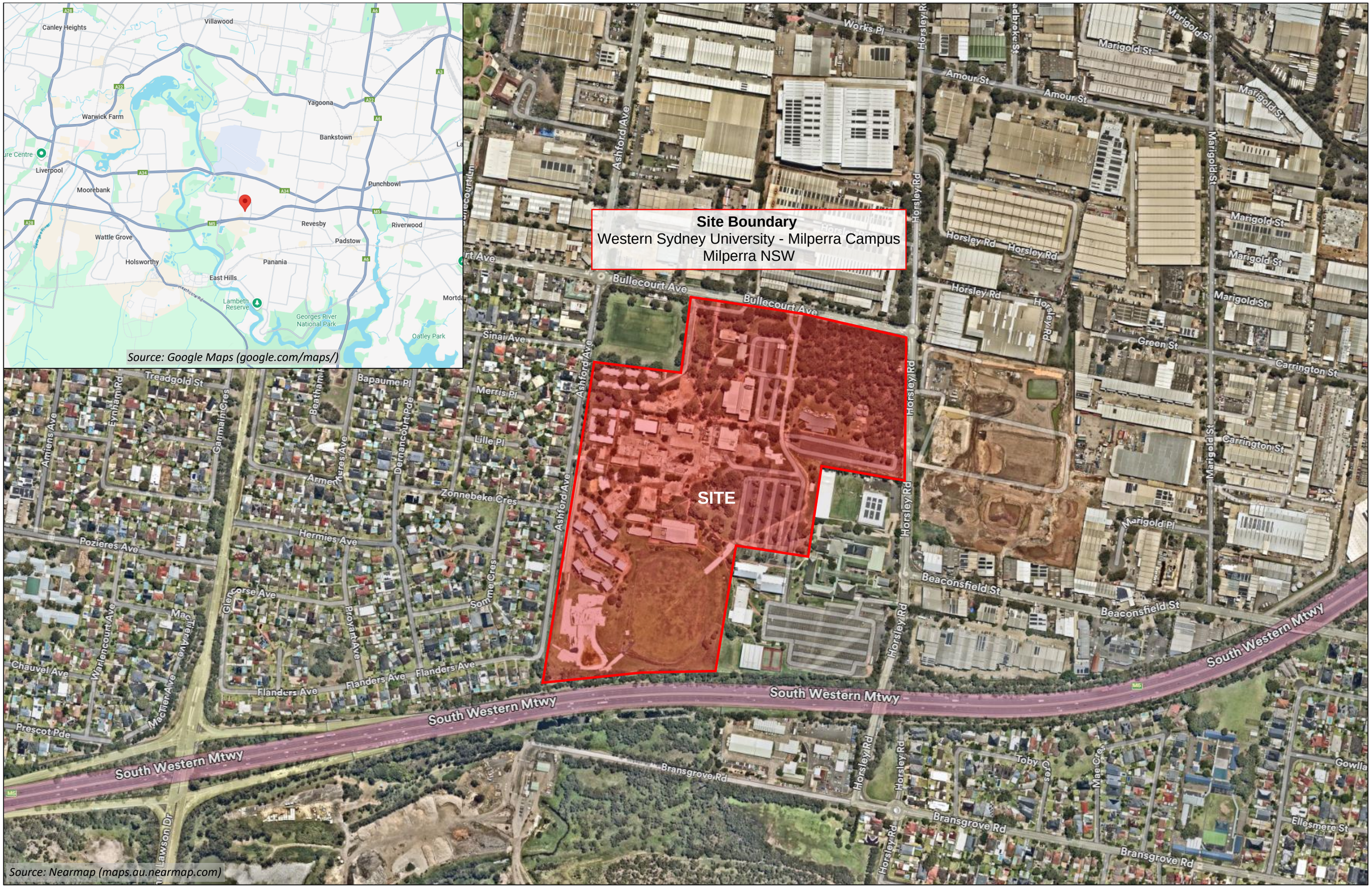
NSW EPA 2020, '*Guidelines for the Assessment and Management of Sites Impacted by Hazardous Ground Gases*'

NSW EPA 2020, '*Contaminated Sites: Guidelines for Consultants Reporting on Contaminated Sites*'.

NSW EPA 2022, '*Contaminated Sites: Sampling Design Guidelines*'.

WA DOH 2021, '*Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia*' dated May 2021.

FIGURES



Scale :	150 m	Site Locality		
Client Name:	Mirvac Pty Ltd	N	Figure Number:	1
Project Name:	Detailed Site Investigation		Figure Date:	1 August 2025
Project Location:	Western Sydney University – Milperra Campus, Milperra NSW		Report Number:	2300-DSI-01-110325.v6f

LEGEND

- Site Boundary
- **AEC01 (AG 2022)** - Investigation Area (Potential Friable Asbestos Impacted Soils)
- **AEC02 (AG 2022)** - Investigation Area (Potential Friable Asbestos Impacted Soils)
- **AEC03 (AG 2022)** - Investigation Area (Potential Asbestos Impacted Soils and Potential Asbestos Impacted Soils)
- **AEC05 (AG 2022)** - Structure Footprints (Previously un-assessed)

Investigation areas subject to assessment as part of the works completed by EGA in 2024 and 2025 for this report.

Summary of findings presented in Figure 11

Source: Nearmap (maps.au.nearmap.com)

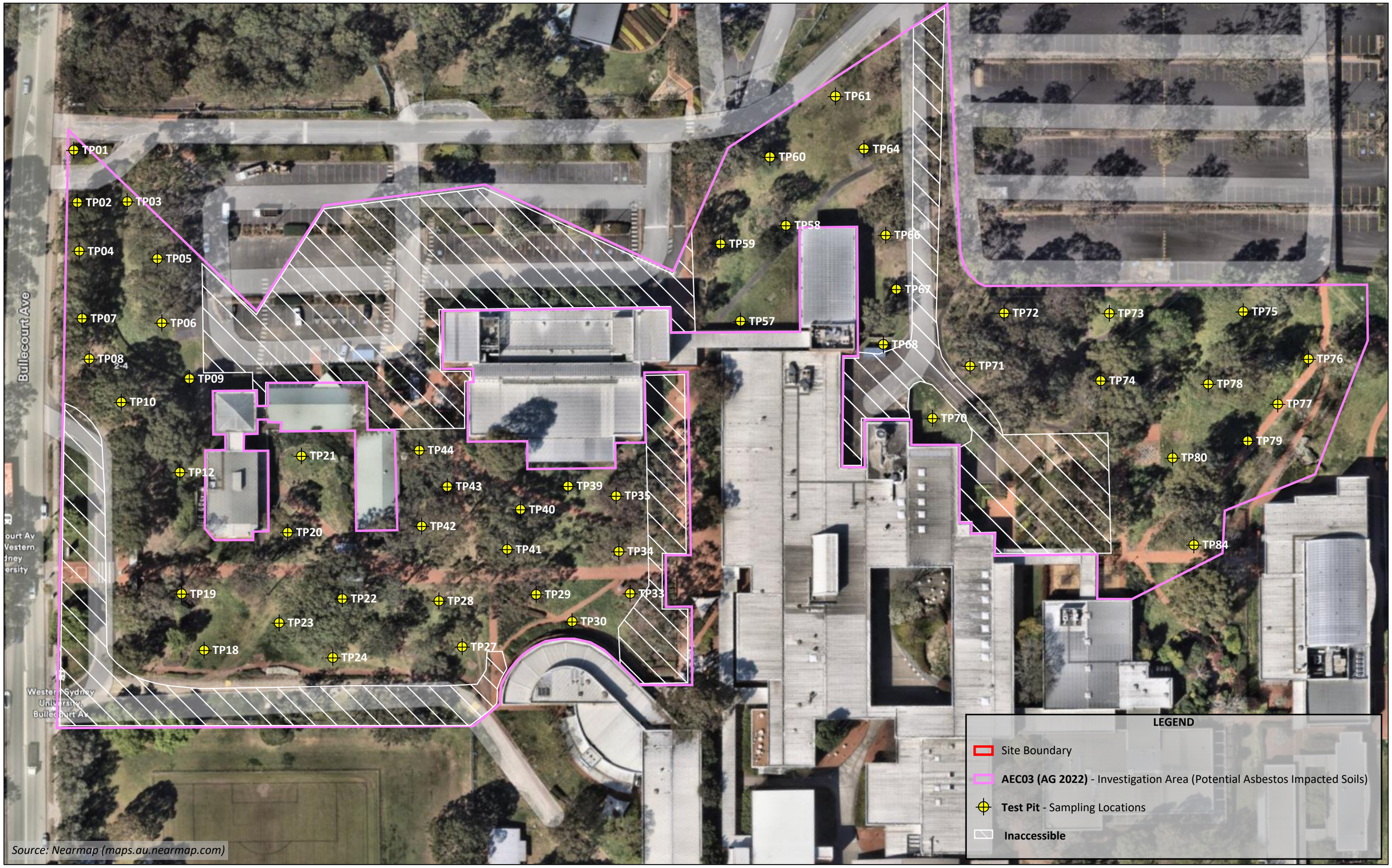
Scale :	65 m	Site Layout and Investigation Areas	
Client Name:	Mirvac Pty Ltd	Figure Number:	2
Project Name:	Detailed Site Investigation	Figure Date:	1 August 2025
Project Location:	Western Sydney University – Milperra Campus, Milperra NSW	Report Number:	2300-DSI-01-110325.v6f



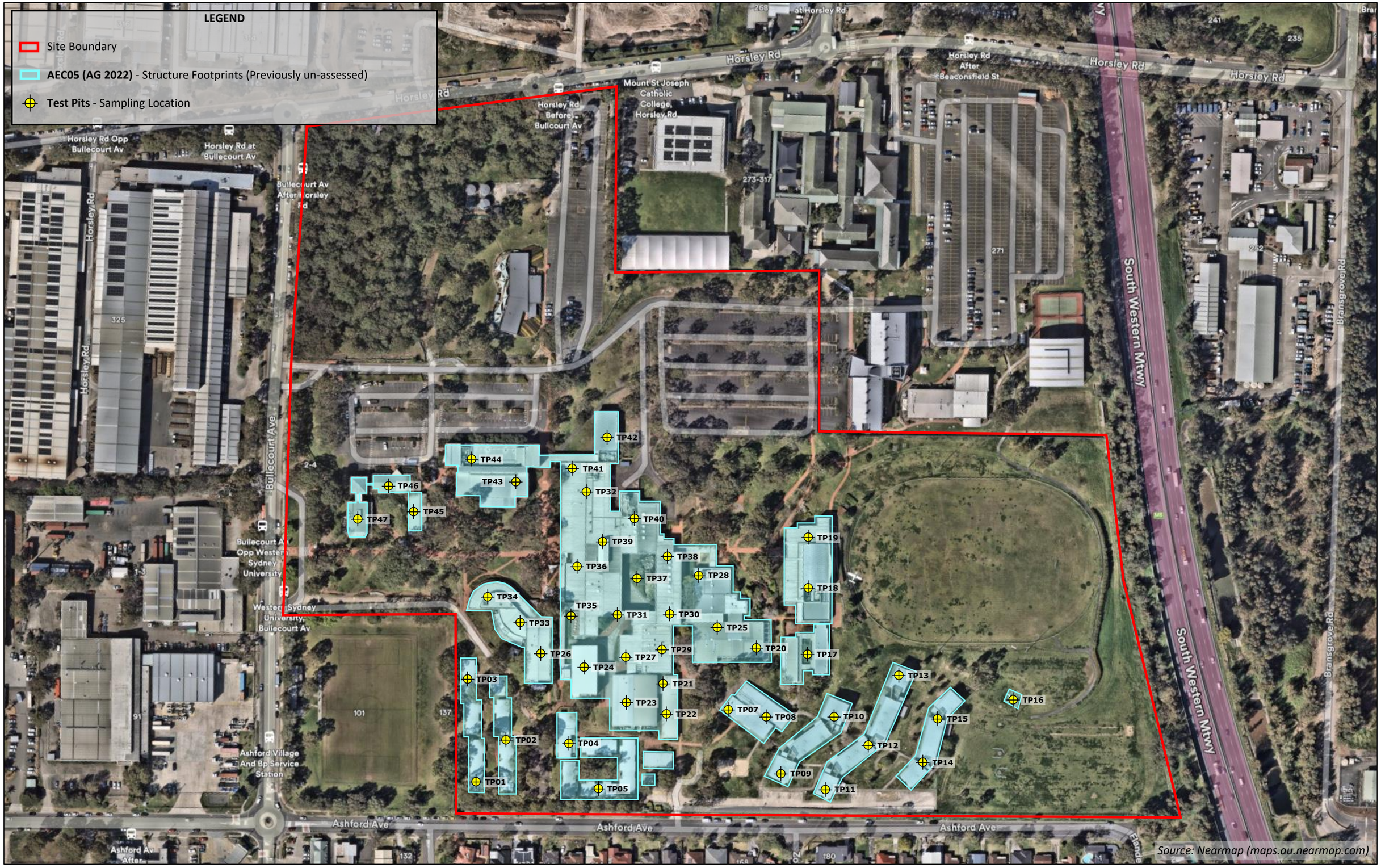
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Client Name:	Mirvac Pty Ltd	Figure Number:	3
Project Name:	Detailed Site Investigation	Figure Date:	1 August 2025
Project Location:	Western Sydney University – Milperra Campus, Milperra NSW	Report Number:	2300-DSI-01-110325.v6f



Scale :	21 m	Sampling Plan (AEC02)	
Client Name:	Mirvac Pty Ltd	Figure Number:	4
Project Name:	Detailed Site Investigation	Figure Date:	1 August 2025
Project Location:	Western Sydney University – Milperra Campus, Milperra NSW	Report Number:	2300-DSI-01-110325.v6f



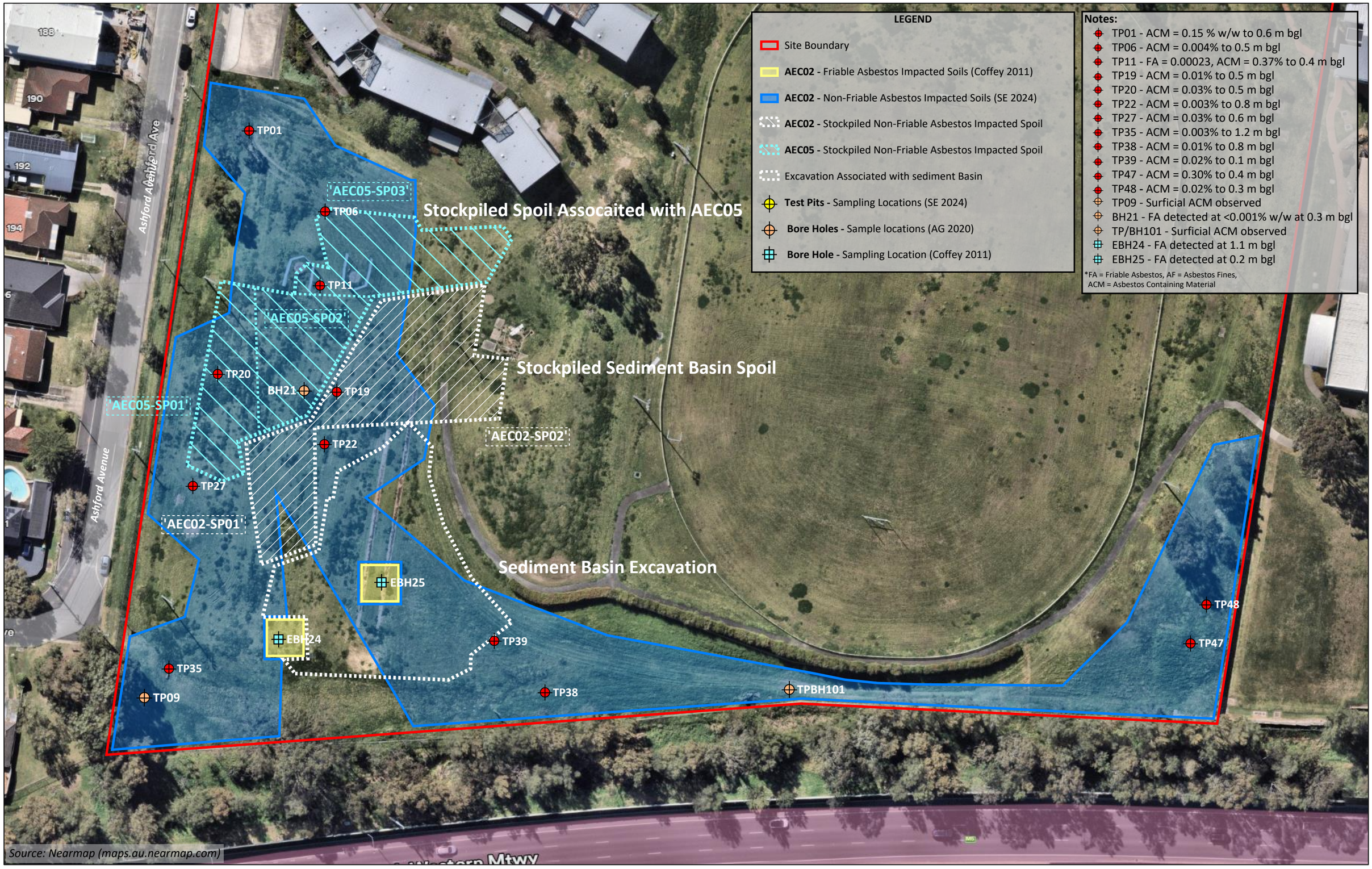
Scale :	25 m	Sampling Plan (AEC03)		
Client Name:	Mirvac Pty Ltd		Figure Number:	5
Project Name:	Detailed Site Investigation		Figure Date:	1 August 2025
Project Location:	Western Sydney University – Milperra Campus, Milperra NSW		Report Number:	2300-DSI-01-110325.v6f



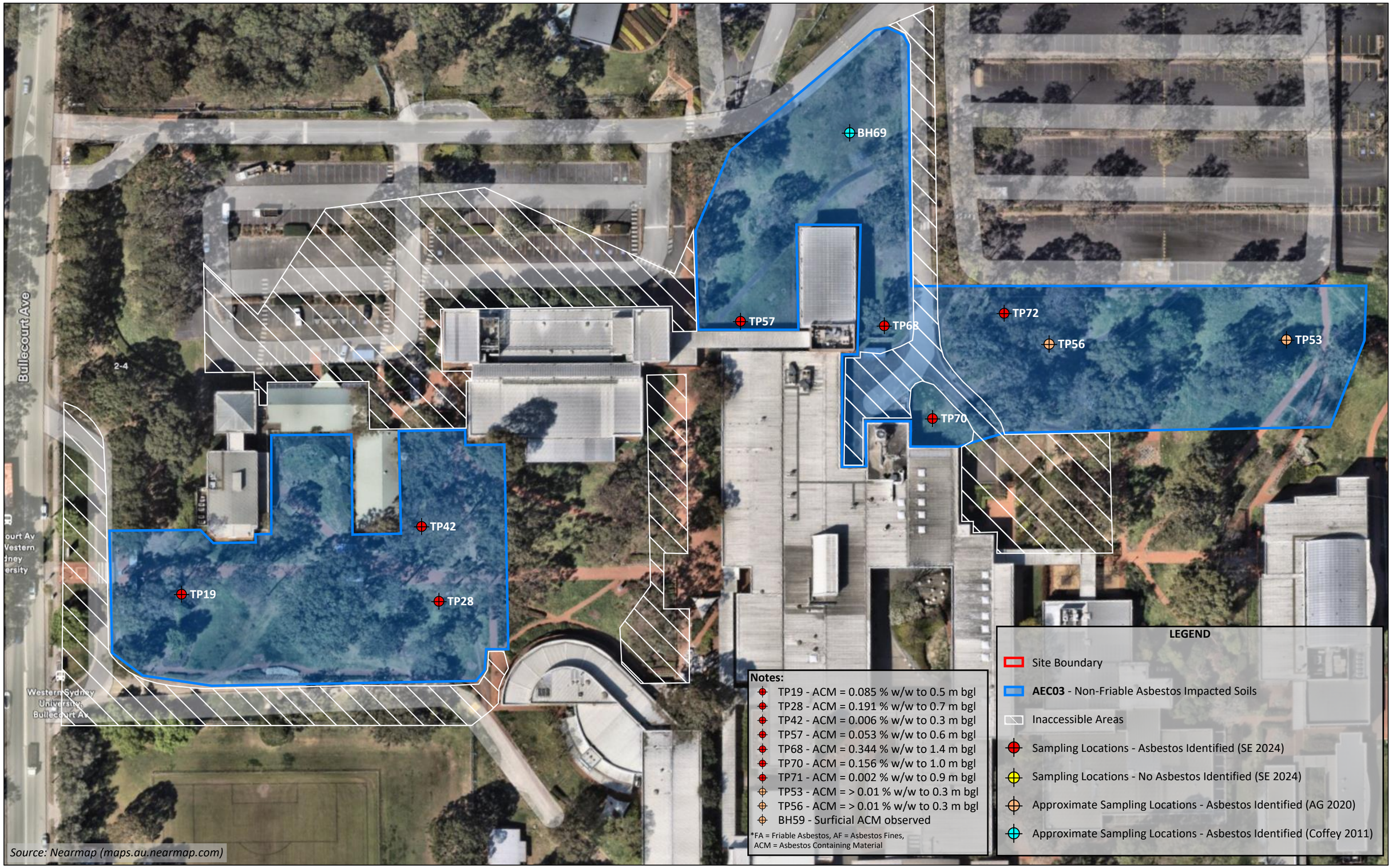
Scale :	65 m	Sampling Location (AEC05)	
Client Name:	Mirvac Pty Ltd	Figure Number:	6
Project Name:	Detailed Site Investigation	Figure Date:	1 August 2025
Project Location:	Western Sydney University – Milperra Campus, Milperra NSW	Report Number:	2300-DSI-01-110325.v6f



Scale :	15 m	Identifed Extent of Asbestos (AEC01)	
Client Name:	Mirvac Pty Ltd	Figure Number:	7
Project Name:	Detailed Site Investigation	Figure Date:	1 August 2025
Project Location:	Western Sydney University – Milperra Campus, Milperra NSW	Report Number:	2300-DSI-01-110325.v6f



Scale :	21 m	Identifed Extent of Asbestos (AEC02)		
Client Name:	Mirvac Pty Ltd	N	Figure Number:	8
Project Name:	Detailed Site Investigation		Figure Date:	11 March 2025
Project Location:	Western Sydney University – Milperra Campus, Milperra NSW		Report Number:	2300-DSI-01-110325.v6f



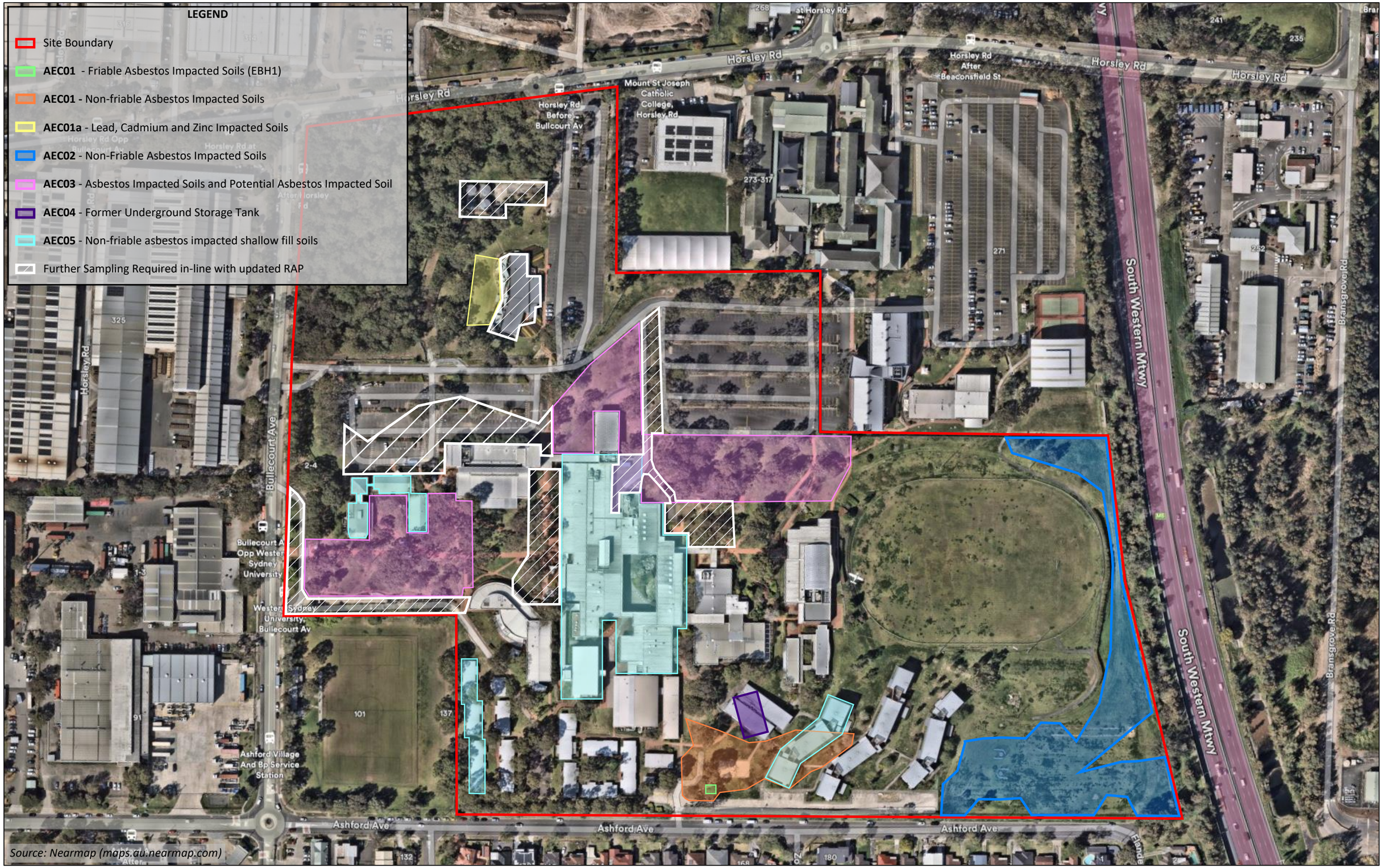
Scale :	25 m	Identifed Extent of Asbestos (AEC03)	
Client Name:	Mirvac Pty Ltd	Figure Number:	9
Project Name:	Detailed Site Investigation	Figure Date:	11 March 2025
Project Location:	Western Sydney University – Milperra Campus, Milperra NSW	Report Number:	2300-DSI-01-110325.v6f



Scale :	50 m	Identified Extent of Asbestos (AEC05)	
Client Name:	Mirvac Pty Ltd	Figure Number:	10
Project Name:	Detailed Site Investigation	Figure Date:	21 July 2025
Project Location:	Western Sydney University – Milperra Campus, Milperra NSW	Report Number:	2300-DSI-01-110325.v6f

LEGEND

- Site Boundary
- **AEC01** - Friable Asbestos Impacted Soils (EBH1)
- **AEC01** - Non-friable Asbestos Impacted Soils
- **AEC01a** - Lead, Cadmium and Zinc Impacted Soils
- **AEC02** - Non-Friable Asbestos Impacted Soils
- **AEC03** - Asbestos Impacted Soils and Potential Asbestos Impacted Soil
- **AEC04** - Former Underground Storage Tank
- **AEC05** - Non-friable asbestos impacted shallow fill soils
- Further Sampling Required in-line with updated RAP



Source: Nearmap (maps.au.nearmap.com)

Scale :	65 m	Areas of Environmental Concern		
Client Name:	Mirvac Pty Ltd	N	Figure Number:	11
Project Name:	Detailed Site Investigation		Figure Date:	7 August 2025
Project Location:	Western Sydney University – Milperra Campus, Milperra NSW		Report Number:	2300-DSI-01-110325.v6f

TABLES

Group	Analyte	Units	PQL	# Samples	# Detects	Minimum	Average	Standard Deviation	95% UCL	Maximum	Sample ID	TP01-0.1-0.2	TP02-0.1-0.2	TP03-0.1-0.2	TP04-0.1-0.2	TP05-0.1-0.2	TP07-0.1-0.2	TP07-1.0-1.1	TP07-2.0-2.1	TP08-0.1-0.2	TP08-1.0-1.1	TP08-2.0-2.1	TP09-0.1-0.2	TP09-0.2-0.3	TP10-0.1-0.2	TP10-1.0-1.1	TP10-2.0-2.1	TP11-0.1-0.2	TP11-0.4-0.5	TP12-0.1-0.2	TP12-0.9-1.0	TP13-0.1-0.2	TP13-0.3-0.4	TP13-0.6-0.7	TP13-1.5-1.6	TP14-0.1-0.2	TP14-0.4-0.5	TP14-0.8-0.9	TP15-0.1-0.2	TP15-0.4-0.5	TP15-0.6-0.7	TP15-0.9-1.0	TP16-0.1-0.2	TP16-0.4-0.5
											Reference / Sample Date	ES2510979022 15/04/25	ES2510979023 15/04/25	ES2509826003 03/04/25	ES2509826004 03/04/25	ES2509826005 03/04/25	ES2510979016 15/04/25	ES2510979017 15/04/25	ES2510979018 15/04/25	ES2510979019 15/04/25	ES2510979020 15/04/25	ES2509826001 03/04/25	ES2509826002 03/04/25	ES2510979021 15/04/25	ES2509826007 03/04/25	ES2509826008 03/04/25	ES2509826009 03/04/25	ES2509826010 03/04/25	ES2509826011 03/04/25	ES2509826012 03/04/25	ES2509826013 03/04/25	ES2509826014 03/04/25	ES2509826015 03/04/25	ES2509826016 03/04/25	ES2509826017 03/04/25	ES2509826018 03/04/25	ES2509826019 03/04/25	ES2509826020 03/04/25	ES2509826021 03/04/25	ES2509826022 03/04/25	ES2510979001 15/04/25	ES2510979002 15/04/25	ES2510979003 15/04/25	ES2510979004 15/04/25
Metals	Arsenic	mg/kg	5	18	9	6	4	2	-	17	<5	6	6	<5	7	<5	8	<5	7	6	<5	<5	12	8	<5	<5	7	9	<5	11	<5	<5	12	17	9	<5	6	<5	<5	12	8	<5	<5
	Cadmium	mg/kg	1	18	0	0	NC	NC	-	ND	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Chromium (Total)[1]	mg/kg	2	18	18	4	14	6	-	27	8	8	6	12	8	19	16	4	16	11	5	13	18	13	8	7	16	17	14	17	17	27	21	22	18	10	19	9	17	14	21	7	19
	Copper	mg/kg	5	18	15	8	13	7	-	35	<5	32	11	23	12	13	14	8	13	14	10	8	24	15	18	35	<5	16	22	15	<5	<5	17	19	15	5	10	<5	<5	21	15	8	8
	Lead	mg/kg	5	18	18	8	17	9	-	73	5	23	13	14	16	14	13	16	20	11	9	15	48	22	17	16	13	29	19	15	8	8	16	40	17	14	13	8	6	73	14	17	10
	Nickel	mg/kg	2	18	13	2	4	3	-	22	<2	22	7	11	4	12	<2	<2	5	<2	<2	3	8	4	8	5	<2	5	4	3	2	3	6	6	4	<2	5	2	<2	10	2	3	7
	Zinc	mg/kg	5	18	13	6	31	34	-	199	18	81	46	47	54	47	<5	<5	38	6	<5	38	142	54	38	36	<5	61	31	25	12	<5	24	59	36	21	6	20	<5	193	6	26	7
	Mercury (Inorganic)	mg/kg	0.1	18	0	0	NC	NC	-	ND	<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	<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	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PAH	Naphthalene	mg/kg	0.5	18	0	0.0	NC	NC	-	ND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Acenaphthylene	mg/kg	0.5	18	0	0.0	NC	NC	-	ND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Acenaphthene	mg/kg	0.5	18	0	0.0	NC	NC	-	ND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Fluorene	mg/kg	0.5	18	0	0.0	NC	NC	-	ND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Phenanthrene	mg/kg	0.5	18	0	0.0	NC	NC	-	ND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Anthracene	mg/kg	0.5	18	0	0.0	NC	NC	-	ND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Fluoranthene	mg/kg	0.5	18	0	0.0	NC	NC	-	ND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Pyrene	mg/kg	0.5	18	0	0.0	NC	NC	-	ND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Benz(a)anthracene	mg/kg	0.5	18	0	0.0	NC	NC	-	ND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Chrysene	mg/kg	0.5	18	0	0.0	NC	NC	-	ND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<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	mg/kg	0.5	18	0	0.0	NC	NC	-	ND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<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(k)fluoranthene	mg/kg	0.5	18	0	0.0	NC	NC	-	ND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<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	mg/kg	0.5	18	0	0.0	NC	NC	-	ND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Indeno(1.2.3.cd)pyrene	mg/kg	0.5	18	0	0.0	NC	NC	-	ND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Dibenz(a.h)anthracene	mg/kg	0.5	18	0	0.0	NC	NC	-	ND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<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(g.h.i)perylene	mg/kg	0.5	18	0	0.0	NC	NC	-	ND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<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 (18)	mg/kg	0.5	18	0	0.0	NC	NC	-	ND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<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 (zero)	mg/kg	0.5	18	0	0.0	NC	NC	-	ND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<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 (half LOR)	mg/kg	0.5	18	18	0.6	0.6	0.0	-	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
	Benzo(a)pyrene TEQ (LOR)	mg/kg	0.5	18	18	1.2	1.2	0.0	-	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
TRH	TRH C6-C9	mg/kg	10	18	0	0	NC	NC	-	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
	TRH C10-C14	mg/kg	50	18	0	0	NC	NC	-	ND	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
	TRH C15-C28	mg/kg	100	18	0	0	NC	NC	-	ND	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
	TRH C29-C36	mg/kg	100	18	0	0	NC	NC	-	ND	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
	TRH C10-C36 Total	mg/kg	50	18	0	0	NC	NC	-	ND	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
	TRH C6-C10	mg/kg	10	18	0	0	NC	NC	-	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
	TRH C6-C10 minus BTEX (F1)	mg/kg	10	18	0	0	NC	NC	-	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
	TRH >C10-C16 (F2)	mg/kg	50	18	0	0	NC	NC	-	ND	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
	TRH >C16-C34 (F3)	mg/kg	100	18	0	0	NC	NC	-	ND	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
	TRH >C34-C40 (F4)	mg/kg	100	18	0	0	NC	NC	-	ND	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
	TRH C10-C40 Total (F bands)	mg/kg	50	18	0	0	NC	NC	-	ND	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
	TRH >C10-C16 (F2) - Naphthalene	mg/kg	50	18	0	0	NC	NC	-	ND	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
BTEX	Benzene	mg/kg	0.2	18	0	0.0	NC	NC	-	ND	<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	<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	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Toluene	mg/kg	0.5	18	0	0.0	NC	NC	-	ND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Ethylbenzene	mg/kg	0.5	18	0	0.0	NC	NC	-	ND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	m/p-xylene	mg/kg	0.5	18	0	0.0	NC	NC	-	ND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	o-xylene	mg/kg	0.5	18	0	0.0	NC	NC	-	ND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<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 Xylenes	mg/kg	0.5	18	0	0.0	NC	NC	-	ND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
OCP	alpha-BHC	mg/kg	0.5	18	0	0.0	NC	NC	-	ND	<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	<0.05	<0.05	<0.05
	Hexachlorobenzene (HCB)	mg/kg	0.5	18	0	0.0	NC	NC	-	ND	<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	<0.05	<0.05	<0.05
	beta-BHC	mg/kg	0.5	18	0	0.0	NC	NC	-	ND	<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	<0.05	<0.05	<0.05
	gamma-BHC - (Lindane)	mg/kg	0.5	18	0	0.0	NC	NC	-	ND	<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	<0.05	<0.05	<0.05
	delta-BHC	mg/kg	0.5	18	0	0.0	NC	NC	-	ND	<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	<0.05	<0.05	<0.05
	Heptachlor	mg/kg	0.5	18	0	0.00	NC	NC	-	ND	<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	<0.05	<0.05	<0.05
	Aldrin	mg/kg	0.5	18	1	0.2	0.0	NC	-	0.67	<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	0.22	<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
	Heptachlor epoxide	mg/kg	0.1	18	0	0.0	NC	NC	-	ND	<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	<0.05	<0.05	<0.05
	Total Chlordane (sum)	mg/kg	0.1	18	0	0.0	NC	NC	-	ND	<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	<0.05	<0.05	<0.05
	trans-Chlordane	mg/kg	0.1	18	0	0.0	NC	NC	-	ND	<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	<0.05	<0.05	<0.05
	alpha-Endosulfan	mg/kg	0.1	18	0	0.0	NC	NC	-	ND	<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	<0.05	<0.05	<0.05
	cis-Chlordane	mg/kg	0.1	18	0	0.0	NC	NC	-	ND	<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	<0.05	<0.05	<0.05
	Dieldrin	mg/kg	0.1	18	0	0.0	NC	NC	-	ND	<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	<0.05	<0.05	<0.05
	4.4`-DDE	mg/kg	0.1	18	3	0.1	0.0	0.0	-	0.14	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.07	0.06	<0.05	<0.05	<0.05	0.14	<0.05	<0.05	<0.05	<0.05	<0.05	0.08	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.06	<0.05
	Endrin	mg/kg	0.1	18	0	0.0	NC	NC	-	ND	<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	<0.05	<0.05	<0.05
	Endosulfan (sum)	mg/kg	0.1	18	0	0.0	NC	NC	-	ND	<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	<0.05	<0.05	<0.05
	beta-Endosulfan	mg/kg	0.1	18	0	0.0	NC	NC	-	ND	<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	<0.05	<0.05	<0.05
	4.4`-DDD	mg/kg	0.1	18	0	0.0	NC	NC	-	ND	<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

Group	Analyte	Units	PQL	TP17-0.1-0.2	TP17-1.0-1.1	TP17-2.0-2.1	TP18-0.1-0.2	TP18_1.0-1.1	TP18-2.0-2.1	TP19-0.1-0.2	TP19-1.0-1.1	TP19-2.0-2.1	TP20-0.1-0.2	TP20-1.0-1.1	TP20-2.0-2.1	TP21-0-0.1	TP22-1.1-1.2	TP22-0.1-0.2	TP23-0.1-0.2	TP24-0.1-0.2	TP25-0.1-0.2	TP25-0.2-0.3	TP25-0.4-0.5	TP25-1.0-1.1	TP25-2.0-2.1	TP26-0.1-0.2	TP26-1.1-1.2	TP27-0.1-0.2	TP28-0.1-0.2	TP28-0.3-0.4	TP28-1.0-1.1	TP28-2.0-2.1	TP29-0.1-0.2	TP30-0.1-0.2	TP30-1.1-1.2	TP31-0.1-0.2	TP32-0.1-0.2	TP32-0.5-0.6	TP33-0.1-0.2	TP34-0.1-0.2	TP35-0.1-0.2
				ES2510979005 15/04/25	ES2510979006 15/04/25	ES2510979007 15/04/25	ES2510979008 15/04/25	ES2510979009 15/04/25	ES2512173001 29/04/25	ES2510979010 15/04/25	ES2510979011 15/04/25	ES2510979012 15/04/25	ES2510979013 15/04/25	ES2510979014 15/04/25	ES2510979024 15/04/25	ES2510979025 15/04/25	ES2525227302 7 21/07/25	ES2525227302 6 21/07/25	ES2525227302 5 21/07/25	ES2525227302 4 21/07/25	ES2510979026 15/04/25	ES2510979027 15/04/25	ES2510322001 09/04/25	ES2510322002 09/04/25	ES2509826025 03/04/25	ES2525227301 8 21/07/25	ES2525227301 8 21/07/25	ES2525227302 2 21/07/25	ES2510979024 15/04/25	ES2510979025 15/04/25	ES2510979026 15/04/25	ES2510979027 15/04/25	ES2510322022 09/04/25	ES2510322020 21/07/25	ES2510322021 21/07/25	ES2510322019 21/07/25	ES2510322001 09/04/25	ES2510322002 09/04/25	ES2522273016 21/07/2025	ES2522273015 21/07/2025	ES2522273014 21/07/2025
Metals	Arsenic	mg/kg	5	5	<5	6	<5	<5	<5	<5	<5	5	5	12	<5	7	34	<5	8	5	<5	<5	12	7	<5	6	<5	8	8	9	<5	<5	8	8	9	10	<5	<5	<5	8	<5
	Cadmium	mg/kg	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Chromium (Total)[1]	mg/kg	2	9	5	12	7	5	3	5	4	9	8	18	5	11	11	11	8	12	7	9	19	21	5	7	11	11	24	19	10	6	11	12	5	22	7	3	8	6	16
	Copper	mg/kg	5	16	15	20	21	19	22	24	23	22	7	10	13	11	10	15	22	8	<5	6	9	12	8	11	<5	12	18	10	<5	9	14	11	<5	12	7	<5	27	14	14
	Lead	mg/kg	5	16	14	15	13	16	10	13	14	14	12	16	8	9	19	17	20	12	7	23	17	12	9	12	6	19	21	18	7	10	51	14	<5	14	8	<5	16	12	12
	Nickel	mg/kg	2	<2	<2	3	6	2	4	6	4	4	5	<2	<2	5	4	7	10	4	5	10	3	<2	<2	3	3	2	21	4	<2	<2	2	2	<2	6	2	<2	4	2	14
	Zinc	mg/kg	5	11	10	18	26	16	26	38	30	25	58	<5	6	13	29	55	138	25	12	45	42	<5	<5	32	6	8	76	16	<5	<5	9	8	<5	13	14	<5	54	27	106
	Mercury (Inorganic)	mg/kg	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	<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	<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
PAH	Naphthalene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Acenaphthylene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Acenaphthene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Fluorene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Phenanthrene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Anthracene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Fluoranthene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Pyrene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Benz(a)anthracene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Chrysene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<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	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<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(k)fluoranthene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<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	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Indeno(1.2.3.cd)pyrene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Dibenz(a.h)anthracene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<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(g.h.i)perylene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<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 (18)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<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 (zero)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<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 (half LOR)	mg/kg	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
	Benzo(a)pyrene TEQ (LOR)	mg/kg	0.5	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
TRH	TRH C6-C9	mg/kg	10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
	TRH C10-C14	mg/kg	50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
	TRH C15-C28	mg/kg	100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	230	<100	<100	<100
	TRH C29-C36	mg/kg	100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	180	<100	<100	<100
	TRH C10-C36 Total	mg/kg	50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	410	<50	<50	<50
	TRH C6-C10	mg/kg	10	<10	<10	<10	<10	<10	<10	<10	<10	<10	12	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
	TRH C6-C10 minus BTEX (F1)	mg/kg	10	<10	<10	<10	<10	<10	<10	<10	<10	<10	12	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
	TRH >C10-C16 (F2)	mg/kg	50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	60	<50	<50	<50
	TRH >C16-C34 (F3)	mg/kg	100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	320	<100	<100	<100
	TRH >C34-C40 (F4)	mg/kg	100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	140	<100	<100	<100
	TRH C10-C40 Total (F bands)	mg/kg	50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	520	<50	<50	<50
	TRH >C10-C16 (F2) - Naphthalene	mg/kg	50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	60	<50	<50	<50
BTEX	Benzene	mg/kg	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	<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	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Toluene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Ethylbenzene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	m/p-xylene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	o-xylene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<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 Xylenes	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
OCP	alpha-BHC	mg/kg	0.5	<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	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	Hexachlorobenzene (HCB)	mg/kg	0.5	<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	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	beta-BHC	mg/kg	0.5	<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	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	gamma-BHC - (Lindane)	mg/kg	0.5	<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	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	delta-BHC	mg/kg	0.5	<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	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	Heptachlor	mg/kg	0.5	<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	0.06	<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
	Aldrin	mg/kg	0.5	0.12	0.08	0.45	0.67	0.29	<0.05	0.11	<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	0.17
	Heptachlor epoxide	mg/kg	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	0.48	0.99	<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
	Total Chlordane (sum)	mg/kg	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	0.31	1.20	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<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	<0.05	<0.05	<0.05	<0.05
	trans-Chlordane	mg/kg	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	0.31	1.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<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	<0.05	<0.05	<0.05	<0.05
	alpha-Endosulfan	mg/kg	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	<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
	cis-Chlordane	mg/kg	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	0.14	<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
	Dieldrin	mg/kg	0.1	0.1	0.12	0.35	0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.10	<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
	4.4`-DDE	mg/kg	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	0.12	<0.05	<0.05	<0.05	<0.05	<0.05	<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	0.11	<0.05
	Endrin	mg/kg	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	<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
	Endosulfan (sum)	mg/kg	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	<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
	beta-Endosulfan	mg/kg	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	<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
	4.4`-DDD	mg/kg	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	<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

Group	Analyte	Units	PQL	TP36-0.1-0.2 ES2522273013 21/07/2025	TP37-0.1-0.2 ES2522273012 21/07/2025	TP38-0.1-0.2 ES2522273011 21/07/2025	TP39-0.1-0.2 ES2522273010 21/07/2025	TP40-0.1-0.2 ES2522273009 21/07/2025	TP41-0.1-0.2 ES2522273008 21/07/2025	TP42-0.1-0.2 ES2522273007 21/07/2025	TP43-0.1-0.2 ES2522273006 21/07/2025	TP44-0.1-0.2 ES2522273004 21/07/2025	TP44-1.1-1.2 ES2522273005 21/07/2025	TP45-0.1-0.2 ES2522273003 21/07/2025	TP46-0.1-0.2 ES2522273002 21/07/2025	TP47-0.1-0.2 ES2522273001 21/07/2025	DUP01 ES2509826025 03/04/25	DUP01 ES2522273029 21/07/2025	DUP02 ES2510979028 15/04/25	DUP03 ES2509826005 09/04/25	Site Adopted Criteria Residential A 0 m to <1 m | SAND: Health Investigation / Screening Level (HIL / HSL)	Environmental Investigation / Screening Level (EIL / ESL)	Petroleum Hydrocarbon Management Level (PHML)
Metals	Arsenic	mg/kg	5	<5	10	8	10	11	9	6	8	<5	<5	<5	12	9	6	10	7	<5	100	100	-
	Cadmium	mg/kg	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	20	-	-
	Chromium (Total)[1]	mg/kg	2	13	20	13	18	26	10	8	10	11	9	8	17	32	13	16	13	7	100	400	-
	Copper	mg/kg	5	33	7	11	9	10	8	12	12	36	40	10	15	18	22	13	13	<5	6000	130	-
	Lead	mg/kg	5	37	13	13	12	19	10	8	9	16	21	26	23	16	28	12	21	<5	300	1100	-
	Nickel	mg/kg	2	8	4	2	4	<2	2	6	5	19	20	3	6	25	8	<2	4	<2	400	130	-
	Zinc	mg/kg	5	57	11	10	8	5	15	22	34	83	115	59	43	35	199	6	49	12	7400	720	-
	Mercury (Inorganic)	mg/kg	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	<0.1	<0.1	<0.1	<0.1	<0.1	40	-	-
PAH	Naphthalene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-
	Acenaphthylene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-
	Acenaphthene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-
	Fluorene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-
	Phenanthrene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-
	Anthracene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-
	Fluoranthene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-
	Pyrene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-
	Benz(a)anthracene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-
	Chrysene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-
	Benzo(b+j)fluoranthene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-
	Benzo(k)fluoranthene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-
	Benzo(a)pyrene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	0.7	-
	Indeno(1.2.3.cd)pyrene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-
	Dibenz(a.h)anthracene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-
	Benzo(g.h.i)perylene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-
	Total PAH (18)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	300	-	-
	Benzo(a)pyrene TEQ (zero)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	3	-	-
	Benzo(a)pyrene TEQ (half LOR)	mg/kg	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	3	-	-
	Benzo(a)pyrene TEQ (LOR)	mg/kg	0.5	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	3	-	-
TRH	TRH C6-C9	mg/kg	10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	-	-	-	-	-	-
	TRH C10-C14	mg/kg	50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	-	-	-	-	-	-
	TRH C15-C28	mg/kg	100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	-	-	-	-	-	-
	TRH C29-C36	mg/kg	100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	-	-	-	-	-	-
	TRH C10-C36 Total	mg/kg	50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	-	-	-	-	-	-
	TRH C6-C10	mg/kg	10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	-	-	-	-	-	-
	TRH C6-C10 minus BTEX (F1)	mg/kg	10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	-	-	-	-	45	-	-
	TRH >C10-C16 (F2)	mg/kg	50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	-	-	-	-	-	120	1000
	TRH >C16-C34 (F3)	mg/kg	100	120	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	-	-	-	-	-	1300	3500
	TRH >C34-C40 (F4)	mg/kg	100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	-	-	-	-	-	5600	10000
	TRH C10-C40 Total (F bands)	mg/kg	50	120	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	-	-	-	-	-	-	-
	TRH >C10-C16 (F2) - Naphthalene	mg/kg	50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	-	-	-	-	110	-	-
BTEX	Benzene	mg/kg	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	<0.2	-	-	-	-	0.5	65	-
	Toluene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	160	105	-
	Ethylbenzene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	55	125	-
	m/p-xylene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
	o-xylene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
	Total Xylenes	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	40	45	-
OCP	alpha-BHC	mg/kg	0.5	<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	-	-	-	-	-	-	-
	Hexachlorobenzene (HCB)	mg/kg	0.5	<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	-	-	-	-	10	-	-
	beta-BHC	mg/kg	0.5	<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	-	-	-	-	-	-	-
	gamma-BHC - (Lindane)	mg/kg	0.5	<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	-	-	-	-	-	-	-
	delta-BHC	mg/kg	0.5	<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	-	-	-	-	-	-	-
	Heptachlor	mg/kg	0.5	<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	0.24	-	-	-	-	6	-	-
	Aldrin	mg/kg	0.5	0.35	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.58	-	-	-	-	-	-	-
	Heptachlor epoxide	mg/kg	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	-	-	-	-	-	-	-
	Total Chlordane (sum)	mg/kg	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	0.16	-	-	-	-	50	-	-
	trans-Chlordane	mg/kg	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	0.16	-	-	-	-	-	-	-
	alpha-Endosulfan	mg/kg	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	-	-	-	-	-	-	-
	cis-Chlordane	mg/kg	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	-	-	-	-	-	-	-
	Dieldrin	mg/kg	0.1	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.18	0.06	0.70	-	-	-	-	-	-	-
	4.4`-DDE	mg/kg	0.1	<0.05	<0.05	<0.05	<0.05	<0.05	0.19	<0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	-	-	-	-	-	-
	Endrin	mg/kg	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	-	-	-	-	10	-	-
	Endosulfan (sum)	mg/kg	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	-	-	-	-	270	-	-
	beta-Endosulfan	mg/kg	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	-	-	-	-	-	-	-
	4.4`-DDD	mg/kg	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	-	-	-	-	-	-	-
	Endrin aldehyde	mg/kg	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	-	-	-	-	-	-	-
	Endosulfan sulfate	mg/kg	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	-	-	-	-	-	-	-
	4.4`-DDT	mg/kg	0.1	<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	-	-	-	-	-	-	-
	Endrin ketone	mg/kg	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	-	-	-	-	-	-	-
	Methoxychlor	mg/kg	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	-	-	-	-	300	-	-
	Sum of DDD + DDE + DDT	mg/kg	0.1	<0.05	<0.05	<0.05	<0.05	<0.05	0.19	<0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	-	-	-	240	-	-
	Sum of Aldrin + Dieldrin	mg/kg	0.2	0.41	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.18	0.06	1.28	-	-	-	-	6	-	-
PCBs	Total PCBs	mg/kg	0.5	<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	-	-	-	-	1	-	-

General Notes to Table: | - = Not Analysed | BTEX = Benzene, Toluene
| PCBs = Polychlorinated Biphenyls | PQL = Practical Quantification Lir
Notes to Statistical Calculations: The average and Standard Deviation
Additional Notes: [1] HIL limits are for Chromuium (VI) only, and EIL lim

Value	Highlighted concentration exceeds the site adopted criteri
Value	Highlighted concentration exceeds the site adopted criteri
Value	Highlight concentration exceeds the site adopted criteria (
Value	Highlighted concentration exceeds multiple site adopted c

Sample ID	Date Sampled	HIL A - FA/AF (% w/w)	HIL A - Bonded ACM (% w/w)	Laboratory Results	Laboratory Results		On-site gravimetric results			
				Asbestos Detected/ Non-Detected	Percentage of AF/FA <7mm, %w/w	Percentage of Bonded ACM >7mm (500ml), %w/w	Weight of Sample (10L), g	Onsite weight of ACM fragment >7mm, g	Asbestos	Percentage of Bonded ACM >7mm (10L), %w/w
AEC01-TP01-0.2-0.3	19/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	12800	-	-	-
AEC01-TP04-0.2-0.3	19/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	13200	-	-	-
AEC01-TP05-0.2-0.3	19/01/2024	0.001%	0.01%	Asbestos Detected	**0.00022%**	<0.01%	13600	-	-	-
AEC01-TP06-0.2-0.3	19/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	13700	-	-	-
AEC01-TP07-0.2-0.3	19/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	13100	-	-	-
AEC01-TP08-0.2-0.3	19/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	12800	-	-	-
AEC01-TP09-0.2-0.3	19/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	13100	-	-	-
AEC01-TP10-0.2-0.3	19/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	14500	-	-	-
AEC01-TP11-0.2-0.3	19/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	13800	-	-	-
AEC01-TP13-0.2-0.3	19/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	14200	-	-	-
AEC01-TP14-0.2-0.3	19/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	13400	-	-	-
AEC01-TP15-0.2-0.3	19/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	12900	-	-	-
AEC01-TP16-0.2-0.3	19/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	13200	-	-	-
AEC01-TP17-0.2-0.3	11/01/2024	0.001%	0.01%	Asbestos Detected	**0.00032%**	<0.01%	11500	25	3.75	**0.033%**
AEC01-TP18-0.2-0.3	11/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	14100	-	-	-
AEC01-TP19-0.2-0.3	11/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	13300	-	-	-
AEC01-TP20-0.2-0.3	19/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	13800	-	-	-
AEC01-TP21-0.2-0.3	11/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	11800	-	-	-
AEC01-TP22-0.2-0.3	11/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	15000	-	-	-
AEC01-TP23-0.2-0.3	19/01//2024	0.001%	0.01%	Asbestos Detected	<0.001%	**0.058%**	12700	-	-	-
EBH2-01	28/10/2024	0.001%	0.01%	-	<0.001%	<0.01%	14950	-	-	-
EBH2-02	28/10/2024	0.001%	0.01%	-	<0.001%	<0.01%	16410	-	-	-
EBH2-03	28/10/2024	0.001%	0.01%	-	<0.001%	<0.01%	12620	-	-	-
EBH2-04	28/10/2024	0.001%	0.01%	Asbestos Detected	<0.001%	**0.028%**	16880	-	-	-
EBH3-01	28/10/2024	0.001%	0.01%	-	<0.001%	<0.01%	18340	-	-	-
EBH3-02	28/10/2024	0.001%	0.01%	-	<0.001%	<0.01%	16210	-	-	-
EBH3-03	28/10/2024	0.001%	0.01%	-	<0.001%	<0.01%	19450	-	-	-
EBH3-04	28/10/2024	0.001%	0.01%	-	<0.001%	<0.01%	19240	-	-	-
EBH5-01	28/10/2024	0.001%	0.01%	-	<0.001%	<0.01%	18360	-	-	-
EBH5-02	28/10/2024	0.001%	0.01%	-	<0.001%	<0.01%	19530	-	-	-
EBH5-03	28/10/2024	0.001%	0.01%	-	<0.001%	<0.01%	16170	-	-	-
EBH5-04	28/10/2024	0.001%	0.01%	-	<0.001%	<0.01%	16750	-	-	-
BH39-01	28/10/2024	0.001%	0.01%	-	<0.001%	<0.01%	14830	-	-	-
BH39-02	28/10/2024	0.001%	0.01%	-	<0.001%	<0.01%	16150	-	-	-
BH39-03	28/10/2024	0.001%	0.01%	-	<0.001%	<0.01%	13120	-	-	-
BH39-04	28/10/2024	0.001%	0.01%	Asbestos Detected	<0.001%	**0.024%**	18120	-	-	-
SS10-01	28/10/2024	0.001%	0.01%	-	<0.001%	<0.01%	17650	-	-	-
SS10-02	28/10/2024	0.001%	0.01%	-	<0.001%	<0.01%	13180	-	-	-
SS10-03	28/10/2024	0.001%	0.01%	Asbestos Detected	<0.001%	**0.036%**	19270	-	-	-
SS10-04	28/10/2024	0.001%	0.01%	-	<0.001%	<0.01%	13570	-	-	-
AEC02-TP01-0.2-0.3	11/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	13000	130	19.5	**0.150%**
AEC02-TP02-0.2-0.3	11/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	11000	-	-	-
AEC02-TP03-0.2-0.3	11/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	11500	-	-	-
AEC02-TP04-0.2-0.3	11/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	13200	-	-	-
AEC02-TP05-0.2-0.3	11/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	13300	-	-	-
AEC02-TP06-0.2-0.3	11/01/2024	0.001%	0.01%	Asbestos Detected	<0.001%	<0.01%	13400	4	0.6	**0.004%**
AEC02-TP07-0.2-0.3	11/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	13100	-	-	-
AEC02-TP08-0.2-0.3	11/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	13000	-	-	-
AEC02-TP09-0.2-0.3	11/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	12800	-	-	-
AEC02-TP10-0.2-0.3	11/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	14000	-	-	-
AEC02-TP11-0.2-0.3	11/01/2024	0.001%	0.01%	Asbestos Detected	**0.00023%**	<0.01%	13000	321	48.15	**0.370%**
AEC02-TP12-0.2-0.3	11/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	11300	-	-	-
AEC02-TP13-0.2-0.3	12/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	14000	-	-	-
AEC02-TP14-0.2-0.3	12/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	13200	-	-	-
AEC02-TP15-0.2-0.3	12/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	13600	-	-	-
AEC02-TP16-0.2-0.3	12/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	12500	-	-	-
AEC02-TP17-0.2-0.3	12/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	12600	-	-	-
AEC02-TP18-0.2-0.3	12/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	13400	-	-	-
AEC02-TP19-0.2-0.3	12/01/2024	0.001%	0.01%	Asbestos Detected	<0.001%	<0.01%	13700	6	0.9	**0.007 %**
AEC02-TP20-0.2-0.3	12/01/2024	0.001%	0.01%	Asbestos Detected	<0.001%	<0.01%	12800	28	4.2	**0.033%**
AEC02-TP21-0.2-0.3	12/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	12900	-	-	-
AEC02-TP22-0.2-0.3	12/01/2024	0.001%	0.01%	Asbestos Detected	<0.001%	<0.01%	13400	3	0.45	**0.003%**
AEC02-TP23-0.2-0.3	12/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	13500	-	-	-
AEC02-TP24-0.2-0.3	12/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	14400	-	-	-
AEC02-TP25-0.2-0.3	12/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	14000	-	-	-
AEC02-TP26-0.2-0.3	12/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	13400	-	-	-

Sample ID	Date Sampled	HIL A - FA/AF (% w/w)	HIL A - Bonded ACM (% w/w)	Laboratory Results	Laboratory Results		On-site gravimetric results			
				Asbestos Detected/ Non-Detected	Percentage of AF/FA <7mm, %w/w	Percentage of Bonded ACM >7mm (500ml), %w/w	Weight of Sample (10L), g	Onsite weight of ACM fragment >7mm, g	Asbestos	Percentage of Bonded ACM >7mm (10L), %w/w
AEC02-TP27-0.2-0.3	12/01/2024	0.001%	0.01%	Asbestos Detected	<0.001%	<0.01%	12600	27	4.05	**0.032%**
AEC02-TP28-0.2-0.3	12/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	13000	-	-	-
AEC02-TP29-0.2-0.3	12/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	13700	-	-	-
AEC02-TP30-0.2-0.3	12/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	13000	-	-	-
AEC02-TP31-0.2-0.3	12/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	13600	-	-	-
AEC02-TP32-0.2-0.3	12/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	13200	-	-	-
AEC02-TP33-0.2-0.3	12/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	14800	-	-	-
AEC02-TP34-0.2-0.3	12/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	14000	-	-	-
AEC02-TP35-0.2-0.3	12/01/2024	0.001%	0.01%	Asbestos Detected	<0.001%	<0.01%	14000	3	0.45	**0.003%**
AEC02-TP36-0.2-0.3	12/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	14000	-	-	-
AEC02-TP37-0.2-0.3	12/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	12800	-	-	-
AEC02-TP38-0.2-0.3	12/01/2024	0.001%	0.01%	Asbestos Detected	<0.001%	<0.01%	13100	10	1.5	**0.011%**
AEC02-TP39-0.2-0.3	12/01/2024	0.001%	0.01%	Asbestos Detected	<0.001%	<0.01%	13000	16	2.4	**0.018%**
AEC02-TP40-0.2-0.3	12/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	13700	-	-	-
AEC02-TP41-0.2-0.3	12/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	13400	-	-	-
AEC02-TP42-0.2-0.3	12/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	13200	-	-	-
AEC02-TP43-0.2-0.3	12/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	14100	-	-	-
AEC02-TP44-0.2-0.3	12/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	12000	-	-	-
AEC02-TP45-0.2-0.3	12/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	14000	-	-	-
AEC02-TP46-0.2-0.3	12/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	15000	-	-	-
AEC02-TP47-0.2-0.3	12/01/2024	0.001%	0.01%	Asbestos Detected	<0.001%	<0.01%	13800	276	41.4	**0.300%**
AEC02-TP48-0.2-0.3	12/01/2024	0.001%	0.01%	Asbestos Detected	<0.001%	<0.01%	14500	18	2.7	**0.019%**
AEC02-TP49-0.2-0.3	12/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	13400	-	-	-
AEC02-TP50-0.2-0.3	12/01/2024	0.001%	0.01%	-	<0.001%	0.004%	13900	-	-	-
AEC02-TP51-0.2-0.3	12/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	14000	-	-	-
AEC02-TP52-0.2-0.3	12/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	15100	-	-	-
AEC03-TP02-0.2-0.3	9/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	11500	-	-	-
AEC03-TP03-0.2-0.3	9/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	12300	-	-	-
AEC03-TP04-0.2-0.3	9/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	13500	-	-	-
AEC03-TP05-0.2-0.3	9/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	14200	-	-	-
AEC03-TP06-0.2-0.3	9/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	12800	-	-	-
AEC03-TP07-0.2-0.3	9/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	13200	-	-	-
AEC03-TP08-0.2-0.3	9/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	11500	-	-	-
AEC03-TP09-0.2-0.3	9/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	15300	-	-	-
AEC03-TP10-0.2-0.3	9/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	13000	-	-	-
AEC03-TP12-0.2-0.3	9/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	14500	-	-	-
AEC03-TP18-0.2-0.3	9/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	14700	-	-	-
TP19	9/01/2024	0.001%	0.01%	Asbestos Detected	<0.001%	<0.01%	11700	66	9.9	**0.085%**
AEC03-TP20-0.2-0.3	9/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	13700	-	-	-
AEC03-TP21-0.2-0.3	9/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	12800	-	-	-
AEC03-TP22-0.2-0.3	9/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	13700	-	-	-
AEC03-TP23-0.2-0.3	9/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	13200	-	-	-
AEC03-TP24-0.2-0.3	9/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	12600	-	-	-
AEC03-TP27-0.2-0.3	9/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	13600	-	-	-
AEC03-TP28-0.2-0.3	9/01/2024	0.001%	0.01%	Asbestos Detected	<0.001%	<0.01%	16400	209	31.35	**0.191%**
AEC03-TP29-0.2-0.3	10/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	14600	-	-	-
AEC03-TP30-0.2-0.3	10/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	14000	-	-	-
AEC03-TP32-0.2-0.3	10/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	13000	-	-	-
AEC03-TP33-0.2-0.3	10/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	12800	-	-	-
AEC03-TP34-0.2-0.3	10/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	13800	-	-	-
AEC03-TP35-0.2-0.3	10/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	14000	-	-	-
AEC03-TP39-0.2-0.3	10/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	14200	-	-	-
AEC03-TP40-0.2-0.3	10/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	13800	-	-	-
AEC03-TP41-0.2-0.3	10/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	12800	-	-	-
AEC03-TP42-0.2-0.3	10/01/2024	0.001%	0.01%	Asbestos Detected	<0.001%	<0.01%	11700	5	0.75	**0.006%**
AEC03-TP43-0.2-0.3	10/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	14100	-	-	-
AEC03-TP44-0.2-0.3	10/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	14800	-	-	-
AEC03-TP57-0.2-0.3	10/01/2024	0.001%	0.01%	Asbestos Detected	<0.001%	<0.01%	14500	51	7.65	**0.053%**
AEC03-TP58-0.2-0.3	10/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	11000	-	-	-
AEC03-TP60-0.2-0.3	10/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	12700	-	-	-
AEC03-TP61-0.2-0.3	10/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	12700	-	-	-
AEC03-TP62-0.2-0.3	10/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	14500	-	-	-
AEC03-TP63-0.2-0.3	10/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	12500	-	-	-
AEC03-TP64-0.2-0.3	10/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	12500	-	-	-
AEC03-TP66-0.2-0.3	10/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	13800	-	-	-
AEC03-TP67-0.2-0.3	10/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	13100	-	-	-

Sample ID	Date Sampled	HIL A - FA/AF (% w/w)	HIL A - Bonded ACM (% w/w)	Laboratory Results	Laboratory Results		On-site gravimetric results			
				Asbestos Detected/ Non-Detected	Percentage of AF/FA <7mm, %w/w	Percentage of Bonded ACM >7mm (500ml), %w/w	Weight of Sample (10L), g	Onsite weight of ACM fragment >7mm, g	Asbestos	Percentage of Bonded ACM >7mm (10L), %w/w
AEC03-TP68-0.2-0.3	10/01/2024	0.001%	0.01%	Asbestos Detected	<0.001%	<0.01%	13500	310	46.5	**0.344%**
AEC03-TP70-0.2-0.3	10/01/2024	0.001%	0.01%	Asbestos Detected	<0.001%	<0.01%	14600	152	22.8	**0.156%**
AEC03-TP71-0.2-0.3	10/01/2024	0.001%	0.01%	Asbestos Detected	<0.001%	<0.01%	13100	2	0.3	**0.002%**
AEC03-TP72-0.2-0.3	10/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	12200	-	-	-
AEC03-TP73-0.2-0.3	10/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	14000	-	-	-
AEC03-TP75-0.2-0.3	10/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	12600	-	-	-
AEC03-TP76-0.2-0.3	11/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	14900	-	-	-
AEC03-TP77-0.2-0.3	11/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	12800	-	-	-
AEC03-TP78-0.2-0.3	11/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	14100	-	-	-
AEC03-TP79-0.2-0.3	11/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	12500	-	-	-
AEC03-TP80-0.2-0.3	11/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	13200	-	-	-
AEC03-TP84-0.2-0.3	11/01/2024	0.001%	0.01%	-	<0.001%	<0.01%	12600	-	-	-

Legend

	Highlighted concentration exceeds the adopted site criteria - Asbestos Health Screening Level (w/w) - NEPM ASC 2013 AF/FA
	Highlighted concentration exceeds the adopted site criteria - Asbestos Health Screening Level (w/w) - NEPM ASC 2013 Bonded ACM
ACM	Asbestos Containing Material
FA and AF	Fibrous Asbestos and Asbestos Fines
NL	Not Limiting
-	Detected at below the limit of reporting

		Group	Asbestos					
		Analyte	Asbestos Sample Mass/Dimensions	Asbestos Sample Description	AF	FA	FA + AF	ACM
		Units	-	-	% w/w	% w/w	% w/w	% w/w
		PQL	-	-	0.01	0.01	0.01	0.01
Sample ID	Reference / Sample Date			# Samples	84	84	84	84
				# Detects	0	0	0	0
				Minimum	0	0	0	0
				Average	NC	NC	NC	NC
				Standard Deviation	NC	NC	NC	NC
				Maximum	ND	ND	ND	ND
TP01-0.1-0.2	ES2510979022 15/04/25		154	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP02-0.1-0.2	ES2510979023 15/04/25		104	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP03-0.1-0.2	ES2509826003 03/04/25		138	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP04-0.1-0.2	ES2509826004 03/04/25		131	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP05-0.1-0.2	ES2509826005 03/04/25		133	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP07-0.1-0.2	ES2510979016 15/04/25		71	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP07-1.0-1.1	ES2510979017 15/04/25		62	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP07-2.0-2.1	ES2510979018 15/04/25		63	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP08-0.1-0.2	ES2510979019 15/04/25		56	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP08-1.0-1.1	ES2510979020 15/04/25		56	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP08-2.0-2.1	ES2509826001 03/04/25		72	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP09-0.1-0.2	ES2509826002 03/04/25		53	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP09-0.2-0.3	ES2510979021 15/04/25		44	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP10-0.1-0.2	ES2509826007 03/04/25		74	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP10-1.0-1.1	ES2509826008 03/04/25		64	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP10-2.0-2.1	ES2509826009 03/04/25		62	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP11-0.1-0.2	ES2509826010 03/04/25		45	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP11-0.4-0.5	ES2509826011 03/04/25		50	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP12-0.1-0.2	ES2509826012 03/04/25		58	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP12-0.9-1.0	ES2509826013 03/04/25		55	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP13-0.1-0.2	ES2509826014 03/04/25		57	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP13-0.3-0.4	ES2509826015 03/04/25		48	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP13-0.6-0.7	ES2509826016 03/04/25		44	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP13-1.5-1.6	ES2509826017 03/04/25		57	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP14-0.1-0.2	ES2509826018 03/04/25		84	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP14-0.4-0.5	ES2509826019 03/04/25		50	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP14-0.8-0.9	ES2509826020 03/04/25		39	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP15-0.1-0.2	ES2509826021 03/04/25		47	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP15-0.4-0.5	ES2509826022 03/04/25		58	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP15-0.6-0.7	ES2510979001 15/04/25		59	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP15-0.9-1.0	ES2510979002 15/04/25		53	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP16-0.1-0.2	ES2510979003 15/04/25		52	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP16-0.4-0.5	ES2510979004 15/04/25		48	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP17-0.1-0.2	ES2510979005 15/04/25		43	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP17-1.0-1.1	ES2510979006 15/04/25		49	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP17-2.0-2.1	ES2510979007 15/04/25		41	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP18-0.1-0.2	ES2510979008 15/04/25		69	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP18_1.0-1.1	ES2510979009 15/04/25		59	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP18-2.0-2.1	ES2512173001 29/04/25		71	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP19-0.1-0.2	ES2510979010 15/04/25		72	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP19-1.0-1.1	ES2510979011 15/04/25		62	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP19-2.0-2.1	ES2510979012 15/04/25		76	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP20-0.1-0.2	ES2510979013 15/04/25		110	A soil sample.	<0.01	<0.01	<0.01	<0.01

		Group	Asbestos					
		Analyte	Asbestos Sample Mass/Dimensions	Asbestos Sample Description	AF	FA	FA + AF	ACM
		Units	-	-	% w/w	% w/w	% w/w	% w/w
		PQL	-	-	0.01	0.01	0.01	0.01
TP20-1.0-1.1	ES2510979014 15/04/25		44	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP20-2.0-2.1	ES2510979024 15/04/25		88	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP21-0-0.1	ES2510979025 15/04/25		185	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP22-1.1-1.2	ES252522273027 21/07/25		53	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP22-0.1-0.2	ES252522273026 21/07/25		57	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP23-0.1-0.2	ES252522273025 21/07/25		64	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP24-0.1-0.2	ES252522273024 21/07/25		68	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP25-0.1-0.2	ES2510979026 15/04/25		80	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP25-0.2-0.3	ES2510979027 15/04/25		68	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP25-0.4-0.5	ES2510322001 09/04/25		51	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP25-1.0-1.1	ES2510322002 09/04/25		38	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP25-2.0-2.1	ES2509826025 03/04/25		50	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP26-0.1-0.2	ES252522273018 21/07/25		59	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP26-1.1-1.2	ES252522273018 21/07/25		75	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP27-0.1-0.2	ES252522273022 21/07/25		59	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP28-0.1-0.2	ES2510979024 15/04/25		56	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP28-0.3-0.4	ES2510979025 15/04/25		82	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP28-1.0-1.1	ES2510979026 15/04/25		43	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP28-2.0-2.1	ES2510979027 15/04/25		54	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP29-0.1-0.2	ES2510322022 09/04/25		61	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP30-0.1-0.2	ES2510322020 21/07/25		71	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP30-1.1-1.2	ES2510322021 21/07/25		52	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP31-0.1-0.2	ES2510322019 21/07/25		61	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP32-0.1-0.2	ES2510322001 09/04/25		79	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP32-0.5-0.6	ES2510322002 09/04/25		109	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP33-0.1-0.2	ES2522273016 21/07/2025		37	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP34-0.1-0.2	ES2522273015 21/07/2025		50	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP35-0.1-0.2	ES2522273014 21/07/2025		62	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP36-0.1-0.2	ES2522273013 21/07/2025		62	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP37-0.1-0.2	ES2522273012 21/07/2025		70	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP38-0.1-0.2	ES2522273011 21/07/2025		61	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP39-0.1-0.2	ES2522273010 21/07/2025		51	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP40-0.1-0.2	ES2522273009 21/07/2025		60	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP41-0.1-0.2	ES2522273008 21/07/2025		73	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP42-0.1-0.2	ES2522273007 21/07/2025		61	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP43-0.1-0.2	ES2522273006 21/07/2025		52	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP44-0.1-0.2	ES2522273004 21/07/2025		55	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP44-1.1-1.2	ES2522273005 21/07/2025		56	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP45-0.1-0.2	ES2522273003 21/07/2025		72	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP46-0.1-0.2	ES2522273002 21/07/2025		74	A soil sample.	<0.01	<0.01	<0.01	<0.01
TP47-0.1-0.2	ES2522273001 21/07/2025		65	A soil sample.	<0.01	<0.01	<0.01	<0.01

General Notes to Table: | - = Not Analysed | ACM = Asbestos Containing Material | AF = Asbestos Fines | FA = Fibrous Asbestos | NC = Not Calculated | ND = Non-Detect |
| NL = Not Limiting |PQL = Practical Quantification Limit

Notes to Statistical Calculations: The Average and Standard Deviation are calculated with non-detects replaced with a null (0) proxy value. Where all values are non-detect, a "NC" value is ouputted.

Value Highlighted concentration exceeds the site adopted criteria (HIL)

	Sample ID				TP11-0.4-0.5	DUP01	RPD Limit	RPD	TP11-0.4-0.5	DUP01A	RPD Limit	RPD	TP47-0.1-0.2	DUP01	RPD Limit	RPD	TP47-0.1-0.2	DUP01A	RPD Limit	RPD	TP10-0.1-0.2	DUP02	RPD Limit	RPD	TP10-0.1-0.2	DUP02A	RPD Limit	RPD	TP01-0.1-0.2	DUP03	RPD Limit	RPD	TP01-0.1-0.2	DUP03A	RPD Limit	RPD
	Reference /Sample Date				ES2509826011 03/04/25	ES2509826025 03/04/25			ES2509826011 03/04/25	S25-Ap0021453 03/04/2025			ES2522273001 21/07/2025	ES2522273029 21/07/2025			ES2522273001 21/07/2025	S25-I0068869 21/07/25			ES2510979021 15/04/25	ES2510979028 15/04/25			ES2510979021 15/04/25	S25-Ap0061817 15/04/2025			ES2513733001 09/05/25	ES2509826005 09/05/25			ES2513733001 09/05/25	S25-My0041895 09/05/2025		
Group	Analyte	Units	Eurofins PQL	ALS PQL																																
Metals	Arsenic	mg/kg	2	5	9	6	NL	40	9	8.6	NL	5	9	10	NL	11	9	8	NL	12	8	7	NL	13	8	9	NL	14	<5	<5	NL	NC	<5	<2	NL	NC
	Cadmium	mg/kg	0.4	1	<1	<1	NL	NC	<1	< 0.4	NL	NC	<1	<1	NL	NC	<1	<1	NL	NC	<1	<1	NL	NC	<1	< 0.4	NL	NC	<1	<1	NL	NC	<1	<0.4	NL	NC
	Chromium (Total)	mg/kg	5	2	17	13	NL	27	17	15	NL	13	32	16	NL	67	32	16	NL	67	13	13	NL	0	13	13	NL	0	8	7	NL	13	8	9	NL	14
	Copper	mg/kg	5	5	16	22	NL	32	16	15	NL	6	18	13	NL	32	18	18	NL	0	15	13	NL	14	15	13	NL	14	<5	<5	NL	NC	<5	<5	NL	NC
	Lead	mg/kg	5	5	29	28	NL	4	29	20	NL	37	16	12	NL	29	16	14	NL	13	22	21	NL	5	22	20	NL	10	5	<5	NL	NC	5	6	NL	15
	Nickel	mg/kg	5	5	5	8	NL	46	5	<5	NL	NC	25	<2	NL	NC	25	7	NL	113	4	4	NL	0	4	< 5	NL	NC	<2	<2	NL	NC	<2	<5	NL	NC
	Zinc	mg/kg	5	0.1	61	199	50	106	61	39	50	44	35	6	NL	141	35	27	NL	26	54	49	50	10	54	47	50	14	18	12	NL	40	18	13	NL	32
	Mercury (Inorganic)	mg/kg	0.1	2	<0.1	<0.1	NL	NC	<0.1	<0.1	NL	NC	<0.1	<0.1	NL	NC	<0.1	<0.1	NL	NC	<0.1	<0.1	NL	NC	<0.1	< 0.1	NL	NC	<0.1	<0.1	NL	NC	<0.1	<0.1	NL	NC
PAH	Naphthalene	mg/kg	0.5	0.5	<0.5	<0.5	NL	NC	<0.5	< 0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	< 0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	<0.5	NL	NC
	Acenaphthylene	mg/kg	0.5	0.5	<0.5	<0.5	NL	NC	<0.5	< 0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	< 0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	<0.5	NL	NC
	Acenaphthene	mg/kg	0.5	0.5	<0.5	<0.5	NL	NC	<0.5	< 0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	< 0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	<0.5	NL	NC
	Fluorene	mg/kg	0.5	0.5	<0.5	<0.5	NL	NC	<0.5	< 0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	< 0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	<0.5	NL	NC
	Phenanthrene	mg/kg	0.5	0.5	<0.5	<0.5	NL	NC	<0.5	< 0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	< 0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	<0.5	NL	NC
	Anthracene	mg/kg	0.5	0.5	<0.5	<0.5	NL	NC	<0.5	< 0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	< 0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	<0.5	NL	NC
	Fluoranthene	mg/kg	0.5	0.5	<0.5	<0.5	NL	NC	<0.5	< 0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	< 0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	<0.5	NL	NC
	Pyrene	mg/kg	0.5	0.5	<0.5	<0.5	NL	NC	<0.5	< 0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	< 0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	<0.5	NL	NC
	Benz(a)anthracene	mg/kg	0.5	0.5	<0.5	<0.5	NL	NC	<0.5	< 0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	< 0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	<0.5	NL	NC
	Chrysene	mg/kg	0.5	0.5	<0.5	<0.5	NL	NC	<0.5	< 0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	< 0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	<0.5	NL	NC
	Benzo(b+j)fluoranthene	mg/kg	0.5	0.5	<0.5	<0.5	NL	NC	<0.5	< 0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	< 0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	<0.5	NL	NC
	Benzo(k)fluoranthene	mg/kg	0.5	0.5	<0.5	<0.5	NL	NC	<0.5	< 0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	< 0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	<0.5	NL	NC
	Benzo(a)pyrene	mg/kg	0.5	0.5	<0.5	<0.5	NL	NC	<0.5	< 0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	< 0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	<0.5	NL	NC
	Indeno(1.2.3.cd)pyrene	mg/kg	0.5	0.5	<0.5	<0.5	NL	NC	<0.5	< 0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	< 0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	<0.5	NL	NC
	Dibenz(a.h)anthracene	mg/kg	0.5	0.5	<0.5	<0.5	NL	NC	<0.5	< 0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	< 0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	<0.5	NL	NC
	Benzo(g.h.i)perylene	mg/kg	0.5	0.5	<0.5	<0.5	NL	NC	<0.5	< 0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	< 0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	<0.5	NL	NC
	Total PAH (18)	mg/kg	0.5	0.5	<0.5	<0.5	NL	NC	<0.5	< 0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	< 0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	<0.5	NL	NC
	Benzo(a)pyrene TEQ (zero)	mg/kg	0.5	0.5	<0.5	<0.5	NL	NC	<0.5	< 0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	< 0.5	NL	NC	<0.5	<0.5	NL	NC	<0.5	<0.5	NL	NC
	Benzo(a)pyrene TEQ (half LOR)	mg/kg	0.6	0.5	0.6	0.6	NL	NC	1	0.6	NL	NC	0.6	0.6	NL	NC	1	0.6	NL	NC	1	1	NL	NC	0.6	1	NL	NC	1	1	NL	NC	1	1	NL	NC
	Benzo(a)pyrene TEQ (LOR)	mg/kg	1.2	0.5	1.2	1.2	NL	NC	1	1.2	NL	NC	1.2	1.2	NL	NC	1	1.2	NL	NC	1	1	NL	NC	1.2	1	NL	NC	1	1	NL	NC	1	1	NL	NC

General Notes to Table: | - = Not Analysed | NC = Not Calculated | ND = Non-Detect | PAH = Polyaromatic Hydrocarbon |

| PQL = Practical Quantification Limit | RPD = Relative Percentage Difference | TEQ = Toxicity Equivalence Quotient |

Notes to RPD limits: Limits vary according based on a comparison of the parent sample concentration and the PQL for each analyte.

The following RPD limits apply: analyte concentration < 10x PQL: No RPD limit; > 10x < 20x PQL, 50% RPD limit; > 20x PQL, 30% RPD limit.

Value Highlighted value exceeds the site adopted RPD criteria

	TRIP SPIKE	TRIP BLANK	TRIP SPIKE	TRIP BLANK	TRIP SPIKE	TRIP BLANK	TRIP SPIKE	TRIP BLANK	TRIP SPIKE	TRIP BLANK	TRIP SPIKE	Trip Blank
	ES2513733007	ES2513733008	ES2510979029	ES2510979030	ES2512173002	ES2512173003	ES2510322003	ES2510322004	ES2509826023	ES2509826024	ES2522273031	ES2522273032
	05/05/2025	02/05/2025	07/04/2025	07/04/2025	28/04/2025	28/04/2025	07/04/2025	07/04/2025	31/03/2025	03/04/2025	14/07/2025	14/07/2025
	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
	Recovery (%)	**Concentration**	**Recovery (%)**	**Concentration**	**Recovery (%)**	**Concentration**	**Recovery (%)**	**Concentration**	**Recovery (%)**	**Concentration**	**Recovery (%)**	**Concentration**
Analyte	%	mg/kg	%	mg/kg	%	mg/kg	%	mg/kg	%	mg/kg	%	mg/kg
Benzene	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Toulene	97	<0.5	113	<0.5	75	<0.5	72	<0.5	80	<0.5	91	<0.5
Ethylbenzene	89	<0.5	125	<0.5	76	<0.5	69	<0.5	83	<0.5	90	<0.5
m/p-Xylene	96	<0.5	116	<0.2	76	<0.2	71	<0.2	82	<0.2	90	<0.2
o-Xylene	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	89	<1
Total Xylenes	99	<0.5	113	<0.5	76	<0.5	71	<0.5	82	<0.5	90	<0.5

Value **Value outside assessment criteria**

APPENDIX A

TEST PIT LOGS

ENVIRONMENTAL TESTPIT AEC01 TP01

PROJECT NUMBER 2300	**DATE** 19 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LM
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.2 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2	AEC01-TP01-0.2-0.3		FILL	FILL: Clayey SAND with low organics, coarse grained, medium brown, dry-moist.	
0.3					
0.4					
0.5					
0.6			FILL	FILL: CLAY, low plasticity, grey with orange mottling, dry-moist.	
0.7					
0.8					
0.9					
1					
1.1					
1.2				Termination Depth at: 1.2 m on compacted fill	
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					

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ENVIRONMENTAL TESTPIT AEC01 TP04

PROJECT NUMBER 2300	**DATE** 19 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LM
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.4 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2	AEC01-TP04-0.2-0.3		FILL	FILL: Clayey SAND with low organics, coarse grained, medium brown, dry-moist.	
0.3			FILL	FILL: CLAY, low-medium plasticity, grey with yellow mottling, moist.	
1.1			CLS	NATURAL: CLAY, medium plasticity, grey with red mottling, moist.	
1.4				Termination Depth at: 1.4 m on compacted fill	

ENVIRONMENTAL TESTPIT AEC01 TP05

PROJECT NUMBER 2300	**DATE** 19 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LM
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.4 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2	AEC01-TP05-0.2-0.3		FILL	FILL: Clayey SAND with low organics, coarse grained, medium brown, dry-moist, trace sandstone.	
0.3			FILL	FILL: CLAY, low-medium plasticity, grey with orange mottling, moist.	
1.1			CLS	NATURAL: CLAY, medium plasticity, grey with red mottling, moist.	
1.4				Termination Depth at: 1.4 m on compacted fill	

ENVIRONMENTAL TESTPIT AEC01 TP06

PROJECT NUMBER 2300	**DATE** 19 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra SCA	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LM
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.3 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2	AEC01-TP06-0.2-0.3		FILL	FILL: Clayey SAND with low organics, coarse grained, medium brown, dry-moist.	
0.3					
0.4					
0.5					
0.6					
0.7			FILL	FILL: Silty CLAY, low plasticity, red-brown, dry-moist.	
0.8					
0.9					
1					
1.1					
1.2					
1.3				Termination Depth at: 1.3 m on compacted fill	
1.4					
1.5					
1.6					
1.7					
1.8					

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ENVIRONMENTAL TESTPIT AEC01 TP07

PROJECT NUMBER 2300	**DATE** 19 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LM
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.2 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2	AEC01-TP07-0.2-0.3		FILL	FILL: Clayey SAND with low organics, coarse grained, medium brown, dry-moist.	
0.3					
0.4					
0.5			FILL	FILL: CLAY, low plasticity, red-brown, dry.	
0.6					
0.7					
0.8					
0.9					
1					
1.1					
1.2				Termination Depth at: 1.2 m on compacted fill	
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					

ENVIRONMENTAL TESTPIT AEC01 TP08

PROJECT NUMBER 2300	**DATE** 19 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LM
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.3 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2	AEC01-TP08-0.2-0.3		FILL	FILL: Clayey SAND with low organics, coarse grained, medium brown, dry-moist.	
0.3					
0.4			FILL	FILL: CLAY, low plasticity, red with grey mottling, moist.	
0.5					
0.6					
0.7					
0.8					
0.9					
1					
1.1				Termination Depth at: 1.1 m on compacted fill	
1.2					
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					

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ENVIRONMENTAL TESTPIT AEC01 TP09

PROJECT NUMBER 2300	**DATE** 19 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LM
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.2 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2	AEC01-TP09-0.2-0.3		FILL	FILL: Clayey SAND with low organics, coarse grained, medium brown, dry-moist.	
0.3			FILL	FILL: CLAY, low plasticity, red with grey mottling, moist.	
0.4					
0.5					
0.6					
0.7					
0.8					
0.9					
1					
1.1					
1.2				Termination Depth at: 1.2 m on compacted fill	
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					

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ENVIRONMENTAL TESTPIT AEC01 TP10

PROJECT NUMBER 2300	**DATE** 19 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LM
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.2 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2	AEC01-TP10-0.2-0.3		FILL	FILL: Clayey SAND with low organics, coarse grained, medium brown, dry-moist.	
0.3					
0.4					
0.5					
0.6			FILL	FILL: Sandy CLAY, low plasticity, red-brown with grey mottling, dry.	
0.7					
0.8					
0.9					
1					
1.1					
1.2				Termination Depth at: 1.2 m on compacted fill	
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					

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ENVIRONMENTAL TESTPIT AEC01 TP11

PROJECT NUMBER 2300	**DATE** 19 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LM
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 0.9 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, fine-coarse grained, grey-brown, dry-moist.	No contamination indicators observed.
0.2	AEC01-TP11-0.2-0.3		FILL	FILL: Clayey SAND with low organics, fine-coarse grained, grey-brown, dry-moist.	
0.3					
0.4			FILL	FILL: CLAY, low plasticity, red-brown with grey mottling, dry.	
0.5					
0.6					
0.7					
0.8					
0.9				Termination Depth at: 0.9 m on compacted fill	
1					
1.1					
1.2					
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					

ENVIRONMENTAL TESTPIT AEC01 TP13

PROJECT NUMBER 2300	**DATE** 19 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LM
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 0.9 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, fine-coarse grained, brown, dry.	No contamination indicators observed.
0.2	AEC01-TP13-0.2-0.3		FILL	FILL: Clayey SAND with low organics, fine-coarse grained, brown, dry.	
0.3					
0.4					
0.5			FILL	FILL: CLAY, low plasticity, red-brown, dry.	
0.6					
0.7					
0.8					
0.9				Termination Depth at: 0.9 m on compacted fill	
1					
1.1					
1.2					
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					

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ENVIRONMENTAL TESTPIT AEC01 TP14

PROJECT NUMBER 2300	**DATE** 19 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LM
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.0 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, grey-brown, dry-moist.	No contamination indicators observed.
0.2	AEC01-TP14-0.2-0.3		FILL	FILL: Clayey SAND with low organics, coarse grained, grey-brown, dry-moist.	
0.3					
0.4			FILL	FILL: CLAY, low plasticity, red-brown, dry.	Foreign materials including terracotta and metals observed.
0.5					
0.6					No contamination indicators observed.
0.7					
0.8					
0.9					
1				Termination Depth at: 1.0 m on compacted fill	
1.1					
1.2					
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					

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Sydney Environmental Group

ENVIRONMENTAL TESTPIT AEC01 TP15

PROJECT NUMBER 2300	**DATE** 19 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LM
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.1 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, grey-brown, dry-moist.	No contamination indicators observed.
0.2	AEC01-TP15-0.2-0.3		FILL	FILL: Clayey SAND with low organics, coarse grained, grey-brown, dry-moist.	
0.3					
0.4					
0.5			FILL	FILL: CLAY, low plasticity, red-brown, moist.	
0.6					
0.7					
0.8					
0.9					
1					
1.1				Termination Depth at: 1.1 m on compacted fill	
1.2					
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					

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ENVIRONMENTAL TESTPIT AEC01 TP16

PROJECT NUMBER 2300	**DATE** 19 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LM
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.0 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2	AEC01-TP16-0.2-0.3		FILL	FILL: Clayey SAND with low organics, coarse grained, medium brown, dry-moist.	
0.3					Foreign materials including gravels and metals observed.
0.4			FILL	FILL: CLAY, low plasticity, orange with red and brown mottling, dry.	
0.5					
0.6					No contamination indicators observed.
0.7					
0.8					
0.9					
1				Termination Depth at: 1.0 m on compacted fill	
1.1					
1.2					
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					

ENVIRONMENTAL TESTPIT AEC01 TP17

PROJECT NUMBER 2300	**DATE** 11 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LM
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.4 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2	AEC01-TP17-0.2-0.3		FILL	FILL: Clayey SAND with low organics, coarse grained, medium brown, dry-moist.	
0.3					Foreign materials including Asbestos Containing Material (ACM), wood, and textile observed.
0.4					
0.5					No contamination indicators observed.
0.6					
0.7			FILL	FILL: CLAY, low plasticity, orange with red and yellow mottling, dry.	
0.8					
0.9					
1					
1.1					
1.2					
1.3					
1.4				Termination Depth at: 1.4 m on compacted fill.	
1.5					
1.6					
1.7					
1.8					

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ENVIRONMENTAL TESTPIT AEC01 TP18

PROJECT NUMBER 2300	**DATE** 11 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LM
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.0 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2	AEC01-TP18-0.2-0.3		FILL	FILL: Clayey SAND with low organics, coarse grained, pale brown, dry-moist.	
0.3					
0.4					
0.5			FILL	FILL: CLAY, low-medium plasticity, orange with grey mottling, dry.	
0.6					
0.7					
0.8					
0.9					
1				Termination Depth at: 1.0 m on compacted fill	
1.1					
1.2					
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					

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ENVIRONMENTAL TESTPIT AEC01 TP19

PROJECT NUMBER 2300	**DATE** 19 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra SCA	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LM
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.1 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2	AEC01-TP19-0.2-0.3		FILL	FILL: Clayey SAND with low organics, coarse grained, medium brown, dry-moist.	
0.3					
0.4					
0.5			FILL	FILL: CLAY, low plasticity, red-orange, dry.	
0.6					
0.7					
0.8					
0.9					
1					
1.1				Termination Depth at: 1.1 m on compacted fill	
1.2					
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					

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ENVIRONMENTAL TESTPIT AEC01 TP20

PROJECT NUMBER 2300	**DATE** 11 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LM
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.0 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2	AEC01-TP20-0.2-0.3		FILL	FILL: Clayey SAND with low organics, coarse grained, medium brown, dry-moist.	
0.3					
0.4					
0.5			FILL	FILL: CLAY, low plasticity, orange with grey mottling, dry.	
0.6					
0.7					
0.8					
0.9					
1				Termination Depth at: 1.0 m on compacted fill	
1.1					
1.2					
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					

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ENVIRONMENTAL TESTPIT AEC01 TP21

PROJECT NUMBER 2300	**DATE** 11 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LM
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 0.7 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2	AEC01-TP21-0.2-0.3		FILL	FILL: Clayey SAND with low organics, coarse grained, medium brown, dry-moist.	
0.3					Foreign materials including brick, glass, and plastic observed.
0.4			FILL	FILL: CLAY, low plasticity, orange with grey mottling, dry.	
0.5					No contamination indicators observed.
0.6					
0.7				Termination Depth at: 0.7 m refusal on stormwater conduit	
0.8					
0.9					
1					
1.1					
1.2					
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					

ENVIRONMENTAL TESTPIT AEC01 TP22

PROJECT NUMBER 2300	**DATE** 11 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LM
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.0 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2	AEC01-TP22-0.2-0.3		FILL	FILL: Clayey SAND with low organics, coarse grained, medium brown, dry-moist.	
0.3					
0.4					
0.5			FILL	FILL: CLAY, low plasticity, red-brown, dry.	
0.6					
0.7					
0.8					
0.9					
1				Termination Depth at: 1.0 m on compacted fill	
1.1					
1.2					
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					

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ENVIRONMENTAL TESTPIT AEC01 TP23

PROJECT NUMBER 2300	**DATE** 19 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LM
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.0 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2	AEC01-TP23-0.2-0.3		FILL	FILL: Clayey SAND with low organics, coarse grained, medium brown, dry-moist.	
0.3					Foreign materials including terracotta observed.
0.4					
0.5			FILL	FILL: CLAY, low plasticity, red-brown, dry.	No contamination indicators observed.
0.6					
0.7					
0.8					
0.9					
1				Termination Depth at: 1.0 m on compacted fill	
1.1					
1.2					
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					

ENVIRONMENTAL TESTPIT AEC02 TP01

PROJECT NUMBER 2300	**DATE** 11 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LM
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.0 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2			FILL	FILL: Clayey SAND with low organics, coarse grained, medium brown, dry-moist.	
0.3	AEC02-TP01-0.2-0.3				Foreign materials including potential Asbestos Containing Material (ACM), terracotta, and asphalt observed.
0.4					
0.5					
0.6			FILL	FILL: CLAY, low-medium plasticity, grey with yellow mottling, moist.	No contamination indicators observed.
0.7					
0.8					
0.9					
1				Termination Depth at: 1.0 m on compacted fill	
1.1					
1.2					
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					

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ENVIRONMENTAL TESTPIT AEC02 TP02

PROJECT NUMBER 2300	**DATE** 11 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LM
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.0 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2	AEC02-TP02-0.2-0.3		FILL	FILL: Clayey SAND with low organics, coarse grained, medium brown, dry-moist.	
0.3			FILL	FILL: CLAY, low-medium plasticity, grey with yellow mottling, moist.	
0.4					
0.5					
0.6					
0.7					
0.8					
0.9					
1				Termination Depth at: 1.0 m on compacted fill	
1.1					
1.2					
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					

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ENVIRONMENTAL TESTPIT AEC02 TP03

PROJECT NUMBER 2300	**DATE** 11 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LM
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.0 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2	AEC02-TP03-0.2-0.3		FILL	FILL: Clayey SAND with low organics, coarse grained, medium brown, dry-moist.	
0.3			FILL	FILL: CLAY, low-medium plasticity, grey with yellow mottling, moist.	
0.4					Foreign materials including glass observed.
0.5					No contamination indicators observed.
0.6					
0.7					
0.8					
0.9					
1				Termination Depth at: 1.0 m on compacted fill	
1.1					
1.2					
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					

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ENVIRONMENTAL TESTPIT AEC02 TP04

PROJECT NUMBER 2300	**DATE** 11 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY**
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.0 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2	AEC02-TP04-0.2-0.3		FILL	FILL: Clayey SAND with low organics, coarse grained, medium brown, dry-moist.	
0.3					
0.4					Foreign materials including brick observed.
0.5					
0.6					
0.7			FILL	FILL: CLAY, low-medium plasticity, grey with yellow mottling, moist.	No contamination indicators observed.
0.8					
0.9					
1				Termination Depth at: 1.0 m on compacted fill	
1.1					
1.2					
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					

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ENVIRONMENTAL TESTPIT AEC02 TP05

PROJECT NUMBER 2300	**DATE** 11 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LM
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.0 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2	AEC02-TP05-0.2-0.3		FILL	FILL: Clayey SAND with low organics, coarse grained, medium brown, dry-moist, trace sandstone.	
0.3					
0.4					
0.5			FILL	FILL: CLAY, low-medium plasticity, grey with orange and yellow mottling, moist.	
0.6					
0.7					
0.8					
0.9					
1				Termination Depth at: 1.0 m on compacted fill	
1.1					
1.2					
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					

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ENVIRONMENTAL TESTPIT AEC02 TP06

PROJECT NUMBER 2300	**DATE** 11 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LM
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.0 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2			FILL	FILL: Clayey SAND with low organics, coarse grained, medium brown, dry-moist.	
0.3	AEC02-TP06-0.2-0.3				Foreign materials including potential Asbestos Containing Material (ACM) and glass observed.
0.4					
0.5			FILL	FILL: CLAY, low-medium plasticity, grey with orange and yellow mottling, moist.	No contamination indicators observed.
0.6					
0.7					
0.8					
0.9					
1				Termination Depth at: 1.0 m on compacted fill	
1.1					
1.2					
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					

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ENVIRONMENTAL TESTPIT AEC02 TP07

PROJECT NUMBER 2300	**DATE** 11 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LM
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.1 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2	AEC02-TP07-0.2-0.3		FILL	FILL: Clayey SAND with low organics, coarse grained, medium brown, dry-moist.	
0.3					
0.4					Foreign materials including plastic observed.
0.5					No contamination indicators observed.
0.6					
0.7			FILL	FILL: CLAY, low-medium plasticity, orange with yellow mottling, moist.	
0.8					
0.9					
1					
1.1				Termination Depth at: 1.1 m on compacted fill	
1.2					
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					

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produced by ESlog.ESdat.net on 24 Mar 2025

ENVIRONMENTAL TESTPIT AEC02 TP08

PROJECT NUMBER 2300	**DATE** 11 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LM
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.0 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2	AEC02-TP08-0.2-0.3		FILL	FILL: Clayey SAND with low organics, coarse grained, medium brown, dry-moist.	
0.3					
0.4					
0.5			FILL	FILL: CLAY, low plasticity, grey with orange and yellow mottling, moist.	
0.6					
0.7					
0.8					
0.9					
1				Termination Depth at: 1.0 m on compacted fill	
1.1					
1.2					
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					

ENVIRONMENTAL TESTPIT AEC02 TP09

PROJECT NUMBER 2300	**DATE** 11 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LM
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.1 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2	AEC02-TP09-0.2-0.3		FILL	FILL: Clayey SAND with low organics, coarse grained, medium brown, dry-moist.	
0.3			FILL	FILL: SAND, fine-coarse grained, grey-brown, dry-moist.	
0.5			FILL	FILL: CLAY, low plasticity, grey with orange and yellow mottling, moist.	
1					
1.1				Termination Depth at: 1.1 m on compacted fill	
1.2					
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					

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ENVIRONMENTAL TESTPIT AEC02 TP10

PROJECT NUMBER 2300
PROJECT NAME WSU Milperra DSI
CLIENT Mirvac Group Pty Ltd
ADDRESS Western Sydney University, Milperra Campus

DATE 11 January 2024
EXCAVATION CO. Smartscan Locators
OPERATOR Tyler
EXCAVATION METHOD 3.5 t Excavator
TOTAL DEPTH 0.8 m

LOGGED BY LL
CHECKED BY LM

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2			FILL	FILL: Clayey SAND with low organics, coarse grained, medium brown, dry-moist.	
0.3	AEC02-TP10-0.2-0.3				Foreign materials including terracotta observed.
0.4			FILL	FILL: Sandy CLAY, low plasticity, red-brown with grey mottling, dry.	
0.5			FILL	NATURAL: CLAY, low plasticity, yellow-grey, moist.	No contamination indicators observed.
0.6					
0.7					
0.8				Termination Depth at: 0.8 m on compacted fill	
0.9					
1					
1.1					
1.2					
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					

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ENVIRONMENTAL TESTPIT AEC02 TP11

PROJECT NUMBER 2300	**DATE** 11 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LM
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 0.7 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, fine-coarse grained, grey-brown, dry-moist.	No contamination indicators observed.
0.2	AEC02-TP11-0.2-0.3		FILL	FILL: Clayey SAND with low organics, fine-coarse grained, grey-brown, dry-moist.	Foreign materials including potential Asbestos Containing Material (ACM), and terracotta observed.
0.3					
0.4			FILL	FILL: CLAY, low plasticity, yellow-grey, moist.	No contamination indicators observed.
0.5					
0.6					
0.7				Termination Depth at: 0.7 m on compacted fill	
0.8					
0.9					
1					
1.1					
1.2					
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					

ENVIRONMENTAL TESTPIT AEC02 TP12

PROJECT NUMBER 2300	**DATE** 11 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LM
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 0.7 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, grey-brown, dry-moist.	No contamination indicators observed.
0.2			FILL	FILL: Clayey SAND with low organics, coarse grained, grey-brown, dry-moist.	
0.3	AEC02-TP12-0.2-0.3				Foreign materials including terracotta observed.
0.4			FILL	FILL: CLAY, low-medium plasticity, yellow-grey, moist.	No contamination indicators observed.
0.5					
0.6					
0.7				Termination Depth at: 0.7 m on compacted fill	
0.8					
0.9					
1					
1.1					
1.2					
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					

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ENVIRONMENTAL TESTPIT AEC02 TP13

PROJECT NUMBER 2300	**DATE** 12 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LM
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 0.9 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, fine-coarse grained, brown, dry.	No contamination indicators observed.
0.2	AEC02-TP13-0.2-0.3		FILL	FILL: Clayey SAND with low organics, fine-coarse grained, brown, dry.	
0.3					
0.4			FILL	FILL: CLAY, medium plasticity, yellow-grey, moist.	
0.5					
0.6					
0.7					
0.8					
0.9				Termination Depth at: 0.9 m on compacted fill	
1					
1.1					
1.2					
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					

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ENVIRONMENTAL TESTPIT AEC02 TP14

PROJECT NUMBER 2300	**DATE** 11 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LM
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 0.7 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, grey-brown, dry-moist.	No contamination indicators observed.
0.2	AEC02-TP14-0.2-0.3		FILL	FILL: Clayey SAND with low organics, coarse grained, grey-brown, dry-moist.	
0.3			FILL	FILL: CLAY, low plasticity, yellow-grey, moist.	
0.4					
0.5					
0.6					
0.7				Termination Depth at: 0.7 m on compacted fill	
0.8					
0.9					
1					
1.1					
1.2					
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					

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ENVIRONMENTAL TESTPIT AEC02 TP15

PROJECT NUMBER 2300	**DATE** 11 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LM
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 0.7 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, grey-brown, dry-moist.	No contamination indicators observed.
0.2	AEC02-TP15-0.2-0.3		FILL	FILL: Clayey SAND with low organics, coarse grained, grey-brown, dry-moist.	
0.3			FILL	FILL: CLAY, low plasticity, yellow-grey, moist.	
0.4					
0.5					
0.6					
0.7				Termination Depth at: 0.7 m on compacted fill	
0.8					
0.9					
1					
1.1					
1.2					
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					

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ENVIRONMENTAL TESTPIT AEC02 TP16

PROJECT NUMBER 2300	**DATE** 11 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LM
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 0.5 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2			FILL	FILL: Clayey SAND with low organics, coarse grained, medium brown, dry-moist.	
0.3	AEC02-TP16-0.2-0.3		FILL	FILL: CLAY, low plasticity, orange with red and brown mottling, moist, trace gravels.	
0.4					
0.5				Termination Depth at: 0.5 m on compacted fill	
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					

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ENVIRONMENTAL TESTPIT AEC02 TP17

PROJECT NUMBER 2300	**DATE** 12 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LM
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.2 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2	AEC02-TP17-0.2-0.3		FILL	FILL: Clayey SAND with low organics, coarse grained, medium brown, dry-moist.	
0.3			FILL	FILL: CLAY, low plasticity, orange with grey mottling, dry.	
0.8			FILL	FILL: CLAY, low plasticity, orange, dry, trace gravels.	
1.2				Termination Depth at: 1.2 m on compacted fill	

ENVIRONMENTAL TESTPIT AEC02 TP18

PROJECT NUMBER 2300	**DATE** 12 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LM
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 0.9 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2	AEC02-TP18-0.2-0.3		FILL	FILL: Clayey SAND with low organics, coarse grained, pale brown, dry-moist.	
0.3					
0.4					
0.5			FILL	FILL: CLAY, medium plasticity, yellow-grey, dry-moist.	
0.6			FILL	FILL: CLAY, medium plasticity, red-brown, moist.	
0.7					
0.8					
0.9				Termination Depth at: 0.9 m on compacted fill	
1					
1.1					
1.2					
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					

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ENVIRONMENTAL TESTPIT AEC02 TP19

PROJECT NUMBER 2300	**DATE** 12 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LM
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.0 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2	AEC02-TP19-0.2-0.3		FILL	FILL: Clayey SAND with low organics, coarse grained, medium brown, dry-moist.	Foreign materials including Geotextile Fabric, Asbestos Containing Material (ACM), plastic, tile, and ceramics observed.
0.3					
0.4					
0.5			FILL	FILL: CLAY, medium plasticity, red-orange, moist.	No contamination indicators observed.
0.6					
0.7					
0.8					
0.9					
1				Termination Depth at: 1.0 m on compacted fill	
1.1					
1.2					
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					

ENVIRONMENTAL TESTPIT AEC02 TP20

PROJECT NUMBER 2300	**DATE** 12 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LM
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 0.9 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2	AEC02-TP20-0.2-0.3		FILL	FILL: Clayey SAND with low organics, coarse grained, medium brown, dry-moist.	Foreign materials including Geotextile fabric, Asbestos Containing Material (ACM), and glass observed.
0.3					
0.4					
0.5			FILL	FILL: CLAY, medium plasticity, yellow-orange, moist.	No contamination indicators observed.
0.6					
0.7					
0.8					
0.9				Termination Depth at: 0.9 m on compacted fill	
1					
1.1					
1.2					
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					

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ENVIRONMENTAL TESTPIT AEC02 TP21

PROJECT NUMBER 2300	**DATE** 12 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LM
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.2 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2	AEC02-TP21-0.2-0.3		FILL	FILL: Clayey SAND with low organics, coarse grained, medium brown, dry-moist.	
0.3					
0.4					
0.5					
0.6					
0.7					Foreign materials including metal observed.
0.8					
0.9					
1			FILL	FILL: CLAY, low-medium plasticity, red-brown with yellow and orange mottling, moist, trace sand.	No contamination indicators observed.
1.1					
1.2				Termination Depth at: 1.2 m on compacted fill	
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					

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Sydney Environmental Group

ENVIRONMENTAL TESTPIT AEC02 TP22

PROJECT NUMBER 2300
PROJECT NAME WSU Milperra DSI
CLIENT Mirvac Group Pty Ltd
ADDRESS Western Sydney University, Milperra Campus

DATE 12 January 2024
EXCAVATION CO. Smartscan Locators
OPERATOR Tyler
EXCAVATION METHOD 3.5 t Excavator
TOTAL DEPTH 1.4 m

LOGGED BY LL
CHECKED BY LM

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2	AEC02-TP22-0.2-0.3		FILL	FILL: Clayey SAND with low organics, coarse grained, medium brown, dry-moist.	Foreign materials including geotextile fabric, Asbestos Containing Material (ACM), glass, brick, terracotta, and plastic observed.
0.3					
0.4					
0.5					
0.6					
0.7					
0.8			FILL	FILL: CLAY, low-medium plasticity, dark grey-brown, moist, trace rocks and shale.	No contamination indicators observed.
0.9					
1					
1.1					
1.2					
1.3					
1.4				Termination Depth at: 1.4 m on compacted fill	
1.5					
1.6					
1.7					
1.8					

ENVIRONMENTAL TESTPIT AEC02 TP23

PROJECT NUMBER 2300	**DATE** 12 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LM
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.2 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2	AEC02-TP23-0.2-0.3		FILL	FILL: Clayey SAND with low organics, coarse grained, medium brown, dry-moist.	
0.3					
0.4					Foreign materials including road base, asphalt, and concrete observed.
0.5			FILL	FILL: CLAY, low plasticity, red-orange, moist.	No contamination indicators observed.
0.6					
0.7					
0.8					
0.9					
1					
1.1					
1.2				Termination Depth at: 1.2 m on compacted fill	
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					

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ENVIRONMENTAL TESTPIT AEC02 TP24

PROJECT NUMBER 2300	**DATE** 12 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LM
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.2 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2	AEC02-TP24-0.2-0.3		FILL	FILL: Clayey SAND with low organics, coarse grained, medium brown, dry-moist.	
0.3			FILL	FILL: CLAY, low plasticity, grey with orange mottling, moist.	
0.4					
0.5					
0.6					
0.7					
0.8					
0.9					
1					
1.1					
1.2				Termination Depth at: 1.2 m on compacted fill	
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					

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ENVIRONMENTAL TESTPIT AEC02 TP25

PROJECT NUMBER 2300	**DATE** 12 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LM
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.2 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2	AEC02-TP25-0.2-0.3		FILL	FILL: Clayey SAND with low organics, coarse grained, medium brown, dry-moist.	
0.3					
0.4			FILL	FILL: CLAY, low plasticity, grey, dry.	
0.5					
0.6			FILL	FILL: CLAY, medium plasticity, red-orange, moist.	
0.7					
0.8					
0.9					
1					
1.1					
1.2				Termination Depth at: 1.2 m on compacted fill	
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					

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ENVIRONMENTAL TESTPIT AEC02 TP26

PROJECT NUMBER 2300	**DATE** 12 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LM
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.6 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, dark brown, dry-moist.	No contamination indicators observed.
0.2	AEC02-TP26-0.2-0.3		FILL	FILL: Clayey SAND with low organics, coarse grained, dark brown, dry-moist.	Foreign materials including geotextile fabric, plastic, glass, and brick observed.
0.3			FILL	FILL: CLAY, low plasticity, grey with brown and orange mottling, dry.	No contamination indicators observed.
1			FILL	FILL: CLAY, low-medium plasticity, dark grey, moist, trace gravels.	
1.6				Termination Depth at: 1.6 m on compacted fill	

ENVIRONMENTAL TESTPIT AEC02 TP27

PROJECT NUMBER 2300
PROJECT NAME WSU Milperra DSI
CLIENT Mirvac Group Pty Ltd
ADDRESS Western Sydney University, Milperra Campus

DATE 12 January 2024
EXCAVATION CO. Smartscan Locators
OPERATOR Tyler
EXCAVATION METHOD 3.5 t Excavator
TOTAL DEPTH 1.0 m

LOGGED BY LL
CHECKED BY LM

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, dark brown, dry-moist.	No contamination indicators observed.
0.2	AEC02-TP27-0.2-0.3		FILL	FILL: Clayey SAND with low organics, coarse grained, dark brown, dry-moist.	Foreign materials including geotextile fabric, Asbestos Containing Material (ACM), plastic, glass, shade cloth, metal, and terracotta observed.
0.3					
0.4					
0.5					
0.6			FILL	FILL: CLAY, low-medium plasticity, yellow-brown, moist.	No contamination indicators observed.
0.7					
0.8					
0.9					
1				Termination Depth at: 1.0 m on compacted fill	
1.1					
1.2					
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					

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ENVIRONMENTAL TESTPIT AEC02 TP28

PROJECT NUMBER 2300	**DATE** 12 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LM
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.4 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2	AEC02-TP28-0.2-0.3		FILL	FILL: Clayey SAND with low organics, coarse grained, medium brown, dry-moist.	Foreign materials including geotextile fabric, terracotta, and glass observed.
0.3			FILL	FILL: CLAY, low plasticity, grey, moist, with trace shale.	No contamination indicators observed.
0.4					
0.5					
0.6					
0.7					
0.8					
0.9					
1					
1.1	AEC02-TP28-1.1-1.2				
1.2					
1.3					
1.4				Termination Depth at: 1.4 m on compacted fill	
1.5					
1.6					
1.7					
1.8					

ENVIRONMENTAL TESTPIT AEC02 TP29

PROJECT NUMBER 2300	**DATE** 12 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LM
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.4 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2	AEC02-TP29-0.2-0.3		FILL	FILL: Clayey SAND with low organics, coarse grained, medium brown, dry-moist.	
0.3					
0.4			FILL	FILL: CLAY, low plasticity, grey with orange mottling, dry.	
0.5					
0.6					
0.7					
0.8					
0.9					
1					
1.1			FILL	FILL: CLAY, medium plasticity, grey, moist.	
1.2	AEC02-TP29-1.2-1.3				
1.3					
1.4				Termination Depth at: 1.4 m on compacted fill	
1.5					
1.6					
1.7					
1.8					

ENVIRONMENTAL TESTPIT AEC02 TP30

PROJECT NUMBER 2300	**DATE** 12 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LM
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.4 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2	AEC02-TP30-0.2-0.3		FILL	FILL: Clayey SAND with low organics, coarse grained, medium brown, dry-moist.	
0.3					
0.4					
0.5					
0.6					
0.7					
0.8			FILL	FILL: CLAY, low plasticity, orange with grey mottling, moist, trace rocks.	
0.9					
1					
1.1					
1.2	AEC02-TP30-1.1-1.2				
1.3					
1.4				Termination Depth at: 1.4 m on compacted fill	
1.5					
1.6					
1.7					
1.8					

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ENVIRONMENTAL TESTPIT AEC02 TP31

PROJECT NUMBER 2300	**DATE** 12 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LM
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.4 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2	AEC02-TP30-0.2-0.3		FILL	FILL: Clayey SAND with low organics, coarse grained, medium brown, dry-moist.	
0.3					Foreign materials including metal and glass observed.
0.4					
0.5					No contamination indicators observed.
0.6					
0.7					
0.8			FILL	FILL: CLAY, low plasticity, orange with grey mottling, moist, trace rocks.	
0.9					
1					
1.1					
1.2					
1.3					
1.4				Termination Depth at: 1.4 m on compacted fill	
1.5					
1.6					
1.7					
1.8					

ENVIRONMENTAL TESTPIT AEC02 TP32

PROJECT NUMBER 2300	**DATE** 12 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LM
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.0 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2	AEC02-TP32-0.2-0.3		FILL	FILL: Clayey SAND with low organics, coarse grained, medium brown, dry-moist.	
0.3			FILL	FILL: CLAY, low plasticity, grey with orange mottling, moist, trace sand.	
0.4					
0.5					
0.6					
0.7					
0.8					
0.9					
1				Termination Depth at: 1.0 m on compacted fill	
1.1					
1.2					
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					

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ENVIRONMENTAL TESTPIT AEC02 TP33

PROJECT NUMBER 2300	**DATE** 12 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LM
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.3 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2	AEC02-TP33-0.2-0.3		FILL	FILL: Clayey SAND with low organics, coarse grained, medium brown, dry-moist.	
0.3					
0.4					
0.5					
0.6			FILL	FILL: CLAY, low plasticity, orange-brown with grey mottling, moist.	
0.7					
0.8					
0.9					
1					
1.1	AEC02-TP33-1.1-1.2				
1.2					
1.3				Termination Depth at: 1.3 m - Refusal due to bedrock.	
1.4					
1.5					
1.6					
1.7					
1.8					

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ENVIRONMENTAL TESTPIT AEC02 TP34

PROJECT NUMBER 2300	**DATE** 12 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LM
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.3 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2	AEC02-TP34-0.2-0.3		FILL	FILL: Clayey SAND with low organics, coarse grained, medium brown, dry-moist.	Foreign materials including geotextile fabric, plastic, and metal observed.
0.3					
0.4			FILL	FILL: CLAY, low plasticity, orange with grey mottling, moist, trace shale.	No contamination indicators observed.
0.5					
0.6					
0.7					
0.8					
0.9					
1					
1.1	AEC02-TP34-1.2-1.3				
1.2					
1.3				Termination Depth at: 0.9 m - Refusal due to claystone bedrock.	
1.4					
1.5					
1.6					
1.7					
1.8					

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ENVIRONMENTAL TESTPIT AEC02 TP35

PROJECT NUMBER 2300	**DATE** 12 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LM
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.4 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2	AEC02-TP35-0.2-0.3		FILL	FILL: Clayey Silty SAND, coarse grained, grey-orange, dry, with rocks.	
0.3					
0.4					
0.5					
0.6					
0.7					
0.8					
0.9					
1					
1.1	AEC02-TP35-1.2-1.3				Foreign materials including potential Asbestos Containing Material (ACM) observed.
1.2					No contamination indicators observed.
1.3					
1.4				Termination Depth at: 1.4 m on compacted fill	
1.5					
1.6					
1.7					
1.8					

ENVIRONMENTAL TESTPIT AEC02 TP36

PROJECT NUMBER 2300	**DATE** 12 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LM
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 0.9 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2	AEC02-TP36-0.2-0.3		FILL	FILL: Clayey Silty SAND, coarse grained, grey-orange, dry, with rocks.	
0.3			FILL	FILL: CLAY, low plasticity, grey with orange mottling, moist, trace claystone and shale.	Foreign materials including terracotta and metal observed.
0.4					No contamination indicators observed.
0.5					
0.6					
0.7					
0.8					
0.9				Termination Depth at: 0.9 m on compacted fill	
1					
1.1					
1.2					
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					

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ENVIRONMENTAL TESTPIT AEC02 TP37

PROJECT NUMBER 2300
PROJECT NAME WSU Milperra DSI
CLIENT Mirvac Group Pty Ltd
ADDRESS Western Sydney University, Milperra Campus

DATE 12 January 2024
EXCAVATION CO. Smartscan Locators
OPERATOR Tyler
EXCAVATION METHOD 3.5 t Excavator
TOTAL DEPTH 0.8 m

LOGGED BY LL
CHECKED BY LM

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2	AEC02-TP37-0.2-0.3		FILL	FILL: CLAY, low-medium plasticity, red-orange with grey mottling, moist.	
0.3					
0.4					
0.5					
0.6					
0.7					
0.8				Termination Depth at: 0.8 m on compacted fill	
0.9					
1					
1.1					
1.2					
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					

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ENVIRONMENTAL TESTPIT AEC02 TP38

PROJECT NUMBER 2300	**DATE** 12 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LM
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 0.8 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
			FILL	FILL: Clayey SAND with low organics, coarse grained, medium brown, dry-moist.	Foreign materials including geotextile fabric and Asbestos Containing Material (ACM) observed.
0.2	AEC02-TP38-0.2-0.3		FILL	FILL: Sandy CLAY, low plasticity, red-orange with grey mottling, moist.	No contamination indicators observed.
0.3					
0.4					
0.5					
0.6					
0.7					
0.8				Termination Depth at: 0.8 m on compacted fill	
0.9					
1					
1.1					
1.2					
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					

ENVIRONMENTAL TESTPIT AEC02 TP39

PROJECT NUMBER 2300	**DATE** 12 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LM
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.4 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2	AEC02-TP39-0.2-0.3		FILL	FILL: Clayey SAND with low organics, coarse grained, medium brown, dry-moist, trace gravel.	Foreign materials including geotextile fabric, plastic and metal observed.
0.3			FILL	FILL: CLAY, low plasticity, pale grey-brown, dry, trace sand.	
0.4					No contamination indicators observed.
0.5					
0.6					
0.7					
0.8					Foreign materials including potential Asbestos Containing Material (ACM) observed.
0.9					No contamination indicators observed.
1			FILL	NATURAL: CLAY, low plasticity, orange with grey-brown mottling, moist.	
1.1					
1.2					
1.3					
1.4				Termination Depth at: 1.4 m on compacted fill	
1.5					
1.6					
1.7					
1.8					

ENVIRONMENTAL TESTPIT AEC02 TP40

PROJECT NUMBER 2300	**DATE** 12 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LM
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.3 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2	AEC02-TP40-0.2-0.3		FILL	FILL: Clayey SAND with low organics, coarse grained, medium brown, dry-moist.	Foreign materials including geotextile fabric and metal observed.
0.3					No contamination indicators observed.
0.4					
0.5			FILL	FILL: CLAY, low plasticity, orange-brown, moist, trace sandstone and sand, with claystone.	
0.6					
0.7					
0.8					
0.9					
1					
1.1					
1.2	AEC02-TP40-1.2-1.3				
1.3				Termination Depth at: 1.3 m on compacted fill	
1.4					
1.5					
1.6					
1.7					
1.8					

ENVIRONMENTAL TESTPIT AEC02 TP41

PROJECT NUMBER 2300	**DATE** 12 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LM
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.4 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2			FILL	FILL: Clayey SAND with low organics, coarse grained, medium brown, dry-moist.	
0.3	AEC02-TP41-0.2-0.3		FILL	FILL: CLAY, low plasticity, orange-brown, moist.	Foreign materials including metal observed.
0.4					No contamination indicators observed.
0.5					
0.6					
0.7					
0.8					
0.9					
1					
1.1					
1.2	AEC02-TP41-1.2-1.3				
1.3					
1.4				Termination Depth at: 1.4 m on compacted fill	
1.5					
1.6					
1.7					
1.8					

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ENVIRONMENTAL TESTPIT AEC02 TP42

PROJECT NUMBER 2300	**DATE** 12 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LM
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.3 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2	AEC02-TP42-0.2-0.3		FILL	FILL: Clayey SAND with low organics, coarse grained, medium brown, dry-moist.	
0.3					
0.4			FILL	FILL: CLAY, low plasticity, orange-brown, moist, trace sand.	
0.5					
0.6					
0.7					
0.8					
0.9					
1					
1.1					
1.2					
1.3				Termination Depth at: 1.3 m on compacted fill	
1.4					
1.5					
1.6					
1.7					
1.8					

ENVIRONMENTAL TESTPIT AEC02 TP43

PROJECT NUMBER 2300	**DATE** 12 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LM
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.4 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, red-brown, dry-moist.	No contamination indicators observed.
0.2	AEC02-TP43-0.2-0.3		FILL	FILL: Clayey SAND with low organics, fine-coarse grained, red-brown, dry-moist.	
0.3			FILL	FILL: CLAY, low-medium plasticity, red-brown with grey mottling, moist.	
0.4					
0.5					
0.6					
0.7					
0.8					
0.9					
1					
1.1					
1.2					
1.3					
1.4				Termination Depth at: 1.4 m on compacted fill	
1.5					
1.6					
1.7					
1.8					

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ENVIRONMENTAL TESTPIT AEC02 TP44

PROJECT NUMBER 2300	**DATE** 12 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LM
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 0.4 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, fine-coarse grained, red-brown, dry-moist.	No contamination indicators observed.
0.2	AEC02-TP44-0.2-0.3		FILL	FILL: Clayey SAND with low organics, fine-coarse grained, red-brown, dry-moist.	
0.3					
0.4				Termination Depth at: 0.4 m - Refusal due to retaining wall.	
0.5					
0.6					
0.7					
0.8					
0.9					
1					
1.1					
1.2					
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					

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ENVIRONMENTAL TESTPIT AEC02 TP45

PROJECT NUMBER 2300	**DATE** 12 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LM
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.2 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Sandy Silty CLAY with high organics, low plasticity, orange with grey mottling, dry, trace claystone.	No contamination indicators observed.
0.2	AEC02-TP45-0.2-0.3		FILL	FILL: Sandy Silty CLAY, low plasticity, orange with grey mottling, dry, with claystone.	
0.3					
0.4					
0.5					
0.6					
0.7					
0.8					
0.9					
1					
1.1					
1.2				Termination Depth at: 1.2 m - Refusal due to claystone bedrock.	
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					

ENVIRONMENTAL TESTPIT AEC02 TP46

PROJECT NUMBER 2300	**DATE** 12 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LM
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.4 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, fine-coarse grained, medium brown, dry.	No contamination indicators observed.
0.2	AEC02-TP46-0.2-0.3		FILL	FILL: CLAY, low plasticity, grey with orange mottling, dry.	
0.3					
0.4					
0.5					
0.6					
0.7					
0.8					
0.9					
1					
1.1					
1.2					
1.3					
1.4				Termination Depth at: 1.4 m on compacted fill	
1.5					
1.6					
1.7					
1.8					

ENVIRONMENTAL TESTPIT AEC02 TP47

PROJECT NUMBER 2300	**DATE** 12 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LM
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.2 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, fine-coarse grained, medium brown, dry.	No contamination indicators observed.
0.2	AEC02-TP47-0.2-0.3		FILL	FILL: CLAY, low plasticity, grey with orange mottling, dry.	Foreign material including geotextile fabric, potential Asbestos Containing Material (ACM), and brick observed.
0.3					
0.4					No contamination indicators observed.
0.5					
0.6					
0.7					
0.8					
0.9					
1					
1.1					
1.2				Termination Depth at: 1.2 m - Refusal due to excavator limit.	
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					

ENVIRONMENTAL TESTPIT AEC02 TP48

PROJECT NUMBER 2300
PROJECT NAME WSU Milperra DSI
CLIENT Mirvac Group Pty Ltd
ADDRESS Western Sydney University, Milperra Campus

DATE 12 January 2024
EXCAVATION CO. Smartscan Locators
OPERATOR Tyler
EXCAVATION METHOD 3.5 t Excavator
TOTAL DEPTH 1.7 m

LOGGED BY LL
CHECKED BY LM

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, fine-coarse grained, medium brown, dry.	No contamination indicators observed.
0.2			FILL	FILL: Clayey SAND with low organics, fine-coarse grained, medium brown, dry.	
0.3	AEC02-TP48-0.2-0.3				Foreign materials including potential Asbestos Containing Material (ACM) observed.
0.4			FILL	FILL: CLAY, low plasticity, orange with grey mottling, dry, with shale.	No contamination indicators observed.
0.5					
0.6					
0.7					
0.8					
0.9					
1					
1.1					
1.2	AEC02-TP48-1.2-1.3				
1.3					
1.4			FILL	FILL: CLAY, medium plasticity, grey, dry-moist.	
1.5					
1.6					
1.7				Termination Depth at: 1.7 m. Refusal due to excavator limit.	
1.8					

ENVIRONMENTAL TESTPIT AEC02 TP49

PROJECT NUMBER 2300	**DATE** 12 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LM
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.4 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, fine-coarse grained, medium brown, dry.	No contamination indicators observed.
0.2	AEC02-TP49-0.2-0.3		FILL	FILL: CLAY, low plasticity, grey with orange mottling, dry.	
0.3					
0.4					
0.5					
0.6					
0.7					
0.8					
0.9					
1					
1.1					
1.2					
1.3					
1.4				Termination Depth at: 1.4 m on compacted fill	
1.5					
1.6					
1.7					
1.8					

ENVIRONMENTAL TESTPIT AEC02 TP50

PROJECT NUMBER 2300	**DATE** 12 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LM
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.5 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, fine-coarse grained, medium brown, dry.	No contamination indicators observed.
0.2	AEC02-TP50-0.2-0.3		FILL	FILL: CLAY, low plasticity, grey with orange mottling, dry.	
0.3					
0.4					
0.5					
0.6					
0.7					
0.8					
0.9					
1					
1.1					
1.2					
1.3					
1.4					
1.5				Termination Depth at: 1.5 m on compacted fill	
1.6					
1.7					
1.8					

ENVIRONMENTAL TESTPIT AEC02 TP51

PROJECT NUMBER 2300	**DATE** 12 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LM
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.1 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, fine-coarse grained, medium brown, dry.	No contamination indicators observed.
0.2	AEC02-TP51-0.2-0.3		FILL	FILL: Clayey SAND with low organics, fine-coarse grained, medium brown, dry.	
0.3			FILL	FILL: CLAY, low plasticity, red-brown, dry.	
0.4					
0.5					
0.6					
0.7					
0.8					
0.9					
1					
1.1				Termination Depth at: 1.1 m on compacted fill	
1.2					
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					

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ENVIRONMENTAL TESTPIT AEC02 TP52

PROJECT NUMBER 2300	**DATE** 12 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LM
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.2 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, fine-coarse grained, medium brown, dry.	No contamination indicators observed.
0.2	AEC02-TP52-0.2-0.3		FILL	FILL: Clayey SAND with low organics, fine-coarse grained, medium brown, dry.	
0.3			FILL	FILL: CLAY, low plasticity, orange with grey motting, dry.	
0.7			FILL	FILL: Sandy Silty CLAY, low plasticity, grey-brown, dry.	
1.2				Termination Depth at: 1.2 m on compacted fill	

ENVIRONMENTAL TESTPIT AEC03 TP02

PROJECT NUMBER 2300	**DATE** 9 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LH
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.2 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2	AEC03-TP02-0.2-0.3		FILL	FILL: Clayey SAND with low organics, coarse grained, medium brown, dry-moist.	
0.3					
0.4					Foreign materials including tile, ceramics and brick observed.
0.5					
0.6					No contamination indicators observed.
0.7					
0.8					
0.9			FILL	FILL: CLAY, low plasticity, orange brown, moist.	
1					
1.1					
1.2				Termination Depth at: 1.2 m on compacted fill	
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					
1.9					

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ENVIRONMENTAL TESTPIT AEC03 TP03

PROJECT NUMBER 2300	**DATE** 9 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LH
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.0 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2	AEC03-TP03-0.2-0.3		FILL	FILL: Clayey SAND with low organics, coarse grained, medium brown, dry-moist, trace shale.	
0.3					
0.4					
0.5			FILL	FILL: CLAY with low organics, low plasticity, orange brown, moist.	
0.6					
0.7					
0.8					
0.9					
1				Termination Depth at: 1.0 m on compacted fill	
1.1					
1.2					
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					
1.9					

ENVIRONMENTAL TESTPIT AEC03 TP04

PROJECT NUMBER 2300	**DATE** 9 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LH
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.0 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, dark brown, dry-moist.	No contamination indicators observed.
0.2			FILL	FILL: Clayey SAND with low organics, coarse grained, dark brown, dry-moist.	
0.3	AEC03-TP04-0.2-0.3				
0.4					
0.5			FILL	NATURAL: CLAY, low plasticity, orange brown, moist.	
0.6					
0.7					
0.8					
0.9					
1				Termination Depth at: 1.0 m on compacted fill	
1.1					
1.2					
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					
1.9					

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ENVIRONMENTAL TESTPIT AEC03 TP05

PROJECT NUMBER 2300	**DATE** 9 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LH
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.4 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, pale brown, dry-moist.	No contamination indicators observed.
0.2	AEC03-TP05-0.2-0.3		FILL	FILL: Clayey SAND with low organics, coarse grained, pale brown, dry-moist.	
0.3					
0.4					Foreign materials including glass and terracotta observed.
0.5					
0.6					No contamination indicators observed.
0.7					
0.8					
0.9					
1					
1.1			CL	NATURAL: CLAY, low plasticity, red brown, dry.	
1.2					
1.3					
1.4				Termination Depth at: 1.4 m	
1.5					
1.6					
1.7					
1.8					
1.9					

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Sydney Environmental Group

ENVIRONMENTAL TESTPIT AEC03 TP06

PROJECT NUMBER 2300	**DATE** 9 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LH
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.8 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, pale brown, dry-moist.	No contamination indicators observed.
0.2	AEC03-TP06-0.2-0.3		FILL	FILL: Clayey SAND with low organics, coarse grained, pale brown, dry-moist.	
0.3					
0.4					
0.5					
0.6					
0.7					
0.8					
0.9					
1					
1.1					
1.2					
1.3					
1.4					
1.5					
1.6					
1.7					
1.8				Termination Depth at: 1.8 m - Excavation limit	
1.9					

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ENVIRONMENTAL TESTPIT AEC03 TP07

PROJECT NUMBER 2300	**DATE** 9 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LH
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.5 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, pale brown, dry-moist.	No contamination indicators observed.
0.2	AEC03-TP07-0.2-0.3		FILL	FILL: Clayey SAND with low organics, coarse grained, pale brown, dry-moist, trace sand.	
0.3					
0.4					
0.5					
0.6					
0.7					
0.8					
0.9					
1					
1.1					
1.2			FILL	FILL: CLAY, low plasticity, pale orange brown, dry.	
1.3					
1.4					
1.5				Termination Depth at: 1.5 m on compacted fill	
1.6					
1.7					
1.8					
1.9					

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ENVIRONMENTAL TESTPIT AEC03 TP08

PROJECT NUMBER 2300	**DATE** 9 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LH
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.2 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, pale brown, dry-moist.	No contamination indicators observed.
0.2			FILL	FILL: Clayey SAND with low organics, coarse grained, pale brown, dry-moist, trace sand, gravel.	
0.3	AEC03-TP08-0.2-0.3				
0.4					
0.5			FILL	FILL: Clayey SAND, coarse grained, pale brown, dry-moist, trace sand, gravel.	
0.6					
0.7					
0.8					
0.9			CL	NATURAL: CLAY, low plasticity, orange brown with pale brown mottling, dry.	
1					
1.1					
1.2				Termination Depth at: 1.2 m	
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					
1.9					

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ENVIRONMENTAL TESTPIT AEC03 TP09

PROJECT NUMBER 2300	**DATE** 9 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LH
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.2 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, pale brown, dry-moist.	No contamination indicators observed.
0.2	AEC03-TP09-0.2-0.3		FILL	FILL: Clayey SAND with low organics, coarse grained, pale brown, dry-moist, trace sand, gravel.	
0.3					
0.4					
0.5			FILL	FILL: Clayey SAND, coarse grained, pale brown, dry-moist, trace sand, gravel.	
0.6					
0.7					
0.8					
0.9			CL	NATURAL: CLAY, low plasticity, orange brown with pale brown mottling, dry.	
1					
1.1					
1.2				Termination Depth at: 1.2 m	
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					
1.9					

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ENVIRONMENTAL TESTPIT AEC03 TP10

PROJECT NUMBER 2300	**DATE** 9 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LH
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.0 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, pale brown, dry-moist.	No contamination indicators observed.
0.2	AEC03-TP10-0.2-0.3		FILL	FILL: Clayey SAND with low organics, coarse grained, pale brown, dry-moist, trace sand, gravel.	
0.3					
0.4					
0.5					
0.6					
0.7			CL	NATURAL: CLAY, low plasticity, orange brown with pale brown mottling, dry.	
0.8					
0.9					
1				Termination Depth at: 1.0 m	
1.1					
1.2					
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					
1.9					

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ENVIRONMENTAL TESTPIT AEC03 TP12

PROJECT NUMBER 2300	**DATE** 9 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LH
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 0.8 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, dark brown, dry-moist.	No contamination indicators observed.
0.2			FILL	FILL: Clayey SAND with low organics, coarse grained, medium brown, dry-moist.	
0.3	AEC03-TP12-0.2-0.3				
0.4					
0.5			CL	NATURAL: CLAY, low plasticity, orange brown, dry-moist.	
0.6					
0.7					
0.8				Termination Depth at: 0.8 m	
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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ENVIRONMENTAL TESTPIT AEC03 TP18

PROJECT NUMBER 2300	**DATE** 9 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LH
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 0.8 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, dark brown, dry-moist.	No contamination indicators observed.
0.2	AEC03-TP18-0.2-0.3		FILL	FILL: Clayey SAND, coarse grained, medium brown, dry-moist.	
0.3					
0.4					
0.5			CL	NATURAL: CLAY, medium plasticity, orange brown, moist.	
0.6					
0.7					
0.8				Termination Depth at: 0.8 m	
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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ENVIRONMENTAL TESTPIT AEC03 TP19

PROJECT NUMBER 2300	**DATE** 9 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LH
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 0.8 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, pale brown, dry.	No contamination indicators observed.
0.2			FILL	FILL: Clayey SAND, coarse grained, pale brown, dry.	
0.3	AEC03-TP19-0.2-0.3				Foreign materials including potential Asbestos Containing Material (ACM), concrete, and terracotta observed.
0.4					
0.5			CL	NATURAL: CLAY, low plasticity, orange brown, dry-moist.	No contamination indicators observed.
0.6					
0.7					
0.8				Termination Depth at: 0.8 m	
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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ENVIRONMENTAL TESTPIT AEC03 TP20

PROJECT NUMBER 2300	**DATE** 9 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LH
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 0.8 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, pale brown, dry.	No contamination indicators observed.
0.2	AEC03-TP20-0.2-0.3		FILL	FILL: Clayey SAND, coarse grained, pale brown, dry, gravels.	
0.3					
0.4					
0.5			FILL	FILL: CLAY, low plasticity, orange brown, dry-moist.	
0.6					
0.7					
0.8				Termination Depth at: 0.8 m on compacted fill	
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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ENVIRONMENTAL TESTPIT AEC03 TP21

PROJECT NUMBER 2300	**DATE** 9 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LH
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.1 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, dark brown, dry-moist.	No contamination indicators observed.
0.2	AEC03-TP21-0.2-0.3		FILL	FILL: Clayey SAND, coarse grained, pale brown, dry, gravels.	Foreign materials including glass, ceramics, and plastic observed.
0.8			CL	NATURAL: CLAY, low plasticity, orange brown, dry-moist.	No contamination indicators observed.
1.1				Termination Depth at: 1.1 m	

Sydney Environmental Group

ENVIRONMENTAL TESTPIT AEC03 TP22

PROJECT NUMBER 2300	**DATE** 9 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LH
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.1 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, dark brown, dry-moist.	No contamination indicators observed.
0.2	AEC03-TP22-0.2-0.3		FILL	FILL: Clayey SAND, coarse grained, pale brown, dry, trace gravels.	
0.3					
0.4					
0.5					
0.6					
0.7					
0.8			FILL	FILL: CLAY, low plasticity, orange brown, moist-dry.	
0.9					
1					
1.1				Termination Depth at: 1.1 m on compacted fill	
1.2					
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					
1.9					

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ENVIRONMENTAL TESTPIT AEC03 TP23

PROJECT NUMBER 2300	**DATE** 9 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LH
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.1 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2	AEC03-TP23-0.2-0.3		FILL	FILL: Clayey SAND, coarse grained, pale brown, dry, trace gravels.	
0.3					
0.4					
0.5					
0.6					
0.7					
0.8			FILL	FILL: CLAY, low plasticity, orange brown with pale brown mottling, dry-moist.	
0.9					
1					
1.1				Termination Depth at: 1.1 m on compacted fill	
1.2					
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					
1.9					

ENVIRONMENTAL TESTPIT AEC03 TP24

PROJECT NUMBER 2300	**DATE** 9 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LH
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.1 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2	AEC03-TP24-0.2-0.3		FILL	FILL: Clayey SAND, coarse grained, pale brown, dry, trace gravels.	
0.3					Foreign materials including concrete observed.
0.4					No contamination indicators observed.
0.5					
0.6					
0.7					
0.8			FILL	FILL: CLAY, low plasticity, orange brown with pale brown mottling, dry-moist.	
0.9					
1					
1.1				Termination Depth at: 1.1 m on compacted fill	
1.2					
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					
1.9					

ENVIRONMENTAL TESTPIT AEC03 TP27

PROJECT NUMBER 2300
PROJECT NAME WSU Milperra DSI
CLIENT Mirvac Group Pty Ltd
ADDRESS Western Sydney University, Milperra Campus

DATE 9 January 2024
EXCAVATION CO. Smartscan Locators
OPERATOR Tyler
EXCAVATION METHOD 3.5 t Excavator
TOTAL DEPTH 0.8 m

LOGGED BY LL
CHECKED BY LH

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, dark brown, dry-moist.	Foreign materials including brick observed.
0.2	AEC03-TP27-0.2-0.3				
0.3			FILL	FILL: Clayey SAND, fine grained, medium brown, dry.	No contamination indicators observed.
0.4					
0.5			CL	NATURAL: Sandy CLAY, low medium plasticity, orange with brown mottling, dry-moist.	
0.6					
0.7					
0.8				Termination Depth at: 0.8 m	
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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ENVIRONMENTAL TESTPIT AEC03 TP28

PROJECT NUMBER 2300	**DATE** 9 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LH
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.0 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, pale brown, dry-moist.	No contamination indicators observed.
0.2	AEC03-TP28-0.2-0.3		FILL	FILL: Clayey SAND, fine grained, medium brown, dry.	
0.3					Foreign materials including potential Asbestos Containing Material (ACM), terracotta and brick observed.
0.4					
0.5					
0.6					
0.7			CL	NATURAL: CLAY, low plasticity, orange brown with pale brown mottling, dry.	No contamination indicators observed.
0.8					
0.9					
1				Termination Depth at: 1.0 m	
1.1					
1.2					
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					
1.9					

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ENVIRONMENTAL TESTPIT AEC03 TP29

PROJECT NUMBER 2300	**DATE** 10 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LH
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 0.9 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, pale brown, dry-moist.	No contamination indicators observed.
0.2			FILL	FILL: Clayey SAND, fine grained, medium brown, dry-moist.	
0.3	AEC03-TP29-0.2-0.3				
0.4			FILL	FILL: SAND, pale yellow, fine grained, dry-moist.	
0.5					
0.6			FILL	FILL: CLAY, low plasticity, orange, moist.	
0.7					
0.8					
0.9				Termination Depth at: 0.9 m on compacted fill	
1					
1.1					
1.2					
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					
1.9					

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ENVIRONMENTAL TESTPIT AEC03 TP30

PROJECT NUMBER 2300	**DATE** 10 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LH
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.0 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, fine-coarse grained, dark brown, dry-moist.	No contamination indicators observed.
0.2			FILL	FILL: Clayey SAND, fine grained, medium brown, dry-moist.	
0.3	AEC03-TP30-0.2-0.3				
0.4			FILL	FILL: SAND, pale yellow, fine grained, dry-moist.	
0.5					
0.6					
0.7			FILL	FILL: CLAY, low plasticity, orange, moist.	
0.8					
0.9					
1				Termination Depth at: 1.0 m on compacted fill	
1.1					
1.2					
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					
1.9					

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ENVIRONMENTAL TESTPIT AEC03 TP32

PROJECT NUMBER 2300	**DATE** 10 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LH
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 0.3 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, fine-coarse grained, grey brown, dry-moist.	No contamination indicators observed.
0.2	AEC03-TP32-0.2-0.3		FILL	FILL: Clayey SAND, fine grained, grey brown, dry-moist.	
0.3				Termination Depth at: 0.3 m - Inaccessible due to service lines	
0.4					
0.5					
0.6					
0.7					
0.8					
0.9					
1					
1.1					
1.2					
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					
1.9					

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ENVIRONMENTAL TESTPIT AEC03 TP33

PROJECT NUMBER 2300	**DATE** 10 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LH
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 0.3 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, grey brown, dry-moist.	No contamination indicators observed.
0.2	AEC03-TP33-0.2-0.3		FILL	FILL: Clayey SAND, with low organics, fine grained, grey brown, dry-moist.	
0.3				Termination Depth at: 0.3 m - Inaccessible due to service lines	
0.4					
0.5					
0.6					
0.7					
0.8					
0.9					
1					
1.1					
1.2					
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					
1.9					

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ENVIRONMENTAL TESTPIT AEC03 TP34

PROJECT NUMBER 2300	**DATE** 10 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LH
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 0.9 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, grey brown, dry-moist.	No contamination indicators observed.
0.2			FILL	FILL: Clayey SAND, fine grained, grey brown, dry-moist.	
0.3	AEC03-TP34-0.2-0.3				
0.4					
0.5					
0.6			FILL	FILL: CLAY, low plasticity, red brown, dry.	
0.7					
0.8					
0.9				Termination Depth at: 0.9 m on compacted fill	
1					
1.1					
1.2					
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					
1.9					

ENVIRONMENTAL TESTPIT AEC03 TP35

PROJECT NUMBER 2300	**DATE** 10 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LH
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.1 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, grey brown, dry-moist.	No contamination indicators observed.
0.2			FILL	FILL: Clayey SAND, with low organics, fine grained, grey brown, dry-moist.	
0.3	AEC03-TP35-0.2-0.3				
0.4					
0.5			FILL	FILL: SAND, fine grained, grey yellow, dry-moist.	
0.6					
0.7					
0.8			FILL	FILL: CLAY, low plasticity, red brown, dry.	
0.9					
1					
1.1				Termination Depth at: 1.1 m on compacted fill	
1.2					
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					
1.9					

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ENVIRONMENTAL TESTPIT AEC03 TP39

PROJECT NUMBER 2300	**DATE** 10 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LH
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.0 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, pale brown, dry-moist.	No contamination indicators observed.
0.2			FILL	FILL: Clayey SAND, fine grained, medium brown, dry-moist.	
0.3	AEC03-TP39-0.2-0.3				
0.4			FILL	FILL: SAND, fine grained, grey yellow, dry-moist.	
0.5					
0.6					
0.7			FILL	FILL: CLAY, low plasticity, orange, dry.	
0.8					
0.9					
1				Termination Depth at: 1.0 m on compacted fill	
1.1					
1.2					
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					
1.9					

ENVIRONMENTAL TESTPIT AEC03 TP40

PROJECT NUMBER 2300	**DATE** 10 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LH
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 0.9 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, pale brown, dry-moist.	No contamination indicators observed.
0.2			FILL	FILL: Clayey SAND, fine grained, medium brown, dry-moist.	
0.3	AEC03-TP40-0.2-0.3				
0.4			FILL	FILL: SAND, fine grained, grey yellow, dry-moist.	
0.5					
0.6			FILL	FILL: CLAY, low plasticity, orange, dry.	
0.7					
0.8					
0.9				Termination Depth at: 0.9 m on compacted fill	
1					
1.1					
1.2					
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					
1.9					

ENVIRONMENTAL TESTPIT AEC03 TP41

PROJECT NUMBER 2300	**DATE** 10 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LH
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 0.9 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2	AEC03-TP41-0.2-0.3		FILL	FILL: Clayey SAND, fine grained, medium brown, dry-moist.	
0.3					
0.4					
0.5					
0.6			FILL	FILL: CLAY, low plasticity, orange, dry.	
0.7					
0.8					
0.9				Termination Depth at: 0.9 m on compacted fill	
1					
1.1					
1.2					
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					
1.9					

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ENVIRONMENTAL TESTPIT AEC03 TP42

PROJECT NUMBER 2300	**DATE** 10 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LH
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.0 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	Foreign Materials observed included Asbestos Containing Materials (ACM)
0.2	AEC03-TP42-0.2-0.3		FILL	FILL: Clayey SAND with low organics, fine grained, medium brown, dry-moist, trace sand.	
0.3					No contamination indicators observed.
0.4					
0.5					
0.6					
0.7			FILL	FILL: CLAY, low plasticity, orange, dry.	
0.8					
0.9					
1				Termination Depth at: 1.0 m on compacted fill	
1.1					
1.2					
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					
1.9					

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ENVIRONMENTAL TESTPIT AEC03 TP43

PROJECT NUMBER 2300	**DATE** 10 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LH
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 0.9 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2	AEC03-TP43-0.2-0.3		FILL	FILL: Clayey SAND, fine grained, medium brown, dry-moist.	
0.3					
0.4					Foreign materials including brick and plastic observed.
0.5					No contamination indicators observed.
0.6			FILL	FILL: CLAY, low plasticity, orange with yellow brown mottling, dry.	
0.7					
0.8					
0.9				Termination Depth at: 0.9 m on compacted fill	
1					
1.1					
1.2					
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					
1.9					

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ENVIRONMENTAL TESTPIT AEC03 TP44

PROJECT NUMBER 2300	**DATE** 10 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LH
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 0.8 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, fine-coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2	AEC03-TP44-0.2-0.3		FILL	FILL: Clayey SAND with low organics, fine grained, medium brown, dry-moist.	
0.3					
0.4					
0.5			FILL	FILL: CLAY, low plasticity, orange with yellow brown mottling, dry.	
0.6					
0.7					
0.8				Termination Depth at: 0.8 m on compacted fill	
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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ENVIRONMENTAL TESTPIT AEC03 TP57

PROJECT NUMBER 2300	**DATE** 10 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LH
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.3 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, dark brown, dry-moist.	No contamination indicators observed.
0.2	AEC03-TP57-0.2-0.3		FILL	FILL: Clayey SAND with low organics, fine grained, dark brown, dry-moist.	
0.3					
0.4			FILL	FILL: Silty CLAY, low plasticity, orange with yellow brown mottling, dry-moist, trace rocks.	Foreign materials including potential Asbestos Containing Material (ACM), metal, and plastic observed.
0.5					
0.6					No contamination indicators observed.
0.7					
0.8					
0.9					
1			FILL	FILL: CLAY, low plasticity, grey with yellow mottling, dry-moist.	
1.1					
1.2					
1.3				Termination Depth at: 1.3 m on compacted fill	
1.4					
1.5					
1.6					
1.7					
1.8					
1.9					

ENVIRONMENTAL TESTPIT AEC03 TP58

PROJECT NUMBER 2300	**DATE** 10 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LH
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.0 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, pale brown, dry-moist.	No contamination indicators observed.
0.2	AEC03-TP58-0.2-0.3		FILL	FILL: Clayey SAND with low organics, fine grained, pale brown, dry-moist.	
0.3					
0.4					
0.5					
0.6					
0.7			FILL	FILL: CLAY, low plasticity, orange with yellow mottling, dry.	
0.8					
0.9					
1				Termination Depth at: 1.0 m on compacted fill	
1.1					
1.2					
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					
1.9					

ENVIRONMENTAL TESTPIT AEC03 TP60

PROJECT NUMBER 2300	**DATE** 10 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LH
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 0.8 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2	AEC03-TP60-0.2-0.3		FILL	FILL: Clayey SAND, fine grained, pale brown, dry.	
0.3					
0.4					
0.5			FILL	FILL: CLAY, low plasticity, orange brown with yellow mottling, dry.	
0.6					
0.7					
0.8				Termination Depth at: 0.8 m on compacted fill	
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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Sydney Environmental Group

ENVIRONMENTAL TESTPIT AEC03 TP61

PROJECT NUMBER 2300	**DATE** 10 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LH
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 0.9 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2	AEC03-TP61-0.2-0.3		FILL	FILL: Clayey SAND, fine grained, pale brown, dry.	
0.3			FILL	FILL: Sandy CLAY, low plasticity, orange brown, dry.	
0.6			FILL	FILL: CLAY, low plasticity, orange brown, dry.	
0.9				Termination Depth at: 0.9 m on compacted fill	
1					
1.1					
1.2					
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					
1.9					

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ENVIRONMENTAL TESTPIT AEC03 TP62

PROJECT NUMBER 2300	**DATE** 10 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LH
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 0.6 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2	AEC03-TP62-0.2-0.3		FILL	FILL: Clayey SAND, with low organics, fine grained, medium brown, dry.	
0.3			FILL	FILL: CLAY with low organics, low plasticity, orange brown, dry.	
0.4					
0.5					
0.6				Termination Depth at: 0.6 m on compacted fill	
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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ENVIRONMENTAL TESTPIT AEC03 TP63

PROJECT NUMBER 2300	**DATE** 10 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra SCA	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LH
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 0.6 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, fine-coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2			FILL	FILL: Clayey SAND, with low organics, fine grained, medium brown, dry.	
0.3	TP63-0.2-0.3				
0.4			CL	NATURAL: CLAY with low organics, low plasticity, orange brown, dry.	
0.5					
0.6				Termination Depth at: 0.6 m	
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					

ENVIRONMENTAL TESTPIT AEC03 TP64

PROJECT NUMBER 2300	**DATE** 10 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LH
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 0.9 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2			FILL	FILL: Clayey SAND, fine grained, medium brown, dry.	
0.3	AEC03-TP64-0.2-0.3				
0.4			FILL	FILL: CLAY, low plasticity, orange brown, dry, trace sand.	
0.5					
0.6					
0.7					
0.8					
0.9				Termination Depth at: 0.9 m on compacted fill	
1					
1.1					
1.2					
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					
1.9					

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ENVIRONMENTAL TESTPIT AEC03 TP66

PROJECT NUMBER 2300	**DATE** 10 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LH
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.1 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2	AEC03-TP66-0.2-0.3		FILL	FILL: Clayey SAND, fine grained, medium brown, dry, trace gravels and rocks.	
0.3			FILL	FILL: CLAY, low plasticity, orange brown, dry, trace sand.	
1.1				Termination Depth at: 1.1 m on compacted fill	

ENVIRONMENTAL TESTPIT AEC03 TP67

PROJECT NUMBER 2300
PROJECT NAME WSU Milperra DSI
CLIENT Mirvac Group Pty Ltd
ADDRESS Western Sydney University, Milperra Campus

DATE 10 January 2024
EXCAVATION CO. Smartscan Locators
OPERATOR Tyler
EXCAVATION METHOD 3.5 t Excavator
TOTAL DEPTH 0.6 m

LOGGED BY LL
CHECKED BY LH

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, fine-coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2	AEC03-TP67-0.2-0.3		FILL	FILL: Clayey SAND, fine grained, medium brown, dry-moist.	
0.3			FILL	FILL: CLAY, medium plasticity, orange with yellow mottling, dry-moist.	
0.4					
0.5					
0.6				Termination Depth at: 0.6 m on compacted fill	
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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ENVIRONMENTAL TESTPIT AEC03 TP68

PROJECT NUMBER 2300	**DATE** 10 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LH
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.4 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2			FILL	FILL: Clayey SAND, fine grained, medium brown, dry.	
0.3	AEC03-TP68-0.2-0.3				Foreign materials including potential Asbestos Containing Material (ACM), glass, brick, metal, and cable were observed.
0.4					
0.5			FILL	FILL: CLAY, high plasticity, orange with grey mottling, moist.	
0.6					
0.7					
0.8					
0.9					
1					
1.1					
1.2					
1.3					
1.4				Termination Depth at: 1.4 m on compacted fill	
1.5					
1.6					
1.7					
1.8					
1.9					

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ENVIRONMENTAL TESTPIT AEC03 TP70

PROJECT NUMBER 2300	**DATE** 10 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LH
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.0 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2			FILL	FILL: Clayey SAND, fine grained, medium brown, dry.	
0.3	AEC03-TP70-0.2-0.3				Foreign materials including potential Asbestos Containing Metal (ACM), plastic, metal and terracotta observed.
0.4					
0.5					
0.6			FILL	FILL: CLAY, low plasticity, orange with grey mottling, dry.	
0.7					
0.8					
0.9					
1				Termination Depth at: 1.0 m on compacted fill	
1.1					
1.2					
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					
1.9					

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produced by ESlog.ESdat.net on 24 Mar 2025

ENVIRONMENTAL TESTPIT AEC03 TP71

PROJECT NUMBER 2300	**DATE** 10 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra SCA	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LH
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.3 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2			FILL	FILL: Clayey SAND, fine grained, medium brown, dry.	
0.3	AEC03-TP71-0.2-0.3				
0.4			FILL	FILL: CLAY, low plasticity, orange, dry.	
0.5					
0.6					
0.7					Foreign materials including Asbestos Containing Materials (ACM), metal and glass observed.
0.8					
0.9					No contamination indicators observed.
1					
1.1					
1.2					
1.3				Termination Depth at: 1.3 m - Refusal due to tree root	
1.4					
1.5					
1.6					
1.7					
1.8					
1.9					

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ENVIRONMENTAL TESTPIT AEC03 TP72

PROJECT NUMBER 2300
PROJECT NAME WSU Milperra DSI
CLIENT Mirvac Group Pty Ltd
ADDRESS Western Sydney University, Milperra Campus

DATE 10 January 2024
EXCAVATION CO. Smartscan Locators
OPERATOR Tyler
EXCAVATION METHOD 3.5 t Excavator
TOTAL DEPTH 1.5 m

LOGGED BY LL
CHECKED BY LH

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2	AEC03-TP72-0.2-0.3		FILL	FILL: Clayey SAND, fine grained, pale brown, dry.	
0.3					
0.4			FILL	FILL: CLAY, low plasticity, orange brown, dry.	
0.5					Foreign materials including metal and glass observed.
0.6					
0.7					
0.8					
0.9					
1					
1.1					
1.2					No contamination indicators observed.
1.3					
1.4					
1.5				Termination Depth at: 1.5 m on compacted fill	
1.6					
1.7					
1.8					
1.9					

ENVIRONMENTAL TESTPIT AEC03 TP73

PROJECT NUMBER 2300
PROJECT NAME WSU Milperra DSI
CLIENT Mirvac Group Pty Ltd
ADDRESS Western Sydney University, Milperra Campus

DATE 10 January 2024
EXCAVATION CO. Smartscan Locators
OPERATOR Tyler
EXCAVATION METHOD 3.5 t Excavator
TOTAL DEPTH 1.2 m

LOGGED BY LL
CHECKED BY LH

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2	AEC03-TP73-0.2-0.3		FILL	FILL: Clayey SAND, fine grained, medium brown, dry.	
0.3					Foreign materials including brick observed.
0.4					
0.5					No contamination indicators observed.
0.6			FILL	FILL: CLAY with claystone inclusion, low plasticity, orange brown, dry.	
0.7					
0.8					
0.9					
1					
1.1					
1.2				Termination Depth at: 1.2 m - Refusal due to claystone bedrock	
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					
1.9					

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ENVIRONMENTAL TESTPIT AEC03 TP75

PROJECT NUMBER 2300	**DATE** 10 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LH
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.5 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2	AEC03-TP75-0.2-0.3		FILL	FILL: Clayey SAND, fine grained, pale brown, dry, trace gravels.	
0.3					Foreign materials including timber observed.
0.4					
0.5					No contamination indicators observed.
0.6					
0.7					
0.8					
0.9					
1					
1.1					
1.2			FILL	FILL: CLAY, low plasticity, red with grey mottling, dry.	
1.3					
1.4					
1.5				Termination Depth at: 1.5 m on compacted fill	
1.6					
1.7					
1.8					
1.9					

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ENVIRONMENTAL TESTPIT AEC03 TP76

PROJECT NUMBER 2300	**DATE** 11 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LH
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.2 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2	AEC03-TP76-0.2-0.3		FILL	FILL: Clayey SAND, fine grained, pale brown, dry.	
0.3					
0.4					
0.5					
0.6					
0.7			FILL	FILL: CLAY, low plasticity, grey with orange mottling, dry.	
0.8					
0.9					Foreign materials including tile observed.
1					
1.1					No contamination indicators observed.
1.2				Termination Depth at: 1.2 m on compacted fill	
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					
1.9					

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ENVIRONMENTAL TESTPIT AEC03 TP77

PROJECT NUMBER 2300	**DATE** 11 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LH
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.1 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2	AEC03-TP77-0.2-0.3		FILL	FILL: Clayey SAND, fine grained, brown, dry, trace rocks.	
0.3					
0.4					
0.5					Foreign materials including terracotta observed.
0.6			FILL	FILL: CLAY, low plasticity, red brown, dry.	
0.7					No contamination indicators observed.
0.8					
0.9					
1					
1.1				Termination Depth at: 1.1 m - Refusal due to bedrock.	
1.2					
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					
1.9					

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Sydney Environmental Group

ENVIRONMENTAL TESTPIT AEC03 TP78

PROJECT NUMBER 2300	**DATE** 11 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LH
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.1 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, moist.	No contamination indicators observed.
0.2	AEC03-TP78-0.2-0.3		FILL	FILL: Clayey SAND, fine grained, brown, moist-dry.	
0.8			FILL	FILL: CLAY, high plasticity, orange, moist.	
1.1				Termination Depth at: 1.1 m on compacted fill	

ENVIRONMENTAL TESTPIT AEC03 TP79

PROJECT NUMBER 2300	**DATE** 11 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LH
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.1 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2	AEC03-TP79-0.2-0.3		FILL	FILL: Clayey SAND, fine grained, brown, dry.	
0.3					Foreign materials including terracotta observed.
0.4					
0.5					No contamination indicators observed.
0.6			FILL	FILL: CLAY, low plasticity, red brown, dry.	
0.7					
0.8					
0.9					
1					
1.1				Termination Depth at: 1.1 m - Refusal due to bedrock.	
1.2					
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					
1.9					

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ENVIRONMENTAL TESTPIT AEC03 TP80

PROJECT NUMBER 2300	**DATE** 11 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LH
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.2 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2	AEC03-TP80-0.2-0.3		FILL	FILL: Clayey SAND, fine grained, brown, dry.	
0.3					
0.4					
0.5					
0.6					
0.7			FILL	FILL: CLAY, low plasticity, red brown, dry.	
0.8					
0.9					
1					
1.1					
1.2				Termination Depth at: 1.2 m on compacted fill	
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					
1.9					

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Sydney Environmental Group

ENVIRONMENTAL TESTPIT AEC03 TP84

PROJECT NUMBER 2300	**DATE** 11 January 2024	**LOGGED BY** LL
PROJECT NAME WSU Milperra DSI	**EXCAVATION CO.** Smartscan Locators	**CHECKED BY** LH
CLIENT Mirvac Group Pty Ltd	**OPERATOR** Tyler	
ADDRESS Western Sydney University, Milperra Campus	**EXCAVATION METHOD** 3.5 t Excavator	
	TOTAL DEPTH 1.1 m	

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			FILL	FILL: Clayey SAND with high organics, coarse grained, medium brown, dry-moist.	No contamination indicators observed.
0.2	AEC03-TP84-0.2-0.3		FILL	FILL: Clayey SAND, fine grained, brown, dry.	
0.3					
0.4					
0.5					
0.6			FILL	FILL: CLAY, low plasticity, red brown, dry.	
0.7					
0.8					
0.9					
1					
1.1				Termination Depth at: 1.1 m on compacted fill	
1.2					
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					
1.9					

ENVIRONMENTAL TEST PIT AEC05 TP01

PROJECT NUMBER 2300
PROJECT NAME WSU Milperra SCA
CLIENT Mirvac Pty Ltd
ADDRESS 2 Bullecourt Avenue, Milperra NSW

DATE 9 May 2025
EXCAVATOR COMPANY DECC Pty Ltd
EXCAVATOR METHOD 5 t Excavator
OPERATOR -
TOTAL DEPTH 1.2 m

LOGGED BY LC
CHECKED BY MC

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1	TP01-0.1-0.2 DUP01 DUP01A		SAND	FILL: SAND, coarse grained, dark yellow, moist with foreign materials in top 100mm.	Foreign materials including brick, terracotta, plastic, concrete and sandstone boulders were observed.
0.9			CL	NATURAL: CLAY, low plasticity, dark grey with red mottling, moist.	No indicators of contamination were observed.
1.2				Termination Depth: 1.2 m	

ENVIRONMENTAL TEST PIT AEC05 TP02

PROJECT NUMBER 2300
PROJECT NAME WSU Milperra SCA
CLIENT Mirvac Pty Ltd
ADDRESS 2 Bullecourt Avenue, Milperra NSW

DATE 9 May 2025
EXCAVATOR COMPANY DECC Pty Ltd
EXCAVATOR METHOD 5 t Excavator
OPERATOR -
TOTAL DEPTH 1.1 m

LOGGED BY LC
CHECKED BY MC

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1	TP02-0.1-0.2		SC	FILL: Clayey SAND, coarse grained, dark brown, moist with foreign materials in top 100mm.	Foreign materials including brick, terracotta, plastic, concrete and sandstone boulders were observed.
0.8			CL	FILL: Sandy CLAY, fine grained, light brown/grey, dry.	No indicators of contamination were observed.
1.1				Termination Depth: 1.1 m	

ENVIRONMENTAL TEST PIT AEC05 TP03

PROJECT NUMBER 2300
PROJECT NAME WSU Milperra SCA
CLIENT Mirvac Pty Ltd
ADDRESS 2 Bullecourt Avenue, Milperra NSW

DATE 9 May 2025
EXCAVATOR COMPANY DECC Pty Ltd
EXCAVATOR METHOD 5 t Excavator
OPERATOR -
TOTAL DEPTH 1.0 m

LOGGED BY LC
CHECKED BY MC

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1	TP03-0.1-0.2		SC	FILL: Clayey SAND, coarse grained, dark brown, moist with foreign materials in top 100mm.	Foreign materials including brick, terracotta, plastic, concrete and sandstone boulders were observed.
0.7			CL	FILL: Sandy CLAY, fine grained, yellow/red, moist.	No indicators of contamination were observed.
1				Termination Depth: 1.0 m	

ENVIRONMENTAL TEST PIT AEC05 TP04

PROJECT NUMBER 2300
PROJECT NAME WSU Milperra SCA
CLIENT Mirvac Pty Ltd
ADDRESS 2 Bullecourt Avenue, Milperra NSW

DATE 9 May 2025
EXCAVATOR COMPANY DECC Pty Ltd
EXCAVATOR METHOD 5 t Excavator
OPERATOR -
TOTAL DEPTH 1.1 m

LOGGED BY LC
CHECKED BY MC

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1	TP04-0.1-0.2		SC	FILL: Clayey SAND, coarse grained, light grey, moist with trace sandstone and foreign materials in top 100mm.	Foreign materials including brick, terracotta, plastic, concrete and sandstone boulders were observed.
0.8			CL	FILL: Sandy CLAY, fine grained, red/grey, moist.	No indicators of contamination were observed.
1.1				Termination Depth: 1.1 m	

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ENVIRONMENTAL TEST PIT AEC05 TP05

PROJECT NUMBER 2300
PROJECT NAME WSU Milperra SCA
CLIENT Mirvac Pty Ltd
ADDRESS 2 Bullecourt Avenue, Milperra NSW

DATE 9 May 2025
EXCAVATOR COMPANY DECC Pty Ltd
EXCAVATOR METHOD 5 t Excavator
OPERATOR -
TOTAL DEPTH 1.0 m

LOGGED BY LC
CHECKED BY MC

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1	TP05-0.1-0.2		SC	FILL: Clayey SAND, coarse grained, light grey/yellow, moist with foreign materials in top 100mm.	Foreign materials including brick, terracotta, plastic, concrete and sandstone boulders were observed.
0.7			CL	FILL: Sandy CLAY, fine grained, yellow/red, moist.	No indicators of contamination were observed.
1				Termination Depth: 1.0 m	

ENVIRONMENTAL TEST PIT AEC05 TP07

PROJECT NUMBER 2300
PROJECT NAME WSU Milperra SCA
CLIENT Mirvac Pty Ltd
ADDRESS 2 Bullecourt Avenue, Milperra NSW

DATE 15 April 2025
EXCAVATOR COMPANY DECC Pty Ltd
EXCAVATOR METHOD 5 t Excavator
OPERATOR -
TOTAL DEPTH 2.5 m

LOGGED BY KW
CHECKED BY MC

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.2	TP07-0.1-0.2		CLS	FILL: Silty CLAY, low plasticity, pale brown, dry.	Foreign materials including brick, terracotta and plastic were observed.
0.4			CL	FILL: CLAY, low plasticity, light brown with red mottling, dry.	No indicators of contamination were observed.
0.6					
0.8					
1	TP07-1.0-1.1				
1.2			620	INFERRED NATURAL: Clayey SHALE, low plasticity, light grey with yellow mottling, dry.	
1.4					
1.6					
1.8					
2	TP07-2.0-2.1				
2.2					
2.4					
2.6				Termination Depth: 2.5 m	
2.8					
3					
3.2					
3.4					
3.6					
3.8					

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ENVIRONMENTAL TEST PIT AEC05 TP08

PROJECT NUMBER 2300
PROJECT NAME WSU Milperra SCA
CLIENT Mirvac Pty Ltd
ADDRESS 2 Bullecourt Avenue, Milperra NSW

DATE 15 April 2025
EXCAVATOR COMPANY DECC Pty Ltd
EXCAVATOR METHOD 5 t Excavator
OPERATOR -
TOTAL DEPTH 2.4 m

LOGGED BY KW
CHECKED BY MC

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1	TP08-0.1-0.2		CLS	FILL: Silty CLAY, low plasticity, medium brown with red-orange mottling, dry.	Foreign materials including rock, concrete, metal and plastic were observed.
0.2					
0.3					
0.4					
0.5					
0.6					
0.7					
0.8					
0.9					
1	TP08-1.0-1.1				
1.1					
1.2			CL	FILL: CLAY, low plasticity, red with light brown mottling, dry.	No indicators of contamination were observed.
1.3					
1.4					
1.5					
1.6			620	INFERRED NATURAL: Clayey SHALE, low plasticity, light grey with yellow mottling, dry.	
1.7					
1.8					
1.9					
2	TP08-2.0-2.1				
2.1					
2.2					
2.3					
2.4				Termination Depth: 2.4 m	

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ENVIRONMENTAL TEST PIT AEC05 TP09

PROJECT NUMBER 2300
PROJECT NAME WSU Milperra SCA
CLIENT Mirvac Pty Ltd
ADDRESS 2 Bullecourt Avenue, Milperra NSW

DATE 3 April 2025
EXCAVATOR COMPANY DECC Pty Ltd
EXCAVATOR METHOD 5 t Excavator
OPERATOR -
TOTAL DEPTH 1.8 m

LOGGED BY LL
CHECKED BY MC

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1	TP09-0.1-0.2		FILL	FILL: Sandy CLAY, low plasticity, orange-brown, dry-moist.	Foreign materials including asbestos containing materials (ACM) PVC, brick, terracotta, metal, and plastic observed.
0.2	TP009-0.2-0.3		FILL	FILL: Silty CLAY, low plasticity, dark brown, dry-moist.	
0.6			CLS	INFERRED NATURAL: CLAY, medium-low plasticity, grey with yellow-brown mottling, dry-moist.	No indicators of contamination were observed.
1.8				Termination Depth: 1.8 m	

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ENVIRONMENTAL TEST PIT AEC05 TP10

PROJECT NUMBER 2300
PROJECT NAME WSU Milperra SCA
CLIENT Mirvac Pty Ltd
ADDRESS 2 Bullecourt Avenue, Milperra NSW

DATE 15 April 2025
EXCAVATOR COMPANY DECC Pty Ltd
EXCAVATOR METHOD 5 t Excavator
OPERATOR -
TOTAL DEPTH 2.2 m

LOGGED BY KW
CHECKED BY MC

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1	TP10-0.1-0.2 DUP02 DUP02A		CLS	FILL: Silty CLAY, low plasticity, dark brown, dry.	Foreign materials including brick, plastic, glass and terracotta were observsed.
0.7			CL	FILL: CLAY, low plasticity, grey with orange mottling, dry.	No indicators of contamination were observed.
1	TP10-1.0-1.1				
2	TP10-2.0-2.1				
2.2				Termination Depth: 2.2 m	

ENVIRONMENTAL TEST PIT AEC05 TP11

PROJECT NUMBER 2300
PROJECT NAME WSU Milperra SCA
CLIENT Mirvac Pty Ltd
ADDRESS 2 Bullecourt Avenue, Milperra NSW

DATE 3 April 2025
EXCAVATOR COMPANY DECC Pty Ltd
EXCAVATOR METHOD 5 t Excavator
OPERATOR -
TOTAL DEPTH 1.6 m

LOGGED BY LL
CHECKED BY MC

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.2	TP11-0.1-0.2		FILL	FILL: Reworked CLAY, low plasticity, pale red with grey mottling, dry moist, with claystone.	No indicators of contamination were observed.
0.4	TP11-0.4-0.5 DUP01/DUP01A		FILL	FILL: Silty CLAY, low plasticity, dark brown, moist-dry.	
1.2			CH	INFERRED NATURAL: CLAY, high plasticity, yellow brown, moist-dry.	
1.4			CH	INFERRED NATURAL: CLAY, high plasticity, pale red with grey mottling, moist-dry.	
1.6				Termination Depth: 1.6 m	

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ENVIRONMENTAL TEST PIT AEC05 TP12

PROJECT NUMBER 2300
PROJECT NAME WSU Milperra SCA
CLIENT Mirvac Pty Ltd
ADDRESS 2 Bullecourt Avenue, Milperra NSW

DATE 3 April 2025
EXCAVATOR COMPANY DECC Pty Ltd
EXCAVATOR METHOD 5 t Excavator
OPERATOR -
TOTAL DEPTH 2.0 m

LOGGED BY LL
CHECKED BY MC

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1	TP12-0.1-0.2		FILL	FILL: Silty Sandy CLAY, medium plasticity, white with red brown, dry-moist.	Foreign materials including plastic, tile, terracotta, and metal observed.
0.9	TP12-0.9-1.0		FILL	FILL: Sandy Silty CLAY, low plasticity, dark brown, moist-dry.	
1.3			CH	INFERRED NATURAL: CLAY, high plasticity, red-brown with grey mottling, moist-dry, with trace claystone.	No indicators of contamination were observed.
2				Termination Depth: 2.0 m	

ENVIRONMENTAL TEST PIT AEC05 TP13

PROJECT NUMBER 2300
PROJECT NAME WSU Milperra SCA
CLIENT Mirvac Pty Ltd
ADDRESS 2 Bullecourt Avenue, Milperra NSW

DATE 3 April 2025
EXCAVATOR COMPANY DECC Pty Ltd
EXCAVATOR METHOD 5 t Excavator
OPERATOR -
TOTAL DEPTH 2.0 m

LOGGED BY LL
CHECKED BY MC

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1	TP13-0.1-0.2		FILL	FILL: Silty Sandy CLAY, low plasticity, medium brown, dry-moist with trace claystone.	Foreign materials including concrete and tile observed.
0.2					
0.3	TP13-0.3-0.4		FILL	FILL: Sandy CLAY, low plasticity, orange brown, dry-moist.	No indicators of contamination were observed.
0.4					
0.5					
0.6	TP13-0.6-0.7		FILL	FILL: Silty CLAY, high plasticity, dark brown-grey, dry-moist.	
0.7					
0.8					
0.9					
1					
1.1					
1.2					
1.3					
1.4					
1.5	T13-1.5-1.6				
1.6			CH	INFERRED NATURAL: CLAY, high plasticity, red brown with grey mottling, moist-dry.	
1.7					
1.8					
1.9					
2				Termination Depth: 2.0 m	
2.1					
2.2					
2.3					
2.4					

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ENVIRONMENTAL TEST PIT AEC05 TP14

PROJECT NUMBER 2300
PROJECT NAME WSU Milperra SCA
CLIENT Mirvac Pty Ltd
ADDRESS 2 Bullecourt Avenue, Milperra NSW

DATE 3 April 2025
EXCAVATOR COMPANY DECC Pty Ltd
EXCAVATOR METHOD 5 t Excavator
OPERATOR -
TOTAL DEPTH 2.0 m

LOGGED BY LL
CHECKED BY MC

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1	TP14-0.1-0.2		FILL	FILL: Silty Sandy CLAY, low plasticity, orange-brown, dry with trace sandstone.	Foreign materials including terracotta observed.
0.2					
0.3					
0.4	TP14-0.4-0.5		FILL	FILL: Silty Sandy CLAY, low plasticity, pale brown, dry, with gravel.	No indicators of contamination were observed.
0.5					
0.6					
0.7					
0.8	TP14-0.8-0.9		FILL	FILL: CLAY, medium plasticity, yellow-brown, dry-moist.	
0.9					
1					
1.1					
1.2			CL	INFERRED NATURAL: CLAY, medium plasticity, yellow-brown with white mottling, dry-moist.	
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					
1.9					
2				Termination Depth: 2.0 m	
2.1					
2.2					
2.3					
2.4					

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ENVIRONMENTAL TEST PIT AEC05 TP15

PROJECT NUMBER 2300
PROJECT NAME WSU Milperra SCA
CLIENT Mirvac Pty Ltd
ADDRESS 2 Bullecourt Avenue, Milperra NSW

DATE 3 April 2025
EXCAVATOR COMPANY DECC Pty Ltd
EXCAVATOR METHOD 5 t Excavator
OPERATOR -
TOTAL DEPTH 2.0 m

LOGGED BY LL
CHECKED BY MC

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1	TP15-0.1-0.2		FILL	FILL: Silty Sandy CLAY, low plasticity, pale brown, dry with gravel.	Foreign materials including concrete, metal, and plastic observed.
0.4	TP15-0.4-0.5		FILL	FILL: Sandy CLAY, low plasticity, orange brown, dry.	
0.6	TP15-0.6-0.7		FILL	FILL: Silty CLAY, low plasticity, dark brown, dry.	
0.9	TP15-0.9-1.0		FILL	FILL: CLAY, medium plasticity, yellow-brown, dry-moist.	
1.2			CL	INFERRED NATURAL: CLAY, medium plasticity, yellow-orange with white mottling, dry-moist.	No indicators of contamination were observed.
2				Termination Depth: 2.0 m	

ENVIRONMENTAL TEST PIT AEC05 TP16

PROJECT NUMBER 2300
PROJECT NAME WSU Milperra SCA
CLIENT Mirvac Pty Ltd
ADDRESS 2 Bullecourt Avenue, Milperra NSW

DATE 3 April 2025
EXCAVATOR COMPANY DECC Pty Ltd
EXCAVATOR METHOD 5 t Excavator
OPERATOR -
TOTAL DEPTH 2.0 m

LOGGED BY LL
CHECKED BY MC

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1	TP16-0.1-0.2		FILL	FILL: Silty CLAY, low plasticity, dark brown, dry-moist.	Foreign materials including terracotta and brick observed.
0.4	TP16-0.4-0.5		FILL	FILL: Silty CLAY, medium plasticity, yellow brown, dry-moist.	No indicators of contamination were observed.
1			CH	INFERRED NATURAL: CLAY, high plasticity, red-brown with grey mottling, moist-dry.	
2				Termination Depth: 2.0 m	

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ENVIRONMENTAL TEST PIT AEC05 TP17

PROJECT NUMBER 2300
PROJECT NAME WSU Milperra SCA
CLIENT Mirvac Pty Ltd
ADDRESS 2 Bullecourt Avenue, Milperra NSW

DATE 3 April 2025
EXCAVATOR COMPANY DECC Pty Ltd
EXCAVATOR METHOD 5 t Excavator
OPERATOR -
TOTAL DEPTH 2.5 m

LOGGED BY LL
CHECKED BY MC

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.2 0.4 0.6 0.8 1 1.2 1.4 1.6 1.8 2 2.2 2.4	TP17-0.1-0.2 TP17-1.0-1.1 TP17-2.0-2.1		FILL	FILL: Reworked CLAY, low plasticity, pale grey with yellow brown, dry-moist.	No indicators of contamination were observed.
2.6 2.8 3 3.2 3.4 3.6 3.8				Termination Depth: 2.5 m due to excavator limit.	

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ENVIRONMENTAL TEST PIT AEC05 TP18

PROJECT NUMBER 2300
PROJECT NAME WSU Milperra SCA
CLIENT Mirvac Pty Ltd
ADDRESS 2 Bullecourt Avenue, Milperra NSW

DATE 15 April 2025
EXCAVATOR COMPANY DECC Pty Ltd
EXCAVATOR METHOD 5 t Excavator
OPERATOR -
TOTAL DEPTH 4.0 m

LOGGED BY KW
CHECKED BY MC

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.2	TP18-0.1-0.2		CLS	FILL: Silty CLAY, low plasticity, light brown with red-grey mottling, dry.	No indicators of contamination were observed.
1	TP18-1.0-1.1				
2	TP18-2.0-2.1				
3			CL	INFERRED NATURAL: Clayey SHALE, low plasticity, grey with red-orange mottling, dry.	
4				Termination Depth: 4.0 m	

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ENVIRONMENTAL TEST PIT AEC05 TP19

PROJECT NUMBER 2300
PROJECT NAME WSU Milperra SCA
CLIENT Mirvac Pty Ltd
ADDRESS 2 Bullecourt Avenue, Milperra NSW

DATE 15 April 2025
EXCAVATOR COMPANY DECC Pty Ltd
EXCAVATOR METHOD 5 t Excavator
OPERATOR -
TOTAL DEPTH 2.1 m

LOGGED BY KW
CHECKED BY MC

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1	TP19-0.1-0.2		CLS	FILL: Silty CLAY, low plasticity, light brown-grey, dry.	No indicators of contamination were observed.
0.2					
0.3			CL	FILL: CLAY, low plasticity, brown-orange with yellow mottling, dry-moist.	
0.4					
0.5					
0.6					
0.7					
0.8					
0.9					
1	TP19-1.0-1.1				
1.1					
1.2					
1.3					
1.4					
1.5			620	FILL: Shaley CLAY, low plasticity, brown-orange with yellow mottling, moist.	
1.6					
1.7					
1.8					
1.9					
2	TP19-2.0-2.1				
2.1				Termination Depth: 2.1 m	
2.2					
2.3					
2.4					

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ENVIRONMENTAL TEST PIT AEC05 TP20

PROJECT NUMBER 2300
PROJECT NAME WSU Milperra SCA
CLIENT Mirvac Pty Ltd
ADDRESS 2 Bullecourt Avenue, Milperra NSW

DATE 15 April 2025
EXCAVATOR COMPANY DECC Pty Ltd
EXCAVATOR METHOD 5 t Excavator
OPERATOR -
TOTAL DEPTH 3.0 m

LOGGED BY KW
CHECKED BY MC

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.2	TP20-0.1-0.2		CLS	FILL: Silty sandy CLAY, low plasticity, pale brown, dry.	Foreign materials including brick, terracotta and plastic were observed.
0.4			CL	FILL: CLAY, low plasticity, light brown with red mottling, dry.	No indicators of contamination were observed.
1	TP20-1.0-1.1				
1.2			620	INFERRED NATURAL: Clayey SHALE, low plasticity, light grey with yellow mottling, dry.	
2	TP20-2.0-2.1				
3				Termination Depth: 3.0 m	

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ENVIRONMENTAL TEST PIT AEC05 TP21

PROJECT NUMBER 2300
PROJECT NAME WSU Milperra SCA
CLIENT Mirvac Pty Ltd
ADDRESS 2 Bullecourt Avenue, Milperra NSW

DATE 21 July 2025
EXCAVATION COMPANY DECC Pty Ltd
EXCAVATION METHOD 20 t Excavator
OPERATOR Dave
TOTAL DEPTH 1.0 m

LOGGED BY SH
CHECKED BY LM

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0			FILL	FILL: Sandy CLAY, low plasticity, lightbrown, dry-moist.	Foreign material observed including PVC, brick, terracotta, metal, and plastic.
0.1	TP21-0.1-0.2		FILL	FILL: Sandy CLAY, low plasticity, orange-brown, dry-moist.	
0.6			CLS	INFERRED NATURAL: CLAY, medium-low plasticity, red and grey with yellow-brown mottling, dry-moist.	No contamination indicators identified.
1				Termination Depth: 1.0 m	

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ENVIRONMENTAL TEST PIT AEC05 TP22

PROJECT NUMBER 2300
PROJECT NAME WSU Milperra SCA
CLIENT Mirvac Pty Ltd
ADDRESS 2 Bullecourt Avenue, Milperra NSW

DATE 21 July 2025
EXCAVATION COMPANY DECC Pty Ltd
EXCAVATION METHOD 20 t Excavator
OPERATOR Dave
TOTAL DEPTH 1.5 m

LOGGED BY SH
CHECKED BY LM

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			GC	FILL: Sandy GRAVEL, moist, grey, low plasticity with foreign materials.	Foreign material observed including crushed concrete, bricks, plastic and metal.
0.2	TP22-0.1-0.2		SC	FILL: Sandy CLAY, moist, medium brown, medium plasticity with gravels.	
0.6				FILL: Sandy CLAY, moist, light brown and orange, medium plasticity with gravels.	
1.1	TP22-1.1-1.2				
1.2			CL	NATURAL: CLAY, dry, orange and red with grey mottling, low plasticity.	No contamination indicators identified.
1.5				Termination Depth: 1.5 m	

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ENVIRONMENTAL TEST PIT AEC05 TP23

PROJECT NUMBER 2300
PROJECT NAME WSU Milperra SCA
CLIENT Mirvac Pty Ltd
ADDRESS 2 Bullecourt Avenue, Milperra NSW

DATE 21 July 2025
EXCAVATION COMPANY DECC Pty Ltd
EXCAVATION METHOD 20 t Excavator
OPERATOR Dave
TOTAL DEPTH 0.8 m

LOGGED BY SH
CHECKED BY LM

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			GC	FILL: Sandy GRAVEL, moist, grey, low plasticity with foreign materials.	Foreign material observed including crushed concrete, timber, bricks, plastic and metal.
0.2	TP23-0.1-0.2		SC	FILL: Sandy CLAY, dry to moist, medium brown, low to medium plasticity with gravels.	
0.6			CL	NATURAL: CLAY, dry, light brown with grey mottling, low plasticity.	No contamination indicators identified.
0.8				Termination Depth: 0.8 m	

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ENVIRONMENTAL TEST PIT AEC05 TP24

PROJECT NUMBER 2300
PROJECT NAME WSU Milperra SCA
CLIENT Mirvac Pty Ltd
ADDRESS 2 Bullecourt Avenue, Milperra NSW

DATE 21 July 2025
EXCAVATION COMPANY DECC Pty Ltd
EXCAVATION METHOD 20 t Excavator
OPERATOR Dave
TOTAL DEPTH 0.8 m

LOGGED BY SH
CHECKED BY LM

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			GC	FILL: Sandy GRAVEL, moist, grey, low plasticity with foreign materials.	Foreign material observed including crushed concrete, terracotta, bricks, plastic and metal.
0.2	TP24-0.1-0.2		SC	FILL: Sandy CLAY, dry to moist, medium brown, low to medium plasticity with gravels.	
0.6			CL	NATURAL: CLAY, dry, orange and red with grey mottling, low plasticity.	No contamination indicators identified.
0.8				Termination Depth: 0.8 m	
0.9					
1					
1.1					
1.2					
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					
1.9					
2					
2.1					
2.2					
2.3					
2.4					

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ENVIRONMENTAL TEST PIT AEC05 TP25

PROJECT NUMBER 2300
PROJECT NAME WSU Milperra SCA
CLIENT Mirvac Pty Ltd
ADDRESS 2 Bullecourt Avenue, Milperra NSW

DATE 15 April 2025
EXCAVATOR COMPANY DECC Pty Ltd
EXCAVATOR METHOD 5 t Excavator
OPERATOR -
TOTAL DEPTH 2.1 m

LOGGED BY KW
CHECKED BY MC

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1	TP25-0.1-0.2		CLS	FILL: Sandy CLAY, low plasticity, medium brown, dry.	Foreign materials including brick and concrete were observed.
0.2	TP25-0.2-0.3			FILL: Sandy CLAY with gravels, low plasticity, grey, dry.	No indicators of contamination were observed.
0.3					
0.4	TP25-0.4-0.5			FILL: Silty CLAY, medium plasticity, black, dry.	Foreign odours were observed. No further indicators of contamination were observed.
0.5					
0.6					
0.7					
0.8			CL	FILL: CLAY, low plasticity, light brown with grey and red mottling, dry.	No indicators of contamination were observed.
0.9					
1	TP25-1.0-1.1				
1.1					
1.2					
1.3					
1.4					
1.5				FILL: Shaley CLAY, low plasticity, grey with yellow mottling, dry.	
1.6					
1.7					
1.8					
1.9					
2	TP25-2.0-2.1				
2.1				Termination Depth: 2.1 m	
2.2					
2.3					
2.4					

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ENVIRONMENTAL TEST PIT AEC05 TP26

PROJECT NUMBER 2300
PROJECT NAME WSU Milperra SCA
CLIENT Mirvac Pty Ltd
ADDRESS 2 Bullecourt Avenue, Milperra NSW

DATE 21 July 2025
EXCAVATION COMPANY DECC Pty Ltd
EXCAVATION METHOD 20 t Excavator
OPERATOR Dave
TOTAL DEPTH 1.5 m

LOGGED BY SH
CHECKED BY LM

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			GC	FILL: Sandy GRAVEL, moist, grey, low plasticity with foreign materials.	Foreign material observed including crushed concrete, bricks, plastic and metal.
	TP26-0.1-0.2		SC	FILL: Sandy CLAY, moist, medium brown, medium plasticity with gravels.	
0.8				FILL: Sandy CLAY, moist, light brown, medium plasticity with gravels.	No contamination indicators identified.
1.1	TP26-1.1-1.2				
1.2			CL	NATURAL: CLAY, dry, orange and red with grey mottling, low plasticity.	
1.5				Termination Depth: 1.5 m	

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ENVIRONMENTAL TEST PIT AEC05 TP27

PROJECT NUMBER 2300
PROJECT NAME WSU Milperra SCA
CLIENT Mirvac Pty Ltd
ADDRESS 2 Bullecourt Avenue, Milperra NSW

DATE 21 July 2025
EXCAVATION COMPANY DECC Pty Ltd
EXCAVATION METHOD 20 t Excavator
OPERATOR Dave
TOTAL DEPTH 1.0 m

LOGGED BY SH
CHECKED BY LM

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			GC	FILL: Sandy GRAVEL, moist, grey, low plasticity with foreign materials.	Foreign material observed including crushed concrete, bricks, plastic and metal.
0.2	TP27-0.1-0.2		SC	FILL: Sandy CLAY, moist, light brown with red and grey mottling, medium plasticity with gravels.	
0.7			CL	NATURAL: CLAY, dry, orange and red with grey mottling, low plasticity.	No contamination indicators identified.
1				Termination Depth: 1.0 m	

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ENVIRONMENTAL TEST PIT AEC05 TP28

PROJECT NUMBER 2300
PROJECT NAME WSU Milperra SCA
CLIENT Mirvac Pty Ltd
ADDRESS 2 Bullecourt Avenue, Milperra NSW

DATE 15 April 2025
EXCAVATOR COMPANY DECC Pty Ltd
EXCAVATOR METHOD 5 t Excavator
OPERATOR -
TOTAL DEPTH 3.0 m

LOGGED BY KW
CHECKED BY MC

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0			CLS	FILL: Silty CLAY, medium plasticity, dark brown, dry.	No indicators of contamination were observed.
	TP028-0.1-0.2				
0.2				FILL: Silty CLAY with gravels, low plasticity, black with light brown mottling, dry.	
	TP28-0.3-0.4				
0.4					
0.6					
0.8				FILL: Sandy CLAY, low plasticity, light grey with pale orange mottling, dry.	
1	TP28-1.0-1.1		CL	FILL: CLAY, low plasticity, red with brown mottling, dry.	
1.2					
1.4					
1.6					
1.8					
2	TP28-2.0-2.1			FILL: Shaley CLAY, low plasticity, red with light grey mottling, dry.	
2.2					
2.4					
2.6					
2.8					
3				Termination Depth: 3.0 m	
3.2					
3.4					
3.6					
3.8					

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ENVIRONMENTAL TEST PIT AEC05 TP29

PROJECT NUMBER 2300
PROJECT NAME WSU Milperra SCA
CLIENT Mirvac Pty Ltd
ADDRESS 2 Bullecourt Avenue, Milperra NSW

DATE 21 July 2025
EXCAVATION COMPANY DECC Pty Ltd
EXCAVATION METHOD 20 t Excavator
OPERATOR Dave
TOTAL DEPTH 1.0 m

LOGGED BY SH
CHECKED BY LM

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0			GC	FILL: Sandy GRAVEL, moist, grey, low plasticity with foreign materials.	Foreign material observed including crushed concrete, bricks, plastic and metal.
0.1	TP29-0.1-0.2		SC	FILL: Sandy CLAY, moist, light brown with red and grey mottling, medium plasticity with gravels.	
0.7			CL	NATURAL: CLAY, dry, orange and red with grey mottling, low plasticity.	No contamination indicators identified.
1				Termination Depth: 1.0 m	

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ENVIRONMENTAL TEST PIT AEC05 TP30

PROJECT NUMBER 2300
PROJECT NAME WSU Milperra SCA
CLIENT Mirvac Pty Ltd
ADDRESS 2 Bullecourt Avenue, Milperra NSW

DATE 21 July 2025
EXCAVATION COMPANY DECC Pty Ltd
EXCAVATION METHOD 20 t Excavator
OPERATOR Dave
TOTAL DEPTH 1.0 m

LOGGED BY SH
CHECKED BY LM

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0			GC	FILL: Sandy GRAVEL, moist, grey, low plasticity with foreign materials.	Foreign material observed including crushed concrete, bricks, plastic and metal.
0.1	TP30-0.1-0.2		SC	FILL: Sandy CLAY, moist, light brown with red and grey mottling, medium plasticity with gravels.	
0.7			CL	NATURAL: CLAY, dry, orange and red with grey mottling, low plasticity.	No contamination indicators identified.
1				Termination Depth: 1.0 m	

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ENVIRONMENTAL TEST PIT AEC05 TP31

PROJECT NUMBER 2300
PROJECT NAME WSU Milperra SCA
CLIENT Mirvac Pty Ltd
ADDRESS 2 Bullecourt Avenue, Milperra NSW

DATE 21 July 2025
EXCAVATION COMPANY DECC Pty Ltd
EXCAVATION METHOD 20 t Excavator
OPERATOR Dave
TOTAL DEPTH 1.2 m

LOGGED BY SH
CHECKED BY LM

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			GC	FILL: Sandy GRAVEL, moist, grey, low plasticity with foreign materials.	Foreign material observed including crushed concrete, bricks, plastic and metal.
	TP31-0.1-0.2		SC	FILL: Sandy CLAY, moist, light brown with red and grey mottling, medium plasticity with gravels.	
0.9			CL	NATURAL: CLAY, dry, orange and red with grey mottling, low plasticity.	No contamination indicators identified.
1.2				Termination Depth: 1.2 m	

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ENVIRONMENTAL TEST PIT AEC05 TP32

PROJECT NUMBER 2300
PROJECT NAME WSU Milperra SCA
CLIENT Mirvac Pty Ltd
ADDRESS 2 Bullecourt Avenue, Milperra NSW

DATE 21 July 2025
EXCAVATION COMPANY DECC Pty Ltd
EXCAVATION METHOD 20 t Excavator
OPERATOR Dave
TOTAL DEPTH 1.0 m

LOGGED BY SH
CHECKED BY LM

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1	TP32-0.1-0.2		FILL	FILL: Sandy CLAY, low plasticity, dark brown, dry-moist.	Foreign material observed including PVC, brick, terracotta, metal, and plastic.
0.4			FILL	FILL: Sandy CLAY, low plasticity, light brown, dry-moist.	
0.5	TP32-0.5-0.6				
0.6			CLS	INFERRED NATURAL: CLAY, medium-low plasticity, orange red with grey mottling, dry-moist.	No contamination indicators identified.
1				Termination Depth: 1.0 m	

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ENVIRONMENTAL TEST PIT AEC05 TP33

PROJECT NUMBER 2300
PROJECT NAME WSU Milperra SCA
CLIENT Mirvac Pty Ltd
ADDRESS 2 Bullecourt Avenue, Milperra NSW

DATE 21 July 2025
EXCAVATION COMPANY DECC Pty Ltd
EXCAVATION METHOD 20 t Excavator
OPERATOR Dave
TOTAL DEPTH 0.8 m

LOGGED BY SH
CHECKED BY LM

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			GC	FILL: Sandy GRAVEL, moist, grey, low plasticity with foreign materials.	Foreign material observed including crushed concrete, terracotta, bricks, plastic and metal.
0.2	TP33-0.1-0.2		SC	FILL: Sandy CLAY, dry to moist, dark brown, low to medium plasticity with high organic matters and gravels.	
0.6			CL	NATURAL: CLAY, dry, orange and red with grey mottling, low plasticity.	No contamination indicators identified.
0.8				Termination Depth: 0.8 m	
2.4					

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ENVIRONMENTAL TEST PIT AEC05 TP34

PROJECT NUMBER 2300
PROJECT NAME WSU Milperra SCA
CLIENT Mirvac Pty Ltd
ADDRESS 2 Bullecourt Avenue, Milperra NSW

DATE 21 July 2025
EXCAVATION COMPANY DECC Pty Ltd
EXCAVATION METHOD 20 t Excavator
OPERATOR Dave
TOTAL DEPTH 0.8 m

LOGGED BY SH
CHECKED BY LM

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			GC	FILL: Sandy GRAVEL, moist, grey, low plasticity with foreign materials.	Foreign material observed including crushed concrete, terracotta, bricks, plastic and metal.
0.2	TP34-0.1-0.2		SC	FILL: Sandy CLAY, dry to moist, dark brown, low to medium plasticity with high organic matters and gravels.	
0.6			CL	NATURAL: CLAY, dry, orange and red with grey mottling, low plasticity.	No contamination indicators identified.
0.8				Termination Depth: 0.8 m	
0.9					
1					
1.1					
1.2					
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					
1.9					
2					
2.1					
2.2					
2.3					
2.4					

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ENVIRONMENTAL TEST PIT AEC05 TP35

PROJECT NUMBER 2300
PROJECT NAME WSU Milperra SCA
CLIENT Mirvac Pty Ltd
ADDRESS 2 Bullecourt Avenue, Milperra NSW

DATE 21 July 2025
EXCAVATION COMPANY DECC Pty Ltd
EXCAVATION METHOD 20 t Excavator
OPERATOR Dave
TOTAL DEPTH 0.8 m

LOGGED BY SH
CHECKED BY LM

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			GC	FILL: Sandy GRAVEL, moist, grey, low plasticity with foreign materials.	Foreign material observed including crushed concrete, terracotta, bricks, plastic, asbestos fibre cement fragments and metal.
0.2	TP35-0.1-0.2		SC	FILL: Sandy CLAY, dry to moist, medium brown, low to medium plasticity with gravels.	
0.6			CL	NATURAL: CLAY, dry, orange and red with grey mottling, low plasticity.	No contamination indicators identified.
0.8				Termination Depth: 0.8 m	

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ENVIRONMENTAL TEST PIT AEC05 TP36

PROJECT NUMBER 2300
PROJECT NAME WSU Milperra SCA
CLIENT Mirvac Pty Ltd
ADDRESS 2 Bullecourt Avenue, Milperra NSW

DATE 21 July 2025
EXCAVATION COMPANY DECC Pty Ltd
EXCAVATION METHOD 20 t Excavator
OPERATOR Dave
TOTAL DEPTH 0.8 m

LOGGED BY SH
CHECKED BY LM

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			GC	FILL: Sandy GRAVEL, moist, grey, low plasticity with foreign materials.	Foreign material observed including crushed concrete, terracotta, bricks, plastic and metal.
	TP36-0.1-0.2		SC	FILL: Sandy CLAY, dry to moist, medium brown, low to medium plasticity with gravels.	
0.6			CL	NATURAL: CLAY, dry, orange and red with grey mottling, low plasticity.	No contamination indicators identified.
0.8				Termination Depth: 0.8 m	

0.9 1 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 2 2.1 2.2 2.3 2.4

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ENVIRONMENTAL TEST PIT AEC05 TP37

PROJECT NUMBER 2300
PROJECT NAME WSU Milperra SCA
CLIENT Mirvac Pty Ltd
ADDRESS 2 Bullecourt Avenue, Milperra NSW

DATE 21 July 2025
EXCAVATION COMPANY DECC Pty Ltd
EXCAVATION METHOD 20 t Excavator
OPERATOR Dave
TOTAL DEPTH 1.2 m

LOGGED BY SH
CHECKED BY LM

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			GC	FILL: Sandy GRAVEL, moist, grey, low plasticity with foreign materials.	Foreign material observed including crushed concrete, bricks, plastic and metal.
	TP37-0.1-0.2		SC	FILL: Sandy CLAY, moist, light brown with red mottling, medium plasticity with gravels.	
0.9			CL	NATURAL: CLAY, dry, orange and red with grey mottling, low plasticity.	No contamination indicators identified.
1.2				Termination Depth: 1.2 m	

Disclaimer This log is intended for environmental not geotechnical purposes.

ENVIRONMENTAL TEST PIT AEC05 TP38

PROJECT NUMBER 2300
PROJECT NAME WSU Milperra SCA
CLIENT Mirvac Pty Ltd
ADDRESS 2 Bullecourt Avenue, Milperra NSW

DATE 21 July 2025
EXCAVATION COMPANY DECC Pty Ltd
EXCAVATION METHOD 20 t Excavator
OPERATOR Dave
TOTAL DEPTH 1.2 m

LOGGED BY SH
CHECKED BY LM

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			GC	FILL: Sandy GRAVEL, moist, grey, low plasticity with foreign materials.	Foreign material observed including crushed concrete, bricks, plastic and metal.
	TP38-0.1-0.2		SC	FILL: Sandy CLAY, moist, light brown with red mottling, medium plasticity with gravels.	
0.9			CL	NATURAL: CLAY, dry, orange and red with grey mottling, low plasticity.	No contamination indicators identified.
1.2				Termination Depth: 1.2 m	

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ENVIRONMENTAL TEST PIT AEC05 TP39

PROJECT NUMBER 2300
PROJECT NAME WSU Milperra SCA
CLIENT Mirvac Pty Ltd
ADDRESS 2 Bullecourt Avenue, Milperra NSW

DATE 21 July 2025
EXCAVATION COMPANY DECC Pty Ltd
EXCAVATION METHOD 20 t Excavator
OPERATOR Dave
TOTAL DEPTH 1.2 m

LOGGED BY SH
CHECKED BY LM

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			GC	FILL: Sandy GRAVEL, moist, grey, low plasticity with foreign materials.	Foreign material observed including crushed concrete, bricks, plastic and metal.
	TP39-0.1-0.2		SC	FILL: Sandy CLAY, moist, light brown with red mottling, medium plasticity with gravels.	
0.9			CL	NATURAL: CLAY, dry, orange and red with grey mottling, low plasticity.	No contamination indicators identified.
1.2				Termination Depth: 1.2 m	

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ENVIRONMENTAL TEST PIT AEC05 TP40

PROJECT NUMBER 2300
PROJECT NAME WSU Milperra SCA
CLIENT Mirvac Pty Ltd
ADDRESS 2 Bullecourt Avenue, Milperra NSW

DATE 21 July 2025
EXCAVATION COMPANY DECC Pty Ltd
EXCAVATION METHOD 20 t Excavator
OPERATOR Dave
TOTAL DEPTH 0.8 m

LOGGED BY SH
CHECKED BY LM

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			GC	FILL: Sandy GRAVEL, moist, grey, low plasticity with foreign materials.	No contamination indicators identified.
0.2	TP40-0.1-0.2		SC	FILL: Sandy CLAY, dry to moist, light brown with grey mottling, low to medium plasticity with gravels.	Foreign material observed including crushed concrete, terracotta, bricks, plastic and metal.
0.6			CL	NATURAL: CLAY, dry, light brown with grey mottling, low plasticity.	No contamination indicators identified.
0.8				Termination Depth: 0.8 m	
0.9					
1					
1.1					
1.2					
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					
1.9					
2					
2.1					
2.2					
2.3					
2.4					

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produced by ESlog.ESdat.net on 31 Jul 2025

ENVIRONMENTAL TEST PIT AEC05 TP41

PROJECT NUMBER 2300
PROJECT NAME WSU Milperra SCA
CLIENT Mirvac Pty Ltd
ADDRESS 2 Bullecourt Avenue, Milperra NSW

DATE 21 July 2025
EXCAVATION COMPANY DECC Pty Ltd
EXCAVATION METHOD 20 t Excavator
OPERATOR Dave
TOTAL DEPTH 0.8 m

LOGGED BY SH
CHECKED BY LM

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			GC	FILL: Sandy GRAVEL, moist, grey, low plasticity with foreign materials.	No contamination indicators identified.
0.2	TP41-0.1-0.2		SC	FILL: Sandy CLAY, dry to moist, light brown, low to medium plasticity with gravels.	Foreign material observed including crushed concrete, terracotta, bricks, plastic and metal.
0.6			CL	NATURAL: CLAY, dry, light brown with grey mottling, low plasticity.	No contamination indicators identified.
0.8				Termination Depth: 0.8 m	

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produced by ESlog.ESdat.net on 31 Jul 2025

ENVIRONMENTAL TEST PIT AEC05 TP42

PROJECT NUMBER 2300
PROJECT NAME WSU Milperra SCA
CLIENT Mirvac Pty Ltd
ADDRESS 2 Bullecourt Avenue, Milperra NSW

DATE 21 July 2025
EXCAVATION COMPANY DECC Pty Ltd
EXCAVATION METHOD 20 t Excavator
OPERATOR Dave
TOTAL DEPTH 0.8 m

LOGGED BY SH
CHECKED BY LM

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			GC	FILL: Sandy GRAVEL, moist, grey, low plasticity with foreign materials.	No contamination indicators identified.
0.2	TP42-0.1-0.2		SC	FILL: Sandy CLAY, dry to moist, medium brown, low to medium plasticity with gravels.	Foreign material observed including crushed concrete, terracotta, bricks, plastic and metal.
0.6			CL	NATURAL: CLAY, dry, light brown with grey mottling, low plasticity.	No contamination indicators identified.
0.8				Termination Depth: 0.8 m	

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produced by ESlog.ESdat.net on 31 Jul 2025

ENVIRONMENTAL TEST PIT AEC05 TP43

PROJECT NUMBER 2300
PROJECT NAME WSU Milperra SCA
CLIENT Mirvac Pty Ltd
ADDRESS 2 Bullecourt Avenue, Milperra NSW

DATE 21 July 2025
EXCAVATION COMPANY DECC Pty Ltd
EXCAVATION METHOD 20 t Excavator
OPERATOR Dave
TOTAL DEPTH 0.8 m

LOGGED BY SH
CHECKED BY LM

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			GC	FILL: Sandy GRAVEL, moist, grey, low plasticity with foreign materials.	No contamination indicators identified.
0.2	TP43-0.1-0.2		SC	FILL: Sandy CLAY, dry to moist, dark brown, low to medium plasticity with gravels.	Foreign material observed including crushed concrete, terracotta, bricks, plastic and metal.
0.5			CL	NATURAL: CLAY, dry, orange and red with grey mottling, low plasticity.	No contamination indicators identified.
0.8				Termination Depth: 0.8 m	

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ENVIRONMENTAL TEST PIT AEC05 TP44

PROJECT NUMBER 2300
PROJECT NAME WSU Milperra SCA
CLIENT Mirvac Pty Ltd
ADDRESS 2 Bullecourt Avenue, Milperra NSW

DATE 21 July 2025
EXCAVATION COMPANY DECC Pty Ltd
EXCAVATION METHOD 20 t Excavator
OPERATOR Dave
TOTAL DEPTH 1.5 m

LOGGED BY SH
CHECKED BY LM

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1	TP44-0.1-0.2		SC	FILL: Sandy GRAVEL, moist, light grey, low plasticity with foreign materials.	Foreign material observed including crushed concrete, bricks, plastic and metal.
0.6				FILL: Sandy GRAVEL, dry, medium grey, low plasticity with foreign materials.	
1.1	TP44-1.1-1.2				
1.2			CL	NATURAL: CLAY, dry, light brown with orange mottling, low plasticity.	No contamination indicators identified.
1.5				Termination Depth: 1.5 m	

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ENVIRONMENTAL TEST PIT AEC05 TP45

PROJECT NUMBER 2300
PROJECT NAME WSU Milperra SCA
CLIENT Mirvac Pty Ltd
ADDRESS 2 Bullecourt Avenue, Milperra NSW

DATE 21 July 2025
EXCAVATION COMPANY DECC Pty Ltd
EXCAVATION METHOD 20 t Excavator
OPERATOR Dave
TOTAL DEPTH 0.8 m

LOGGED BY SH
CHECKED BY LM

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			GC	FILL: Sandy GRAVEL, moist, grey, low plasticity with foreign materials.	Potential asbestos fibre cement fragment observed on soil surface.
0.2	TP45-0.1-0.2		SC	FILL: Sandy CLAY, dry to moist, dark brown, low to medium plasticity with gravels.	Foreign material observed including crushed concrete, terracotta, bricks, plastic and metal.
0.5			CL	NATURAL: CLAY, dry, light brown with grey mottling, low plasticity.	No contamination indicators identified.
0.8				Termination Depth: 0.8 m	

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ENVIRONMENTAL TEST PIT AEC05 TP46

PROJECT NUMBER 2300
PROJECT NAME WSU Milperra SCA
CLIENT Mirvac Pty Ltd
ADDRESS 2 Bullecourt Avenue, Milperra NSW

DATE 21 July 2025
EXCAVATION COMPANY DECC Pty Ltd
EXCAVATION METHOD 20 t Excavator
OPERATOR Dave
TOTAL DEPTH 0.8 m

LOGGED BY SH
CHECKED BY LM

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			GC	FILL: Sandy GRAVEL, moist, grey, low plasticity with foreign materials.	Potential asbestos fibre cement fragment observed on soil surface.
0.2	TP46-0.1-0.2		SC	FILL: Sandy CLAY, dry to moist, dark brown, low to medium plasticity with gravels.	Foreign material observed including crushed concrete, terracotta, bricks, plastic and metal.
0.5			CL	NATURAL: CLAY, dry, light brown with grey mottling, low plasticity.	No contamination indicators identified.
0.8				Termination Depth: 0.8 m	

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ENVIRONMENTAL TEST PIT AEC05 TP47

PROJECT NUMBER 2300
PROJECT NAME WSU Milperra SCA
CLIENT Mirvac Pty Ltd
ADDRESS 2 Bullecourt Avenue, Milperra NSW

DATE 21 July 2025
EXCAVATOR COMPANY DECC Pty Ltd
EXCAVATOR METHOD 20 t Excavator
OPERATOR Dave
TOTAL DEPTH 1.2 m

LOGGED BY SH
CHECKED BY LM

COMMENTS

Depth (m)	Samples	Graphic Log	USCS	Material Description	Additional Observations
0.1			GC	FILL: Sandy GRAVEL, moist, grey, low plasticity with foreign materials.	Foreign material observed including crushed concrete, bricks, plastic and metal.
0.2	TP47-0.1-0.2		SC	FILL: Sandy CLAY, moist, light brown with grey mottling, medium plasticity with gravels.	
0.9			CL	NATURAL: CLAY, dry, orange and red with grey mottling, low plasticity.	No contamination indicators identified.
1.2				Termination Depth: 1.2 m	

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APPENDIX B

SITE ADOPTED CRITERIA

1 SITE ADOPTED ASSESSMENT CRITERIA

Assessment criteria considered appropriate for the site were derived from a number of sources including the RAP, and relevant legislation and guidelines.

1.1 Soil Criteria

The assessment of potentially contaminated land involves the evaluation of potential human health hazards and environmental impacts. The receptors (or potential receptors) of concern may be within the site being assessed, or outside the site boundaries due to potential off-site migration of contaminants.

The subject site is proposed for low-density residential use. Consequently, the issues of concern for contamination within the site are considered to be the risk of harm to human health and ecological systems.

Table 1.1.1 Health Screening Levels for Asbestos – Residential A

Analyte	Health Screening Level – Residential A (% w/w)
Non-friable Asbestos	0.01
Friable Asbestos (Asbestos Fines / Fibrous Asbestos)	0.001
All Forms of Asbestos	No visible asbestos on surface soils

SE note however that all soils where non-friable and friable asbestos is identified will be considered to pose an unacceptable risk and need to be removed from the site. The reasoning behind this assessment is as follows:

- NATA does not accredit laboratories with a detection less than 0.01%, which is more than the friable asbestos criteria provided in the NEPM (2013) guidelines of 0.001%;
- Allowing small amounts of known bonded asbestos to remain at the Site (i.e. at concentrations below the NEPM Commercial/Industrial D criteria of 0.05%), would mean a risk remained that visible asbestos may occur by future excavation work and the NEPM (2013) criteria of 'No visible asbestos for surface soil' would not be met; and
- Allowing small amounts of known asbestos to remain at the Site would mean that such contaminated soil would need to be classified as 'Special Waste – Asbestos' if ever soil needed to be excavated and removed from Site in the future, such as may occur for a swimming pool excavation.

APPENDIX C

LABORATORY DOCUMENTATION

Sydney Environmental Group Pty Ltd
Unit 63/45 Huntley St
Alexandria
NSW 2015

Attention:	Mitchell Kirby
Report	1058859-AID
Project Name	WSU MILPERRA CAMPUS SCA
Project ID	2300
Received Date	Jan 11, 2024
Date Reported	Jan 16, 2024

Methodology:

Asbestos Fibre Identification	Conducted in accordance with the Australian Standard AS 4964 – 2004: Method for the Qualitative Identification of Asbestos in Bulk Samples and in-house Method LTM-ASB-8020 by polarised light microscopy (PLM) and dispersion staining (DS) techniques. *NOTE: Positive Trace Analysis results indicate the sample contains detectable respirable fibres.*
Unknown Mineral Fibres	Mineral fibres of unknown type, as determined by PLM with DS, may require another analytical technique, such as Electron Microscopy, to confirm unequivocal identity. *NOTE: While Actinolite, Anthophyllite and Tremolite asbestos may be detected by PLM with DS, due to variability in the optical properties of these materials, AS4964 requires that these are reported as UMF unless confirmed by an independent technique.*
Subsampling Soil Samples	The whole sample submitted is first dried and then passed through a 10mm sieve followed by a 2mm sieve. All fibrous matter greater than 10mm, greater than 2mm as well as the material passing through the 2mm sieve are retained and analysed for the presence of asbestos. If the sub 2mm fraction is greater than approximately 30 to 60g then a sub-sampling routine based on ISO 3082:2009(E) is employed. *NOTE: Depending on the nature and size of the soil sample, the sub-2 mm residue material may need to be sub-sampled for trace analysis, in accordance with AS 4964-2004.*
Bonded asbestos-containing material (ACM)	The material is first examined and any fibres isolated for identification by PLM and DS. Where required, interfering matrices may be removed by disintegration using a range of heat, chemical or physical treatments, possibly in combination.The resultant material is then further examined in accordance with AS 4964 - 2004. *NOTE: Even after disintegration it may be difficult to detect the presence of asbestos in some asbestos-containing bulk materials using PLM and DS. This is due to the low grade or small length or diameter of the asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials. Vinyl/asbestos floor tiles, some asbestos-containing sealants and mastics, asbestos-containing epoxy resins and some ore samples are examples of these types of material, which are difficult to analyse.*
Limit of Reporting	The performance limitation of the AS 4964 (2004) method for non-homogeneous samples is around 0.1 g/kg (equivalent to 0.01% (w/w)). Where no asbestos is found by PLM and DS, including Trace Analysis, this is considered to be at the nominal reporting limit of 0.01% (w/w). The NEPM screening level of 0.001% (w/w) is intended as an on-site determination, not a laboratory Limit of Reporting (LOR), per se. Examination of a large sample size (e.g. 500 mL) may improve the likelihood of detecting asbestos, particularly AF, to aid assessment against the NEPM criteria. Gravimetric determinations to this level of accuracy are outside of AS 4964 and hence NATA Accreditation does not cover the performance of this service (non-NATA results shown with an asterisk). *NOTE: NATA News March 2014, p.7, states in relation to AS 4964: "This is a qualitative method with a nominal reporting limit of 0.01 % " and that currently in Australia "there is no validated method available for the quantification of asbestos".This report is consistent with the analytical procedures and reporting recommendations in the NEPM and the WA DoH.*

Project Name WSU MILPERRA CAMPUS SCA
Project ID 2300
Date Sampled Jan 09, 2024 to Jan 11, 2024
Report 1058859-AID

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
AEC03-TP29-0.2-0.3	24-Ja0010505	Jan 10, 2024	Approximate Sample 821g Sample consisted of: Brown coarse-grained sandy soil, brick and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC03-TP30-0.2-0.3	24-Ja0010506	Jan 10, 2024	Approximate Sample 829g Sample consisted of: Brown coarse-grained sandy soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC03-TP32-0.2-0.3	24-Ja0010507	Jan 10, 2024	Approximate Sample 925g Sample consisted of: Brown coarse-grained sandy soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC03-TP33-0.2-0.3	24-Ja0010508	Jan 10, 2024	Approximate Sample 734g Sample consisted of: Brown coarse-grained sandy soil, cement and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC03-TP34-0.2-0.3	24-Ja0010509	Jan 10, 2024	Approximate Sample 820g Sample consisted of: Brown coarse-grained sandy soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC03-TP35-0.2-0.3	24-Ja0010510	Jan 10, 2024	Approximate Sample 843g Sample consisted of: Brown coarse-grained sandy soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC03-TP39-0.2-0.3	24-Ja0010514	Jan 10, 2024	Approximate Sample 633g Sample consisted of: Brown coarse-grained sandy soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC03-TP40-0.2-0.3	24-Ja0010515	Jan 10, 2024	Approximate Sample 773g Sample consisted of: Brown coarse-grained sandy soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
AEC03-TP41-0.2-0.3	24-Ja0010516	Jan 10, 2024	Approximate Sample 674g Sample consisted of: Brown coarse-grained sandy soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC03-TP42-0.2-0.3	24-Ja0010517	Jan 10, 2024	Approximate Sample 757g Sample consisted of: Brown coarse grained sandy clayey soil, cement and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC03-TP43-0.2-0.3	24-Ja0010518	Jan 10, 2024	Approximate Sample 834g Sample consisted of: Brown coarse grained sandy clayey soil, corroded metal, cement and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC03-TP44-0.2-0.3	24-Ja0010519	Jan 10, 2024	Approximate Sample 771g Sample consisted of: Brown coarse grained sandy clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC03-TP60-0.2-0.3	24-Ja0010520	Jan 10, 2024	Approximate Sample 920g Sample consisted of: Brown coarse grained sandy clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC03-TP61-0.2-0.3	24-Ja0010521	Jan 10, 2024	Approximate Sample 823g Sample consisted of: Brown coarse grained sandy clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC03-TP62-0.2-0.3	24-Ja0010522	Jan 10, 2024	Approximate Sample 714g Sample consisted of: Brown coarse grained sandy clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC03-TP64-0.2-0.3	24-Ja0010524	Jan 10, 2024	Approximate Sample 991g Sample consisted of: Brown fine-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC03-TP57-0.2-0.3	24-Ja0010525	Jan 10, 2024	Approximate Sample 610g Sample consisted of: Brown coarse grained sandy clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC03-TP58-0.2-0.3	24-Ja0010526	Jan 10, 2024	Approximate Sample 677g Sample consisted of: Brown coarse grained sandy clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC03-TP66-0.2-0.3	24-Ja0010527	Jan 10, 2024	Approximate Sample 835g Sample consisted of: Brown coarse grained sandy clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC03-TP02-0.2-0.3	24-Ja0010528	Jan 09, 2024	Approximate Sample 811g Sample consisted of: Brown coarse grained sandy clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC03-TP03-0.2-0.3	24-Ja0010529	Jan 09, 2024	Approximate Sample 661g Sample consisted of: Brown coarse grained sandy clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
AEC03-TP04-0.2-0.3	24-Ja0010530	Jan 09, 2024	Approximate Sample 894g Sample consisted of: Brown coarse grained sandy clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC03-TP05-0.2-0.3	24-Ja0010531	Jan 09, 2024	Approximate Sample 841g Sample consisted of: Brown coarse grained sandy clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC03-TP06-0.2-0.3	24-Ja0010532	Jan 09, 2024	Approximate Sample 774g Sample consisted of: Brown coarse grained sandy clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC03-TP07-0.2-0.3	24-Ja0010533	Jan 09, 2024	Approximate Sample 833g Sample consisted of: Brown fine-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC03-TP08-0.2-0.3	24-Ja0010534	Jan 09, 2024	Approximate Sample 813g Sample consisted of: Brown coarse grained sandy clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC03-TP09-0.2-0.3	24-Ja0010535	Jan 09, 2024	Approximate Sample 1052g Sample consisted of: Brown coarse grained sandy clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC03-TP10-0.2-0.3	24-Ja0010536	Jan 09, 2024	Approximate Sample 781g Sample consisted of: Brown coarse grained sandy clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC03-TP12-0.2-0.3	24-Ja0010537	Jan 09, 2024	Approximate Sample 774g Sample consisted of: Brown coarse grained sandy clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC03-TP18-0.2-0.3	24-Ja0010538	Jan 09, 2024	Approximate Sample 764g Sample consisted of: Brown coarse grained sandy clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC03-TP19-0.2-0.3	24-Ja0010539	Jan 09, 2024	Approximate Sample 755g Sample consisted of: Brown coarse grained sandy clayey soil, brick, coal and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC03-TP20-0.2-0.3	24-Ja0010540	Jan 09, 2024	Approximate Sample 746g Sample consisted of: Brown coarse grained sandy clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC03-TP21-0.2-0.3	24-Ja0010541	Jan 09, 2024	Approximate Sample 600g Sample consisted of: Brown coarse grained sandy clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC03-TP22-0.2-0.3	24-Ja0010542	Jan 09, 2024	Approximate Sample 792g Sample consisted of: Brown coarse grained sandy clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
AEC03-TP23-0.2-0.3	24-Ja0010543	Jan 09, 2024	Approximate Sample 759g Sample consisted of: Brown coarse grained sandy clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC03-TP24-0.2-0.3	24-Ja0010544	Jan 09, 2024	Approximate Sample 818g Sample consisted of: Brown fine-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC03-TP27-0.2-0.3	24-Ja0010545	Jan 09, 2024	Approximate Sample 561g Sample consisted of: Brown coarse grained sandy clayey soil, cement and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC03-TP28-0.2-0.3	24-Ja0010546	Jan 09, 2024	Approximate Sample 768g Sample consisted of: Brown coarse grained sandy clayey soil, cement and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC03-TP67-0.2-0.3	24-Ja0010547	Jan 10, 2024	Approximate Sample 880g Sample consisted of: Brown coarse grained sandy clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC03-TP68-0.2-0.3	24-Ja0010548	Jan 10, 2024	Approximate Sample 870g Sample consisted of: Brown coarse grained sandy clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC03-TP70-0.2-0.3	24-Ja0010549	Jan 10, 2024	Approximate Sample 760g Sample consisted of: Brown coarse grained sandy clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC03-TP71-0.2-0.3	24-Ja0010550	Jan 10, 2024	Approximate Sample 739g Sample consisted of: Brown coarse grained sandy clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC03-TP72-0.2-0.3	24-Ja0010551	Jan 10, 2024	Approximate Sample 848g Sample consisted of: Brown coarse grained sandy clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC03-TP73-0.2-0.3	24-Ja0010552	Jan 10, 2024	Approximate Sample 778g Sample consisted of: Brown coarse grained sandy clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC03-TP75-0.2-0.3	24-Ja0010553	Jan 10, 2024	Approximate Sample 793g Sample consisted of: Brown coarse grained sandy clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC03-TP76-0.2-0.3	24-Ja0010554	Jan 11, 2024	Approximate Sample 800g Sample consisted of: Brown coarse grained sandy clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC03-TP77-0.2-0.3	24-Ja0010555	Jan 11, 2024	Approximate Sample 943g Sample consisted of: Brown coarse grained sandy clayey soil, cement and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
AEC03-TP78-0.2-0.3	24-Ja0010556	Jan 11, 2024	Approximate Sample 738g Sample consisted of: Brown coarse grained sandy clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC03-TP79-0.2-0.3	24-Ja0010557	Jan 11, 2024	Approximate Sample 893g Sample consisted of: Brown coarse grained sandy clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC03-TP80-0.2-0.3	24-Ja0010558	Jan 11, 2024	Approximate Sample 779g Sample consisted of: Brown coarse grained sandy clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC03-TP84-0.2-0.3	24-Ja0010559	Jan 11, 2024	Approximate Sample 839g Sample consisted of: Brown coarse grained sandy clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC01-TP17-0.2-0.3	24-Ja0010560	Jan 11, 2024	Approximate Sample 722g Sample consisted of: Brown coarse grained sandy clayey soil, brick, cement and rocks	AF: Chrysotile and amosite asbestos detected in fibre cement material. Approximate raw weight of AF = 0.023g* Estimated asbestos content in AF = 0.0023g* Total estimated asbestos concentration in AF = 0.00032% w/w* No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC01-TP18-0.2-0.3	24-Ja0010561	Jan 11, 2024	Approximate Sample 928g Sample consisted of: Brown coarse grained sandy clayey soil, brick, cement and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC01-TP21-0.2-0.3	24-Ja0010562	Jan 11, 2024	Approximate Sample 858g Sample consisted of: Brown coarse grained sandy clayey soil, brick, cement and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC01-TP22-0.2-0.3	24-Ja0010563	Jan 11, 2024	Approximate Sample 851g Sample consisted of: Brown coarse grained sandy clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC02-TP01-0.2-0.3	24-Ja0010564	Jan 11, 2024	Approximate Sample 738g Sample consisted of: Brown coarse grained sandy clayey soil, coal and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC02-TP02-0.2-0.3	24-Ja0010565	Jan 11, 2024	Approximate Sample 727g Sample consisted of: Brown coarse grained sandy clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC02-TP03-0.2-0.3	24-Ja0010566	Jan 11, 2024	Approximate Sample 765g Sample consisted of: Brown coarse grained sandy clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
AEC02-TP04-0.2-0.3	24-Ja0010567	Jan 11, 2024	Approximate Sample 817g Sample consisted of: Brown coarse grained sandy clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC02-TP05-0.2-0.3	24-Ja0010568	Jan 11, 2024	Approximate Sample 803g Sample consisted of: Brown coarse grained sandy clayey soil, cement and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC02-TP06-0.2-0.3	24-Ja0010569	Jan 11, 2024	Approximate Sample 802g Sample consisted of: Brown coarse grained sandy clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC02-TP07-0.2-0.3	24-Ja0010570	Jan 11, 2024	Approximate Sample 884g Sample consisted of: Brown coarse grained sandy clayey soil, coal and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC02-TP08-0.2-0.3	24-Ja0010571	Jan 11, 2024	Approximate Sample 836g Sample consisted of: Brown coarse grained sandy clayey soil, cement and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC02-TP09-0.2-0.3	24-Ja0010572	Jan 11, 2024	Approximate Sample 813g Sample consisted of: Brown coarse grained sandy clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC02-TP10-0.2-0.3	24-Ja0010573	Jan 11, 2024	Approximate Sample 917g Sample consisted of: Brown coarse grained sandy clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC02-TP11-0.2-0.3	24-Ja0010574	Jan 11, 2024	Approximate Sample 869g Sample consisted of: Brown coarse grained sandy clayey soil and rocks	FA: Chrysotile asbestos detected in weathered fibre cement material. Approximate raw weight of FA = 0.0068g Estimated asbestos content in FA = 0.0020g* Total estimated asbestos concentration in FA = 0.00023% w/w* No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC02-TP12-0.2-0.3	24-Ja0010575	Jan 11, 2024	Approximate Sample 651g Sample consisted of: Brown coarse grained sandy clayey soil, glass and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC02-TP14-0.2-0.3	24-Ja0010576	Jan 11, 2024	Approximate Sample 861g Sample consisted of: Brown coarse grained sandy clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC02-TP15-0.2-0.3	24-Ja0010577	Jan 11, 2024	Approximate Sample 820g Sample consisted of: Brown coarse grained sandy clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
AEC02-TP16-0.2-0.3	24-Ja0010578	Jan 11, 2024	Approximate Sample 841g Sample consisted of: Brown coarse grained sandy clayey soil, bitumen and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.

Sample History

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

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

Description	Testing Site	Extracted	Holding Time
Asbestos - LTM-ASB-8020	Sydney	Jan 12, 2024	Indefinite

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NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261
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Company Name: Sydney Environmental Group Pty Ltd
Address: Unit 63/45 Huntley St
Alexandria
NSW 2015

Project Name: WSU MILPERRA CAMPUS SCA
Project ID: 2300

Order No.:
Report #: 1058859
Phone: 1300 884 164
Fax:

Received: Jan 11, 2024 5:18 PM
Due: Jan 16, 2024
Priority: 3 Day
Contact Name: Mitchell Kirby

Eurofins Analytical Services Manager : Asim Khan

Sample Detail						Asbestos - WA guidelines	CANCELLED	HOLD
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X
External Laboratory								
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**			
1	AEC03-TP29-0.2-0.3	Jan 10, 2024		Soil	S24-Ja0010505	X		
2	AEC03-TP30-0.2-0.3	Jan 10, 2024		Soil	S24-Ja0010506	X		
3	AEC03-TP32-0.2-0.3	Jan 10, 2024		Soil	S24-Ja0010507	X		
4	AEC03-TP33-0.2-0.3	Jan 10, 2024		Soil	S24-Ja0010508	X		
5	AEC03-TP34-0.2-0.3	Jan 10, 2024		Soil	S24-Ja0010509	X		
6	AEC03-TP35-0.2-0.3	Jan 10, 2024		Soil	S24-Ja0010510	X		
7	AEC03-TP36-0.2-0.3	Jan 10, 2024		Soil	S24-Ja0010511		X	
8	AEC03-TP37-0.2-0.3	Jan 10, 2024		Soil	S24-Ja0010512		X	

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Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X
9	AEC03-TP38-0.2-0.3	Jan 10, 2024		Soil	S24-Ja0010513		X	
10	AEC03-TP39-0.2-0.3	Jan 10, 2024		Soil	S24-Ja0010514	X		
11	AEC03-TP40-0.2-0.3	Jan 10, 2024		Soil	S24-Ja0010515	X		
12	AEC03-TP41-0.2-0.3	Jan 10, 2024		Soil	S24-Ja0010516	X		
13	AEC03-TP42-0.2-0.3	Jan 10, 2024		Soil	S24-Ja0010517	X		
14	AEC03-TP43-0.2-0.3	Jan 10, 2024		Soil	S24-Ja0010518	X		
15	AEC03-TP44-0.2-0.3	Jan 10, 2024		Soil	S24-Ja0010519	X		
16	AEC03-TP60-0.2-0.3	Jan 10, 2024		Soil	S24-Ja0010520	X		
17	AEC03-TP61-0.2-0.3	Jan 10, 2024		Soil	S24-Ja0010521	X		
18	AEC03-TP62-	Jan 10, 2024		Soil	S24-Ja0010522	X		

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Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X
18	AEC03-TP62-0.2-0.3	Jan 10, 2024		Soil	S24-Ja0010522			
19	AEC03-TP63-0.2-0.3	Jan 10, 2024		Soil	S24-Ja0010523		X	
20	AEC03-TP64-0.2-0.3	Jan 10, 2024		Soil	S24-Ja0010524	X		
21	AEC03-TP57-0.2-0.3	Jan 10, 2024		Soil	S24-Ja0010525	X		
22	AEC03-TP58-0.2-0.3	Jan 10, 2024		Soil	S24-Ja0010526	X		
23	AEC03-TP66-0.2-0.3	Jan 10, 2024		Soil	S24-Ja0010527	X		
24	AEC03-TP02-0.2-0.3	Jan 09, 2024		Soil	S24-Ja0010528	X		
25	AEC03-TP03-0.2-0.3	Jan 09, 2024		Soil	S24-Ja0010529	X		
26	AEC03-TP04-0.2-0.3	Jan 09, 2024		Soil	S24-Ja0010530	X		
27	AEC03-TP05-	Jan 09, 2024		Soil	S24-Ja0010531	X		

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Sample Detail						Asbestos - WA guidelines	CANCELLED	HOLD
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X
	0.2-0.3							
28	AEC03-TP06-0.2-0.3	Jan 09, 2024		Soil	S24-Ja0010532	X		
29	AEC03-TP07-0.2-0.3	Jan 09, 2024		Soil	S24-Ja0010533	X		
30	AEC03-TP08-0.2-0.3	Jan 09, 2024		Soil	S24-Ja0010534	X		
31	AEC03-TP09-0.2-0.3	Jan 09, 2024		Soil	S24-Ja0010535	X		
32	AEC03-TP10-0.2-0.3	Jan 09, 2024		Soil	S24-Ja0010536	X		
33	AEC03-TP12-0.2-0.3	Jan 09, 2024		Soil	S24-Ja0010537	X		
34	AEC03-TP18-0.2-0.3	Jan 09, 2024		Soil	S24-Ja0010538	X		
35	AEC03-TP19-0.2-0.3	Jan 09, 2024		Soil	S24-Ja0010539	X		
36	AEC03-TP20-0.2-0.3	Jan 09, 2024		Soil	S24-Ja0010540	X		

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Due: Jan 16, 2024
Priority: 3 Day
Contact Name: Mitchell Kirby

Eurofins Analytical Services Manager : Asim Khan

Sample Detail						Asbestos - WA guidelines	CANCELLED	HOLD
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X
37	AEC03-TP21-0.2-0.3	Jan 09, 2024		Soil	S24-Ja0010541	X		
38	AEC03-TP22-0.2-0.3	Jan 09, 2024		Soil	S24-Ja0010542	X		
39	AEC03-TP23-0.2-0.3	Jan 09, 2024		Soil	S24-Ja0010543	X		
40	AEC03-TP24-0.2-0.3	Jan 09, 2024		Soil	S24-Ja0010544	X		
41	AEC03-TP27-0.2-0.3	Jan 09, 2024		Soil	S24-Ja0010545	X		
42	AEC03-TP28-0.2-0.3	Jan 09, 2024		Soil	S24-Ja0010546	X		
43	AEC03-TP67-0.2-0.3	Jan 10, 2024		Soil	S24-Ja0010547	X		
44	AEC03-TP68-0.2-0.3	Jan 10, 2024		Soil	S24-Ja0010548	X		
45	AEC03-TP70-0.2-0.3	Jan 10, 2024		Soil	S24-Ja0010549	X		
46	AEC03-TP71-	Jan 10, 2024		Soil	S24-Ja0010550	X		

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NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261
Site# 1254	Site# 25403	Site# 18217	Site# 25466	Site# 20794	Site# 25079 & 25289

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IANZ# 1327	IANZ# 1308	IANZ# 1290	IANZ# 1402

Company Name: Sydney Environmental Group Pty Ltd
Address: Unit 63/45 Huntley St
Alexandria
NSW 2015

Project Name: WSU MILPERRA CAMPUS SCA
Project ID: 2300

Order No.:
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Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X
	0.2-0.3							
47	AEC03-TP72-0.2-0.3	Jan 10, 2024		Soil	S24-Ja0010551	X		
48	AEC03-TP73-0.2-0.3	Jan 10, 2024		Soil	S24-Ja0010552	X		
49	AEC03-TP75-0.2-0.3	Jan 10, 2024		Soil	S24-Ja0010553	X		
50	AEC03-TP76-0.2-0.3	Jan 11, 2024		Soil	S24-Ja0010554	X		
51	AEC03-TP77-0.2-0.3	Jan 11, 2024		Soil	S24-Ja0010555	X		
52	AEC03-TP78-0.2-0.3	Jan 11, 2024		Soil	S24-Ja0010556	X		
53	AEC03-TP79-0.2-0.3	Jan 11, 2024		Soil	S24-Ja0010557	X		
54	AEC03-TP80-0.2-0.3	Jan 11, 2024		Soil	S24-Ja0010558	X		
55	AEC03-TP84-0.2-0.3	Jan 11, 2024		Soil	S24-Ja0010559	X		

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Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X
56	AEC01-TP17-0.2-0.3	Jan 11, 2024		Soil	S24-Ja0010560	X		
57	AEC01-TP18-0.2-0.3	Jan 11, 2024		Soil	S24-Ja0010561	X		
58	AEC01-TP21-0.2-0.3	Jan 11, 2024		Soil	S24-Ja0010562	X		
59	AEC01-TP22-0.2-0.3	Jan 11, 2024		Soil	S24-Ja0010563	X		
60	AEC02-TP01-0.2-0.3	Jan 11, 2024		Soil	S24-Ja0010564	X		
61	AEC02-TP02-0.2-0.3	Jan 11, 2024		Soil	S24-Ja0010565	X		
62	AEC02-TP03-0.2-0.3	Jan 11, 2024		Soil	S24-Ja0010566	X		
63	AEC02-TP04-0.2-0.3	Jan 11, 2024		Soil	S24-Ja0010567	X		
64	AEC02-TP05-0.2-0.3	Jan 11, 2024		Soil	S24-Ja0010568	X		
65	AEC02-TP06-	Jan 11, 2024		Soil	S24-Ja0010569	X		

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Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X
	0.2-0.3							
66	AEC02-TP07-0.2-0.3	Jan 11, 2024		Soil	S24-Ja0010570	X		
67	AEC02-TP08-0.2-0.3	Jan 11, 2024		Soil	S24-Ja0010571	X		
68	AEC02-TP09-0.2-0.3	Jan 11, 2024		Soil	S24-Ja0010572	X		
69	AEC02-TP10-0.2-0.3	Jan 11, 2024		Soil	S24-Ja0010573	X		
70	AEC02-TP11-0.2-0.3	Jan 11, 2024		Soil	S24-Ja0010574	X		
71	AEC02-TP12-0.2-0.3	Jan 11, 2024		Soil	S24-Ja0010575	X		
72	AEC02-TP14-0.2-0.3	Jan 11, 2024		Soil	S24-Ja0010576	X		
73	AEC02-TP15-0.2-0.3	Jan 11, 2024		Soil	S24-Ja0010577	X		
74	AEC02-TP16-0.2-0.3	Jan 11, 2024		Soil	S24-Ja0010578	X		

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Sample Detail						Asbestos - WA guidelines	CANCELLED	HOLD
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X
75	AEC03-TP06-1.1-1.2	Jan 09, 2024		Soil	S24-Ja0010579			X
Test Counts						70	4	1

Internal Quality Control Review and Glossary General

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

Holding Times

Please refer to the most recent version of the 'Sample Preservation and Container Guide' for holding times (QS3001).
If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported. Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

Units

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

Calculations

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

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

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

Terms

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

Comments

Sample Integrity

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

Asbestos Counter/Identifier:

Laxman Dias	Senior Analyst-Asbestos

Authorised by:

Sayeed Abu	Senior Analyst-Asbestos



Glenn Jackson
Managing Director

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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Certificate of Analysis

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.

Sydney Environmental Group Pty Ltd
Unit 63/45 Huntley St
Alexandria
NSW 2015

Attention:	Lachlan Mulhearn
Report	1059273-AID
Project Name	WSU MILPERRA CAMPUS SCA
Project ID	2300
Received Date	Jan 12, 2024
Date Reported	Jan 18, 2024

Methodology:

Asbestos Fibre Identification	Conducted in accordance with the Australian Standard AS 4964 – 2004: Method for the Qualitative Identification of Asbestos in Bulk Samples and in-house Method LTM-ASB-8020 by polarised light microscopy (PLM) and dispersion staining (DS) techniques. *NOTE: Positive Trace Analysis results indicate the sample contains detectable respirable fibres.*
Unknown Mineral Fibres	Mineral fibres of unknown type, as determined by PLM with DS, may require another analytical technique, such as Electron Microscopy, to confirm unequivocal identity. *NOTE: While Actinolite, Anthophyllite and Tremolite asbestos may be detected by PLM with DS, due to variability in the optical properties of these materials, AS4964 requires that these are reported as UMF unless confirmed by an independent technique.*
Subsampling Soil Samples	The whole sample submitted is first dried and then passed through a 10mm sieve followed by a 2mm sieve. All fibrous matter greater than 10mm, greater than 2mm as well as the material passing through the 2mm sieve are retained and analysed for the presence of asbestos. If the sub 2mm fraction is greater than approximately 30 to 60g then a sub-sampling routine based on ISO 3082:2009(E) is employed. *NOTE: Depending on the nature and size of the soil sample, the sub-2 mm residue material may need to be sub-sampled for trace analysis, in accordance with AS 4964-2004.*
Bonded asbestos-containing material (ACM)	The material is first examined and any fibres isolated for identification by PLM and DS. Where required, interfering matrices may be removed by disintegration using a range of heat, chemical or physical treatments, possibly in combination.The resultant material is then further examined in accordance with AS 4964 - 2004. *NOTE: Even after disintegration it may be difficult to detect the presence of asbestos in some asbestos-containing bulk materials using PLM and DS. This is due to the low grade or small length or diameter of the asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials. Vinyl/asbestos floor tiles, some asbestos-containing sealants and mastics, asbestos-containing epoxy resins and some ore samples are examples of these types of material, which are difficult to analyse.*
Limit of Reporting	The performance limitation of the AS 4964 (2004) method for non-homogeneous samples is around 0.1 g/kg (equivalent to 0.01% (w/w)). Where no asbestos is found by PLM and DS, including Trace Analysis, this is considered to be at the nominal reporting limit of 0.01% (w/w). The NEPM screening level of 0.001% (w/w) is intended as an on-site determination, not a laboratory Limit of Reporting (LOR), per se. Examination of a large sample size (e.g. 500 mL) may improve the likelihood of detecting asbestos, particularly AF, to aid assessment against the NEPM criteria. Gravimetric determinations to this level of accuracy are outside of AS 4964 and hence NATA Accreditation does not cover the performance of this service (non-NATA results shown with an asterisk). *NOTE: NATA News March 2014, p.7, states in relation to AS 4964: "This is a qualitative method with a nominal reporting limit of 0.01 % " and that currently in Australia "there is no validated method available for the quantification of asbestos".This report is consistent with the analytical procedures and reporting recommendations in the NEPM and the WA DoH.*

Project Name WSU MILPERRA CAMPUS SCA
Project ID 2300
Date Sampled Jan 12, 2024
Report 1059273-AID

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
AEC02-TP13_0.2_0.3	24-Ja0013279	Jan 12, 2024	Approximate Sample 977g Sample consisted of: Brown fine-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC02-TP17_0.2_0.3	24-Ja0013280	Jan 12, 2024	Approximate Sample 798g Sample consisted of: Brown fine-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC02-TP18_0.2_0.3	24-Ja0013281	Jan 12, 2024	Approximate Sample 918g Sample consisted of: Brown coarse grained sandy clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC02-TP19_0.2_0.3	24-Ja0013282	Jan 12, 2024	Approximate Sample 834g Sample consisted of: Brown coarse grained sandy clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC02-TP20_0.2_0.3	24-Ja0013283	Jan 12, 2024	Approximate Sample 923g Sample consisted of: Brown coarse-grained sandy soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC02-TP21_0.2_0.3	24-Ja0013284	Jan 12, 2024	Approximate Sample 756g Sample consisted of: Brown coarse grained sandy clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC02-TP22_0.2_0.3	24-Ja0013285	Jan 12, 2024	Approximate Sample 921g Sample consisted of: Brown coarse grained sandy clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC02-TP23_0.2_0.3	24-Ja0013286	Jan 12, 2024	Approximate Sample 721g Sample consisted of: Brown coarse grained sandy clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
AEC02-TP24_0.2_0.3	24-Ja0013287	Jan 12, 2024	Approximate Sample 847g Sample consisted of: Brown coarse grained sandy clayey soil, cement and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC02-TP25_0.2_0.3	24-Ja0013288	Jan 12, 2024	Approximate Sample 865g Sample consisted of: Brown coarse grained sandy clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC02-TP26_0.2_0.3	24-Ja0013289	Jan 12, 2024	Approximate Sample 828g Sample consisted of: Brown coarse grained sandy clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC02-TP27_0.2_0.3	24-Ja0013290	Jan 12, 2024	Approximate Sample 795g Sample consisted of: Brown coarse grained sandy clayey soil, glass and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC02-TP28_0.2_0.3	24-Ja0013291	Jan 12, 2024	Approximate Sample 748g Sample consisted of: Brown coarse grained sandy clayey soil, cement and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC02-TP28_1.1_1.2	24-Ja0013292	Jan 12, 2024	Approximate Sample 719g Sample consisted of: Brown coarse grained sandy clayey soil, cement and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC02-TP29_0.2_0.3	24-Ja0013293	Jan 12, 2024	Approximate Sample 833g Sample consisted of: Brown coarse grained sandy clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC02-TP29_1.2_1.3	24-Ja0013294	Jan 12, 2024	Approximate Sample 653g Sample consisted of: Brown fine-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC02-TP30_0.2_0.3	24-Ja0013295	Jan 12, 2024	Approximate Sample 895g Sample consisted of: Brown coarse grained sandy clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC02-TP30_1.1_1.2	24-Ja0013296	Jan 12, 2024	Approximate Sample 717g Sample consisted of: Brown fine-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC02-TP31_0.2_0.3	24-Ja0013297	Jan 12, 2024	Approximate Sample 791g Sample consisted of: Brown coarse grained sandy clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC02-TP32_0.2_0.3	24-Ja0013298	Jan 12, 2024	Approximate Sample 731g Sample consisted of: Brown coarse grained sandy clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC02-TP33_0.2_0.3	24-Ja0013299	Jan 12, 2024	Approximate Sample 885g Sample consisted of: Brown coarse-grained sandy soil, cement and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
AEC02-TP33_1.1_1.2	24-Ja0013300	Jan 12, 2024	Approximate Sample 731g Sample consisted of: Brown coarse grained sandy clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC02-TP34_0.2_0.3	24-Ja0013301	Jan 12, 2024	Approximate Sample 810g Sample consisted of: Brown coarse grained sandy clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC02-TP34_1.2_1.3	24-Ja0013302	Jan 12, 2024	Approximate Sample 767g Sample consisted of: Brown fine-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC02-TP35_0.2_0.3	24-Ja0013303	Jan 12, 2024	Approximate Sample 752g Sample consisted of: Brown fine-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC02-TP35_1.2_1.3	24-Ja0013304	Jan 12, 2024	Approximate Sample 682g Sample consisted of: Brown coarse grained sandy clayey soil, coal and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC02-TP36_0.2_0.3	24-Ja0013305	Jan 12, 2024	Approximate Sample 755g Sample consisted of: Brown coarse grained sandy clayey soil, glass and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC02-TP37_0.2_0.3	24-Ja0013306	Jan 12, 2024	Approximate Sample 647g Sample consisted of: Brown fine-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC02-TP38_0.2_0.3	24-Ja0013307	Jan 12, 2024	Approximate Sample 743g Sample consisted of: Brown coarse grained sandy clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC02-TP39_0.2_0.3	24-Ja0013308	Jan 12, 2024	Approximate Sample 821g Sample consisted of: Brown coarse grained sandy clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC02-TP40_0.2_0.3	24-Ja0013309	Jan 12, 2024	Approximate Sample 756g Sample consisted of: Brown coarse grained sandy clayey soil, glass and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC02-TP40_1.2_1.3	24-Ja0013310	Jan 12, 2024	Approximate Sample 799g Sample consisted of: Brown coarse grained sandy clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC02-TP41_0.2_0.3	24-Ja0013311	Jan 12, 2024	Approximate Sample 736g Sample consisted of: Brown coarse grained sandy clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC02-TP41_1.2_1.3	24-Ja0013312	Jan 12, 2024	Approximate Sample 756g Sample consisted of: Brown fine-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
AEC02-TP42_0.2_0.3	24-Ja0013313	Jan 12, 2024	Approximate Sample 750g Sample consisted of: Brown coarse grained sandy clayey soil, bitumen and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC02-TP43_0.2_0.3	24-Ja0013314	Jan 12, 2024	Approximate Sample 687g Sample consisted of: Brown coarse grained sandy clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC02-TP44_0.2_0.3	24-Ja0013315	Jan 12, 2024	Approximate Sample 736g Sample consisted of: Brown fine-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC02-TP45_0.2_0.3	24-Ja0013316	Jan 12, 2024	Approximate Sample 719g Sample consisted of: Brown fine-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC02-TP46_0.2_0.3	24-Ja0013317	Jan 12, 2024	Approximate Sample 772g Sample consisted of: Brown coarse grained sandy clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC02-TP47_0.2_0.3	24-Ja0013318	Jan 12, 2024	Approximate Sample 742g Sample consisted of: Brown coarse grained sandy clayey soil, cement, glass and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC02-TP48_0.2_0.3	24-Ja0013319	Jan 12, 2024	Approximate Sample 869g Sample consisted of: Brown coarse grained sandy clayey soil, cement and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC02-TP48_1.2_1.3	24-Ja0013320	Jan 12, 2024	Approximate Sample 756g Sample consisted of: Brown fine-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC02-TP49_0.2_0.3	24-Ja0013321	Jan 12, 2024	Approximate Sample 736g Sample consisted of: Brown coarse grained sandy clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC02-TP50_0.2_0.3	24-Ja0013322	Jan 12, 2024	Approximate Sample 764g Sample consisted of: Brown fine-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC02-TP51_0.2_0.3	24-Ja0013323	Jan 12, 2024	Approximate Sample 806g Sample consisted of: Brown coarse grained sandy clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC02-TP52_0.2_0.3	24-Ja0013324	Jan 12, 2024	Approximate Sample 826g Sample consisted of: Brown fine-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.

Sample History

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

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

Description	Testing Site	Extracted	Holding Time
Asbestos - LTM-ASB-8020	Sydney	Jan 15, 2024	Indefinite

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NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261
Site# 1254	Site# 25403	Site# 18217	Site# 25466	Site# 20794	Site# 25079 & 25289

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Alexandria
NSW 2015

Project Name: WSU MILPERRA CAMPUS SCA
Project ID: 2300

Order No.:
Report #: 1059273
Phone: 1300 884 164
Fax:

Received: Jan 12, 2024 6:27 PM
Due: Jan 18, 2024
Priority: 3 Day
Contact Name: Lachlan Mulhearn

Eurofins Analytical Services Manager : Asim Khan

Sample Detail						Asbestos - WA guidelines
Sydney Laboratory - NATA # 1261 Site # 18217						X
External Laboratory						
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**	
1	AEC02-TP13_0.2_0.3	Jan 12, 2024		Soil	S24-Ja0013279	X
2	AEC02-TP17_0.2_0.3	Jan 12, 2024		Soil	S24-Ja0013280	X
3	AEC02-TP18_0.2_0.3	Jan 12, 2024		Soil	S24-Ja0013281	X
4	AEC02-TP19_0.2_0.3	Jan 12, 2024		Soil	S24-Ja0013282	X
5	AEC02-TP20_0.2_0.3	Jan 12, 2024		Soil	S24-Ja0013283	X
6	AEC02-TP21_0.2_0.3	Jan 12, 2024		Soil	S24-Ja0013284	X
7	AEC02-TP22_0.2_0.3	Jan 12, 2024		Soil	S24-Ja0013285	X
8	AEC02-TP23_0.2_0.3	Jan 12, 2024		Soil	S24-Ja0013286	X

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Sample Detail						Asbestos - WA guidelines
Sydney Laboratory - NATA # 1261 Site # 18217						X
9	AEC02-TP24_0.2_0.3	Jan 12, 2024		Soil	S24-Ja0013287	X
10	AEC02-TP25_0.2_0.3	Jan 12, 2024		Soil	S24-Ja0013288	X
11	AEC02-TP26_0.2_0.3	Jan 12, 2024		Soil	S24-Ja0013289	X
12	AEC02-TP27_0.2_0.3	Jan 12, 2024		Soil	S24-Ja0013290	X
13	AEC02-TP28_0.2_0.3	Jan 12, 2024		Soil	S24-Ja0013291	X
14	AEC02-TP28_1.1_1.2	Jan 12, 2024		Soil	S24-Ja0013292	X
15	AEC02-TP29_0.2_0.3	Jan 12, 2024		Soil	S24-Ja0013293	X
16	AEC02-TP29_1.2_1.3	Jan 12, 2024		Soil	S24-Ja0013294	X
17	AEC02-TP30_0.2_0.3	Jan 12, 2024		Soil	S24-Ja0013295	X
18	AEC02-	Jan 12, 2024		Soil	S24-Ja0013296	X

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Sample Detail						Asbestos - WA guidelines
Sydney Laboratory - NATA # 1261 Site # 18217						X
18	AEC02-TP30_1.1_1.2	Jan 12, 2024		Soil	S24-Ja0013296	
19	AEC02-TP31_0.2_0.3	Jan 12, 2024		Soil	S24-Ja0013297	X
20	AEC02-TP32_0.2_0.3	Jan 12, 2024		Soil	S24-Ja0013298	X
21	AEC02-TP33_0.2_0.3	Jan 12, 2024		Soil	S24-Ja0013299	X
22	AEC02-TP33_1.1_1.2	Jan 12, 2024		Soil	S24-Ja0013300	X
23	AEC02-TP34_0.2_0.3	Jan 12, 2024		Soil	S24-Ja0013301	X
24	AEC02-TP34_1.2_1.3	Jan 12, 2024		Soil	S24-Ja0013302	X
25	AEC02-TP35_0.2_0.3	Jan 12, 2024		Soil	S24-Ja0013303	X
26	AEC02-TP35_1.2_1.3	Jan 12, 2024		Soil	S24-Ja0013304	X
27	AEC02-	Jan 12, 2024		Soil	S24-Ja0013305	X

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Sample Detail						Asbestos - WA guidelines
Sydney Laboratory - NATA # 1261 Site # 18217						X
	TP36_0.2_0.3					
28	AEC02-TP37_0.2_0.3	Jan 12, 2024		Soil	S24-Ja0013306	X
29	AEC02-TP38_0.2_0.3	Jan 12, 2024		Soil	S24-Ja0013307	X
30	AEC02-TP39_0.2_0.3	Jan 12, 2024		Soil	S24-Ja0013308	X
31	AEC02-TP40_0.2_0.3	Jan 12, 2024		Soil	S24-Ja0013309	X
32	AEC02-TP40_1.2_1.3	Jan 12, 2024		Soil	S24-Ja0013310	X
33	AEC02-TP41_0.2_0.3	Jan 12, 2024		Soil	S24-Ja0013311	X
34	AEC02-TP41_1.2_1.3	Jan 12, 2024		Soil	S24-Ja0013312	X
35	AEC02-TP42_0.2_0.3	Jan 12, 2024		Soil	S24-Ja0013313	X
36	AEC02-TP43_0.2_0.3	Jan 12, 2024		Soil	S24-Ja0013314	X

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Sample Detail						Asbestos - WA guidelines
Sydney Laboratory - NATA # 1261 Site # 18217						X
37	AEC02-TP44_0.2_0.3	Jan 12, 2024		Soil	S24-Ja0013315	X
38	AEC02-TP45_0.2_0.3	Jan 12, 2024		Soil	S24-Ja0013316	X
39	AEC02-TP46_0.2_0.3	Jan 12, 2024		Soil	S24-Ja0013317	X
40	AEC02-TP47_0.2_0.3	Jan 12, 2024		Soil	S24-Ja0013318	X
41	AEC02-TP48_0.2_0.3	Jan 12, 2024		Soil	S24-Ja0013319	X
42	AEC02-TP48_1.2_1.3	Jan 12, 2024		Soil	S24-Ja0013320	X
43	AEC02-TP49_0.2_0.3	Jan 12, 2024		Soil	S24-Ja0013321	X
44	AEC02-TP50_0.2_0.3	Jan 12, 2024		Soil	S24-Ja0013322	X
45	AEC02-TP51_0.2_0.3	Jan 12, 2024		Soil	S24-Ja0013323	X
46	AEC02-	Jan 12, 2024		Soil	S24-Ja0013324	X

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Eurofins Environment Testing Australia Pty Ltd
ABN: 50 005 085 521

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Dandenong South	Grovedale	Girraween	Mitchell	Murarrie	Mayfield West
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NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261
Site# 1254	Site# 25403	Site# 18217	Site# 25466	Site# 20794	Site# 25079 & 25289

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IANZ# 1327	IANZ# 1308	IANZ# 1290	IANZ# 1402

Company Name: Sydney Environmental Group Pty Ltd
Address: Unit 63/45 Huntley St
Alexandria
NSW 2015

Project Name: WSU MILPERRA CAMPUS SCA
Project ID: 2300

Order No.:
Report #: 1059273
Phone: 1300 884 164
Fax:

Received: Jan 12, 2024 6:27 PM
Due: Jan 18, 2024
Priority: 3 Day
Contact Name: Lachlan Mulhearn

Eurofins Analytical Services Manager : Asim Khan

Sample Detail						Asbestos - WA guidelines
Sydney Laboratory - NATA # 1261 Site # 18217						X
	TP52_0.2_0.3					
Test Counts						46

Internal Quality Control Review and Glossary General

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

Holding Times

Please refer to the most recent version of the 'Sample Preservation and Container Guide' for holding times (QS3001).
If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported. Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

Units

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

Calculations

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

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

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

Terms

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

Comments

Sample Integrity

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

Asbestos Counter/Identifier:

Laxman Dias	Senior Analyst-Asbestos

Authorised by:

Sayeed Abu	Senior Analyst-Asbestos



Glenn Jackson
Managing Director

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

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

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

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

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Certificate of Analysis

Sydney Environmental Group Pty Ltd
Unit 63/45 Huntley St
Alexandria
NSW 2015

Attention:	Mitchell Kirby
Report	1061182-AID
Project Name	WSU MILPERRA CAMPUS DSI
Project ID	2300
Received Date	Jan 19, 2024
Date Reported	Jan 24, 2024

Methodology:

Asbestos Fibre Identification	Conducted in accordance with the Australian Standard AS 4964 – 2004: Method for the Qualitative Identification of Asbestos in Bulk Samples and in-house Method LTM-ASB-8020 by polarised light microscopy (PLM) and dispersion staining (DS) techniques. *NOTE: Positive Trace Analysis results indicate the sample contains detectable respirable fibres.*
Unknown Mineral Fibres	Mineral fibres of unknown type, as determined by PLM with DS, may require another analytical technique, such as Electron Microscopy, to confirm unequivocal identity. *NOTE: While Actinolite, Anthophyllite and Tremolite asbestos may be detected by PLM with DS, due to variability in the optical properties of these materials, AS4964 requires that these are reported as UMF unless confirmed by an independent technique.*
Subsampling Soil Samples	The whole sample submitted is first dried and then passed through a 10mm sieve followed by a 2mm sieve. All fibrous matter greater than 10mm, greater than 2mm as well as the material passing through the 2mm sieve are retained and analysed for the presence of asbestos. If the sub 2mm fraction is greater than approximately 30 to 60g then a sub-sampling routine based on ISO 3082:2009(E) is employed. *NOTE: Depending on the nature and size of the soil sample, the sub-2 mm residue material may need to be sub-sampled for trace analysis, in accordance with AS 4964-2004.*
Bonded asbestos-containing material (ACM)	The material is first examined and any fibres isolated for identification by PLM and DS. Where required, interfering matrices may be removed by disintegration using a range of heat, chemical or physical treatments, possibly in combination.The resultant material is then further examined in accordance with AS 4964 - 2004. *NOTE: Even after disintegration it may be difficult to detect the presence of asbestos in some asbestos-containing bulk materials using PLM and DS. This is due to the low grade or small length or diameter of the asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials. Vinyl/asbestos floor tiles, some asbestos-containing sealants and mastics, asbestos-containing epoxy resins and some ore samples are examples of these types of material, which are difficult to analyse.*
Limit of Reporting	The performance limitation of the AS 4964 (2004) method for non-homogeneous samples is around 0.1 g/kg (equivalent to 0.01% (w/w)). Where no asbestos is found by PLM and DS, including Trace Analysis, this is considered to be at the nominal reporting limit of 0.01% (w/w). The NEPM screening level of 0.001% (w/w) is intended as an on-site determination, not a laboratory Limit of Reporting (LOR), per se. Examination of a large sample size (e.g. 500 mL) may improve the likelihood of detecting asbestos, particularly AF, to aid assessment against the NEPM criteria. Gravimetric determinations to this level of accuracy are outside of AS 4964 and hence NATA Accreditation does not cover the performance of this service (non-NATA results shown with an asterisk). *NOTE: NATA News March 2014, p.7, states in relation to AS 4964: "This is a qualitative method with a nominal reporting limit of 0.01 % " and that currently in Australia "there is no validated method available for the quantification of asbestos".This report is consistent with the analytical procedures and reporting recommendations in the NEPM and the WA DoH.*

Project Name WSU MILPERRA CAMPUS DSI
Project ID 2300
Date Sampled Jan 19, 2024
Report 1061182-AID

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
AEC01-TP01-0.2-0.3	24-Ja0028644	Jan 19, 2024	Approximate Sample 656g Sample consisted of: Brown fine-grained clayey soil, brick and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC01-TP04-0.2-0.3	24-Ja0028645	Jan 19, 2024	Approximate Sample 679g Sample consisted of: Brown coarse-grained sandy soil, glass cement and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC01-TP05-0.2-0.3	24-Ja0028646	Jan 19, 2024	Approximate Sample 681.1g Sample consisted of: Brown fine-grained clayey soil, glass and rocks	FA: Chrysotile and amosite asbestos detected in weathered fibre plaster cement material. Approximate raw weight of FA = 0.0050g Estimated asbestos content in FA = 0.0015g* Total estimated asbestos concentration in FA = 0.00022% w/w* No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC01-TP06-0.2-0.3	24-Ja0028647	Jan 19, 2024	Approximate Sample 704g Sample consisted of: Brown fine-grained clayey soil, brick and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC01-TP07-0.2-0.3	24-Ja0028648	Jan 19, 2024	Approximate Sample 615g Sample consisted of: Brown fine-grained clayey soil, brick and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC01-TP08-0.2-0.3	24-Ja0028649	Jan 19, 2024	Approximate Sample 600g Sample consisted of: Brown fine-grained clayey soil, brick, cement and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
AEC01-TP09-0.2-0.3	24-Ja0028650	Jan 19, 2024	Approximate Sample 672g Sample consisted of: Brown fine-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Synthetic mineral fibre detected. Organic fibre detected. No trace asbestos detected.
AEC01-TP10-0.2-0.3	24-Ja0028651	Jan 19, 2024	Approximate Sample 720g Sample consisted of: Brown fine-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC01-TP11-0.2-0.3	24-Ja0028652	Jan 19, 2024	Approximate Sample 617g Sample consisted of: Brown fine-grained clayey soil, brick and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC01-TP13-0.2-0.3	24-Ja0028653	Jan 19, 2024	Approximate Sample 713g Sample consisted of: Brown fine-grained clayey soil, glass, cement brick and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC01-TP14-0.2-0.3	24-Ja0028654	Jan 19, 2024	Approximate Sample 779g Sample consisted of: Brown fine-grained clayey soil, glass, brick and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC01-TP15-0.2-0.3	24-Ja0028655	Jan 19, 2024	Approximate Sample 618g Sample consisted of: Brown coarse-grained sandy soil, cement and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC01-TP16-0.2-0.3	24-Ja0028656	Jan 19, 2024	Approximate Sample 691g Sample consisted of: Brown coarse-grained sandy soil, cement, ceramic tile and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC01-TP19-0.2-0.3	24-Ja0028657	Jan 19, 2024	Approximate Sample 749g Sample consisted of: Brown coarse-grained soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC01-TP20-0.2-0.3	24-Ja0028658	Jan 19, 2024	Approximate Sample 647g Sample consisted of: Brown coarse-grained sandy soil, glass, brick, cement and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
AEC01-TP23-0.2-0.3	24-Ja0028659	Jan 19, 2024	Approximate Sample 644g Sample consisted of: Brown coarse-grained sandy soil, plant residue and rocks	ACM: Chrysotile asbestos detected in fibre cement material. Approximate raw weight of ACM = 3.8g Total estimated asbestos content in ACM = 0.38g* Total estimated asbestos concentration in ACM = 0.058% w/w* Organic fibre detected. No trace asbestos detected.

Sample History

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

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

Description	Testing Site	Extracted	Holding Time
Asbestos - LTM-ASB-8020	Sydney	Jan 22, 2024	Indefinite

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NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261
Site# 1254	Site# 25403	Site# 18217	Site# 25466	Site# 20794	Site# 25079 & 25289

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IANZ# 1327	IANZ# 1308	IANZ# 1290	IANZ# 1402

Company Name: Sydney Environmental Group Pty Ltd
Address: Unit 63/45 Huntley St
Alexandria
NSW 2015

Project Name: WSU MILPERRA CAMPUS DSI
Project ID: 2300

Order No.:
Report #: 1061182
Phone: 1300 884 164
Fax:

Received: Jan 19, 2024 5:20 PM
Due: Jan 24, 2024
Priority: 3 Day
Contact Name: Mitchell Kirby

Eurofins Analytical Services Manager : Asim Khan

Sample Detail						Asbestos - WA guidelines
Sydney Laboratory - NATA # 1261 Site # 18217						X
External Laboratory						
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**	
1	AEC01-TP01-0.2-0.3	Jan 19, 2024		Soil	S24-Ja0028644	X
2	AEC01-TP04-0.2-0.3	Jan 19, 2024		Soil	S24-Ja0028645	X
3	AEC01-TP05-0.2-0.3	Jan 19, 2024		Soil	S24-Ja0028646	X
4	AEC01-TP06-0.2-0.3	Jan 19, 2024		Soil	S24-Ja0028647	X
5	AEC01-TP07-0.2-0.3	Jan 19, 2024		Soil	S24-Ja0028648	X
6	AEC01-TP08-0.2-0.3	Jan 19, 2024		Soil	S24-Ja0028649	X
7	AEC01-TP09-0.2-0.3	Jan 19, 2024		Soil	S24-Ja0028650	X
8	AEC01-TP10-0.2-0.3	Jan 19, 2024		Soil	S24-Ja0028651	X

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NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261
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Company Name: Sydney Environmental Group Pty Ltd
Address: Unit 63/45 Huntley St
Alexandria
NSW 2015

Project Name: WSU MILPERRA CAMPUS DSI
Project ID: 2300

Order No.:
Report #: 1061182
Phone: 1300 884 164
Fax:

Received: Jan 19, 2024 5:20 PM
Due: Jan 24, 2024
Priority: 3 Day
Contact Name: Mitchell Kirby

Eurofins Analytical Services Manager : Asim Khan

Sample Detail						Asbestos - WA guidelines
Sydney Laboratory - NATA # 1261 Site # 18217						X
9	AEC01-TP11-0.2-0.3	Jan 19, 2024		Soil	S24-Ja0028652	X
10	AEC01-TP13-0.2-0.3	Jan 19, 2024		Soil	S24-Ja0028653	X
11	AEC01-TP14-0.2-0.3	Jan 19, 2024		Soil	S24-Ja0028654	X
12	AEC01-TP15-0.2-0.3	Jan 19, 2024		Soil	S24-Ja0028655	X
13	AEC01-TP16-0.2-0.3	Jan 19, 2024		Soil	S24-Ja0028656	X
14	AEC01-TP19-0.2-0.3	Jan 19, 2024		Soil	S24-Ja0028657	X
15	AEC01-TP20-0.2-0.3	Jan 19, 2024		Soil	S24-Ja0028658	X
16	AEC01-TP23-0.2-0.3	Jan 19, 2024		Soil	S24-Ja0028659	X
Test Counts						16

Internal Quality Control Review and Glossary General

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Units

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

Calculations

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

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

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

Terms

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

Comments

Sample Integrity

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

Asbestos Counter/Identifier:

Chamath JHM Annakkage	Senior Analyst-Asbestos

Authorised by:

Sayeed Abu	Senior Analyst-Asbestos



Glenn Jackson
Managing Director

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

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

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

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

Certificate of Analysis

Sydney Environmental Group Pty Ltd
36E Fitzroy Street
Marrickville
NSW 2204

Attention:	Isabelle Figatowski
Report	1153896-AID
Project Name	WSU MILPERRA DELINEATION
Project ID	2300
Received Date	Oct 28, 2024
Date Reported	Nov 01, 2024

Methodology:

Asbestos Fibre Identification	Conducted in accordance with the Australian Standard AS 5370:2024* Sampling and qualitative identification of asbestos in bulk materials (ISO 22262-1:2012, MOD), formerly AS 4964-2004 and in-house Method LTM-ASB-8020 by polarised light microscopy (PLM) and dispersion staining (DS) techniques. *NOTE: Positive Trace Analysis results indicate the sample contains detectable respirable fibres.*
Man-made vitreous fibre (MMVF)	Fibres exhibiting isotropic characteristics, including glass fibres, glass wool, rock wool, slag wool, ceramic fibres and bio-soluble fibres. NOTE: previously known as "synthetic mineral fibre" (SMF). Simple analytical procedures such as polarised light microscopy cannot detect or reliably identify asbestos in some types of commercial products containing asbestos, either because the fibres are below the resolution of optical microscopy or because the matrix material adheres too strongly to the fibres. For these types of products, electron microscopy may be necessary.
Subsampling Soil Samples	The sample submitted is dried and passed through a 10 mm sieve followed by a 2 mm sieve. All fibrous matter greater than 10 mm and greater than 2 mm and the material passing through the 2 mm sieve are retained and analysed for the presence of asbestos. If the sub 2mm fraction is greater than approximately 30 g to 60 g, then a subsampling routine based on ISO 3082:2017(E) is employed. *NOTE: Depending on the nature and size of the soil sample, the sub-2 mm residue material may need to be subsampled for trace analysis, in accordance with AS 5370:2024*.*
Bonded asbestos-containing material (ACM)	The material is first examined, and any fibres are isolated for identification by PLM and DS. Where required, interfering matrices may be removed by disintegration using a range of heat, chemical or physical treatments, possibly in combination. The resultant material is then further examined in accordance with AS 5370:2024*. *NOTE: Even after disintegration, it may be difficult to detect the presence of asbestos in some asbestos-containing bulk materials using PLM and DS. This is due to the low grade or small length or diameter of the asbestos fibres present in the material or to the fact that very fine fibres have been distributed intimately throughout the materials. Vinyl/asbestos floor tiles, some asbestos-containing sealants and mastics, asbestos-containing epoxy resins and some ore samples are examples of these types of material, which are difficult to analyse.*
Limit of Reporting (LOR)	The performance limitation of the AS 5370:2024* method for non-homogeneous samples is around 0.1 g/kg (equivalent to 0.01% (w/w)). Where no asbestos is found by PLM and DS, including Trace Analysis, this is considered to be at the nominal reporting limit of 0.01% (w/w). The NEPM screening level of 0.001% (w/w) is intended as an on-site determination, not a laboratory limit of reporting, per se. Examination of large sample size (e.g., 500 mL) may improve the likelihood of detecting asbestos, particularly AF, to aid assessment against the NEPM criteria. Gravimetric determinations to this level of accuracy are outside of AS 5370:2024*, and hence, NATA Accreditation does not cover the performance of this service (non-NATA results are shown with an asterisk). *NOTE: NATA News March 2014, p.7, states in relation to AS 4964-2004: "This is a qualitative method with a nominal reporting limit of 0.01 % " and that currently in Australia "there is no validated method available for the quantification of asbestos". This report is consistent with the analytical procedures and reporting recommendations in the NEPM and the WA DoH.*

Project Name WSU MILPERRA DELINEATION
Project ID 2300
Date Sampled Oct 28, 2024
Report 1153896-AID

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
EBH2-01	24-Oc0072661	Oct 28, 2024	Approximate Sample 669g Sample consisted of: Brown fine-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
EBH2-02	24-Oc0072662	Oct 28, 2024	Approximate Sample 645g Sample consisted of: Brown fine-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
EBH2-03	24-Oc0072663	Oct 28, 2024	Approximate Sample 622g Sample consisted of: Brown fine-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
EBH2-04	24-Oc0072664	Oct 28, 2024	Approximate Sample 812g Sample consisted of: Brown fine-grained clayey soil and rocks	ACM: Chrysotile and amosite asbestos detected in fibre cement material. Approximate raw weight of ACM = 1.5g Total estimated asbestos content in ACM = 0.23g* Total estimated asbestos concentration in ACM = 0.028% w/w* Organic fibre detected. No trace asbestos detected.
EBH3-01	24-Oc0072665	Oct 28, 2024	Approximate Sample 881g Sample consisted of: Brown coarse-grained sandy soil, brick, glass, cement and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
EBH3-02	24-Oc0072666	Oct 28, 2024	Approximate Sample 862g Sample consisted of: Brown coarse-grained sandy soil, plant residue and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
EBH3-03	24-Oc0072667	Oct 28, 2024	Approximate Sample 861g Sample consisted of: Brown coarse-grained sandy soil, glass and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
EBH3-04	24-Oc0072668	Oct 28, 2024	Approximate Sample 820g Sample consisted of: Brown coarse-grained sandy soil, cement, brick, plant residue and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
EBH5-01	24-Oc0072669	Oct 28, 2024	Approximate Sample 714g Sample consisted of: Brown coarse-grained sandy soil, glass and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
EBH5-02	24-Oc0072670	Oct 28, 2024	Approximate Sample 721g Sample consisted of: Brown coarse-grained sandy soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
EBH5-03	24-Oc0072671	Oct 28, 2024	Approximate Sample 855g Sample consisted of: Brown coarse-grained sandy soil, brick, glass and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
EBH5-04	24-Oc0072672	Oct 28, 2024	Approximate Sample 874g Sample consisted of: Brown coarse-grained sandy soil, brick, glass, plant residue and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
BH39-01	24-Oc0072673	Oct 28, 2024	Approximate Sample 795g Sample consisted of: Brown coarse-grained clayey sandy soil, cement, ceramic tile and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
BH39-02	24-Oc0072674	Oct 28, 2024	Approximate Sample 715g Sample consisted of: Brown coarse-grained clayey sandy soil, glass, cement and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
BH39-03	24-Oc0072675	Oct 28, 2024	Approximate Sample 795g Sample consisted of: Brown coarse-grained sandy soil, cement, glass, brick and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
BH39-04	24-Oc0072676	Oct 28, 2024	Approximate Sample 753g Sample consisted of: Brown coarse-grained clayey sandy soil, glass and rocks	ACM: Chrysotile and amosite asbestos detected in fibre cement material. Approximate raw weight of ACM = 1.2g Total estimated asbestos content in ACM = 0.18g* Total estimated asbestos concentration in ACM = 0.024% w/w* Organic fibre detected. No trace asbestos detected.
SS10-01	24-Oc0072677	Oct 28, 2024	Approximate Sample 916g Sample consisted of: Brown coarse-grained clayey sandy soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
SS10-02	24-Oc0072678	Oct 28, 2024	Approximate Sample 844g Sample consisted of: Brown coarse-grained clayey sandy soil, glass, cement and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
SS10-03	24-Oc0072679	Oct 28, 2024	Approximate Sample 905g Sample consisted of: Brown coarse-grained clayey sandy soil, cement and rocks	ACM: Chrysotile and amosite asbestos detected in fibre cement material. Approximate raw weight of ACM = 2.1g Total estimated asbestos content in ACM = 0.32g* Total estimated asbestos concentration in ACM = 0.036% w/w* Organic fibre detected. No trace asbestos detected.
SS10-04	24-Oc0072680	Oct 28, 2024	Approximate Sample 870g Sample consisted of: Brown coarse-grained sandy soil, cement and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.

Sample History

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

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

Description	Testing Site	Extracted	Holding Time
Asbestos - LTM-ASB-8020	Sydney	Oct 28, 2024	Indefinite

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Dandenong South	Grovedale	Girraween	Mitchell	Murarrie	Mayfield West
VIC 3175	VIC 3216	NSW 2145	ACT 2911	QLD 4172	NSW 2304
+61 3 8564 5000	+61 3 8564 5000	+61 2 9900 8400	+61 2 6113 8091	T: +61 7 3902 4600	+61 2 4968 8448
NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261
Site# 1254	Site# 25403	Site# 18217	Site# 25466	Site# 20794 & 2780	Site# 25079

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IANZ# 1327	IANZ# 1308	IANZ# 1290	IANZ# 1402

Company Name: Sydney Environmental Group Pty Ltd
Address: 36E Fitzroy Street
Marrickville
NSW 2204

Project Name: WSU MILPERRA DELINEATION
Project ID: 2300

Order No.:
Report #: 1153896
Phone: 1300 884 164
Fax:

Received: Oct 28, 2024 6:11 PM
Due: Oct 31, 2024
Priority: 3 Day
Contact Name: Isabelle Figatowski

Eurofins Analytical Services Manager : Asim Khan

Sample Detail						Asbestos - WA guidelines	HOLD*
Sydney Laboratory - NATA # 1261 Site # 18217						X	X
External Laboratory							
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**		
1	EBH2-01	Oct 28, 2024		Soil	S24-Oc0072661	X	
2	EBH2-02	Oct 28, 2024		Soil	S24-Oc0072662	X	
3	EBH2-03	Oct 28, 2024		Soil	S24-Oc0072663	X	
4	EBH2-04	Oct 28, 2024		Soil	S24-Oc0072664	X	
5	EBH3-01	Oct 28, 2024		Soil	S24-Oc0072665	X	
6	EBH3-02	Oct 28, 2024		Soil	S24-Oc0072666	X	
7	EBH3-03	Oct 28, 2024		Soil	S24-Oc0072667	X	
8	EBH3-04	Oct 28, 2024		Soil	S24-Oc0072668	X	
9	EBH5-01	Oct 28, 2024		Soil	S24-Oc0072669	X	
10	EBH5-02	Oct 28, 2024		Soil	S24-Oc0072670	X	
11	EBH5-03	Oct 28, 2024		Soil	S24-Oc0072671	X	
12	EBH5-04	Oct 28, 2024		Soil	S24-Oc0072672	X	
13	BH39-01	Oct 28, 2024		Soil	S24-Oc0072673	X	
14	BH39-02	Oct 28, 2024		Soil	S24-Oc0072674	X	

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NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261
Site# 1254	Site# 25403	Site# 18217	Site# 25466	Site# 20794 & 2780	Site# 25079

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Company Name: Sydney Environmental Group Pty Ltd
Address: 36E Fitzroy Street
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Order No.:
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Phone: 1300 884 164
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Received: Oct 28, 2024 6:11 PM
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Priority: 3 Day
Contact Name: Isabelle Figatowski

Eurofins Analytical Services Manager : Asim Khan

Sample Detail						Asbestos - WA guidelines	HOLD*
Sydney Laboratory - NATA # 1261 Site # 18217						X	X
15	BH39-03	Oct 28, 2024		Soil	S24-Oc0072675	X	
16	BH39-04	Oct 28, 2024		Soil	S24-Oc0072676	X	
17	SS10-01	Oct 28, 2024		Soil	S24-Oc0072677	X	
18	SS10-02	Oct 28, 2024		Soil	S24-Oc0072678	X	
19	SS10-03	Oct 28, 2024		Soil	S24-Oc0072679	X	
20	SS10-04	Oct 28, 2024		Soil	S24-Oc0072680	X	
21	EBH2-05	Oct 28, 2024		Soil	S24-Oc0072681		X
22	EBH2-07	Oct 28, 2024		Soil	S24-Oc0072682		X
23	EBH2-08	Oct 28, 2024		Soil	S24-Oc0072683		X
24	EBH3-05	Oct 28, 2024		Soil	S24-Oc0072684		X
25	EBH3-06	Oct 28, 2024		Soil	S24-Oc0072685		X
26	EBH3-07	Oct 28, 2024		Soil	S24-Oc0072686		X
27	EBH3-08	Oct 28, 2024		Soil	S24-Oc0072687		X
28	EBH5-05	Oct 28, 2024		Soil	S24-Oc0072688		X
29	EBH5-06	Oct 28, 2024		Soil	S24-Oc0072689		X
30	EBH5-07	Oct 28, 2024		Soil	S24-Oc0072690		X
31	EBH5-08	Oct 28, 2024		Soil	S24-Oc0072691		X

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NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261
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Sample Detail						Asbestos - WA guidelines	HOLD*
Sydney Laboratory - NATA # 1261 Site # 18217						X	X
32	BH39-05	Oct 28, 2024		Soil	S24-Oc0072692		X
33	BH39-06	Oct 28, 2024		Soil	S24-Oc0072693		X
34	BH39-07	Oct 28, 2024		Soil	S24-Oc0072694		X
35	BH39-08	Oct 28, 2024		Soil	S24-Oc0072695		X
36	SS10-05	Oct 28, 2024		Soil	S24-Oc0072696		X
37	SS10-06	Oct 28, 2024		Soil	S24-Oc0072697		X
38	SS10-07	Oct 28, 2024		Soil	S24-Oc0072698		X
39	SS10-08	Oct 28, 2024		Soil	S24-Oc0072699		X
Test Counts						20	19

Internal Quality Control Review and Glossary General

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

Holding Times

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

Units

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

Calculations

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

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

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

Terms

%asbestos	Estimated percentage of asbestos in a given matrix may be derived from knowledge or experience of the material, informed by HSG264 *Appendix 2*, else assumed to be 15% in accordance with WA DOH *Appendix 2* (**P_A**). This estimate is not NATA-accredited.
ACM	Asbestos Containing Materials. Asbestos contained within a non-asbestos matrix, typically presented in bonded (non-friable) condition. For the purposes of the NEPM and WA DOH, ACM corresponds to material larger than 7 mm x 7 mm.
AF	Asbestos Fines. Asbestos contamination within a soil sample, as defined by WA DOH. Includes loose fibre bundles and small pieces of friable and non-friable material such as asbestos cement fragments mixed with soil. Considered under the NEPM as equivalent to “non-bonded / friable”.
AFM	Airborne Fibre Monitoring, e.g., by the MFM.
Amosite	Amosite Asbestos Detected. Amosite may also refer to Fibrous Grunerite or Brown Asbestos. Identified in accordance with AS 5370:2024* Sampling and qualitative identification of asbestos in bulk materials (ISO 22262-1:2012, MOD), formerly AS 4964-2004.
AS	Australian Standard.
Asbestos Content (as asbestos)	Total %w/w asbestos content in asbestos-containing finds in a soil sample (**% w/w)**.
Chrysotile	Chrysotile Asbestos Detected. Chrysotile may also refer to Fibrous Serpentine or White Asbestos. Identified in accordance with AS 5370:2024* Sampling and qualitative identification of asbestos in bulk materials (ISO 22262-1:2012, MOD), formerly AS 4964-2004..
COC	Chain of Custody.
Crocidolite	Crocidolite Asbestos Detected. Crocidolite may also refer to Fibrous Riebeckite or Blue Asbestos. Identified in accordance with AS 5370:2024* Sampling and qualitative identification of asbestos in bulk materials (ISO 22262-1:2012, MOD), formerly AS 4964-2004..
Dry	Sample is dried by heating prior to analysis.
DS	Dispersion Staining. Technique required for unequivocal Identification of asbestos fibres by PLM.
FA	Fibrous Asbestos. Asbestos-containing material that is wholly or in part friable, including materials with higher asbestos content with a propensity to become friable with handling, and any material that was previously non-friable and in a severely degraded condition. For the purposes of the NEPM and WA DOH, FA generally corresponds to material larger than 7 mm x 7 mm, although FA may be more difficult to distinguish visibly and may be assessed as AF.
Fibre Count	Total of all fibres (whether asbestos or not) meeting the counting criteria set out in the NOHSC:3003
Fibre ID	Fibre Identification. Unequivocal identification of asbestos fibres according to AS 5370:2024* Sampling and qualitative identification of asbestos in bulk materials (ISO 22262-1:2012, MOD), formerly AS 4964-2004.. Includes Chrysotile, Amosite (Grunerite) or Crocidolite asbestos.
Friable	Asbestos-containing materials of any size that may be broken or crumbled by hand pressure. For the purposes of the NEPM, this includes both AF and FA. It is outside of the laboratory’s remit to assess the degree of friability.
HSG248	UK HSE HSG248, *Asbestos: The Analysts Guide*, 2nd Edition (2021), ISBN: 9780616667079.
HSG264	UK HSE HSG264, *Asbestos: The Survey Guide* (2012), .ISBN: 9780717665020
ISO (also ISO/IEC)	International Organization for Standardization / International Electrotechnical Commission.
K Factor	Microscope constant (**K**) as derived from the effective filter area of the given AFM membrane used for collecting the sample (**A**) and the projected eyepiece graticule area of the specific microscope used for the analysis (**a**).
LOR	Limit of Reporting.
MFM (also NOHSC:3003)	Membrane Filter Method. As described by the Australian Government National Occupational Health and Safety Commission, *Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres*, 2nd Edition [NOHSC:3003(2005)].
MMVF	Man-Made Vitreous Fibre - exhibiting isotropic characteristics, including glass fibres, glass wool, rock wool, slag wool, ceramic fibres and “bio-soluble fibres. NOTE: previously known as “synthetic mineral fibre” (SMF).
NEPM (also ASC NEPM)	National Environment Protection (Assessment of Site Contamination) Measure, (2013, as amended).
Organic	Organic Fibres Detected. Organic may refer to Natural or Man-Made Polymeric Fibres. Identified in accordance with AS 5370:2024* Sampling and qualitative identification of asbestos in bulk materials (ISO 22262-1:2012, MOD), formerly AS 4964-2004..
PCM	Phase Contrast Microscopy. This is used for fibre counting according to the MFM.
PLM	Polarised Light Microscopy. As used for Fibre Identification and Trace Analysis according to AS 5370:2024* Sampling and qualitative identification of asbestos in bulk materials (ISO 22262-1:2012, MOD), formerly AS 4964-2004..
Sampling	Unless otherwise stated, Eurofins are not responsible for sampling equipment or the sampling process.
SRA	Sample Receipt Advice.
Trace Analysis	An analytical procedure is used to detect the presence of respirable fibres (particularly asbestos) in a given sample matrix.
UK HSE HSG	United Kingdom, Health and Safety Executive, Health and Safety Guidance, publication.
UMF	Unidentified Mineral Fibre Detected. Fibrous minerals that are detected but have not been unequivocally identified by PLM with DS according to AS 5370:2024* Sampling and qualitative identification of asbestos in bulk materials (ISO 22262-1:2012, MOD), formerly AS 4964-2004.. It may include (but is not limited to) actinolite, anthophyllite, or tremolite asbestos.
WA DOH	Reference document for the NEPM. Government of Western Australia, *Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia* (updated 2021), including Appendix Four: *Laboratory analysis*
Weighted Average	Combined average %w/w asbestos content of all asbestos-containing finds in the given aliquot or total soil sample (**$\%_{WA}$**).

Comments

Sample Integrity

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

Asbestos Counter/Identifier:

Chamath JHM Annakkage	Senior Analyst-Asbestos

Authorised by:

Sayeed Abu	Senior Analyst-Asbestos



Glenn Jackson
Managing Director

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

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

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

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

CERTIFICATE OF ANALYSIS

Work Order	: **ES2509826**	Page	: 1 of 32
Client	: **ENVIRONMENTAL GROUP AUSTRALIA PTY LTD**	Laboratory	: Environmental Division Sydney
Contact	: MAX CUNNINGHAM	Contact	: Samiksha Sathish
Address	: 36E Fitzroy Street Marrickville 2204	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61-2-8784 8555
Project	: 2300	Date Samples Received	: 03-Apr-2025 18:00
Order number	: ----	Date Analysis Commenced	: 07-Apr-2025
C-O-C number	: ----	Issue Date	: 11-Apr-2025 16:07
Sampler	: LAWRENCE LIU		
Site	: WSU, 2 bullecourt Ave milperra		
Quote number	: ES25ENVGROLIM0002		
No. of samples received	: 27		
No. of samples analysed	: 27		

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*
Ankit Joshi	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW
Brendan Schrader	Laboratory Technician	Newcastle - Asbestos, Mayfield West, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, 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 Contract for details.

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

- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a.h)anthracene (1.0), Benzo(g.h.i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero, for 'TEQ 1/2LOR' are treated as half the reported LOR, and for 'TEQ LOR' are treated as being equal to the reported LOR. Note: TEQ 1/2LOR and TEQ LOR will calculate as 0.6mg/Kg and 1.2mg/Kg respectively for samples with non-detects for all of the eight TEQ PAHs.
- EA200: Asbestos Identification Samples were analysed by Polarised Light Microscopy including dispersion staining.
- 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.
- 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.
- EP068: Positive results have been confirmed by re-extraction and re-analysis.
- EG005: Poor matrix spike recovery was obtained for Zinc on sample ES2509768-#001. Confirmed by reanalysis.
- **EA200 Legend**
- EA200 'Am' Amosite (brown asbestos)
- EA200 'Cr' Crocidolite (blue asbestos)
- 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.
- EA200: Analysis of asbestos from swabs and tapes is not covered under the current scope of NATA accreditation.
- 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.
- Dup 01 has been forwared to Eurofins.
- 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: 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.

- EA200: N/A - Not Applicable

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	TP09-0.1-0.2	TP09-0.2-0.3	TP11-0.1-0.2	TP11-0.4-0.5	TP12-0.1-0.2
				Sampling date / time	03-Apr-2025 00:00	03-Apr-2025 00:00	03-Apr-2025 00:00	03-Apr-2025 00:00	03-Apr-2025 00:00
Compound	CAS Number	LOR	Unit		ES2509826-001	ES2509826-002	ES2509826-003	ES2509826-004	ES2509826-005
					Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	1.0	%		6.4	17.2	16.2	16.0	18.1
EA200: AS 4964 - 2004 Identification of Asbestos in Soils									
Asbestos Detected	1332-21-4	0.1	g/kg		No	No	No	No	No
Asbestos (Trace)	1332-21-4	-	-		No	No	No	No	No
Asbestos Type	1332-21-4	-	--		-	-	-	-	-
Sample weight (dry)	----	0.01	g		52.7	44.0	44.8	50.2	58.2
APPROVED IDENTIFIER:	----	-	--		B.SCHRADER	B.SCHRADER	B.SCHRADER	B.SCHRADER	B.SCHRADER
Synthetic Mineral Fibre	----	-	--		No	No	No	No	No
Organic Fibre	----	-	--		No	No	No	No	No
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		<5	12	7	9	<5
Cadmium	7440-43-9	1	mg/kg		<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg		13	18	16	17	14
Copper	7440-50-8	5	mg/kg		8	24	<5	16	22
Lead	7439-92-1	5	mg/kg		15	48	13	29	19
Nickel	7440-02-0	2	mg/kg		3	8	<2	5	4
Zinc	7440-66-6	5	mg/kg		38	142	<5	61	31
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 - (Lindane)	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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	TP09-0.1-0.2	TP09-0.2-0.3	TP11-0.1-0.2	TP11-0.4-0.5	TP12-0.1-0.2
				Sampling date / time	03-Apr-2025 00:00	03-Apr-2025 00:00	03-Apr-2025 00:00	03-Apr-2025 00:00	03-Apr-2025 00:00
Compound	CAS Number	LOR	Unit		ES2509826-001	ES2509826-002	ES2509826-003	ES2509826-004	ES2509826-005
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
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	**0.07**	<0.05	**0.14**	<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**	72-54-8/72-55-9/50-29-2	0.05	mg/kg		<0.05	**0.07**	<0.05	**0.14**	<0.05
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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	TP09-0.1-0.2	TP09-0.2-0.3	TP11-0.1-0.2	TP11-0.4-0.5	TP12-0.1-0.2
				Sampling date / time	03-Apr-2025 00:00	03-Apr-2025 00:00	03-Apr-2025 00:00	03-Apr-2025 00:00	03-Apr-2025 00:00
Compound	CAS Number	LOR	Unit		ES2509826-001	ES2509826-002	ES2509826-003	ES2509826-004	ES2509826-005
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
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**
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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	TP09-0.1-0.2	TP09-0.2-0.3	TP11-0.1-0.2	TP11-0.4-0.5	TP12-0.1-0.2
				Sampling date / time	03-Apr-2025 00:00	03-Apr-2025 00:00	03-Apr-2025 00:00	03-Apr-2025 00:00	03-Apr-2025 00:00
Compound	CAS Number	LOR	Unit		ES2509826-001	ES2509826-002	ES2509826-003	ES2509826-004	ES2509826-005
					Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
>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	%		**77.3**	**74.1**	**88.4**	**131**	**70.4**
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**83.1**	**102**	**97.6**	**127**	**84.3**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**97.5**	**114**	**109**	**101**	**95.5**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**76.4**	**88.0**	**89.8**	**79.6**	**78.2**
2-Chlorophenol-D4	93951-73-6	0.5	%		**80.0**	**90.1**	**91.2**	**84.9**	**85.3**
2.4.6-Tribromophenol	118-79-6	0.5	%		**35.1**	**80.8**	**83.6**	**77.2**	**72.1**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**96.6**	**97.9**	**98.6**	**91.5**	**94.8**
Anthracene-d10	1719-06-8	0.5	%		**91.3**	**91.0**	**92.4**	**84.5**	**73.6**
4-Terphenyl-d14	1718-51-0	0.5	%		**93.8**	**99.2**	**98.5**	**93.2**	**120**
EP080S: TPH(V)/BTEX Surrogates									

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	TP09-0.1-0.2	TP09-0.2-0.3	TP11-0.1-0.2	TP11-0.4-0.5	TP12-0.1-0.2
				Sampling date / time	03-Apr-2025 00:00	03-Apr-2025 00:00	03-Apr-2025 00:00	03-Apr-2025 00:00	03-Apr-2025 00:00
Compound	CAS Number	LOR	Unit		ES2509826-001	ES2509826-002	ES2509826-003	ES2509826-004	ES2509826-005
					Result	Result	Result	Result	Result
EP080S: TPH(V)/BTEX Surrogates - Continued									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**85.0**	**88.3**	**87.7**	**76.2**	**93.1**
Toluene-D8	2037-26-5	0.2	%		**90.0**	**91.2**	**87.1**	**77.7**	**96.0**
4-Bromofluorobenzene	460-00-4	0.2	%		**98.1**	**101**	**96.8**	**86.6**	**101**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	TP12-0.9-1.0	TP13-0.1-0.2	TP13-0.3-0.4	TP13-0.6-0.7	TP13-1.5-1.6
				Sampling date / time	03-Apr-2025 00:00	03-Apr-2025 00:00	03-Apr-2025 00:00	03-Apr-2025 00:00	03-Apr-2025 00:00
Compound	CAS Number	LOR	Unit		ES2509826-006	ES2509826-007	ES2509826-008	ES2509826-009	ES2509826-010
					Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	1.0	%		15.0	8.1	11.1	18.7	15.0
EA200: AS 4964 - 2004 Identification of Asbestos in Soils									
Asbestos Detected	1332-21-4	0.1	g/kg		No	No	No	No	No
Asbestos (Trace)	1332-21-4	-	-		No	No	No	No	No
Asbestos Type	1332-21-4	-	--		-	-	-	-	-
Sample weight (dry)	----	0.01	g		55.4	56.8	47.7	43.6	57.1
APPROVED IDENTIFIER:	----	-	--		B.SCHRADER	B.SCHRADER	B.SCHRADER	B.SCHRADER	B.SCHRADER
Synthetic Mineral Fibre	----	-	--		No	No	No	No	No
Organic Fibre	----	-	--		No	No	No	No	No
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		11	<5	<5	12	17
Cadmium	7440-43-9	1	mg/kg		<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg		17	17	27	21	22
Copper	7440-50-8	5	mg/kg		15	<5	<5	17	19
Lead	7439-92-1	5	mg/kg		15	8	8	16	40
Nickel	7440-02-0	2	mg/kg		3	2	3	6	6
Zinc	7440-66-6	5	mg/kg		25	12	<5	24	59
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 - (Lindane)	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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	TP12-0.9-1.0	TP13-0.1-0.2	TP13-0.3-0.4	TP13-0.6-0.7	TP13-1.5-1.6
				Sampling date / time	03-Apr-2025 00:00	03-Apr-2025 00:00	03-Apr-2025 00:00	03-Apr-2025 00:00	03-Apr-2025 00:00
Compound	CAS Number	LOR	Unit		ES2509826-006	ES2509826-007	ES2509826-008	ES2509826-009	ES2509826-010
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
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	**0.08**
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**	72-54-8/72-55-9/50-29-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	**0.08**
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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	TP12-0.9-1.0	TP13-0.1-0.2	TP13-0.3-0.4	TP13-0.6-0.7	TP13-1.5-1.6
				Sampling date / time	03-Apr-2025 00:00	03-Apr-2025 00:00	03-Apr-2025 00:00	03-Apr-2025 00:00	03-Apr-2025 00:00
Compound	CAS Number	LOR	Unit		ES2509826-006	ES2509826-007	ES2509826-008	ES2509826-009	ES2509826-010
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
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**
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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	TP12-0.9-1.0	TP13-0.1-0.2	TP13-0.3-0.4	TP13-0.6-0.7	TP13-1.5-1.6
				Sampling date / time	03-Apr-2025 00:00	03-Apr-2025 00:00	03-Apr-2025 00:00	03-Apr-2025 00:00	03-Apr-2025 00:00
Compound	CAS Number	LOR	Unit		ES2509826-006	ES2509826-007	ES2509826-008	ES2509826-009	ES2509826-010
					Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
>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	%		**84.6**	**83.4**	**79.8**	**95.6**	**75.6**
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**93.7**	**53.3**	**92.8**	**104**	**87.3**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**106**	**97.2**	**97.4**	**117**	**102**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**86.5**	**77.4**	**72.5**	**79.5**	**82.7**
2-Chlorophenol-D4	93951-73-6	0.5	%		**89.2**	**89.6**	**84.5**	**89.9**	**85.2**
2.4.6-Tribromophenol	118-79-6	0.5	%		**80.2**	**65.2**	**61.4**	**77.7**	**75.6**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**97.4**	**97.7**	**98.6**	**98.5**	**92.0**
Anthracene-d10	1719-06-8	0.5	%		**78.8**	**73.0**	**79.1**	**71.5**	**73.8**
4-Terphenyl-d14	1718-51-0	0.5	%		**112**	**106**	**112**	**109**	**97.7**
EP080S: TPH(V)/BTEX Surrogates									

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	TP12-0.9-1.0	TP13-0.1-0.2	TP13-0.3-0.4	TP13-0.6-0.7	TP13-1.5-1.6
				Sampling date / time	03-Apr-2025 00:00	03-Apr-2025 00:00	03-Apr-2025 00:00	03-Apr-2025 00:00	03-Apr-2025 00:00
Compound	CAS Number	LOR	Unit		ES2509826-006	ES2509826-007	ES2509826-008	ES2509826-009	ES2509826-010
					Result	Result	Result	Result	Result
EP080S: TPH(V)/BTEX Surrogates - Continued									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**91.5**	**85.5**	**89.5**	**90.5**	**95.9**
Toluene-D8	2037-26-5	0.2	%		**90.2**	**82.6**	**89.5**	**88.2**	**93.1**
4-Bromofluorobenzene	460-00-4	0.2	%		**96.9**	**90.0**	**95.7**	**92.0**	**99.2**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	TP14-0.1-0.2	TP14-0.4-0.5	TP14-0.8-0.9	TP15-0.1-0.2	TP15-0.4-0.5
				Sampling date / time	03-Apr-2025 00:00	03-Apr-2025 00:00	03-Apr-2025 00:00	03-Apr-2025 00:00	03-Apr-2025 00:00
Compound	CAS Number	LOR	Unit		ES2509826-011	ES2509826-012	ES2509826-013	ES2509826-014	ES2509826-015
					Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	1.0	%		14.5	7.4	12.7	11.8	10.9
EA200: AS 4964 - 2004 Identification of Asbestos in Soils									
Asbestos Detected	1332-21-4	0.1	g/kg		No	No	No	No	No
Asbestos (Trace)	1332-21-4	-	-		No	No	No	No	No
Asbestos Type	1332-21-4	-	--		-	-	-	-	-
Sample weight (dry)	----	0.01	g		83.5	49.9	38.7	47.0	57.6
APPROVED IDENTIFIER:	----	-	--		B.SCHRADER	B.SCHRADER	B.SCHRADER	B.SCHRADER	B.SCHRADER
Synthetic Mineral Fibre	----	-	--		No	No	No	No	No
Organic Fibre	----	-	--		No	No	No	No	No
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		9	<5	6	<5	<5
Cadmium	7440-43-9	1	mg/kg		<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg		18	10	19	9	17
Copper	7440-50-8	5	mg/kg		15	5	10	<5	<5
Lead	7439-92-1	5	mg/kg		17	14	13	8	6
Nickel	7440-02-0	2	mg/kg		4	<2	5	2	<2
Zinc	7440-66-6	5	mg/kg		36	21	6	20	<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 - (Lindane)	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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	TP14-0.1-0.2	TP14-0.4-0.5	TP14-0.8-0.9	TP15-0.1-0.2	TP15-0.4-0.5
				Sampling date / time	03-Apr-2025 00:00	03-Apr-2025 00:00	03-Apr-2025 00:00	03-Apr-2025 00:00	03-Apr-2025 00:00
Compound	CAS Number	LOR	Unit		ES2509826-011	ES2509826-012	ES2509826-013	ES2509826-014	ES2509826-015
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
Heptachlor	76-44-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ **Total Chlordane (sum)**	----	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ **Endosulfan (sum)**	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	TP14-0.1-0.2	TP14-0.4-0.5	TP14-0.8-0.9	TP15-0.1-0.2	TP15-0.4-0.5
				Sampling date / time	03-Apr-2025 00:00	03-Apr-2025 00:00	03-Apr-2025 00:00	03-Apr-2025 00:00	03-Apr-2025 00:00
Compound	CAS Number	LOR	Unit		ES2509826-011	ES2509826-012	ES2509826-013	ES2509826-014	ES2509826-015
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
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**
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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	TP14-0.1-0.2	TP14-0.4-0.5	TP14-0.8-0.9	TP15-0.1-0.2	TP15-0.4-0.5
				Sampling date / time	03-Apr-2025 00:00	03-Apr-2025 00:00	03-Apr-2025 00:00	03-Apr-2025 00:00	03-Apr-2025 00:00
Compound	CAS Number	LOR	Unit		ES2509826-011	ES2509826-012	ES2509826-013	ES2509826-014	ES2509826-015
					Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
>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	%		**83.2**	**78.0**	**75.8**	**90.3**	**68.0**
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**97.1**	**86.2**	**91.8**	**78.3**	**82.9**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**108**	**96.1**	**101**	**114**	**90.2**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**88.1**	**78.7**	**81.6**	**97.9**	**86.0**
2-Chlorophenol-D4	93951-73-6	0.5	%		**90.5**	**85.1**	**85.1**	**97.9**	**89.6**
2.4.6-Tribromophenol	118-79-6	0.5	%		**80.0**	**65.4**	**73.3**	**88.0**	**76.7**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**98.3**	**94.1**	**93.0**	**101**	**97.3**
Anthracene-d10	1719-06-8	0.5	%		**76.3**	**69.7**	**69.2**	**101**	**72.8**
4-Terphenyl-d14	1718-51-0	0.5	%		**103**	**98.9**	**99.2**	**101**	**104**
EP080S: TPH(V)/BTEX Surrogates									

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	TP14-0.1-0.2	TP14-0.4-0.5	TP14-0.8-0.9	TP15-0.1-0.2	TP15-0.4-0.5
				Sampling date / time	03-Apr-2025 00:00	03-Apr-2025 00:00	03-Apr-2025 00:00	03-Apr-2025 00:00	03-Apr-2025 00:00
Compound	CAS Number	LOR	Unit		ES2509826-011	ES2509826-012	ES2509826-013	ES2509826-014	ES2509826-015
					Result	Result	Result	Result	Result
EP080S: TPH(V)/BTEX Surrogates - Continued									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**88.8**	**96.9**	**90.5**	**97.8**	**97.8**
Toluene-D8	2037-26-5	0.2	%		**82.2**	**90.9**	**91.7**	**91.2**	**91.8**
4-Bromofluorobenzene	460-00-4	0.2	%		**92.6**	**96.8**	**95.2**	**96.1**	**94.5**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	TP15-0.6-0.7	TP15-0.9-1.0	TP16-0.1-0.2	TP16-0.4-0.5	TP17-0.1-0.2
			Sampling date / time	03-Apr-2025 00:00	03-Apr-2025 00:00	03-Apr-2025 00:00	03-Apr-2025 00:00	03-Apr-2025 00:00
Compound	CAS Number	LOR	Unit	ES2509826-016	ES2509826-017	ES2509826-018	ES2509826-019	ES2509826-020
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	16.2	16.6	10.9	18.8	15.5
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No	No	No
Asbestos (Trace)	1332-21-4	-	-	No	No	No	No	No
Asbestos Type	1332-21-4	-	--	-	-	-	-	-
Sample weight (dry)	----	0.01	g	59.0	53.0	51.8	47.5	42.9
APPROVED IDENTIFIER:	----	-	--	B.SCHRADER	B.SCHRADER	B.SCHRADER	B.SCHRADER	B.SCHRADER
Synthetic Mineral Fibre	----	-	--	No	No	No	No	No
Organic Fibre	----	-	--	No	No	No	No	No
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	12	8	<5	<5	5
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	14	21	7	19	9
Copper	7440-50-8	5	mg/kg	21	15	8	8	16
Lead	7439-92-1	5	mg/kg	73	14	17	10	16
Nickel	7440-02-0	2	mg/kg	10	2	3	7	<2
Zinc	7440-66-6	5	mg/kg	193	6	26	7	11
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 - (Lindane)	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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	TP15-0.6-0.7	TP15-0.9-1.0	TP16-0.1-0.2	TP16-0.4-0.5	TP17-0.1-0.2
				Sampling date / time	03-Apr-2025 00:00	03-Apr-2025 00:00	03-Apr-2025 00:00	03-Apr-2025 00:00	03-Apr-2025 00:00
Compound	CAS Number	LOR	Unit		ES2509826-016	ES2509826-017	ES2509826-018	ES2509826-019	ES2509826-020
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
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	**0.12**
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	**0.10**
4.4`-DDE	72-55-9	0.05	mg/kg		<0.05	<0.05	**0.06**	<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	**0.22**
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-29-2	0.05	mg/kg		<0.05	<0.05	**0.06**	<0.05	<0.05
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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	TP15-0.6-0.7	TP15-0.9-1.0	TP16-0.1-0.2	TP16-0.4-0.5	TP17-0.1-0.2
				Sampling date / time	03-Apr-2025 00:00	03-Apr-2025 00:00	03-Apr-2025 00:00	03-Apr-2025 00:00	03-Apr-2025 00:00
Compound	CAS Number	LOR	Unit		ES2509826-016	ES2509826-017	ES2509826-018	ES2509826-019	ES2509826-020
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
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**
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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	TP15-0.6-0.7	TP15-0.9-1.0	TP16-0.1-0.2	TP16-0.4-0.5	TP17-0.1-0.2
				Sampling date / time	03-Apr-2025 00:00	03-Apr-2025 00:00	03-Apr-2025 00:00	03-Apr-2025 00:00	03-Apr-2025 00:00
Compound	CAS Number	LOR	Unit		ES2509826-016	ES2509826-017	ES2509826-018	ES2509826-019	ES2509826-020
					Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
>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	%		**92.0**	**96.2**	**95.6**	**95.2**	**82.2**
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**106**	**114**	**113**	**112**	**107**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**118**	**123**	**125**	**125**	**104**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**86.7**	**81.3**	**81.9**	**90.8**	**90.2**
2-Chlorophenol-D4	93951-73-6	0.5	%		**85.0**	**83.0**	**82.0**	**90.7**	**92.0**
2.4.6-Tribromophenol	118-79-6	0.5	%		**88.7**	**68.7**	**52.9**	**76.8**	**78.8**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**93.7**	**89.0**	**91.0**	**98.3**	**103**
Anthracene-d10	1719-06-8	0.5	%		**96.9**	**71.3**	**75.0**	**76.6**	**71.3**
4-Terphenyl-d14	1718-51-0	0.5	%		**95.8**	**94.8**	**94.5**	**103**	**127**
EP080S: TPH(V)/BTEX Surrogates									

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	TP15-0.6-0.7	TP15-0.9-1.0	TP16-0.1-0.2	TP16-0.4-0.5	TP17-0.1-0.2
				Sampling date / time	03-Apr-2025 00:00	03-Apr-2025 00:00	03-Apr-2025 00:00	03-Apr-2025 00:00	03-Apr-2025 00:00
Compound	CAS Number	LOR	Unit		ES2509826-016	ES2509826-017	ES2509826-018	ES2509826-019	ES2509826-020
					Result	Result	Result	Result	Result
EP080S: TPH(V)/BTEX Surrogates - Continued									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**95.7**	**96.6**	**97.2**	**97.7**	**102**
Toluene-D8	2037-26-5	0.2	%		**92.0**	**92.5**	**91.2**	**90.8**	**101**
4-Bromofluorobenzene	460-00-4	0.2	%		**97.5**	**94.5**	**93.5**	**97.5**	**104**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	TP17-1.0-1.1	TP17-2.0-2.1	TRIP SPIKE	TRIP BLANK	DUP01
				Sampling date / time	03-Apr-2025 00:00	03-Apr-2025 00:00	31-Mar-2025 00:00	03-Apr-2025 00:00	03-Apr-2025 00:00
Compound	CAS Number	LOR	Unit		ES2509826-021	ES2509826-022	ES2509826-023	ES2509826-024	ES2509826-025
					Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	1.0	%		14.7	19.0	----	----	18.2
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	-	-		No	No	----	----	----
Asbestos Type	1332-21-4	-	--		-	-	----	----	----
Sample weight (dry)	----	0.01	g		49.4	40.7	----	----	----
APPROVED IDENTIFIER:	----	-	--		B.SCHRADER	B.SCHRADER	----	----	----
Synthetic Mineral Fibre	----	-	--		No	No	----	----	----
Organic Fibre	----	-	--		No	No	----	----	----
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		<5	6	----	----	6
Cadmium	7440-43-9	1	mg/kg		<1	<1	----	----	<1
Chromium	7440-47-3	2	mg/kg		5	12	----	----	13
Copper	7440-50-8	5	mg/kg		15	20	----	----	22
Lead	7439-92-1	5	mg/kg		14	15	----	----	28
Nickel	7440-02-0	2	mg/kg		<2	3	----	----	8
Zinc	7440-66-6	5	mg/kg		10	18	----	----	199
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	----	----	----
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 - (Lindane)	58-89-9	0.05	mg/kg		<0.05	<0.05	----	----	----
delta-BHC	319-86-8	0.05	mg/kg		<0.05	<0.05	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	TP17-1.0-1.1	TP17-2.0-2.1	TRIP SPIKE	TRIP BLANK	DUP01
			Sampling date / time	03-Apr-2025 00:00	03-Apr-2025 00:00	31-Mar-2025 00:00	03-Apr-2025 00:00	03-Apr-2025 00:00
Compound	CAS Number	LOR	Unit	ES2509826-021	ES2509826-022	ES2509826-023	ES2509826-024	ES2509826-025
				Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued								
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	----	----	----
Aldrin	309-00-2	0.05	mg/kg	**0.08**	**0.45**	----	----	----
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	**0.12**	**0.35**	----	----	----
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	----	----	----
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	**0.20**	**0.80**	----	----	----
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-2	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	----	----	<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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	TP17-1.0-1.1	TP17-2.0-2.1	TRIP SPIKE	TRIP BLANK	DUP01
				Sampling date / time	03-Apr-2025 00:00	03-Apr-2025 00:00	31-Mar-2025 00:00	03-Apr-2025 00:00	03-Apr-2025 00:00
Compound	CAS Number	LOR	Unit		ES2509826-021	ES2509826-022	ES2509826-023	ES2509826-024	ES2509826-025
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	----	----	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	----	----	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	----	----	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	----	----	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	----	----	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	----	----	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	----	----	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	----	----	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	----	----	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	----	----	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	----	----	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	----	----	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	----	----	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	----	----	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**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	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	TP17-1.0-1.1	TP17-2.0-2.1	TRIP SPIKE	TRIP BLANK	DUP01
			Sampling date / time	03-Apr-2025 00:00	03-Apr-2025 00:00	31-Mar-2025 00:00	03-Apr-2025 00:00	03-Apr-2025 00:00
Compound	CAS Number	LOR	Unit	ES2509826-021	ES2509826-022	ES2509826-023	ES2509826-024	ES2509826-025
				Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued								
>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	6.8	<0.5	----
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	8.6	<0.5	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	10.1	<0.5	----
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	4.5	<0.5	----
^ Sum of BTEX	----	0.2	mg/kg	<0.2	<0.2	30.0	<0.2	----
^ Total Xylenes	----	0.5	mg/kg	<0.5	<0.5	14.6	<0.5	----
Naphthalene	91-20-3	1	mg/kg	<1	<1	<1	<1	----
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	120	115	----	----	----
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.05	%	82.0	66.9	----	----	----
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.05	%	101	83.7	----	----	----
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.5	%	91.0	82.7	----	----	89.4
2-Chlorophenol-D4	93951-73-6	0.5	%	95.6	82.6	----	----	82.5
2.4.6-Tribromophenol	118-79-6	0.5	%	54.2	55.9	----	----	53.1
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.5	%	90.6	88.0	----	----	89.4
Anthracene-d10	1719-06-8	0.5	%	94.4	80.1	----	----	85.2
4-Terphenyl-d14	1718-51-0	0.5	%	84.9	80.8	----	----	101
EP080S: TPH(V)/BTEX Surrogates								

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	TP17-1.0-1.1	TP17-2.0-2.1	TRIP SPIKE	TRIP BLANK	DUP01
				Sampling date / time	03-Apr-2025 00:00	03-Apr-2025 00:00	31-Mar-2025 00:00	03-Apr-2025 00:00	03-Apr-2025 00:00
Compound	CAS Number	LOR	Unit		ES2509826-021	ES2509826-022	ES2509826-023	ES2509826-024	ES2509826-025
					Result	Result	Result	Result	Result
EP080S: TPH(V)/BTEX Surrogates - Continued									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**75.6**	**91.7**	**88.0**	**86.2**	**----**
Toluene-D8	2037-26-5	0.2	%		**91.4**	**108**	**104**	**96.3**	**----**
4-Bromofluorobenzene	460-00-4	0.2	%		**104**	**116**	**102**	**105**	**----**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	TSC	----	----	----	----
			Sampling date / time	31-Mar-2025 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit	ES2509826-027	--------	--------	--------	--------
				Result	----	----	----	----
EP080: BTEXN								
Benzene	71-43-2	0.2	mg/kg	<0.2	----	----	----	----
Toluene	108-88-3	0.5	mg/kg	**8.2**	----	----	----	----
Ethylbenzene	100-41-4	0.5	mg/kg	**10.6**	----	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	**12.3**	----	----	----	----
ortho-Xylene	95-47-6	0.5	mg/kg	**5.6**	----	----	----	----
^ **Sum of BTEX**	----	0.2	mg/kg	**36.7**	----	----	----	----
^ **Total Xylenes**	----	0.5	mg/kg	**17.9**	----	----	----	----
Naphthalene	91-20-3	1	mg/kg	<1	----	----	----	----
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.2	%	**91.4**	----	----	----	----
Toluene-D8	2037-26-5	0.2	%	**103**	----	----	----	----
4-Bromofluorobenzene	460-00-4	0.2	%	**105**	----	----	----	----

Analytical Results

Sub-Matrix: SOLID (Matrix: SOLID)			Sample ID	TP09 -ACM	----	----	----	----
			Sampling date / time	03-Apr-2025 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit	ES2509826-026	--------	--------	--------	--------
				Result	----	----	----	----
EA200: AS 4964 - 2004 Identification of Asbestos in bulk samples								
Asbestos Detected	1332-21-4	0.1	g/kg	**Yes**	----	----	----	----
Asbestos Type	1332-21-4	-	--	**Ch**	----	----	----	----
Asbestos (Trace)	1332-21-4	-	-	**N/A**	----	----	----	----
Sample weight (dry)	----	0.01	g	**5.30**	----	----	----	----
Synthetic Mineral Fibre	----	-	-	**No**	----	----	----	----
Organic Fibre	----	-	-	**No**	----	----	----	----
APPROVED IDENTIFIER:	----	-	--	**J. PAGE**	----	----	----	----

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	TP09-0.1-0.2 - 03-Apr-2025 00:00	A soil sample.
EA200: Description	TP09-0.2-0.3 - 03-Apr-2025 00:00	A soil sample.
EA200: Description	TP11-0.1-0.2 - 03-Apr-2025 00:00	A soil sample.
EA200: Description	TP11-0.4-0.5 - 03-Apr-2025 00:00	A soil sample.
EA200: Description	TP12-0.1-0.2 - 03-Apr-2025 00:00	A soil sample.
EA200: Description	TP12-0.9-1.0 - 03-Apr-2025 00:00	A soil sample.
EA200: Description	TP13-0.1-0.2 - 03-Apr-2025 00:00	A soil sample.
EA200: Description	TP13-0.3-0.4 - 03-Apr-2025 00:00	A soil sample.
EA200: Description	TP13-0.6-0.7 - 03-Apr-2025 00:00	A soil sample.
EA200: Description	TP13-1.5-1.6 - 03-Apr-2025 00:00	A soil sample.
EA200: Description	TP14-0.1-0.2 - 03-Apr-2025 00:00	A soil sample.
EA200: Description	TP14-0.4-0.5 - 03-Apr-2025 00:00	A soil sample.
EA200: Description	TP14-0.8-0.9 - 03-Apr-2025 00:00	A soil sample.
EA200: Description	TP15-0.1-0.2 - 03-Apr-2025 00:00	A soil sample.
EA200: Description	TP15-0.4-0.5 - 03-Apr-2025 00:00	A soil sample.
EA200: Description	TP15-0.6-0.7 - 03-Apr-2025 00:00	A soil sample.
EA200: Description	TP15-0.9-1.0 - 03-Apr-2025 00:00	A soil sample.
EA200: Description	TP16-0.1-0.2 - 03-Apr-2025 00:00	A soil sample.
EA200: Description	TP16-0.4-0.5 - 03-Apr-2025 00:00	A soil sample.
EA200: Description	TP17-0.1-0.2 - 03-Apr-2025 00:00	A soil sample.
EA200: Description	TP17-1.0-1.1 - 03-Apr-2025 00:00	A soil sample.
EA200: Description	TP17-2.0-2.1 - 03-Apr-2025 00:00	A soil sample.

Sub-Matrix: **SOLID**

Method: Compound	Sample ID - Sampling date / time	Analytical Results
EA200: AS 4964 - 2004 Identification of Asbestos in bulk samples		
EA200: Description	TP09 -ACM - 03-Apr-2025 00:00	One piece of asbestos cement sheeting approximately 40x25x5.

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
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
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	63	125
Toluene-D8	2037-26-5	67	124
4-Bromofluorobenzene	460-00-4	66	131

Inter-Laboratory Testing

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

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

(SOLID) EA200: AS 4964 - 2004 Identification of Asbestos in bulk samples

CERTIFICATE OF ANALYSIS

Work Order	: **ES2510322**	Page	: 1 of 8
Client	: **ENVIRONMENTAL GROUP AUSTRALIA PTY LTD**	Laboratory	: Environmental Division Sydney
Contact	: MAX CUNNINGHAM	Contact	: Samiksha Sathish
Address	: 36E Fitzroy Street Marrickville 2204	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61-2-8784 8555
Project	: 2300	Date Samples Received	: 09-Apr-2025 19:45
Order number	: ----	Date Analysis Commenced	: 10-Apr-2025
C-O-C number	: ----	Issue Date	: 17-Apr-2025 14:22
Sampler	: KYA WIYA		
Site	: WSU Milperra		
Quote number	: ES25ENVGROLIM0001		
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
- 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*
Ankit Joshi	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW
Brendan Schrader	Laboratory Technician	Newcastle - Asbestos, Mayfield West, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic 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 Contract for details.

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

- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a.h)anthracene (1.0), Benzo(g.h.i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero, for 'TEQ 1/2LOR' are treated as half the reported LOR, and for 'TEQ LOR' are treated as being equal to the reported LOR. Note: TEQ 1/2LOR and TEQ LOR will calculate as 0.6mg/Kg and 1.2mg/Kg respectively for samples with non-detects for all of the eight TEQ PAHs.
- 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.
- 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: 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.
- 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.
- 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.

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	TP32-0.1-0.2	TP32-0.5-0.6	Trip spike	Trip blank	Trip control spike
			Sampling date / time	09-Apr-2025 00:00	09-Apr-2025 00:00	07-Apr-2025 00:00	07-Apr-2025 00:00	07-Apr-2025 00:00
Compound	CAS Number	LOR	Unit	ES2510322-001	ES2510322-002	ES2510322-003	ES2510322-004	ES2510322-005
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	14.7	5.7	----	----	----
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	----	----	----
Asbestos (Trace)	1332-21-4	-	-	No	No	----	----	----
Asbestos Type	1332-21-4	-	--	-	-	----	----	----
Sample weight (dry)	----	0.01	g	78.6	109	----	----	----
APPROVED IDENTIFIER:	----	-	--	J. PAGE	J. PAGE	----	----	----
Synthetic Mineral Fibre	----	-	--	No	No	----	----	----
Organic Fibre	----	-	--	No	No	----	----	----
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	<5	<5	----	----	----
Cadmium	7440-43-9	1	mg/kg	<1	<1	----	----	----
Chromium	7440-47-3	2	mg/kg	7	3	----	----	----
Copper	7440-50-8	5	mg/kg	7	<5	----	----	----
Lead	7439-92-1	5	mg/kg	8	<5	----	----	----
Nickel	7440-02-0	2	mg/kg	2	<2	----	----	----
Zinc	7440-66-6	5	mg/kg	14	<5	----	----	----
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 - (Lindane)	58-89-9	0.05	mg/kg	<0.05	<0.05	----	----	----
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	TP32-0.1-0.2	TP32-0.5-0.6	Trip spike	Trip blank	Trip control spike
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Compound	CAS Number	LOR	Unit	ES2510322-001	ES2510322-002	ES2510322-003	ES2510322-004	ES2510322-005
				Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued								
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	----	----	----
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	----	----	----
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	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	TP32-0.1-0.2	TP32-0.5-0.6	Trip spike	Trip blank	Trip control spike
				Sampling date / time	09-Apr-2025 00:00	09-Apr-2025 00:00	07-Apr-2025 00:00	07-Apr-2025 00:00	07-Apr-2025 00:00
Compound	CAS Number	LOR	Unit		ES2510322-001	ES2510322-002	ES2510322-003	ES2510322-004	ES2510322-005
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	----	----	----
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	----	----	----
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	----	----	----
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	----	----	----
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	**20**	<10	**29**
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	**28**	<10	**41**
^ **C6 - C10 Fraction minus BTEX (F1)**	C6_C10-BTEX	10	mg/kg		<10	<10	**13**	<10	**20**
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	----	----	----
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	TP32-0.1-0.2	TP32-0.5-0.6	Trip spike	Trip blank	Trip control spike
			Sampling date / time	09-Apr-2025 00:00	09-Apr-2025 00:00	07-Apr-2025 00:00	07-Apr-2025 00:00	07-Apr-2025 00:00
Compound	CAS Number	LOR	Unit	ES2510322-001	ES2510322-002	ES2510322-003	ES2510322-004	ES2510322-005
				Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued								
>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	<0.2
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	**3.4**	<0.5	**4.9**
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	**4.3**	<0.5	**6.0**
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	**5.1**	<0.5	**7.2**
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	**2.3**	<0.5	**3.2**
^ Sum of BTEX	----	0.2	mg/kg	<0.2	<0.2	**15.1**	<0.2	**21.3**
^ Total Xylenes	----	0.5	mg/kg	<0.5	<0.5	**7.4**	<0.5	**10.4**
Naphthalene	91-20-3	1	mg/kg	<1	<1	<1	<1	<1
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	**121**	**127**	----	----	----
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.05	%	**104**	**142**	----	----	----
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.05	%	**119**	**79.5**	----	----	----
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.5	%	**74.1**	**72.7**	----	----	----
2-Chlorophenol-D4	93951-73-6	0.5	%	**77.6**	**80.8**	----	----	----
2.4.6-Tribromophenol	118-79-6	0.5	%	**64.3**	**66.1**	----	----	----
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.5	%	**84.6**	**87.8**	----	----	----
Anthracene-d10	1719-06-8	0.5	%	**84.9**	**87.4**	----	----	----
4-Terphenyl-d14	1718-51-0	0.5	%	**84.7**	**88.6**	----	----	----
EP080S: TPH(V)/BTEX Surrogates								

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	TP32-0.1-0.2	TP32-0.5-0.6	Trip spike	Trip blank	Trip control spike
				Sampling date / time	09-Apr-2025 00:00	09-Apr-2025 00:00	07-Apr-2025 00:00	07-Apr-2025 00:00	07-Apr-2025 00:00
Compound	CAS Number	LOR	Unit		ES2510322-001	ES2510322-002	ES2510322-003	ES2510322-004	ES2510322-005
					Result	Result	Result	Result	Result
EP080S: TPH(V)/BTEX Surrogates - Continued									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**79.3**	**68.4**	**73.5**	**82.5**	**83.1**
Toluene-D8	2037-26-5	0.2	%		**96.3**	**82.1**	**93.0**	**100**	**99.2**
4-Bromofluorobenzene	460-00-4	0.2	%		**101**	**104**	**96.4**	**106**	**99.8**

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	TP32-0.1-0.2 - 09-Apr-2025 00:00	Soil sample.
EA200: Description	TP32-0.5-0.6 - 09-Apr-2025 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
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
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	63	125
Toluene-D8	2037-26-5	67	124
4-Bromofluorobenzene	460-00-4	66	131

Inter-Laboratory Testing

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

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

CERTIFICATE OF ANALYSIS

Work Order	: **ES2510979**	Page	: 1 of 35
Client	: **ENVIRONMENTAL GROUP AUSTRALIA PTY LTD**	Laboratory	: Environmental Division Sydney
Contact	: MAX CUNNINGHAM	Contact	: Samiksha Sathish
Address	: 36E Fitzroy Street Marrickville 2204	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61-2-8784 8555
Project	: 2300	Date Samples Received	: 15-Apr-2025 17:30
Order number	: ----	Date Analysis Commenced	: 16-Apr-2025
C-O-C number	: ----	Issue Date	: 24-Apr-2025 17:37
Sampler	: Kya Wiya		
Site	: WSU Milperra		
Quote number	: ES25ENVGROLIM0001		
No. of samples received	: 31		
No. of samples analysed	: 31		

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Signatories	*Position*	*Accreditation Category*
Ankit Joshi	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW
John Williams	Lab Technician	Newcastle - Asbestos, Mayfield West, NSW
Rassem Ayoubi	Senior Organic Chemist	Sydney Organics, Smithfield, NSW
Sanjeshni Jyoti	Senior Chemist Volatiles	Sydney Organics, Smithfield, NSW

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~ = Indicates an estimated value.

- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a.h)anthracene (1.0), Benzo(g.h.i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero, for 'TEQ 1/2LOR' are treated as half the reported LOR, and for 'TEQ LOR' are treated as being equal to the reported LOR. Note: TEQ 1/2LOR and TEQ LOR will calculate as 0.6mg/Kg and 1.2mg/Kg respectively for samples with non-detects for all of the eight TEQ PAHs.
- EP080: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP068: Where reported, Total Chlordane (sum) is the sum of the reported concentrations of cis-Chlordane and trans-Chlordane at or above the LOR.
- EP068: Where reported, Total OCP is the sum of the reported concentrations of all Organochlorine Pesticides at or above LOR.
- 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: The result for sample ES2510979-007 was confirmed by re-analysis.
- EP068: Positive results have been confirmed by re-extraction and 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. Results have been confirmed by re-extraction and re-analysis.
- Sample DUP02A has been forwarded to EUROFINS.
- 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.
- 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.

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	TP18-0.1-0.2	TP18_1.0-1.1	TP18-2.0-2.1	TP19-0.1-0.2	TP19-1.0-1.1
			Sampling date / time	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00
Compound	CAS Number	LOR	Unit	ES2510979-001	ES2510979-002	ES2510979-003	ES2510979-004	ES2510979-005
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	14.5	14.3	11.1	11.7	10.3
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No	No	No
Asbestos (Trace)	1332-21-4	-	-	No	No	No	No	No
Asbestos Type	1332-21-4	-	--	-	-	-	-	-
Sample weight (dry)	----	0.01	g	69.0	59.0	71.4	71.8	62.3
APPROVED IDENTIFIER:	----	-	--	J. WILLIAMS	J. WILLIAMS	J. WILLIAMS	J. WILLIAMS	J. WILLIAMS
Synthetic Mineral Fibre	----	-	--	No	No	No	No	No
Organic Fibre	----	-	--	No	No	No	No	No
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	<5	<5	<5	<5	<5
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	7	5	3	5	4
Copper	7440-50-8	5	mg/kg	21	19	22	24	23
Lead	7439-92-1	5	mg/kg	13	16	10	13	14
Nickel	7440-02-0	2	mg/kg	6	2	4	6	4
Zinc	7440-66-6	5	mg/kg	26	16	26	38	30
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 - (Lindane)	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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	TP18-0.1-0.2	TP18_1.0-1.1	TP18-2.0-2.1	TP19-0.1-0.2	TP19-1.0-1.1
				Sampling date / time	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00
Compound	CAS Number	LOR	Unit		ES2510979-001	ES2510979-002	ES2510979-003	ES2510979-004	ES2510979-005
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
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		**0.67**	**0.29**	<0.05	**0.11**	<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		**0.10**	<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		**0.77**	**0.29**	<0.05	**0.11**	<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
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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	TP18-0.1-0.2	TP18_1.0-1.1	TP18-2.0-2.1	TP19-0.1-0.2	TP19-1.0-1.1
			Sampling date / time	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00
Compound	CAS Number	LOR	Unit	ES2510979-001	ES2510979-002	ES2510979-003	ES2510979-004	ES2510979-005
				Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
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**
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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	TP18-0.1-0.2	TP18_1.0-1.1	TP18-2.0-2.1	TP19-0.1-0.2	TP19-1.0-1.1
				Sampling date / time	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00
Compound	CAS Number	LOR	Unit		ES2510979-001	ES2510979-002	ES2510979-003	ES2510979-004	ES2510979-005
					Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
>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	%		**86.6**	**84.2**	**87.7**	**99.3**	**87.3**
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**73.2**	**94.8**	**91.9**	**97.5**	**86.5**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**70.0**	**93.7**	**93.0**	**97.7**	**87.1**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**95.8**	**89.2**	**98.6**	**99.2**	**94.2**
2-Chlorophenol-D4	93951-73-6	0.5	%		**97.9**	**100**	**98.8**	**94.2**	**98.2**
2.4.6-Tribromophenol	118-79-6	0.5	%		**75.6**	**75.9**	**73.0**	**71.4**	**72.6**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**95.9**	**98.4**	**103**	**100**	**105**
Anthracene-d10	1719-06-8	0.5	%		**105**	**108**	**107**	**107**	**107**
4-Terphenyl-d14	1718-51-0	0.5	%		**94.9**	**98.3**	**95.8**	**94.2**	**95.8**
EP080S: TPH(V)/BTEX Surrogates									

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	TP18-0.1-0.2	TP18_1.0-1.1	TP18-2.0-2.1	TP19-0.1-0.2	TP19-1.0-1.1
				Sampling date / time	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00
Compound	CAS Number	LOR	Unit		ES2510979-001	ES2510979-002	ES2510979-003	ES2510979-004	ES2510979-005
					Result	Result	Result	Result	Result
EP080S: TPH(V)/BTEX Surrogates - Continued									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**72.6**	**72.7**	**79.8**	**80.7**	**81.8**
Toluene-D8	2037-26-5	0.2	%		**72.4**	**76.5**	**86.5**	**85.5**	**87.5**
4-Bromofluorobenzene	460-00-4	0.2	%		**87.1**	**90.1**	**97.4**	**94.9**	**95.7**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	TP19-2.0-2.1	TP20-0.1-0.2	TP20-1.0-1.1	TP20-2.0-2.1	TP25-0.1-0.2
				Sampling date / time	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00
Compound	CAS Number	LOR	Unit		ES2510979-006	ES2510979-007	ES2510979-008	ES2510979-009	ES2510979-010
					Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	1.0	%		17.4	7.2	15.1	7.4	10.2
EA200: AS 4964 - 2004 Identification of Asbestos in Soils									
Asbestos Detected	1332-21-4	0.1	g/kg		No	No	No	No	No
Asbestos (Trace)	1332-21-4	-	-		No	No	No	No	No
Asbestos Type	1332-21-4	-	--		-	-	-	-	-
Sample weight (dry)	----	0.01	g		75.9	110	44.4	88.2	80.3
APPROVED IDENTIFIER:	----	-	--		J. WILLIAMS	J. WILLIAMS	J. WILLIAMS	J. WILLIAMS	J. WILLIAMS
Synthetic Mineral Fibre	----	-	--		No	No	No	No	No
Organic Fibre	----	-	--		No	No	No	No	No
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		5	5	12	<5	<5
Cadmium	7440-43-9	1	mg/kg		<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg		9	8	18	5	7
Copper	7440-50-8	5	mg/kg		22	7	10	13	<5
Lead	7439-92-1	5	mg/kg		14	12	16	8	7
Nickel	7440-02-0	2	mg/kg		4	5	<2	<2	5
Zinc	7440-66-6	5	mg/kg		25	58	<5	6	12
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 - (Lindane)	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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	TP19-2.0-2.1	TP20-0.1-0.2	TP20-1.0-1.1	TP20-2.0-2.1	TP25-0.1-0.2
				Sampling date / time	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00
Compound	CAS Number	LOR	Unit		ES2510979-006	ES2510979-007	ES2510979-008	ES2510979-009	ES2510979-010
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
Heptachlor	76-44-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ **Total Chlordane (sum)**	----	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ **Endosulfan (sum)**	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	TP19-2.0-2.1	TP20-0.1-0.2	TP20-1.0-1.1	TP20-2.0-2.1	TP25-0.1-0.2
				Sampling date / time	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00
Compound	CAS Number	LOR	Unit		ES2510979-006	ES2510979-007	ES2510979-008	ES2510979-009	ES2510979-010
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
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**
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	**12**	<10	<10	<10
^ **C6 - C10 Fraction minus BTEX (F1)**	C6_C10-BTEX	10	mg/kg		<10	**12**	<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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	TP19-2.0-2.1	TP20-0.1-0.2	TP20-1.0-1.1	TP20-2.0-2.1	TP25-0.1-0.2
				Sampling date / time	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00
Compound	CAS Number	LOR	Unit		ES2510979-006	ES2510979-007	ES2510979-008	ES2510979-009	ES2510979-010
					Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
>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	%		**104**	**87.0**	**105**	**97.2**	**88.4**
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**101**	**87.5**	**101**	**93.7**	**86.3**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**102**	**87.9**	**100.0**	**94.5**	**86.6**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**99.1**	**96.6**	**102**	**94.4**	**93.2**
2-Chlorophenol-D4	93951-73-6	0.5	%		**99.0**	**98.4**	**101**	**94.6**	**93.1**
2.4.6-Tribromophenol	118-79-6	0.5	%		**70.5**	**73.2**	**68.6**	**69.2**	**63.9**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**103**	**91.2**	**96.1**	**95.9**	**95.1**
Anthracene-d10	1719-06-8	0.5	%		**98.4**	**94.0**	**105**	**108**	**102**
4-Terphenyl-d14	1718-51-0	0.5	%		**96.5**	**101**	**97.4**	**97.2**	**89.1**
EP080S: TPH(V)/BTEX Surrogates									

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	TP19-2.0-2.1	TP20-0.1-0.2	TP20-1.0-1.1	TP20-2.0-2.1	TP25-0.1-0.2
				Sampling date / time	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00
Compound	CAS Number	LOR	Unit		ES2510979-006	ES2510979-007	ES2510979-008	ES2510979-009	ES2510979-010
					Result	Result	Result	Result	Result
EP080S: TPH(V)/BTEX Surrogates - Continued									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**77.9**	**87.0**	**79.8**	**79.9**	**98.5**
Toluene-D8	2037-26-5	0.2	%		**75.8**	**92.2**	**77.3**	**78.9**	**88.3**
4-Bromofluorobenzene	460-00-4	0.2	%		**84.0**	**99.3**	**90.9**	**88.0**	**97.5**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	TP25-0.2-0.3	TP25-0.4-0.5	TP25-1.0-1.1	TP25-2.0-2.1	TP07-0.1-0.2
				Sampling date / time	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00
Compound	CAS Number	LOR	Unit		ES2510979-011	ES2510979-012	ES2510979-013	ES2510979-014	ES2510979-015
					Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	1.0	%		8.0	12.7	22.6	16.1	8.5
EA200: AS 4964 - 2004 Identification of Asbestos in Soils									
Asbestos Detected	1332-21-4	0.1	g/kg		No	No	No	No	No
Asbestos (Trace)	1332-21-4	-	-		No	No	No	No	No
Asbestos Type	1332-21-4	-	--		-	-	-	-	-
Sample weight (dry)	----	0.01	g		67.6	50.7	37.9	50.0	71.0
APPROVED IDENTIFIER:	----	-	--		J. WILLIAMS	J. WILLIAMS	J. WILLIAMS	J. WILLIAMS	J. WILLIAMS
Synthetic Mineral Fibre	----	-	--		No	No	No	No	No
Organic Fibre	----	-	--		No	No	No	No	No
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		<5	12	7	<5	<5
Cadmium	7440-43-9	1	mg/kg		<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg		9	19	21	5	19
Copper	7440-50-8	5	mg/kg		6	9	12	8	13
Lead	7439-92-1	5	mg/kg		23	17	12	9	14
Nickel	7440-02-0	2	mg/kg		10	3	<2	<2	12
Zinc	7440-66-6	5	mg/kg		45	42	<5	<5	47
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 - (Lindane)	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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	TP25-0.2-0.3	TP25-0.4-0.5	TP25-1.0-1.1	TP25-2.0-2.1	TP07-0.1-0.2
				Sampling date / time	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00
Compound	CAS Number	LOR	Unit		ES2510979-011	ES2510979-012	ES2510979-013	ES2510979-014	ES2510979-015
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
Heptachlor	76-44-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ Endosulfan (sum)	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	TP25-0.2-0.3	TP25-0.4-0.5	TP25-1.0-1.1	TP25-2.0-2.1	TP07-0.1-0.2
			Sampling date / time	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00
Compound	CAS Number	LOR	Unit	ES2510979-011	ES2510979-012	ES2510979-013	ES2510979-014	ES2510979-015
				Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
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**
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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	TP25-0.2-0.3	TP25-0.4-0.5	TP25-1.0-1.1	TP25-2.0-2.1	TP07-0.1-0.2
				Sampling date / time	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00
Compound	CAS Number	LOR	Unit		ES2510979-011	ES2510979-012	ES2510979-013	ES2510979-014	ES2510979-015
					Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
>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	%		**89.8**	**109**	**90.8**	**105**	**90.7**
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**94.0**	**100**	**86.7**	**97.5**	**81.1**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**93.5**	**103**	**88.1**	**99.4**	**86.6**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**104**	**90.4**	**101**	**98.8**	**102**
2-Chlorophenol-D4	93951-73-6	0.5	%		**102**	**93.2**	**97.8**	**94.6**	**100**
2.4.6-Tribromophenol	118-79-6	0.5	%		**67.6**	**73.0**	**67.8**	**65.4**	**64.6**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**97.6**	**95.6**	**95.5**	**104**	**102**
Anthracene-d10	1719-06-8	0.5	%		**98.4**	**108**	**110**	**105**	**104**
4-Terphenyl-d14	1718-51-0	0.5	%		**96.8**	**99.7**	**96.6**	**95.4**	**96.3**
EP080S: TPH(V)/BTEX Surrogates									

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	TP25-0.2-0.3	TP25-0.4-0.5	TP25-1.0-1.1	TP25-2.0-2.1	TP07-0.1-0.2
				Sampling date / time	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00
Compound	CAS Number	LOR	Unit		ES2510979-011	ES2510979-012	ES2510979-013	ES2510979-014	ES2510979-015
					Result	Result	Result	Result	Result
EP080S: TPH(V)/BTEX Surrogates - Continued									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**79.4**	**90.4**	**85.0**	**88.4**	**98.8**
Toluene-D8	2037-26-5	0.2	%		**81.0**	**89.4**	**83.7**	**85.9**	**101**
4-Bromofluorobenzene	460-00-4	0.2	%		**88.9**	**94.6**	**93.0**	**96.4**	**103**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	TP07-1.0-1.1	TP07-2.0-2.1	TP08-0.1-0.2	TP08-1.0-1.1	TP08-2.0-2.1
				Sampling date / time	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00
Compound	CAS Number	LOR	Unit		ES2510979-016	ES2510979-017	ES2510979-018	ES2510979-019	ES2510979-020
					Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	1.0	%		16.1	10.0	13.7	18.3	12.1
EA200: AS 4964 - 2004 Identification of Asbestos in Soils									
Asbestos Detected	1332-21-4	0.1	g/kg		No	No	No	No	No
Asbestos (Trace)	1332-21-4	-	-		No	No	No	No	No
Asbestos Type	1332-21-4	-	--		-	-	-	-	-
Sample weight (dry)	----	0.01	g		61.8	63.3	56.2	55.6	72.4
APPROVED IDENTIFIER:	----	-	--		J. WILLIAMS	J. WILLIAMS	J. WILLIAMS	J. WILLIAMS	J. WILLIAMS
Synthetic Mineral Fibre	----	-	--		No	No	No	No	No
Organic Fibre	----	-	--		No	No	No	No	No
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		8	<5	7	6	<5
Cadmium	7440-43-9	1	mg/kg		<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg		16	4	16	11	5
Copper	7440-50-8	5	mg/kg		14	8	13	14	10
Lead	7439-92-1	5	mg/kg		13	16	20	11	9
Nickel	7440-02-0	2	mg/kg		<2	<2	5	<2	<2
Zinc	7440-66-6	5	mg/kg		<5	<5	38	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 - (Lindane)	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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	TP07-1.0-1.1	TP07-2.0-2.1	TP08-0.1-0.2	TP08-1.0-1.1	TP08-2.0-2.1
				Sampling date / time	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00
Compound	CAS Number	LOR	Unit		ES2510979-016	ES2510979-017	ES2510979-018	ES2510979-019	ES2510979-020
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
Heptachlor	76-44-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ **Total Chlordane (sum)**	----	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ **Endosulfan (sum)**	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	TP07-1.0-1.1	TP07-2.0-2.1	TP08-0.1-0.2	TP08-1.0-1.1	TP08-2.0-2.1
				Sampling date / time	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00
Compound	CAS Number	LOR	Unit		ES2510979-016	ES2510979-017	ES2510979-018	ES2510979-019	ES2510979-020
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
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**
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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	TP07-1.0-1.1	TP07-2.0-2.1	TP08-0.1-0.2	TP08-1.0-1.1	TP08-2.0-2.1
				Sampling date / time	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00
Compound	CAS Number	LOR	Unit		ES2510979-016	ES2510979-017	ES2510979-018	ES2510979-019	ES2510979-020
					Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
>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	%		**97.1**	**114**	**101**	**93.1**	**89.9**
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**96.8**	**105**	**98.0**	**87.0**	**87.4**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**97.6**	**107**	**99.8**	**86.2**	**85.1**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**100**	**104**	**105**	**104**	**97.8**
2-Chlorophenol-D4	93951-73-6	0.5	%		**97.6**	**91.8**	**97.0**	**101**	**96.7**
2.4.6-Tribromophenol	118-79-6	0.5	%		**71.8**	**69.7**	**75.7**	**66.6**	**69.8**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**104**	**104**	**89.6**	**100**	**91.6**
Anthracene-d10	1719-06-8	0.5	%		**97.8**	**110**	**111**	**104**	**95.8**
4-Terphenyl-d14	1718-51-0	0.5	%		**99.7**	**99.4**	**103**	**95.1**	**99.9**
EP080S: TPH(V)/BTEX Surrogates									

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	TP07-1.0-1.1	TP07-2.0-2.1	TP08-0.1-0.2	TP08-1.0-1.1	TP08-2.0-2.1
				Sampling date / time	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00
Compound	CAS Number	LOR	Unit		ES2510979-016	ES2510979-017	ES2510979-018	ES2510979-019	ES2510979-020
					Result	Result	Result	Result	Result
EP080S: TPH(V)/BTEX Surrogates - Continued									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**88.5**	**86.2**	**89.9**	**83.0**	**80.8**
Toluene-D8	2037-26-5	0.2	%		**86.8**	**89.5**	**91.2**	**86.4**	**79.2**
4-Bromofluorobenzene	460-00-4	0.2	%		**94.9**	**94.9**	**102**	**92.5**	**87.9**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	TP10-0.1-0.2	TP10-1.0-1.1	TP10-2.0-2.1	TP28-0.1-0.2	TP28-0.3-0.4
				Sampling date / time	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00
Compound	CAS Number	LOR	Unit		ES2510979-021	ES2510979-022	ES2510979-023	ES2510979-024	ES2510979-025
					Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	1.0	%		13.5	16.6	14.6	20.1	16.4
EA200: AS 4964 - 2004 Identification of Asbestos in Soils									
Asbestos Detected	1332-21-4	0.1	g/kg		No	No	No	No	No
Asbestos (Trace)	1332-21-4	-	-		No	No	No	No	No
Asbestos Type	1332-21-4	-	--		-	-	-	-	-
Sample weight (dry)	----	0.01	g		73.9	63.8	62.0	56.4	81.9
APPROVED IDENTIFIER:	----	-	--		J. WILLIAMS	J. WILLIAMS	J. WILLIAMS	J. WILLIAMS	J. WILLIAMS
Synthetic Mineral Fibre	----	-	--		No	No	No	No	No
Organic Fibre	----	-	--		No	No	No	No	No
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		8	<5	<5	8	9
Cadmium	7440-43-9	1	mg/kg		<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg		13	8	7	24	19
Copper	7440-50-8	5	mg/kg		15	18	35	18	10
Lead	7439-92-1	5	mg/kg		22	17	16	21	18
Nickel	7440-02-0	2	mg/kg		4	8	5	21	4
Zinc	7440-66-6	5	mg/kg		54	38	36	76	16
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 - (Lindane)	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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	TP10-0.1-0.2	TP10-1.0-1.1	TP10-2.0-2.1	TP28-0.1-0.2	TP28-0.3-0.4
				Sampling date / time	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00
Compound	CAS Number	LOR	Unit		ES2510979-021	ES2510979-022	ES2510979-023	ES2510979-024	ES2510979-025
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
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	**0.22**	<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		**0.06**	<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	**0.22**	<0.05	<0.05
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-29-2	0.05	mg/kg		**0.06**	<0.05	<0.05	<0.05	<0.05
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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	TP10-0.1-0.2	TP10-1.0-1.1	TP10-2.0-2.1	TP28-0.1-0.2	TP28-0.3-0.4
				Sampling date / time	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00
Compound	CAS Number	LOR	Unit		ES2510979-021	ES2510979-022	ES2510979-023	ES2510979-024	ES2510979-025
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
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**
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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	TP10-0.1-0.2	TP10-1.0-1.1	TP10-2.0-2.1	TP28-0.1-0.2	TP28-0.3-0.4
				Sampling date / time	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00
Compound	CAS Number	LOR	Unit		ES2510979-021	ES2510979-022	ES2510979-023	ES2510979-024	ES2510979-025
					Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
>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	%		**79.7**	**62.5**	**62.0**	**74.1**	**91.2**
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**86.6**	**74.2**	**75.8**	**89.2**	**79.1**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**84.5**	**76.6**	**77.8**	**94.3**	**84.2**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**90.7**	**94.8**	**92.3**	**96.2**	**88.8**
2-Chlorophenol-D4	93951-73-6	0.5	%		**91.5**	**97.5**	**94.7**	**96.9**	**94.9**
2.4.6-Tribromophenol	118-79-6	0.5	%		**79.7**	**83.9**	**74.8**	**84.9**	**84.3**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**100**	**102**	**96.7**	**104**	**101**
Anthracene-d10	1719-06-8	0.5	%		**106**	**107**	**105**	**110**	**108**
4-Terphenyl-d14	1718-51-0	0.5	%		**96.8**	**102**	**95.1**	**102**	**99.5**
EP080S: TPH(V)/BTEX Surrogates									

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	TP10-0.1-0.2	TP10-1.0-1.1	TP10-2.0-2.1	TP28-0.1-0.2	TP28-0.3-0.4
				Sampling date / time	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00
Compound	CAS Number	LOR	Unit		ES2510979-021	ES2510979-022	ES2510979-023	ES2510979-024	ES2510979-025
					Result	Result	Result	Result	Result
EP080S: TPH(V)/BTEX Surrogates - Continued									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**64.7**	**74.2**	**69.4**	**69.2**	**70.6**
Toluene-D8	2037-26-5	0.2	%		**68.2**	**99.8**	**94.3**	**88.9**	**94.3**
4-Bromofluorobenzene	460-00-4	0.2	%		**90.3**	**106**	**100**	**96.5**	**97.7**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	TP28-1.0-1.1	TP28-2.0-2.1	DUP02	TRIP SPIKE	TRIP BLANK
				Sampling date / time	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00	07-Apr-2025 00:00	07-Apr-2025 00:00
Compound	CAS Number	LOR	Unit		ES2510979-026	ES2510979-027	ES2510979-028	ES2510979-029	ES2510979-030
					Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	1.0	%		10.9	14.0	13.6	----	----
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	-	-		No	No	----	----	----
Asbestos Type	1332-21-4	-	--		-	-	----	----	----
Sample weight (dry)	----	0.01	g		42.8	53.8	----	----	----
APPROVED IDENTIFIER:	----	-	--		J. WILLIAMS	J. WILLIAMS	----	----	----
Synthetic Mineral Fibre	----	-	--		No	No	----	----	----
Organic Fibre	----	-	--		No	No	----	----	----
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		<5	<5	7	----	----
Cadmium	7440-43-9	1	mg/kg		<1	<1	<1	----	----
Chromium	7440-47-3	2	mg/kg		10	6	13	----	----
Copper	7440-50-8	5	mg/kg		<5	9	13	----	----
Lead	7439-92-1	5	mg/kg		7	10	21	----	----
Nickel	7440-02-0	2	mg/kg		<2	<2	4	----	----
Zinc	7440-66-6	5	mg/kg		<5	<5	49	----	----
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	----	----	----
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 - (Lindane)	58-89-9	0.05	mg/kg		<0.05	<0.05	----	----	----
delta-BHC	319-86-8	0.05	mg/kg		<0.05	<0.05	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	TP28-1.0-1.1	TP28-2.0-2.1	DUP02	TRIP SPIKE	TRIP BLANK
			Sampling date / time	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00	07-Apr-2025 00:00	07-Apr-2025 00:00
Compound	CAS Number	LOR	Unit	ES2510979-026	ES2510979-027	ES2510979-028	ES2510979-029	ES2510979-030
				Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued								
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	----	----	----
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	----	----	----
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	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	TP28-1.0-1.1	TP28-2.0-2.1	DUP02	TRIP SPIKE	TRIP BLANK
				Sampling date / time	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00	07-Apr-2025 00:00	07-Apr-2025 00:00
Compound	CAS Number	LOR	Unit		ES2510979-026	ES2510979-027	ES2510979-028	ES2510979-029	ES2510979-030
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	----	----
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**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	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	TP28-1.0-1.1	TP28-2.0-2.1	DUP02	TRIP SPIKE	TRIP BLANK
			Sampling date / time	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00	07-Apr-2025 00:00	07-Apr-2025 00:00
Compound	CAS Number	LOR	Unit	ES2510979-026	ES2510979-027	ES2510979-028	ES2510979-029	ES2510979-030
				Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued								
>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	----	**2.0**	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	----	**2.8**	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	----	**3.4**	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	----	**1.7**	<0.5
^ Sum of BTEX	----	0.2	mg/kg	<0.2	<0.2	----	**9.9**	<0.2
^ Total Xylenes	----	0.5	mg/kg	<0.5	<0.5	----	**5.1**	<0.5
Naphthalene	91-20-3	1	mg/kg	<1	<1	----	<1	<1
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	**52.4**	**68.2**	----	----	----
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.05	%	**64.8**	**85.0**	----	----	----
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.05	%	**62.9**	**78.8**	----	----	----
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.5	%	**94.2**	**89.3**	**88.2**	----	----
2-Chlorophenol-D4	93951-73-6	0.5	%	**95.7**	**91.4**	**91.8**	----	----
2.4.6-Tribromophenol	118-79-6	0.5	%	**81.4**	**78.1**	**75.8**	----	----
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.5	%	**101**	**94.7**	**99.7**	----	----
Anthracene-d10	1719-06-8	0.5	%	**108**	**109**	**107**	----	----
4-Terphenyl-d14	1718-51-0	0.5	%	**102**	**101**	**98.0**	----	----
EP080S: TPH(V)/BTEX Surrogates								

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	TP28-1.0-1.1	TP28-2.0-2.1	DUP02	TRIP SPIKE	TRIP BLANK
				Sampling date / time	15-Apr-2025 00:00	15-Apr-2025 00:00	15-Apr-2025 00:00	07-Apr-2025 00:00	07-Apr-2025 00:00
Compound	CAS Number	LOR	Unit		ES2510979-026	ES2510979-027	ES2510979-028	ES2510979-029	ES2510979-030
					Result	Result	Result	Result	Result
EP080S: TPH(V)/BTEX Surrogates - Continued									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**69.6**	**68.8**	**----**	**86.1**	**90.2**
Toluene-D8	2037-26-5	0.2	%		**89.1**	**89.3**	**----**	**113**	**115**
4-Bromofluorobenzene	460-00-4	0.2	%		**94.1**	**93.7**	**----**	**110**	**121**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	TSC	----	----	----	----
				Sampling date / time	07-Apr-2025 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit		ES2510979-031	--------	--------	--------	--------
					Result	----	----	----	----
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	----	----	----	----
Toluene	108-88-3	0.5	mg/kg		**1.6**	----	----	----	----
Ethylbenzene	100-41-4	0.5	mg/kg		**2.4**	----	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		**3.0**	----	----	----	----
ortho-Xylene	95-47-6	0.5	mg/kg		**1.5**	----	----	----	----
^ **Sum of BTEX**	----	0.2	mg/kg		**8.5**	----	----	----	----
^ **Total Xylenes**	----	0.5	mg/kg		**4.5**	----	----	----	----
Naphthalene	91-20-3	1	mg/kg		<1	----	----	----	----
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**86.3**	----	----	----	----
Toluene-D8	2037-26-5	0.2	%		**112**	----	----	----	----
4-Bromofluorobenzene	460-00-4	0.2	%		**109**	----	----	----	----

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	TP18-0.1-0.2 - 15-Apr-2025 00:00	A soil sample.
EA200: Description	TP18_1.0-1.1 - 15-Apr-2025 00:00	A soil sample.
EA200: Description	TP18-2.0-2.1 - 15-Apr-2025 00:00	A soil sample.
EA200: Description	TP19-0.1-0.2 - 15-Apr-2025 00:00	A soil sample.
EA200: Description	TP19-1.0-1.1 - 15-Apr-2025 00:00	A soil sample.
EA200: Description	TP19-2.0-2.1 - 15-Apr-2025 00:00	A soil sample.
EA200: Description	TP20-0.1-0.2 - 15-Apr-2025 00:00	A soil sample.
EA200: Description	TP20-1.0-1.1 - 15-Apr-2025 00:00	A soil sample.
EA200: Description	TP20-2.0-2.1 - 15-Apr-2025 00:00	A soil sample.
EA200: Description	TP25-0.1-0.2 - 15-Apr-2025 00:00	A soil sample.
EA200: Description	TP25-0.2-0.3 - 15-Apr-2025 00:00	A soil sample.
EA200: Description	TP25-0.4-0.5 - 15-Apr-2025 00:00	A soil sample.
EA200: Description	TP25-1.0-1.1 - 15-Apr-2025 00:00	A soil sample.
EA200: Description	TP25-2.0-2.1 - 15-Apr-2025 00:00	A soil sample.
EA200: Description	TP07-0.1-0.2 - 15-Apr-2025 00:00	A soil sample.
EA200: Description	TP07-1.0-1.1 - 15-Apr-2025 00:00	A soil sample.
EA200: Description	TP07-2.0-2.1 - 15-Apr-2025 00:00	A soil sample.
EA200: Description	TP08-0.1-0.2 - 15-Apr-2025 00:00	A soil sample.
EA200: Description	TP08-1.0-1.1 - 15-Apr-2025 00:00	A soil sample.
EA200: Description	TP08-2.0-2.1 - 15-Apr-2025 00:00	A soil sample.
EA200: Description	TP10-0.1-0.2 - 15-Apr-2025 00:00	A soil sample.
EA200: Description	TP10-1.0-1.1 - 15-Apr-2025 00:00	A soil sample.
EA200: Description	TP10-2.0-2.1 - 15-Apr-2025 00:00	A soil sample.
EA200: Description	TP28-0.1-0.2 - 15-Apr-2025 00:00	A soil sample.
EA200: Description	TP28-0.3-0.4 - 15-Apr-2025 00:00	A soil sample.
EA200: Description	TP28-1.0-1.1 - 15-Apr-2025 00:00	A soil sample.
EA200: Description	TP28-2.0-2.1 - 15-Apr-2025 00:00	A soil sample.

Surrogate Control Limits

Sub-Matrix: SOIL		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP066S: PCB Surrogate			
Decachlorobiphenyl	2051-24-3	39	149
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21655-73-2	49	147
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	35	143
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
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	63	125
Toluene-D8	2037-26-5	67	124
4-Bromofluorobenzene	460-00-4	66	131

Inter-Laboratory Testing

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

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

CERTIFICATE OF ANALYSIS

Work Order	: **ES2512173**	Page	: 1 of 8
Client	: **ENVIRONMENTAL GROUP AUSTRALIA PTY LTD**	Laboratory	: Environmental Division Sydney
Contact	: MAX CUNNINGHAM	Contact	: Samiksha Sathish
Address	: 36E Fitzroy Street Marrickville 2204	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61-2-8784 8555
Project	: 2300	Date Samples Received	: 29-Apr-2025 17:25
Order number	: ----	Date Analysis Commenced	: 30-Apr-2025
C-O-C number	: ----	Issue Date	: 06-May-2025 09:28
Sampler	: Lachlan Cranch		
Site	: 2 Bullecourt Avenue, Milpera		
Quote number	: ES25ENVGROLIM0001		
No. of samples received	: 4		
No. of samples analysed	: 4		

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

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

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- 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*
Ankit Joshi	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
John Williams	Lab Technician	Newcastle - Asbestos, Mayfield West, NSW

General Comments

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

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

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

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

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

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

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

- 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.
- 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: 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.
- 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.
- 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.

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	TP21-0.01	TRIP SPIKE	TRIP BLANK	TSC	----
			Sampling date / time	29-Apr-2025 00:00	28-Apr-2025 00:00	28-Apr-2025 00:00	28-Apr-2025 00:00	----
Compound	CAS Number	LOR	Unit	ES2512173-001	ES2512173-002	ES2512173-003	ES2512173-004	--------
				Result	Result	Result	Result	----
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	21.1	----	----	----	----
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	----	----	----	----
Asbestos (Trace)	1332-21-4	-	-	No	----	----	----	----
Asbestos Type	1332-21-4	-	--	-	----	----	----	----
Sample weight (dry)	----	0.01	g	185	----	----	----	----
APPROVED IDENTIFIER:	----	-	--	J. WILLIAMS	----	----	----	----
Synthetic Mineral Fibre	----	-	--	No	----	----	----	----
Organic Fibre	----	-	--	No	----	----	----	----
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	7	----	----	----	----
Cadmium	7440-43-9	1	mg/kg	<1	----	----	----	----
Chromium	7440-47-3	2	mg/kg	11	----	----	----	----
Copper	7440-50-8	5	mg/kg	11	----	----	----	----
Lead	7439-92-1	5	mg/kg	9	----	----	----	----
Nickel	7440-02-0	2	mg/kg	5	----	----	----	----
Zinc	7440-66-6	5	mg/kg	13	----	----	----	----
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	----	----	----	----
EP066: Polychlorinated Biphenyls (PCB)								
Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	----	----	----	----
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	----	----	----	----
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	----	----	----	----
beta-BHC	319-85-7	0.05	mg/kg	<0.05	----	----	----	----
gamma-BHC - (Lindane)	58-89-9	0.05	mg/kg	<0.05	----	----	----	----
delta-BHC	319-86-8	0.05	mg/kg	<0.05	----	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	TP21-0.01	TRIP SPIKE	TRIP BLANK	TSC	----
				Sampling date / time	29-Apr-2025 00:00	28-Apr-2025 00:00	28-Apr-2025 00:00	28-Apr-2025 00:00	----
Compound	CAS Number	LOR	Unit		ES2512173-001	ES2512173-002	ES2512173-003	ES2512173-004	--------
					Result	Result	Result	Result	----
EP068A: Organochlorine Pesticides (OC) - Continued									
Heptachlor	76-44-8	0.05	mg/kg		<0.05	----	----	----	----
Aldrin	309-00-2	0.05	mg/kg		<0.05	----	----	----	----
Heptachlor epoxide	1024-57-3	0.05	mg/kg		<0.05	----	----	----	----
^ **Total Chlordane (sum)**	----	0.05	mg/kg		<0.05	----	----	----	----
trans-Chlordane	5103-74-2	0.05	mg/kg		<0.05	----	----	----	----
alpha-Endosulfan	959-98-8	0.05	mg/kg		<0.05	----	----	----	----
cis-Chlordane	5103-71-9	0.05	mg/kg		<0.05	----	----	----	----
Dieldrin	60-57-1	0.05	mg/kg		<0.05	----	----	----	----
4.4`-DDE	72-55-9	0.05	mg/kg		<0.05	----	----	----	----
Endrin	72-20-8	0.05	mg/kg		<0.05	----	----	----	----
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	----	----	----	----
^ **Endosulfan (sum)**	115-29-7	0.05	mg/kg		<0.05	----	----	----	----
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	----	----	----	----
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	----	----	----	----
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	----	----	----	----
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	----	----	----	----
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	----	----	----	----
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	----	----	----	----
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.05	mg/kg		<0.05	----	----	----	----
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-2	0.05	mg/kg		<0.05	----	----	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	----	----	----	----
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	----	----	----	----
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	----	----	----	----
Fluorene	86-73-7	0.5	mg/kg		<0.5	----	----	----	----
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	----	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	TP21-0.01	TRIP SPIKE	TRIP BLANK	TSC	----
			Sampling date / time	29-Apr-2025 00:00	28-Apr-2025 00:00	28-Apr-2025 00:00	28-Apr-2025 00:00	----
Compound	CAS Number	LOR	Unit	ES2512173-001	ES2512173-002	ES2512173-003	ES2512173-004	--------
				Result	Result	Result	Result	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
Anthracene	120-12-7	0.5	mg/kg	<0.5	----	----	----	----
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	----	----	----	----
Pyrene	129-00-0	0.5	mg/kg	<0.5	----	----	----	----
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	----	----	----	----
Chrysene	218-01-9	0.5	mg/kg	<0.5	----	----	----	----
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	----	----	----	----
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	----	----	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	----	----	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	----	----	----	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	----	----	----	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	----	----	----	----
^ **Sum of polycyclic aromatic hydrocarbons**	----	0.5	mg/kg	<0.5	----	----	----	----
^ **Benzo(a)pyrene TEQ (zero)**	----	0.5	mg/kg	<0.5	----	----	----	----
^ **Benzo(a)pyrene TEQ (half LOR)**	----	0.5	mg/kg	**0.6**	----	----	----	----
^ **Benzo(a)pyrene TEQ (LOR)**	----	0.5	mg/kg	**1.2**	----	----	----	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	<10	----	----	----	----
C10 - C14 Fraction	----	50	mg/kg	<50	----	----	----	----
C15 - C28 Fraction	----	100	mg/kg	<100	----	----	----	----
C29 - C36 Fraction	----	100	mg/kg	<100	----	----	----	----
^ **C10 - C36 Fraction (sum)**	----	50	mg/kg	<50	----	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
C6 - C10 Fraction	C6_C10	10	mg/kg	<10	----	----	----	----
^ **C6 - C10 Fraction minus BTEX (F1)**	C6_C10-BTEX	10	mg/kg	<10	----	----	----	----
>C10 - C16 Fraction	----	50	mg/kg	<50	----	----	----	----
>C16 - C34 Fraction	----	100	mg/kg	<100	----	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	TP21-0.01	TRIP SPIKE	TRIP BLANK	TSC	----
				Sampling date / time	29-Apr-2025 00:00	28-Apr-2025 00:00	28-Apr-2025 00:00	28-Apr-2025 00:00	----
Compound	CAS Number	LOR	Unit		ES2512173-001	ES2512173-002	ES2512173-003	ES2512173-004	--------
					Result	Result	Result	Result	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
>C34 - C40 Fraction	----	100	mg/kg		<100	----	----	----	----
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	----	----	----	----
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	----	----	----	----
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	**3.9**	<0.5	**5.1**	----
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	**4.7**	<0.5	**6.1**	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	**4.8**	<0.5	**6.3**	----
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	**2.1**	<0.5	**2.8**	----
^ Total Xylenes	----	0.5	mg/kg		<0.5	**6.9**	<0.5	**9.1**	----
^ Sum of BTEX	----	0.2	mg/kg		<0.2	**15.5**	<0.2	**20.3**	----
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	----
EP066S: PCB Surrogate									
Decachlorobiphenyl	2051-24-3	0.1	%		**92.5**	----	----	----	----
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**79.9**	----	----	----	----
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**72.9**	----	----	----	----
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**86.2**	----	----	----	----
2-Chlorophenol-D4	93951-73-6	0.5	%		**86.2**	----	----	----	----
2.4.6-Tribromophenol	118-79-6	0.5	%		**68.6**	----	----	----	----
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**91.0**	----	----	----	----
Anthracene-d10	1719-06-8	0.5	%		**93.5**	----	----	----	----
4-Terphenyl-d14	1718-51-0	0.5	%		**83.8**	----	----	----	----
EP080S: TPH(V)/BTEX Surrogates									

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	TP21-0.01	TRIP SPIKE	TRIP BLANK	TSC	----
				Sampling date / time	29-Apr-2025 00:00	28-Apr-2025 00:00	28-Apr-2025 00:00	28-Apr-2025 00:00	----
Compound	CAS Number	LOR	Unit		ES2512173-001	ES2512173-002	ES2512173-003	ES2512173-004	--------
					Result	Result	Result	Result	----
EP080S: TPH(V)/BTEX Surrogates - Continued									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**73.8**	**97.2**	**93.1**	**78.7**	**----**
Toluene-D8	2037-26-5	0.2	%		**89.8**	**114**	**111**	**95.0**	**----**
4-Bromofluorobenzene	460-00-4	0.2	%		**93.6**	**110**	**114**	**92.8**	**----**

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	TP21-0.01 - 29-Apr-2025 00:00	A soil sample.

Surrogate Control Limits

Sub-Matrix: SOIL		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP066S: PCB Surrogate			
Decachlorobiphenyl	2051-24-3	39	149
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21655-73-2	49	147
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	35	143
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
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	63	125
Toluene-D8	2037-26-5	67	124
4-Bromofluorobenzene	460-00-4	66	131

Inter-Laboratory Testing

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

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

CERTIFICATE OF ANALYSIS

Work Order	: **ES2513733**	Page	: 1 of 11
Amendment	: **1**		
Client	: **ENVIRONMENTAL GROUP AUSTRALIA PTY LTD**	Laboratory	: Environmental Division Sydney
Contact	: MAX CUNNINGHAM	Contact	: Samiksha Sathish
Address	: 36E Fitzroy Street Marrickville 2204	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61-2-8784 8555
Project	: 2300-2 Bullecourt Ave - SCA	Date Samples Received	: 12-May-2025 17:55
Order number	: ----	Date Analysis Commenced	: 14-May-2025
C-O-C number	: ----	Issue Date	: 20-May-2025 09:23
Sampler	: Lachlan Cranch		
Site	: ----		
Quote number	: ES25ENVGROLIM0001		
No. of samples received	: 9		
No. of samples analysed	: 9		

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*
Ankit Joshi	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW
Brendan Schrader	Laboratory Technician	Newcastle - Asbestos, Mayfield West, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic 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 Contract for details.

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

- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a.h)anthracene (1.0), Benzo(g.h.i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero, for 'TEQ 1/2LOR' are treated as half the reported LOR, and for 'TEQ LOR' are treated as being equal to the reported LOR. Note: TEQ 1/2LOR and TEQ LOR will calculate as 0.6mg/Kg and 1.2mg/Kg respectively for samples with non-detects for all of the eight TEQ PAHs.
- 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.
- 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.
- Amendment (20/05/2025): This report has been amended as a result of a request to change sample identification number (ID) received from <<Client Contact>Kya Wiya on 20/05/2025 for sample 006. All analysis results are as per the previous report.
- 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.
- 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.
- 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.

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	TP01-0.1-0.2	TP02-0.1-0.2	TP03-0.1-0.2	TP04-0.1-0.2	TP05-0.1-0.2
			Sampling date / time	09-May-2025 00:00	09-May-2025 00:00	09-May-2025 00:00	09-May-2025 00:00	09-May-2025 00:00
Compound	CAS Number	LOR	Unit	ES2513733-001	ES2513733-002	ES2513733-003	ES2513733-004	ES2513733-005
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	---	1.0	%	6.0	8.8	10.2	11.4	10.9
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No	No	No
Asbestos (Trace)	1332-21-4	-	-	No	No	No	No	No
Asbestos Type	1332-21-4	-	--	-	-	-	-	-
Synthetic Mineral Fibre	---	-	--	No	No	No	No	No
Organic Fibre	---	-	--	No	No	No	No	No
Sample weight (dry)	---	0.01	g	154	104	138	131	133
APPROVED IDENTIFIER:	---	-	--	B.SCHRADER	B.SCHRADER	B.SCHRADER	B.SCHRADER	B.SCHRADER
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	<5	6	6	<5	7
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	8	8	6	12	8
Copper	7440-50-8	5	mg/kg	<5	32	11	23	12
Lead	7439-92-1	5	mg/kg	5	23	13	14	16
Nickel	7440-02-0	2	mg/kg	<2	22	7	11	4
Zinc	7440-66-6	5	mg/kg	18	81	46	47	54
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 - (Lindane)	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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	TP01-0.1-0.2	TP02-0.1-0.2	TP03-0.1-0.2	TP04-0.1-0.2	TP05-0.1-0.2
			Sampling date / time	09-May-2025 00:00	09-May-2025 00:00	09-May-2025 00:00	09-May-2025 00:00	09-May-2025 00:00
Compound	CAS Number	LOR	Unit	ES2513733-001	ES2513733-002	ES2513733-003	ES2513733-004	ES2513733-005
				Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued								
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Total Chlordane (sum)	---	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Endosulfan (sum)	115-29-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	TP01-0.1-0.2	TP02-0.1-0.2	TP03-0.1-0.2	TP04-0.1-0.2	TP05-0.1-0.2
			Sampling date / time	09-May-2025 00:00	09-May-2025 00:00	09-May-2025 00:00	09-May-2025 00:00	09-May-2025 00:00
Compound	CAS Number	LOR	Unit	ES2513733-001	ES2513733-002	ES2513733-003	ES2513733-004	ES2513733-005
				Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
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**
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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	TP01-0.1-0.2	TP02-0.1-0.2	TP03-0.1-0.2	TP04-0.1-0.2	TP05-0.1-0.2
			Sampling date / time	09-May-2025 00:00	09-May-2025 00:00	09-May-2025 00:00	09-May-2025 00:00	09-May-2025 00:00
Compound	CAS Number	LOR	Unit	ES2513733-001	ES2513733-002	ES2513733-003	ES2513733-004	ES2513733-005
				Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued								
>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	%	**91.4**	**114**	**93.4**	**90.6**	**87.2**
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.05	%	**89.0**	**97.0**	**90.8**	**87.1**	**85.4**
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.05	%	**85.3**	**94.9**	**89.4**	**85.1**	**83.3**
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.5	%	**86.4**	**88.8**	**71.3**	**88.2**	**70.0**
2-Chlorophenol-D4	93951-73-6	0.5	%	**89.0**	**89.8**	**66.7**	**87.7**	**71.0**
2.4.6-Tribromophenol	118-79-6	0.5	%	**48.5**	**74.3**	**77.1**	**69.3**	**75.5**
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.5	%	**86.8**	**94.8**	**93.6**	**90.4**	**91.2**
Anthracene-d10	1719-06-8	0.5	%	**94.4**	**94.1**	**94.1**	**91.8**	**91.6**
4-Terphenyl-d14	1718-51-0	0.5	%	**91.9**	**94.0**	**93.1**	**90.8**	**64.0**
EP080S: TPH(V)/BTEX Surrogates								

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	TP01-0.1-0.2	TP02-0.1-0.2	TP03-0.1-0.2	TP04-0.1-0.2	TP05-0.1-0.2
			Sampling date / time	09-May-2025 00:00	09-May-2025 00:00	09-May-2025 00:00	09-May-2025 00:00	09-May-2025 00:00
Compound	CAS Number	LOR	Unit	ES2513733-001	ES2513733-002	ES2513733-003	ES2513733-004	ES2513733-005
				Result	Result	Result	Result	Result
EP080S: TPH(V)/BTEX Surrogates - Continued								
1.2-Dichloroethane-D4	17060-07-0	0.2	%	111	109	112	112	123
Toluene-D8	2037-26-5	0.2	%	92.5	101	99.4	105	92.2
4-Bromofluorobenzene	460-00-4	0.2	%	127	102	104	111	129

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	DUP03	Trip Spike - 13	Trip Blank	Trip Spike Control -13	----
			Sampling date / time	09-May-2025 00:00	05-May-2025 00:00	02-May-2025 00:00	05-May-2025 00:00	----
Compound	CAS Number	LOR	Unit	ES2513733-006	ES2513733-007	ES2513733-008	ES2513733-009	------
				Result	Result	Result	Result	----
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	---	1.0	%	**5.5**	---	---	---	---
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	<5	---	---	---	---
Cadmium	7440-43-9	1	mg/kg	<1	---	---	---	---
Chromium	7440-47-3	2	mg/kg	**7**	---	---	---	---
Copper	7440-50-8	5	mg/kg	<5	---	---	---	---
Lead	7439-92-1	5	mg/kg	<5	---	---	---	---
Nickel	7440-02-0	2	mg/kg	<2	---	---	---	---
Zinc	7440-66-6	5	mg/kg	**12**	---	---	---	---
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	---	---	---	---
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	---	---	---	---
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	---	---	---	---
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	---	---	---	---
Fluorene	86-73-7	0.5	mg/kg	<0.5	---	---	---	---
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	---	---	---	---
Anthracene	120-12-7	0.5	mg/kg	<0.5	---	---	---	---
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	---	---	---	---
Pyrene	129-00-0	0.5	mg/kg	<0.5	---	---	---	---
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)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	---	---	---	---
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	---	---	---	---
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	---	---	---	---
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	---	---	---	---
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	---	---	---	---

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	DUP03	Trip Spike - 13	Trip Blank	Trip Spike Control -13	----
			Sampling date / time	09-May-2025 00:00	05-May-2025 00:00	02-May-2025 00:00	05-May-2025 00:00	----
Compound	CAS Number	LOR	Unit	ES2513733-006	ES2513733-007	ES2513733-008	ES2513733-009	------
				Result	Result	Result	Result	---
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	---	---	---	---
^ Sum of polycyclic aromatic hydrocarbons	---	0.5	mg/kg	<0.5	---	---	---	---
^ Benzo(a)pyrene TEQ (zero)	---	0.5	mg/kg	<0.5	---	---	---	---
^ Benzo(a)pyrene TEQ (half LOR)	---	0.5	mg/kg	0.6	---	---	---	---
^ Benzo(a)pyrene TEQ (LOR)	---	0.5	mg/kg	1.2	---	---	---	---
EP080: BTEXN								
Benzene	71-43-2	0.2	mg/kg	---	<0.2	<0.2	<0.2	---
Toluene	108-88-3	0.5	mg/kg	---	5.4	<0.5	6.1	---
Ethylbenzene	100-41-4	0.5	mg/kg	---	6.1	<0.5	6.2	---
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	---	7.0	<0.5	7.0	---
ortho-Xylene	95-47-6	0.5	mg/kg	---	2.8	<0.5	2.9	---
^ Sum of BTEX	---	0.2	mg/kg	---	21.3	<0.2	22.2	---
^ Total Xylenes	---	0.5	mg/kg	---	9.8	<0.5	9.9	---
Naphthalene	91-20-3	1	mg/kg	---	<1	<1	<1	---
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.5	%	87.4	---	---	---	---
2-Chlorophenol-D4	93951-73-6	0.5	%	89.0	---	---	---	---
2.4.6-Tribromophenol	118-79-6	0.5	%	74.5	---	---	---	---
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.5	%	93.0	---	---	---	---
Anthracene-d10	1719-06-8	0.5	%	94.0	---	---	---	---
4-Terphenyl-d14	1718-51-0	0.5	%	91.8	---	---	---	---
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.2	%	---	95.8	122	99.4	---
Toluene-D8	2037-26-5	0.2	%	---	87.5	104	87.4	---
4-Bromofluorobenzene	460-00-4	0.2	%	---	90.8	108	85.9	---

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	TP01-0.1-0.2 - 09-May-2025 00:00	A soil sample.
EA200: Description	TP02-0.1-0.2 - 09-May-2025 00:00	A soil sample.
EA200: Description	TP03-0.1-0.2 - 09-May-2025 00:00	A soil sample.
EA200: Description	TP04-0.1-0.2 - 09-May-2025 00:00	A soil sample.
EA200: Description	TP05-0.1-0.2 - 09-May-2025 00:00	A soil sample.

Surrogate Control Limits

Sub-Matrix: SOIL		Recovery Limits (%)	
Compound	*CAS Number*	*Low*	*High*
EP066S: PCB Surrogate			
Decachlorobiphenyl	2051-24-3	39	149
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21655-73-2	49	147
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	35	143
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
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	63	125
Toluene-D8	2037-26-5	67	124
4-Bromofluorobenzene	460-00-4	66	131

Inter-Laboratory Testing

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

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

CERTIFICATE OF ANALYSIS

Work Order	: **ES2522273**	Page	: 1 of 36
Client	: **ENVIRONMENTAL GROUP AUSTRALIA PTY LTD**	Laboratory	: Environmental Division Sydney
Contact	: MAX CUNNINGHAM	Contact	: Samiksha Sathish
Address	: 36E Fitzroy Street Marrickville 2204	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61-2-8784 8555
Project	: 2300 - WSU MILPERRA - SCA Post Demo	Date Samples Received	: 21-Jul-2025 17:10
Order number	: ----	Date Analysis Commenced	: 22-Jul-2025
C-O-C number	: ----	Issue Date	: 28-Jul-2025 17:49
Sampler	: Siyuan He		
Site	: Milpera		
Quote number	: ES25ENVGROLIM0001		
No. of samples received	: 33		
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*
Ankit Joshi	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW
Brendan Schrader	Laboratory Technician	Newcastle - Asbestos, Mayfield West, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Franco Lentini	LCMS Coordinator	Sydney Inorganics, Smithfield, NSW
John Williams	Lab Technician	Newcastle - Asbestos, Mayfield West, 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 Contract for details.

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

- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a.h)anthracene (1.0), Benzo(g.h.i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero, for 'TEQ 1/2LOR' are treated as half the reported LOR, and for 'TEQ LOR' are treated as being equal to the reported LOR. Note: TEQ 1/2LOR and TEQ LOR will calculate as 0.6mg/Kg and 1.2mg/Kg respectively for samples with non-detects for all of the eight TEQ PAHs.
- EA200: Asbestos Identification Samples were analysed by Polarised Light Microscopy including dispersion staining.
- 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.
- 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.
- EP071: Results of sample TP33-0.1-0.2 have been confirmed by re-extraction and re-analysis.
- **EA200 Legend**
- EA200 'Am' Amosite (brown asbestos)
- EA200 'Cr' Crocidolite (blue asbestos)
- 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.
- EA200: Analysis of asbestos from swabs and tapes is not covered under the current scope of NATA accreditation.
- 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.
- 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: 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.
- EA200: N/A - Not Applicable

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	TP47-0.1-0.2	TP46-0.1-0.2	TP45-0.1-0.2	TP44-1.1-1.2	TP44-0.1-0.2
			Sampling date / time	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00
Compound	CAS Number	LOR	Unit	ES2522273-001	ES2522273-002	ES2522273-003	ES2522273-004	ES2522273-005
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	22.5	13.2	11.5	10.0	10.2
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No	No	No
Asbestos (Trace)	1332-21-4	-	-	No	No	No	No	No
Asbestos Type	1332-21-4	-	--	-	-	-	-	-
Sample weight (dry)	----	0.01	g	64.7	74.4	71.8	55.5	54.5
APPROVED IDENTIFIER:	----	-	--	B.SCHRADER	B.SCHRADER	B.SCHRADER	B.SCHRADER	B.SCHRADER
Synthetic Mineral Fibre	----	-	--	No	No	No	No	No
Organic Fibre	----	-	--	No	No	No	No	No
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	9	12	<5	<5	<5
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	32	17	8	9	11
Copper	7440-50-8	5	mg/kg	18	15	10	40	36
Lead	7439-92-1	5	mg/kg	16	23	26	21	16
Nickel	7440-02-0	2	mg/kg	25	6	3	20	19
Zinc	7440-66-6	5	mg/kg	35	43	59	115	83
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 - (Lindane)	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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	TP47-0.1-0.2	TP46-0.1-0.2	TP45-0.1-0.2	TP44-1.1-1.2	TP44-0.1-0.2
			Sampling date / time	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00
Compound	CAS Number	LOR	Unit	ES2522273-001	ES2522273-002	ES2522273-003	ES2522273-004	ES2522273-005
				Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued								
Heptachlor	76-44-8	0.05	mg/kg	**0.24**	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	**0.58**	<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	**0.16**	<0.05	<0.05	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg	**0.16**	<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	**0.70**	**0.06**	**0.18**	<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	**1.28**	**0.06**	**0.18**	<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
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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	TP47-0.1-0.2	TP46-0.1-0.2	TP45-0.1-0.2	TP44-1.1-1.2	TP44-0.1-0.2
			Sampling date / time	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00
Compound	CAS Number	LOR	Unit	ES2522273-001	ES2522273-002	ES2522273-003	ES2522273-004	ES2522273-005
				Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
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**
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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	TP47-0.1-0.2	TP46-0.1-0.2	TP45-0.1-0.2	TP44-1.1-1.2	TP44-0.1-0.2
			Sampling date / time	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00
Compound	CAS Number	LOR	Unit	ES2522273-001	ES2522273-002	ES2522273-003	ES2522273-004	ES2522273-005
				Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued								
>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	%	**97.9**	**96.7**	**96.0**	**97.2**	**88.0**
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.05	%	**79.2**	**82.3**	**82.2**	**87.6**	**74.1**
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.05	%	**79.7**	**85.5**	**74.8**	**89.8**	**95.7**
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.5	%	**87.3**	**87.8**	**88.0**	**95.5**	**89.7**
2-Chlorophenol-D4	93951-73-6	0.5	%	**82.2**	**83.1**	**84.6**	**86.8**	**82.8**
2.4.6-Tribromophenol	118-79-6	0.5	%	**77.3**	**78.7**	**76.8**	**73.3**	**63.2**
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.5	%	**85.3**	**93.4**	**91.1**	**88.4**	**77.6**
Anthracene-d10	1719-06-8	0.5	%	**89.8**	**90.3**	**87.3**	**92.0**	**82.7**
4-Terphenyl-d14	1718-51-0	0.5	%	**86.6**	**87.6**	**85.0**	**85.5**	**75.8**
EP080S: TPH(V)/BTEX Surrogates								

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	TP47-0.1-0.2	TP46-0.1-0.2	TP45-0.1-0.2	TP44-1.1-1.2	TP44-0.1-0.2
				Sampling date / time	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00
Compound	CAS Number	LOR	Unit		ES2522273-001	ES2522273-002	ES2522273-003	ES2522273-004	ES2522273-005
					Result	Result	Result	Result	Result
EP080S: TPH(V)/BTEX Surrogates - Continued									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**74.2**	**80.4**	**78.0**	**72.2**	**80.4**
Toluene-D8	2037-26-5	0.2	%		**97.4**	**99.5**	**95.7**	**98.9**	**96.8**
4-Bromofluorobenzene	460-00-4	0.2	%		**116**	**112**	**108**	**111**	**109**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	TP43-0.1-0.2	TP42-0.1-0.2	TP41-0.1-0.2	TP40-0.1-0.2	TP39-0.1-0.2
			Sampling date / time	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00
Compound	CAS Number	LOR	Unit	ES2522273-006	ES2522273-007	ES2522273-008	ES2522273-009	ES2522273-010
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	11.6	11.3	8.4	13.1	17.1
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No	No	No
Asbestos (Trace)	1332-21-4	-	-	No	No	No	No	No
Asbestos Type	1332-21-4	-	--	-	-	-	-	-
Sample weight (dry)	----	0.01	g	52.1	61.2	73.1	60.3	51.2
APPROVED IDENTIFIER:	----	-	--	B.SCHRADER	B.SCHRADER	B.SCHRADER	B.SCHRADER	B.SCHRADER
Synthetic Mineral Fibre	----	-	--	No	No	No	No	No
Organic Fibre	----	-	--	No	No	No	No	No
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	8	6	9	11	10
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	10	8	10	26	18
Copper	7440-50-8	5	mg/kg	12	12	8	10	9
Lead	7439-92-1	5	mg/kg	9	8	10	19	12
Nickel	7440-02-0	2	mg/kg	5	6	2	<2	4
Zinc	7440-66-6	5	mg/kg	34	22	15	5	8
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 - (Lindane)	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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	TP43-0.1-0.2	TP42-0.1-0.2	TP41-0.1-0.2	TP40-0.1-0.2	TP39-0.1-0.2
			Sampling date / time	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00
Compound	CAS Number	LOR	Unit	ES2522273-006	ES2522273-007	ES2522273-008	ES2522273-009	ES2522273-010
				Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued								
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	**0.19**	<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	**0.19**	<0.05	<0.05
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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	TP43-0.1-0.2	TP42-0.1-0.2	TP41-0.1-0.2	TP40-0.1-0.2	TP39-0.1-0.2
			Sampling date / time	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00
Compound	CAS Number	LOR	Unit	ES2522273-006	ES2522273-007	ES2522273-008	ES2522273-009	ES2522273-010
				Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
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**
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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	TP43-0.1-0.2	TP42-0.1-0.2	TP41-0.1-0.2	TP40-0.1-0.2	TP39-0.1-0.2
			Sampling date / time	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00
Compound	CAS Number	LOR	Unit	ES2522273-006	ES2522273-007	ES2522273-008	ES2522273-009	ES2522273-010
				Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued								
>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	%	**72.6**	**121**	**74.5**	**108**	**89.8**
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.05	%	**63.3**	**126**	**64.6**	**85.4**	**71.9**
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.05	%	**77.7**	**116**	**63.8**	**96.2**	**83.7**
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.5	%	**92.4**	**94.9**	**92.8**	**92.7**	**98.8**
2-Chlorophenol-D4	93951-73-6	0.5	%	**86.5**	**89.7**	**87.2**	**83.4**	**91.4**
2.4.6-Tribromophenol	118-79-6	0.5	%	**67.6**	**58.6**	**71.5**	**67.9**	**68.7**
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.5	%	**86.0**	**88.2**	**86.9**	**84.5**	**88.0**
Anthracene-d10	1719-06-8	0.5	%	**90.5**	**91.1**	**90.4**	**87.6**	**90.3**
4-Terphenyl-d14	1718-51-0	0.5	%	**84.0**	**85.9**	**84.1**	**81.3**	**85.1**
EP080S: TPH(V)/BTEX Surrogates								

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	TP43-0.1-0.2	TP42-0.1-0.2	TP41-0.1-0.2	TP40-0.1-0.2	TP39-0.1-0.2
				Sampling date / time	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00
Compound	CAS Number	LOR	Unit		ES2522273-006	ES2522273-007	ES2522273-008	ES2522273-009	ES2522273-010
					Result	Result	Result	Result	Result
EP080S: TPH(V)/BTEX Surrogates - Continued									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**80.3**	**76.4**	**76.6**	**73.3**	**70.4**
Toluene-D8	2037-26-5	0.2	%		**96.3**	**94.2**	**96.5**	**94.0**	**88.8**
4-Bromofluorobenzene	460-00-4	0.2	%		**111**	**123**	**106**	**104**	**99.6**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	TP38-0.1-0.2	TP37-0.1-0.2	TP36-0.1-0.2	TP35-0.1-0.2	TP34-0.1-0.2
			Sampling date / time	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00
Compound	CAS Number	LOR	Unit	ES2522273-011	ES2522273-012	ES2522273-013	ES2522273-014	ES2522273-015
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	19.3	15.4	15.4	12.9	6.6
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No	No	No
Asbestos (Trace)	1332-21-4	-	-	No	No	No	No	No
Asbestos Type	1332-21-4	-	--	-	-	-	-	-
Sample weight (dry)	----	0.01	g	61.4	70.4	62.1	62.1	50.4
APPROVED IDENTIFIER:	----	-	--	B.SCHRADER	B.SCHRADER	B.SCHRADER	B.SCHRADER	B.SCHRADER
Synthetic Mineral Fibre	----	-	--	No	No	No	No	No
Organic Fibre	----	-	--	No	No	No	No	No
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	8	10	<5	<5	8
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	13	20	13	16	6
Copper	7440-50-8	5	mg/kg	11	7	33	14	14
Lead	7439-92-1	5	mg/kg	13	13	37	12	12
Nickel	7440-02-0	2	mg/kg	2	4	8	14	2
Zinc	7440-66-6	5	mg/kg	10	11	57	106	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 - (Lindane)	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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	TP38-0.1-0.2	TP37-0.1-0.2	TP36-0.1-0.2	TP35-0.1-0.2	TP34-0.1-0.2
			Sampling date / time	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00
Compound	CAS Number	LOR	Unit	ES2522273-011	ES2522273-012	ES2522273-013	ES2522273-014	ES2522273-015
				Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued								
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	**0.35**	**0.17**	<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	**0.06**	<0.05	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	**0.11**
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	**0.41**	**0.17**	<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	**0.11**
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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	TP38-0.1-0.2	TP37-0.1-0.2	TP36-0.1-0.2	TP35-0.1-0.2	TP34-0.1-0.2
			Sampling date / time	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00
Compound	CAS Number	LOR	Unit	ES2522273-011	ES2522273-012	ES2522273-013	ES2522273-014	ES2522273-015
				Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
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**
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	**120**	<100	<100

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	TP38-0.1-0.2	TP37-0.1-0.2	TP36-0.1-0.2	TP35-0.1-0.2	TP34-0.1-0.2
			Sampling date / time	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00
Compound	CAS Number	LOR	Unit	ES2522273-011	ES2522273-012	ES2522273-013	ES2522273-014	ES2522273-015
				Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued								
>C34 - C40 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	**120**	<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	%	**95.4**	**100.0**	**89.0**	**99.7**	**101**
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.05	%	**72.2**	**77.2**	**75.2**	**70.3**	**86.1**
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.05	%	**84.1**	**97.5**	**86.9**	**73.0**	**88.9**
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.5	%	**91.5**	**92.1**	**94.4**	**92.9**	**99.0**
2-Chlorophenol-D4	93951-73-6	0.5	%	**84.7**	**84.9**	**87.5**	**87.3**	**91.2**
2.4.6-Tribromophenol	118-79-6	0.5	%	**68.2**	**67.3**	**51.9**	**64.2**	**78.8**
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.5	%	**86.4**	**86.9**	**87.4**	**85.4**	**90.6**
Anthracene-d10	1719-06-8	0.5	%	**88.8**	**89.9**	**91.0**	**91.4**	**95.5**
4-Terphenyl-d14	1718-51-0	0.5	%	**83.7**	**84.4**	**85.3**	**84.1**	**88.1**
EP080S: TPH(V)/BTEX Surrogates								

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	TP38-0.1-0.2	TP37-0.1-0.2	TP36-0.1-0.2	TP35-0.1-0.2	TP34-0.1-0.2
				Sampling date / time	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00
Compound	CAS Number	LOR	Unit		ES2522273-011	ES2522273-012	ES2522273-013	ES2522273-014	ES2522273-015
					Result	Result	Result	Result	Result
EP080S: TPH(V)/BTEX Surrogates - Continued									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**76.1**	**72.0**	**75.8**	**75.8**	**71.8**
Toluene-D8	2037-26-5	0.2	%		**95.7**	**88.1**	**97.4**	**92.8**	**89.1**
4-Bromofluorobenzene	460-00-4	0.2	%		**110**	**95.9**	**103**	**99.4**	**95.4**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	TP33-0.1-0.2	TP26-1.1-1.2	TP26-0.1-0.2	TP31-0.1-0.2	TP30-0.1-0.2
			Sampling date / time	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00
Compound	CAS Number	LOR	Unit	ES2522273-016	ES2522273-017	ES2522273-018	ES2522273-019	ES2522273-020
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	24.7	16.1	13.0	19.1	21.6
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No	No	No
Asbestos (Trace)	1332-21-4	-	-	No	No	No	No	No
Asbestos Type	1332-21-4	-	--	-	-	-	-	-
Sample weight (dry)	----	0.01	g	36.7	75.3	58.9	60.5	71.0
APPROVED IDENTIFIER:	----	-	--	B.SCHRADER	B.SCHRADER	B.SCHRADER	B.SCHRADER	B.SCHRADER
Synthetic Mineral Fibre	----	-	--	No	No	No	No	No
Organic Fibre	----	-	--	No	No	No	No	No
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	<5	<5	6	10	8
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	8	11	7	22	12
Copper	7440-50-8	5	mg/kg	27	<5	11	12	11
Lead	7439-92-1	5	mg/kg	16	6	12	14	14
Nickel	7440-02-0	2	mg/kg	4	3	3	6	2
Zinc	7440-66-6	5	mg/kg	54	6	32	13	8
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 - (Lindane)	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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	TP33-0.1-0.2	TP26-1.1-1.2	TP26-0.1-0.2	TP31-0.1-0.2	TP30-0.1-0.2
			Sampling date / time	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00
Compound	CAS Number	LOR	Unit	ES2522273-016	ES2522273-017	ES2522273-018	ES2522273-019	ES2522273-020
				Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued								
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	**0.07**	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	**0.07**	<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	**0.07**	<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	**0.07**	<0.05	<0.05
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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	TP33-0.1-0.2	TP26-1.1-1.2	TP26-0.1-0.2	TP31-0.1-0.2	TP30-0.1-0.2
				Sampling date / time	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00
Compound	CAS Number	LOR	Unit		ES2522273-016	ES2522273-017	ES2522273-018	ES2522273-019	ES2522273-020
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
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**
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		**230**	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		**180**	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		**410**	<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		**60**	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		**320**	<100	<100	<100	<100

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	TP33-0.1-0.2	TP26-1.1-1.2	TP26-0.1-0.2	TP31-0.1-0.2	TP30-0.1-0.2
			Sampling date / time	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00
Compound	CAS Number	LOR	Unit	ES2522273-016	ES2522273-017	ES2522273-018	ES2522273-019	ES2522273-020
				Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued								
>C34 - C40 Fraction	----	100	mg/kg	**140**	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	**520**	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg	**60**	<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	%	**72.8**	**92.1**	**75.0**	**80.8**	**110**
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.05	%	**59.2**	**75.8**	**56.2**	**75.8**	**110**
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.05	%	**70.5**	**87.7**	**76.4**	**84.7**	**91.2**
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.5	%	**94.3**	**94.0**	**97.1**	**95.2**	**90.8**
2-Chlorophenol-D4	93951-73-6	0.5	%	**88.9**	**88.6**	**88.5**	**87.1**	**81.5**
2.4.6-Tribromophenol	118-79-6	0.5	%	**87.3**	**80.2**	**78.3**	**72.0**	**69.5**
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.5	%	**86.8**	**88.2**	**88.2**	**87.2**	**84.3**
Anthracene-d10	1719-06-8	0.5	%	**90.0**	**93.5**	**92.8**	**92.1**	**88.1**
4-Terphenyl-d14	1718-51-0	0.5	%	**83.7**	**86.8**	**85.5**	**86.0**	**82.7**
EP080S: TPH(V)/BTEX Surrogates								

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	TP33-0.1-0.2	TP26-1.1-1.2	TP26-0.1-0.2	TP31-0.1-0.2	TP30-0.1-0.2
				Sampling date / time	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00
Compound	CAS Number	LOR	Unit		ES2522273-016	ES2522273-017	ES2522273-018	ES2522273-019	ES2522273-020
					Result	Result	Result	Result	Result
EP080S: TPH(V)/BTEX Surrogates - Continued									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**69.8**	**65.9**	**73.3**	**68.5**	**75.2**
Toluene-D8	2037-26-5	0.2	%		**90.2**	**85.2**	**89.1**	**84.9**	**95.4**
4-Bromofluorobenzene	460-00-4	0.2	%		**94.3**	**91.2**	**98.9**	**92.2**	**102**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	TP30-1.1-1.2	TP29-0.1-0.2	TP27-0.1-0.2	TP24-0.1-0.2	TP23-0.1-0.2
			Sampling date / time	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00
Compound	CAS Number	LOR	Unit	ES2522273-021	ES2522273-022	ES2522273-023	ES2522273-024	ES2522273-025
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	12.1	18.5	13.7	8.5	12.9
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No	No	No
Asbestos (Trace)	1332-21-4	-	-	No	No	No	No	No
Asbestos Type	1332-21-4	-	--	-	-	-	-	-
Sample weight (dry)	----	0.01	g	51.7	61.2	59.0	67.8	64.3
APPROVED IDENTIFIER:	----	-	--	B.SCHRADER	B.SCHRADER	B.SCHRADER	B.SCHRADER	B.SCHRADER
Synthetic Mineral Fibre	----	-	--	No	No	No	No	No
Organic Fibre	----	-	--	No	No	No	No	No
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	9	8	8	5	8
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	5	11	11	12	8
Copper	7440-50-8	5	mg/kg	<5	14	12	8	22
Lead	7439-92-1	5	mg/kg	<5	51	19	12	20
Nickel	7440-02-0	2	mg/kg	<2	2	2	4	10
Zinc	7440-66-6	5	mg/kg	<5	9	8	25	138
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 - (Lindane)	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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	TP30-1.1-1.2	TP29-0.1-0.2	TP27-0.1-0.2	TP24-0.1-0.2	TP23-0.1-0.2
				Sampling date / time	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00
Compound	CAS Number	LOR	Unit		ES2522273-021	ES2522273-022	ES2522273-023	ES2522273-024	ES2522273-025
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
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	**0.10**
4.4`-DDE	72-55-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	**0.12**
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	**0.10**
^ **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	**0.12**
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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	TP30-1.1-1.2	TP29-0.1-0.2	TP27-0.1-0.2	TP24-0.1-0.2	TP23-0.1-0.2
			Sampling date / time	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00
Compound	CAS Number	LOR	Unit	ES2522273-021	ES2522273-022	ES2522273-023	ES2522273-024	ES2522273-025
				Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
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**
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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	TP30-1.1-1.2	TP29-0.1-0.2	TP27-0.1-0.2	TP24-0.1-0.2	TP23-0.1-0.2
				Sampling date / time	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00
Compound	CAS Number	LOR	Unit		ES2522273-021	ES2522273-022	ES2522273-023	ES2522273-024	ES2522273-025
					Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
>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	%		**124**	**101**	**78.2**	**96.8**	**100**
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**104**	**83.7**	**68.2**	**97.2**	**98.5**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**120**	**92.7**	**76.0**	**97.6**	**101**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**96.0**	**88.8**	**93.9**	**88.2**	**85.4**
2-Chlorophenol-D4	93951-73-6	0.5	%		**89.9**	**83.0**	**86.2**	**86.6**	**84.3**
2.4.6-Tribromophenol	118-79-6	0.5	%		**71.5**	**65.8**	**65.6**	**73.3**	**77.0**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**88.7**	**83.2**	**87.4**	**93.6**	**93.7**
Anthracene-d10	1719-06-8	0.5	%		**93.3**	**88.9**	**92.2**	**88.3**	**89.3**
4-Terphenyl-d14	1718-51-0	0.5	%		**87.1**	**82.3**	**85.3**	**86.3**	**87.0**
EP080S: TPH(V)/BTEX Surrogates									

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	TP30-1.1-1.2	TP29-0.1-0.2	TP27-0.1-0.2	TP24-0.1-0.2	TP23-0.1-0.2
				Sampling date / time	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00
Compound	CAS Number	LOR	Unit		ES2522273-021	ES2522273-022	ES2522273-023	ES2522273-024	ES2522273-025
					Result	Result	Result	Result	Result
EP080S: TPH(V)/BTEX Surrogates - Continued									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**94.1**	**86.0**	**87.4**	**85.5**	**88.9**
Toluene-D8	2037-26-5	0.2	%		**93.4**	**86.4**	**84.3**	**85.4**	**87.4**
4-Bromofluorobenzene	460-00-4	0.2	%		**102**	**90.7**	**89.1**	**90.5**	**92.4**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	TP22-0.1-0.2	TP22-1.1-1.2	DUP01	Trip Spike 18	Trip Blank
			Sampling date / time	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00	14-Jul-2025 00:00	14-Jul-2025 00:00
Compound	CAS Number	LOR	Unit	ES2522273-026	ES2522273-027	ES2522273-029	ES2522273-031	ES2522273-032
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	9.5	13.2	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	-	-	No	No	----	----	----
Asbestos Type	1332-21-4	-	--	-	-	----	----	----
Sample weight (dry)	----	0.01	g	56.5	52.6	----	----	----
APPROVED IDENTIFIER:	----	-	--	B.SCHRADER	B.SCHRADER	----	----	----
Synthetic Mineral Fibre	----	-	--	No	No	----	----	----
Organic Fibre	----	-	--	No	No	----	----	----
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	<5	34	10	----	----
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	----	----
Chromium	7440-47-3	2	mg/kg	11	11	16	----	----
Copper	7440-50-8	5	mg/kg	15	10	13	----	----
Lead	7439-92-1	5	mg/kg	17	19	12	----	----
Nickel	7440-02-0	2	mg/kg	7	4	<2	----	----
Zinc	7440-66-6	5	mg/kg	55	29	6	----	----
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	----	----	----
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 - (Lindane)	58-89-9	0.05	mg/kg	<0.05	<0.05	----	----	----
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	TP22-0.1-0.2	TP22-1.1-1.2	DUP01	Trip Spike 18	Trip Blank
			Sampling date / time	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00	14-Jul-2025 00:00	14-Jul-2025 00:00
Compound	CAS Number	LOR	Unit	ES2522273-026	ES2522273-027	ES2522273-029	ES2522273-031	ES2522273-032
				Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued								
Heptachlor	76-44-8	0.05	mg/kg	**0.06**	<0.05	----	----	----
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	----	----	----
Heptachlor epoxide	1024-57-3	0.05	mg/kg	**0.99**	**0.48**	----	----	----
^ Total Chlordane (sum)	----	0.05	mg/kg	**1.20**	**0.31**	----	----	----
trans-Chlordane	5103-74-2	0.05	mg/kg	**1.06**	**0.31**	----	----	----
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	----	----	----
cis-Chlordane	5103-71-9	0.05	mg/kg	**0.14**	<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	----	----	----
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	----	----	----
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	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	TP22-0.1-0.2	TP22-1.1-1.2	DUP01	Trip Spike 18	Trip Blank
			Sampling date / time	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00	14-Jul-2025 00:00	14-Jul-2025 00:00
Compound	CAS Number	LOR	Unit	ES2522273-026	ES2522273-027	ES2522273-029	ES2522273-031	ES2522273-032
				Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg	**0.6**	**0.6**	**0.6**	----	----
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	**1.2**	**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	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	TP22-0.1-0.2	TP22-1.1-1.2	DUP01	Trip Spike 18	Trip Blank
			Sampling date / time	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00	14-Jul-2025 00:00	14-Jul-2025 00:00
Compound	CAS Number	LOR	Unit	ES2522273-026	ES2522273-027	ES2522273-029	ES2522273-031	ES2522273-032
				Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued								
>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	----	**6.2**	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	----	**8.0**	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	----	**8.6**	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	----	**3.4**	<0.5
^ Sum of BTEX	----	0.2	mg/kg	<0.2	<0.2	----	**26.2**	<0.2
^ Total Xylenes	----	0.5	mg/kg	<0.5	<0.5	----	**12.0**	<0.5
Naphthalene	91-20-3	1	mg/kg	<1	<1	----	<1	<1
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	**100**	**85.3**	----	----	----
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.05	%	**98.4**	**83.1**	----	----	----
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.05	%	**100**	**83.3**	----	----	----
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.5	%	**90.9**	**88.4**	**85.3**	----	----
2-Chlorophenol-D4	93951-73-6	0.5	%	**88.4**	**85.2**	**84.3**	----	----
2.4.6-Tribromophenol	118-79-6	0.5	%	**75.7**	**78.7**	**75.3**	----	----
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.5	%	**94.8**	**94.7**	**91.7**	----	----
Anthracene-d10	1719-06-8	0.5	%	**89.5**	**90.4**	**86.9**	----	----
4-Terphenyl-d14	1718-51-0	0.5	%	**87.2**	**87.1**	**83.3**	----	----
EP080S: TPH(V)/BTEX Surrogates								

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	TP22-0.1-0.2	TP22-1.1-1.2	DUP01	Trip Spike 18	Trip Blank
				Sampling date / time	21-Jul-2025 00:00	21-Jul-2025 00:00	21-Jul-2025 00:00	14-Jul-2025 00:00	14-Jul-2025 00:00
Compound	CAS Number	LOR	Unit		ES2522273-026	ES2522273-027	ES2522273-029	ES2522273-031	ES2522273-032
					Result	Result	Result	Result	Result
EP080S: TPH(V)/BTEX Surrogates - Continued									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**91.3**	**93.4**	**----**	**90.9**	**96.2**
Toluene-D8	2037-26-5	0.2	%		**88.9**	**88.8**	**----**	**90.1**	**92.1**
4-Bromofluorobenzene	460-00-4	0.2	%		**92.1**	**95.4**	**----**	**94.2**	**95.0**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	Trip Spike Control 18	----	----	----	----
			Sampling date / time	14-Jul-2025 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit	ES2522273-033	--------	--------	--------	--------
				Result	----	----	----	----
EP080: BTEXN								
Benzene	71-43-2	0.2	mg/kg	<0.2	----	----	----	----
Toluene	108-88-3	0.5	mg/kg	**6.8**	----	----	----	----
Ethylbenzene	100-41-4	0.5	mg/kg	**8.9**	----	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	**9.6**	----	----	----	----
ortho-Xylene	95-47-6	0.5	mg/kg	**3.8**	----	----	----	----
^ **Sum of BTEX**	----	0.2	mg/kg	**29.1**	----	----	----	----
^ **Total Xylenes**	----	0.5	mg/kg	**13.4**	----	----	----	----
Naphthalene	91-20-3	1	mg/kg	<1	----	----	----	----
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.2	%	**77.0**	----	----	----	----
Toluene-D8	2037-26-5	0.2	%	**88.0**	----	----	----	----
4-Bromofluorobenzene	460-00-4	0.2	%	**90.5**	----	----	----	----

Analytical Results

Sub-Matrix: SOLID (Matrix: SOLID)			Sample ID	TP46-FC	----	----	----	----
			Sampling date / time	21-Jul-2025 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit	ES2522273-028	--------	--------	--------	--------
				Result	----	----	----	----
EA200: AS 4964 - 2004 Identification of Asbestos in bulk samples								
Asbestos Detected	1332-21-4	0.1	g/kg	**Yes**	----	----	----	----
Asbestos Type	1332-21-4	-	--	**Ch**	----	----	----	----
Asbestos (Trace)	1332-21-4	-	-	**N/A**	----	----	----	----
Sample weight (dry)	----	0.01	g	**12.5**	----	----	----	----
Synthetic Mineral Fibre	----	-	-	**No**	----	----	----	----
Organic Fibre	----	-	-	**No**	----	----	----	----
APPROVED IDENTIFIER:	----	-	--	**J. WILLIAMS**	----	----	----	----

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	TP47-0.1-0.2 - 21-Jul-2025 00:00	A soil sample.
EA200: Description	TP46-0.1-0.2 - 21-Jul-2025 00:00	A soil sample.
EA200: Description	TP45-0.1-0.2 - 21-Jul-2025 00:00	A soil sample.
EA200: Description	TP44-1.1-1.2 - 21-Jul-2025 00:00	A soil sample.
EA200: Description	TP44-0.1-0.2 - 21-Jul-2025 00:00	A soil sample.
EA200: Description	TP43-0.1-0.2 - 21-Jul-2025 00:00	A soil sample.
EA200: Description	TP42-0.1-0.2 - 21-Jul-2025 00:00	A soil sample.
EA200: Description	TP41-0.1-0.2 - 21-Jul-2025 00:00	A soil sample.
EA200: Description	TP40-0.1-0.2 - 21-Jul-2025 00:00	A soil sample.
EA200: Description	TP39-0.1-0.2 - 21-Jul-2025 00:00	A soil sample.
EA200: Description	TP38-0.1-0.2 - 21-Jul-2025 00:00	A soil sample.
EA200: Description	TP37-0.1-0.2 - 21-Jul-2025 00:00	A soil sample.
EA200: Description	TP36-0.1-0.2 - 21-Jul-2025 00:00	A soil sample.
EA200: Description	TP35-0.1-0.2 - 21-Jul-2025 00:00	A soil sample.
EA200: Description	TP34-0.1-0.2 - 21-Jul-2025 00:00	A soil sample.
EA200: Description	TP33-0.1-0.2 - 21-Jul-2025 00:00	A soil sample.
EA200: Description	TP26-1.1-1.2 - 21-Jul-2025 00:00	A soil sample.
EA200: Description	TP26-0.1-0.2 - 21-Jul-2025 00:00	A soil sample.
EA200: Description	TP31-0.1-0.2 - 21-Jul-2025 00:00	A soil sample.
EA200: Description	TP30-0.1-0.2 - 21-Jul-2025 00:00	A soil sample.
EA200: Description	TP30-1.1-1.2 - 21-Jul-2025 00:00	A soil sample.
EA200: Description	TP29-0.1-0.2 - 21-Jul-2025 00:00	A soil sample.
EA200: Description	TP27-0.1-0.2 - 21-Jul-2025 00:00	A soil sample.
EA200: Description	TP24-0.1-0.2 - 21-Jul-2025 00:00	A soil sample.
EA200: Description	TP23-0.1-0.2 - 21-Jul-2025 00:00	A soil sample.
EA200: Description	TP22-0.1-0.2 - 21-Jul-2025 00:00	A soil sample.
EA200: Description	TP22-1.1-1.2 - 21-Jul-2025 00:00	A soil sample.

Sub-Matrix: **SOLID**

Method: Compound	Sample ID - Sampling date / time	Analytical Results
EA200: AS 4964 - 2004 Identification of Asbestos in bulk samples		
EA200: Description	TP46-FC - 21-Jul-2025 00:00	One piece of asbestos cement sheeting approximately 60x30x5mm.

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
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
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	63	125
Toluene-D8	2037-26-5	67	124
4-Bromofluorobenzene	460-00-4	66	131

Inter-Laboratory Testing

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

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

(SOLID) EA200: AS 4964 - 2004 Identification of Asbestos in bulk samples

Environmental Group Australia Pty Ltd
36E Fitzroy St
Marrickville
NSW 2204

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: **Max Cunningham**

Report **1248678-S**
Project name WSU MILPERRA - SCA POST DEMO
Project ID 2300
Received Date Jul 25, 2025

Client Sample ID			**DUP01A**
Sample Matrix			**Soil**
Eurofins Sample No.			**S25-JI0068869**
Date Sampled			**Jul 21, 2025**
Test/Reference	LOR	Unit	
Polycyclic Aromatic Hydrocarbons			
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2
Acenaphthene	0.5	mg/kg	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5
Anthracene	0.5	mg/kg	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5
Chrysene	0.5	mg/kg	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5
Fluorene	0.5	mg/kg	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5
Naphthalene	0.5	mg/kg	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5
Pyrene	0.5	mg/kg	< 0.5
Total PAH*	0.5	mg/kg	< 0.5
2-Fluorobiphenyl (surr.)	1	%	98
p-Terphenyl-d14 (surr.)	1	%	
Heavy Metals			
Arsenic	2	mg/kg	8.0
Cadmium	0.4	mg/kg	< 0.4
Chromium	5	mg/kg	16
Copper	5	mg/kg	18
Lead	5	mg/kg	14
Mercury	0.1	mg/kg	< 0.1
Nickel	5	mg/kg	7.0
Zinc	5	mg/kg	27
Sample Properties			
% Moisture	1	%	14

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
Polycyclic Aromatic Hydrocarbons	Sydney	Jul 25, 2025	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Metals M8	Sydney	Jul 25, 2025	28 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
% Moisture	Sydney	Jul 25, 2025	14 Days
- Method: LTM-GEN-7080 Moisture			

eurofins

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Eurofins Environment Testing Australia Pty Ltd
ABN: 50 005 085 521

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6 Monterey Road	19/8 Lewalan Street	179 Magowar Road	Unit 1,2 Dacre Street	1/21 Smallwood Place	1/2 Frost Drive
Dandenong South	Grovedale	Girraween	Mitchell	Murarrie	Mayfield West
VIC 3175	VIC 3216	NSW 2145	ACT 2911	QLD 4172	NSW 2304
+61 3 8564 5000	+61 3 8564 5000	+61 2 9900 8400	+61 2 6113 8091	+61 7 3902 4600	+61 2 4968 8448
NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261
Site# 1254	Site# 25403	Site# 18217	Site# 25466	Site# 20794 & 2780	Site# 25079

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Site# 2370 & 2554

Eurofins Environment Testing NZ Ltd
NZBN: 9429046024954

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Company Name: Environmental Group Australia Pty Ltd
Address: 36E Fitzroy St
Marrickville
NSW 2204

Project Name: WSU MILPERRA - SCA POST DEMO
Project ID: 2300

Order No.:
Report #: 1248678
Phone: 0432 660 506
Fax:

Received: Jul 25, 2025 1:20 PM
Due: Aug 1, 2025
Priority: 5 Day
Contact Name: Max Cunningham

Eurofins Analytical Services Manager : Adam Bateup

Sample Detail						Polycyclic Aromatic Hydrocarbons	Metals M8	Moisture Set
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X
External Laboratory								
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**			
1	DUP01A	Jul 21, 2025		Soil	S25-Jl0068869	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 follow guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013. They are included in this QC report where applicable. Additional QC data may be available on request.
2. Unless otherwise stated, all soil/sediment/solid results are reported on a dry weight basis.
3. Unless otherwise stated, all biota/food results are reported on a wet weight basis on the edible portion.
4. For CEC results where the sample's origin is unknown or environmentally contaminated, the results should be used advisedly.
5. Actual LORs are matrix dependent. Quoted LORs may be raised where sample extracts are diluted due to interferences.
6. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds where annotated.
7. SVOC analysis on waters is performed on homogenised, unfiltered samples unless noted otherwise.
8. Samples were analysed on an 'as received' basis.
9. Information identified in this report with **blue** colour indicates data provided by customers that may have an impact on the results.
10. This report replaces any interim results previously issued.

Holding Times

Please refer to the '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 before sample receipt deadlines as stated on the SRA.

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

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

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

Units

mg/kg: milligrams per kilogram	**mg/L:** milligrams per litre	**ppm:** parts per million
µg/L: micrograms per litre	**ppb:** parts per billion	**%:** Percentage
org/100 mL: Organisms per 100 millilitres	**NTU:** Nephelometric Turbidity Units	**MPN/100 mL:** Most Probable Number of organisms per 100 millilitres
CFU: Colony Forming Unit	**Colour:** Pt-Co Units (CU)	

Terms

APHA	American Public Health Association
CEC	Cation Exchange Capacity
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 moisture has been determined on a solid sample, the result is expressed on a dry weight 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 represents 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 similar compound to the analyte target is reported as percentage recovery. See below for acceptance criteria.
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 6.0
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 only be used as a guide 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. SVOCs recoveries 20 – 150%, VOC recoveries 50 – 150%

PFAS field samples containing surrogate recoveries above the QC limit designated in QSM 6.0, where no positive PFAS results have been reported or reviewed, and no data was affected.

QC Data General Comments

1. Where a result is reported as 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 are 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							
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							
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							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	104			70-130	Pass	
Acenaphthylene	%	109			70-130	Pass	
Anthracene	%	108			70-130	Pass	
Benz(a)anthracene	%	93			70-130	Pass	
Benzo(a)pyrene	%	100			70-130	Pass	
Benzo(b&j)fluoranthene	%	99			70-130	Pass	
Benzo(g.h.i)perylene	%	75			70-130	Pass	
Benzo(k)fluoranthene	%	107			70-130	Pass	
Chrysene	%	104			70-130	Pass	
Dibenz(a.h)anthracene	%	91			70-130	Pass	
Fluoranthene	%	98			70-130	Pass	
Fluorene	%	116			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	85			70-130	Pass	
Naphthalene	%	102			70-130	Pass	
Phenanthrene	%	103			70-130	Pass	
Pyrene	%	97			70-130	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	91			80-120	Pass	
Cadmium	%	108			80-120	Pass	
Chromium	%	111			80-120	Pass	
Copper	%	112			80-120	Pass	

Test			Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Lead			%	109			80-120	Pass	
Mercury			%	111			80-120	Pass	
Nickel			%	112			80-120	Pass	
Zinc			%	113			80-120	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	S25-Jl0069730	NCP	%	84			70-130	Pass	
Anthracene	S25-Jl0069730	NCP	%	109			70-130	Pass	
Benzo(a)pyrene	S25-Jl0069730	NCP	%	72			70-130	Pass	
Benzo(b&j)fluoranthene	S25-Jl0069730	NCP	%	71			70-130	Pass	
Benzo(g.h.i)perylene	S25-Jl0069730	NCP	%	79			70-130	Pass	
Benzo(k)fluoranthene	S25-Jl0069730	NCP	%	89			70-130	Pass	
Chrysene	S25-Jl0069730	NCP	%	101			70-130	Pass	
Dibenz(a.h)anthracene	S25-Jl0069730	NCP	%	80			70-130	Pass	
Fluoranthene	S25-Jl0069730	NCP	%	74			70-130	Pass	
Indeno(1.2.3-cd)pyrene	S25-Jl0069730	NCP	%	74			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	S25-Jl0070074	NCP	%	75			75-125	Pass	
Cadmium	S25-Jl0070074	NCP	%	102			75-125	Pass	
Chromium	S25-Jl0070074	NCP	%	432			75-125	Fail	Q08
Copper	S25-Jl0070074	NCP	%	98			75-125	Pass	
Lead	S25-Jl0070074	NCP	%	87			75-125	Pass	
Mercury	S25-Jl0070074	NCP	%	106			75-125	Pass	
Nickel	S25-Jl0070074	NCP	%	101			75-125	Pass	
Zinc	S25-Jl0070074	NCP	%	110			75-125	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	S25-Jl0073257	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	S25-Jl0073257	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	S25-Jl0073257	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	S25-Jl0073257	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	S25-Jl0073257	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&j)fluoranthene	S25-Jl0073257	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	S25-Jl0073257	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	S25-Jl0073257	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	S25-Jl0073257	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	S25-Jl0073257	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	S25-Jl0073257	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	S25-Jl0073257	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	S25-Jl0073257	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	S25-Jl0073257	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	S25-Jl0073257	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	S25-Jl0073257	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	S25-Jl0067352	NCP	mg/kg	8.4	8.2	3.0	30%	Pass	
Cadmium	S25-Jl0067352	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	S25-Jl0067352	NCP	mg/kg	16	15	5.0	30%	Pass	
Copper	S25-Jl0067352	NCP	mg/kg	18	18	1.0	30%	Pass	
Lead	S25-Jl0067352	NCP	mg/kg	12	12	3.0	30%	Pass	

Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Mercury	S25-Jl0067352	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Nickel	S25-Jl0067352	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
Zinc	S25-Jl0067352	NCP	mg/kg	13	12	10	30%	Pass	
Duplicate									
Sample Properties				Result 1	Result 2	RPD			
% Moisture	S25-Jl0068755	NCP	%	8.2	8.8	7.0	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
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.

Authorised by:

Adam Bateup	Analytical Services Manager
Mickael Ros	Senior Analyst-Metal
Roopesh Rangarajan	Senior Analyst-Organic
Ryan Phillips	Senior Analyst-Sample Properties



Glenn Jackson
Managing Director

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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1/4

RECORD

ABN 50 005 085 521

☑ Sydney Laboratory — Unit F3 Bld.F, 16 Mars Rd, Lane Cove West, NSW 2066 — 02 9900 8400 — EnviroSampleNSW@eurofins.com

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

☐ Melbourne Laboratory — 2 Kingston Town Close, Oakleigh, VIC 3166 — 03 8564 5000 — EnviroSampleVic@eurofins.com

Company	Sydney Environmental Group	Project №	2300	Project Manager	Mitch Kirby
Address	U63, 45 Huntley Street Alexandria NSW	Project Name	WSU Milperra Campus SCA	EDD Format (ESdat, EQuIS, Custom)	
Contact Name	Lachlan Mulhearn			Sampler(s)	LM & LL
Phone №	1300 884 164			Handed over by	LM & LL
Special Directions				Primary Email	enviro@sydneyenvironmental.com.au
Purchase Order				Secondary Email	Mitch@ "Lachlan@ "Lawrence@
Quote ID №					

Analyses (Note: Where metals are required, please specify "Total" or "Filtered"). SUITE code must be used to advise SUITE analysis.

№	Client Sample ID	Sampled Date (dd/mm/yy)	Matrix (Solid (S) Water (W))	SEG Contam Suite 1 (TRH, BTEX, PAH, Metals, Asbestos ID)	SEG Contam Suite 2 (TRH, BTEX, PAH, Metals, OCP, PCB, Asbestos ID)	SEG Contam Suite 3 (TRH, BTEX, PAH, Metals, OCP, OPP, PCB, Asbestos ID)	SEG ENM Suite 1 (TRH, BTEX, PAH, Metals, pH, EC, Asbestos ID)	Salinity Assessment Suite (L2 Aggresivity Suite, ESP %)	Asbestos ID AS4964 (0.01%)	Asbestos ID NEPM & WA (0.001%)	B7 Suite (TRH, BTEX, PAH, Metals)	B13 Suite (OCP, PCB)	Containers: 1L Plastic	250mL Plastic	125mL Plastic	200mL Amber Glass	40mL VOA vial	500mL PFAS Bottle	Jar (Glass or HDPE)	Other (Asbestos AS4964, WA Guidelines)	Sample Comments / Dangerous Goods Hazard Warning
1	AECO3-TP29-0.2-0.3	10/1/24	S							X											
2	" - TP30-0.2-0.3																				
3	" - TP32-0.2-0.3																				
4	" - TP33-0.2-0.3																				
5	" - TP34-0.2-0.3																				
6	" - TP35-0.2-0.3																				
7	" - TP39-0.2-0.3																				
8	" - TP40-0.2-0.3																				
9	" - TP41-0.2-0.3																				
10	" - TP42-0.2-0.3																				
11	" - TP43-0.2-0.3																				
12	" - TP44-0.2-0.3																				
13	" - TP60-0.2-0.3																				
14	" - TP61-0.2-0.3																				
15	" - TP62-0.2-0.3																				
16	" - TP63-0.2-0.3																				
17	" - TP64-0.2-0.3																				
18	" - TP57-0.2-0.3																				
19	" - TP58-0.2-0.3																				
20	" - TP66-0.2-0.3	V																			
	Total Counts								20												

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

☐ Overnight ☐ Same Day ☐ 1 Day ☐ 2 Day ☑ 3 Day ☐ 5 Day ☐ Other (

Method of Shipment	☑ Courier (#)	☐ Hand Delivered	☐ Postal	Name	Lachlan Mulhearn	Signature		Date	11/01/24	Time	16:30
Eurofins | mgt Laboratory Use Only	Received By	Ribom AJ	SYD | BNE | MEL | PER | ADL |	Signature		Date	11/1	Time	5:48	Temperature	N/A
	Received By	Smaydi	SYD | BNE | MEL | PER | ADL |	Signature		Date		Time	PM	Report №	

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

Eurofins Environment Testing Australia Pty Ltd trading as Eurofins | mgt

Note: Metals = As, Cd, Cr, Cu, Hg, Ni, Pb, and Zn), TRH = Total Recoverable Hydrocarbons, PAH = Polycyclic Aromatic Hydrocarbons, PCB = Polychlorinated Biphenyls, BTEX = Benzene, Toluene, Ethylbenzene, and Xylene

1058859

2/4

RECORD

ABN 50 005 085 521

Sydney Laboratory
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02 9900 8400 EnviroSampleNSW@eurofins.com

Brisbane Laboratory
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07 3902 4600 EnviroSampleQLD@eurofins.com

Melbourne Laboratory
2 Kingston Town Close, Oakleigh VIC 3166
03 8564 5000 EnviroSampleVic@eurofins.com

Company	Sydney Environmental Group	Project №	2300	Project Manager	MK
Address	U63, 45 Huntley Street Alexandria NSW	Project Name	WSH Milperra Campus SCA	EDD Format (ESdat, EQuIS, Custom)	
Contact Name	Lachlan Mulhearn			Sampler(s)	LM & LL
Phone №	1300 884 164			Handed over by	LM & LL
Special Directions				Primary Email	enviro@sydneyenvironmental.com.au
Purchase Order				Secondary Email	"Mitch@... Lachlan@... "Lawrence@...
Quote ID №					

Analyses (Note: Where metals are required, please specify "Total" or "Dissolved" | Note: Hold this sample for analysis: SUITE ###)

№	Client Sample ID	Sampled Date (dd/mm/yy)	Matrix (Solid (S) Water (W))	SEG Contam Suite 1 (TRH, BTEX, PAH, Metals, Asbestos ID)	SEG Contam Suite 2 (TRH, BTEX, PAH, Metals, OCP, PCB, Asbestos ID)	SEG Contam Suite 3 (TRH, BTEX, PAH, Metals, OCP, OPP, PCB, Asbestos ID)	SEG ENM Suite 1 (TRH, BTEX, PAH, Metals, pH, EC, Asbestos ID)	Salinity Assessment Suite (L2 Aggresivity Suite, ESP %)	Asbestos ID AS4964 (0.01%)	Asbestos ID NEPM & WA (0.001%)	B7 Suite (TRH, BTEX, PAH, Metals)	B13 Suite (OCP, PCB)	HOLD
1	AECO3-TP02-0.2-0.3	9/10/24	S							X			
2	" -TP03-0.2-0.3												
3	" -TP04-0.2-0.3												
4	" -TP05-0.2-0.3												
5	" -TP06-0.2-0.3												
6	" -TP06-1.0-1.2												X
7	" -TP07-0.2-0.3									X			
8	" -TP08-0.2-0.3												
9	" -TP09-0.2-0.3												
10	" -TP10-0.2-0.3												
11	" -TP12-0.2-0.3												
12	" -TP18-0.2-0.3												
13	" -TP19-0.2-0.3												
14	" -TP20-0.2-0.3												
15	" -TP21-0.2-0.3												
16	" -TP22-0.2-0.3												
17	" -TP23-0.2-0.3												
18	" -TP24-0.2-0.3												
19	" -TP27-0.2-0.3												
20	" -TP28-0.2-0.3												
	Total Counts								19	1			

Containers: 1L Plastic | 250mL Plastic | 125mL Plastic | 200mL Amber Glass | 40mL VOA vial | 500mL PFAS Bottle | Jar (Glass or HDPE) | Other (Asbestos AS4964, WA Guidelines)

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

- ☐ Overnight ☐ Same Day
- ☐ 1 Day ☐ 2 Day
- ☒ 3 Day ☐ 5 Day
- ☐ Other (

Sample Comments / Dangerous Goods Hazard Warning

Method of Shipment	☐ Courier (#) ☐ Hand Delivered	☐ Postal	Name	Lachlan Mulhearn	Signature		Date	11/1/24	Time	16:30
Eurofins | mgt Laboratory Use Only	Received By	SYD | BNE | MEL | PER | ADL |	Signature		Date		Time		Temperature	
	Received By	SYD | BNE | MEL | PER | ADL |	Signature		Date		Time		Report №	

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

Eurofins Environment Testing Australia Pty Ltd trading as Eurofins | mgt

Note: Metals = As, Cd, Cr, Cu, Hg, Ni, Pb, and Zn), TRH = Total Recoverable Hydrocarbons, PAH = Polycyclic Aromatic Hydrocarbons, PCB = Polychlorinated Biphenyls, BTEX = Benzene, Toluene, Ethylbenzene, and Xylene

3/9

RECORD

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

☐ Brisbane Laboratory
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07 3902 4600 EnviroSampleQLD@eurofins.com

☐ Melbourne Laboratory
2 Kingston Town Close, Oakleigh, VIC 3166
03 8564 5000 EnviroSampleVic@eurofins.com

Company	Sydney Environmental Group	Project №	2300	Project Manager	Mitchell Kirby
Address	U63, 45 Huntley Street Alexandria NSW	Project Name	WSU Milperra Campus SCA	EDD Format (ESdat, EQuIS, Custom)	
Contact Name	Lawrence			Sampler(s)	Lawrence
Phone №	1300 884 164			Handed over by	
Special Directions				Primary Email	enviro@sydneyenvironmental.com.au
Purchase Order				Secondary Email	mitchell@ lawrence@ lachlan@
Quote ID №					

Analyses (Tick which suites to analyse, please specify "Filtered" or "Filtered" SUITE (please indicate in Sample Comments section below))

№	Client Sample ID	Sampled Date (dd/mm/yy)	Matrix (Solid (S) Water (W))	SEG Contam Suite 1 (TRH, BTEX, PAH, Metals, Asbestos ID)	SEG Contam Suite 2 (TRH, BTEX, PAH, Metals, OCP, PCB, Asbestos ID)	SEG Contam Suite 3 (TRH, BTEX, PAH, Metals, OCP, OPP, PCB, Asbestos ID)	SEG ENM Suite 1 (TRH, BTEX, PAH, Metals, pH, EC, Asbestos ID)	Salinity Assessment Suite (L2 Aggresivity Suite, ESP %)	Asbestos ID AS4964 (0.01%)	Asbestos ID NEPM & WA (0.001%)	B7 Suite (TRH, BTEX, PAH, Metals)	B13 Suite (OCP, PCB)
1	AEC03-TP67-0.2-0.3	10/1/24	S							X		
2	AEC03-TP68-0.2-0.3											
3	AEC03-TP70-0.2-0.3											
4	AEC03-TP71-0.2-0.3											
5	AEC03-TP72-0.2-0.3											
6	AEC03-TP73-0.2-0.3											
7	AEC03-TP75-0.2-0.3											
8	AEC03-TP76-0.2-0.3	11/1/24										
9	AEC03-TP77-0.2-0.3											
10	AEC03-TP78-0.2-0.3											
11	AEC03-TP79-0.2-0.3											
12	AEC03-TP80-0.2-0.3											
13	AEC03-TP84-0.2-0.3											
14												
15												
16												
17												
18												
19												
20												
	Total Counts											

Containers: 1L Plastic | 250mL Plastic | 125mL Amber Glass | 200mL VOA Vial | 40mL VOA Vial | 500mL PFAS Bottle | Jar (Glass or HDPE) | Other (Asbestos AS 4964 (Geotubes))

Turnaround Time (TAT) Requirements (Default will be 5 days if not Ticked)
☐ Overnight ☐ Same Day
☐ 1 Day ☐ 2 Day
☐ 3 Day ☐ 5 Day
☐ Other (

Sample Comments / Dangerous Goods Hazard Warning

Method of Shipment	☐ Courier ( ) ☐ Hand Delivered	☐ Postal	Name	Lawrence	Signature		Date	11/1/24	Time		
Eurofins | mgt Laboratory Use Only	Received By	Bibam AJ	SYD | BNE | MEL | PER | ADL |		Signature		Date	11/1	Time	5:48	Temperature N/A
	Received By	Smaggi	SYD | BNE | MEL | PER | ADL |		Signature		Date		Time	pm	Report №

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

Eurofins Environment Testing Australia Pty Ltd trading as Eurofins | mgt

Note: Metals = As, Cd, Cr, Cu, Hg, Ni, Pb, and Zn), TRH = Total Recoverable Hydrocarbons, PAH = Polycyclic Aromatic Hydrocarbons, PCB = Polychlorinated Biphenyls, BTEX = Benzene, Toluene, Ethylbenzene, and Xylene

Q4

RECORD

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

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

Melbourne Laboratory
2 Kingston Town Close, Oakleigh VIC 3166
03 8564 5000 EnviroSampleVic@eurofins.com

Company	Sydney Environmental Group	Project №	2300	Project Manager	Mitchell Kirby
Address	U63, 45 Huntley Street Alexandria NSW	Project Name	WSU Milperra Campus SCA	EDD Format (ESdat, EQuIS, Custom)	
Contact Name	Lawrence				
Phone №	1300 884 164				
Special Directions					
Purchase Order					
Quote ID №					

Sampler(s)	Lawrence
Hande Loverby	Lawrence
Primary Email	enviro@sydneyenvironmental.com.au
Secondary Email	mitchell@ lawrence@ lachlan@

Analyses (Note: Where metals are to be analysed, please specify "Total" or "Filtered". Suite name must be used to avoid ambiguity.)

№	Client Sample ID	Sampled Date (dd/mm/yy)	Matrix (Solid (S) Water (W))	SEG Contam Suite 1 (TRH, BTEX, PAH, Metals, Asbestos ID)	SEG Contam Suite 2 (TRH, BTEX, PAH, Metals, OCP, PCB, Asbestos ID)	SEG Contam Suite 3 (TRH, BTEX, PAH, Metals, OCP, OPP, PCB, Asbestos ID)	SEG ENM Suite 1 (TRH, BTEX, PAH, Metals, pH, EC, Asbestos ID)	Salinity Assessment Suite (L2 Aggressivity Suite, ESP %)	Asbestos ID AS4964 (0.01%)	Asbestos ID NEPM & WA (0.001%)	B7 Suite (TRH, BTEX, PAH, Metals)	B13 Suite (OCP, PCB)
1	AEC01-TP17-0.2-0.3	11/1/24	S							X		
2	AEC01-TP18-0.2-0.3											
3	AEC01-TP21-0.2-0.3											
4	AEC01-TP22-0.2-0.3											
5	AEC02-TP01-0.2-0.3											
6	AEC02-TP02-0.2-0.3											
7	AEC02-TP03-0.2-0.3											
8	AEC02-TP04-0.2-0.3											
9	AEC02-TP05-0.2-0.3											
10	AEC02-TP06-0.2-0.3											
11	AEC02-TP07-0.2-0.3											
12	AEC02-TP08-0.2-0.3											
13	AEC02-TP09-0.2-0.3											
14	AEC02-TP10-0.2-0.3											
15	AEC02-TP11-0.2-0.3											
16	AEC02-TP12-0.2-0.3											
17	AEC02-TP14-0.2-0.3											
18	AEC02-TP15-0.2-0.3											
19	AEC02-TP16-0.2-0.3	✓	✓							✓		
20												
	Total Counts											

Containers

1L Plastic	250mL Plastic	125mL Plastic	200mL Amber Glass	40mL VOA vial	500mL PFAS Bottle	Jar (Glass or HDPE)	Other (Please list & specify WAC/Container)	Sample Comments / Dangerous Goods Hazard Warning

Turnaround Time (TAT) Requirements (Default will be 5 days if not defined)

☐ Overnight ☐ Same Day
☐ 1 Day ☐ 2 Day
☐ 3 Day ☐ 5 Day
☐ Other (

Method of Shipment	☐ Courier (#)	☐ Hand Delivered	☐ Postal	Name	Lawrence	Signature		Date	11/1/24	Time
Eurofins | mgt Laboratory Use Only	Received By	Bikram Al	SYD | BNE | MEL | PER | ADL	Signature		Date	11/1	Time	5:18	Temperature
	Received By	Sanyadi	SYD | BNE | MEL | PER | ADL	Signature		Date		Time	pm	Report №

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

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Note: Metals = As, Cd, Cr, Cu, Hg, Ni, Pb, and Zn), TRH = Total Recoverable Hydrocarbons, PAH = Polycyclic Aromatic Hydrocarbons, PCB = Polychlorinated Biphenyls, BTEX = Benzene, Toluene, Ethylbenzene, and Xylene

RECORD

ABN 50 005 085 521

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

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

☐

☐ Melbourne Laboratory
2 Kingston Town Close, Oakleigh, VIC 3166
03 8564 5000 EnviroSampleVic@eurofins.com

Company	Sydney Environmental Group	Project №	2300	Project Manager	Mitch Kirby
Address	U63, 45 Huntley Street Alexandria NSW	Project Name	WSU Milperra Campus SCA	EDD Format (ESdat, EQuIS, Custom)	
Contact Name	Lachlan Mulhearn				
Phone №	1300 884 164				
Special Directions					
Purchase Order					
Quote ID №					

Sampler(s)	LM & LL
Handed over by	LM & LL
Primary Email	enviro@sydneyenvironmental.com.au
Secondary Email	"Lachlan@... "Mitch@... "Lawrence@...

Analyses (Note: where results are requested please specify 'Total' or 'Filtered'.) SUITE add's must be used to attract SUITE pricing.

Containers: 1L Plastic | 250mL Plastic | 125mL Plastic | 200mL Amber Glass | 40mL VOA Vial | 500mL PFAS Bottle | Jar (Glass or HDPE) | Other (Asbestos AS4964, WA Guidelines)

Turnaround Time (TAT) Requirements (Default will be 5 days if not stated)
☐ Overnight ☐ Same Day
☐ 1 Day ☐ 2 Day
☒ 3 Day ☐ 5 Day
☐ Other (

№	Client Sample ID	Sampled Date (dd/mm/yy)	Matrix (Solid (S) Water (W))	SEG Contam Suite 1 (TRH, BTEX, PAH, Metals, Asbestos ID)	SEG Contam Suite 2 (TRH, BTEX, PAH, Metals, OCP, PCB, Asbestos ID)	SEG Contam Suite 3 (TRH, BTEX, PAH, Metals, OCP, OPP, PCB, Asbestos ID)	SEG ENM Suite 1 (TRH, BTEX, PAH, Metals, pH, EC, Asbestos ID)	Salinity Assessment Suite (L2 Aggressivity Suite, ESP %)	Asbestos ID AS4964 (0.01%)	Asbestos ID NEPM & WA (0.001%)	B7 Suite (TRH, BTEX, PAH, Metals)	B13 Suite (OCP, PCB)	Sample Comments / Dangerous Goods Hazard Warning
1	AECOL-TP13-0.2-0.3									X			
2	" - TP17-0.2-0.3												
3	" - TP18-0.2-0.3												
4	" - TP19-0.2-0.3												
5	" - TP20-0.2-0.3												
6	" - TP21-0.2-0.3												
7	" - TP22-0.2-0.3												
8	" - TP23-0.2-0.3												
9	" - TP24-0.2-0.3												
10	" - TP25-0.2-0.3												
11	" - TP26-0.2-0.3												
12	" - TP27-0.2-0.3												
13	" - TP28-0.2-0.3												
14	" - TP28-1.1-1.2												
15	" - TP29-0.2-0.3												
16	" - TP29-1.2-1.3												
17	" - TP30-0.2-0.3												
18	" - TP30-1.1-1.2												
19	" - TP31-0.2-0.3												
20	" - TP32-0.2-0.3												
	Total Counts									20			

Method of Shipment	☐ Courier (#) ☐ Hand Delivered ☐ Postal	Name	Lachlan Mulhearn	Signature		Date	12/1/24
Eurofins | mgt Laboratory Use Only	Received By	SYD | BNE | MEL | PER | ADL |		Signature		Date	
	Received By	SYD | BNE | MEL | PER | ADL |		Signature		Date	

Time	17:00	Temperature	21.4
Time		Report №	
Time			

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

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Note: Metals = As, Cd, Cr, Cu, Hg, Ni, Pb, and Zn), TRH = Total Recoverable Hydrocarbons, PAH = Polycyclic Aromatic Hydrocarbons, PCB = Polychlorinated Biphenyls, BTEX = Benzene, Toluene, Ethylbenzene, and Xylene

10594273

2/3

RECORD

ABN 50 005 085 521

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

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

Melbourne Laboratory
2 Kingston Town Close, Oakleigh, VIC 3166
03 8564 5000 EnviroSampleVic@eurofins.com

Company	Sydney Environmental Group	Project №	2300	Project Manager	Mitch Kirby
Address	U63, 45 Huntley Street Alexandria NSW	Project Name	WSU Milperra Campus SCA	EDD Format (ESdat, EQuIS, Custom)	
Contact Name	Lachlan Mulhearn			Sampler(s)	LM + ZL
Phone №	1300 884 164			Handed over by	LM 3LL
Special Directions				Primary Email	enviro@sydneyenvironmental.com.au
Purchase Order				Secondary Email	"Lachlan@" "Mitch@" "Lawrence@"
Quote ID №					

Analyses (Note: Where multiple are requested, please specify "Total" or "Filtered") SUITE codes must be used to attach SUITE groups.

№	Client Sample ID	Sampled Date (dd/mm/yy)	Matrix (Solid (S) Water (W))	SEG Contam Suite 1 (TRH, BTEX, PAH, Metals, Asbestos ID)	SEG Contam Suite 2 (TRH, BTEX, PAH, Metals, OCP, PCB, Asbestos ID)	SEG Contam Suite 3 (TRH, BTEX, PAH, Metals, OCP, OPP, PCB, Asbestos ID)	SEG ENM Suite 1 (TRH, BTEX, PAH, Metals, pH, EC, Asbestos ID)	Salinity Assessment Suite (L2 Aggresivity Suite, ESP %)	Asbestos ID AS4964 (0.01%)	Asbestos ID NEPM & WA (0.001%)	B7 Suite (TRH, BTEX, PAH, Metals)	B13 Suite (OCP, PCB)
1	AEC02 - TP33 - 0.2-0.3	12/1/24	S							X		
2	" - TP33 - 1.1-1.2											
3	" - TP34 - 0.2-0.3											
4	" - TP34 - 1.2-1.3											
5	" - TP35 - 0.2-0.3											
6	" - TP35 - 1.2-1.3											
7	" - TP36 - 0.2-0.3											
8	" - TP37 - 0.2-0.3											
9	" - ~~TP38~~ TP38 - 0.2-0.3											
10	" - TP39 - 0.2-0.3											
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
	Total Counts											

Containers: 1L Plastic; 250mL Plastic; 125mL Plastic; 200mL Amber Glass; 40mL VOA Vial; 500mL PFAS Bottle; Jar (Glass or HDPE); Other (Asbestos AS4964, WA Guidelines); Sample Comments / Dangerous Goods Hazard Warning

Turnaround Time (TAT) Requirements (Default will be 5 days if not stated)

- ☐ Overnight ☐ Same Day
- ☐ 1 Day ☐ 2 Day
- ☑ 3 Day ☐ 5 Day
- ☐ Other (

Method of Shipment	☐ Courier (#)	☐ Hand Delivered	☐ Postal	Name	Lachlan Mulhearn	Signature		Date	12/1/23	Time	17:00
Eurofins | mgt Laboratory Use Only	Received By		SYD | BNE | MEL | PER | ADL |	Signature		Date		Time		Temperature	
	Received By		SYD | BNE | MEL | PER | ADL |	Signature		Date		Time		Report №	

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

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Note: Metals = As, Cd, Cr, Cu, Hg, Ni, Pb, and Zn), TRH = Total Recoverable Hydrocarbons, PAH = Polycyclic Aromatic Hydrocarbons, PCB = Polychlorinated Biphenyls, BTEX = Benzene, Toluene, Ethylbenzene, and Xylene

1059273

3/3

RECORD

ABN 50 005 085 521

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

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

☐

☐ Melbourne Laboratory
2 Kingston Town Close, Oakleigh VIC 3166
03 8564 5000 EnviroSampleVic@eurofins.com

Company	Sydney Environmental Group	Project №	2300	Project Manager	Mitchell Kirby
Address	U63, 45 Huntley Street Alexandria NSW	Project Name	WSU Milperra campus SCA	EDD Format (ESdat, EQuIS, Custom)	
Contact Name	Lawrence			Sampler(s)	Lawrence
Phone №	1300 884 164			Handed over by	
Special Directions				Primary Email	enviro@sydneyenvironmental.com.au Mitchell P
Purchase Order				Secondary Email	Lawrence & Lachlan P
Quote ID №					

Analyses (Note: Where multiple tests requested, please specify "Total" or "Filtered". SUITE codes must be used to select SUITE analysis)

Containers: 1L Plastic; 250mL Plastic; 125mL Plastic; 200mL Amber Glass; 40mL VOA vial; 500mL PFAS Bottle; Jar (Glass or HDPE); Other (Asbestos AS4964, WA Guidelines)

Turnaround Time (TAT) Requirements (Default will be 5 days if not stated): ☐ Overnight ☐ Same Day ☐ 1 Day ☐ 2 Day ☐ 3 Day ☐ 5 Day ☐ Other (

№	Client Sample ID	Sampled Date (dd/mm/yy)	Matrix (Solid (S) Water (W))	SEG Contam Suite 1 (TRH, BTEX, PAH, Metals, Asbestos ID)	SEG Contam Suite 2 (TRH, BTEX, PAH, Metals, OCP, PCB, Asbestos ID)	SEG Contam Suite 3 (TRH, BTEX, PAH, Metals, OCP, OPP, PCB, Asbestos ID)	SEG ENM Suite 1 (TRH, BTEX, PAH, Metals, pH, EC, Asbestos ID)	Salinity Assessment Suite (L2 Aggresivity Suite, ESP %)	Asbestos ID AS4964 (0.01%)	Asbestos ID NEPM & WA (0.001%)	B7 Suite (TRH, BTEX, PAH, Metals)	B13 Suite (OCP, PCB)	Sample Comments / Dangerous Goods Hazard Warning
1	AEC02-TP40-0.2-0.3	12/1/24	S							X			
2	AEC02-TP40-1.2-1.3												
3	AEC02-TP41-0.2-0.3												
4	AEC02-TP41-1.2-1.3												
5	AEC02-TP42-0.2-0.3												
6	AEC02-TP43-0.2-0.3												
7	AEC02-TP44-0.2-0.3												
8	AEC02-TP45-0.2-0.3												
9	AEC02-TP46-0.2-0.3												
10	AEC02-TP47 0.2-0.3												
11	AEC02-TP48-0.2-0.3												
12	AEC02-TP48-1.2-1.3												
13	AEC02-TP49-0.2-0.3												
14	AEC02-TP50-0.2-0.3												
15	AEC02-TP51-0.2-0.3												
16	AEC02-TP52-0.2-0.3												
17													
18													
19													
20													
	Total Counts												

Method of Shipment: ☐ Courier ( ) ☐ Hand Delivered ☐ Postal — Name: Lawrence — Signature: — Date: 12/1/24 — Time: — Temperature: 3.1.3

Eurofins | mgt Laboratory Use Only

Received By: [illegible] — SYD | BNE | MEL | PER | ADL | — Signature: — Date: 12/1 — Time: 6.24 — Temperature: 0.0

Received By: — SYD | BNE | MEL | PER | ADL | — Signature: — Date: — Time: — — Report №: 1059273

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

Eurofins Environment Testing Australia Pty Ltd trading as Eurofins | mgt

Note: Metals = As, Cd, Cr, Cu, Hg, Ni, Pb, and Zn), TRH = Total Recoverable Hydrocarbons, PAH = Polycyclic Aromatic Hydrocarbons, PCB = Polychlorinated Biphenyls, BTEX = Benzene, Toluene, Ethylbenzene, and Xylene

CHAIN OF CUSTODY

Mandatory Fields

Page 1 of 3

CLIENT CODE:	*PROJECT MANAGER: Max. Cunningham	SAMPLER: Lawrence Lw	
*CLIENT: EGA	*PM MOBILE: 0452 432 575	SAMPLER MOBILE: +61 418 328 885	CoC #: (if applicable)
OFFICE: (Invoiced Office) 366 Fitzroy Street, Mounchall	ALS QUOTE # (Client PL if blank)	PURCHASE ORDER NO.:	
PROJECT NO./PROJECT: 2300		SITE: WSU, 2 Bullpeaut Ave, Milperra	
*INVOICE TO: (Client default if nil)		☐ CC Invoice to PM	BIOSECURITY
*EMAIL REPORTS TO: (default to PM if blank)			Country of Origin: (if not Australia)

*** STORAGE REQUIREMENTS** Please check box. → Standard Storage time from receipt of samples: Waters - 3 weeks, Soils - 2 months

☒ Standard Storage ☐ Extended Storage

Specify Disposal Date:

Note: Extended storage incurs a fee and requires a signed agreement.

***TURNAROUND** Please check box. → (Not all tests can be expedited, contact Client Services for more information)

☑ 5+ days (no surcharge) ☐ 3 day (+15%) ☐ 2 day (+30%) ☐ 1 day (+50%)

***ANALYSIS REQUIRED**

(No. ALS Quote No. and/or Analysis Suite Codes must be listed to ensure correct price)

Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).

Mark an X in the boxes below analysis to indicate the parameter listed above to be tested on that sample.

Comments:

ALS Use Only Lab ID	Sample ID	Depth	Date/Time	No. Bottles	MATRIX: Soil/Solid(S) Water(W) Sediments (SD), Dust (D), Product (P), Biota (B), Biosolid (BS)	TPH, BTEX, PAH, Metals, OCP, PCB	Asbestos ID	Lab QC (additional bottles req.) Dup	Lab QC (additional bottles req.) MS	Additional Information (Comment on hazards - e.g. asbestos high contamination)
1	TP09 - 0.1 - 0.2		3/4/25	1	S	X	X	☐	☐	
2	TP09 - 0.2 - 0.3			1		X	X	☐	☐	
3	TP11 - 0.1 - 0.2			1		X	X	☐	☐	
4	TP11 - 0.4 - 0.5			1		X	X	☐	☐	
5	TP12 - 0.1 - 0.2			1		X	X	☐	☐	
6	TP12 - 0.9 - 1.0			1		X	X	☐	☐	
7	TP13 - 0.1 - 0.2			1		X	X	☐	☐	
8	TP13 - 0.3 - 0.4			1		X	X	☐	☐	
9	TP13 - 0.6 - 0.7			1		X	X	☐	☐	
10	TP13 - 1.5 - 1.6			1		X	X	☐	☐	

Receipt Detail (Lab Use ONLY) — Chilling Method: Ice: Frozen / Melted; Ice Bricks: Frozen / Thawed; None

Sample Temp at Receipt: °C °C °C

Security Seal Intact (circle): Yes / No / NA(None)

Carrier Details: ☐ Courier/Post ☐ Client

Con Note #

Packaging: (Circle) Hard Esky Foam Esky

Count # #

Relinquished by: Signature: Date/Time:

Signature: Date/Time:

Received by: WOOD Signature: Date/Time: 3/4/25

Received by: Signature: Date/Time:

Environmental Divis
Sydney
Work Order Referenc
ES25098

Telephone + 61-2-8784 8555

Mandatory Fields | **CHAIN OF CUSTODY** | Page 2 of 3

CLIENT CODE:

*PROJECT MANAGER: Mar Cunningham

SAMPLER: Laurence Lin

*CLIENT: EGA

*PM MOBILE: 0452 432 575

SAMPLER MOBILE: +61 418 328 895

CoC #: (if applicable)

OFFICE: (Invoiced Office) 36E Fitzroy Street, Marrickville

ALS QUOTE # (Client PL if blank)

PURCHASE ORDER NO.:

PROJECT NO./PROJECT: 2300

SITE: WSU, 2 Bullecourt Ave, Milperra

*INVOICE TO: (default if blank)

☐ CC Invoice to PM

*EMAIL REPORTS TO: (default to PM if blank) m.cunningham@ lolin@

BIOSECURITY

Country of Origin: (if not Australia)

*** STORAGE REQUIREMENTS** Please check box. →

Standard Storage time from receipt of samples: Waters - 3 weeks, Soils - 2 months

☑ Standard Storage

☐ Extended Storage

Specify Disposal Date:

Note: Extended storage incurs a fee and requires a signed agreement.

*** TURNAROUND** Please check box. →

(Not all tests can be expedited, contact Client Services for more information)

☑ 5+ days (no surcharge)

☐ 3 day (+15%)

☐ 2 day (+30%)

☐ 1 day (+50%)

***ANALYSIS REQUIRED**

(NB. ALS Quote No. and/or Analysis/Suite Codes must be listed to attract subcontracted price)

Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).

Mark an X in the boxes below analysis to indicate the parameter listed above to be tested on that sample.

Comments:

ALS Use Only Lab ID	Sample ID	Depth	Date/Time	No. Bottles	MATRIX: Soil/Solid(S) Water(W) Sediment (SD), Dust (D), Product (P), Sludge (SL), Biosolid (BS)	TRH, BTEX, PAH, Metals, OCP, PCB	Asbestos ID (EGA Suite 2)	Lab QC (additional bottles req.) Dup	Lab QC (additional bottles req.) MS	Additional Information (Comment on hazards - e.g. asbestos high contamination)
11	TP14-0.1-0.2		3/4/28	1	S	X	X	☐	☐	
12	TP14-0.4-0.5			1		X	X	☐	☐	
13	TP14-0.8-0.9			1		X	X	☐	☐	
16	TP15-0.1-0.2			1		X	X	☐	☐	
15	TP15-0.4-0.5			1		X	X	☐	☐	
16	TP15-0.6-0.7			1		X	X	☐	☐	
17	TP15-0.9-1.0			1		X	X	☐	☐	
18	TP16-0.1-0.2			1		X	X	☐	☐	
19	TP16-0.4-0.5		↓	1	↓	X	X	☐	☐	
								☐	☐	

WO Sticker to go here. (ALS use only)

Receipt Detail (ALS use ONLY): Chilling Method: Ice / Ice Bricks: Frozen / Melted / Frozen / Thawed / None

Sample Temp at Receipt: °C °C °C

Security Seal Intact (circle): Yes / No / NA(None)

Carrier Details: ☐ Courier/Post ☐ Client

Con Note #

Packaging: (Circle) Hard Esky, Foam Esky

Count

Relinquished by: Signature: Date/Time:

Signature: Date/Time:

Received by: Will Signature: Date/Time: 3/4/28

Received by: Signature: Date/Time:

Mandatory Fields | **CHAIN OF CUSTODY** | Page 3 of 3

CLIENT CODE:

*PROJECT MANAGER: Mav Cunningham

SAMPLER: Lawrence Lin

*CLIENT: EGA

*PM MOBILE: 0452 432 575

SAMPLER MOBILE: +61 418 328 895

CoC #: (if applicable)

OFFICE: (Invoiced Office) 315 Fitzroy Street, Marrickville. ALS QUOTE # (Client PL if blank)

PURCHASE ORDER NO.:

PROJECT NO./PROJECT: 2300

SITE: WSV, 12 Bullecourt Ave, Mt Penny

*INVOICE TO: (client default if nil)

☐ CC Invoice to PM

BIOSECURITY

*EMAIL REPORTS TO: (default to PM if blank)

Country of Origin: (if not Australia)

***ANALYSIS REQUIRED**

(NB. ALS Quote No. and/or Analysis/Suite Codes must be listed to attract suite/quoted price)
Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).
Mark an X in the boxes below analysis to indicate the parameter listed above to be tested on that sample.

*** STORAGE REQUIREMENTS** Please check box. →
Standard Storage time from receipt of samples:
Waters - 3 weeks
Soils - 2 months

☑ Standard Storage
☐ Extended Storage
Specify Disposal Date:
Note: Extended storage incurs a fee and requires a signed agreement.

*** TURNAROUND** Please check box. →
(Not all tests can be expedited, contact Client Services for more information)

☑ 5+ days (no surcharge)
☐ 3 day (+15%)
☐ 2 day (+30%)
☐ 1 day (+50%)

Comments:

WO Sticker to go here.
(ALS use only)

ALS Use Only Lab ID	Sample ID	Depth	Date/Time	No. Bottles	MATRIX: Soil/Solid(S) Water(W) Sediments (SD), Dust (D), Product (P), Biota (B), Biosolid (BS)	TPH, BTEX, PAH, Metals, OCP/PCB	Asbestos ID (ESA Suite 2)	BTEX	Metals, PAH								Lab QC (additional bottles req.) Dup	Lab QC (additional bottles req.) MS	Additional Information (Comment on hazards - e.g. asbestos high contamination)
20	TP17-0.1-0.2		3/4/25	1	S	X	X										☐	☐	
21	TP17-1.0-1.1		↓	1	↓	X	X										☐	☐	
22	TP17-2.0-2.1			1		X	X										☐	☐	
23	Trip Spike			1				X									☐	☐	
24	Trip Blank			1				X									☐	☐	
25	DUP01			1					X								☐	☐	
	DUP01A		↓	1	↓				X								☐	☐	Forward to Envi 5 Day TA
26	TP09-AEM		↓	1	↓		X										☐	☐	
																	☐	☐	
																	☐	☐	

Receipt Detail (Lab Use ONLY) — Chilling Method: Ice: Frozen / Melted; Ice Bricks: Frozen / Thawed; None

Sample Temp at Receipt: °C °C °C

Security Seal Intact (circle): Yes / No / NA(None)

Carrier Details: ☐ Courier/Post ☐ Client
Con Note #

Packaging: (Circle) Hard Esky Foam Esky
Count # #

Relinquished by: Signature: Date/Time:

Received by: WAP Signature: Date/Time: 3/4/25

Relinquished by: Signature: Date/Time:

Received by: Signature: Date/Time:

CHAIN OF CUSTODY

Mandatory Fields

Page _1_of_1_

CLIENT CODE:	ENVGROLIM	*PROJECT MANAGER:	Max Cunningham	SAMPLER:	Kya Wiya
*CLIENT:	Environmental Group Australia Pty Ltd	*PM MOBILE:	0452432575	SAMPLER MOBILE:	0404497097
OFFICE: (Invoiced Office)	36E Fitzroy Street, Marrickville NSW 2204	ALS QUOTE # (Client PL if blank)	ES25ENVGROLIM0001	PURCHASE ORDER NO.:	
PROJECT NO./PROJECT:	2300			SITE:	WSU Milperra
*INVOICE TO: (client default if nil)	accounts@egau.com.au			☐ CC Invoice to PM	
*EMAIL REPORTS TO: (default to PM if blank)	enviro@egau.com.au m.cunningham@egau.com.au k.wiya@egau.com.au				
EDD Format/Type →		EDD Email Address:			

CoC #: (if applicable)

BIOSECURITY

Country of Origin: (if not Australia)

Environmental Division Sydney
Work Order Reference
ES2510322

Telephone : – 61-2-8784 8555

*** STORAGE REQUIREMENTS**
Please check box →
Standard Storage time from receipt of samples:
Waters - 3 weeks
Soils - 2 months

- ☒ Standard Storage
- ☐ Extended Storage

Specify Disposal Date:

Note: Extended storage incurs a fee and requires a signed agreement.

*** TURNAROUND**
Please check box →
(Not all tests can be expedited, contact Client Services for more information)

- ☒ 5+ days (no surcharge)
- ☐ 3 day (+15%)
- ☐ 2 day (+30%)
- ☐ 1 day (+50%)

***ANALYSIS REQUIRED**
(NB. ALS Quote No. and/or Analysis Suite Codes must be listed to attract suite/quoted price)
Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).
Mark an X in the boxes below analysis to indicate the parameter listed above to be tested on that sample.

Comments: please log as per quote

ALS Use Only Lab ID	Sample ID	Depth/Description	Date/Time	No. Bottles	MATRIX/SUBMATRIX: Soil/Solid(S) Water(W) Sediments (SD), Dust (D), Product (P), Biota (B), Biosolid (BS)	EGA ENM Suite (Asbestos P/A (grab), pH + EC, TRH/BTEX/PAH/8 Metals)	EGA Contam Suite 2 (TRH/BTEX/PAH/OC/PCB/8 Metals, Asbestos in Bulk Solids)	EGA Contam Suite 3 (TRH/BTEX/PAH/OC/OP/PCB/8 Metals, Asbestos in Bulk Solids)	EGA NEPM Suite 2 (Asbestos NEPM Quantification, TRH/BTEX/PAH/OC/PCB/8 Metals)	EGA NEPM Suite 3 (Asbestos NEPM Quantification, TRH/BTEX/PAH/OC/OP/PCB/8 Metals)	EA200N Asbestos NEPM Quantification	EA200B Asbestos in Bulk Solids	EA003 pH field/fox	BTEX				Lab QC (additional bottles req.) Dup	Lab QC (additional bottles req.) MS	Additional Information (Comment on hazards - e.g., asbestos, known high contamination)
1	TP32-0.1-0.2		9/04/2025		S		X											☐	☐	
2	TP32-0.5-0.6		9/04/2025		S		X											☐	☐	
3	Trip spike		9/04/2025		S									X				☐	☐	
4	Trip blank		9/04/2025		S									X				☐	☐	
5	Trip Control Spike.		7/4															☐	☐	
																		☐	☐	
																		☐	☐	
																		☐	☐	
																		☐	☐	
																		☐	☐	
																		☐	☐	

Subcon / Forward Lab / Split WO: NEWCASTLE
Lab / Analysis: EA200G
Organised By / Date:
Relinquished By / Date:
Connote / Courier:
WO No:
Attached By PO / Internal Sheet:

Receipt Detail (Lab Use ONLY)
Chilling Method: Ice: / Ice Bricks: / Wet Ice / Frozen / Thawed / None
Sample Temp at Receipt: °C °C °C
Security Seal Intact (circle): Yes / No / NA(None)
Carrier Details: ☐ Courier/Post ☐ Client
Con Note #
Packaging: (Circle) Hard Esky Foam Esky Box/Bag/Other
Count # # #

Relinquished by:	Signature:	Date/ Time: 9/04/2025	Received by: Wms	Signature	Date/ Time: 9/4/25 1945
Relinquished by:	Signature:	Date/ Time:	Received by:	Signature	Date/ Time:

CHAIN OF CUSTODY

Page _1_of_4_

CoC #: (if applicable)

Mandatory Fields

CLIENT CODE:	ENVGROLIM	*PROJECT MANAGER:	Max Cunningham	SAMPLER:	Kya Wiya
*CLIENT:	Environmental Group Australia Pty Ltd	*PM MOBILE:	0452432575	SAMPLER MOBILE:	0404497097
OFFICE: (Invoiced Office)	36E Fitzroy Street, Marrickville NSW 2204	ALS QUOTE # (Client PL if blank)	ES25ENVGROLIM0001	PURCHASE ORDER NO.:	
PROJECT NO./PROJECT:	2300			SITE:	WSU Milperra
*INVOICE TO: (client default if nil)	accounts@egau.com.au			☐ CC Invoice to PM	
*EMAIL REPORTS TO: (default to PM if blank)	enviro@egau.com.au m.cunningham@egau.com.au k.wiya@egau.com.au				
EDD Format/Type →	EDD Email Address:				

BIOSECURITY

Country of Origin:

Environmental Division
Sydney
Work Order Reference
ES2510979

Telephone : +61-2-8784 8555

*** STORAGE REQUIREMENTS** (Please check box →)

Standard Storage time from receipt of samples:
Waters - 3 weeks
Soils - 2 months

☒ Standard Storage
☐ Extended Storage
Specify Disposal Date:
Note: Extended storage incurs a fee and requires a signed agreement.

*** TURNAROUND** (Please check box →)

(Not all tests can be expedited, contact Client Services for more information)

☒ 5+ days (no surcharge)
☐ 3 day (+15%)
☐ 2 day (+30%)
☐ 1 day (+50%)

***ANALYSIS REQUIRED**

(NB. ALS Quote No. and/or Analysis Suite Codes must be listed to attract suite/quoted price)
Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).
Mark an X in the boxes below analysis to indicate the parameter listed above to be tested on that sample.

Comments: please log as per quote

ALS Use Only Lab ID	Sample ID	Depth/Description	Date/Time	No. Bottles	MATRIX/SUBMATRIX: Soil/Solid(S), Water(W), Sediments(SD), Dust(D), Product(P), Biota(B), Biosolid(BS)	EGA ENM Suite (Asbestos P/A (grab), pH + EC, TRH/BTEX/PAH/8 Metals)	EGA Contam Suite 2 (TRH/BTEX/PAH/OC/PCB/8 Metals, Asbestos in Bulk Solids)	EGA Contam Suite 3 (TRH/BTEX/PAH/OC/OP/PCB/8 Metals, Asbestos in Bulk Solids)	EGA NEPM Suite 2 (Asbestos NEPM Quantification, TRH/BTEX/PAH/OC/PCB/8 Metals)	EGA NEPM Suite 3 (Asbestos NEPM Quantification, TRH/BTEX/PAH/OC/OP/PCB/8 Metals)	EA200N Asbestos NEPM Quantification	EA200B Asbestos in Bulk Solids	EA003 pH field/fox	BTEX	Metals, PAH	Lab QC (additional bottles req.) Dup	Lab QC (additional bottles req.) MS	Additional Information (Comment on hazards - e.g., asbestos, known high contamination)
1	TP18-0.1-0.2		15/04/2025		S		X									☐	☐	
2	TP18-1.0-1.1		15/04/2025		S		X									☐	☐	
3	TP18-2.0-2.1		15/04/2025		S		X									☐	☐	
4	TP19-0.1-0.2		15/04/2025		S		X									☐	☐	
5	TP19-1.0-1.1		15/04/2025		S		X									☐	☐	
6	TP19-2.0-2.1		15/04/2025		S		X									☐	☐	
7	TP20-0.1-0.2		15/04/2025		S		X									☐	☐	
8	TP20-1.0-1.1		15/04/2025		S		X									☐	☐	
9	TP20-2.0-2.1		15/04/2025		S		X									☐	☐	
10	TP25-0.1-0.2															☐	☐	

Lab to Split WO
PUPOZA
Eurofins
Logged In By / Date:
Relinquished By / Date:
Courier:
No. of Pkgs:
Rec'd By / Material Sheet:

Receipt Detail (Lab Use ONLY)
Chilling Method: Ice: Frozen / Melted Ice Bricks: Frozen / Thawed None
Sample Temp at Receipt: °C °C °C
Security Seal Intact (circle): Yes / No / NA(None)

Carrier Details: ☐ Courier/Post ☐ Client
Con Note #

Packaging: (Circle) Hard Esky Foam Esky Box/Bag/Other
Count # # #

Relinquished by: Kya Wiya Signature: Date/Time: 15/04/2025
Received by: Wcas Signature: Date/Time: 15/4/25 1730

Relinquished by: Signature: Date/Time:
Received by: Signature: Date/Time:

Approved Date: 19-06-2024

Form Page 1 of 1

CHAIN OF CUSTODY

Page _2_of_4_

Mandatory Fields					
CLIENT CODE:	ENVGROLIM	*PROJECT MANAGER:	Max Cunningham	SAMPLER:	Kya Wiya
*CLIENT:	Environmental Group Australia Pty Ltd	*PM MOBILE:	0452432575	SAMPLER MOBILE:	0404497097
OFFICE: (Invoiced Office)	36E Fitzroy Street, Marrickville NSW 2204	ALS QUOTE # (Client PL if blank)	ES25ENVGROLIM0001	PURCHASE ORDER NO.:	
PROJECT NO./PROJECT:	2300			SITE:	WSU Milperra
*INVOICE TO: (client default if nil)	accounts@egau.com.au			☐ CC Invoice to PM	
*EMAIL REPORTS TO: (default to PM if blank)	enviro@egau.com.au m.cunningham@egau.com.au k.wiya@egau.com.au				
EDD Format/Type →		EDD Email Address:			

CoC #: (if applicable)

BIOSECURITY

Country of Origin: (if not Australia)

*** STORAGE REQUIREMENTS** — Please check box →
Standard Storage time from receipt of samples:
Waters - 3 weeks
Soils - 2 months

☒ Standard Storage
☐ Extended Storage
Specify Disposal Date:
Note: Extended storage incurs a fee and requires a signed agreement.

*** TURNAROUND** — Please check box →
(Not all tests can be expedited, contact Client Services for more information)

☒ 5+ days (no surcharge)
☐ 3 day (+15%)
☐ 2 day (+30%)
☐ 1 day (+50%)

***ANALYSIS REQUIRED**
(NB. ALS Quote No. and/or Analysis Suite Codes must be listed to attract suite/quoted price)
Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).
Mark an X in the boxes below analysis to indicate the parameter listed above to be tested on that sample.

WO Sticker to go here.
(ALS use only)

Comments: please log as per quote

ALS Use Only Lab ID	Sample ID	Depth/Description	Date/Time	No. Bottles	MATRIX/SUBMATRIX: Soil/Solid(S) Water(W) Sediments(SD), Dust(D), Product(P), Biota(B), Biosolid(BS)	EGA ENM Suite (Asbestos P/A (grab), pH + EC, TRH/BTEX/PAH/8 Metals)	EGA Contam Suite 2 (TRH/BTEX/PAH/OC/PCB/8 Metals, Asbestos in Bulk Solids)	EGA Contam Suite 3 (TRH/BTEX/PAH/OC/OP/PCB/8 Metals, Asbestos in Bulk Solids)	EGA NEPM Suite 2 (Asbestos NEPM Quantification, TRH/BTEX/PAH/OC/PCB/8 Metals)	EGA NEPM Suite 3 (Asbestos NEPM Quantification, TRH/BTEX/PAH/OC/OP/PCB/8 Metals)	EA200N Asbestos NEPM Quantification	EA200B Asbestos in Bulk Solids	EA003 pH field/fox	BTEX	Metals; PAH			Lab QC (additional bottles req.) Dup	Lab QC (additional bottles req.) MS	Additional Information (Comment on hazards - e.g., asbestos, known high contamination)
11	TP25-0.2-0.3		15/04/2025		S		X										☐	☐	
12	TP25-0.4-0.5		15/04/2025		S		X										☐	☐	
13	TP25-1.0-1.1		15/04/2025		S		X										☐	☐	
14	TP25-2.0-2.1		15/04/2025		S		X										☐	☐	
15	TP07-0.1-0.2		15/04/2025		S		X										☐	☐	
16	TP07-1.0-1.1		15/04/2025		S		X										☐	☐	
17	TP07-2.0-2.1		15/04/2025		S		X										☐	☐	
18	TP08-0.1-0.2		15/04/2025		S		X										☐	☐	
19	TP08-1.0-1.1		15/04/2025		S		X										☐	☐	
20	TP08-2.0-2.1		15/04/2025		S		X										☐	☐	

Receipt Detail (Lab Use ONLY)
Chilling Method: Ice: Frozen / Melted — Ice Bricks: Frozen / Thawed — None
Sample Temp at Receipt: °C °C °C
Security Seal Intact (circle): Yes / No / NA(None)
Carrier Details: ☐ Courier/Post ☐ Client
Con Note #
Packaging: (Circle) Hard Esky Foam Esky Box/Bag/Other
Count # # #

Relinquished by:	Kya Wiya	Signature:		Date/Time:	15/04/2025	Received by:	Signature:	Date/Time: 15/4/25 1730
Relinquished by:		Signature:		Date/Time:		Received by:	Signature	Date/Time:

CHAIN OF CUSTODY

Page _3_of_4_

CoC #: (if applicable)

Mandatory Fields					
CLIENT CODE:	ENVGROLIM	*PROJECT MANAGER:	Max Cunningham	SAMPLER:	Kya Wiya
*CLIENT:	Environmental Group Australia Pty Ltd	*PM MOBILE:	0452432575	SAMPLER MOBILE:	0404497097
OFFICE: (Invoiced Office)	36E Fitzroy Street, Marrickville NSW 2204	ALS QUOTE # (Client PL if blank)	ES25ENVGROLIM0001	PURCHASE ORDER NO.:	
PROJECT NO./PROJECT:	2300			SITE:	WSU Milperra
*INVOICE TO: (client default if nil)	accounts@egau.com.au			☐ CC Invoice to PM	
*EMAIL REPORTS TO: (default to PM if blank)	enviro@egau.com.au m.cunningham@egau.com.au k.wiya@egau.com.au				
EDD Format/Type →		EDD Email Address:			

BIOSECURITY

Country of Origin: (if not Australia)

*** STORAGE REQUIREMENTS**
Please check box →
Standard Storage time from receipt of samples:
Waters - 3 weeks
Soils - 2 months

☒ Standard Storage
☐ Extended Storage
Specify Disposal Date:
Note: Extended storage incurs a fee and requires a signed agreement.

*** TURNAROUND**
Please check box →
(Not all tests can be expedited, contact Client Services for more information)

☒ 5+ days (no surcharge)
☐ 3 day (+15%)
☐ 2 day (+30%)
☐ 1 day (+50%)

***ANALYSIS REQUIRED**
(NB. ALS Quote No. and/or Analysis Suite Codes must be listed to attract suite/quoted price)
Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).
Mark an X in the boxes below analysis to indicate the parameter listed above to be tested on that sample.

WO Sticker to go here.
(ALS use only)

Comments: please log as per quote

ALS Use Only Lab ID	Sample ID	Depth/Description	Date/Time	No. Bottles	MATRIX/SUBMATRIX: Soil/Solid(S), Water(W), Sediments (SD), Dust (D), Product (P), Biota (B), Biosolid (BS)	EGA ENM Suite (Asbestos P/A (grab), pH + EC, TRH/BTEX/PAH/8 Metals)	EGA Contam Suite 2 (TRH/BTEX/PAH/OC/PCB/8 Metals, Asbestos in Bulk Solids)	EGA Contam Suite 3 (TRH/BTEX/PAH/OC/OP/PCB/8 Metals, Asbestos in Bulk Solids)	EGA NEPM Suite 2 (Asbestos NEPM Quantification, TRH/BTEX/PAH/OC/PCB/8 Metals)	EGA NEPM Suite 3 (Asbestos NEPM Quantification, TRH/BTEX/PAH/OC/OP/PCB/8 Metals)	EA200N Asbestos NEPM Quantification	EA200B Asbestos in Bulk Solids	EA003 pH field/lox	BTEX	Metals, PAH			Lab QC (additional bottles req.) Dup	Lab QC (additional bottles req.) MS	Additional Information (Comment on hazards - e.g., asbestos, known high contamination)
25	TP10-0.1-0.2		15/04/2025		S		X											☐	☐	
22	TP10-1.0-1.1		15/04/2025		S		X											☐	☐	
23	TP10-2.0-2.1		15/04/2025		S		X											☐	☐	
24	TP28-0.1-0.2		15/04/2025		S		X											☐	☐	
28	TP28-0.3-0.4		15/04/2025		S		X											☐	☐	
26	TP28-1.0-1.1		15/04/2025		S		X											☐	☐	
27	TP28-2.0-2.1		15/04/2025		S		X											☐	☐	
																		☐	☐	
																		☐	☐	
																		☐	☐	

Receipt Detail (Lab Use ONLY)
Chilling Method: Ice: Frozen / Melted — Ice Bricks: Frozen / Thawed — None
Sample Temp at Receipt: °C °C °C
Security Seal Intact (circle): Yes / No / NA(None)
Carrier Details: ☐ Courier/Post ☐ Client
Con Note #
Packaging: (Circle) Hard Esky Foam Esky Box/Bag/Other
Count # # #

Relinquished by:	Kya Wiya	Signature:	Date/Time: 15/04/2025	Received by:	Wong	Signature	Date/Time: 15/4/25 1730
Relinquished by:		Signature:	Date/Time:	Received by:		Signature	Date/Time:

CHAIN OF CUSTODY

Page _4_of_4_

CoC #: (if applicable)

Mandatory Fields

CLIENT CODE:	ENVGROLIM	*PROJECT MANAGER:	Max Cunningham	SAMPLER:	Kya Wiya
*CLIENT:	Environmental Group Australia Pty Ltd	*PM MOBILE:	0452432575	SAMPLER MOBILE:	0404497097
OFFICE: (Invoiced Office)	36E Fitzroy Street, Marrickville NSW 2204	ALS QUOTE # (Client PL if blank)	ES25ENVGROLIM0001	PURCHASE ORDER NO.:	
PROJECT NO./PROJECT:	2300			SITE:	WSU Milperra
*INVOICE TO: (client default if nil)	accounts@egau.com.au			☐ CC Invoice to PM	
*EMAIL REPORTS TO: (default to PM if blank)	enviro@egau.com.au m.cunningham@egau.com.au k.wiya@egau.com.au				
EDD Format/Type →		EDD Email Address:			

BIOSECURITY

Country of Origin: (if not Australia)

*** STORAGE REQUIREMENTS**
Please check box →
Standard Storage time from receipt of samples:
Waters - 3 weeks
Soils - 2 months

☒ Standard Storage
☐ Extended Storage
Specify Disposal Date:
Note: Extended storage incurs a fee and requires a signed agreement.

*** TURNAROUND**
Please check box →
(Not all tests can be expedited, contact Client Services for more information)

☒ 5+ days (no surcharge)
☐ 3 day (+15%)
☐ 2 day (+30%)
☐ 1 day (+50%)

***ANALYSIS REQUIRED**
(NB. ALS Quote No. and/or Analysis Suite Codes must be listed to attract suite/quoted price)
Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).
Mark an X in the boxes below analysis to indicate the parameter listed above to be tested on that sample.

WO Sticker to go here.
(ALS use only)

Comments: please log as per quote

ALS Use Only Lab ID	Sample ID	Depth/Description	Date/Time	No. Bottles	MATRIX/SUBMATRIX: Soil-Solid(S) Water(W) Sediments (SD), Dust (D), Product (P), Biota (B), Biosolid (BS)	EGA ENM Suite (Asbestos P/A (grab), pH + EC, TRH/BTEX/PAH/8 Metals)	EGA Contam Suite 2 (TRH/BTEX/PAH/OC/PCB/8 Metals, Asbestos in Bulk Solids)	EGA Contam Suite 3 (TRH/BTEX/PAH/OC/OP/PCB/8 Metals, Asbestos in Bulk Solids)	EGA NEPM Suite 2 (Asbestos NEPM Quantification, TRH/BTEX/PAH/OC/PCB/8 Metals)	EGA NEPM Suite 3 (Asbestos NEPM Quantification, TRH/BTEX/PAH/OC/OP/PCB/8 Metals)	EA200N Asbestos NEPM Quantification	EA200B Asbestos in Bulk Solids	EA003 pH field/fox	BTEX	Metals, PAH			Lab QC (additional bottles req.) Dup	Lab QC (additional bottles req.) MS	Additional Information (Comment on hazards - e.g., asbestos, known high contamination)
29	DUP02		15/04/2025		S										X			☐	☐	
	DUP02A		15/04/2025		S										X			☐	☐	Forward to Eurofins - 5 day TAT
29	TRIP SPIKE		15/04/2025		S									X				☐	☐	
30	TRIP BLANK		15/04/2025		S									X				☐	☐	
31	TSL																	☐	☐	
																		☐	☐	
																		☐	☐	
																		☐	☐	
																		☐	☐	
																		☐	☐	

Receipt Detail (Lab Use ONLY)	Ice: Chilling Method: Frozen / Melted	Ice Bricks: Frozen / Thawed	None	Sample Temp at Receipt °C °C °C	Security Seal Intact (circle) Yes / No / NA(None)

Carrier Details ☐ Courier/Post ☐ Client
Con Note #

Packaging: (Circle) Hard Esky Foam Esky Box/Bag/Other
Count # # #

Relinquished by:	Kya Wiya	Signature:	Date/Time: 15/04/2025	Received by: Way	Signature: Date/Time: 15/4/25 1730.
Relinquished by:		Signature:	Date/Time:	Received by:	Signature: Date/Time:

CHAIN OF CUSTODY

Page 1 of 1

CoC #: (if applicable)

Mandatory Fields

CLIENT CODE:	ENVGROLIM	*PROJECT MANAGER:	Max Cunningham	SAMPLER:	Lachlan Cranch
*CLIENT:	Environmental Group Australia Pty Ltd	*PM MOBILE:	0474 877 655	SAMPLER MOBILE:	0459 563 853
OFFICE: (Invoiced Office)	36E Fitzroy Street, Marrickville NSW 2204	ALS QUOTE # (Client PL if blank)	EX25ENVGROLIM0001	PURCHASE ORDER NO.:	
PROJECT NO./PROJECT:	2300			SITE:	2 Bullecourt Avenue, Milperra
*INVOICE TO: (client default if nil)	accounts@egau.com.au			☐ CC invoice to PM	
*EMAIL REPORTS TO: (default to PM if blank)	envi@egau.com.au l.cranch@egau.com.au l.mulhearn@egau.com.au m.cunningham@egau.com.au				
EDD Format/Type ->		EDD Email Address:			

BIOSECURITY

Country of Origin: (if not Australia)

***STORAGE REQUIREMENTS**
Please check box →
Standard Storage time from receipt of samples:
Waters - 3 weeks
Soils - 2 months

☑ Standard Storage
☐ Extended Storage

Specify Disposal Date:

Note: Extended storage incurs a fee and requires a signed agreement.

***TURNAROUND**
Please check box →
(Not all tests can be expedited, contact Client Services for more information)

☑ 5+ days (no surcharge)
☐ 3 day (+15%)
☐ 2 day (+30%)
☐ 1 day (+50%)

***ANALYSIS REQUIRED**
(NB. ALS Quote No. and/or Analysis Suite Codes must be listed to ensure suite is performed)
Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).
Mark an X in the boxes below analysis to indicate the parameter listed above to be tested on that sample.

Environmental Division Sydney
Work Order Reference
ES2512173

Telephone : +61-2-8784 8555

Comments: please log as per quote

ALS Use Only Lab ID	*Sample ID	Depth/Description	Date/Time	No. Bottles	MATRIX: (GW Groundwater (W) Soil/Solid(S) Water (W) Sediments (SD) Dust (D) Product (P), Biota (B), Biosolid (BS))	ESA NEPM Suite 1 (Asbestos in Soil (ASS) pH 4 & 7, TPH (TEH) C6-C9 (F1) & C10-C36 (F2) Metals)	Suite Custom Suite 2 (TRH/BTEX/PAH/OCP/PCB/8 Metals, Asbestos in Soil Solids)	ESA Custom Suite 3 (TRH/BTEX/PAH/OCP/PCB/8 Metals, Asbestos in Soil Solids)	ESA NEPM Suite 2 (Asbestos NEPM Quantification, TRH/BTEX/PAH/OCP/PCB/8 Metals)	ESA NEPM Suite 3 (Asbestos NEPM Quantification, TRH/BTEX/PAH/OCP/PCB/8 Metals)	FA2008 Asbestos NEPM Quantification	FA2008 Asbestos NEPM Identification in Bulk Solids	FA2008 Asbestos in Soil Fines	8260 VOC in Soil/Fines	8260 VOC in Field Fines	8260 VOC in Water	Lab QC (additional bottles req.) Dup	Lab QC (additional bottles req.) MS	Additional Information (Comment on hazards - e.g., asbestos, known high contamination)
1	TP21-0-0.1		29/4/25		S		X										☐	☐	
2	Trip Spike		↓		↓											X	☐	☐	
3	Trip Blank															X	☐	☐	
4	TS																☐	☐	
																	☐	☐	
																	☐	☐	
																	☐	☐	
																	☐	☐	
																	☐	☐	
																	☐	☐	

Receipt Detail (Lab Use ONLY)
Chilling Method: Ice: Frozen / Melted; Ice Bricks: Frozen / Thawed; None
Sample Temp at Receipt: °C °C °C
Security Seal Intact (circle): Yes / No / NA(None)
Carrier Details: ☐ Courier/Post ☐ Client
Con Note #:
Packaging: (Circle) Hard Esky Foam Esky Box/Bag/Other
Count # # #

Relinquished by:	Signature:	Date/Time:	
Relinquished by:	Signature:	Date/Time:	
Received by: Wes	Signature	Date/Time: 29/4/25 1725	
Received by:	Signature	Date/Time:	

CHAIN OF CUSTODY

Page 1 of 1

CoC #: (if applicable)

Mandatory Fields

CLIENT CODE:	ENVGROLIM	*PROJECT MANAGER:	Max Cunningham	SAMPLER:	Lachlan Cranch
*CLIENT:	Environmental Group Australia Pty Ltd	*PM MOBILE:	0474 877 456	SAMPLER MOBILE:	
OFFICE: (Invoiced Office)	36E Fitzroy Street, Marrickville NSW 2204	ALS QUOTE # (Client PL if blank)	ES25ENVGROLIM0001	PURCHASE ORDER NO.:	
PROJECT NO./PROJECT:	2300 - 2 Bullecourt Ave - SCA			SITE:	
*INVOICE TO: (client default if nil)	accounts@egau.com.au			☐ CC Invoice to PM	
*EMAIL REPORTS TO: (default to PM if blank)	enviro@egau.com.au l.cranch@ m.cunningham@				
EDD Format/Type →		EDD Email Address:			

BIOSECURITY

Country of Origin: (if not Australia)

*** STORAGE REQUIREMENTS**
Please check box. →
Standard Storage time from receipt of samples:
Waters - 3 weeks
Soils - 2 months

☑ Standard Storage
☐ Extended Storage
Specify Disposal Date:
Note: Extended storage incurs a fee and requires a signed agreement.

*** TURNAROUND**
Please check box. →
(Not all tests can be expedited, contact Client Services for more information)

☑ 5+ days (no surcharge)
☐ 3 day (+15%)
☐ 2 day (+30%)
☐ 1 day (+50%)

***ANALYSIS REQUIRED**
(NB. ALS Quote No. and/or Analysis Suite Codes must be listed to attract suite/quoted price)
Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).
Mark an X in the boxes below analysis to indicate the parameter listed above to be tested on that sample.

Environmental Division Sydney
Work Order Reference
ES2513733

Telephone : + 61-2-8784 8555

Comments: please log as per quote

Forward Lab / Split WO
Lab / Analysis: Eurofins - Trip - DUP01A
Organised By / Date: Mercedes - 9/5/25
Relinquished By / Date:
Courier / Courier:
WO No: ES2513733
Attach By PO / Internal Sheet:

ALS Use Only Lab ID	Sample ID	Depth/Description	Date/Time	No. Bottles	MATRIX/SUBMATRIX: Soil/Solid(S) Water(W) Sediments (SD), Dust (D), Product (P), Biota (B), Biosolid (BS)	EGA ENM Suite (Asbestos P/A (grab), pH + EC, TRH/BTEX/PAH/8 Metals)	EGA Contam Suite 2 (TRH/BTEX/PAH/OC/PCB/8 Metals, Asbestos in Bulk Solids)	EGA Contam Suite 3 (TRH/BTEX/PAH/OC/OP/PCB/8 Metals, Asbestos in Bulk Solids)	EGA NEPM Suite 2 (Asbestos NEPM Quantification, TRH/BTEX/PAH/OC/PCB/8 Metals)	EGA NEPM Suite 3 (Asbestos NEPM Quantification, TRH/BTEX/PAH/OC/OP/PCB/8 Metals)	EA200N Asbestos NEPM Quantification	EA200B Asbestos in Bulk Solids	EA003 pH field/fox	PAH, Metals	BTEX			Lab QC (additional bottles req.) Dup	Lab QC (additional bottles req.) MS	Additional Information (Comment on hazards - e.g., asbestos, known high contamination)
1	TP01-0.1-0.2		9/05/25		S		X											☐	☐	
2	TP02-0.1-0.2						X											☐	☐	
3	TP03-0.1-0.2						X											☐	☐	
4	TP04-0.1-0.2						X											☐	☐	
5	TP05-0.1-0.2						X											☐	☐	
6	~~DUP~~ TP01-DUP01												X					☐	☐	
—	TP01-DUP01A												X					☐	☐	Send to EUROFINS
7	Trip Spike -13		5.5.25											X				☐	☐	
8	Trip Blank		2.5.25											X				☐	☐	
9	TSC-13		5.5.25															☐	☐	

Receipt Detail (Lab Use ONLY)	Chilling Method:	Ice: Frozen / Melted	Ice Bricks: Frozen / Thawed	None	Sample Temp at Receipt	°C °C °C	Security Seal Intact (circle)	Yes / No / NA(None)

Carrier Details ☐ Courier/Post ☐ Client
Con Note #

Packaging: (Circle) Hard Esky Foam Esky Box/Bag/Other
Count # # #

Relinquished by:	Signature:	Date/Time:	Received by:	Signature	Date/Time: 12/5/25 1755
Relinquished by:	Signature:	Date/Time:	Received by:	Signature	Date/Time:

Mandatory Fields

CHAIN OF CUSTODY

Page 1 of 4

CLIENT CODE:	ENVGROUPA	*PROJECT MANAGER:	Max Cunningham	SAMPLER:	Siyuan He
*CLIENT:	Environmental Group Australia Pty Ltd	*PM MOBILE:	0474 877 456	SAMPLER MOBILE:	439097815
OFFICE: (Invoiced Office)	26E Fitzroy Street, Marrickville NSW 2204	ALS QUOTE #: (Client PL if blank)	ES25ENVGRPQ0001	PURCHASE ORDER NO.:	
PROJECT NO./PROJECT:	2300 - WSU, Milperra -- SCA Post Demo			SITE:	Milperra
*INVOICE TO: (client default if nil)	accounts@egau.com.au			☑ CC Invoice to PM	
*EMAIL REPORTS TO: (default to PM if blank)	s.he@egau.com.au; l.mulheron@egau.com.au; m.cunningham@egau.com.au				
EDD Format/Type →		EDD Email Address:			

CoC #: (if applicable)

BIOSECURITY

Country of Origin: (If not Australia)

***STORAGE REQUIREMENTS**
Please check box.
→
Standard Storage time from receipt of samples:
Waters - 3 weeks
Soils - 2 months

☑ Standard Storage
☐ Extended Storage
Specify Disposal Date:
Note: Extended storage incurs a fee and requires a signed agreement.

***TURNAROUND**
Please check box.
→
(Not all tests can be expedited, contact Client Services for more information)

☑ 5+ days (no surcharge)
☐ 3 day (+15%)
☐ 2 day (+30%)
☐ 1 day (+50%)

***ANALYSIS REQUIRED**
(NB. ALS Quote No. and/or Analysis Suite Codes must be listed to attract suite/quoted price)
Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).
Mark an X in the box(es) below analysis to indicate the parameter listed above to be tested on that sample.

Comments: please log as per quote

Environmental Division Sydney
Work Order Reference
ES2522273

Telephone : +61-2-8784 9555

ALS Use Only Lab ID	Sample ID	Depth/Description	Date/Time	No. Bottles	MATRIX: Soil/Solid (S), Water (W), Sediments (SD), Dust (D), Product (P), Biota (B), Biosolid (BS)	☐ ☐	Lab QC (additional bottles req.) Dup	MS	Additional Information (Comment on hazards - e.g., asbestos, known high contamination)
1	TP47-0.1-0.2		21/7/25		S	X	☐	☐	
2	TP46-0.1-0.2						☐	☐	
3	TP45-0.1-0.2						☐	☐	
4	TP44-0.1-1.2						☐	☐	
5	TP44-0.1-0.2						☐	☐	
6	TP43-0.1-0.2						☐	☐	
7	TP42-0.1-0.2						☐	☐	
8	TP41-0.1-0.2						☐	☐	
9	TP40-0.1-0.2						☐	☐	
10	TP39-0.1-0.2						☐	☐	

Suncon / Forward Lab / Split WO: Newcastle ALS
Lab / Analysis: # 1 - 2
Relinquished Date:
WO: ES2522273

Receipt Detail (Lab Use ONLY)						
Chilling Method:	Ice: Frozen / Melted	Ice Bricks: Frozen / Thawed	None	Sample Temp at Receipt	°C	°C
Security Seal Intact (circle)	Yes / No / NA(None)	Carrier Details	☐ Courier/Post	☐ Client	Con Note #	Packaging: (Circle) Hard Esky / Foam Esky / Box/Bag/Other; Count: #

Relinquished by:		Signature:		Date/ Time:	Received by: Wang	Signature:	Date/ Time: 21/7/25 1910
Relinquished by:		Signature:		Date/ Time:	Received by:	Signature:	Date/ Time:

Mandatory Fields		CHAIN OF CUSTODY				Page 2 of 4	
CLIENT CODE:	ENVGROUPAU	*PROJECT MANAGER:	Max Cunningham	SAMPLER:	Siyuan He		
*CLIENT:	Environmental Group Australia Pty Ltd	*PM MOBILE:	" "	SAMPLER MOBILE:	489097815	CoC #: (if applicable)	
OFFICE: (Invoiced Office)	3/8 Priory Street, Mentone NSW 2214	ALS QUOTE # (Client PL if blank)	ESSENVGROUP0001	PURCHASE ORDER NO.:			
PROJECT NO./PROJECT:	2302 - WSL, Milperra - SCA Post Demo			SITE:	Milperra		
*INVOICE TO: (client default if nil)	accounts@egal.com.au			☑ CC Invoice to PM		BIOSECURITY	
*EMAIL REPORTS TO: (default to PM if blank)	envgroup@egal.com.au s.he@egal.com.au s.malham@egal.com.au m.cunningham@egal.com.au			*ANALYSIS REQUIRED (NB. ALS Quote No. and/or Analysis Suite Codes must be listed to attract suite/quoted price) Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required). Mark an X in the boxes below analysis to indicate the parameter listed above to be tested on that sample.		Country of Origin: (If not Australia)	
EDD Format/Type →		EDD Email Address:					

* STORAGE REQUIREMENTS (Please check box. →)		* TURNAROUND (Please check box. →) (Not all tests can be expedited, contact Client Services for more information)	
Standard Storage	☑	5+ days (no surcharge)	☑
Extended Storage	☐	3 day (+15%)	☐
Specify Disposal Date:		2 day (+30%)	☐
Note: Extended storage incurs a fee and requires a signed agreement.		1 day (+50%)	☐

Standard Storage time from receipt of samples: Waters - 3 weeks; Soils - 2 months

Comments: please log as per quote

WO Sticker to go here. (ALS use only)

ALS Use Only Lab ID	Sample ID	Depth/Description	Date/Time	No. Bottles	MATRIX: (W-Water, S-Soil/Solid(S) Waters(W) Sediments (SD), Dust (D), Products (P), Biota (B), Biosolid (BS))	Lab QC (additional bottles req.) Dup	Lab QC (additional bottles req.) MS	Additional Information (Comment on hazards - e.g., asbestos, known high contamination)
11	TP38-0.1-0.2		2/7/25		S	☐	☐	
12	TP37-0.1-0.2					☐	☐	
13	TP36-0.1-0.2					☐	☐	
14	TP35-0.1-0.2					☐	☐	
15	TP34-0.1-0.2					☐	☐	
16	TP33-0.1-0.2					☐	☐	
17	TP26-[redacted]1-1.2					☐	☐	
18	TP26-0.1-0.2					☐	☐	
19	TP31-0.1-0.2					☐	☐	
20	TP30-0.1-0.2					☐	☐	

Receipt Detail (Lab Use ONLY)												
Chilling Method:	Ice: Frozen / Melted	Ice Bricks: Frozen / Thawed	None	Sample Temp at Receipt	°C	°C	°C	Security Seal Intact (circle)	Yes / No / NA(None)	Carrier Details	☐ Courier/Post	☐ Client	Packaging: (Circle)	Hard Esky / Foam Esky / Box/Bag/Other
										Con Note #			Count	# / # / #

Relinquished by:	Signature:	Date/Time:	Received by: WUS	Signature:	Date/Time: 2/7/25 17:10
Relinquished by:	Signature:	Date/Time:	Received by:	Signature	Date/Time:

Mandatory Fields

CHAIN OF CUSTODY

Page 2 of 4

CoC #: (if applicable)

CLIENT CODE:	ENVGROUP	*PROJECT MANAGER:	Alex Cunningham	SAMPLER:	Siyuan He
*CLIENT:	Environmental Group Australia Pty Ltd	*PM MOBILE:	[illegible]	SAMPLER MOBILE:	439097815
OFFICE: (Invoiced Office)	668 Pittwater Street, Mariciville NSW 2204	ALS QUOTE # (Client PL if blank)	592ENVIROLIMBOUS	PURCHASE ORDER NO.:	
PROJECT NO./PROJECT:	2300 - WSU - Milperra - SCA - Post Dems			SITE:	[illegible]
*INVOICE TO: (client default if nil)	accounts@envirolimbous			☑ CC Invoice to PM	
*EMAIL REPORTS TO: (default to PM if blank)	[illegible]				
EDD Format/Type →		EDD Email Address:			

BIOSECURITY

Country of Origin: (If not Australia)

WO Sticker to go here. (ALS use only)

*** STORAGE REQUIREMENTS**
Please check box.
→
Standard Storage time from receipt of samples:
Waters - 3 weeks
Soils - 2 months

☑ Standard Storage
☐ Extended Storage
Specify Disposal Date:
Note: Extended storage incurs a fee and requires a signed agreement.

*** TURNAROUND**
Please check box.
→
(Not all tests can be expedited, contact Client Services for more information)

☑ 5+ days (no surcharge)
☐ 3 day (+15%)
☐ 2 day (+30%)
☐ 1 day (+50%)

***ANALYSIS REQUIRED**
(NB. ALS Quote No. and/or Analysis Suite Codes must be listed to attract suite/quoted price)
Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).
Mark an X in the boxes below analysis to indicate the parameter listed above to be tested on that sample.

Comments: please log as per quote

ALS Use Only Lab ID	Sample ID	Depth/Description	Date/Time	No. Bottles	MATRIX: Soil/Solid(S) Water(W) Sediments (SD), Dust (D), Product (P), Biota (B), Biosolid (BS)	PAH, 8 Metals	Lab QC (additional bottles req.) Dup	Lab QC (additional bottles req.) MS	Additional Information (Comment on hazards - e.g., asbestos, known high contamination)
21	TP30-0.1-1.2		21/7/25		S	X	☐	☐	
22	TP29-0.1-0.2						☐	☐	
23	TP27-0.1-0.2						☐	☐	
24	TP24-0.1-0.2						☐	☐	
25	TP23-0.1-0.2						☐	☐	
26	TP22-0.1-0.2						☐	☐	
27	TP22-1.1-1.2						☐	☐	
28	TP46-EC					X	☐	☐	
29	DUP01					X	☐	☐	
30	DUP01A					X	☐	☐	

Receipt Detail (Lab Use ONLY)	Chilling Method: Ice / Frozen / Melted; Ice Bricks: Frozen / Thawed; None	Sample Temp at Receipt °C °C °C	Security Seal Intact (circle) Yes / No / NA(None)
Carrier Details	☐ Courier/Post ☐ Client	Packaging: (Circle)	Hard Esky / Foam Esky / Box/bag/Other
Con Note #		Count	# # #

Relinquished by:	Signature:	Date/ Time:	Received by: SWS	Signature	Date/ Time: 21/7/25 1740
Relinquished by:	Signature:	Date/ Time:	Received by:	Signature	Date/ Time:

CHAIN OF CUSTODY

Page 4 of 4

CoC #: (if applicable)

Mandatory Fields					
CLIENT CODE:	ESYGROUM	*PROJECT MANAGER:	Max Cunningham	SAMPLER:	Siyuan He
*CLIENT:	Environmental Group Australia Pty Ltd	*PM MOBILE:	[redacted]	SAMPLER MOBILE:	439097815
OFFICE: (Invoiced Office)	168 Fitzroy Street, Marrickville NSW 2204	ALS QUOTE # (Client PL if blank)	ES25ENVGROUM0001	PURCHASE ORDER NO.:	
PROJECT NO./PROJECT:	2300 - WSU, Milperra - SCA Post Dems			SITE:	[redacted]
*INVOICE TO: (client default if nil)	accounts@egau.com.au			CC Invoice to PM	
*EMAIL REPORTS TO: (default to PM if blank)	[redacted]				
EDD Format/Type →		EDD Email Address:			

BIOSECURITY

Country of Origin: (if not Australia)

WO Sticker to go here. (ALS use only)

*** STORAGE REQUIREMENTS** *Please check box.* → *Standard Storage time from receipt of samples: Waters - 3 weeks, Soils - 2 months*

- ☑ Standard Storage
- ☐ Extended Storage

Specify Disposal Date:

Note: Extended storage incurs a fee and requires a signed agreement.

*** TURNAROUND** *Please check box.* → *(Not all tests can be expedited, contact Client Services for more information)*

- ☑ 5+ days (no surcharge)
- ☐ 3 day (+15%)
- ☐ 2 day (+30%)
- ☐ 1 day (+50%)

***ANALYSIS REQUIRED**

(NB. ALS Quote No. and/or Analysis Suite Codes must be listed to attract suite/quoted price)
Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).
Mark an X in the boxes below analysis to indicate the parameter listed above to be tested on that sample.

Comments: please log as per quote

ALS Use Only Lab ID	Sample ID	Depth/Description	Date/Time	No. Bottles	MATRIX (Enter one letter: Soil/Solid (S), Water (W), Sediments (SD), Dust (D), Feather (F), Biota (B), Biosolid (BS))	RTEX	Lab QC (additional bottles req.) Dup	Lab QC (additional bottles req.) MS	Additional Information (Comment on hazards - e.g., asbestos, known high contamination)
31	Trip Spike 18		14/11/25		S	X	☐	☐	
32	Trip Blank 18		↓		W	X	☐	☐	
33	TSC 18		↓				☐	☐	
							☐	☐	
							☐	☐	
							☐	☐	
							☐	☐	
							☐	☐	
							☐	☐	
							☐	☐	

Receipt Detail (Lab Use ONLY)								
Chilling Method:	Ice / Frozen / Melted	Ice Bricks: Frozen / Thawed	None	Sample Temp at Receipt	°C	°C	°C	Security Seal Intact (circle) Yes / No / NA(None)

Carrier Details ☐ Courier/Post ☐ Client
Con Note #

Packaging: (Circle) Hard Esky Foam Esky Box/Bag/Other
Count: # # #

Relinquished by:		Signature:		Date/ Time:	
Relinquished by:		Signature:		Date/ Time:	
Received by:	Vans	Signature		Date/ Time:	21/11/25 1710
Received by:		Signature		Date/ Time:	

RECORD

ABN 50 005 085 521

☑ Sydney Laboratory — Unit F3 Bld F, 16 Mars Rd, Lane Cove West, NSW 2066 — 02 9900 8400 — EnviroSampleNSW@eurofins.com

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

☐ Melbourne Laboratory — 2 Kingston Town Close, Oakleigh, VIC 3166 — 03 8564 5000 — EnviroSampleVic@eurofins.com

Company	Sydney Environmental Group	Project №	2300	Project Manager	IF
Address	U63, 45 Huntley Street Alexandria NSW	Project Name	WSU Milperra Delineation	EDD Format (ESdat, EQuIS, Custom)	
Contact Name	LACHLAN MULHERAN				
Phone №	1300 884 164				
Special Directions					
Purchase Order					
Quote ID №					

Sampler(s)	LM
Handed over by	LM
Primary Email	enviro@sydneyenvironmental.com.au
Secondary Email	Lachlan@ Isabelle@

Containers: 1L Plastic; 250ml Plastic; 125ml Plastic; 200ml Amber Glass; 40ml VOA vial; 500ml PFAS Bottle; Jar (Glass or HDPE); Other (Asbestos Jar/Bag, WA GoldJars)

Turnaround Time (TAT) Requirements: ☐ Overnight ☐ Same Day ☐ 1 Day ☐ 2 Day ☑ 3 Day ☐ 5 Day ☐ Other (

Analyses

№	Client Sample ID	Sampled Date (dd/mm/yy)	Matrix (Solid (S) Water (W))	SEG Contam Suite 1 (TRH, BTEX, PAH, Metals, Asbestos ID)	SEG Contam Suite 2 (TRH, BTEX, PAH, Metals, OCP, PCB, Asbestos ID)	SEG Contam Suite 3 (TRH, BTEX, PAH, Metals, OCP, OPP, PCB, Asbestos ID)	SEG ENM Suite 1 (TRH, BTEX, PAH, Metals, pH, EC, Asbestos ID)	Salinity Assessment Suite (L2 Aggresivity Suite, ESP %)	Asbestos ID AS4964 (0.01%)	Asbestos ID NEPM & WA (0.001%)	B7 Suite (TRH, BTEX, PAH, Metals)	B13 Suite (OCP, PCB)	Hold	Sample Comments / Dangerous Goods Hazard Warning
1	EBH2-01	28/10	S							X				
2	EBH2-02									↓				
3	EBH2-03													
4	EBH2-04													
5	EBH2-05												X	
6	EBH2-07												↓	
7	EBH2-08													
8	EBH3-01									X				
9	EBH3-02									↓				
10	EBH3-03													
11	EBH3-04													
12	EBH3-05												X	
13	EBH3-06												↓	
14	EBH3-07													
15	EBH3-08													
16	EBH5-01									X				
17	EBH5-02									↓				
18	EBH5-03													
19	EBH5-04													
20	EBH5-05												X	
	Total Counts									12			8	

Method of Shipment	☐ Courier (#)	☐ Hand Delivered	☐ Postal	Name	L Mulheran	Signature		Date	28/10/24	Time	16:30
Eurofins | mgt Laboratory Use Only	Received By	Bihan AI	SYD | BNE | MEL | PER | ADL |	Signature		Date	28/10	Time		Temperature	N/A
	Received By	Smayed	SYD | BNE | MEL | PER | ADL |	Signature		Date		Time	PM	Report №	

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

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Note: Metals = As, Cd, Cr, Cu, Hg, Ni, Pb, and Zn), TRH = Total Recoverable Hydrocarbons, PAH = Polycyclic Aromatic Hydrocarbons, PCB = Polychlorinated Biphenyls, BTEX = Benzene, Toluene, Ethylbenzene, and Xylene

1153896

RECORD

ABN 50 005 085 521

☑ Sydney Laboratory — Unit F3 Bld F, 16 Mars Rd, Lane Cove West, NSW 2066 — 02 9900 8400 — EnviroSampleNSW@eurofins.com

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

☐

☐ Melbourne Laboratory — 2 Kingston Town Close, Oakleigh, VIC 3166 — 03 8564 5000 — EnviroSampleVic@eurofins.com

Company	Sydney Environmental Group	Project №	2300	Project Manager	IF
Address	U63, 45 Huntley Street Alexandria NSW	Project Name	WSU Milperra Delineation	EDD Format (ESdat, EQuIS, Custom)	
Contact Name	ZACHLAN MULTHERN			Sampler(s)	LM
Phone №	1300 884 164			Handed over by	LM
Special Directions				Primary Email	enviro@sydneyenvironmental.com.au
Purchase Order				Secondary Email	zachlan@ Isabelle@
Quote ID №					

Analyses

Containers

Turnaround Time (TAT) Requirements (Default will be 3 days if not specified)

☐ Overnight ☐ Same Day ☐ 1 Day ☐ 2 Day ☐ 3 Day ☐ 5 Day ☐ Other (

№	Client Sample ID	Sampled Date (dd/mm/yy)	Matrix (Solid (S) Water (W))	SEG Contam Suite 1 (TRH, BTEX, PAH, Metals, Asbestos ID)	SEG Contam Suite 2 (TRH, BTEX, PAH, Metals, OCP, PCB, Asbestos ID)	SEG Contam Suite 3 (TRH, BTEX, PAH, Metals, OCP, OPP, PCB, Asbestos ID)	SEG ENM Suite 1 (TRH, BTEX, PAH, Metals, pH, EC, Asbestos ID)	Salinity Assessment Suite (L2 Aggresivity Suite, ESP %)	Asbestos ID AS4964 (0.01%)	Asbestos ID NEPM & WA (0.001%)	B7 Suite (TRH, BTEX, PAH, Metals)	B13 Suite (OCP, PCB)	Hold	1L Plastic	250ml Plastic	125ml Plastic	20ml Amber Glass	40ml VOA vial	240ml PFAS Bottle	Jar (Glass or HDPE)	Other (Asbestos AS4964 WA Guidelines)	Sample Comments / Dangerous Goods Hazard Warning
1	EBH2-01	28/10	S							X												
2	EBH2-02									↓												
3	EBH2-03																					
4	EBH2-04																					
5	EBH2-05												X									
6	EBH2-07												↓									
7	EBH2-08																					
8	EBH3-01									X												
9	EBH3-02									↓												
10	EBH3-03																					
11	EBH3-04																					
12	EBH3-05												X									
13	EBH3-06												↓									
14	EBH3-07																					
15	EBH3-08																					
16	EBH5-01									X												
17	EBH5-02									↓												
18	EBH5-03																					
19	EBH5-04																					
20	EBH5-05												X									
	Total Counts									12			8									

Delivery Details (Mandatory)	☐ Courier (#)	☐ Hand Delivered	☐ Postal	Name	2 Mylhern	Signature		Date	28/10/24	Time	16:30
Eurofins | mgt Laboratory Use Only	Received By	Bikram A	SYD | BNE | MEL | PER | ADL	Signature		Date	29/10	Time		Temperature	N/A
	Received By	Smayd	SYD | BNE | MEL | PER | ADL	Signature		Date		Time	PM	Report №	

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Note: Metals = As, Cd, Cr, Cu, Hg, Ni, Pb, and Zn), TRH = Total Recoverable Hydrocarbons, PAH = Polycyclic Aromatic Hydrocarbons, PCB = Polychlorinated Biphenyls, BTEX = Benzene, Toluene, Ethylbenzene, and Xylene

1153896

RECORD

ABN 50 005 085 521

☑ Sydney Laboratory — Unit F3 Bld F, 16 Mars Rd, Lane Cove West, NSW 2066 — 02 9900 8400 — EnviroSampleNSW@eurofins.com

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

☐ Melbourne Laboratory — 2 Kingston Town Close, Oakleigh, VIC 3166 — 03 8564 5000 — EnviroSampleVic@eurofins.com

Company	Sydney Environmental Group	Project №	2300	Project Manager	IF
Address	U63, 45 Huntley Street Alexandria NSW	Project Name	WSA Milpera Delacombe	EDD Format (ESdat, EQuIS, Custom)	
Contact Name	LACHLAN MULHEARN	Phone №	1300 884 164	Special Directions	
Purchase Order		Quote ID №			

Sampler(s)	LM
Handed over by	LM
Primary Email	enviro@sydneyenvironmental.com.au
Secondary Email	Lachlan@ Isabella@

Analyses

№	Client Sample ID	Sampled Date (dd/mm/yy)	Matrix (Solid (S) Water (W))	SEG Contam Suite 1 (TRH, BTEX, PAH, Metals, Asbestos ID)	SEG Contam Suite 2 (TRH, BTEX, PAH, Metals, OCP, PCB, Asbestos ID)	SEG Contam Suite 3 (TRH, BTEX, PAH, Metals, OCP, OPP, PCB, Asbestos ID)	SEG ENM Suite 1 (TRH, BTEX, PAH, Metals, pH, EC, Asbestos ID)	Salinity Assessment Suite (L2 Aggressivity Suite, ESP %)	Asbestos ID AS4964 (0.01%)	Asbestos ID NEPM & WA (0.001%)	B7 Suite (TRH, BTEX, PAH, Metals)	B13 Suite (OCP, PCB)	Hold
1	EBH5-06	28/10	S										X
2	EBH5-07												↓
3	EBH5-08												
4	BH39-01									X			
5	BH39-02									↓			
6	BH39-03												
7	BH39-04												
8	BH39-05												X
9	BH39-06												↓
10	BH39-07												
11	BH39-08												
12	SS10-01									X			
13	SS10-02									↓			
14	SS10-03												
15	SS10-04												
16	SS10-05												X
17	SS10-06												↓
18	SS10-07												
19	SS10-08												
20													
	Total Counts												

Containers

1L Plastic	250ml Plastic	125ml Plastic	250ml Amber Glass	40ml VOA vial	500ml PFAS Bottle	Jar (Glass or HDPE)	Other (Asbestos AS4964 WA Quantarine)

Turnaround Time (TAT) Requirements

☐ Overnight ☐ Same Day
☐ 1 Day ☐ 2 Day
☒ 3 Day ☐ 5 Day
☐ Other (

Sample Comments / Dangerous Goods Hazard Warning

Method of Shipment	☐ Courier (#)	☐ Hand Delivered	☐ Postal	Name	L Mulhearn	Signature		Date	28/10	Time	16:30
Eurofins | mgt Laboratory Use Only	Received By	Rihan Al	SYD | BNE | MEL | PER | ADL |	Signature		Date	28/10	Time	6:40	Temperature	N/A
	Received By	Smaydi	SYD | BNE | MEL | PER | ADL |	Signature		Date		Time	pm	Report №	

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Note: Metals = As, Cd, Cr, Cu, Hg, Ni, Pb, and Zn), TRH = Total Recoverable Hydrocarbons, PAH = Polycyclic Aromatic Hydrocarbons, PCB = Polychlorinated Biphenyls, BTEX = Benzene, Toluene, Ethylbenzene, and Xylene

3973
GPH

Fadi Soro

From: Samiksha Sathish
Sent: Thursday, 24 July 2025 12:29 PM
To: Kim Phan; EnviroCosting Sydney
Cc: Samples Sydney
Subject: FW: [EXTERNAL] - ALS Workorder : ES2522273 (2300 - WSU MILPERRA - SCA Post Demo)

Hi Kimmy & SR,

Are we able to please pull-out sample 030, DUP01A and send it to Eurofins with a copy of this email & the COC.

@EnviroCosting Sydney - can we please still charge the client the prep fee for this? Let me know and I can cancel analysis

Received
25/7/25
1:20 pm
S.S
CH

Kind regards,

Sam Sathish (she/her)
Client Services Officer, Environmental
Sydney, NSW

O: +61 2 8784 8555
D: +61 2 8784 8534
Samiksha.Sathish@alsglobal.com
277-289 Woodpark Road
Smithfield NSW 2164 AUSTRALIA

alsglobal.com

EnviroMail 148 Australia – Interpreting TOP Assay
EnviroMail 149 Australia - Net Zero commitments and roadmap
EnviroMail 150 Australia - Spotlight on emerging contaminants - Triclosan
EnviroMail 151 Australia - Expanding the scope of PFAS analysis in soils and waters
EnviroMail 152 Australia – Analysing Air & Gas with Canisters
EnviroMail 93 Australia Re-release – Laboratory quality assurance/quality control

From: Siyuan He <s.he@egau.com.au>
Sent: Thursday, 24 July 2025 11:45 AM
To: Samiksha Sathish <samiksha.sathish@ALSGlobal.com>
Subject: Re: [EXTERNAL] - ALS Workorder : ES2522273 (2300 - WSU MILPERRA - SCA Post Demo)

Hi Sam,

1248678

QUALITY CONTROL REPORT

Work Order	: **ES2513733**	Page	: 1 of 9
Amendment	: **1**		
Client	: **ENVIRONMENTAL GROUP AUSTRALIA PTY LTD**	Laboratory	: Environmental Division Sydney
Contact	: MAX CUNNINGHAM	Contact	: Samiksha Sathish
Address	: 36E Fitzroy Street Marrickville 2204	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61-2-8784 8555
Project	: 2300-2 Bullecourt Ave - SCA	Date Samples Received	: 12-May-2025
Order number	: ----	Date Analysis Commenced	: 14-May-2025
C-O-C number	: ----	Issue Date	: 20-May-2025
Sampler	: Lachlan Cranch		
Site	: ----		
Quote number	: ES25ENVGROLIM0001		
No. of samples received	: 9		
No. of samples analysed	: 9		

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
Brendan Schrader	Laboratory Technician	Newcastle - Asbestos, Mayfield West, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic 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
* = The final LOR has been raised due to dilution or other sample specific cause; adjusted LOR is shown in brackets. The duplicate ranges for Acceptable RPD% are applied to the final LOR where applicable.

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: 6576688)									
ES2513733-001	TP01-0.1-0.2	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	8	8	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	9	53.1	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	5	5	0.0	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	18	12	35.8	No Limit
ES2513180-001	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	<2	9	126	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	7	11	41.8	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	<5	0.0	No Limit
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 6575266)									
ES2513733-001	TP01-0.1-0.2	EA055: Moisture Content	----	0.1 (1.0)*	%	6.0	6.1	0.0	No Limit
EW2502524-008	Anonymous	EA055: Moisture Content	----	0.1 (1.0)*	%	16.5	16.9	2.3	0% - 50%
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 6576699)									
ES2513180-001	Anonymous	EA055: Moisture Content	----	0.1 (1.0)*	%	<1.0	<1.0	0.0	No Limit
ES2513180-009	Anonymous	EA055: Moisture Content	----	0.1 (1.0)*	%	<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 (%)*
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 6576691)									
ES2513733-001	TP01-0.1-0.2	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EW2502570-005	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EP066: Polychlorinated Biphenyls (PCB) (QC Lot: 6573768)									
ES2513733-001	TP01-0.1-0.2	EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EP068A: Organochlorine Pesticides (OC) (QC Lot: 6573767)									
ES2513733-001	TP01-0.1-0.2	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 - (Lindane)	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
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 6573766)									
EW2502543-002	Anonymous	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

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: 6573766) - continued									
EW2502543-002	Anonymous	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
ES2513733-001	TP01-0.1-0.2	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
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 6573622)									
ES2513733-001	TP01-0.1-0.2	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
ES2513821-006	Anonymous	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 6573765)									
EW2502543-002	Anonymous	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
ES2513733-001	TP01-0.1-0.2	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 6573765) - continued									
ES2513733-001	TP01-0.1-0.2	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 Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 6573622)									
ES2513733-001	TP01-0.1-0.2	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.0	No Limit
ES2513821-006	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: 6573765)									
EW2502543-002	Anonymous	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
ES2513733-001	TP01-0.1-0.2	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: BTEXN (QC Lot: 6573622)									
ES2513733-001	TP01-0.1-0.2	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
ES2513821-006	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

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: 6576688)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	121.1 mg/kg	95.5	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	109	68.0	132
EG005T: Copper	7440-50-8	5	mg/kg	<5	52.9 mg/kg	102	89.0	111
EG005T: Lead	7439-92-1	5	mg/kg	<5	60.8 mg/kg	98.6	82.0	119
EG005T: Nickel	7440-02-0	2	mg/kg	<2	15.3 mg/kg	95.4	80.0	120
EG005T: Zinc	7440-66-6	5	mg/kg	<5	139.3 mg/kg	94.3	66.0	133
EG035T: Total Recoverable Mercury by FIMS (QCLot: 6576691)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.087 mg/kg	93.7	70.0	125
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 6573768)								
EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	1 mg/kg	78.8	62.0	126
EP068A: Organochlorine Pesticides (OC) (QCLot: 6573767)								
EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	0.5 mg/kg	94.3	69.0	113
EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	0.5 mg/kg	94.0	65.0	117
EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	0.5 mg/kg	95.3	67.0	119
EP068: gamma-BHC - (Lindane)	58-89-9	0.05	mg/kg	<0.05	0.5 mg/kg	93.3	68.0	116
EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	89.8	65.0	117
EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	0.5 mg/kg	86.7	67.0	115
EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	0.5 mg/kg	93.0	69.0	115
EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	0.5 mg/kg	93.2	62.0	118
EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.5 mg/kg	92.9	63.0	117
EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	0.5 mg/kg	94.7	66.0	116
EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	0.5 mg/kg	90.5	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	94.4	67.0	115
EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	0.5 mg/kg	83.6	67.0	123
EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	0.5 mg/kg	102	69.0	115
EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	0.5 mg/kg	98.2	69.0	121
EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	0.5 mg/kg	84.0	56.0	120
EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	0.5 mg/kg	85.9	62.0	124

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
EP068A: Organochlorine Pesticides (OC) (QCLot: 6573767) - continued								
EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	0.5 mg/kg	81.8	66.0	120
EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	0.5 mg/kg	86.7	64.0	122
EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	0.5 mg/kg	91.4	54.0	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 6573766)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	6 mg/kg	93.9	77.0	125
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	6 mg/kg	91.7	72.0	124
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	6 mg/kg	94.5	73.0	127
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	6 mg/kg	95.0	72.0	126
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	6 mg/kg	96.1	75.0	127
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	6 mg/kg	97.6	77.0	127
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	6 mg/kg	95.7	73.0	127
EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	6 mg/kg	98.6	74.0	128
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	6 mg/kg	89.1	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	92.8	68.0	116
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	6 mg/kg	99.8	74.0	126
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	6 mg/kg	74.1	70.0	126
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	6 mg/kg	99.2	61.0	121
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	6 mg/kg	100	62.0	118
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	6 mg/kg	100	63.0	121
EP080/071: Total Petroleum Hydrocarbons (QCLot: 6573622)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	75.8	72.2	131
EP080/071: Total Petroleum Hydrocarbons (QCLot: 6573765)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	300 mg/kg	106	75.0	129
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	450 mg/kg	96.6	77.0	131
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	300 mg/kg	94.9	71.0	129
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 6573622)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	31 mg/kg	75.6	72.4	133
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 6573765)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	375 mg/kg	102	77.0	125
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	525 mg/kg	95.0	74.0	138
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	225 mg/kg	95.0	63.0	131
EP080: BTEXN (QCLot: 6573622)								

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
EP080: BTEXN (QCLot: 6573622) - continued								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	77.2	76.0	124
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	95.7	78.5	121
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	91.9	77.4	121
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	112	78.2	121
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	103	81.3	121
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	90.7	78.8	122

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: 6576688)							
ES2513180-001	Anonymous	EG005T: Arsenic	7440-38-2	50 mg/kg	96.0	70.0	130
		EG005T: Cadmium	7440-43-9	50 mg/kg	95.8	70.0	130
		EG005T: Chromium	7440-47-3	50 mg/kg	106	68.0	132
		EG005T: Copper	7440-50-8	250 mg/kg	97.1	70.0	130
		EG005T: Lead	7439-92-1	250 mg/kg	98.6	70.0	130
		EG005T: Nickel	7440-02-0	50 mg/kg	98.9	70.0	130
		EG005T: Zinc	7440-66-6	250 mg/kg	98.6	66.0	133
EG035T: Total Recoverable Mercury by FIMS (QCLot: 6576691)							
ES2513733-001	TP01-0.1-0.2	EG035T: Mercury	7439-97-6	5 mg/kg	105	70.0	130
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 6573768)							
ES2513733-001	TP01-0.1-0.2	EP066: Total Polychlorinated biphenyls	----	1 mg/kg	86.8	70.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 6573767)							
ES2513733-001	TP01-0.1-0.2	EP068: gamma-BHC - (Lindane)	58-89-9	0.5 mg/kg	96.9	70.0	130
		EP068: Heptachlor	76-44-8	0.5 mg/kg	85.9	70.0	130
		EP068: Aldrin	309-00-2	0.5 mg/kg	94.7	70.0	130
		EP068: Dieldrin	60-57-1	0.5 mg/kg	93.1	70.0	130
		EP068: Endrin	72-20-8	2 mg/kg	73.1	70.0	130
		EP068: 4.4`-DDT	50-29-3	2 mg/kg	80.1	70.0	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 6573766)							
ES2513733-001	TP01-0.1-0.2	EP075(SIM): Acenaphthene	83-32-9	10 mg/kg	92.4	70.0	130
		EP075(SIM): Pyrene	129-00-0	10 mg/kg	96.0	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: 6573622)							
ES2513733-001	TP01-0.1-0.2	EP080: C6 - C9 Fraction	----	32.5 mg/kg	78.8	60.4	142
EP080/071: Total Petroleum Hydrocarbons (QCLot: 6573765)							
ES2513733-001	TP01-0.1-0.2	EP071: C10 - C14 Fraction	----	480 mg/kg	80.3	73.0	137
		EP071: C15 - C28 Fraction	----	3100 mg/kg	76.1	53.0	131
		EP071: C29 - C36 Fraction	----	2060 mg/kg	86.3	52.0	132
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 6573622)							
ES2513733-001	TP01-0.1-0.2	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	77.2	61.1	142
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 6573765)							
ES2513733-001	TP01-0.1-0.2	EP071: >C10 - C16 Fraction	----	860 mg/kg	81.7	73.0	137
		EP071: >C16 - C34 Fraction	----	4320 mg/kg	82.1	53.0	131
		EP071: >C34 - C40 Fraction	----	890 mg/kg	75.1	52.0	132
EP080: BTEXN (QCLot: 6573622)							
ES2513733-001	TP01-0.1-0.2	EP080: Benzene	71-43-2	2.5 mg/kg	71.4	62.1	122
		EP080: Toluene	108-88-3	2.5 mg/kg	94.4	66.6	119
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	87.9	67.4	123
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2.5 mg/kg	107	66.4	121
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	104	70.7	121
		EP080: Naphthalene	91-20-3	2.5 mg/kg	90.6	61.1	115

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **ES2513733**	Page	: 1 of 7
Amendment	: **1**		
Client	: **ENVIRONMENTAL GROUP AUSTRALIA PTY LTD**	Laboratory	: Environmental Division Sydney
Contact	: MAX CUNNINGHAM	Telephone	: +61-2-8784 8555
Project	: 2300-2 Bullecourt Ave - SCA	Date Samples Received	: 12-May-2025
Site	: ----	Issue Date	: 20-May-2025
Sampler	: Lachlan Cranch	No. of samples received	: 9
Order number	: ----	No. of samples analysed	: 9

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.**
- **Surrogate recovery outliers exist for all regular sample matrices - please see following pages for full details.**

Outliers : Analysis Holding Time Compliance

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

Outliers : Frequency of Quality Control Samples

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

Regular Sample Surrogates

Sub-Matrix: **SOIL**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Samples Submitted							
EP075(SIM)T: PAH Surrogates	ES2513733-005	TP05-0.1-0.2	**4-Terphenyl-d14**	1718-51-0	64.0 %	65.0-129 %	**Recovery less than lower data quality objective**

Analysis Holding Time Compliance

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

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

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

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

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

Method / *Container / Client Sample ID(s)*	*Sample Date*	*Extraction / Preparation*			*Analysis*		
		Date extracted	*Due for extraction*	*Evaluation*	*Date analysed*	*Due for analysis*	*Evaluation*
EA055: Moisture Content (Dried @ 105-110°C)							
Soil Glass Jar - Unpreserved (EA055)							
TP01-0.1-0.2	**09-May-2025**	**----**	----	**----**	**14-May-2025**	23-May-2025	✓
Soil Glass Jar - Unpreserved (EA055)							
TP02-0.1-0.2, TP03-0.1-0.2, TP04-0.1-0.2, TP05-0.1-0.2, DUP03	**09-May-2025**	**----**	----	**----**	**15-May-2025**	23-May-2025	✓
EA200: AS 4964 - 2004 Identification of Asbestos in Soils							
Snap Lock Bag - ACM/Asbestos Grab Bag (EA200)							
TP01-0.1-0.2, TP02-0.1-0.2, TP03-0.1-0.2, TP04-0.1-0.2, TP05-0.1-0.2	**09-May-2025**	**----**	----	**----**	**16-May-2025**	05-Nov-2025	✓
EG005(ED093)T: Total Metals by ICP-AES							
Soil Glass Jar - Unpreserved (EG005T)							
TP01-0.1-0.2, TP02-0.1-0.2, TP03-0.1-0.2, TP04-0.1-0.2, TP05-0.1-0.2, DUP03	**09-May-2025**	**15-May-2025**	05-Nov-2025	✓	**16-May-2025**	05-Nov-2025	✓
EG035T: Total Recoverable Mercury by FIMS							
Soil Glass Jar - Unpreserved (EG035T)							
TP01-0.1-0.2, TP02-0.1-0.2, TP03-0.1-0.2, TP04-0.1-0.2, TP05-0.1-0.2, DUP03	**09-May-2025**	**15-May-2025**	06-Jun-2025	✓	**19-May-2025**	06-Jun-2025	✓

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)							
TP01-0.1-0.2, TP02-0.1-0.2, TP03-0.1-0.2, TP04-0.1-0.2, TP05-0.1-0.2	**09-May-2025**	**15-May-2025**	23-May-2025	✓	**15-May-2025**	24-Jun-2025	✓
EP068A: Organochlorine Pesticides (OC)							
Soil Glass Jar - Unpreserved (EP068)							
TP01-0.1-0.2, TP02-0.1-0.2, TP03-0.1-0.2, TP04-0.1-0.2, TP05-0.1-0.2	**09-May-2025**	**15-May-2025**	23-May-2025	✓	**15-May-2025**	24-Jun-2025	✓
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP075(SIM))							
TP01-0.1-0.2, TP02-0.1-0.2, TP03-0.1-0.2, TP04-0.1-0.2, TP05-0.1-0.2, DUP03	**09-May-2025**	**15-May-2025**	23-May-2025	✓	**15-May-2025**	24-Jun-2025	✓
EP080/071: Total Petroleum Hydrocarbons							
Soil Glass Jar - Unpreserved (EP080)							
TP01-0.1-0.2, TP02-0.1-0.2, TP03-0.1-0.2, TP04-0.1-0.2, TP05-0.1-0.2	**09-May-2025**	**14-May-2025**	23-May-2025	✓	**16-May-2025**	23-May-2025	✓
Soil Glass Jar - Unpreserved (EP071)							
TP01-0.1-0.2, TP02-0.1-0.2, TP03-0.1-0.2, TP04-0.1-0.2, TP05-0.1-0.2	**09-May-2025**	**15-May-2025**	23-May-2025	✓	**15-May-2025**	24-Jun-2025	✓
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Soil Glass Jar - Unpreserved (EP080)							
TP01-0.1-0.2, TP02-0.1-0.2, TP03-0.1-0.2, TP04-0.1-0.2, TP05-0.1-0.2	**09-May-2025**	**14-May-2025**	23-May-2025	✓	**16-May-2025**	23-May-2025	✓
Soil Glass Jar - Unpreserved (EP071)							
TP01-0.1-0.2, TP02-0.1-0.2, TP03-0.1-0.2, TP04-0.1-0.2, TP05-0.1-0.2	**09-May-2025**	**15-May-2025**	23-May-2025	✓	**15-May-2025**	24-Jun-2025	✓

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)							
Trip Blank	**02-May-2025**	**14-May-2025**	16-May-2025	✓	**15-May-2025**	16-May-2025	✓
Soil Glass Jar - Unpreserved (EP080)							
Trip Spike Control -13	**05-May-2025**	**14-May-2025**	19-May-2025	✓	**15-May-2025**	19-May-2025	✓
Soil Glass Jar - Unpreserved (EP080)							
Trip Spike - 13	**05-May-2025**	**14-May-2025**	19-May-2025	✓	**16-May-2025**	19-May-2025	✓
Soil Glass Jar - Unpreserved (EP080)							
TP01-0.1-0.2, TP02-0.1-0.2, TP03-0.1-0.2, TP04-0.1-0.2, TP05-0.1-0.2	**09-May-2025**	**14-May-2025**	23-May-2025	✓	**16-May-2025**	23-May-2025	✓

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	30	**13.33**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (SIM)	EP075(SIM)	2	12	**16.67**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	5	**20.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	1	5	**20.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	2	11	**18.18**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	18	**11.11**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
PAH/Phenols (SIM)	EP075(SIM)	1	12	**8.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	5	**20.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	1	5	**20.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	11	**9.09**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	18	**5.56**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
PAH/Phenols (SIM)	EP075(SIM)	1	12	**8.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	5	**20.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	1	5	**20.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	11	**9.09**	**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 Spikes (MS)							
PAH/Phenols (SIM)	EP075(SIM)	1	12	**8.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	5	**20.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	1	5	**20.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	11	**9.09**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	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
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).
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.

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.

Preparation Methods	*Method*	*Matrix*	*Method Descriptions*
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.

QUALITY CONTROL REPORT

Work Order	: **ES2510979**	Page	: 1 of 17
Client	: **ENVIRONMENTAL GROUP AUSTRALIA PTY LTD**	Laboratory	: Environmental Division Sydney
Contact	: MAX CUNNINGHAM	Contact	: Samiksha Sathish
Address	: 36E Fitzroy Street Marrickville 2204	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61-2-8784 8555
Project	: 2300	Date Samples Received	: 15-Apr-2025
Order number	: ----	Date Analysis Commenced	: 16-Apr-2025
C-O-C number	: ----	Issue Date	: 24-Apr-2025
Sampler	: Kya Wiya		
Site	: WSU Milperra		
Quote number	: ES25ENVGROLIM0001		
No. of samples received	: 31		
No. of samples analysed	: 31		

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
John Williams	Lab Technician	Newcastle - Asbestos, Mayfield West, NSW
Rassem Ayoubi	Senior Organic Chemist	Sydney Organics, 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
* = The final LOR has been raised due to dilution or other sample specific cause; adjusted LOR is shown in brackets. The duplicate ranges for Acceptable RPD% are applied to the final LOR where applicable.

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: 6526316)									
ES2510979-001	TP18-0.1-0.2	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	6	5	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	21	20	0.0	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	13	12	8.7	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	26	25	0.0	No Limit
ES2510979-011	TP25-0.2-0.3	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	9	8	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	10	8	26.8	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	6	5	0.0	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	23	12	64.9	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	45	40	11.6	No Limit
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 6526317)									
ES2510979-021	TP10-0.1-0.2	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	13	17	26.1	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	4	6	32.5	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	8	10	22.6	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	15	22	34.9	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	22	22	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: 6526317) - continued									
ES2510979-021	TP10-0.1-0.2	EG005T: Zinc	7440-66-6	5	mg/kg	54	53	2.6	0% - 50%
ES2510983-001	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	14	15	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	18	20	13.5	0% - 50%
		EG005T: Arsenic	7440-38-2	5	mg/kg	8	10	13.9	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	27	28	6.2	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	28	29	0.0	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	103	109	6.2	0% - 20%
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 6520246)									
ES2510906-001	Anonymous	EA055: Moisture Content	----	0.1 (1.0)*	%	23.7	20.1	16.6	0% - 20%
ES2511140-002	Anonymous	EA055: Moisture Content	----	0.1 (1.0)*	%	4.8	5.2	9.2	No Limit
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 6526319)									
ES2510979-002	TP18_1.0-1.1	EA055: Moisture Content	----	0.1 (1.0)*	%	14.3	16.0	11.7	0% - 50%
ES2510979-010	TP25-0.1-0.2	EA055: Moisture Content	----	0.1 (1.0)*	%	10.2	7.1	36.5	0% - 50%
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 6526320)									
ES2510979-024	TP28-0.1-0.2	EA055: Moisture Content	----	0.1 (1.0)*	%	20.1	19.1	4.9	0% - 20%
ES2510983-004	Anonymous	EA055: Moisture Content	----	0.1 (1.0)*	%	5.8	5.0	15.9	No Limit
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 6526315)									
ES2510979-001	TP18-0.1-0.2	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
ES2510979-011	TP25-0.2-0.3	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: 6526318)									
ES2510979-021	TP10-0.1-0.2	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
ES2510983-001	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EP066: Polychlorinated Biphenyls (PCB) (QC Lot: 6517232)									
ES2510979-001	TP18-0.1-0.2	EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
ES2510979-011	TP25-0.2-0.3	EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EP066: Polychlorinated Biphenyls (PCB) (QC Lot: 6517235)									
ES2510979-021	TP10-0.1-0.2	EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
ES2510983-001	Anonymous	EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EP068A: Organochlorine Pesticides (OC) (QC Lot: 6517231)									
ES2510979-001	TP18-0.1-0.2	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 - (Lindane)	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

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: 6517231) - continued									
ES2510979-001	TP18-0.1-0.2	EP068: Aldrin	309-00-2	0.05	mg/kg	0.67	0.70	5.1	0% - 50%
		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	0.10	0.12	10.0	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
ES2510979-011	TP25-0.2-0.3	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 - (Lindane)	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: 6517238)									
ES2510979-021	TP10-0.1-0.2	EP068: alpha-BHC	319-84-6	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 (%)*
EP068A: Organochlorine Pesticides (OC) (QC Lot: 6517238) - continued									
ES2510979-021	TP10-0.1-0.2	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 - (Lindane)	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	0.06	0.08	15.5	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
ES2510983-001	Anonymous	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 - (Lindane)	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

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: 6517238) - continued									
ES2510983-001	Anonymous	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
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 6517230)									
ES2510979-001	TP18-0.1-0.2	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
ES2510979-011	TP25-0.2-0.3	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

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: 6517230) - continued									
ES2510979-011	TP25-0.2-0.3	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: 6517237)									
ES2510979-021	TP10-0.1-0.2	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
ES2510983-001	Anonymous	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

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: 6517237) - continued									
ES2510983-001	Anonymous	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
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 6516610)									
ES2510979-001	TP18-0.1-0.2	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
ES2510979-011	TP25-0.2-0.3	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 6516614)									
ES2510979-021	TP10-0.1-0.2	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
ES2510983-001	Anonymous	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 6517229)									
ES2510979-001	TP18-0.1-0.2	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
ES2510979-011	TP25-0.2-0.3	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: 6517236)									
ES2510979-021	TP10-0.1-0.2	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
ES2510983-001	Anonymous	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 Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 6516610)									
ES2510979-001	TP18-0.1-0.2	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.0	No Limit
ES2510979-011	TP25-0.2-0.3	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: 6516614)									
ES2510979-021	TP10-0.1-0.2	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.0	No Limit
ES2510983-001	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: 6517229)									

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: 6517229) - continued									
ES2510979-001	TP18-0.1-0.2	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
ES2510979-011	TP25-0.2-0.3	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: 6517236)									
ES2510979-021	TP10-0.1-0.2	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
ES2510983-001	Anonymous	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: BTEXN (QC Lot: 6516610)									
ES2510979-001	TP18-0.1-0.2	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
ES2510979-011	TP25-0.2-0.3	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: 6516614)									
ES2510979-021	TP10-0.1-0.2	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
ES2510983-001	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

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: 6516614) - continued									
ES2510983-001	Anonymous	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

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: 6526316)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	121.1 mg/kg	93.9	88.0	113
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	0.74 mg/kg	83.6	70.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	19.6 mg/kg	108	68.0	132
EG005T: Copper	7440-50-8	5	mg/kg	<5	52.9 mg/kg	100	89.0	111
EG005T: Lead	7439-92-1	5	mg/kg	<5	60.8 mg/kg	92.5	82.0	119
EG005T: Nickel	7440-02-0	2	mg/kg	<2	15.3 mg/kg	94.3	80.0	120
EG005T: Zinc	7440-66-6	5	mg/kg	<5	139.3 mg/kg	89.5	66.0	133
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 6526317)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	121.1 mg/kg	99.8	88.0	113
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	0.74 mg/kg	89.6	70.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	19.6 mg/kg	110	68.0	132
EG005T: Copper	7440-50-8	5	mg/kg	<5	52.9 mg/kg	104	89.0	111
EG005T: Lead	7439-92-1	5	mg/kg	<5	60.8 mg/kg	97.6	82.0	119
EG005T: Nickel	7440-02-0	2	mg/kg	<2	15.3 mg/kg	97.1	80.0	120
EG005T: Zinc	7440-66-6	5	mg/kg	<5	139.3 mg/kg	93.2	66.0	133
EG035T: Total Recoverable Mercury by FIMS (QCLot: 6526315)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.087 mg/kg	79.9	70.0	125
EG035T: Total Recoverable Mercury by FIMS (QCLot: 6526318)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.087 mg/kg	86.2	70.0	125
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 6517232)								
EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	1 mg/kg	95.5	62.0	126
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 6517235)								
EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	1 mg/kg	105	62.0	126
EP068A: Organochlorine Pesticides (OC) (QCLot: 6517231)								
EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	0.5 mg/kg	93.6	69.0	113
EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	0.5 mg/kg	94.1	65.0	117
EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	0.5 mg/kg	93.4	67.0	119
EP068: gamma-BHC - (Lindane)	58-89-9	0.05	mg/kg	<0.05	0.5 mg/kg	93.6	68.0	116
EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	92.0	65.0	117
EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	0.5 mg/kg	91.2	67.0	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: 6517231) - continued								
EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	0.5 mg/kg	92.5	69.0	115
EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	0.5 mg/kg	96.4	62.0	118
EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.5 mg/kg	93.3	63.0	117
EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	0.5 mg/kg	92.2	66.0	116
EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	0.5 mg/kg	95.7	64.0	116
EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	0.5 mg/kg	94.4	66.0	116
EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	0.5 mg/kg	97.1	67.0	115
EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	0.5 mg/kg	91.7	67.0	123
EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	0.5 mg/kg	94.1	69.0	115
EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	0.5 mg/kg	93.3	69.0	121
EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	0.5 mg/kg	95.8	56.0	120
EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	0.5 mg/kg	97.9	62.0	124
EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	0.5 mg/kg	92.4	66.0	120
EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	0.5 mg/kg	92.6	64.0	122
EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	0.5 mg/kg	89.2	54.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 6517238)								
EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	0.5 mg/kg	88.9	69.0	113
EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	0.5 mg/kg	90.4	65.0	117
EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	0.5 mg/kg	86.7	67.0	119
EP068: gamma-BHC - (Lindane)	58-89-9	0.05	mg/kg	<0.05	0.5 mg/kg	88.9	68.0	116
EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	86.6	65.0	117
EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	0.5 mg/kg	87.6	67.0	115
EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	0.5 mg/kg	87.1	69.0	115
EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	0.5 mg/kg	90.7	62.0	118
EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.5 mg/kg	87.9	63.0	117
EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	0.5 mg/kg	87.5	66.0	116
EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	0.5 mg/kg	87.4	64.0	116
EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	0.5 mg/kg	87.9	66.0	116
EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	0.5 mg/kg	89.1	67.0	115
EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	0.5 mg/kg	94.7	67.0	123
EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	0.5 mg/kg	87.5	69.0	115
EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	0.5 mg/kg	86.0	69.0	121
EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	0.5 mg/kg	82.9	56.0	120
EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	0.5 mg/kg	96.1	62.0	124

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: 6517238) - continued								
EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	0.5 mg/kg	93.3	66.0	120
EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	0.5 mg/kg	90.4	64.0	122
EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	0.5 mg/kg	90.9	54.0	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 6517230)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	6 mg/kg	94.6	77.0	125
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	6 mg/kg	93.6	72.0	124
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	6 mg/kg	97.4	73.0	127
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	6 mg/kg	96.0	72.0	126
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	6 mg/kg	91.6	75.0	127
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	6 mg/kg	91.7	77.0	127
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	6 mg/kg	90.5	73.0	127
EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	6 mg/kg	98.4	74.0	128
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	6 mg/kg	94.2	69.0	123
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	6 mg/kg	89.4	75.0	127
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	6 mg/kg	95.9	68.0	116
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	6 mg/kg	93.4	74.0	126
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	6 mg/kg	96.4	70.0	126
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	6 mg/kg	99.7	61.0	121
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	6 mg/kg	95.3	62.0	118
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	6 mg/kg	96.9	63.0	121
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 6517237)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	6 mg/kg	93.2	77.0	125
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	6 mg/kg	93.9	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	95.6	72.0	126
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	6 mg/kg	98.6	75.0	127
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	6 mg/kg	90.6	77.0	127
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	6 mg/kg	91.6	73.0	127
EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	6 mg/kg	93.5	74.0	128
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	6 mg/kg	95.0	69.0	123
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	6 mg/kg	102	75.0	127
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	6 mg/kg	92.5	68.0	116
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	6 mg/kg	92.4	74.0	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
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 6517237) - continued								
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	6 mg/kg	96.3	70.0	126
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	6 mg/kg	99.8	61.0	121
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	6 mg/kg	97.9	62.0	118
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	6 mg/kg	98.1	63.0	121
EP080/071: Total Petroleum Hydrocarbons (QCLot: 6516610)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	94.5	72.2	131
EP080/071: Total Petroleum Hydrocarbons (QCLot: 6516614)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	81.1	72.2	131
EP080/071: Total Petroleum Hydrocarbons (QCLot: 6517229)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	300 mg/kg	104	75.0	129
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	450 mg/kg	105	77.0	131
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	300 mg/kg	101	71.0	129
EP080/071: Total Petroleum Hydrocarbons (QCLot: 6517236)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	300 mg/kg	107	75.0	129
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	450 mg/kg	110	77.0	131
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	300 mg/kg	104	71.0	129
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 6516610)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	31 mg/kg	87.8	72.4	133
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 6516614)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	31 mg/kg	78.2	72.4	133
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 6517229)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	375 mg/kg	106	77.0	125
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	525 mg/kg	103	74.0	138
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	225 mg/kg	87.0	63.0	131
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 6517236)								
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	107	74.0	138
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	225 mg/kg	84.1	63.0	131
EP080: BTEXN (QCLot: 6516610)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	91.6	76.0	124
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	89.5	78.5	121
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	81.0	77.4	121
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	81.9	78.2	121

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	LCS: Spike Recovery (%)	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP080: BTEXN (QCLot: 6516610) - continued								
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	84.2	81.3	121
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	80.9	78.8	122
EP080: BTEXN (QCLot: 6516614)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	102	76.0	124
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	112	78.5	121
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	102	77.4	121
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	115	78.2	121
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	114	81.3	121
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	99.0	78.8	122

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: 6526316)							
ES2510979-001	TP18-0.1-0.2	EG005T: Arsenic	7440-38-2	50 mg/kg	94.7	70.0	130
		EG005T: Cadmium	7440-43-9	50 mg/kg	94.0	70.0	130
		EG005T: Chromium	7440-47-3	50 mg/kg	97.8	68.0	132
		EG005T: Copper	7440-50-8	250 mg/kg	97.4	70.0	130
		EG005T: Lead	7439-92-1	250 mg/kg	95.4	70.0	130
		EG005T: Nickel	7440-02-0	50 mg/kg	95.2	70.0	130
		EG005T: Zinc	7440-66-6	250 mg/kg	95.0	66.0	133
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 6526317)							
ES2510979-021	TP10-0.1-0.2	EG005T: Arsenic	7440-38-2	50 mg/kg	101	70.0	130
		EG005T: Cadmium	7440-43-9	50 mg/kg	99.6	70.0	130
		EG005T: Chromium	7440-47-3	50 mg/kg	102	68.0	132
		EG005T: Copper	7440-50-8	250 mg/kg	103	70.0	130
		EG005T: Lead	7439-92-1	250 mg/kg	102	70.0	130
		EG005T: Nickel	7440-02-0	50 mg/kg	100	70.0	130
		EG005T: Zinc	7440-66-6	250 mg/kg	106	66.0	133
EG035T: Total Recoverable Mercury by FIMS (QCLot: 6526315)							
ES2510979-001	TP18-0.1-0.2	EG035T: Mercury	7439-97-6	5 mg/kg	87.4	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 6526318)							

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EG035T: Total Recoverable Mercury by FIMS (QCLot: 6526318) - continued							
ES2510979-021	TP10-0.1-0.2	EG035T: Mercury	7439-97-6	5 mg/kg	88.1	70.0	130
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 6517232)							
ES2510979-001	TP18-0.1-0.2	EP066: Total Polychlorinated biphenyls	----	1 mg/kg	101	70.0	130
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 6517235)							
ES2510979-021	TP10-0.1-0.2	EP066: Total Polychlorinated biphenyls	----	1 mg/kg	106	70.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 6517231)							
ES2510979-001	TP18-0.1-0.2	EP068: gamma-BHC - (Lindane)	58-89-9	0.5 mg/kg	80.7	70.0	130
		EP068: Heptachlor	76-44-8	0.5 mg/kg	84.8	70.0	130
		EP068: Aldrin	309-00-2	0.5 mg/kg	90.4	70.0	130
		EP068: Dieldrin	60-57-1	0.5 mg/kg	100	70.0	130
		EP068: Endrin	72-20-8	2 mg/kg	79.2	70.0	130
		EP068: 4.4`-DDT	50-29-3	2 mg/kg	79.9	70.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 6517238)							
ES2510979-021	TP10-0.1-0.2	EP068: gamma-BHC - (Lindane)	58-89-9	0.5 mg/kg	93.7	70.0	130
		EP068: Heptachlor	76-44-8	0.5 mg/kg	102	70.0	130
		EP068: Aldrin	309-00-2	0.5 mg/kg	91.9	70.0	130
		EP068: Dieldrin	60-57-1	0.5 mg/kg	99.7	70.0	130
		EP068: Endrin	72-20-8	2 mg/kg	101	70.0	130
		EP068: 4.4`-DDT	50-29-3	2 mg/kg	84.1	70.0	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 6517230)							
ES2510979-001	TP18-0.1-0.2	EP075(SIM): Acenaphthene	83-32-9	10 mg/kg	95.6	70.0	130
		EP075(SIM): Pyrene	129-00-0	10 mg/kg	103	70.0	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 6517237)							
ES2510979-021	TP10-0.1-0.2	EP075(SIM): Acenaphthene	83-32-9	10 mg/kg	91.7	70.0	130
		EP075(SIM): Pyrene	129-00-0	10 mg/kg	98.6	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 6516610)							
ES2510979-001	TP18-0.1-0.2	EP080: C6 - C9 Fraction	----	32.5 mg/kg	96.8	60.4	142
EP080/071: Total Petroleum Hydrocarbons (QCLot: 6516614)							
ES2510979-021	TP10-0.1-0.2	EP080: C6 - C9 Fraction	----	32.5 mg/kg	75.6	60.4	142
EP080/071: Total Petroleum Hydrocarbons (QCLot: 6517229)							
ES2510979-001	TP18-0.1-0.2	EP071: C10 - C14 Fraction	----	480 mg/kg	133	73.0	137
		EP071: C15 - C28 Fraction	----	3100 mg/kg	121	53.0	131
		EP071: C29 - C36 Fraction	----	2060 mg/kg	115	52.0	132
EP080/071: Total Petroleum Hydrocarbons (QCLot: 6517236)							
ES2510979-021	TP10-0.1-0.2	EP071: C10 - C14 Fraction	----	480 mg/kg	112	73.0	137

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: 6517236) - continued							
ES2510979-021	TP10-0.1-0.2	EP071: C15 - C28 Fraction	----	3100 mg/kg	98.5	53.0	131
		EP071: C29 - C36 Fraction	----	2060 mg/kg	108	52.0	132
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 6516610)							
ES2510979-001	TP18-0.1-0.2	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	88.1	61.1	142
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 6516614)							
ES2510979-021	TP10-0.1-0.2	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	72.6	61.1	142
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 6517229)							
ES2510979-001	TP18-0.1-0.2	EP071: >C10 - C16 Fraction	----	860 mg/kg	110	73.0	137
		EP071: >C16 - C34 Fraction	----	4320 mg/kg	120	53.0	131
		EP071: >C34 - C40 Fraction	----	890 mg/kg	116	52.0	132
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 6517236)							
ES2510979-021	TP10-0.1-0.2	EP071: >C10 - C16 Fraction	----	860 mg/kg	110	73.0	137
		EP071: >C16 - C34 Fraction	----	4320 mg/kg	102	53.0	131
		EP071: >C34 - C40 Fraction	----	890 mg/kg	108	52.0	132
EP080: BTEXN (QCLot: 6516610)							
ES2510979-001	TP18-0.1-0.2	EP080: Benzene	71-43-2	2.5 mg/kg	85.0	62.1	122
		EP080: Toluene	108-88-3	2.5 mg/kg	82.3	66.6	119
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	76.4	67.4	123
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2.5 mg/kg	76.2	66.4	121
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	77.2	70.7	121
		EP080: Naphthalene	91-20-3	2.5 mg/kg	81.9	61.1	115
EP080: BTEXN (QCLot: 6516614)							
ES2510979-021	TP10-0.1-0.2	EP080: Benzene	71-43-2	2.5 mg/kg	92.0	62.1	122
		EP080: Toluene	108-88-3	2.5 mg/kg	97.8	66.6	119
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	87.2	67.4	123
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2.5 mg/kg	96.1	66.4	121
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	98.1	70.7	121
		EP080: Naphthalene	91-20-3	2.5 mg/kg	82.7	61.1	115

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **ES2510979**	Page	: 1 of 11
Client	: **ENVIRONMENTAL GROUP AUSTRALIA PTY LTD**	Laboratory	: Environmental Division Sydney
Contact	: MAX CUNNINGHAM	Telephone	: +61-2-8784 8555
Project	: 2300	Date Samples Received	: 15-Apr-2025
Site	: WSU Milperra	Issue Date	: 24-Apr-2025
Sampler	: Kya Wiya	No. of samples received	: 31
Order number	: ----	No. of samples analysed	: 31

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, where applicable to the methodology, 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
EA055: Moisture Content (Dried @ 105-110°C)							
Soil Glass Jar - Unpreserved (EA055)							
TP18-0.1-0.2, TP25-0.2-0.3, TP10-0.1-0.2	**15-Apr-2025**	**----**	----	----	**17-Apr-2025**	29-Apr-2025	✓
Soil Glass Jar - Unpreserved (EA055)							
TP18_1.0-1.1, TP18-2.0-2.1, TP19-0.1-0.2, TP19-1.0-1.1, TP19-2.0-2.1, TP20-0.1-0.2, TP20-1.0-1.1, TP20-2.0-2.1, TP25-0.1-0.2, TP25-0.4-0.5, TP25-1.0-1.1, TP25-2.0-2.1, TP07-0.1-0.2, TP07-1.0-1.1, TP07-2.0-2.1, TP08-0.1-0.2, TP08-1.0-1.1, TP08-2.0-2.1, TP10-1.0-1.1, TP10-2.0-2.1, TP28-0.1-0.2, TP28-0.3-0.4, TP28-1.0-1.1, TP28-2.0-2.1, DUP02	**15-Apr-2025**	**----**	----	----	**23-Apr-2025**	29-Apr-2025	✓

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 - ACM/Asbestos Grab Bag (EA200)								
TP18-0.1-0.2,	TP18_1.0-1.1,	**15-Apr-2025**	**----**	----	**----**	**22-Apr-2025**	12-Oct-2025	✓
TP18-2.0-2.1,	TP19-0.1-0.2,							
TP19-1.0-1.1,	TP19-2.0-2.1,							
TP20-0.1-0.2,	TP20-1.0-1.1,							
TP20-2.0-2.1,	TP25-0.1-0.2,							
TP25-0.2-0.3,	TP25-0.4-0.5,							
TP25-1.0-1.1,	TP25-2.0-2.1,							
TP07-0.1-0.2,	TP07-1.0-1.1,							
TP07-2.0-2.1,	TP08-0.1-0.2,							
TP08-1.0-1.1,	TP08-2.0-2.1,							
TP10-0.1-0.2,	TP10-1.0-1.1,							
TP10-2.0-2.1,	TP28-0.1-0.2,							
TP28-0.3-0.4,	TP28-1.0-1.1,							
TP28-2.0-2.1								
EG005(ED093)T: Total Metals by ICP-AES								
Soil Glass Jar - Unpreserved (EG005T)								
TP18-0.1-0.2,	TP18_1.0-1.1,	**15-Apr-2025**	**23-Apr-2025**	12-Oct-2025	✓	**23-Apr-2025**	12-Oct-2025	✓
TP18-2.0-2.1,	TP19-0.1-0.2,							
TP19-1.0-1.1,	TP19-2.0-2.1,							
TP20-0.1-0.2,	TP20-1.0-1.1,							
TP20-2.0-2.1,	TP25-0.1-0.2,							
TP25-0.2-0.3,	TP25-0.4-0.5,							
TP25-1.0-1.1,	TP25-2.0-2.1,							
TP07-0.1-0.2,	TP07-1.0-1.1,							
TP07-2.0-2.1,	TP08-0.1-0.2,							
TP08-1.0-1.1,	TP08-2.0-2.1,							
TP10-0.1-0.2,	TP10-1.0-1.1,							
TP10-2.0-2.1,	TP28-0.1-0.2,							
TP28-0.3-0.4,	TP28-1.0-1.1,							
TP28-2.0-2.1,	DUP02							

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)							
TP18-0.1-0.2, TP18_1.0-1.1, TP18-2.0-2.1, TP19-0.1-0.2, TP19-1.0-1.1, TP19-2.0-2.1, TP20-0.1-0.2, TP20-1.0-1.1, TP20-2.0-2.1, TP25-0.1-0.2, TP25-0.2-0.3, TP25-0.4-0.5, TP25-1.0-1.1, TP25-2.0-2.1, TP07-0.1-0.2, TP07-1.0-1.1, TP07-2.0-2.1, TP08-0.1-0.2, TP08-1.0-1.1, TP08-2.0-2.1, TP10-0.1-0.2, TP10-1.0-1.1, TP10-2.0-2.1, TP28-0.1-0.2, TP28-0.3-0.4, TP28-1.0-1.1, TP28-2.0-2.1, DUP02	**15-Apr-2025**	**23-Apr-2025**	13-May-2025	✓	**24-Apr-2025**	13-May-2025	✓
EP066: Polychlorinated Biphenyls (PCB)							
Soil Glass Jar - Unpreserved (EP066)							
TP18-0.1-0.2, TP18_1.0-1.1, TP18-2.0-2.1, TP19-0.1-0.2, TP19-1.0-1.1, TP19-2.0-2.1, TP20-0.1-0.2, TP20-1.0-1.1, TP20-2.0-2.1, TP25-0.1-0.2, TP25-0.2-0.3, TP25-0.4-0.5, TP25-1.0-1.1, TP25-2.0-2.1, TP07-0.1-0.2, TP07-1.0-1.1, TP07-2.0-2.1, TP08-0.1-0.2, TP08-1.0-1.1, TP08-2.0-2.1, TP10-0.1-0.2, TP10-1.0-1.1, TP10-2.0-2.1, TP28-0.1-0.2, TP28-0.3-0.4, TP28-1.0-1.1, TP28-2.0-2.1	**15-Apr-2025**	**17-Apr-2025**	29-Apr-2025	✓	**23-Apr-2025**	27-May-2025	✓

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)								
TP18_1.0-1.1,	TP18-2.0-2.1,	**15-Apr-2025**	**17-Apr-2025**	29-Apr-2025	✓	**23-Apr-2025**	27-May-2025	✓
TP19-0.1-0.2,	TP19-1.0-1.1,							
TP19-2.0-2.1,	TP20-0.1-0.2,							
TP20-1.0-1.1,	TP20-2.0-2.1,							
TP25-0.1-0.2,	TP25-0.2-0.3,							
TP25-0.4-0.5,	TP25-1.0-1.1,							
TP25-2.0-2.1,	TP07-0.1-0.2,							
TP07-1.0-1.1,	TP07-2.0-2.1,							
TP08-0.1-0.2,	TP08-1.0-1.1,							
TP08-2.0-2.1,	TP10-1.0-1.1,							
TP10-2.0-2.1,	TP28-0.1-0.2,							
TP28-1.0-1.1,	TP28-2.0-2.1							
Soil Glass Jar - Unpreserved (EP068)								
TP18-0.1-0.2,	TP10-0.1-0.2,	**15-Apr-2025**	**17-Apr-2025**	29-Apr-2025	✓	**24-Apr-2025**	27-May-2025	✓
TP28-0.3-0.4								
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Soil Glass Jar - Unpreserved (EP075(SIM))								
TP18-0.1-0.2,	TP18_1.0-1.1,	**15-Apr-2025**	**17-Apr-2025**	29-Apr-2025	✓	**17-Apr-2025**	27-May-2025	✓
TP18-2.0-2.1,	TP19-0.1-0.2,							
TP19-1.0-1.1,	TP19-2.0-2.1,							
TP20-0.1-0.2,	TP20-1.0-1.1,							
TP20-2.0-2.1,	TP25-0.1-0.2,							
TP25-0.2-0.3,	TP08-0.1-0.2,							
TP08-1.0-1.1,	TP08-2.0-2.1,							
TP28-2.0-2.1,	DUP02							
Soil Glass Jar - Unpreserved (EP075(SIM))								
TP25-0.4-0.5,	TP25-1.0-1.1,	**15-Apr-2025**	**17-Apr-2025**	29-Apr-2025	✓	**22-Apr-2025**	27-May-2025	✓
TP25-2.0-2.1,	TP07-0.1-0.2,							
TP07-1.0-1.1,	TP07-2.0-2.1,							
TP10-0.1-0.2,	TP10-1.0-1.1,							
TP10-2.0-2.1,	TP28-0.1-0.2,							
TP28-0.3-0.4,	TP28-1.0-1.1							

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)							
TP18-0.1-0.2, TP18_1.0-1.1, TP18-2.0-2.1, TP19-0.1-0.2, TP19-1.0-1.1, TP19-2.0-2.1, TP20-0.1-0.2, TP20-1.0-1.1, TP20-2.0-2.1, TP25-0.1-0.2, TP25-0.2-0.3, TP25-0.4-0.5, TP25-1.0-1.1, TP25-2.0-2.1, TP07-0.1-0.2, TP07-1.0-1.1, TP07-2.0-2.1, TP08-0.1-0.2, TP08-1.0-1.1, TP08-2.0-2.1, TP10-0.1-0.2, TP10-1.0-1.1, TP10-2.0-2.1, TP28-0.1-0.2, TP28-0.3-0.4, TP28-1.0-1.1, TP28-2.0-2.1	**15-Apr-2025**	**16-Apr-2025**	29-Apr-2025	✓	**23-Apr-2025**	29-Apr-2025	✓
Soil Glass Jar - Unpreserved (EP071)							
TP18-0.1-0.2, TP18_1.0-1.1, TP18-2.0-2.1, TP19-0.1-0.2, TP19-1.0-1.1, TP19-2.0-2.1, TP20-0.1-0.2, TP20-1.0-1.1, TP20-2.0-2.1, TP25-0.1-0.2, TP25-0.2-0.3, TP25-0.4-0.5, TP25-1.0-1.1, TP25-2.0-2.1, TP07-0.1-0.2, TP07-1.0-1.1, TP07-2.0-2.1, TP08-0.1-0.2, TP08-1.0-1.1, TP08-2.0-2.1, TP10-0.1-0.2, TP10-1.0-1.1, TP10-2.0-2.1, TP28-0.3-0.4, TP28-1.0-1.1, TP28-2.0-2.1	**15-Apr-2025**	**17-Apr-2025**	29-Apr-2025	✓	**22-Apr-2025**	27-May-2025	✓
Soil Glass Jar - Unpreserved (EP071)							
TP28-0.1-0.2	**15-Apr-2025**	**17-Apr-2025**	29-Apr-2025	✓	**24-Apr-2025**	27-May-2025	✓

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)							
TP18-0.1-0.2, TP18_1.0-1.1, TP18-2.0-2.1, TP19-0.1-0.2, TP19-1.0-1.1, TP19-2.0-2.1, TP20-0.1-0.2, TP20-1.0-1.1, TP20-2.0-2.1, TP25-0.1-0.2, TP25-0.2-0.3, TP25-0.4-0.5, TP25-1.0-1.1, TP25-2.0-2.1, TP07-0.1-0.2, TP07-1.0-1.1, TP07-2.0-2.1, TP08-0.1-0.2, TP08-1.0-1.1, TP08-2.0-2.1, TP10-0.1-0.2, TP10-1.0-1.1, TP10-2.0-2.1, TP28-0.1-0.2, TP28-0.3-0.4, TP28-1.0-1.1, TP28-2.0-2.1	**15-Apr-2025**	**16-Apr-2025**	29-Apr-2025	✓	**23-Apr-2025**	29-Apr-2025	✓
Soil Glass Jar - Unpreserved (EP071)							
TP18-0.1-0.2, TP18_1.0-1.1, TP18-2.0-2.1, TP19-0.1-0.2, TP19-1.0-1.1, TP19-2.0-2.1, TP20-0.1-0.2, TP20-1.0-1.1, TP20-2.0-2.1, TP25-0.1-0.2, TP25-0.2-0.3, TP25-0.4-0.5, TP25-1.0-1.1, TP25-2.0-2.1, TP07-0.1-0.2, TP07-1.0-1.1, TP07-2.0-2.1, TP08-0.1-0.2, TP08-1.0-1.1, TP08-2.0-2.1, TP10-0.1-0.2, TP10-1.0-1.1, TP10-2.0-2.1, TP28-0.3-0.4, TP28-1.0-1.1, TP28-2.0-2.1	**15-Apr-2025**	**17-Apr-2025**	29-Apr-2025	✓	**22-Apr-2025**	27-May-2025	✓
Soil Glass Jar - Unpreserved (EP071)							
TP28-0.1-0.2	**15-Apr-2025**	**17-Apr-2025**	29-Apr-2025	✓	**24-Apr-2025**	27-May-2025	✓

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)							
TRIP SPIKE, TRIP BLANK, TSC	**07-Apr-2025**	**16-Apr-2025**	21-Apr-2025	✓	**18-Apr-2025**	21-Apr-2025	✓
Soil Glass Jar - Unpreserved (EP080)							
TP18-0.1-0.2, TP18_1.0-1.1, TP18-2.0-2.1, TP19-0.1-0.2, TP19-1.0-1.1, TP19-2.0-2.1, TP20-0.1-0.2, TP20-1.0-1.1, TP20-2.0-2.1, TP25-0.1-0.2, TP25-0.2-0.3, TP25-0.4-0.5, TP25-1.0-1.1, TP25-2.0-2.1, TP07-0.1-0.2, TP07-1.0-1.1, TP07-2.0-2.1, TP08-0.1-0.2, TP08-1.0-1.1, TP08-2.0-2.1, TP10-0.1-0.2, TP10-1.0-1.1, TP10-2.0-2.1, TP28-0.1-0.2, TP28-0.3-0.4, TP28-1.0-1.1, TP28-2.0-2.1	**15-Apr-2025**	**16-Apr-2025**	29-Apr-2025	✓	**23-Apr-2025**	29-Apr-2025	✓

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	6	47	**12.77**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (SIM)	EP075(SIM)	4	40	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	4	39	**10.26**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	4	39	**10.26**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	4	40	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	4	40	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	4	39	**10.26**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	4	40	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
PAH/Phenols (SIM)	EP075(SIM)	2	40	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	2	39	**5.13**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	2	39	**5.13**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	40	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	40	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	2	39	**5.13**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	40	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
PAH/Phenols (SIM)	EP075(SIM)	2	40	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	2	39	**5.13**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	2	39	**5.13**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	40	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	40	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	2	39	**5.13**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	40	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
PAH/Phenols (SIM)	EP075(SIM)	2	40	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	2	39	**5.13**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	2	39	**5.13**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	40	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	40	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	2	39	**5.13**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	40	**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).
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.

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.

Preparation Methods	*Method*	*Matrix*	*Method Descriptions*
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.

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **ES2509826**	Page	: 1 of 9
Client	: **ENVIRONMENTAL GROUP AUSTRALIA PTY LTD**	Laboratory	: Environmental Division Sydney
Contact	: MAX CUNNINGHAM	Telephone	: +61-2-8784 8555
Project	: 2300	Date Samples Received	: 03-Apr-2025
Site	: WSU, 2 bullecourt Ave milperra	Issue Date	: 11-Apr-2025
Sampler	: LAWRENCE LIU	No. of samples received	: 27
Order number	: ----	No. of samples analysed	: 27

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

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

Summary of Outliers

Outliers : Quality Control Samples

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

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

Outliers : Analysis Holding Time Compliance

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

Outliers : Frequency of Quality Control Samples

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

Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **SOIL**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Matrix Spike (MS) Recoveries							
EG005(ED093)T: Total Metals by ICP-AES	ES2509768--001	Anonymous	**Zinc**	7440-66-6	161 %	66.0-133%	**Recovery greater than upper data quality objective**

Regular Sample Surrogates

Sub-Matrix: **SOIL**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Samples Submitted							
EP075(SIM)S: Phenolic Compound Surrogates	ES2509826-001	TP09-0.1-0.2	**2.4.6-Tribromophenol**	118-79-6	35.1 %	40.0-138 %	**Recovery less than lower data quality objective**

Analysis Holding Time Compliance

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

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

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

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

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA055: Moisture Content (Dried @ 105-110°C)							
Soil Glass Jar - Unpreserved (EA055)							
TP09-0.1-0.2, TP09-0.2-0.3, TP11-0.1-0.2, TP11-0.4-0.5, TP12-0.1-0.2, TP12-0.9-1.0, TP13-0.1-0.2, TP13-0.3-0.4, TP13-0.6-0.7, TP13-1.5-1.6, TP14-0.1-0.2, TP14-0.4-0.5, TP14-0.8-0.9, TP15-0.1-0.2, TP15-0.4-0.5, TP15-0.6-0.7, TP15-0.9-1.0, TP16-0.1-0.2, TP16-0.4-0.5, TP17-0.1-0.2, TP17-1.0-1.1, TP17-2.0-2.1, DUP01	**03-Apr-2025**	**----**	----	----	**10-Apr-2025**	17-Apr-2025	✓

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 - ACM/Asbestos Grab Bag (EA200)								
TP09-0.1-0.2,	TP09-0.2-0.3,	**03-Apr-2025**	**----**	----	----	**08-Apr-2025**	30-Sep-2025	✓
TP11-0.1-0.2,	TP11-0.4-0.5,							
TP12-0.1-0.2,	TP12-0.9-1.0,							
TP13-0.1-0.2,	TP13-0.3-0.4,							
TP13-0.6-0.7,	TP13-1.5-1.6,							
TP14-0.1-0.2,	TP14-0.4-0.5,							
TP14-0.8-0.9,	TP15-0.1-0.2,							
TP15-0.4-0.5,	TP15-0.6-0.7,							
TP15-0.9-1.0,	TP16-0.1-0.2,							
TP16-0.4-0.5,	TP17-0.1-0.2,							
TP17-1.0-1.1,	TP17-2.0-2.1							
EG005(ED093)T: Total Metals by ICP-AES								
Soil Glass Jar - Unpreserved (EG005T)								
TP09-0.1-0.2,	TP09-0.2-0.3,	**03-Apr-2025**	**10-Apr-2025**	30-Sep-2025	✓	**10-Apr-2025**	30-Sep-2025	✓
TP11-0.1-0.2,	TP11-0.4-0.5,							
TP12-0.1-0.2,	TP12-0.9-1.0,							
TP13-0.1-0.2,	TP13-0.3-0.4,							
TP13-0.6-0.7,	TP13-1.5-1.6,							
TP14-0.1-0.2,	TP14-0.4-0.5,							
TP14-0.8-0.9,	TP15-0.1-0.2,							
TP15-0.4-0.5,	TP15-0.6-0.7,							
TP15-0.9-1.0,	TP16-0.1-0.2,							
TP16-0.4-0.5,	TP17-0.1-0.2,							
TP17-1.0-1.1,	TP17-2.0-2.1,							
DUP01								
EG035T: Total Recoverable Mercury by FIMS								
Soil Glass Jar - Unpreserved (EG035T)								
TP15-0.4-0.5,	TP15-0.6-0.7,	**03-Apr-2025**	**10-Apr-2025**	01-May-2025	✓	**10-Apr-2025**	01-May-2025	✓
TP15-0.9-1.0,	TP16-0.1-0.2,							
TP16-0.4-0.5,	TP17-0.1-0.2,							
TP17-1.0-1.1,	TP17-2.0-2.1,							
DUP01								
Soil Glass Jar - Unpreserved (EG035T)								
TP09-0.1-0.2,	TP09-0.2-0.3,	**03-Apr-2025**	**10-Apr-2025**	01-May-2025	✓	**11-Apr-2025**	01-May-2025	✓
TP11-0.1-0.2,	TP11-0.4-0.5,							
TP12-0.1-0.2,	TP12-0.9-1.0,							
TP13-0.1-0.2,	TP13-0.3-0.4,							
TP13-0.6-0.7,	TP13-1.5-1.6,							
TP14-0.1-0.2,	TP14-0.4-0.5,							
TP14-0.8-0.9,	TP15-0.1-0.2							

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)							
TP09-0.1-0.2, TP09-0.2-0.3, TP11-0.1-0.2, TP17-1.0-1.1, TP17-2.0-2.1	**03-Apr-2025**	**07-Apr-2025**	17-Apr-2025	✓	**09-Apr-2025**	17-May-2025	✓
Soil Glass Jar - Unpreserved (EP066)							
TP11-0.4-0.5, TP12-0.1-0.2, TP12-0.9-1.0, TP13-0.1-0.2, TP13-0.3-0.4, TP13-0.6-0.7, TP13-1.5-1.6, TP14-0.1-0.2, TP14-0.4-0.5, TP14-0.8-0.9, TP15-0.1-0.2, TP15-0.4-0.5, TP15-0.6-0.7, TP15-0.9-1.0, TP16-0.1-0.2, TP16-0.4-0.5, TP17-0.1-0.2	**03-Apr-2025**	**07-Apr-2025**	17-Apr-2025	✓	**10-Apr-2025**	17-May-2025	✓
EP068A: Organochlorine Pesticides (OC)							
Soil Glass Jar - Unpreserved (EP068)							
TP09-0.1-0.2, TP09-0.2-0.3, TP11-0.1-0.2, TP11-0.4-0.5, TP12-0.1-0.2, TP12-0.9-1.0, TP13-0.1-0.2, TP13-0.3-0.4, TP13-0.6-0.7, TP13-1.5-1.6, TP14-0.1-0.2, TP14-0.4-0.5, TP14-0.8-0.9, TP15-0.1-0.2, TP15-0.4-0.5, TP15-0.6-0.7, TP15-0.9-1.0, TP16-0.1-0.2, TP16-0.4-0.5, TP17-0.1-0.2, TP17-1.0-1.1, TP17-2.0-2.1	**03-Apr-2025**	**07-Apr-2025**	17-Apr-2025	✓	**09-Apr-2025**	17-May-2025	✓

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))								
TP09-0.1-0.2,	TP09-0.2-0.3,	**03-Apr-2025**	**07-Apr-2025**	17-Apr-2025	✓	**08-Apr-2025**	17-May-2025	✓
TP11-0.1-0.2,	TP11-0.4-0.5,							
TP12-0.1-0.2,	TP12-0.9-1.0,							
TP13-0.1-0.2,	TP13-0.3-0.4,							
TP13-0.6-0.7,	TP13-1.5-1.6,							
TP14-0.1-0.2,	TP14-0.4-0.5,							
TP14-0.8-0.9,	TP15-0.1-0.2,							
TP15-0.4-0.5,	TP17-1.0-1.1,							
TP17-2.0-2.1,	DUP01							
Soil Glass Jar - Unpreserved (EP075(SIM))								
TP15-0.9-1.0,	TP16-0.1-0.2,	**03-Apr-2025**	**07-Apr-2025**	17-Apr-2025	✓	**09-Apr-2025**	17-May-2025	✓
TP16-0.4-0.5,	TP17-0.1-0.2							
Soil Glass Jar - Unpreserved (EP075(SIM))								
TP15-0.6-0.7		**03-Apr-2025**	**07-Apr-2025**	17-Apr-2025	✓	**10-Apr-2025**	17-May-2025	✓
EP080/071: Total Petroleum Hydrocarbons								
Soil Glass Jar - Unpreserved (EP080)								
TP09-0.1-0.2,	TP09-0.2-0.3,	**03-Apr-2025**	**07-Apr-2025**	17-Apr-2025	✓	**08-Apr-2025**	17-Apr-2025	✓
TP11-0.1-0.2,	TP11-0.4-0.5,							
TP12-0.1-0.2,	TP12-0.9-1.0,							
TP13-0.1-0.2,	TP13-0.3-0.4,							
TP13-0.6-0.7,	TP13-1.5-1.6,							
TP14-0.1-0.2,	TP14-0.4-0.5,							
TP14-0.8-0.9,	TP15-0.1-0.2,							
TP15-0.4-0.5,	TP15-0.6-0.7,							
TP15-0.9-1.0,	TP16-0.1-0.2,							
TP16-0.4-0.5,	TP17-0.1-0.2,							
TP17-1.0-1.1,	TP17-2.0-2.1							
Soil Glass Jar - Unpreserved (EP071)								
TP14-0.4-0.5,	TP14-0.8-0.9,	**03-Apr-2025**	**07-Apr-2025**	17-Apr-2025	✓	**09-Apr-2025**	17-May-2025	✓
TP15-0.1-0.2,	TP15-0.4-0.5,							
TP15-0.6-0.7,	TP15-0.9-1.0,							
TP16-0.1-0.2,	TP16-0.4-0.5,							
TP17-0.1-0.2,	TP17-1.0-1.1,							
TP17-2.0-2.1								

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)							
TP09-0.1-0.2, TP09-0.2-0.3, TP11-0.1-0.2, TP11-0.4-0.5, TP12-0.1-0.2, TP12-0.9-1.0, TP13-0.1-0.2, TP13-0.3-0.4, TP13-0.6-0.7, TP13-1.5-1.6, TP14-0.1-0.2, TP14-0.4-0.5, TP14-0.8-0.9, TP15-0.1-0.2, TP15-0.4-0.5, TP15-0.6-0.7, TP15-0.9-1.0, TP16-0.1-0.2, TP16-0.4-0.5, TP17-0.1-0.2, TP17-1.0-1.1, TP17-2.0-2.1	**03-Apr-2025**	**07-Apr-2025**	17-Apr-2025	✓	**08-Apr-2025**	17-Apr-2025	✓
Soil Glass Jar - Unpreserved (EP071)							
TP14-0.4-0.5, TP14-0.8-0.9, TP15-0.1-0.2, TP15-0.4-0.5, TP15-0.6-0.7, TP15-0.9-1.0, TP16-0.1-0.2, TP16-0.4-0.5, TP17-0.1-0.2, TP17-1.0-1.1, TP17-2.0-2.1	**03-Apr-2025**	**07-Apr-2025**	17-Apr-2025	✓	**09-Apr-2025**	17-May-2025	✓
EP080: BTEXN							
Soil Glass Jar - Unpreserved (EP080)							
TP09-0.1-0.2, TP09-0.2-0.3, TP11-0.1-0.2, TP11-0.4-0.5, TP12-0.1-0.2, TP12-0.9-1.0, TP13-0.1-0.2, TP13-0.3-0.4, TP13-0.6-0.7, TP13-1.5-1.6, TP14-0.1-0.2, TP14-0.4-0.5, TP14-0.8-0.9, TP15-0.1-0.2, TP15-0.4-0.5, TP15-0.6-0.7, TP15-0.9-1.0, TP16-0.1-0.2, TP16-0.4-0.5, TP17-0.1-0.2, TP17-1.0-1.1, TP17-2.0-2.1, TRIP BLANK	**03-Apr-2025**	**07-Apr-2025**	17-Apr-2025	✓	**08-Apr-2025**	17-Apr-2025	✓
Soil Glass Jar - Unpreserved (EP080)							
TRIP SPIKE, TSC	**31-Mar-2025**	**07-Apr-2025**	14-Apr-2025	✓	**09-Apr-2025**	14-Apr-2025	✓

Matrix: **SOLID**

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 bulk samples							
Snap Lock Bag - Friable Asbestos/PSD Bag (EA200)							
TP09 -ACM	**03-Apr-2025**	**----**	----	----	**08-Apr-2025**	30-Sep-2025	✓

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	40	**10.00**	**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
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
Total Mercury by FIMS	EG035T	4	40	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	5	40	**12.50**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	3	28	**10.71**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	4	36	**11.11**	**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
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
Total Mercury by FIMS	EG035T	2	40	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	40	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	2	28	**7.14**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	36	**5.56**	**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
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
Total Mercury by FIMS	EG035T	2	40	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	40	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	2	28	**7.14**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	36	**5.56**	**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
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
Total Mercury by FIMS	EG035T	2	40	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	40	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	2	28	**7.14**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	36	**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
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).
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.
Asbestos Identification in Bulk Solids	EA200	SOLID	In house: Referenced to AS 4964 Method for the qualitative identification of asbestos in bulk samples Analysis by Polarised Light Microscopy including dispersion staining

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.

Preparation Methods	*Method*	*Matrix*	*Method Descriptions*
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.

QUALITY CONTROL REPORT

Work Order	: **ES2509826**	Page	: 1 of 15
Client	: **ENVIRONMENTAL GROUP AUSTRALIA PTY LTD**	Laboratory	: Environmental Division Sydney
Contact	: MAX CUNNINGHAM	Contact	: Samiksha Sathish
Address	: 36E Fitzroy Street Marrickville 2204	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61-2-8784 8555
Project	: 2300	Date Samples Received	: 03-Apr-2025
Order number	: ----	Date Analysis Commenced	: 07-Apr-2025
C-O-C number	: ----	Issue Date	: 11-Apr-2025
Sampler	: LAWRENCE LIU		
Site	: WSU, 2 bullecourt Ave milperra		
Quote number	: ES25ENVGROLIM0002		
No. of samples received	: 27		
No. of samples analysed	: 27		

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
Brendan Schrader	Laboratory Technician	Newcastle - Asbestos, Mayfield West, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, 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
* = The final LOR has been raised due to dilution or other sample specific cause; adjusted LOR is shown in brackets. The duplicate ranges for Acceptable RPD% are applied to the final LOR where applicable.

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: 6500046)									
ES2509768-001	Anonymous	EG005T: Lead	7439-92-1	5	mg/kg	145	129	11.9	0% - 20%
		EG005T: Zinc	7440-66-6	5	mg/kg	812	731	10.4	0% - 20%
ES2509768-001	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	2	2	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	42	41	0.0	0% - 20%
		EG005T: Nickel	7440-02-0	2	mg/kg	13	13	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	10	12	19.4	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	75	92	19.8	0% - 50%
ES2509826-005	TP12-0.1-0.2	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	14	10	28.8	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	22	20	10.9	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	19	19	0.0	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	31	28	9.7	No Limit
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 6500048)									
ES2509826-015	TP15-0.4-0.5	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	17	21	19.0	0% - 50%
		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	6	7	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: 6500048) - continued									
ES2509826-015	TP15-0.4-0.5	EG005T: Zinc	7440-66-6	5	mg/kg	<5	5	0.0	No Limit
ES2509855-002	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	11	11	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	14	16	12.4	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	8	14	59.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	14	12	15.8	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	9	14	42.6	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	27	30	10.8	No Limit
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 6500056)									
ES2509768-001	Anonymous	EA055: Moisture Content	----	0.1 (1.0)*	%	32.0	30.9	3.5	0% - 20%
ES2509826-003	TP11-0.1-0.2	EA055: Moisture Content	----	0.1 (1.0)*	%	16.2	15.3	6.1	0% - 50%
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 6500057)									
ES2509826-015	TP15-0.4-0.5	EA055: Moisture Content	----	0.1 (1.0)*	%	10.9	10.4	5.2	0% - 50%
ES2509826-025	DUP01	EA055: Moisture Content	----	0.1 (1.0)*	%	18.2	15.9	13.0	0% - 50%
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 6500047)									
ES2509768-001	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
ES2509826-005	TP12-0.1-0.2	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: 6500049)									
ES2509826-015	TP15-0.4-0.5	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
ES2509855-002	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EP066: Polychlorinated Biphenyls (PCB) (QC Lot: 6490536)									
ES2509826-001	TP09-0.1-0.2	EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
ES2509826-011	TP14-0.1-0.2	EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EP066: Polychlorinated Biphenyls (PCB) (QC Lot: 6490540)									
ES2509818-001	Anonymous	EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EP068A: Organochlorine Pesticides (OC) (QC Lot: 6490535)									
ES2509826-001	TP09-0.1-0.2	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 - (Lindane)	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

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: 6490535) - continued									
ES2509826-001	TP09-0.1-0.2	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
ES2509826-011	TP14-0.1-0.2	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 - (Lindane)	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: 6490539)									
ES2509818-001	Anonymous	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 - (Lindane)	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

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: 6490539) - continued									
ES2509818-001	Anonymous	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
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 6490534)									
ES2509826-001	TP09-0.1-0.2	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
ES2509826-011	TP14-0.1-0.2	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

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: 6490534) - continued									
ES2509826-011	TP14-0.1-0.2	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: 6490538)									
ES2509818-001	Anonymous	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

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: 6490538) - continued									
ES2509818-001	Anonymous	EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 6490533)									
ES2509826-001	TP09-0.1-0.2	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
ES2509826-011	TP14-0.1-0.2	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: 6490537)									
ES2509818-001	Anonymous	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: 6491251)									
ES2509826-001	TP09-0.1-0.2	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
ES2509826-011	TP14-0.1-0.2	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 6491254)									
ES2509858-001	Anonymous	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
ES2509858-002	Anonymous	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 6490533)									
ES2509826-001	TP09-0.1-0.2	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
ES2509826-011	TP14-0.1-0.2	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: 6490537)									
ES2509818-001	Anonymous	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: 6491251)									
ES2509826-001	TP09-0.1-0.2	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.0	No Limit
ES2509826-011	TP14-0.1-0.2	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: 6491254)									
ES2509858-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.0	No Limit
ES2509858-002	Anonymous	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.0	No Limit
EP080: BTEXN (QC Lot: 6491251)									

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: 6491251) - continued									
ES2509826-001	TP09-0.1-0.2	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
ES2509826-011	TP14-0.1-0.2	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: 6491254)									
ES2509858-001	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
ES2509858-002	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

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: 6500046)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	121.1 mg/kg	99.8	88.0	113
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	0.74 mg/kg	92.9	70.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	19.6 mg/kg	112	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	99.8	82.0	119
EG005T: Nickel	7440-02-0	2	mg/kg	<2	15.3 mg/kg	99.4	80.0	120
EG005T: Zinc	7440-66-6	5	mg/kg	<5	139.3 mg/kg	97.7	66.0	133
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 6500048)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	121.1 mg/kg	98.6	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	107	68.0	132
EG005T: Copper	7440-50-8	5	mg/kg	<5	52.9 mg/kg	96.6	89.0	111
EG005T: Lead	7439-92-1	5	mg/kg	<5	60.8 mg/kg	92.5	82.0	119
EG005T: Nickel	7440-02-0	2	mg/kg	<2	15.3 mg/kg	91.7	80.0	120
EG005T: Zinc	7440-66-6	5	mg/kg	<5	139.3 mg/kg	86.5	66.0	133
EG035T: Total Recoverable Mercury by FIMS (QCLot: 6500047)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.087 mg/kg	91.4	70.0	125
EG035T: Total Recoverable Mercury by FIMS (QCLot: 6500049)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.087 mg/kg	96.0	70.0	125
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 6490536)								
EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	1 mg/kg	107	62.0	126
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 6490540)								
EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	1 mg/kg	80.2	62.0	126
EP068A: Organochlorine Pesticides (OC) (QCLot: 6490535)								
EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	0.5 mg/kg	98.4	69.0	113
EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	0.5 mg/kg	96.9	65.0	117
EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	0.5 mg/kg	98.4	67.0	119
EP068: gamma-BHC - (Lindane)	58-89-9	0.05	mg/kg	<0.05	0.5 mg/kg	98.6	68.0	116
EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	97.2	65.0	117
EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	0.5 mg/kg	96.9	67.0	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: 6490535) - continued								
EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	0.5 mg/kg	100	69.0	115
EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	0.5 mg/kg	98.9	62.0	118
EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.5 mg/kg	95.3	63.0	117
EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	0.5 mg/kg	100	66.0	116
EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	0.5 mg/kg	96.6	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	99.6	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	104	69.0	115
EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	0.5 mg/kg	100	69.0	121
EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	0.5 mg/kg	103	56.0	120
EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	0.5 mg/kg	99.6	62.0	124
EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	0.5 mg/kg	88.8	66.0	120
EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	0.5 mg/kg	99.2	64.0	122
EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	0.5 mg/kg	83.5	54.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 6490539)								
EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	0.5 mg/kg	86.4	69.0	113
EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	0.5 mg/kg	86.9	65.0	117
EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	0.5 mg/kg	87.3	67.0	119
EP068: gamma-BHC - (Lindane)	58-89-9	0.05	mg/kg	<0.05	0.5 mg/kg	83.4	68.0	116
EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	84.1	65.0	117
EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	0.5 mg/kg	83.6	67.0	115
EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	0.5 mg/kg	87.2	69.0	115
EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	0.5 mg/kg	88.0	62.0	118
EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.5 mg/kg	87.4	63.0	117
EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	0.5 mg/kg	91.2	66.0	116
EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	0.5 mg/kg	87.4	64.0	116
EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	0.5 mg/kg	90.2	66.0	116
EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	0.5 mg/kg	89.1	67.0	115
EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	0.5 mg/kg	92.3	67.0	123
EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	0.5 mg/kg	93.9	69.0	115
EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	0.5 mg/kg	91.7	69.0	121
EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	0.5 mg/kg	82.6	56.0	120
EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	0.5 mg/kg	91.4	62.0	124

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: 6490539) - continued								
EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	0.5 mg/kg	90.4	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	76.3	54.0	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 6490534)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	6 mg/kg	94.3	77.0	125
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	6 mg/kg	99.5	72.0	124
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	6 mg/kg	99.6	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	103	75.0	127
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	6 mg/kg	101	77.0	127
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	6 mg/kg	105	73.0	127
EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	6 mg/kg	103	74.0	128
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	6 mg/kg	99.3	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	98.7	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	103	70.0	126
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	6 mg/kg	101	61.0	121
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	6 mg/kg	99.0	62.0	118
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	6 mg/kg	100	63.0	121
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 6490538)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	6 mg/kg	90.7	77.0	125
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	6 mg/kg	98.5	72.0	124
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	6 mg/kg	101	73.0	127
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	6 mg/kg	103	72.0	126
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	6 mg/kg	88.7	75.0	127
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	6 mg/kg	88.9	77.0	127
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	6 mg/kg	90.2	73.0	127
EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	6 mg/kg	91.2	74.0	128
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	6 mg/kg	87.8	69.0	123
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	6 mg/kg	98.7	75.0	127
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	6 mg/kg	80.3	68.0	116
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	6 mg/kg	85.8	74.0	126

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
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 6490538) - continued								
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	6 mg/kg	95.1	70.0	126
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	6 mg/kg	75.9	61.0	121
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	6 mg/kg	76.1	62.0	118
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	6 mg/kg	74.5	63.0	121
EP080/071: Total Petroleum Hydrocarbons (QCLot: 6490533)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	300 mg/kg	93.2	75.0	129
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	450 mg/kg	91.6	77.0	131
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	300 mg/kg	86.6	71.0	129
EP080/071: Total Petroleum Hydrocarbons (QCLot: 6490537)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	300 mg/kg	96.8	75.0	129
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	450 mg/kg	99.9	77.0	131
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	300 mg/kg	97.2	71.0	129
EP080/071: Total Petroleum Hydrocarbons (QCLot: 6491251)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	96.9	72.2	131
EP080/071: Total Petroleum Hydrocarbons (QCLot: 6491254)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	93.6	72.2	131
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 6490533)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	375 mg/kg	103	77.0	125
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	525 mg/kg	88.6	74.0	138
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	225 mg/kg	85.8	63.0	131
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 6490537)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	375 mg/kg	113	77.0	125
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	525 mg/kg	97.0	74.0	138
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	225 mg/kg	98.4	63.0	131
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 6491251)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	31 mg/kg	104	72.4	133
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 6491254)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	31 mg/kg	92.0	72.4	133
EP080: BTEXN (QCLot: 6491251)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	97.6	76.0	124
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	93.7	78.5	121
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	98.6	77.4	121
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	101	78.2	121

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	LCS: Spike Recovery (%)	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP080: BTEXN (QCLot: 6491251) - continued								
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	95.9	81.3	121
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	94.3	78.8	122
EP080: BTEXN (QCLot: 6491254)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	98.8	76.0	124
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	106	78.5	121
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	101	77.4	121
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	114	78.2	121
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	111	81.3	121
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	100	78.8	122

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: 6500046)							
ES2509768-001	Anonymous	EG005T: Arsenic	7440-38-2	50 mg/kg	114	70.0	130
		EG005T: Cadmium	7440-43-9	50 mg/kg	107	70.0	130
		EG005T: Chromium	7440-47-3	50 mg/kg	103	68.0	132
		EG005T: Copper	7440-50-8	250 mg/kg	121	70.0	130
		EG005T: Lead	7439-92-1	250 mg/kg	98.4	70.0	130
		EG005T: Nickel	7440-02-0	50 mg/kg	103	70.0	130
		EG005T: Zinc	7440-66-6	250 mg/kg	# 161	66.0	133
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 6500048)							
ES2509826-015	TP15-0.4-0.5	EG005T: Arsenic	7440-38-2	50 mg/kg	90.8	70.0	130
		EG005T: Cadmium	7440-43-9	50 mg/kg	93.0	70.0	130
		EG005T: Chromium	7440-47-3	50 mg/kg	89.0	68.0	132
		EG005T: Copper	7440-50-8	250 mg/kg	95.0	70.0	130
		EG005T: Lead	7439-92-1	250 mg/kg	93.9	70.0	130
		EG005T: Nickel	7440-02-0	50 mg/kg	93.2	70.0	130
		EG005T: Zinc	7440-66-6	250 mg/kg	93.1	66.0	133
EG035T: Total Recoverable Mercury by FIMS (QCLot: 6500047)							
ES2509768-001	Anonymous	EG035T: Mercury	7439-97-6	5 mg/kg	90.5	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 6500049)							

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EG035T: Total Recoverable Mercury by FIMS (QCLot: 6500049) - continued							
ES2509826-015	TP15-0.4-0.5	EG035T: Mercury	7439-97-6	5 mg/kg	94.5	70.0	130
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 6490536)							
ES2509826-001	TP09-0.1-0.2	EP066: Total Polychlorinated biphenyls	----	1 mg/kg	109	70.0	130
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 6490540)							
ES2509818-001	Anonymous	EP066: Total Polychlorinated biphenyls	----	1 mg/kg	117	70.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 6490535)							
ES2509826-001	TP09-0.1-0.2	EP068: gamma-BHC - (Lindane)	58-89-9	0.5 mg/kg	101	70.0	130
		EP068: Heptachlor	76-44-8	0.5 mg/kg	98.0	70.0	130
		EP068: Aldrin	309-00-2	0.5 mg/kg	93.8	70.0	130
		EP068: Dieldrin	60-57-1	0.5 mg/kg	104	70.0	130
		EP068: Endrin	72-20-8	2 mg/kg	112	70.0	130
		EP068: 4.4`-DDT	50-29-3	2 mg/kg	71.3	70.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 6490539)							
ES2509818-001	Anonymous	EP068: gamma-BHC - (Lindane)	58-89-9	0.5 mg/kg	95.5	70.0	130
		EP068: Heptachlor	76-44-8	0.5 mg/kg	80.2	70.0	130
		EP068: Aldrin	309-00-2	0.5 mg/kg	99.9	70.0	130
		EP068: Dieldrin	60-57-1	0.5 mg/kg	98.6	70.0	130
		EP068: Endrin	72-20-8	2 mg/kg	93.8	70.0	130
		EP068: 4.4`-DDT	50-29-3	2 mg/kg	71.0	70.0	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 6490534)							
ES2509826-001	TP09-0.1-0.2	EP075(SIM): Acenaphthene	83-32-9	10 mg/kg	98.0	70.0	130
		EP075(SIM): Pyrene	129-00-0	10 mg/kg	104	70.0	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 6490538)							
ES2509818-001	Anonymous	EP075(SIM): Acenaphthene	83-32-9	10 mg/kg	89.1	70.0	130
		EP075(SIM): Pyrene	129-00-0	10 mg/kg	102	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 6490533)							
ES2509826-001	TP09-0.1-0.2	EP071: C10 - C14 Fraction	----	480 mg/kg	119	73.0	137
		EP071: C15 - C28 Fraction	----	3100 mg/kg	106	53.0	131
		EP071: C29 - C36 Fraction	----	2060 mg/kg	113	52.0	132
EP080/071: Total Petroleum Hydrocarbons (QCLot: 6490537)							
ES2509818-001	Anonymous	EP071: C10 - C14 Fraction	----	480 mg/kg	84.5	73.0	137
		EP071: C15 - C28 Fraction	----	3100 mg/kg	64.9	53.0	131
		EP071: C29 - C36 Fraction	----	2060 mg/kg	53.0	52.0	132
EP080/071: Total Petroleum Hydrocarbons (QCLot: 6491251)							
ES2509826-001	TP09-0.1-0.2	EP080: C6 - C9 Fraction	----	32.5 mg/kg	75.2	60.4	142
EP080/071: Total Petroleum Hydrocarbons (QCLot: 6491254)							

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: 6491254) - continued							
ES2509858-001	Anonymous	EP080: C6 - C9 Fraction	----	32.5 mg/kg	110	60.4	142
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 6490533)							
ES2509826-001	TP09-0.1-0.2	EP071: >C10 - C16 Fraction	----	860 mg/kg	105	73.0	137
		EP071: >C16 - C34 Fraction	----	4320 mg/kg	108	53.0	131
		EP071: >C34 - C40 Fraction	----	890 mg/kg	128	52.0	132
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 6490537)							
ES2509818-001	Anonymous	EP071: >C10 - C16 Fraction	----	860 mg/kg	82.5	73.0	137
		EP071: >C16 - C34 Fraction	----	4320 mg/kg	59.1	53.0	131
		EP071: >C34 - C40 Fraction	----	890 mg/kg	57.7	52.0	132
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 6491251)							
ES2509826-001	TP09-0.1-0.2	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	81.5	61.1	142
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 6491254)							
ES2509858-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	105	61.1	142
EP080: BTEXN (QCLot: 6491251)							
ES2509826-001	TP09-0.1-0.2	EP080: Benzene	71-43-2	2.5 mg/kg	70.5	62.1	122
		EP080: Toluene	108-88-3	2.5 mg/kg	72.5	66.6	119
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	81.0	67.4	123
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2.5 mg/kg	81.9	66.4	121
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	79.9	70.7	121
		EP080: Naphthalene	91-20-3	2.5 mg/kg	91.5	61.1	115
EP080: BTEXN (QCLot: 6491254)							
ES2509858-001	Anonymous	EP080: Benzene	71-43-2	2.5 mg/kg	99.6	62.1	122
		EP080: Toluene	108-88-3	2.5 mg/kg	111	66.6	119
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	109	67.4	123
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2.5 mg/kg	115	66.4	121
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	118	70.7	121
		EP080: Naphthalene	91-20-3	2.5 mg/kg	103	61.1	115

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **ES2512173**	Page	: 1 of 6
Client	: **ENVIRONMENTAL GROUP AUSTRALIA PTY LTD**	Laboratory	: Environmental Division Sydney
Contact	: MAX CUNNINGHAM	Telephone	: +61-2-8784 8555
Project	: 2300	Date Samples Received	: 29-Apr-2025
Site	: 2 Bullecourt Avenue, Milpera	Issue Date	: 06-May-2025
Sampler	: Lachlan Cranch	No. of samples received	: 4
Order number	: ----	No. of samples analysed	: 4

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

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

Summary of Outliers

Outliers : Quality Control Samples

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

- **NO Method Blank value outliers occur.**
- **NO Duplicate outliers occur.**
- **NO Laboratory Control outliers occur.**
- **NO Matrix Spike outliers occur.**
- **For all regular sample matrices, where applicable to the methodology, 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
EA055: Moisture Content (Dried @ 105-110°C)							
Soil Glass Jar - Unpreserved (EA055)							
TP21-0.01	29-Apr-2025	----	----	----	01-May-2025	13-May-2025	✓
EA200: AS 4964 - 2004 Identification of Asbestos in Soils							
Snap Lock Bag - ACM/Asbestos Grab Bag (EA200)							
TP21-0.01	29-Apr-2025	----	----	----	01-May-2025	26-Oct-2025	✓
EG005(ED093)T: Total Metals by ICP-AES							
Soil Glass Jar - Unpreserved (EG005T)							
TP21-0.01	29-Apr-2025	01-May-2025	26-Oct-2025	✓	02-May-2025	26-Oct-2025	✓
EG035T: Total Recoverable Mercury by FIMS							
Soil Glass Jar - Unpreserved (EG035T)							
TP21-0.01	29-Apr-2025	01-May-2025	27-May-2025	✓	05-May-2025	27-May-2025	✓
EP066: Polychlorinated Biphenyls (PCB)							
Soil Glass Jar - Unpreserved (EP066)							
TP21-0.01	29-Apr-2025	01-May-2025	13-May-2025	✓	01-May-2025	10-Jun-2025	✓
EP068A: Organochlorine Pesticides (OC)							
Soil Glass Jar - Unpreserved (EP068)							
TP21-0.01	29-Apr-2025	01-May-2025	13-May-2025	✓	01-May-2025	10-Jun-2025	✓
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP075(SIM))							
TP21-0.01	29-Apr-2025	01-May-2025	13-May-2025	✓	01-May-2025	10-Jun-2025	✓
EP080/071: Total Petroleum Hydrocarbons							
Soil Glass Jar - Unpreserved (EP071)							
TP21-0.01	29-Apr-2025	01-May-2025	13-May-2025	✓	01-May-2025	10-Jun-2025	✓
Soil Glass Jar - Unpreserved (EP080)							
TP21-0.01	29-Apr-2025	30-Apr-2025	13-May-2025	✓	02-May-2025	13-May-2025	✓
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Soil Glass Jar - Unpreserved (EP071)							
TP21-0.01	29-Apr-2025	01-May-2025	13-May-2025	✓	01-May-2025	10-Jun-2025	✓
Soil Glass Jar - Unpreserved (EP080)							
TP21-0.01	29-Apr-2025	30-Apr-2025	13-May-2025	✓	02-May-2025	13-May-2025	✓

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)							
TRIP SPIKE, TRIP BLANK, TSC	**28-Apr-2025**	**30-Apr-2025**	12-May-2025	✓	**02-May-2025**	12-May-2025	✓
Soil Glass Jar - Unpreserved (EP080)							
TP21-0.01	**29-Apr-2025**	**30-Apr-2025**	13-May-2025	✓	**02-May-2025**	13-May-2025	✓

Quality Control Parameter Frequency Compliance

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

Matrix: **SOIL**

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

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Duplicates (DUP)							
Moisture Content	EA055	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (SIM)	EP075(SIM)	2	13	**15.38**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	2	11	**18.18**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	2	11	**18.18**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	2	11	**18.18**	**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 (SIM)	EP075(SIM)	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	11	**9.09**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	1	11	**9.09**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	11	**9.09**	**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 (SIM)	EP075(SIM)	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	11	**9.09**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	1	11	**9.09**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	11	**9.09**	**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 (SIM)	EP075(SIM)	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	11	**9.09**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	1	11	**9.09**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	11	**9.09**	**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).
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.

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.

Preparation Methods	*Method*	*Matrix*	*Method Descriptions*
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.

QUALITY CONTROL REPORT

Work Order	: **ES2512173**	Page	: 1 of 10
Client	: **ENVIRONMENTAL GROUP AUSTRALIA PTY LTD**	Laboratory	: Environmental Division Sydney
Contact	: MAX CUNNINGHAM	Contact	: Samiksha Sathish
Address	: 36E Fitzroy Street Marrickville 2204	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61-2-8784 8555
Project	: 2300	Date Samples Received	: 29-Apr-2025
Order number	: ----	Date Analysis Commenced	: 30-Apr-2025
C-O-C number	: ----	Issue Date	: 06-May-2025
Sampler	: Lachlan Cranch		
Site	: 2 Bullecourt Avenue, Milpera		
Quote number	: ES25ENVGROLIM0001		
No. of samples received	: 4		
No. of samples analysed	: 4		

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

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

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

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

Signatories	*Position*	*Accreditation Category*
Ankit Joshi	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
John Williams	Lab Technician	Newcastle - Asbestos, Mayfield West, 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
* = The final LOR has been raised due to dilution or other sample specific cause; adjusted LOR is shown in brackets. The duplicate ranges for Acceptable RPD% are applied to the final LOR where applicable.

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: 6544566)									
ES2512166-006	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	14	14	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	8	9	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	7	7	0.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	22	24	9.4	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	38	36	3.9	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	67	59	12.1	0% - 50%
ES2511946-001	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	5	8	33.3	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	4	4	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	32	22	36.9	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	89	82	8.4	0% - 50%
		EG005T: Zinc	7440-66-6	5	mg/kg	64	72	11.7	0% - 50%
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 6544574)									
ES2511946-001	Anonymous	EA055: Moisture Content	----	0.1 (1.0)*	%	13.3	15.8	16.6	0% - 50%
ES2512166-005	Anonymous	EA055: Moisture Content	----	0.1 (1.0)*	%	6.8	6.9	1.6	No Limit
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 6544567)									
ES2512166-007	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
ES2511946-001	Anonymous	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 (%)*
EP066: Polychlorinated Biphenyls (PCB) (QC Lot: 6542915)									
ES2512173-001	TP21-0.01	EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
ES2512174-030	Anonymous	EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EP068A: Organochlorine Pesticides (OC) (QC Lot: 6542914)									
ES2512173-001	TP21-0.01	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 - (Lindane)	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
ES2512174-030	Anonymous	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 - (Lindane)	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

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: 6542914) - continued									
ES2512174-030	Anonymous	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
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 6542913)									
ES2512173-001	TP21-0.01	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
ES2512174-030	Anonymous	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

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: 6542913) - continued									
ES2512174-030	Anonymous	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
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 6542912)									
ES2512173-001	TP21-0.01	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
ES2512174-030	Anonymous	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: 6543045)									
ES2512173-001	TP21-0.01	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
ES2512174-027	Anonymous	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 6542912)									
ES2512173-001	TP21-0.01	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
ES2512174-030	Anonymous	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: 6543045)									
ES2512173-001	TP21-0.01	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.0	No Limit
ES2512174-027	Anonymous	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.0	No Limit
EP080: BTEXN (QC Lot: 6543045)									
ES2512173-001	TP21-0.01	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: 6543045) - continued									
ES2512173-001	TP21-0.01	EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit
ES2512174-027	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

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: 6544566)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	121.1 mg/kg	95.1	88.0	113
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	0.74 mg/kg	70.6	70.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	19.6 mg/kg	107	68.0	132
EG005T: Copper	7440-50-8	5	mg/kg	<5	52.9 mg/kg	97.8	89.0	111
EG005T: Lead	7439-92-1	5	mg/kg	<5	60.8 mg/kg	95.2	82.0	119
EG005T: Nickel	7440-02-0	2	mg/kg	<2	15.3 mg/kg	93.3	80.0	120
EG005T: Zinc	7440-66-6	5	mg/kg	<5	139.3 mg/kg	87.6	66.0	133
EG035T: Total Recoverable Mercury by FIMS (QCLot: 6544567)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.087 mg/kg	93.0	70.0	125
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 6542915)								
EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	1 mg/kg	86.5	62.0	126
EP068A: Organochlorine Pesticides (OC) (QCLot: 6542914)								
EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	0.5 mg/kg	87.2	69.0	113
EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	0.5 mg/kg	89.4	65.0	117
EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	0.5 mg/kg	87.9	67.0	119
EP068: gamma-BHC - (Lindane)	58-89-9	0.05	mg/kg	<0.05	0.5 mg/kg	89.9	68.0	116
EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	85.2	65.0	117
EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	0.5 mg/kg	89.2	67.0	115
EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	0.5 mg/kg	81.8	69.0	115
EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	0.5 mg/kg	82.9	62.0	118
EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.5 mg/kg	86.0	63.0	117
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	81.9	64.0	116
EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	0.5 mg/kg	82.3	66.0	116
EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	0.5 mg/kg	88.5	67.0	115
EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	0.5 mg/kg	86.3	67.0	123
EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	0.5 mg/kg	88.9	69.0	115
EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	0.5 mg/kg	90.3	69.0	121
EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	0.5 mg/kg	88.7	56.0	120
EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	0.5 mg/kg	92.0	62.0	124

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
EP068A: Organochlorine Pesticides (OC) (QCLot: 6542914) - continued								
EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	0.5 mg/kg	85.9	66.0	120
EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	0.5 mg/kg	87.3	64.0	122
EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	0.5 mg/kg	86.3	54.0	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 6542913)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	6 mg/kg	96.6	77.0	125
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	6 mg/kg	96.9	72.0	124
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	6 mg/kg	96.4	73.0	127
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	6 mg/kg	95.1	72.0	126
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	6 mg/kg	90.3	75.0	127
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	6 mg/kg	96.0	77.0	127
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	6 mg/kg	94.5	73.0	127
EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	6 mg/kg	91.4	74.0	128
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	6 mg/kg	96.9	69.0	123
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	6 mg/kg	89.7	75.0	127
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	6 mg/kg	90.6	68.0	116
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	6 mg/kg	99.2	74.0	126
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	6 mg/kg	92.1	70.0	126
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	6 mg/kg	91.9	61.0	121
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	6 mg/kg	89.2	62.0	118
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	6 mg/kg	99.3	63.0	121
EP080/071: Total Petroleum Hydrocarbons (QCLot: 6542912)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	300 mg/kg	95.0	75.0	129
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	450 mg/kg	97.1	77.0	131
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	300 mg/kg	99.2	71.0	129
EP080/071: Total Petroleum Hydrocarbons (QCLot: 6543045)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	87.1	72.2	131
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 6542912)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	375 mg/kg	96.9	77.0	125
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	525 mg/kg	97.4	74.0	138
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	225 mg/kg	98.7	63.0	131
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 6543045)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	31 mg/kg	87.7	72.4	133
EP080: BTEXN (QCLot: 6543045)								

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
EP080: BTEXN (QCLot: 6543045) - continued								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	93.9	76.0	124
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	89.8	78.5	121
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	96.5	77.4	121
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	95.1	78.2	121
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	95.8	81.3	121
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	84.4	78.8	122

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: 6544566)							
ES2511946-001	Anonymous	EG005T: Arsenic	7440-38-2	50 mg/kg	101	70.0	130
		EG005T: Cadmium	7440-43-9	50 mg/kg	93.0	70.0	130
		EG005T: Chromium	7440-47-3	50 mg/kg	96.6	68.0	132
		EG005T: Copper	7440-50-8	250 mg/kg	92.0	70.0	130
		EG005T: Lead	7439-92-1	250 mg/kg	94.6	70.0	130
		EG005T: Nickel	7440-02-0	50 mg/kg	94.4	70.0	130
		EG005T: Zinc	7440-66-6	250 mg/kg	99.6	66.0	133
EG035T: Total Recoverable Mercury by FIMS (QCLot: 6544567)							
ES2511946-001	Anonymous	EG035T: Mercury	7439-97-6	5 mg/kg	83.6	70.0	130
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 6542915)							
ES2512173-001	TP21-0.01	EP066: Total Polychlorinated biphenyls	----	1 mg/kg	95.8	70.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 6542914)							
ES2512173-001	TP21-0.01	EP068: gamma-BHC - (Lindane)	58-89-9	0.5 mg/kg	98.9	70.0	130
		EP068: Heptachlor	76-44-8	0.5 mg/kg	98.4	70.0	130
		EP068: Aldrin	309-00-2	0.5 mg/kg	97.6	70.0	130
		EP068: Dieldrin	60-57-1	0.5 mg/kg	104	70.0	130
		EP068: Endrin	72-20-8	2 mg/kg	95.5	70.0	130
		EP068: 4.4`-DDT	50-29-3	2 mg/kg	103	70.0	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 6542913)							
ES2512173-001	TP21-0.01	EP075(SIM): Acenaphthene	83-32-9	10 mg/kg	95.7	70.0	130
		EP075(SIM): Pyrene	129-00-0	10 mg/kg	97.3	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: 6542912)							
ES2512173-001	TP21-0.01	EP071: C10 - C14 Fraction	----	480 mg/kg	109	73.0	137
		EP071: C15 - C28 Fraction	----	3100 mg/kg	89.3	53.0	131
		EP071: C29 - C36 Fraction	----	2060 mg/kg	91.4	52.0	132
EP080/071: Total Petroleum Hydrocarbons (QCLot: 6543045)							
ES2512173-001	TP21-0.01	EP080: C6 - C9 Fraction	----	32.5 mg/kg	72.8	60.4	142
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 6542912)							
ES2512173-001	TP21-0.01	EP071: >C10 - C16 Fraction	----	860 mg/kg	93.4	73.0	137
		EP071: >C16 - C34 Fraction	----	4320 mg/kg	91.7	53.0	131
		EP071: >C34 - C40 Fraction	----	890 mg/kg	78.3	52.0	132
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 6543045)							
ES2512173-001	TP21-0.01	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	71.8	61.1	142
EP080: BTEXN (QCLot: 6543045)							
ES2512173-001	TP21-0.01	EP080: Benzene	71-43-2	2.5 mg/kg	78.0	62.1	122
		EP080: Toluene	108-88-3	2.5 mg/kg	72.3	66.6	119
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	79.9	67.4	123
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2.5 mg/kg	76.9	66.4	121
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	79.8	70.7	121
		EP080: Naphthalene	91-20-3	2.5 mg/kg	76.2	61.1	115

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **ES2522273**	Page	: 1 of 11
Client	: **ENVIRONMENTAL GROUP AUSTRALIA PTY LTD**	Laboratory	: Environmental Division Sydney
Contact	: MAX CUNNINGHAM	Telephone	: +61-2-8784 8555
Project	: 2300 - WSU MILPERRA - SCA Post Demo	Date Samples Received	: 21-Jul-2025
Site	: Milpera	Issue Date	: 28-Jul-2025
Sampler	: Siyuan He	No. of samples received	: 33
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 Duplicate outliers occur.**
- **NO Laboratory Control outliers occur.**
- **NO Matrix Spike outliers occur.**
- **For all regular sample matrices, where applicable to the methodology, 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
EA055: Moisture Content (Dried @ 105-110°C)							
Soil Glass Jar - Unpreserved (EA055)							
TP47-0.1-0.2, TP38-0.1-0.2, TP30-1.1-1.2	**21-Jul-2025**	**----**	----	----	**22-Jul-2025**	04-Aug-2025	✓
Soil Glass Jar - Unpreserved (EA055)							
TP46-0.1-0.2, TP45-0.1-0.2, TP44-1.1-1.2, TP44-0.1-0.2, TP43-0.1-0.2, TP42-0.1-0.2, TP41-0.1-0.2, TP40-0.1-0.2, TP39-0.1-0.2, TP37-0.1-0.2, TP36-0.1-0.2, TP35-0.1-0.2, TP34-0.1-0.2, TP33-0.1-0.2, TP26-1.1-1.2, TP26-0.1-0.2, TP31-0.1-0.2, TP30-0.1-0.2, TP29-0.1-0.2, TP27-0.1-0.2, TP24-0.1-0.2, TP23-0.1-0.2, TP22-0.1-0.2, TP22-1.1-1.2, DUP01	**21-Jul-2025**	**----**	----	----	**23-Jul-2025**	04-Aug-2025	✓

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 - ACM/Asbestos Grab Bag (EA200)								
TP47-0.1-0.2,	TP46-0.1-0.2,	**21-Jul-2025**	**----**	----	----	**23-Jul-2025**	17-Jan-2026	✓
TP45-0.1-0.2,	TP44-1.1-1.2,							
TP44-0.1-0.2,	TP43-0.1-0.2,							
TP42-0.1-0.2,	TP41-0.1-0.2,							
TP40-0.1-0.2,	TP39-0.1-0.2,							
TP38-0.1-0.2,	TP37-0.1-0.2,							
TP36-0.1-0.2,	TP35-0.1-0.2,							
TP34-0.1-0.2,	TP33-0.1-0.2,							
TP26-1.1-1.2,	TP26-0.1-0.2,							
TP31-0.1-0.2,	TP30-0.1-0.2,							
TP30-1.1-1.2,	TP29-0.1-0.2,							
TP27-0.1-0.2,	TP24-0.1-0.2,							
TP23-0.1-0.2,	TP22-0.1-0.2,							
TP22-1.1-1.2								
EG005(ED093)T: Total Metals by ICP-AES								
Soil Glass Jar - Unpreserved (EG005T)								
TP47-0.1-0.2,	TP46-0.1-0.2,	**21-Jul-2025**	**23-Jul-2025**	17-Jan-2026	✓	**24-Jul-2025**	17-Jan-2026	✓
TP45-0.1-0.2,	TP44-1.1-1.2,							
TP44-0.1-0.2,	TP43-0.1-0.2,							
TP42-0.1-0.2,	TP41-0.1-0.2,							
TP40-0.1-0.2,	TP39-0.1-0.2,							
TP38-0.1-0.2,	TP37-0.1-0.2,							
TP36-0.1-0.2,	TP35-0.1-0.2,							
TP34-0.1-0.2,	TP33-0.1-0.2,							
TP26-1.1-1.2,	TP26-0.1-0.2,							
TP31-0.1-0.2,	TP30-0.1-0.2,							
TP30-1.1-1.2,	TP29-0.1-0.2,							
TP27-0.1-0.2,	TP24-0.1-0.2,							
TP23-0.1-0.2,	TP22-0.1-0.2,							
TP22-1.1-1.2,	DUP01							

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)								
TP47-0.1-0.2,	TP46-0.1-0.2,	**21-Jul-2025**	**23-Jul-2025**	18-Aug-2025	✓	**24-Jul-2025**	18-Aug-2025	✓
TP45-0.1-0.2,	TP44-1.1-1.2,							
TP44-0.1-0.2,	TP43-0.1-0.2,							
TP42-0.1-0.2,	TP41-0.1-0.2,							
TP40-0.1-0.2,	TP39-0.1-0.2,							
TP38-0.1-0.2,	TP37-0.1-0.2,							
TP36-0.1-0.2,	TP35-0.1-0.2,							
TP34-0.1-0.2,	TP33-0.1-0.2,							
TP26-1.1-1.2,	TP26-0.1-0.2,							
TP31-0.1-0.2,	TP30-0.1-0.2,							
TP30-1.1-1.2,	TP29-0.1-0.2,							
TP27-0.1-0.2,	TP24-0.1-0.2,							
TP23-0.1-0.2,	TP22-0.1-0.2,							
TP22-1.1-1.2,	DUP01							
EP066: Polychlorinated Biphenyls (PCB)								
Soil Glass Jar - Unpreserved (EP066)								
TP47-0.1-0.2,	TP46-0.1-0.2,	**21-Jul-2025**	**23-Jul-2025**	04-Aug-2025	✓	**24-Jul-2025**	01-Sep-2025	✓
TP45-0.1-0.2,	TP44-1.1-1.2,							
TP44-0.1-0.2,	TP43-0.1-0.2,							
TP42-0.1-0.2,	TP41-0.1-0.2,							
TP24-0.1-0.2,	TP23-0.1-0.2,							
TP22-0.1-0.2,	TP22-1.1-1.2							
Soil Glass Jar - Unpreserved (EP066)								
TP40-0.1-0.2,	TP39-0.1-0.2,	**21-Jul-2025**	**23-Jul-2025**	04-Aug-2025	✓	**25-Jul-2025**	01-Sep-2025	✓
TP38-0.1-0.2,	TP37-0.1-0.2,							
TP36-0.1-0.2,	TP35-0.1-0.2,							
TP34-0.1-0.2,	TP33-0.1-0.2,							
TP26-1.1-1.2,	TP26-0.1-0.2,							
TP31-0.1-0.2,	TP30-0.1-0.2,							
TP30-1.1-1.2,	TP29-0.1-0.2,							
TP27-0.1-0.2								

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)							
TP44-1.1-1.2, TP44-0.1-0.2, TP43-0.1-0.2, TP42-0.1-0.2, TP41-0.1-0.2, TP40-0.1-0.2, TP39-0.1-0.2, TP38-0.1-0.2, TP37-0.1-0.2, TP36-0.1-0.2, TP35-0.1-0.2, TP34-0.1-0.2, TP33-0.1-0.2, TP26-1.1-1.2, TP26-0.1-0.2, TP31-0.1-0.2, TP30-0.1-0.2, TP30-1.1-1.2, TP29-0.1-0.2, TP27-0.1-0.2, TP24-0.1-0.2, TP23-0.1-0.2, TP22-0.1-0.2, TP22-1.1-1.2	**21-Jul-2025**	**23-Jul-2025**	04-Aug-2025	✓	**24-Jul-2025**	01-Sep-2025	✓
Soil Glass Jar - Unpreserved (EP068)							
TP47-0.1-0.2, TP46-0.1-0.2, TP45-0.1-0.2	**21-Jul-2025**	**23-Jul-2025**	04-Aug-2025	✓	**25-Jul-2025**	01-Sep-2025	✓
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP075(SIM))							
TP44-1.1-1.2, TP44-0.1-0.2, TP43-0.1-0.2, TP42-0.1-0.2, TP41-0.1-0.2, TP40-0.1-0.2, TP39-0.1-0.2, TP38-0.1-0.2, TP37-0.1-0.2	**21-Jul-2025**	**23-Jul-2025**	04-Aug-2025	✓	**23-Jul-2025**	01-Sep-2025	✓
Soil Glass Jar - Unpreserved (EP075(SIM))							
TP47-0.1-0.2, TP46-0.1-0.2, TP45-0.1-0.2, TP36-0.1-0.2, TP35-0.1-0.2, TP34-0.1-0.2, TP33-0.1-0.2, TP26-1.1-1.2, TP26-0.1-0.2, TP31-0.1-0.2, TP30-0.1-0.2, TP30-1.1-1.2, TP29-0.1-0.2, TP27-0.1-0.2, TP24-0.1-0.2, TP23-0.1-0.2, TP22-0.1-0.2, TP22-1.1-1.2, DUP01	**21-Jul-2025**	**23-Jul-2025**	04-Aug-2025	✓	**24-Jul-2025**	01-Sep-2025	✓

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)							
TP47-0.1-0.2, TP46-0.1-0.2, TP45-0.1-0.2, TP44-1.1-1.2, TP44-0.1-0.2, TP43-0.1-0.2, TP42-0.1-0.2, TP41-0.1-0.2, TP40-0.1-0.2, TP39-0.1-0.2, TP38-0.1-0.2, TP37-0.1-0.2, TP36-0.1-0.2, TP35-0.1-0.2, TP34-0.1-0.2, TP33-0.1-0.2, TP26-1.1-1.2, TP26-0.1-0.2, TP31-0.1-0.2, TP30-0.1-0.2, TP30-1.1-1.2, TP29-0.1-0.2, TP27-0.1-0.2, TP24-0.1-0.2, TP23-0.1-0.2, TP22-0.1-0.2, TP22-1.1-1.2	**21-Jul-2025**	**22-Jul-2025**	04-Aug-2025	✓	**23-Jul-2025**	04-Aug-2025	✓
Soil Glass Jar - Unpreserved (EP071)							
TP44-1.1-1.2, TP44-0.1-0.2, TP43-0.1-0.2, TP42-0.1-0.2, TP41-0.1-0.2, TP40-0.1-0.2, TP39-0.1-0.2, TP38-0.1-0.2, TP37-0.1-0.2, TP36-0.1-0.2, TP35-0.1-0.2, TP34-0.1-0.2, TP33-0.1-0.2, TP26-1.1-1.2, TP26-0.1-0.2, TP31-0.1-0.2, TP30-0.1-0.2, TP30-1.1-1.2, TP29-0.1-0.2, TP27-0.1-0.2	**21-Jul-2025**	**23-Jul-2025**	04-Aug-2025	✓	**25-Jul-2025**	01-Sep-2025	✓
Soil Glass Jar - Unpreserved (EP071)							
TP47-0.1-0.2, TP46-0.1-0.2, TP45-0.1-0.2, TP24-0.1-0.2, TP23-0.1-0.2, TP22-0.1-0.2, TP22-1.1-1.2	**21-Jul-2025**	**23-Jul-2025**	04-Aug-2025	✓	**26-Jul-2025**	01-Sep-2025	✓

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)							
TP47-0.1-0.2, TP46-0.1-0.2, TP45-0.1-0.2, TP44-1.1-1.2, TP44-0.1-0.2, TP43-0.1-0.2, TP42-0.1-0.2, TP41-0.1-0.2, TP40-0.1-0.2, TP39-0.1-0.2, TP38-0.1-0.2, TP37-0.1-0.2, TP36-0.1-0.2, TP35-0.1-0.2, TP34-0.1-0.2, TP33-0.1-0.2, TP26-1.1-1.2, TP26-0.1-0.2, TP31-0.1-0.2, TP30-0.1-0.2, TP30-1.1-1.2, TP29-0.1-0.2, TP27-0.1-0.2, TP24-0.1-0.2, TP23-0.1-0.2, TP22-0.1-0.2, TP22-1.1-1.2	**21-Jul-2025**	**22-Jul-2025**	04-Aug-2025	✓	**23-Jul-2025**	04-Aug-2025	✓
Soil Glass Jar - Unpreserved (EP071)							
TP44-1.1-1.2, TP44-0.1-0.2, TP43-0.1-0.2, TP42-0.1-0.2, TP41-0.1-0.2, TP40-0.1-0.2, TP39-0.1-0.2, TP38-0.1-0.2, TP37-0.1-0.2, TP36-0.1-0.2, TP35-0.1-0.2, TP34-0.1-0.2, TP33-0.1-0.2, TP26-1.1-1.2, TP26-0.1-0.2, TP31-0.1-0.2, TP30-0.1-0.2, TP30-1.1-1.2, TP29-0.1-0.2, TP27-0.1-0.2	**21-Jul-2025**	**23-Jul-2025**	04-Aug-2025	✓	**25-Jul-2025**	01-Sep-2025	✓
Soil Glass Jar - Unpreserved (EP071)							
TP47-0.1-0.2, TP46-0.1-0.2, TP45-0.1-0.2, TP24-0.1-0.2, TP23-0.1-0.2, TP22-0.1-0.2, TP22-1.1-1.2	**21-Jul-2025**	**23-Jul-2025**	04-Aug-2025	✓	**26-Jul-2025**	01-Sep-2025	✓

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)							
Trip Spike 18, Trip Blank, Trip Spike Control 18	**14-Jul-2025**	**22-Jul-2025**	28-Jul-2025	✓	**23-Jul-2025**	28-Jul-2025	✓
Soil Glass Jar - Unpreserved (EP080)							
TP47-0.1-0.2, TP46-0.1-0.2, TP45-0.1-0.2, TP44-1.1-1.2, TP44-0.1-0.2, TP43-0.1-0.2, TP42-0.1-0.2, TP41-0.1-0.2, TP40-0.1-0.2, TP39-0.1-0.2, TP38-0.1-0.2, TP37-0.1-0.2, TP36-0.1-0.2, TP35-0.1-0.2, TP34-0.1-0.2, TP33-0.1-0.2, TP26-1.1-1.2, TP26-0.1-0.2, TP31-0.1-0.2, TP30-0.1-0.2, TP30-1.1-1.2, TP29-0.1-0.2, TP27-0.1-0.2, TP24-0.1-0.2, TP23-0.1-0.2, TP22-0.1-0.2, TP22-1.1-1.2	**21-Jul-2025**	**22-Jul-2025**	04-Aug-2025	✓	**23-Jul-2025**	04-Aug-2025	✓

Matrix: **SOLID**

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 bulk samples							
Snap Lock Bag - ACM/Asbestos Grab Bag (EA200)							
TP46-FC	**21-Jul-2025**	**----**	----	----	**23-Jul-2025**	17-Jan-2026	✓

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	5	32	**15.63**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (SIM)	EP075(SIM)	5	43	**11.63**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	5	41	**12.20**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	5	41	**12.20**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	4	32	**12.50**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	5	32	**15.63**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	5	43	**11.63**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	3	30	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
PAH/Phenols (SIM)	EP075(SIM)	3	43	**6.98**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	3	41	**7.32**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	3	41	**7.32**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	32	**6.25**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	32	**6.25**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	3	43	**6.98**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	30	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
PAH/Phenols (SIM)	EP075(SIM)	3	43	**6.98**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	3	41	**7.32**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	3	41	**7.32**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	32	**6.25**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	32	**6.25**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	3	43	**6.98**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	30	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
PAH/Phenols (SIM)	EP075(SIM)	3	43	**6.98**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	3	41	**7.32**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	3	41	**7.32**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	32	**6.25**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	32	**6.25**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	3	43	**6.98**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	30	**6.67**	**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).
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.
Asbestos Identification in Bulk Solids	EA200	SOLID	In house: Referenced to AS 4964 Method for the qualitative identification of asbestos in bulk samples Analysis by Polarised Light Microscopy including dispersion staining

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.

Preparation Methods	*Method*	*Matrix*	*Method Descriptions*
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.

QUALITY CONTROL REPORT

Work Order	: **ES2522273**	Page	: 1 of 20
Client	: **ENVIRONMENTAL GROUP AUSTRALIA PTY LTD**	Laboratory	: Environmental Division Sydney
Contact	: MAX CUNNINGHAM	Contact	: Samiksha Sathish
Address	: 36E Fitzroy Street Marrickville 2204	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61-2-8784 8555
Project	: 2300 - WSU MILPERRA - SCA Post Demo	Date Samples Received	: 21-Jul-2025
Order number	: ----	Date Analysis Commenced	: 22-Jul-2025
C-O-C number	: ----	Issue Date	: 28-Jul-2025
Sampler	: Siyuan He		
Site	: Milpera		
Quote number	: ES25ENVGROLIM0001		
No. of samples received	: 33		
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 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
Brendan Schrader	Laboratory Technician	Newcastle - Asbestos, Mayfield West, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Franco Lentini	LCMS Coordinator	Sydney Inorganics, Smithfield, NSW
John Williams	Lab Technician	Newcastle - Asbestos, Mayfield West, 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
* = The final LOR has been raised due to dilution or other sample specific cause; adjusted LOR is shown in brackets. The duplicate ranges for Acceptable RPD% are applied to the final LOR where applicable.

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: 6738038)									
ES2522036-001	Anonymous	EG005T: Chromium	7440-47-3	2	mg/kg	67	75	11.3	0% - 20%
ES2522036-001	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	4	7	40.1	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	7	12	47.3	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	16	22	33.0	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	41	54	27.5	0% - 50%
		EG005T: Zinc	7440-66-6	5	mg/kg	121	124	2.2	0% - 20%
ES2522273-007	TP42-0.1-0.2	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	8	8	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	6	7	20.5	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	6	5	25.2	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	12	19	42.0	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	8	13	48.0	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	22	32	37.6	No Limit
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 6738040)									
ES2522273-017	TP26-1.1-1.2	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	11	10	12.3	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	3	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	<5	<5	0.0	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	6	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 (%)*
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 6738040) - continued									
ES2522273-017	TP26-1.1-1.2	EG005T: Zinc	7440-66-6	5	mg/kg	6	6	0.0	No Limit
ES2522273-027	TP22-1.1-1.2	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	11	15	29.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	4	7	43.6	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	34	7	132	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	10	12	20.4	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	19	14	29.3	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	29	35	19.6	No Limit
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 6736752)									
ES2522273-001	TP47-0.1-0.2	EA055: Moisture Content	----	0.1 (1.0)*	%	22.5	20.8	7.4	0% - 20%
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 6738048)									
ES2522036-001	Anonymous	EA055: Moisture Content	----	0.1 (1.0)*	%	6.5	6.7	2.2	No Limit
ES2522273-006	TP43-0.1-0.2	EA055: Moisture Content	----	0.1 (1.0)*	%	11.6	13.1	12.7	0% - 50%
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 6738049)									
ES2522273-019	TP31-0.1-0.2	EA055: Moisture Content	----	0.1 (1.0)*	%	19.1	18.6	2.6	0% - 50%
ES2522273-029	DUP01	EA055: Moisture Content	----	0.1 (1.0)*	%	20.6	21.7	5.4	0% - 20%
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 6738037)									
ES2522036-001	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
ES2522273-007	TP42-0.1-0.2	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: 6738039)									
ES2522273-017	TP26-1.1-1.2	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
ES2522273-027	TP22-1.1-1.2	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EP066: Polychlorinated Biphenyls (PCB) (QC Lot: 6736065)									
ES2522252-001	Anonymous	EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
ES2522252-002	Anonymous	EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EP066: Polychlorinated Biphenyls (PCB) (QC Lot: 6736071)									
ES2522273-004	TP44-1.1-1.2	EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
ES2522273-014	TP35-0.1-0.2	EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EP066: Polychlorinated Biphenyls (PCB) (QC Lot: 6736075)									
ES2522273-024	TP24-0.1-0.2	EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EP068A: Organochlorine Pesticides (OC) (QC Lot: 6736064)									
ES2522252-001	Anonymous	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 - (Lindane)	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: 6736064) - continued									
ES2522252-001	Anonymous	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	0.14	0.15	7.5	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
ES2522252-002	Anonymous	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 - (Lindane)	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	0.14	0.12	20.3	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: 6736070)									

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: 6736070) - continued									
ES2522273-004	TP44-1.1-1.2	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 - (Lindane)	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
ES2522273-014	TP35-0.1-0.2	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 - (Lindane)	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	0.17	0.26	38.8	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

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: 6736070) - continued									
ES2522273-014	TP35-0.1-0.2	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: 6736074)									
ES2522273-024	TP24-0.1-0.2	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 - (Lindane)	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
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 6736063)									
ES2522252-001	Anonymous	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

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: 6736063) - continued									
ES2522252-001	Anonymous	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
ES2522252-002	Anonymous	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: 6736069)									
ES2522273-004	TP44-1.1-1.2	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: 6736069) - continued									
ES2522273-004	TP44-1.1-1.2	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
ES2522273-014	TP35-0.1-0.2	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: 6736073)									
ES2522273-024	TP24-0.1-0.2	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

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: 6736073) - continued									
ES2522273-024	TP24-0.1-0.2	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
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 6736062)									
ES2522252-001	Anonymous	EP071: C15 - C28 Fraction	----	100	mg/kg	140	110	22.3	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	130	140	12.6	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
ES2522252-002	Anonymous	EP071: C15 - C28 Fraction	----	100	mg/kg	150	130	15.2	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	130	130	0.0	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 6736068)									
ES2522273-004	TP44-1.1-1.2	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
ES2522273-014	TP35-0.1-0.2	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: 6736072)									
ES2522273-024	TP24-0.1-0.2	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: 6736610)									
ES2522273-001	TP47-0.1-0.2	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
ES2522273-011	TP38-0.1-0.2	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: 6736612)									
ES2522273-021	TP30-1.1-1.2	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 6736062)									
ES2522252-001	Anonymous	EP071: >C16 - C34 Fraction	----	100	mg/kg	230	210	5.2	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
ES2522252-002	Anonymous	EP071: >C16 - C34 Fraction	----	100	mg/kg	240	220	9.8	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: 6736068)									
ES2522273-004	TP44-1.1-1.2	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
ES2522273-014	TP35-0.1-0.2	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: 6736072)									
ES2522273-024	TP24-0.1-0.2	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: 6736610)									
ES2522273-001	TP47-0.1-0.2	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.0	No Limit
ES2522273-011	TP38-0.1-0.2	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: 6736612)									
ES2522273-021	TP30-1.1-1.2	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.0	No Limit
EP080: BTEXN (QC Lot: 6736610)									
ES2522273-001	TP47-0.1-0.2	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
ES2522273-011	TP38-0.1-0.2	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

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: 6736610) - continued									
ES2522273-011	TP38-0.1-0.2	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: 6736612)									
ES2522273-021	TP30-1.1-1.2	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

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: 6738038)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	121.1 mg/kg	100	88.0	113
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	0.74 mg/kg	90.2	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	103	89.0	111
EG005T: Lead	7439-92-1	5	mg/kg	<5	60.8 mg/kg	102	82.0	119
EG005T: Nickel	7440-02-0	2	mg/kg	<2	15.3 mg/kg	97.5	80.0	120
EG005T: Zinc	7440-66-6	5	mg/kg	<5	139.3 mg/kg	94.5	66.0	133
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 6738040)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	121.1 mg/kg	97.7	88.0	113
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	0.74 mg/kg	86.1	70.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	19.6 mg/kg	111	68.0	132
EG005T: Copper	7440-50-8	5	mg/kg	<5	52.9 mg/kg	102	89.0	111
EG005T: Lead	7439-92-1	5	mg/kg	<5	60.8 mg/kg	97.3	82.0	119
EG005T: Nickel	7440-02-0	2	mg/kg	<2	15.3 mg/kg	96.8	80.0	120
EG005T: Zinc	7440-66-6	5	mg/kg	<5	139.3 mg/kg	90.2	66.0	133
EG035T: Total Recoverable Mercury by FIMS (QCLot: 6738037)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.087 mg/kg	85.2	70.0	125
EG035T: Total Recoverable Mercury by FIMS (QCLot: 6738039)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.087 mg/kg	81.0	70.0	125
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 6736065)								
EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	1 mg/kg	110	62.0	126
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 6736071)								
EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	1 mg/kg	102	62.0	126
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 6736075)								
EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	1 mg/kg	104	62.0	126
EP068A: Organochlorine Pesticides (OC) (QCLot: 6736064)								
EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	0.5 mg/kg	83.9	69.0	113
EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	0.5 mg/kg	81.8	65.0	117
EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	0.5 mg/kg	83.7	67.0	119
EP068: gamma-BHC - (Lindane)	58-89-9	0.05	mg/kg	<0.05	0.5 mg/kg	85.9	68.0	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: 6736064) - continued								
EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	77.3	65.0	117
EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	0.5 mg/kg	79.8	67.0	115
EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	0.5 mg/kg	81.2	69.0	115
EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	0.5 mg/kg	82.5	62.0	118
EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.5 mg/kg	82.1	63.0	117
EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	0.5 mg/kg	88.9	66.0	116
EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	0.5 mg/kg	82.4	64.0	116
EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	0.5 mg/kg	81.6	66.0	116
EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	0.5 mg/kg	83.1	67.0	115
EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	0.5 mg/kg	87.7	67.0	123
EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	0.5 mg/kg	94.1	69.0	115
EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	0.5 mg/kg	85.0	69.0	121
EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	0.5 mg/kg	82.3	56.0	120
EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	0.5 mg/kg	82.5	62.0	124
EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	0.5 mg/kg	84.0	66.0	120
EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	0.5 mg/kg	86.0	64.0	122
EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	0.5 mg/kg	82.9	54.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 6736070)								
EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	0.5 mg/kg	83.2	69.0	113
EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	0.5 mg/kg	85.0	65.0	117
EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	0.5 mg/kg	87.8	67.0	119
EP068: gamma-BHC - (Lindane)	58-89-9	0.05	mg/kg	<0.05	0.5 mg/kg	87.0	68.0	116
EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	77.6	65.0	117
EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	0.5 mg/kg	83.1	67.0	115
EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	0.5 mg/kg	84.8	69.0	115
EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	0.5 mg/kg	88.1	62.0	118
EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.5 mg/kg	89.6	63.0	117
EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	0.5 mg/kg	76.7	66.0	116
EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	0.5 mg/kg	89.8	64.0	116
EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	0.5 mg/kg	87.6	66.0	116
EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	0.5 mg/kg	89.9	67.0	115
EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	0.5 mg/kg	81.2	67.0	123
EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	0.5 mg/kg	91.6	69.0	115
EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	0.5 mg/kg	90.0	69.0	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
EP068A: Organochlorine Pesticides (OC) (QCLot: 6736070) - continued								
EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	0.5 mg/kg	85.7	56.0	120
EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	0.5 mg/kg	85.4	62.0	124
EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	0.5 mg/kg	85.6	66.0	120
EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	0.5 mg/kg	85.8	64.0	122
EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	0.5 mg/kg	83.1	54.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 6736074)								
EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	0.5 mg/kg	84.6	69.0	113
EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	0.5 mg/kg	87.0	65.0	117
EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	0.5 mg/kg	84.0	67.0	119
EP068: gamma-BHC - (Lindane)	58-89-9	0.05	mg/kg	<0.05	0.5 mg/kg	88.3	68.0	116
EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	83.6	65.0	117
EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	0.5 mg/kg	90.2	67.0	115
EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	0.5 mg/kg	85.8	69.0	115
EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	0.5 mg/kg	91.7	62.0	118
EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.5 mg/kg	93.0	63.0	117
EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	0.5 mg/kg	94.1	66.0	116
EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	0.5 mg/kg	94.8	64.0	116
EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	0.5 mg/kg	87.1	66.0	116
EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	0.5 mg/kg	92.2	67.0	115
EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	0.5 mg/kg	92.4	67.0	123
EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	0.5 mg/kg	82.7	69.0	115
EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	0.5 mg/kg	92.8	69.0	121
EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	0.5 mg/kg	82.3	56.0	120
EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	0.5 mg/kg	81.5	62.0	124
EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	0.5 mg/kg	81.9	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	79.9	54.0	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 6736063)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	6 mg/kg	99.7	77.0	125
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	6 mg/kg	97.8	72.0	124
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	6 mg/kg	100	73.0	127
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	6 mg/kg	99.7	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	104	77.0	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: 6736063) - continued								
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	6 mg/kg	102	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	94.9	69.0	123
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	6 mg/kg	101	75.0	127
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	6 mg/kg	93.9	68.0	116
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	6 mg/kg	104	74.0	126
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	6 mg/kg	96.6	70.0	126
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	6 mg/kg	97.6	61.0	121
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	6 mg/kg	99.2	62.0	118
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	6 mg/kg	96.2	63.0	121
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 6736069)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	6 mg/kg	99.7	77.0	125
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	6 mg/kg	98.0	72.0	124
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	6 mg/kg	100	73.0	127
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	6 mg/kg	99.9	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	104	77.0	127
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	6 mg/kg	102	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	95.0	69.0	123
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	6 mg/kg	100	75.0	127
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	6 mg/kg	93.4	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	97.2	70.0	126
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	6 mg/kg	98.4	61.0	121
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	6 mg/kg	99.7	62.0	118
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	6 mg/kg	97.0	63.0	121
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 6736073)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	6 mg/kg	100	77.0	125
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	6 mg/kg	97.7	72.0	124
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	6 mg/kg	100	73.0	127
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	6 mg/kg	99.6	72.0	126
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	6 mg/kg	102	75.0	127

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
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 6736073) - continued								
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	6 mg/kg	104	77.0	127
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	6 mg/kg	102	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	94.9	69.0	123
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	6 mg/kg	101	75.0	127
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	6 mg/kg	94.0	68.0	116
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	6 mg/kg	103	74.0	126
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	6 mg/kg	96.9	70.0	126
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	6 mg/kg	98.0	61.0	121
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	6 mg/kg	99.8	62.0	118
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	6 mg/kg	96.7	63.0	121
EP080/071: Total Petroleum Hydrocarbons (QCLot: 6736062)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	300 mg/kg	102	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	111	71.0	129
EP080/071: Total Petroleum Hydrocarbons (QCLot: 6736068)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	300 mg/kg	108	75.0	129
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	450 mg/kg	107	77.0	131
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	300 mg/kg	113	71.0	129
EP080/071: Total Petroleum Hydrocarbons (QCLot: 6736072)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	300 mg/kg	102	75.0	129
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	450 mg/kg	105	77.0	131
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	300 mg/kg	114	71.0	129
EP080/071: Total Petroleum Hydrocarbons (QCLot: 6736610)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	87.3	72.2	131
EP080/071: Total Petroleum Hydrocarbons (QCLot: 6736612)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	86.2	72.2	131
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 6736062)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	375 mg/kg	102	77.0	125
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	525 mg/kg	105	74.0	138
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	225 mg/kg	113	63.0	131
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 6736068)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	375 mg/kg	106	77.0	125

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
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 6736068) - continued								
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	525 mg/kg	108	74.0	138
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	225 mg/kg	112	63.0	131
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 6736072)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	375 mg/kg	103	77.0	125
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	525 mg/kg	106	74.0	138
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	225 mg/kg	114	63.0	131
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 6736610)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	31 mg/kg	85.0	72.4	133
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 6736612)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	31 mg/kg	87.3	72.4	133
EP080: BTEXN (QCLot: 6736610)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	90.2	76.0	124
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	97.3	78.5	121
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	103	77.4	121
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	110	78.2	121
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	108	81.3	121
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	99.2	78.8	122
EP080: BTEXN (QCLot: 6736612)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	87.1	76.0	124
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	93.9	78.5	121
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	101	77.4	121
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	104	78.2	121
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	101	81.3	121
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	98.2	78.8	122

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: 6738038)							
ES2522036-001	Anonymous	EG005T: Arsenic	7440-38-2	50 mg/kg	84.6	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: 6738038) - continued							
ES2522036-001	Anonymous	EG005T: Cadmium	7440-43-9	50 mg/kg	86.9	70.0	130
		EG005T: Chromium	7440-47-3	50 mg/kg	68.4	68.0	132
		EG005T: Copper	7440-50-8	250 mg/kg	91.4	70.0	130
		EG005T: Lead	7439-92-1	250 mg/kg	91.2	70.0	130
		EG005T: Nickel	7440-02-0	50 mg/kg	89.2	70.0	130
		EG005T: Zinc	7440-66-6	250 mg/kg	90.2	66.0	133
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 6738040)							
ES2522273-017	TP26-1.1-1.2	EG005T: Arsenic	7440-38-2	50 mg/kg	92.5	70.0	130
		EG005T: Cadmium	7440-43-9	50 mg/kg	96.8	70.0	130
		EG005T: Chromium	7440-47-3	50 mg/kg	94.2	68.0	132
		EG005T: Copper	7440-50-8	250 mg/kg	95.7	70.0	130
		EG005T: Lead	7439-92-1	250 mg/kg	97.3	70.0	130
		EG005T: Nickel	7440-02-0	50 mg/kg	95.8	70.0	130
		EG005T: Zinc	7440-66-6	250 mg/kg	98.3	66.0	133
EG035T: Total Recoverable Mercury by FIMS (QCLot: 6738037)							
ES2522036-001	Anonymous	EG035T: Mercury	7439-97-6	5 mg/kg	82.8	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 6738039)							
ES2522273-017	TP26-1.1-1.2	EG035T: Mercury	7439-97-6	5 mg/kg	88.9	70.0	130
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 6736065)							
ES2522252-001	Anonymous	EP066: Total Polychlorinated biphenyls	----	1 mg/kg	119	70.0	130
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 6736071)							
ES2522273-004	TP44-1.1-1.2	EP066: Total Polychlorinated biphenyls	----	1 mg/kg	102	70.0	130
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 6736075)							
ES2522273-024	TP24-0.1-0.2	EP066: Total Polychlorinated biphenyls	----	1 mg/kg	89.0	70.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 6736064)							
ES2522252-001	Anonymous	EP068: gamma-BHC - (Lindane)	58-89-9	0.5 mg/kg	112	70.0	130
		EP068: Heptachlor	76-44-8	0.5 mg/kg	106	70.0	130
		EP068: Aldrin	309-00-2	0.5 mg/kg	105	70.0	130
		EP068: Dieldrin	60-57-1	0.5 mg/kg	99.6	70.0	130
		EP068: Endrin	72-20-8	2 mg/kg	103	70.0	130
		EP068: 4.4`-DDT	50-29-3	2 mg/kg	81.9	70.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 6736070)							
ES2522273-004	TP44-1.1-1.2	EP068: gamma-BHC - (Lindane)	58-89-9	0.5 mg/kg	97.2	70.0	130
		EP068: Heptachlor	76-44-8	0.5 mg/kg	92.1	70.0	130
		EP068: Aldrin	309-00-2	0.5 mg/kg	91.4	70.0	130
		EP068: Dieldrin	60-57-1	0.5 mg/kg	87.4	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
EP068A: Organochlorine Pesticides (OC) (QCLot: 6736070) - continued							
ES2522273-004	TP44-1.1-1.2	EP068: Endrin	72-20-8	2 mg/kg	93.0	70.0	130
		EP068: 4.4`-DDT	50-29-3	2 mg/kg	72.3	70.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 6736074)							
ES2522273-024	TP24-0.1-0.2	EP068: gamma-BHC - (Lindane)	58-89-9	0.5 mg/kg	82.5	70.0	130
		EP068: Heptachlor	76-44-8	0.5 mg/kg	87.9	70.0	130
		EP068: Aldrin	309-00-2	0.5 mg/kg	84.3	70.0	130
		EP068: Dieldrin	60-57-1	0.5 mg/kg	95.5	70.0	130
		EP068: Endrin	72-20-8	2 mg/kg	91.7	70.0	130
		EP068: 4.4`-DDT	50-29-3	2 mg/kg	84.6	70.0	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 6736063)							
ES2522252-001	Anonymous	EP075(SIM): Acenaphthene	83-32-9	10 mg/kg	105	70.0	130
		EP075(SIM): Pyrene	129-00-0	10 mg/kg	112	70.0	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 6736069)							
ES2522273-004	TP44-1.1-1.2	EP075(SIM): Acenaphthene	83-32-9	10 mg/kg	90.3	70.0	130
		EP075(SIM): Pyrene	129-00-0	10 mg/kg	96.2	70.0	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 6736073)							
ES2522273-024	TP24-0.1-0.2	EP075(SIM): Acenaphthene	83-32-9	10 mg/kg	82.8	70.0	130
		EP075(SIM): Pyrene	129-00-0	10 mg/kg	94.2	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 6736062)							
ES2522252-001	Anonymous	EP071: C10 - C14 Fraction	----	480 mg/kg	118	73.0	137
		EP071: C15 - C28 Fraction	----	3100 mg/kg	105	53.0	131
		EP071: C29 - C36 Fraction	----	2060 mg/kg	117	52.0	132
EP080/071: Total Petroleum Hydrocarbons (QCLot: 6736068)							
ES2522273-004	TP44-1.1-1.2	EP071: C10 - C14 Fraction	----	480 mg/kg	122	73.0	137
		EP071: C15 - C28 Fraction	----	3100 mg/kg	107	53.0	131
		EP071: C29 - C36 Fraction	----	2060 mg/kg	120	52.0	132
EP080/071: Total Petroleum Hydrocarbons (QCLot: 6736072)							
ES2522273-024	TP24-0.1-0.2	EP071: C10 - C14 Fraction	----	480 mg/kg	127	73.0	137
		EP071: C15 - C28 Fraction	----	3100 mg/kg	112	53.0	131
		EP071: C29 - C36 Fraction	----	2060 mg/kg	126	52.0	132
EP080/071: Total Petroleum Hydrocarbons (QCLot: 6736610)							
ES2522273-001	TP47-0.1-0.2	EP080: C6 - C9 Fraction	----	32.5 mg/kg	82.6	60.4	142
EP080/071: Total Petroleum Hydrocarbons (QCLot: 6736612)							
ES2522273-021	TP30-1.1-1.2	EP080: C6 - C9 Fraction	----	32.5 mg/kg	66.3	60.4	142
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 6736062)							
ES2522252-001	Anonymous						

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: 6736062) - continued							
ES2522252-001	Anonymous	EP071: >C10 - C16 Fraction	----	860 mg/kg	107	73.0	137
		EP071: >C16 - C34 Fraction	----	4320 mg/kg	109	53.0	131
		EP071: >C34 - C40 Fraction	----	890 mg/kg	116	52.0	132
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 6736068)							
ES2522273-004	TP44-1.1-1.2	EP071: >C10 - C16 Fraction	----	860 mg/kg	110	73.0	137
		EP071: >C16 - C34 Fraction	----	4320 mg/kg	112	53.0	131
		EP071: >C34 - C40 Fraction	----	890 mg/kg	119	52.0	132
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 6736072)							
ES2522273-024	TP24-0.1-0.2	EP071: >C10 - C16 Fraction	----	860 mg/kg	114	73.0	137
		EP071: >C16 - C34 Fraction	----	4320 mg/kg	117	53.0	131
		EP071: >C34 - C40 Fraction	----	890 mg/kg	125	52.0	132
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 6736610)							
ES2522273-001	TP47-0.1-0.2	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	82.8	61.1	142
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 6736612)							
ES2522273-021	TP30-1.1-1.2	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	66.7	61.1	142
EP080: BTEXN (QCLot: 6736610)							
ES2522273-001	TP47-0.1-0.2	EP080: Benzene	71-43-2	2.5 mg/kg	75.8	62.1	122
		EP080: Toluene	108-88-3	2.5 mg/kg	87.9	66.6	119
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	94.8	67.4	123
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2.5 mg/kg	97.1	66.4	121
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	95.8	70.7	121
		EP080: Naphthalene	91-20-3	2.5 mg/kg	85.2	61.1	115
EP080: BTEXN (QCLot: 6736612)							
ES2522273-021	TP30-1.1-1.2	EP080: Benzene	71-43-2	2.5 mg/kg	66.3	62.1	122
		EP080: Toluene	108-88-3	2.5 mg/kg	74.3	66.6	119
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	82.9	67.4	123
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2.5 mg/kg	84.2	66.4	121
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	85.0	70.7	121
		EP080: Naphthalene	91-20-3	2.5 mg/kg	87.8	61.1	115

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **ES2510322**	Page	: 1 of 6
Client	: **ENVIRONMENTAL GROUP AUSTRALIA PTY LTD**	Laboratory	: Environmental Division Sydney
Contact	: MAX CUNNINGHAM	Telephone	: +61-2-8784 8555
Project	: 2300	Date Samples Received	: 09-Apr-2025
Site	: WSU Milperra	Issue Date	: 17-Apr-2025
Sampler	: KYA WIYA	No. of samples received	: 5
Order number	: ----	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.**
- **NO Matrix Spike outliers occur.**
- **For all regular sample matrices, where applicable to the methodology, 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
EA055: Moisture Content (Dried @ 105-110°C)								
Soil Glass Jar - Unpreserved (EA055)								
TP32-0.1-0.2,	TP32-0.5-0.6	**09-Apr-2025**	**----**	----	**----**	**15-Apr-2025**	23-Apr-2025	✓
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Snap Lock Bag - ACM/Asbestos Grab Bag (EA200)								
TP32-0.1-0.2,	TP32-0.5-0.6	**09-Apr-2025**	**----**	----	**----**	**11-Apr-2025**	06-Oct-2025	✓
EG005(ED093)T: Total Metals by ICP-AES								
Soil Glass Jar - Unpreserved (EG005T)								
TP32-0.1-0.2,	TP32-0.5-0.6	**09-Apr-2025**	**15-Apr-2025**	06-Oct-2025	✓	**16-Apr-2025**	06-Oct-2025	✓
EG035T: Total Recoverable Mercury by FIMS								
Soil Glass Jar - Unpreserved (EG035T)								
TP32-0.1-0.2,	TP32-0.5-0.6	**09-Apr-2025**	**15-Apr-2025**	07-May-2025	✓	**17-Apr-2025**	07-May-2025	✓
EP066: Polychlorinated Biphenyls (PCB)								
Soil Glass Jar - Unpreserved (EP066)								
TP32-0.1-0.2,	TP32-0.5-0.6	**09-Apr-2025**	**10-Apr-2025**	23-Apr-2025	✓	**12-Apr-2025**	20-May-2025	✓
EP068A: Organochlorine Pesticides (OC)								
Soil Glass Jar - Unpreserved (EP068)								
TP32-0.5-0.6		**09-Apr-2025**	**10-Apr-2025**	23-Apr-2025	✓	**12-Apr-2025**	20-May-2025	✓
Soil Glass Jar - Unpreserved (EP068)								
TP32-0.1-0.2		**09-Apr-2025**	**10-Apr-2025**	23-Apr-2025	✓	**13-Apr-2025**	20-May-2025	✓
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Soil Glass Jar - Unpreserved (EP075(SIM))								
TP32-0.1-0.2,	TP32-0.5-0.6	**09-Apr-2025**	**10-Apr-2025**	23-Apr-2025	✓	**12-Apr-2025**	20-May-2025	✓
EP080/071: Total Petroleum Hydrocarbons								
Soil Glass Jar - Unpreserved (EP080)								
Trip spike, Trip control spike	Trip blank,	**07-Apr-2025**	**10-Apr-2025**	21-Apr-2025	✓	**14-Apr-2025**	21-Apr-2025	✓
Soil Glass Jar - Unpreserved (EP071)								
TP32-0.1-0.2,	TP32-0.5-0.6	**09-Apr-2025**	**10-Apr-2025**	23-Apr-2025	✓	**11-Apr-2025**	20-May-2025	✓
Soil Glass Jar - Unpreserved (EP080)								
TP32-0.1-0.2,	TP32-0.5-0.6	**09-Apr-2025**	**10-Apr-2025**	23-Apr-2025	✓	**14-Apr-2025**	23-Apr-2025	✓

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)								
Trip spike, Trip control spike	Trip blank,	**07-Apr-2025**	**10-Apr-2025**	21-Apr-2025	✓	**14-Apr-2025**	21-Apr-2025	✓
Soil Glass Jar - Unpreserved (EP071)								
TP32-0.1-0.2,	TP32-0.5-0.6	**09-Apr-2025**	**10-Apr-2025**	23-Apr-2025	✓	**11-Apr-2025**	20-May-2025	✓
Soil Glass Jar - Unpreserved (EP080)								
TP32-0.1-0.2,	TP32-0.5-0.6	**09-Apr-2025**	**10-Apr-2025**	23-Apr-2025	✓	**14-Apr-2025**	23-Apr-2025	✓
EP080: BTEXN								
Soil Glass Jar - Unpreserved (EP080)								
Trip spike, Trip control spike	Trip blank,	**07-Apr-2025**	**10-Apr-2025**	21-Apr-2025	✓	**14-Apr-2025**	21-Apr-2025	✓
Soil Glass Jar - Unpreserved (EP080)								
TP32-0.1-0.2,	TP32-0.5-0.6	**09-Apr-2025**	**10-Apr-2025**	23-Apr-2025	✓	**14-Apr-2025**	23-Apr-2025	✓

Quality Control Parameter Frequency Compliance

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

Matrix: **SOIL**

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

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Duplicates (DUP)							
Moisture Content	EA055	2	15	**13.33**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (SIM)	EP075(SIM)	2	13	**15.38**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	6	**16.67**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	1	6	**16.67**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	16	**12.50**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	17	**11.76**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	6	**16.67**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	16	**12.50**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
PAH/Phenols (SIM)	EP075(SIM)	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	6	**16.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	1	6	**16.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	16	**6.25**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	17	**5.88**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	6	**16.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	16	**6.25**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
PAH/Phenols (SIM)	EP075(SIM)	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	6	**16.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	1	6	**16.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	16	**6.25**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	17	**5.88**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	6	**16.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	16	**6.25**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
PAH/Phenols (SIM)	EP075(SIM)	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	6	**16.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	1	6	**16.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	16	**6.25**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	17	**5.88**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	6	**16.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	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).
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.

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.

Preparation Methods	*Method*	*Matrix*	*Method Descriptions*
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.

QUALITY CONTROL REPORT

Work Order	: **ES2510322**	Page	: 1 of 9
Client	: **ENVIRONMENTAL GROUP AUSTRALIA PTY LTD**	Laboratory	: Environmental Division Sydney
Contact	: MAX CUNNINGHAM	Contact	: Samiksha Sathish
Address	: 36E Fitzroy Street Marrickville 2204	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61-2-8784 8555
Project	: 2300	Date Samples Received	: 09-Apr-2025
Order number	: ----	Date Analysis Commenced	: 10-Apr-2025
C-O-C number	: ----	Issue Date	: 17-Apr-2025
Sampler	: KYA WIYA		
Site	: WSU Milperra		
Quote number	: ES25ENVGROLIM0001		
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 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
Brendan Schrader	Laboratory Technician	Newcastle - Asbestos, Mayfield West, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic 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
* = The final LOR has been raised due to dilution or other sample specific cause; adjusted LOR is shown in brackets. The duplicate ranges for Acceptable RPD% are applied to the final LOR where applicable.

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: 6511444)									
ES2510317-026	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	30	29	0.0	0% - 50%
		EG005T: Nickel	7440-02-0	2	mg/kg	25	28	14.4	0% - 50%
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	31	26	18.0	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	12	12	0.0	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	38	38	0.0	No Limit
ES2510319-004	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	25	24	7.5	0% - 20%
		EG005T: Chromium	7440-47-3	2	mg/kg	392	438	11.0	0% - 20%
		EG005T: Nickel	7440-02-0	2	mg/kg	78	68	14.3	0% - 20%
		EG005T: Arsenic	7440-38-2	5	mg/kg	248	223	10.6	0% - 20%
		EG005T: Copper	7440-50-8	5	mg/kg	3500	2980	16.0	0% - 20%
		EG005T: Lead	7439-92-1	5	mg/kg	648	759	15.8	0% - 20%
		EG005T: Zinc	7440-66-6	5	mg/kg	8070	7320	9.8	0% - 20%
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 6511450)									
ES2510317-031	Anonymous	EA055: Moisture Content	----	0.1 (1.0)*	%	14.2	14.4	1.7	0% - 50%
ES2510319-004	Anonymous	EA055: Moisture Content	----	0.1 (1.0)*	%	<1.0	<1.0	0.0	No Limit
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 6511445)									
ES2510317-026	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
ES2510319-004	Anonymous	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 (%)*
EP066: Polychlorinated Biphenyls (PCB) (QC Lot: 6502159)									
ES2510329-001	Anonymous	EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EP068A: Organochlorine Pesticides (OC) (QC Lot: 6502158)									
ES2510329-001	Anonymous	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 - (Lindane)	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
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 6502157)									
ES2510332-007	Anonymous	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

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: 6502157) - continued									
ES2510332-007	Anonymous	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
ES2510329-001	Anonymous	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
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 6501227)									
ES2510213-001	Anonymous	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
ES2510300-004	Anonymous	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 6502156)									
ES2510329-001	Anonymous	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 Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 6501227)									
ES2510213-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.0	No Limit
ES2510300-004	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: 6502156)									
ES2510329-001	Anonymous	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 6502156) - continued									
ES2510329-001	Anonymous	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: BTEXN (QC Lot: 6501227)									
ES2510213-001	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
ES2510300-004	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

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: 6511444)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	121.1 mg/kg	99.2	88.0	113
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	0.74 mg/kg	88.3	70.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	19.6 mg/kg	112	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	99.4	82.0	119
EG005T: Nickel	7440-02-0	2	mg/kg	<2	15.3 mg/kg	100	80.0	120
EG005T: Zinc	7440-66-6	5	mg/kg	<5	139.3 mg/kg	93.7	66.0	133
EG035T: Total Recoverable Mercury by FIMS (QCLot: 6511445)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.087 mg/kg	96.0	70.0	125
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 6502159)								
EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	1 mg/kg	96.5	62.0	126
EP068A: Organochlorine Pesticides (OC) (QCLot: 6502158)								
EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	0.5 mg/kg	80.6	69.0	113
EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	0.5 mg/kg	83.0	65.0	117
EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	0.5 mg/kg	84.6	67.0	119
EP068: gamma-BHC - (Lindane)	58-89-9	0.05	mg/kg	<0.05	0.5 mg/kg	93.9	68.0	116
EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	85.2	65.0	117
EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	0.5 mg/kg	83.7	67.0	115
EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	0.5 mg/kg	84.3	69.0	115
EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	0.5 mg/kg	86.7	62.0	118
EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.5 mg/kg	83.6	63.0	117
EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	0.5 mg/kg	88.4	66.0	116
EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	0.5 mg/kg	85.4	64.0	116
EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	0.5 mg/kg	87.1	66.0	116
EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	0.5 mg/kg	86.9	67.0	115
EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	0.5 mg/kg	83.6	67.0	123
EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	0.5 mg/kg	87.8	69.0	115
EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	0.5 mg/kg	84.9	69.0	121
EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	0.5 mg/kg	79.5	56.0	120
EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	0.5 mg/kg	80.7	62.0	124

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
EP068A: Organochlorine Pesticides (OC) (QCLot: 6502158) - continued								
EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	0.5 mg/kg	88.9	66.0	120
EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	0.5 mg/kg	78.4	64.0	122
EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	0.5 mg/kg	75.8	54.0	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 6502157)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	6 mg/kg	88.7	77.0	125
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	6 mg/kg	92.4	72.0	124
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	6 mg/kg	93.5	73.0	127
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	6 mg/kg	94.0	72.0	126
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	6 mg/kg	96.5	75.0	127
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	6 mg/kg	95.0	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	97.8	74.0	128
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	6 mg/kg	91.6	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	88.3	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	97.5	70.0	126
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	6 mg/kg	93.6	61.0	121
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	6 mg/kg	91.7	62.0	118
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	6 mg/kg	91.8	63.0	121
EP080/071: Total Petroleum Hydrocarbons (QCLot: 6501227)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	90.9	72.2	131
EP080/071: Total Petroleum Hydrocarbons (QCLot: 6502156)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	300 mg/kg	104	75.0	129
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	450 mg/kg	96.0	77.0	131
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	300 mg/kg	89.1	71.0	129
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 6501227)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	31 mg/kg	91.6	72.4	133
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 6502156)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	375 mg/kg	108	77.0	125
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	525 mg/kg	89.8	74.0	138
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	225 mg/kg	80.3	63.0	131
EP080: BTEXN (QCLot: 6501227)								

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
EP080: BTEXN (QCLot: 6501227) - continued								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	97.3	76.0	124
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	108	78.5	121
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	105	77.4	121
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	113	78.2	121
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	116	81.3	121
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	103	78.8	122

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.

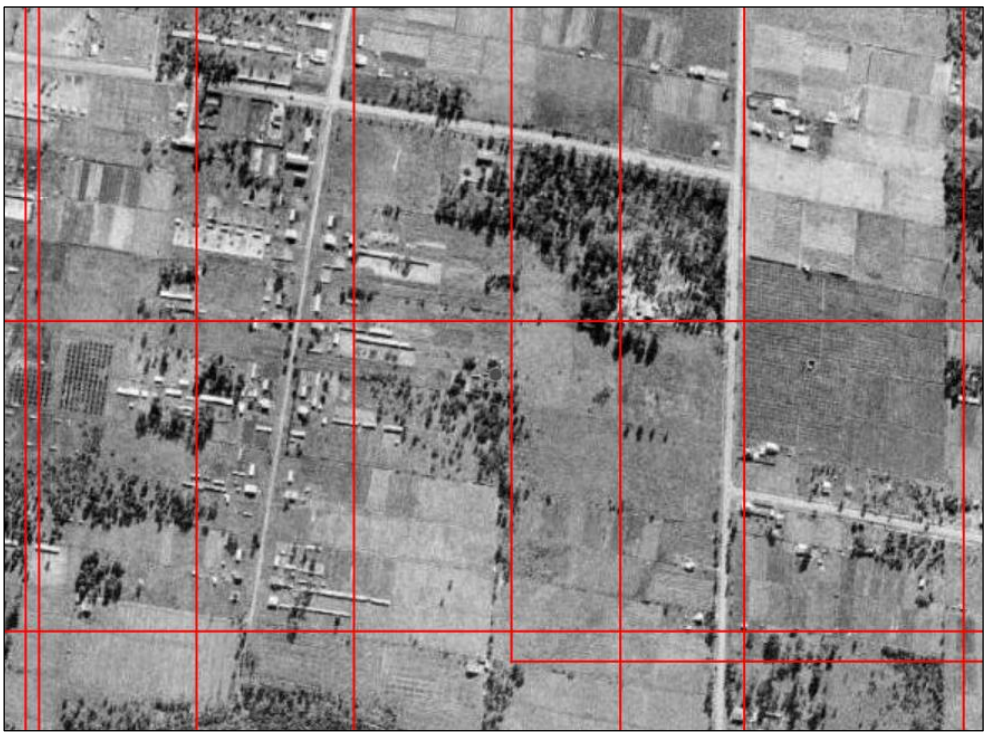
Sub-Matrix: **SOIL**

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: 6511444)							
ES2510317-026	Anonymous	EG005T: Arsenic	7440-38-2	50 mg/kg	83.9	70.0	130
		EG005T: Cadmium	7440-43-9	12.5 mg/kg	91.4	70.0	130
		EG005T: Chromium	7440-47-3	50 mg/kg	89.6	68.0	132
		EG005T: Copper	7440-50-8	50 mg/kg	95.7	70.0	130
		EG005T: Lead	7439-92-1	50 mg/kg	93.4	70.0	130
		EG005T: Nickel	7440-02-0	50 mg/kg	86.9	70.0	130
		EG005T: Zinc	7440-66-6	50 mg/kg	90.8	66.0	133
EG035T: Total Recoverable Mercury by FIMS (QCLot: 6511445)							
ES2510317-026	Anonymous	EG035T: Mercury	7439-97-6	5 mg/kg	91.2	70.0	130
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 6502159)							
ES2510329-001	Anonymous	EP066: Total Polychlorinated biphenyls	----	1 mg/kg	101	70.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 6502158)							
ES2510329-001	Anonymous	EP068: gamma-BHC - (Lindane)	58-89-9	0.5 mg/kg	111	70.0	130
		EP068: Heptachlor	76-44-8	0.5 mg/kg	118	70.0	130
		EP068: Aldrin	309-00-2	0.5 mg/kg	94.6	70.0	130
		EP068: Dieldrin	60-57-1	0.5 mg/kg	91.0	70.0	130
		EP068: Endrin	72-20-8	2 mg/kg	72.2	70.0	130
		EP068: 4.4`-DDT	50-29-3	2 mg/kg	94.2	70.0	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 6502157)							
ES2510329-001	Anonymous	EP075(SIM): Acenaphthene	83-32-9	10 mg/kg	85.8	70.0	130
		EP075(SIM): Pyrene	129-00-0	10 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
EP080/071: Total Petroleum Hydrocarbons (QCLot: 6501227)							
ES2510213-001	Anonymous	EP080: C6 - C9 Fraction	----	32.5 mg/kg	74.2	60.4	142
EP080/071: Total Petroleum Hydrocarbons (QCLot: 6502156)							
ES2510329-001	Anonymous	EP071: C10 - C14 Fraction	----	480 mg/kg	99.8	73.0	137
		EP071: C15 - C28 Fraction	----	3100 mg/kg	110	53.0	131
		EP071: C29 - C36 Fraction	----	2060 mg/kg	123	52.0	132
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 6501227)							
ES2510213-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	78.3	61.1	142
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 6502156)							
ES2510329-001	Anonymous	EP071: >C10 - C16 Fraction	----	860 mg/kg	92.0	73.0	137
		EP071: >C16 - C34 Fraction	----	4320 mg/kg	118	53.0	131
		EP071: >C34 - C40 Fraction	----	890 mg/kg	123	52.0	132
EP080: BTEXN (QCLot: 6501227)							
ES2510213-001	Anonymous	EP080: Benzene	71-43-2	2.5 mg/kg	72.2	62.1	122
		EP080: Toluene	108-88-3	2.5 mg/kg	89.9	66.6	119
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	86.4	67.4	123
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2.5 mg/kg	96.8	66.4	121
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	99.8	70.7	121
		EP080: Naphthalene	91-20-3	2.5 mg/kg	96.5	61.1	115

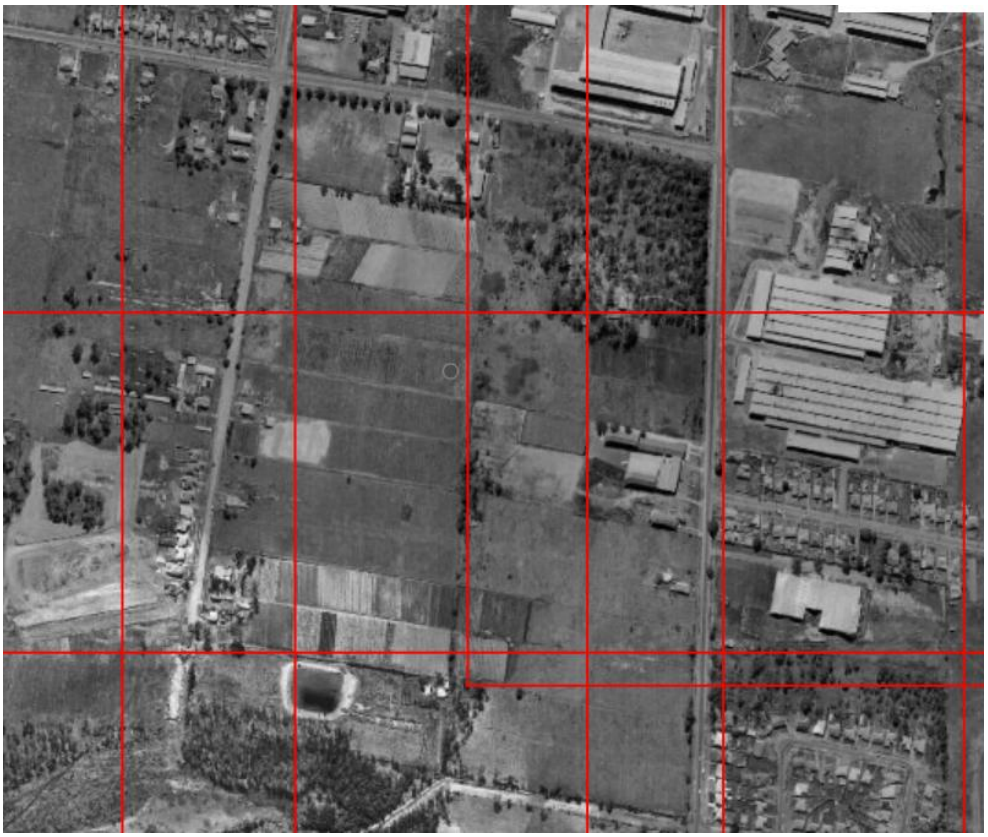
APPENDIX D
HISTORICAL AERIAL PHOTOGRAPHS



Historical Aerial Photograph: 1943



Historical Aerial Photograph: 1947



Historical Aerial Photograph: 1965



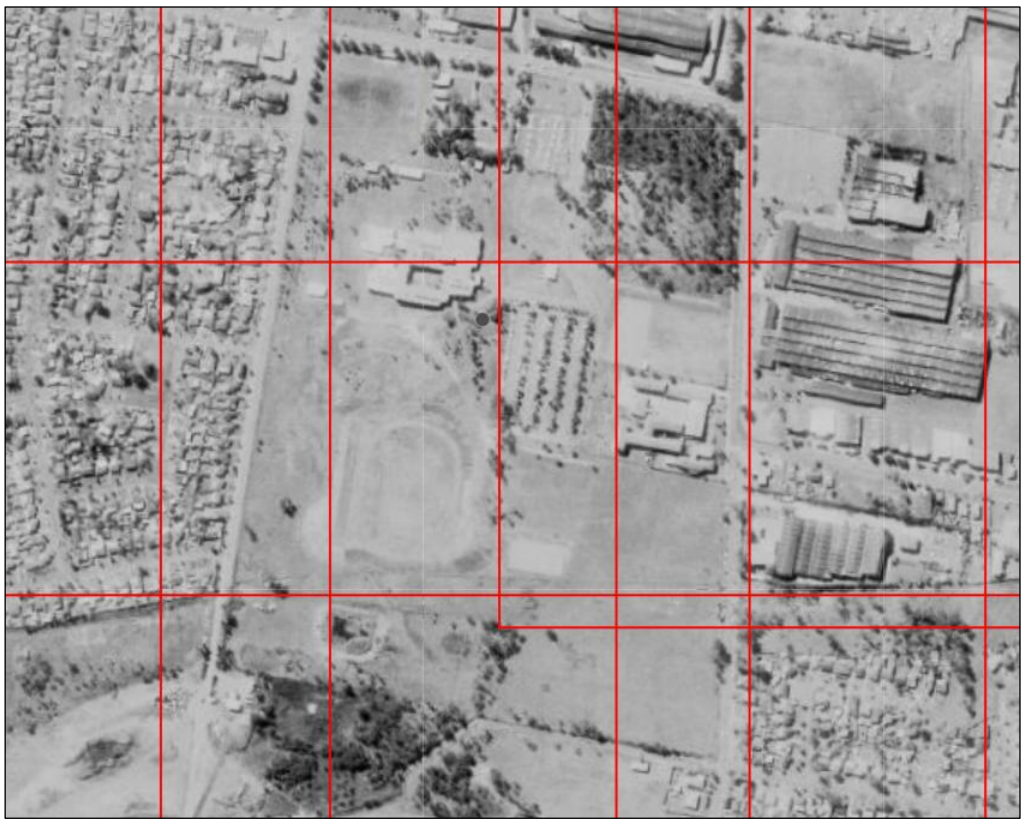
Historical Aerial Photograph: 1971



Historical Aerial Photograph: 1975



Historical Aerial Photograph: 1978



Historical Aerial Photograph: 1984



Historical Aerial Photograph: 1986



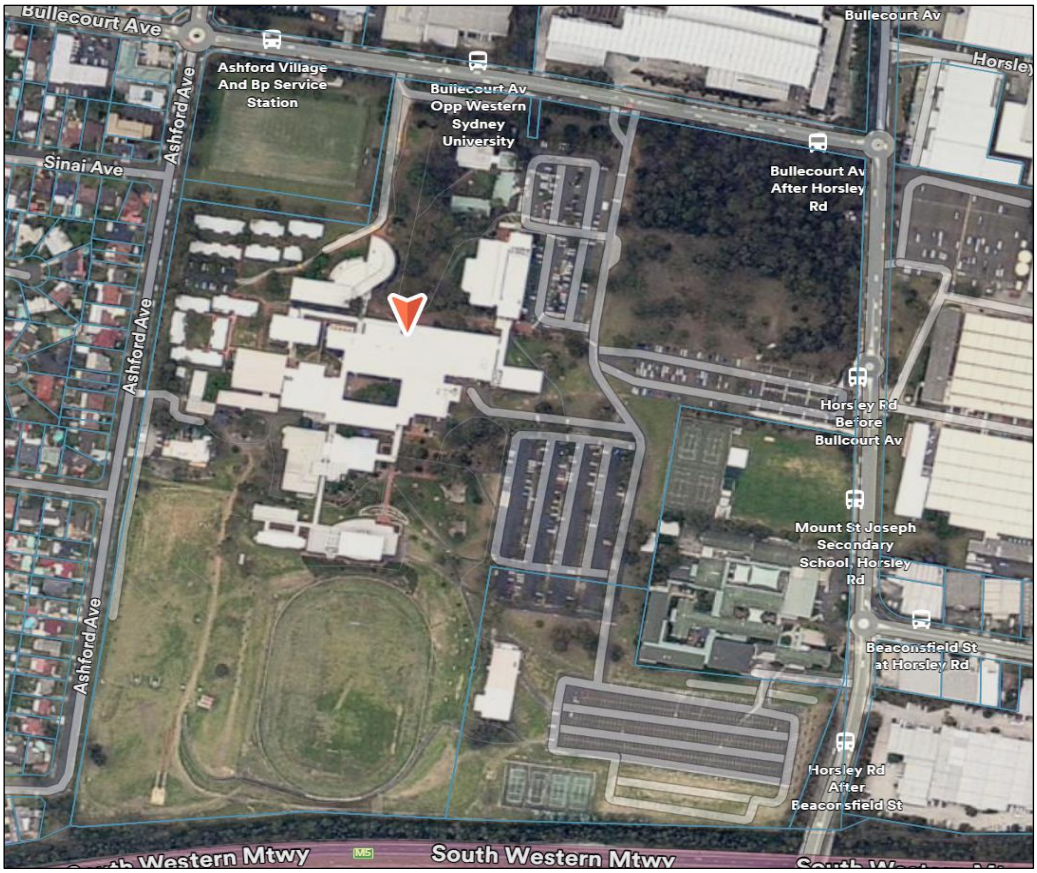
Historical Aerial Photograph: 1991



Historical Aerial Photograph: 1998



Historical Aerial Photograph: 2004



Historical Aerial Photograph: 2009



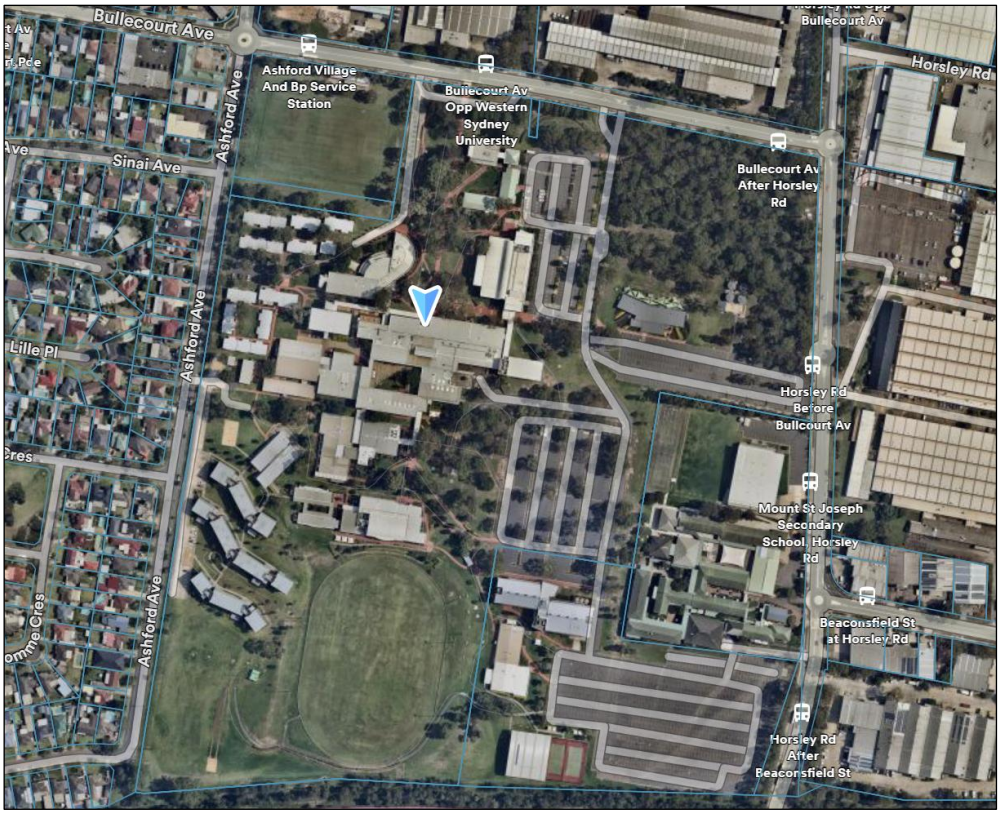
Historical Aerial Photograph: 2011



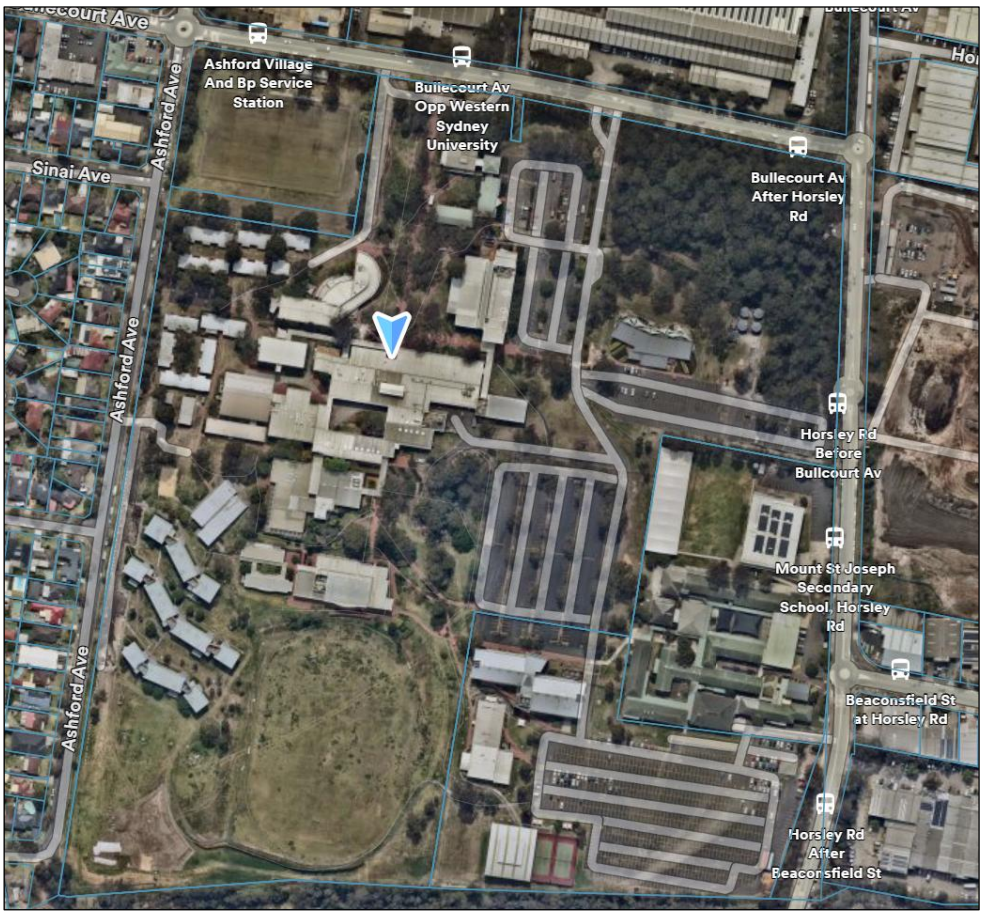
Historical Aerial Photograph: 2012



Historical Aerial Photograph: 2014



Historical Aerial Photograph: 2018



Historical Aerial Photograph: 2024

APPENDIX E

ASBESTOS INSPECTION REPORTS

Sydney Environmental Group

T: 1300 884 164
E: info@sydneyenvironmental.com.au
W: www.sydneyenvironmental.com.au
A: 36E Fitzroy Street, Marrickville NSW

ASBESTOS MATERIALS INSPECTION REPORT

Report Number	2300-ASBINS-06-120225.v1f
Client	Mirvac Pty Ltd
Project Location	Western Sydney University – Milperra Campus, Horsley Road & Bullecourt Avenue, Milperra NSW
Inspection Date	29 January 2025
Report Date	12 February 2025
Scope of Works	Visual inspection and sampling of eight (8) test pits located withing the subject area for Potential Asbestos containing Materials (PACM).
Subject Area	Western Sydney University – Milperra Campus, Horsley Road & Bullecourt Avenue, Milperra NSW, subfloor beneath Building 1 (refer to **Appendix A – Aerial Photograph** and **Appendix B – Photographs**).

INTRODUCTION

General

Sydney Environmental Group Pty Ltd (SE) was commissioned by Mirvac Pty Ltd to undertake an Asbestos Materials Inspection of the subject area located at Western Sydney University – Milperra Campus, Horsley Road & Bullecourt Avenue, Milperra NSW. The site inspection was carried out on 29 January 2025 by Nicholas Jessup, a suitably qualified and experienced occupational hygienist.

Legislative Requirements

The survey works and production of this report have been undertaken in accordance with the requirements of:

- *Work Health and Safety Regulation 2017;*
- *Work Health and Safety Act 2011;*
- SafeWork NSW *Code of Practice: How to Manage and Control Asbestos in the Workplace* (2022); and
- SafeWork NSW *Code of Practice: How to Safely Remove Asbestos* (2022).

SCOPE OF WORK

The scope of work involved the following:

- Completion of a Safety, Health, and Environmental Work Method Statement prior to undertaking works;
- Visual inspection of the subject area for potential asbestos containing materials;
- Sampling of suspected asbestos fibre cement fragments;
- Analysis of eight (8) soil samples and one (1) fibre cement sample by a NATA Accredited Laboratory; and
- Preparation of an Asbestos Materials Inspection Report outlining the site data and conclusions.

INSPECTION DETAILS

General

Soil sampling was undertaken by SE on 29 January 2025. A total of eight (8) test pits ('B1-TP01' to 'B1-TP08'), were advanced across the accessible areas within the subject area using hand tools to a depth of 0.5 m bgs. Samples for potential analysis were collected from the near surface (0.1-0.2 m bsgl). Each soil sample was collected using a new clean pair of nitrile gloves and placed in the appropriate plastic zip-lock bags provided by the laboratory. All eight (8) samples were conveyed to a NATA accredited laboratory for analysis of asbestos (NEPM WA DOH 0.001%)

Suspected asbestos containing fibre cement fragments were observed in fill materials at sampling locations 'TP03', 'TP06', 'TP07' and 'TP08'. Upon inspection and logging of the material, one (1) fibre cement sample was collected from within the soil materials and conveyed to a NATA accredited laboratory for analysis of asbestos (Bulk ID per AS4964:2004). The suspected ACM was observed to be in fair condition and could not be crumbled, pulverised or reduced to a powder by hand pressure with hand pressure. Based on these observations, the suspected ACM was considered to be **Non-friable**, in-line with the criteria outlined within SafeWork NSW (2019).

Restrictions on Survey / Areas not accessed

Please note that this inspection is limited to the surfaces of the subject area as outlined within this report. Areas adjacent to and beneath the subject area are considered outside the scope of this report and may contain asbestos.

Please remain diligent when undertaking further works within the area and contact SE immediately if any unexpected and/or suspected asbestos containing materials are observed during these works.

ANALYTICAL RESULTS

One (1) representative fibre cement sample was collected from within the subject area. Eight (8) representative soil samples were collected from within the subject area. The samples were submitted to Eurofins | Environment Testing, a National Australian Testing Authority (NATA) laboratory. Asbestos was identified in the fibre cement sample (B1-FC) collected (refer to **Appendix C – Laboratory Documentation**). A summary of the results is provided below in **Table 1**.

Table 1 – Asbestos Results Summary

Sample ID	Analyte	Matrix	Result
B1-FC	Asbestos (Bulk ID)	Fibre Cement	**Chrysotile and Amosite asbestos detected** in fibre cement fragment (Dimensions 100 x 46 x 5 mm)
B1-TP01-0.1-0.2	Asbestos (NEPM WA DOH)	Soil	**Asbestos not detected**
B1-TP02-0.1-0.2	Asbestos (NEPM WA DOH)	Soil	**Asbestos not detected**
B1-TP03-0.1-0.2	Asbestos (NEPM WA DOH)	Soil	**Asbestos not detected**
B1-TP04-0.1-0.2	Asbestos (NEPM WA DOH)	Soil	**Asbestos not detected**
B1-TP05-0.1-0.2	Asbestos (NEPM WA DOH)	Soil	**Asbestos not detected**
B1-TP06-0.1-0.2	Asbestos (NEPM WA DOH)	Soil	**Asbestos not detected**
B1-TP07-0.1-0.2	Asbestos (NEPM WA DOH)	Soil	**Asbestos not detected**
B1-TP08-0.1-0.2	Asbestos (NEPM WA DOH)	Soil	**Asbestos not detected**

CONCLUSION

Based on the information presented in this report, it is the opinion of SE that:

- Visual examination of the subject area indicated the presence of asbestos fibre cement fragments throughout shallow fill soils;
- Asbestos was **detected** within the fibre cement sample collected and analysed;
- Asbestos was not detected within any of the soil samples collected and analysed;
- Based on current legislation, the asbestos is considered to be **non-friable** and in fair condition;
- Removal operations must be carried out by an experienced Class A or Class B licensed removalist contractor and as per the SafeWork NSW Code of Practice: How to Safely Remove Asbestos (2022); and
- Please remain diligent and adhere to the restrictions within the body of this report and the limitations stated below.

LIMITATIONS

This report has been prepared for use by the client who has commissioned the works in accordance with the project brief only and has been based on information provided by the client. The advice herein relates only to this project and all results, conclusions and recommendations made should be reviewed by a competent and experienced person with experience in environmental investigations, before being used for any other purpose. Sydney Environmental Group Pty Ltd (SE) accepts no liability for use or interpretation by any person or body other than the client who commissioned the works. This report should not be reproduced or amended in any away without prior approval by the client or SE and should not be relied upon by any other party, who should make their own independent enquiries.

This report does not provide a complete assessment of the environmental status of the site and it is limited to the scope defined herein. Should information become available regarding conditions at the site including previously unknown sources of contamination, SE reserves the right to review the report in the context of the additional information.

SE's professional opinions are based upon its professional judgment, experience, training and results from analytical data. In some cases, further testing and analysis may be required, thus producing different results and/or opinions. SE has limited investigation to the scope agreed upon with its client. It should be noted only the subject area outlined in this report was inspected and adjacent areas may contain asbestos.

SE has used a degree of care and skill ordinarily exercised in similar investigations by reputable member of the Environmental Industry within Australia. No other warranty, expressed or implied, is made or intended.

Inspected & Prepared By:



Nick Jessup
Occupational Hygienist

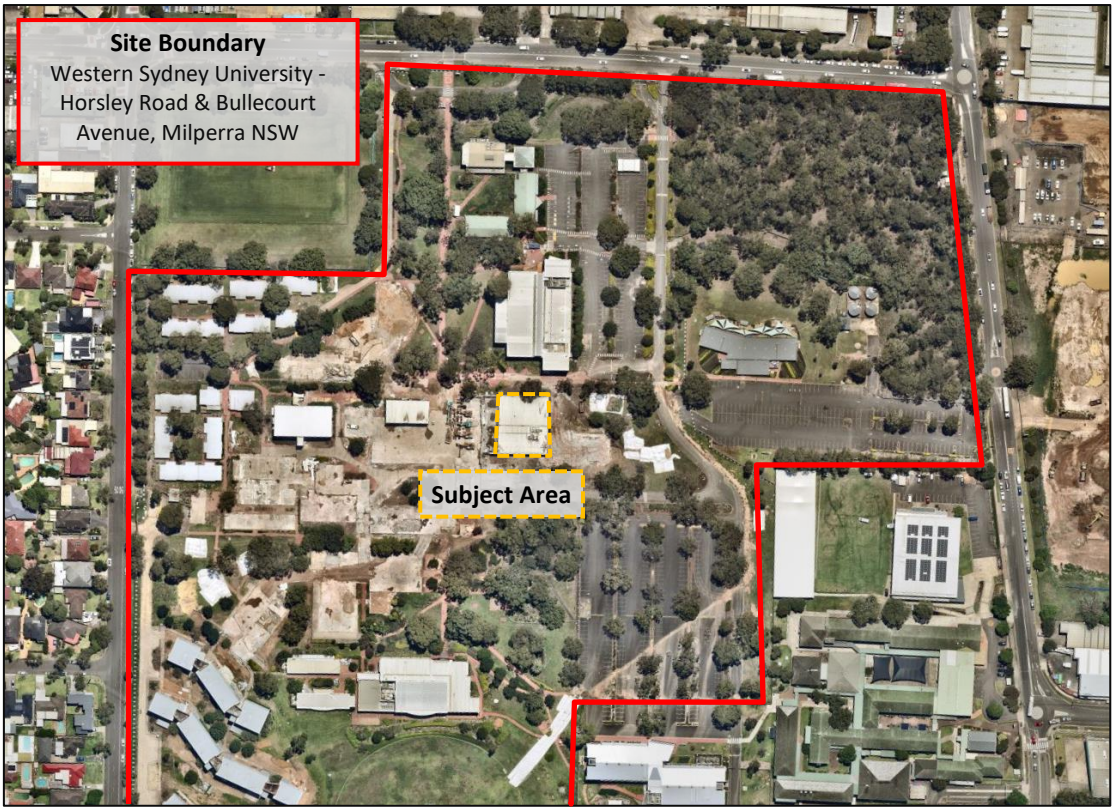
Reviewed By:



Maxwell Cunningham
Licenced Asbestos Assessor
LAA002032

APPENDIX A

AERIAL PHOTOGRAPH



Aerial Photograph 1. Approximate location of the subject area within Western Sydney University – Milperra Campus, Horsley Road & Bullecourt Avenue, Milperra NSW (Source: *maps.au.nearmap.com* accessed on 3 February 2025).

APPENDIX B

PHOTOGRAPHS



Photograph 1: View of representative sampling location (TP01) within the subject area, as observed on 29 January 2025.



Photograph 2: View of representative fibre cement fragments encountered within the subject area, as observed on 29 January 2025.

APPENDIX C

LABORATORY DOCUMENTATION

Certificate of Analysis

Environmental Group Australia Pty Ltd
36E Fitzroy St
Marrickville
NSW 2204

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:	Max Cunningham
Report	1181835-AID
Project Name	WSU MILPERRA
Project ID	2300
Received Date	Jan 29, 2025
Date Reported	Jan 31, 2025

Methodology:

Asbestos Fibre Identification	Conducted in accordance with the Australian Standard AS 5370:2024* Sampling and qualitative identification of asbestos in bulk materials (ISO 22262-1:2012, MOD), formerly AS 4964-2004 and in-house Method LTM-ASB-8020 by polarised light microscopy (PLM) and dispersion staining (DS) techniques. *NOTE: Positive Trace Analysis results indicate the sample contains detectable respirable fibres.*
Man-made vitreous fibre (MMVF)	Fibres exhibiting isotropic characteristics, including glass fibres, glass wool, rock wool, slag wool, ceramic fibres and bio-soluble fibres. NOTE: previously known as "synthetic mineral fibre" (SMF). Simple analytical procedures such as polarised light microscopy cannot detect or reliably identify asbestos in some types of commercial products containing asbestos, either because the fibres are below the resolution of optical microscopy or because the matrix material adheres too strongly to the fibres. For these types of products, electron microscopy may be necessary.
Subsampling Soil Samples	The sample submitted is dried and passed through a 10 mm sieve followed by a 2 mm sieve. All fibrous matter greater than 10 mm and greater than 2 mm and the material passing through the 2 mm sieve are retained and analysed for the presence of asbestos. If the sub 2mm fraction is greater than approximately 30 g to 60 g, then a subsampling routine based on ISO 3082:2017(E) is employed. *NOTE: Depending on the nature and size of the soil sample, the sub-2 mm residue material may need to be subsampled for trace analysis, in accordance with AS 5370:2024*.*
Bonded asbestos-containing material (ACM)	The material is first examined, and any fibres are isolated for identification by PLM and DS. Where required, interfering matrices may be removed by disintegration using a range of heat, chemical or physical treatments, possibly in combination. The resultant material is then further examined in accordance with AS 5370:2024*. *NOTE: Even after disintegration, it may be difficult to detect the presence of asbestos in some asbestos-containing bulk materials using PLM and DS. This is due to the low grade or small length or diameter of the asbestos fibres present in the material or to the fact that very fine fibres have been distributed intimately throughout the materials. Vinyl/asbestos floor tiles, some asbestos-containing sealants and mastics, asbestos-containing epoxy resins and some ore samples are examples of these types of material, which are difficult to analyse.*
Limit of Reporting (LOR)	The performance limitation of the AS 5370:2024* method for non-homogeneous samples is around 0.1 g/kg (equivalent to 0.01% (w/w)). Where no asbestos is found by PLM and DS, including Trace Analysis, this is considered to be at the nominal reporting limit of 0.01% (w/w). The NEPM screening level of 0.001% (w/w) is intended as an on-site determination, not a laboratory limit of reporting, per se. Examination of large sample size (e.g., 500 mL) may improve the likelihood of detecting asbestos, particularly AF, to aid assessment against the NEPM criteria. Gravimetric determinations to this level of accuracy are outside of AS 5370:2024*, and hence, NATA Accreditation does not cover the performance of this service (non-NATA results are shown with an asterisk). *NOTE: NATA News March 2014, p.7, states in relation to AS 4964-2004: "This is a qualitative method with a nominal reporting limit of 0.01 % " and that currently in Australia "there is no validated method available for the quantification of asbestos". This report is consistent with the analytical procedures and reporting recommendations in the NEPM and the WA DoH.*

Project Name WSU MILPERRA
Project ID 2300
Date Sampled Jan 29, 2025
Report 1181835-AID

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
B1-TP01-0.1-0.2	25-Ja0046819	Jan 29, 2025	Approximate Sample 882g Sample consisted of: Brown coarse-grained clayey sandy soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
B1-TP02-0.1-0.2	25-Ja0046820	Jan 29, 2025	Approximate Sample 939g Sample consisted of: Brown coarse-grained clayey sandy soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
B1-TP03-0.1-0.2	25-Ja0046821	Jan 29, 2025	Approximate Sample 1078g Sample consisted of: Brown coarse-grained clayey sandy soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
B1-TP04-0.1-0.2	25-Ja0046822	Jan 29, 2025	Approximate Sample 1110g Sample consisted of: Brown coarse-grained clayey sandy soil, glass, cement and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
B1-TP05-0.1-0.2	25-Ja0046823	Jan 29, 2025	Approximate Sample 982g Sample consisted of: Brown coarse-grained clayey sandy soil, brick and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
B1-TP06-0.1-0.2	25-Ja0046824	Jan 29, 2025	Approximate Sample 908g Sample consisted of: Brown coarse-grained clayey sandy soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
B1-TP07-0.1-0.2	25-Ja0046825	Jan 29, 2025	Approximate Sample 974g Sample consisted of: Brown coarse-grained clayey sandy soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
B1-TP08-0.1-0.2	25-Ja0046826	Jan 29, 2025	Approximate Sample 957g Sample consisted of: Brown coarse-grained clayey sandy soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.

Sample History

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

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

Description	Testing Site	Extracted	Holding Time
Asbestos - LTM-ASB-8020	Sydney	Jan 29, 2025	Indefinite

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Eurofins Environment Testing Australia Pty Ltd
ABN: 50 005 085 521

Melbourne	Geelong	Sydney	Canberra	Brisbane	Newcastle
6 Monterey Road Dandenong South VIC 3175 +61 3 8564 5000 NATA# 1261 Site# 1254	19/8 Lewalan Street Grovedale VIC 3216 +61 3 8564 5000 NATA# 1261 Site# 25403	179 Magowar Road Girraween NSW 2145 +61 2 9900 8400 NATA# 1261 Site# 18217	Unit 1,2 Dacre Street Mitchell ACT 2911 +61 2 6113 8091 NATA# 1261 Site# 25466	1/21 Smallwood Place Murarrie QLD 4172 T: +61 7 3902 4600 NATA# 1261 Site# 20794 & 2780	1/2 Frost Drive Mayfield West NSW 2304 +61 2 4968 8448 NATA# 1261 Site# 25079

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Perth
46-48 Banksia Road Welshpool WA 6106 +61 8 6253 4444 NATA# 2377 Site# 2370 & 2554

Eurofins Environment Testing NZ Ltd
NZBN: 9429046024954

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Company Name: Environmental Group Australia Pty Ltd
Address: 36E Fitzroy St
Marrickville
NSW 2204

Project Name: WSU MILPERRA
Project ID: 2300

Order No.:
Report #: 1181835
Phone: 0432 660 506
Fax:

Received: Jan 29, 2025 6:30 PM
Due: Jan 30, 2025
Priority: 1 Day
Contact Name: Max Cunningham

Eurofins Analytical Services Manager : Asim Khan

Sample Detail						Asbestos - WA guidelines	HOLD*	Suite B13: OCP/PCB	Moisture Set	Eurofins Suite B7
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X	X
External Laboratory										
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**					
1	B1-TP01-0.1-0.2	Jan 29, 2025		Soil	S25-Ja0046819	X		X	X	X
2	B1-TP02-0.1-0.2	Jan 29, 2025		Soil	S25-Ja0046820	X		X	X	X
3	B1-TP03-0.1-0.2	Jan 29, 2025		Soil	S25-Ja0046821	X		X	X	X
4	B1-TP04-0.1-0.2	Jan 29, 2025		Soil	S25-Ja0046822	X		X	X	X
5	B1-TP05-0.1-0.2	Jan 29, 2025		Soil	S25-Ja0046823	X		X	X	X
6	B1-TP06-0.1-0.2	Jan 29, 2025		Soil	S25-Ja0046824	X		X	X	X
7	B1-TP07-0.1-0.2	Jan 29, 2025		Soil	S25-Ja0046825	X		X	X	X
8	B1-TP08-0.1-0.2	Jan 29, 2025		Soil	S25-Ja0046826	X		X	X	X
9	B1-FC	Jan 29, 2025		Building	S25-Ja0046827		X			

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

Eurofins Environment Testing Australia Pty Ltd
ABN: 50 005 085 521

Melbourne	Geelong	Sydney	Canberra	Brisbane	Newcastle
6 Monterey Road	19/8 Lewalan Street	179 Magowar Road	Unit 1,2 Dacre Street	1/21 Smallwood Place	1/2 Frost Drive
Dandenong South	Grovedale	Girraween	Mitchell	Murarrie	Mayfield West
VIC 3175	VIC 3216	NSW 2145	ACT 2911	QLD 4172	NSW 2304
+61 3 8564 5000	+61 3 8564 5000	+61 2 9900 8400	+61 2 6113 8091	T: +61 7 3902 4600	+61 2 4968 8448
NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261
Site# 1254	Site# 25403	Site# 18217	Site# 25466	Site# 20794 & 2780	Site# 25079

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Site# 2370 & 2554

Eurofins Environment Testing NZ Ltd
NZBN: 9429046024954

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Penrose,	Mount Wellington,	Rolleston,	Gate Pa,
Auckland 1061	Auckland 1061	Christchurch 7675	Tauranga 3112
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IANZ# 1327	IANZ# 1308	IANZ# 1290	IANZ# 1402

Company Name: Environmental Group Australia Pty Ltd
Address: 36E Fitzroy St
Marrickville
NSW 2204

Project Name: WSU MILPERRA
Project ID: 2300

Order No.:
Report #: 1181835
Phone: 0432 660 506
Fax:

Received: Jan 29, 2025 6:30 PM
Due: Jan 30, 2025
Priority: 1 Day
Contact Name: Max Cunningham

Eurofins Analytical Services Manager : Asim Khan

Sample Detail	Asbestos - WA guidelines	HOLD*	Suite B13: OCP/PCB	Moisture Set	Eurofins Suite B7
Sydney Laboratory - NATA # 1261 Site # 18217	X	X	X	X	X
Materials					
Test Counts	8	1	8	8	8

Internal Quality Control Review and Glossary General

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

Holding Times

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

Units

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

Calculations

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

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

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

Terms

%asbestos	Estimated percentage of asbestos in a given matrix may be derived from knowledge or experience of the material, informed by HSG264 *Appendix 2*, else assumed to be 15% in accordance with WA DOH *Appendix 2* (**P_A**). This estimate is not NATA-accredited.
ACM	Asbestos Containing Materials. Asbestos contained within a non-asbestos matrix, typically presented in bonded (non-friable) condition. For the purposes of the NEPM and WA DOH, ACM corresponds to material larger than 7 mm x 7 mm.
AF	Asbestos Fines. Asbestos contamination within a soil sample, as defined by WA DOH. Includes loose fibre bundles and small pieces of friable and non-friable material such as asbestos cement fragments mixed with soil. Considered under the NEPM as equivalent to “non-bonded / friable”.
AFM	Airborne Fibre Monitoring, e.g., by the MFM.
Amosite	Amosite Asbestos Detected. Amosite may also refer to Fibrous Grunerite or Brown Asbestos. Identified in accordance with AS 5370:2024* Sampling and qualitative identification of asbestos in bulk materials (ISO 22262-1:2012, MOD), formerly AS 4964-2004.
AS	Australian Standard.
Asbestos Content (as asbestos)	Total %w/w asbestos content in asbestos-containing finds in a soil sample (**% w/w)**.
Chrysotile	Chrysotile Asbestos Detected. Chrysotile may also refer to Fibrous Serpentine or White Asbestos. Identified in accordance with AS 5370:2024* Sampling and qualitative identification of asbestos in bulk materials (ISO 22262-1:2012, MOD), formerly AS 4964-2004..
COC	Chain of Custody.
Crocidolite	Crocidolite Asbestos Detected. Crocidolite may also refer to Fibrous Riebeckite or Blue Asbestos. Identified in accordance with AS 5370:2024* Sampling and qualitative identification of asbestos in bulk materials (ISO 22262-1:2012, MOD), formerly AS 4964-2004..
Dry	Sample is dried by heating prior to analysis.
DS	Dispersion Staining. Technique required for unequivocal Identification of asbestos fibres by PLM.
FA	Fibrous Asbestos. Asbestos-containing material that is wholly or in part friable, including materials with higher asbestos content with a propensity to become friable with handling, and any material that was previously non-friable and in a severely degraded condition. For the purposes of the NEPM and WA DOH, FA generally corresponds to material larger than 7 mm x 7 mm, although FA may be more difficult to distinguish visibly and may be assessed as AF.
Fibre Count	Total of all fibres (whether asbestos or not) meeting the counting criteria set out in the NOHSC:3003
Fibre ID	Fibre Identification. Unequivocal identification of asbestos fibres according to AS 5370:2024* Sampling and qualitative identification of asbestos in bulk materials (ISO 22262-1:2012, MOD), formerly AS 4964-2004.. Includes Chrysotile, Amosite (Grunerite) or Crocidolite asbestos.
Friable	Asbestos-containing materials of any size that may be broken or crumbled by hand pressure. For the purposes of the NEPM, this includes both AF and FA. It is outside of the laboratory’s remit to assess the degree of friability.
HSG248	UK HSE HSG248, *Asbestos: The Analysts Guide*, 2nd Edition (2021), ISBN: 9780616667079.
HSG264	UK HSE HSG264, *Asbestos: The Survey Guide* (2012), .ISBN: 9780717665020
ISO (also ISO/IEC)	International Organization for Standardization / International Electrotechnical Commission.
K Factor	Microscope constant (**K**) as derived from the effective filter area of the given AFM membrane used for collecting the sample (**A**) and the projected eyepiece graticule area of the specific microscope used for the analysis (**a**).
LOR	Limit of Reporting.
MFM (also NOHSC:3003)	Membrane Filter Method. As described by the Australian Government National Occupational Health and Safety Commission, *Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres*, 2nd Edition [NOHSC:3003(2005)].
MMVF	Man-Made Vitreous Fibre - exhibiting isotropic characteristics, including glass fibres, glass wool, rock wool, slag wool, ceramic fibres and “bio-soluble fibres. NOTE: previously known as “synthetic mineral fibre” (SMF).
NEPM (also ASC NEPM)	National Environment Protection (Assessment of Site Contamination) Measure, (2013, as amended).
Organic	Organic Fibres Detected. Organic may refer to Natural or Man-Made Polymeric Fibres. Identified in accordance with AS 5370:2024* Sampling and qualitative identification of asbestos in bulk materials (ISO 22262-1:2012, MOD), formerly AS 4964-2004..
PCM	Phase Contrast Microscopy. This is used for fibre counting according to the MFM.
PLM	Polarised Light Microscopy. As used for Fibre Identification and Trace Analysis according to AS 5370:2024* Sampling and qualitative identification of asbestos in bulk materials (ISO 22262-1:2012, MOD), formerly AS 4964-2004..
Sampling	Unless otherwise stated, Eurofins are not responsible for sampling equipment or the sampling process.
SRA	Sample Receipt Advice.
Trace Analysis	An analytical procedure is used to detect the presence of respirable fibres (particularly asbestos) in a given sample matrix.
UK HSE HSG	United Kingdom, Health and Safety Executive, Health and Safety Guidance, publication.
UMF	Unidentified Mineral Fibre Detected. Fibrous minerals that are detected but have not been unequivocally identified by PLM with DS according to AS 5370:2024* Sampling and qualitative identification of asbestos in bulk materials (ISO 22262-1:2012, MOD), formerly AS 4964-2004.. It may include (but is not limited to) actinolite, anthophyllite, or tremolite asbestos.
WA DOH	Reference document for the NEPM. Government of Western Australia, *Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia* (updated 2021), including Appendix Four: *Laboratory analysis*
Weighted Average	Combined average %w/w asbestos content of all asbestos-containing finds in the given aliquot or total soil sample (**$\%_{WA}$**).

Comments

Sample Integrity

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

Asbestos Counter/Identifier:

Chamath JHM Annakkage	Senior Analyst-Asbestos

Authorised by:

Sayeed Abu	Senior Analyst-Asbestos



Glenn Jackson
Managing Director

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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Certificate of Analysis

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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.

Environmental Group Australia Pty Ltd
36E Fitzroy St
Marrickville
NSW 2204

Attention:	Max Cunningham
Report	1183330-AID
Project Name	ADDITIONAL: WSU MILPERRA
Project ID	2300
Received Date	Feb 03, 2025
Date Reported	Feb 04, 2025

Methodology:

Asbestos Fibre Identification	Conducted in accordance with the Australian Standard AS 5370:2024* Sampling and qualitative identification of asbestos in bulk materials (ISO 22262-1:2012, MOD), formerly AS 4964-2004 and in-house Method LTM-ASB-8020 by polarised light microscopy (PLM) and dispersion staining (DS) techniques. *NOTE: Positive Trace Analysis results indicate the sample contains detectable respirable fibres.*
Man-made vitreous fibre (MMVF)	Fibres exhibiting isotropic characteristics, including glass fibres, glass wool, rock wool, slag wool, ceramic fibres and bio-soluble fibres. NOTE: previously known as "synthetic mineral fibre" (SMF). Simple analytical procedures such as polarised light microscopy cannot detect or reliably identify asbestos in some types of commercial products containing asbestos, either because the fibres are below the resolution of optical microscopy or because the matrix material adheres too strongly to the fibres. For these types of products, electron microscopy may be necessary.
Subsampling Soil Samples	The sample submitted is dried and passed through a 10 mm sieve followed by a 2 mm sieve. All fibrous matter greater than 10 mm and greater than 2 mm and the material passing through the 2 mm sieve are retained and analysed for the presence of asbestos. If the sub 2mm fraction is greater than approximately 30 g to 60 g, then a subsampling routine based on ISO 3082:2017(E) is employed. *NOTE: Depending on the nature and size of the soil sample, the sub-2 mm residue material may need to be subsampled for trace analysis, in accordance with AS 5370:2024*.*
Bonded asbestos-containing material (ACM)	The material is first examined, and any fibres are isolated for identification by PLM and DS. Where required, interfering matrices may be removed by disintegration using a range of heat, chemical or physical treatments, possibly in combination. The resultant material is then further examined in accordance with AS 5370:2024*. *NOTE: Even after disintegration, it may be difficult to detect the presence of asbestos in some asbestos-containing bulk materials using PLM and DS. This is due to the low grade or small length or diameter of the asbestos fibres present in the material or to the fact that very fine fibres have been distributed intimately throughout the materials. Vinyl/asbestos floor tiles, some asbestos-containing sealants and mastics, asbestos-containing epoxy resins and some ore samples are examples of these types of material, which are difficult to analyse.*
Limit of Reporting (LOR)	The performance limitation of the AS 5370:2024* method for non-homogeneous samples is around 0.1 g/kg (equivalent to 0.01% (w/w)). Where no asbestos is found by PLM and DS, including Trace Analysis, this is considered to be at the nominal reporting limit of 0.01% (w/w). The NEPM screening level of 0.001% (w/w) is intended as an on-site determination, not a laboratory limit of reporting, per se. Examination of large sample size (e.g., 500 mL) may improve the likelihood of detecting asbestos, particularly AF, to aid assessment against the NEPM criteria. Gravimetric determinations to this level of accuracy are outside of AS 5370:2024*, and hence, NATA Accreditation does not cover the performance of this service (non-NATA results are shown with an asterisk). *NOTE: NATA News March 2014, p.7, states in relation to AS 4964-2004: "This is a qualitative method with a nominal reporting limit of 0.01 % " and that currently in Australia "there is no validated method available for the quantification of asbestos". This report is consistent with the analytical procedures and reporting recommendations in the NEPM and the WA DoH.*

Project Name ADDITIONAL: WSU MILPERRA
Project ID 2300
Date Sampled Jan 29, 2025
Report 1183330-AID

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
B1-FC	25-Fe0002817	Jan 29, 2025	Approximate Sample 30g / 100x46x5mm Sample consisted of: a) Grey compressed fibre cement material b) White paint layer on side	Chrysotile and amosite asbestos detected (a).

Sample History

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

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

Description	Testing Site	Extracted	Holding Time
Asbestos - LTM-ASB-8020	Sydney	Feb 03, 2025	Indefinite

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Eurofins Environment Testing Australia Pty Ltd
ABN: 50 005 085 521

Melbourne	Geelong	Sydney	Canberra	Brisbane	Newcastle
6 Monterey Road	19/8 Lewalan Street	179 Magowar Road	Unit 1,2 Dacre Street	1/21 Smallwood Place	1/2 Frost Drive
Dandenong South	Grovedale	Girraween	Mitchell	Murarrie	Mayfield West
VIC 3175	VIC 3216	NSW 2145	ACT 2911	QLD 4172	NSW 2304
+61 3 8564 5000	+61 3 8564 5000	+61 2 9900 8400	+61 2 6113 8091	T: +61 7 3902 4600	+61 2 4968 8448
NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261
Site# 1254	Site# 25403	Site# 18217	Site# 25466	Site# 20794 & 2780	Site# 25079

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NZBN: 9429046024954

Auckland	Auckland (Focus)	Christchurch	Tauranga
35 O'Rorke Road	Unit C1/4 Pacific Rise,	43 Detroit Drive	1277 Cameron Road,
Penrose,	Mount Wellington,	Rolleston,	Gate Pa,
Auckland 1061	Auckland 1061	Christchurch 7675	Tauranga 3112
+64 9 526 4551	+64 9 525 0568	+64 3 343 5201	+64 9 525 0568
IANZ# 1327	IANZ# 1308	IANZ# 1290	IANZ# 1402

Company Name: Environmental Group Australia Pty Ltd
Address: 36E Fitzroy St
Marrickville
NSW 2204

Project Name: ADDITIONAL: WSU MILPERRA
Project ID: 2300

Order No.:
Report #: 1183330
Phone: 0432 660 506
Fax:

Received: Feb 3, 2025 2:07 PM
Due: Feb 4, 2025
Priority: Overnight
Contact Name: Max Cunningham

Eurofins Analytical Services Manager : Asim Khan

Sample Detail						Asbestos Absence /Presence
Sydney Laboratory - NATA # 1261 Site # 18217						X
External Laboratory						
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**	
1	B1-FC	Jan 29, 2025		Building Materials	S25-Fe0002817	X
Test Counts						1

Internal Quality Control Review and Glossary General

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

Holding Times

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

Units

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

Calculations

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

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

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

Terms

%asbestos	Estimated percentage of asbestos in a given matrix may be derived from knowledge or experience of the material, informed by HSG264 *Appendix 2*, else assumed to be 15% in accordance with WA DOH *Appendix 2* (**P_A**). This estimate is not NATA-accredited.
ACM	Asbestos Containing Materials. Asbestos contained within a non-asbestos matrix, typically presented in bonded (non-friable) condition. For the purposes of the NEPM and WA DOH, ACM corresponds to material larger than 7 mm x 7 mm.
AF	Asbestos Fines. Asbestos contamination within a soil sample, as defined by WA DOH. Includes loose fibre bundles and small pieces of friable and non-friable material such as asbestos cement fragments mixed with soil. Considered under the NEPM as equivalent to “non-bonded / friable”.
AFM	Airborne Fibre Monitoring, e.g., by the MFM.
Amosite	Amosite Asbestos Detected. Amosite may also refer to Fibrous Grunerite or Brown Asbestos. Identified in accordance with AS 5370:2024* Sampling and qualitative identification of asbestos in bulk materials (ISO 22262-1:2012, MOD), formerly AS 4964-2004.
AS	Australian Standard.
Asbestos Content (as asbestos)	Total %w/w asbestos content in asbestos-containing finds in a soil sample (**% w/w)**.
Chrysotile	Chrysotile Asbestos Detected. Chrysotile may also refer to Fibrous Serpentine or White Asbestos. Identified in accordance with AS 5370:2024* Sampling and qualitative identification of asbestos in bulk materials (ISO 22262-1:2012, MOD), formerly AS 4964-2004..
COC	Chain of Custody.
Crocidolite	Crocidolite Asbestos Detected. Crocidolite may also refer to Fibrous Riebeckite or Blue Asbestos. Identified in accordance with AS 5370:2024* Sampling and qualitative identification of asbestos in bulk materials (ISO 22262-1:2012, MOD), formerly AS 4964-2004..
Dry	Sample is dried by heating prior to analysis.
DS	Dispersion Staining. Technique required for unequivocal Identification of asbestos fibres by PLM.
FA	Fibrous Asbestos. Asbestos-containing material that is wholly or in part friable, including materials with higher asbestos content with a propensity to become friable with handling, and any material that was previously non-friable and in a severely degraded condition. For the purposes of the NEPM and WA DOH, FA generally corresponds to material larger than 7 mm x 7 mm, although FA may be more difficult to distinguish visibly and may be assessed as AF.
Fibre Count	Total of all fibres (whether asbestos or not) meeting the counting criteria set out in the NOHSC:3003
Fibre ID	Fibre Identification. Unequivocal identification of asbestos fibres according to AS 5370:2024* Sampling and qualitative identification of asbestos in bulk materials (ISO 22262-1:2012, MOD), formerly AS 4964-2004.. Includes Chrysotile, Amosite (Grunerite) or Crocidolite asbestos.
Friable	Asbestos-containing materials of any size that may be broken or crumbled by hand pressure. For the purposes of the NEPM, this includes both AF and FA. It is outside of the laboratory’s remit to assess the degree of friability.
HSG248	UK HSE HSG248, *Asbestos: The Analysts Guide*, 2nd Edition (2021), ISBN: 9780616667079.
HSG264	UK HSE HSG264, *Asbestos: The Survey Guide* (2012), .ISBN: 9780717665020
ISO (also ISO/IEC)	International Organization for Standardization / International Electrotechnical Commission.
K Factor	Microscope constant (**K**) as derived from the effective filter area of the given AFM membrane used for collecting the sample (**A**) and the projected eyepiece graticule area of the specific microscope used for the analysis (**a**).
LOR	Limit of Reporting.
MFM (also NOHSC:3003)	Membrane Filter Method. As described by the Australian Government National Occupational Health and Safety Commission, *Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres*, 2nd Edition [NOHSC:3003(2005)].
MMVF	Man-Made Vitreous Fibre - exhibiting isotropic characteristics, including glass fibres, glass wool, rock wool, slag wool, ceramic fibres and “bio-soluble fibres. NOTE: previously known as “synthetic mineral fibre” (SMF).
NEPM (also ASC NEPM)	National Environment Protection (Assessment of Site Contamination) Measure, (2013, as amended).
Organic	Organic Fibres Detected. Organic may refer to Natural or Man-Made Polymeric Fibres. Identified in accordance with AS 5370:2024* Sampling and qualitative identification of asbestos in bulk materials (ISO 22262-1:2012, MOD), formerly AS 4964-2004..
PCM	Phase Contrast Microscopy. This is used for fibre counting according to the MFM.
PLM	Polarised Light Microscopy. As used for Fibre Identification and Trace Analysis according to AS 5370:2024* Sampling and qualitative identification of asbestos in bulk materials (ISO 22262-1:2012, MOD), formerly AS 4964-2004..
Sampling	Unless otherwise stated, Eurofins are not responsible for sampling equipment or the sampling process.
SRA	Sample Receipt Advice.
Trace Analysis	An analytical procedure is used to detect the presence of respirable fibres (particularly asbestos) in a given sample matrix.
UK HSE HSG	United Kingdom, Health and Safety Executive, Health and Safety Guidance, publication.
UMF	Unidentified Mineral Fibre Detected. Fibrous minerals that are detected but have not been unequivocally identified by PLM with DS according to AS 5370:2024* Sampling and qualitative identification of asbestos in bulk materials (ISO 22262-1:2012, MOD), formerly AS 4964-2004.. It may include (but is not limited to) actinolite, anthophyllite, or tremolite asbestos.
WA DOH	Reference document for the NEPM. Government of Western Australia, *Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia* (updated 2021), including Appendix Four: *Laboratory analysis*
Weighted Average	Combined average %w/w asbestos content of all asbestos-containing finds in the given aliquot or total soil sample (**$\%_{WA}$**).

Comments

Sample Integrity

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

Asbestos Counter/Identifier:

Sayeed Abu	Senior Analyst-Asbestos

Authorised by:

Chamath JHM Annakkage	Senior Analyst-Asbestos



Glenn Jackson
Managing Director

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

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

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

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

RECORD

ABN 50 005 085 521

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

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

☐ Melbourne Laboratory
2 Kingston Town Close, Oakleigh, VIC 3166
03 8564 5000 EnviroSampleVic@eurofins.com

Company	Sydney Environmental Group	Project №	2300	Project Manager	MC
Address	U63, 45 Huntley Street Alexandria NSW	Project Name	WSU Milperra	EDD Format (ESdat, EQuIS, Custom)	
Contact Name				Sampler(s)	Nicholas Jessup
Phone №	1300 884 164			Handed over by	
Special Directions				Primary Email	enviro@sydneyenvironmental.com.au
Purchase Order				Secondary Email	nicholas@sydneyenvironmental.com.au
Quote ID №					

Analyses (Note: Where metals are required, specify Total or Dissolved. If Dissolved, sample must be field filtered & preserved. If not specified, Total will be reported.)

Containers: 1L Plastic; 250mL Plastic; 125mL Plastic; 200mL Amber Glass; 40mL VOA vial; 500mL PFAS Bottle; Jar (Glass or HDPE); Other (Asbestos AS4964 WA Guidelines)

Turnaround Time (TAT) Requirements (Default will be 5 days if not ticked)
☐ Overnight ☐ Same Day ☐ 1 Day ☐ 2 Day ☐ 3 Day ☐ 5 Day ☐ Other (

№	Client Sample ID	Sampled Date (dd/mm/yy)	Matrix (S) Solid (W) Water	SEG Contam Suite 1 (TRH, BTEX, PAH, Metals, Asbestos ID)	SEG Contam Suite 2 (TRH, BTEX, PAH, Metals, OCP, PCB, Asbestos ID)	SEG Contam Suite 3 (TRH, BTEX, PAH, Metals, OCP, OPP, PCB, Asbestos ID)	SEG ENIM Suite 1 (TRH, BTEX, PAH, Metals, pH, EC, Asbestos ID)	Salinity Assessment Suite (L2 Aggressivity Suite, ESP %)	Asbestos ID AS4964 (0.01%)	Asbestos ID NEPM & WA (0.001%)	B7 Suite (TRH, BTEX, PAH, Metals)	B13 Suite (OCP, PCB)	HOLD	Sample Comments / Dangerous Goods Hazard Warning
1	BI-TP01-0.1-0.2	29/11/25	S											
2	BI-TP02-0.1-0.2													
3	BI-TP03-0.1-0.2													
4	BI-TP04-0.1-0.2													
5	BI-TP05-0.1-0.2													
6	BI-TP06-0.1-0.2													
7	BI-TP07-0.1-0.2													
8	BI-TP08-0.1-0.2													
9	BI-FC											✓		
10														
11														
12														
13														
14														
15														
16														
17														
18														
19														
20														
	Total Counts													

Method of Shipment: ☐ Courier (#) ☐ Hand Delivered ☐ Postal Name: Nicholas Jessup Signature: Date: 29/11/25 Time: No Chill

Eurofins | mgt Laboratory Use Only							
	Received By	Amin	SYD | BNE | MEL | PER | ADL	Signature	Date	Time	Temperature
	Received By	TEMP	SYD | BNE | MEL | PER | ADL	Signature	Date	Time	Report №

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

Eurofins Environment Testing Australia Pty Ltd trading as Eurofins | mgt

Note: Metals = As, Cd, Cr, Cu, Hg, Ni, Pb, and Zn), TRH = Total Recoverable Hydrocarbons, PAH = Polycyclic Aromatic Hydrocarbons, PCB = Polychlorinated Biphenyls, BTEX = Benzene, Toluene, Ethylbenzene, and Xylene

1181835

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E: info@egau.com.au
W: www.egau.com.au
P (NSW): 36E Fitzroy Street, Marrickville NSW
P (VIC): 88 Langridge Street, Collingwood VIC
ABN: 83 671 599 143

Asbestos Materials Inspection Report

Client:	Mirvac Pty Ltd
Report No:	2300-ASBINS-16-080525.v1f
Site Address:	Western Sydney University – Milperra Campus, Horsley Road & Bullecourt Avenue, Milperra NSW
Date of Field Work:	2 May 2025
Date of Report:	8 May 2025
Scope of Works	Visual inspection within the subject area for Potential Asbestos containing Materials (PACM).
Subject Area Inspected:	Western Sydney University – Milperra Campus, Horsley Road & Bullecourt Avenue, Milperra NSW – Western portion of site, structure 10, building footprint, loose fibre cement fragments on soil surface and remnant villaboard formwork (refer to **Appendix A – Aerial Photograph** and **Appendix B – Photographs**).

1. Introduction

1.1. General

Environmental Group Australia Pty Ltd (EGA) was commissioned by Mirvac Pty Ltd to undertake an Asbestos Materials Inspection of the subject area located at Western Sydney University – Milperra Campus, Horsley Road & Bullecourt Avenue, Milperra NSW. The site inspection was carried out on 2 May 2025 by Lachlan Cranch, an appropriately experienced occupational hygienist under the supervision of Maxwell Cunningham, a SafeWork NSW Licensed Asbestos Assessor (LAA) (LAA002032).

1.2. Legislative Requirements

The survey works and production of this report have been undertaken in accordance with the requirements of:

- *Work Health and Safety Regulation 2017;*
- *Work Health and Safety Act 2011;*
- SafeWork NSW *Code of Practice: How to Manage and Control Asbestos in the Workplace* (2022); and
- SafeWork NSW *Code of Practice: How to Safely Remove Asbestos* (2022).

2. Scope of Work

The scope of work involved the following:

- Completion of a Safety, Health, and Environmental Work Method Statement prior to undertaking works;
- Visual inspection of the subject area for potential asbestos containing materials;
- Sampling of suspected asbestos containing building materials;
- Analysis of three (3) fibre cement samples by a NATA Accredited Laboratory for asbestos (AS4964:2004); and
- Preparation of an Asbestos Materials Inspection Report outlining the site data and conclusions.

3. Inspection Details

3.1. General

Following demolition of the structures, suspected asbestos containing materials were identified within the Structure 10 building footprint in the form of fibre cement fragments and sheeting.

EGA were engaged to undertake an inspection of the materials encountered across the footprint. The inspection was carried out on 2 May 2025.

Various forms of fibre cement were observed across the footprint. The fibre cement fragments were observed to be in good condition, could not be pulverised by hand and had dimensions greater than 7mm, as such the asbestos is considered to be **non-friable** in line with the legislation.

3.2. Restrictions on Survey / Areas not accessed

Please note that this inspection is limited to the surfaces of the subject area as outlined within this report. Areas adjacent to and beneath the subject area are considered outside the scope of this report and may contain asbestos.

Please remain diligent when undertaking further works within the area and contact EGA immediately if any unexpected and/or suspected asbestos containing materials are observed during these works.

4. Analytical Results

Three (3) representative fibre cement samples were collected from within the subject area. The samples were submitted to a NATA accredited laboratory for analysis of asbestos (Bulk ID per AS4964:2004). Asbestos was identified in two (2) of the three (3) building material samples collected (refer to **Appendix C – Laboratory Documentation**). A summary of the results is provided below in **Table 1**.

Table 1 – Asbestos Results Summary

Sample ID	Analyte	Matrix	Result
Building 10-FC01	Asbestos (Bulk ID)	Fibre Cement	**Asbestos detected**
Building 10-FC02	Asbestos (Bulk ID)	Fibre Cement	**Asbestos detected**
Building 10-VB	Asbestos (Bulk ID)	Fibre Cement	No asbestos detected

5. Conclusion

Based on the information presented in this report, it is the opinion of EGA that:

- Visual examination of the subject area indicated the presence of asbestos fibre cement materials;
- Asbestos was **detected** within two (2) of the three (3) fibre cement samples collected and analysed;
- The fibre cement materials were observed to be in good condition and could not be pulverised by hand, as such the asbestos is considered **non-friable** in line with the legislation;
- Removal operations must be carried out by an experienced Class A or Class B licensed removalist contractor and as per the SafeWork NSW Code of Practice: How to Safely Remove Asbestos (2022); and
- Please remain diligent and adhere to the restrictions within the body of this report and the limitations stated below.

6. Statement of Limitations

This report has been prepared for the exclusive use of the client. EGA 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 appendices and attachments.

Any other party should satisfy themselves that the scope of work conducted and report herein meets their specific needs. EGA cannot be held liable for third party reliance on this document, as EGA is not aware of the specific needs of the third party.

The subsurface environment can present substantial uncertainty due to its 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.

EGA'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. EGA has limited its investigation to the scope agreed upon with its client.

Author Signature		**Reviewer Signature**	
Name	Lachlan Cranch	**Name**	Lachlan Mulhearn
Title	Occupational Hygienist	**Title**	Environmental Scientist

Attachments:

1) Figures
2) Site Photographs
3) Laboratory Reports and Chain of Custody Documentation

ATTACHMENT 1

FIGURES

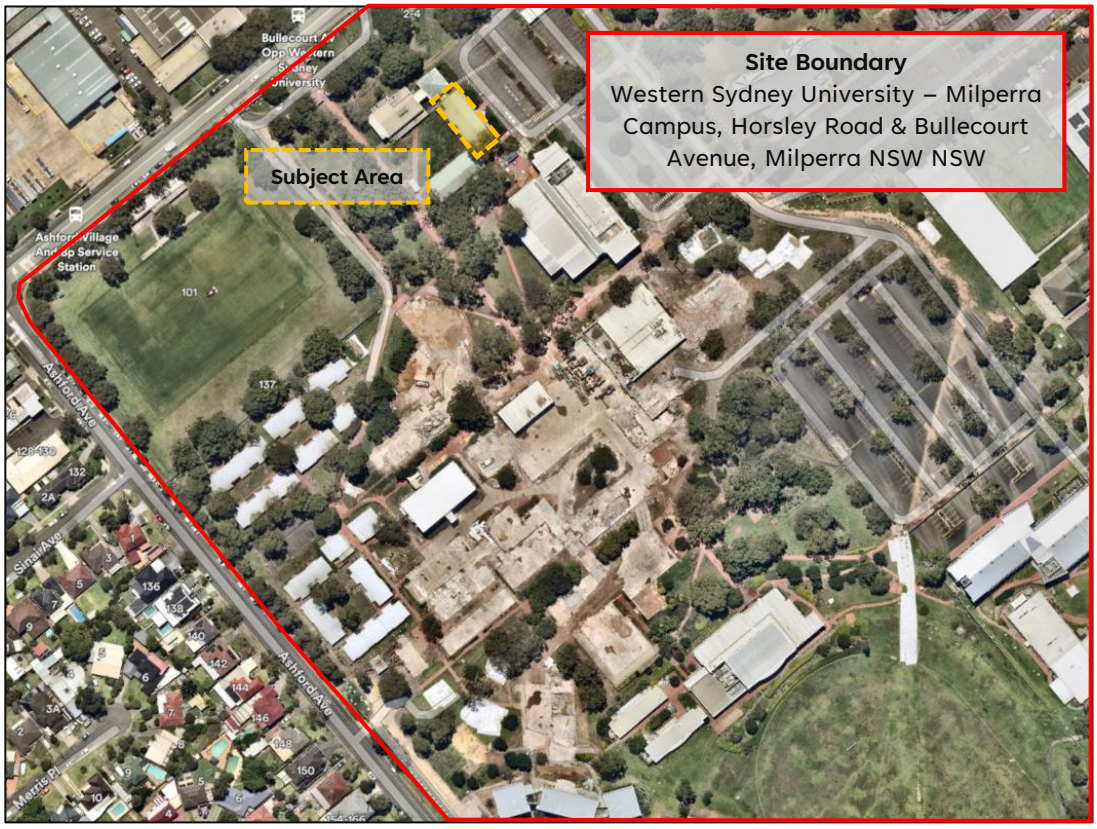


Figure 1: Aerial photograph of the site, with approximate location of the subject area (Source: Nearmap, accessed on 5 May 2025).

ATTACHMENT 2

SITE PHOTOGRAPHS



Photograph 1 – View of the subject area, as observed on 2 May 2025 facing North.



Photograph 2 – View of a representative fibre cement material encountered within the subject area (Building 10-FC01), as observed 2 May 2025. Asbestos detected.



Photograph 3 – View of a representative type of fibre cement material encountered within the subject area (Building 10-FC02), as observed 2 May 2025. Asbestos detected.



Photograph 4 – View of representative non-asbestos fibre cement materials encountered within the subject area (Building 10 – VB), as observed 2 May 2025. Asbestos **not** detected.

ATTACHMENT 3

LABORATORY DOCUMENTATION

CERTIFICATE OF ANALYSIS

Work Order	: **ES2512712**	Page	: 1 of 4
Client	: **ENVIRONMENTAL GROUP AUSTRALIA PTY LTD**	Laboratory	: Environmental Division Sydney
Contact	: MAX CUNNINGHAM	Contact	: Samiksha Sathish
Address	: 36E Fitzroy Street Marrickville 2204	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61-2-8784 8555
Project	: 2300	Date Samples Received	: 05-May-2025 10:50
Order number	: ----	Date Analysis Commenced	: 06-May-2025
C-O-C number	: ----	Issue Date	: 06-May-2025 16:00
Sampler	: Lachlan Cranch		
Site	: 2 Bullecourt Ave (WSU)		
Quote number	: ES25ENVGROLIM0001		
No. of samples received	: 6		
No. of samples analysed	: 6		

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

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*
John Williams	Lab Technician	Newcastle - Asbestos, Mayfield West, NSW

General Comments

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

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

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

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

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

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

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

- EA200: Asbestos Identification Samples were analysed by Polarised Light Microscopy including dispersion staining.
- **EA200 Legend**
- EA200 'Am' Amosite (brown asbestos)
- EA200 'Cr' Crocidolite (blue asbestos)
- 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.
- EA200: Analysis of asbestos from swabs and tapes is not covered under the current scope of NATA accreditation.
- EA200: N/A - Not Applicable

Analytical Results

Sub-Matrix: SOLID (Matrix: SOLID)			Sample ID	Building 10-FC01	Building 10-FC02	Building 10-VB	Building 10-PUTTY	Building 11-FC
			Sampling date / time	05-May-2025 00:00	05-May-2025 00:00	05-May-2025 00:00	05-May-2025 00:00	05-May-2025 00:00
Compound	CAS Number	LOR	Unit	ES2512712-001	ES2512712-002	ES2512712-003	ES2512712-004	ES2512712-005
				Result	Result	Result	Result	Result
EA200: AS 4964 - 2004 Identification of Asbestos in bulk samples								
Asbestos Detected	1332-21-4	0.1	g/kg	**Yes**	**Yes**	**No**	**No**	**Yes**
Asbestos Type	1332-21-4	-	--	**Ch**	**Ch**	**-**	**-**	**Ch + Am + Cr**
Asbestos (Trace)	1332-21-4	-	-	**N/A**	**N/A**	**No**	**No**	**N/A**
Sample weight (dry)	-----	0.01	g	**16.3**	**24.7**	**3.36**	**3.55**	**12.0**
Synthetic Mineral Fibre	-----	-	-	**No**	**No**	**No**	**No**	**No**
Organic Fibre	-----	-	-	**No**	**No**	**Yes**	**Yes**	**No**
APPROVED IDENTIFIER:	-----	-	--	**B. SCHRADER**	**B. SCHRADER**	**B. SCHRADER**	**J. WILLIAMS**	**B. SCHRADER**

Analytical Results

Sub-Matrix: SOLID (Matrix: SOLID)			Sample ID	B11-EXT-EAVES	----	----	----	----
			Sampling date / time	05-May-2025 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit	ES2512712-006	--------	--------	--------	--------
				Result	----	----	----	----
EA200: AS 4964 - 2004 Identification of Asbestos in bulk samples								
Asbestos Detected	1332-21-4	0.1	g/kg	**No**	----	----	----	----
Asbestos Type	1332-21-4	-	--	**-**	----	----	----	----
Asbestos (Trace)	1332-21-4	-	-	**No**	----	----	----	----
Sample weight (dry)	----	0.01	g	**18.7**	----	----	----	----
Synthetic Mineral Fibre	----	-	-	**No**	----	----	----	----
Organic Fibre	----	-	-	**Yes**	----	----	----	----
APPROVED IDENTIFIER:	----	-	--	**B. SCHRADER**	----	----	----	----

Analytical Results

Descriptive Results

Sub-Matrix: **SOLID**

Method: Compound	Sample ID - Sampling date / time	Analytical Results
EA200: AS 4964 - 2004 Identification of Asbestos in bulk samples		
EA200: Description	Building 10-FC01 - 05-May-2025 00:00	One piece of asbestos cement sheeting approximately 45x40x5mm.
EA200: Description	Building 10-FC02 - 05-May-2025 00:00	One piece of asbestos cement material approximately 75x40x10mm.
EA200: Description	Building 10-VB - 05-May-2025 00:00	One piece of cement sheeting.
EA200: Description	Building 10-PUTTY - 05-May-2025 00:00	One piece of tar - like material.
EA200: Description	Building 11-FC - 05-May-2025 00:00	One piece of asbestos cement sheeting approximately 75x30x5mm.
EA200: Description	B11-EXT-EAVES - 05-May-2025 00:00	One piece of cement sheeting.

Inter-Laboratory Testing

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

(SOLID) EA200: AS 4964 - 2004 Identification of Asbestos in bulk samples

CHAIN OF CUSTODY

Page 1 of 1

CoC #: (if applicable)

Mandatory Fields

CLIENT CODE:	ENVGROLIM	*PROJECT MANAGER:	Max Cunningham	SAMPLER:	Lachlan Cranch
*CLIENT:	Environmental Group Australia Pty Ltd	*PM MOBILE:	0474 877 456	SAMPLER MOBILE:	
OFFICE: (Invoiced Office)	36E Fitzroy Street, Marrickville NSW 2204	ALS QUOTE # (Client PL if blank)	ES25ENVGROLIM0001	PURCHASE ORDER NO.:	
PROJECT NO./PROJECT:	2300			SITE:	2 Bullecourt Ave (WSU)
*INVOICE TO: (client default if nil)	accounts@egau.com.au			☐ CC Invoice to PM	
*EMAIL REPORTS TO: (default to PM if blank)	enviro@egau.com.au l.cranch@ m.cunningham@				
EDD Format/Type →		EDD Email Address:			

BIOSECURITY

Country of Origin: (if not Australia)

*** STORAGE REQUIREMENTS**
Please check box →
Standard Storage time from receipt of samples:
Waters - 3 weeks
Soils - 2 months

☑ Standard Storage
☐ Extended Storage
Specify Disposal Date:
Note: Extended storage incurs a fee and requires a signed agreement.

*** TURNAROUND**
Please check box →
(Not all tests can be expedited, contact Client Services for more information)

☐ 5+ days (no surcharge)
☐ 3 day (+15%)
☐ 2 day (+30%)
☑ 1 day (+50%)

***ANALYSIS REQUIRED**
(NB. ALS Quote No. and/or Analysis Suite Codes must be listed to attract suite/quoted price)
Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).
Mark an X in the boxes below analysis to indicate the parameter listed above to be tested on that sample.

Environmental Division Sydney
Work Order Reference
ES2512712

Telephone : +61-2-8784 8555

Comments: please log as per quote

ALS Use Only Lab ID	Sample ID	Depth/Description	Date/Time	No. Bottles	MATRIX/SUBMATRIX: Soil/Solid(S) Water(W) Sediments (SD), Dust (D), Product (P), Biota (B), Biosolid (BS)	EGA ENM Suite (Asbestos P/A (grab), pH + EC, TRH/BTEX/PAH/8 Metals)	EGA Contam Suite 2 (TRH/BTEX/PAH/OC/PCB/8 Metals, Asbestos in Bulk Solids)	EGA Contam Suite 3 (TRH/BTEX/PAH/OC/OP/PCB/8 Metals, Asbestos in Bulk Solids)	EGA NEPM Suite 2 (Asbestos NEPM Quantification, TRH/BTEX/PAH/OC/PCB/8 Metals)	EGA NEPM Suite 3 (Asbestos NEPM Quantification, TRH/BTEX/PAH/OC/OP/PCB/8 Metals)	EA200N Asbestos NEPM Quantification	EA200B Asbestos in Bulk Solids	EA003 pH field/fox	Lab QC (additional bottles req.) Dup	Lab QC (additional bottles req.) MS	Additional Information (Comment on hazards - e.g., asbestos, known high contamination)
1	Building 10 - FC01		5/5/25		S							X		☐	☐	
2	Building 10 - FC02		↓		↓							X		☐	☐	
3	Building 10 - VB		↓		↓							X		☐	☐	
4	Building 10 - PUTTY		↓		↓							X		☐	☐	
5	Building 11 - FC		5/5/25		S							X		☐	☐	
6	B11 - EXT - EAVES		5/5/25		S							X		☐	☐	
														☐	☐	
														☐	☐	
														☐	☐	
														☐	☐	
														☐	☐	

TAT

Subcon / Forward Lab / Split WO: NEWCASTLE
Lab / Analysis: EA200B
Organised By / Date:
Relinquished By / Date:
Connote / Courier:
WO No:
Attached By PO / Internal Sheet:

Receipt Detail (Lab Use ONLY)	Chilling Method:	Ice: Frozen / Melted	Ice Bricks: Frozen / Thawed / None	Sample Temp at Receipt	°C °C . °C
Security Seal Intact (circle)	Yes / No / NA(None)	Carrier Details	☐ Courier/Post ☐ Client	Con Note #	
Packaging: (Circle)	Hard Esky	Foam Esky	Box/Bag/Other	Count	# # #

Relinquished by:	Signature:	Date/ Time:	Received by: MR	Signature	Date/ Time: 5/5/25 1050
Relinquished by:	Signature:	Date/ Time:	Received by:	Signature	Date/ Time:

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ASBESTOS MATERIALS CLEARANCE INSPECTION REPORT

Client:	Mirvac Pty Ltd
Report No:	2300-ASBCLR-53-090725.v1f
Site Address:	Western Sydney University – Horsley Road and Bullecourt Avenue, Milperra NSW
Date of Field Work:	7 July 2025
Date of Report:	9 July 2025
Scope of Works:	Visual clearance of the residual soil surface within the subject area following demolition of structures and removal of building materials.
Subject Area Inspected:	Western Sydney University – Horsley Road and Bullecourt Avenue, Milperra NSW – Southern portion, 'Zone 1 & Zone 4', residual soil surface within building footprints (refer to ***Appendix A – Figures*** and ***Appendix B – Photographs***).

1. INTRODUCTION

Environmental Group Australia Pty Ltd (EGA) was commissioned by Mirvac Pty Ltd to undertake an Asbestos Materials Clearance Inspection of the subject area located within Western Sydney University – Horsley Road and Bullecourt Avenue, Milperra NSW. The site inspection was carried out on 7 July 2025 by Tahlia Jeoffreys, a suitably experienced occupational hygienist representing EGA.

1.1. Legislative Requirements

The survey works and production of this report have been undertaken in accordance with the requirements of:

- *Work Health and Safety Regulation 2017;*
- *Work Health and Safety Act 2011;*
- SafeWork NSW *Code of Practice: How to Manage and Control Asbestos in the Workplace* 2022; and
- SafeWork NSW *Code of Practice: How to Safely Remove Asbestos* 2022.

1.2. Scope of Works

The scope of works for EGA is to complete;

- Completion of a Safety, Health, and Environmental Work Method Statement prior to undertaking works;
- Visual inspection of the subject area by a suitably experienced occupational hygienist; and
- Preparation of an Asbestos Materials Clearance report outlining the site data and conclusions.

2. INSPECTION DETAILS

2.1. Remediation Works

EGA were informed by the client of structure demolition and building material removal works carried out within the subject area (refer to **Appendix A – Figures**). Removal works were undertaken by DECC (Demolition Environmental Civil Contractors) Pty Ltd, a SafeWork NSW Class A licensed asbestos removalist (AD214333) under the supervision of EGA.

At the completion of works, a systematic visual inspection of the subject area was completed by the supervising occupational hygienist. The site inspection was undertaken on 7 July 2025. No suspected asbestos containing materials were observed within the subject area at the time of the inspection.

2.2. Restrictions on Survey/ Areas Not Accessed

Please note that this inspection is limited to the subject area. Areas adjacent to and below the subject area are considered outside the scope of this report.

Please remain diligent when undertaking any further work within or adjacent to the subject area and contact EGA immediately if any further contamination is observed.

3. CONCLUSIONS AND RECOMMENDATIONS

Based on the information presented in this report, it is the opinion of EGA that:

- Visual examination of the subject area indicated no evidence of asbestos containing materials within the subject area following removal works;
- The subject area is considered ***safe*** with regards to the asbestos hazard at the time of the visual inspection;
- Please remain diligent and adhere to the restrictions within the body of this report and the limitations stated below.

4. STATEMENT OF LIMITATIONS

This report has been prepared for the exclusive use of the client. EGA 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 appendices and attachments.

Any other party should satisfy themselves that the scope of work conducted and report herein meets their specific needs. EGA cannot be held liable for third party reliance on this document, as EGA is not aware of the specific needs of the third party.

EGA's professional opinions are based upon its professional judgment, experience, training, and results from analytical data. In some cases, further testing and analysis may be required, thus producing different results and/or opinions. EGA has limited investigation to the scope agreed upon with its client. It should be noted only the subject area outlined in this report was inspected and adjacent areas may contain asbestos.

Author Signature		**Reviewer Signature**	
Name	Tristan Bonython	**Name**	Lachlan Mulhearn
Title	Occupational Hygienist	**Title**	Occupational Hygienist

APPENDIX A

FIGURES

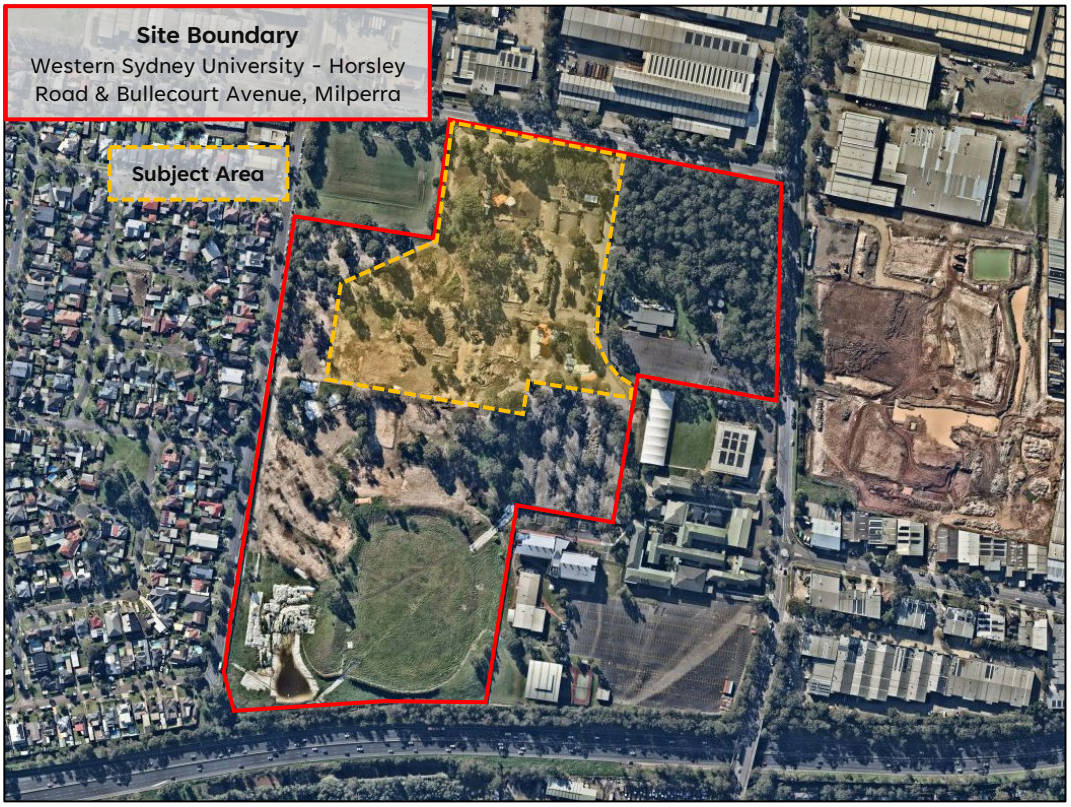


Figure 1: Aerial photograph of the site, with approximate location of the subject area 'Zone 1 & Zone 4' within Western Sydney University – Milperra Campus, Horsley Road & Bullecourt Avenue, Milperra NSW (Source: Nearmap, accessed on 9 July 2025).

APPENDIX B

SITE PHOTOGRAPHS



Photograph 1 – Representative view of the subject area, following removal works, as observed on 7 July 2025 facing northeast.



Photograph 2 – Representative view of the subject area, following removal works, as observed on 7 July 2025 facing north.



Photograph 3 – Representative view of the subject area, following removal works, as observed on 7 July 2025 facing northwest.



Photograph 4 – Representative view of the subject area, following removal works, as observed on 7 July 2025 facing south.

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ASBESTOS MATERIALS CLEARANCE INSPECTION REPORT

Client:	Mirvac Pty Ltd
Report No:	2300-ASBCLR-37-140525.v1f
Site Address:	Western Sydney University – Horsley Road and Bullecourt Avenue, Milperra NSW
Date of Field Work:	14 May 2025
Date of Report:	14 May 2025
Scope of Works:	Visual clearance of the residual soil surface within the subject area following demolition of structures and removal of building materials.
Subject Area Inspected:	Western Sydney University – Horsley Road and Bullecourt Avenue, Milperra NSW – Southern portion, 'Zone 2', residual soil surface within building footprints (refer to ***Appendix A – Figures*** and ***Appendix B – Photographs***).

1. Introduction

Environmental Group Australia Pty Ltd (EGA) was commissioned by Mirvac Pty Ltd to undertake an Asbestos Materials Clearance Inspection of the subject area located within Western Sydney University – Horsley Road and Bullecourt Avenue, Milperra NSW. The site inspection was carried out on 14 May 2025 by Kya Wiya, a suitably experienced and qualified occupational hygienist representing EGA.

1.1. Legislative Requirements

The survey works and production of this report have been undertaken in accordance with the requirements of:

- *Work Health and Safety Regulation 2017;*
- *Work Health and Safety Act 2011;*
- SafeWork NSW *Code of Practice: How to Manage and Control Asbestos in the Workplace* 2022; and
- SafeWork NSW *Code of Practice: How to Safely Remove Asbestos* 2022.

1.2. Scope of Works

The scope of works for EGA is to complete;

- Completion of a Safety, Health, and Environmental Work Method Statement prior to undertaking works;
- Visual inspection of the subject area by an appropriately experienced occupational hygienist; and
- Preparation of an Asbestos Materials Clearance report outlining the site data and conclusions.

2. Inspection Details

2.1. REMEDIATION WORKS

EGA were informed by the client of structure demolition and building material removal works carried out within the subject area (refer to Appendix A – Figures). At the completion of works, a systematic visual inspection of the subject area was completed. No suspected asbestos containing materials were observed within the subject area at the time of the inspection.

Removal works were undertaken by DECC (Demolition Environmental Civil Contractors) Pty Ltd, a SafeWork NSW Class A licensed asbestos removalist (AD214333) under the supervision of EGA.

2.2. Restrictions on Survey/ Areas Not Accessed

Please note that this inspection is limited to the subject area. Areas adjacent to and below the subject area are considered outside the scope of this report.

Please remain diligent when undertaking any further work within or adjacent to the subject area and contact EGA immediately if any further contamination is observed.

3. Conclusion and Recommendations

Based on the information presented in this report, it is the opinion of EGA that:

- Visual examination of the subject area indicated no evidence of asbestos containing materials within the subject area following removal works;
- The subject area is considered ***safe*** with regards to the asbestos hazard at the time of the visual inspection;
- Please remain diligent and adhere to the restrictions within the body of this report and the limitations stated below.

1. Statement of Limitations

This report has been prepared for the exclusive use of the client. EGA 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 appendices and attachments.

Any other party should satisfy themselves that the scope of work conducted and report herein meets their specific needs. EGA cannot be held liable for third party reliance on this document, as EGA is not aware of the specific needs of the third party.

EGA's professional opinions are based upon its professional judgment, experience, training, and results from analytical data. In some cases, further testing and analysis may be required, thus producing different results and/or opinions. EGA has limited investigation to the scope agreed upon with its client. It should be noted only the subject area outlined in this report was inspected and adjacent areas may contain asbestos.

Author Signature		**Reviewer Signature**	
Name	Kya Wiya	**Name**	Maxwell Cunningham
Title	Occupational Hygienist	**Title**	Occupational Hygienist NSW Licensed Asbestos Assessor (LAA002032)

ATTACHMENT 1

FIGURES

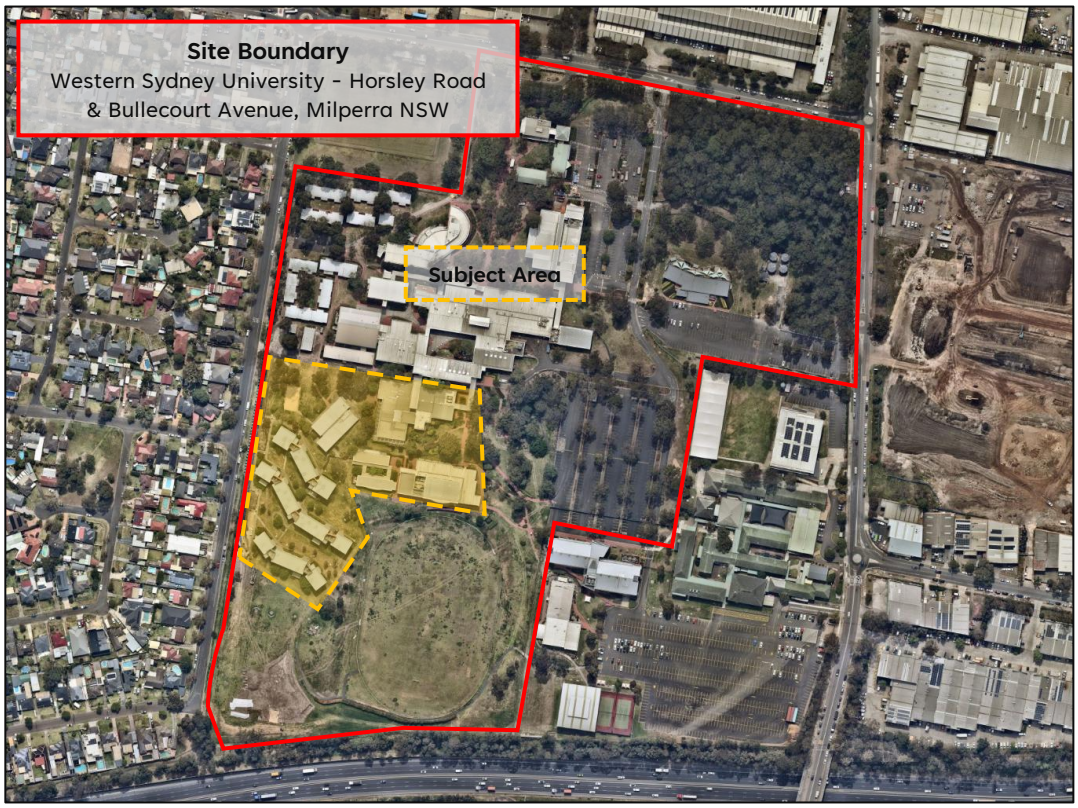


Figure 1: Aerial photograph of the site, with approximate location of the subject area 'Zone 2' within Western Sydney University – Milperra Campus, Horsley Road & Bullecourt Avenue, Milperra NSW (Source: Nearmap, accessed on 14 May 2025).

ATTACHMENT 2

SITE PHOTOGRAPHS



Photograph 1 – View of the subject area, following removal works, as observed on 14 May 2025 facing west.



Photograph 2 – View of the subject area, following removal works, as observed on 14 May 2025 facing west.



Photograph 3 – View of the subject area, following removal works, as observed on 14 May 2025 facing south.



Photograph 4 – View of the subject area, following removal works, as observed on 14 May 2025 facing south.



Photograph 5 – View of the subject area, following removal works, as observed on 14 May 2025 facing east.



Photograph 6 – View of the subject area, following removal works, as observed on 14 May 2025 facing east.

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ASBESTOS MATERIALS CLEARANCE INSPECTION REPORT

Client:	Mirvac Pty Ltd
Report No:	2300-ASBCLR-38-140525.v1f
Site Address:	Western Sydney University – Horsley Road and Bullecourt Avenue, Milperra NSW
Date of Field Work:	14 May 2025
Date of Report:	14 May 2025
Scope of Works:	Visual clearance of the residual soil surface within the subject area following demolition of structures and removal of building materials.
Subject Area Inspected:	Western Sydney University – Horsley Road and Bullecourt Avenue, Milperra NSW – Southern portion, 'Zone 3', residual soil surface within building footprints (refer to ***Appendix A – Figures*** and ***Appendix B – Photographs***).

1. Introduction

Environmental Group Australia Pty Ltd (EGA) was commissioned by Mirvac Pty Ltd to undertake an Asbestos Materials Clearance Inspection of the subject area located within Western Sydney University – Horsley Road and Bullecourt Avenue, Milperra NSW. The site inspection was carried out on 14 May 2025 by Kya Wiya, a suitably experienced and qualified occupational hygienist representing EGA.

1.1. Legislative Requirements

The survey works and production of this report have been undertaken in accordance with the requirements of:

- *Work Health and Safety Regulation 2017;*
- *Work Health and Safety Act 2011;*
- SafeWork NSW *Code of Practice: How to Manage and Control Asbestos in the Workplace* 2022; and
- SafeWork NSW *Code of Practice: How to Safely Remove Asbestos* 2022.

1.2. Scope of Works

The scope of works for EGA is to complete;

- Completion of a Safety, Health, and Environmental Work Method Statement prior to undertaking works;
- Visual inspection of the subject area by an appropriately experienced occupational hygienist; and
- Preparation of an Asbestos Materials Clearance report outlining the site data and conclusions.

2. Inspection Details

2.1. REMEDIATION WORKS

EGA were informed by the client of structure demolition and building material removal works carried out within the subject area (refer to Appendix A – Figures). At the completion of works, a systematic visual inspection of the subject area was completed. No suspected asbestos containing materials were observed within the subject area at the time of the inspection.

Removal works were undertaken by DECC (Demolition Environmental Civil Contractors) Pty Ltd, a SafeWork NSW Class A licensed asbestos removalist (AD214333) under the supervision of EGA.

2.2. Restrictions on Survey/ Areas Not Accessed

Please note that this inspection is limited to the subject area. Areas adjacent to and below the subject area are considered outside the scope of this report.

Please remain diligent when undertaking any further work within or adjacent to the subject area and contact EGA immediately if any further contamination is observed.

3. Conclusion and Recommendations

Based on the information presented in this report, it is the opinion of EGA that:

- Visual examination of the subject area indicated no evidence of asbestos containing materials within the subject area following removal works;
- The subject area is considered ***safe*** with regards to the asbestos hazard at the time of the visual inspection;
- Please remain diligent and adhere to the restrictions within the body of this report and the limitations stated below.

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Author Signature		**Reviewer Signature**	
Name	Kya Wiya	**Name**	Maxwell Cunningham
Title	Occupational Hygienist	**Title**	Occupational Hygienist NSW Licensed Asbestos Assessor (LAA002032)

ATTACHMENT 1

FIGURES

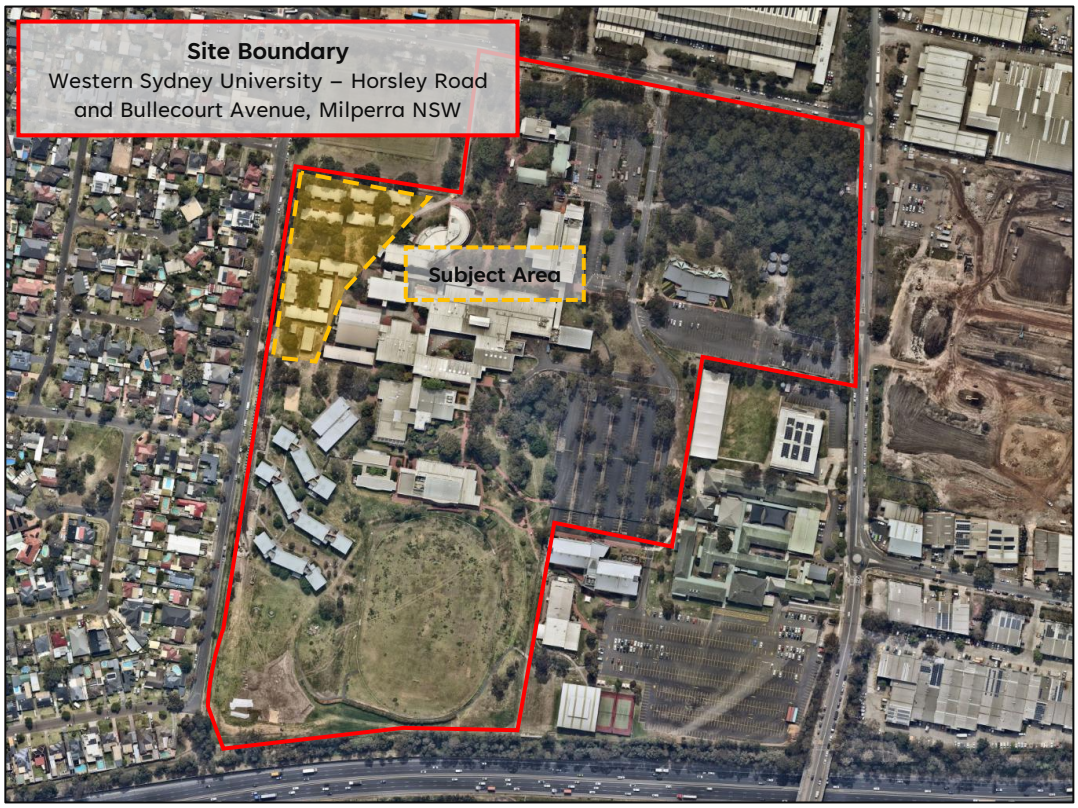


Figure 1: Aerial photograph of the site, with approximate location of the subject area 'Zone 3' within Western Sydney University – Horsley Road and Bullecourt Avenue, Milperra NSW (Source: Nearmap, accessed on 14 May 2025).

ATTACHMENT 2

SITE PHOTOGRAPHS



Photograph 1 – View of the subject area, following removal works, as observed on 14 May 2025 facing northeast.



Photograph 2 – View of the subject area, following removal works, as observed on 14 May 2025 facing east.



Photograph 3 – View of the subject area, following removal works, as observed on 14 May 2025 facing east.

APPENDIX F

STOCKPILE PHOTOGRAPHS



Stockpile Photograph 1. View of 'AEC05-SP01' to 'AEC05-SP05', as observed 8 October 2025 facing south.



Stockpile Photograph 2. View of 'AEC05-SP06', as observed 8 October 2025 facing south.



Stockpile Photograph 3. View of 'AEC05-SP07', as observed 8 October 2025 facing west.



Stockpile Photograph 4. View of 'AEC05-SP08', as observed 8 October 2025 facing east.



Stockpile Photograph 5. View of 'AEC05-SP09', as observed 8 October 2025 facing north.



Stockpile Photograph 6. View of 'AEC05-SP10 and 'AEC05-SP11', as observed 8 October 2025 facing west.



Stockpile Photograph 7. View of 'AEC05-SP12', as observed 8 October 2025 facing north.



Stockpile Photograph 8. View of 'AEC05-SP13', as observed 8 October 2025 facing east.



Stockpile Photograph 9. View of 'AEC05-SP14', as observed 8 October 2025 facing south.



Stockpile Photograph 10. View of 'AEC05-SP15', as observed 8 October 2025 facing north.



Stockpile Photograph 11. View of 'AEC05-SP16', as observed 8 October 2025 facing south.



Stockpile Photograph 12. View of 'AEC05-SP17', as observed 8 October 2025 facing north.



Stockpile Photograph 13. View of 'AEC05-SP18', as observed 8 October 2025 facing north.