



Detailed Site Investigation

7A -11 Racecourse Road, 1-3 Faunce
Street & 38-50 Young Street, West
Gosford

Report date

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Waluya Pty Ltd

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Stantec Pty Ltd

REPORT TITLE

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Table of Contents

EXECUTIVE SUMMARY	IV
1.0 INTRODUCTION.....	3.1
1.1 PURPOSE AND OBJECTIVES	3.1
1.2 SCOPE OF WORKS	3.1
1.2.1 Preliminaries	3.1
1.2.2 Fieldwork.....	3.2
1.2.3 Reporting	3.2
1.3 LEGISLATION AND GUIDELINES	3.2
2.0 SITE IDENTIFICATION	3.1
2.1 SITE DETAILS	3.1
2.2 SURROUNDING LAND USE.....	3.2
2.3 REGIONAL AND SITE SETTINGS.....	3.2
2.4 SITE DESCRIPTION	3.3
3.0 SITE HISTORY	3.6
3.1 PREVIOUS INVESTIGATIONS	3.6
3.2 HISTORICAL LAND TITLES	3.8
3.2.1 Interaction with Dangerous Goods Searches	3.8
4.0 CONCEPTUAL SITE MODEL.....	4.13
4.1 IDENTIFIED CONTAMINATION SOURCES	4.13
4.2 IDENTIFIED RECEPTORS	4.13
4.3 DATA GAPS.....	4.1
5.0 SAMPLING AND ANALYSIS QUALITY PLAN.....	5.1
5.1 DATA QUALITY OBJECTIVES.....	5.1
5.2 DATA QUALITY INDICATORS.....	5.4
6.0 ASSESSMENT CRITERIA.....	6.7
6.1 SOIL ASSESSMENT CRITERIA	6.7
6.1.1 Human Health Criteria.....	6.7
6.1.2 Ecological Soil Criteria	6.8
6.1.3 Waste classification.....	6.9
6.2 GROUNDWATER ASSESSMENT CRITERIA	6.9
6.2.1 Rationale for Groundwater Assessment Criteria.....	6.9
7.0 INVESTIGATION METHODOLOGY	7.13
7.1 SAMPLING LOCATIONS	7.13
7.1.1 North-west site area	7.13
7.1.2 Remaining site areas	7.13
7.1.3 Groundwater wells	7.13
7.2 SITE INVESTIGATION PROGRAM.....	7.13
7.3 ANALYTE SAMPLE RATES.....	7.16
7.4 MONITORING WELL CONSTRUCTION DETAILS	7.17



REPORT TITLE

8.0	RESULTS	8.18
8.1	SITE OBSERVATIONS	8.18
8.2	SOIL RESULTS.....	8.18
8.2.1	Human Health Criteria.....	8.18
8.2.2	Ecological Screening Criteria	8.20
8.2.3	Aesthetic Considerations.....	8.20
8.2.4	Waste Classification	8.20
8.3	GROUNDWATER RESULTS	8.21
8.3.1	Groundwater Field Parameters	8.21
8.3.2	Well Gauging and Levels	8.21
8.3.3	Laboratory Results	8.22
9.0	QA/QC ASSESSMENT	9.1
9.1	LABORATORY QA/QC	9.4
9.2	DATA USEABILITY	9.5
10.0	SITE CHARACTERISATION	10.6
10.1	HUMAN HEALTH	10.6
10.2	ECOLOGICAL HEALTH	10.6
10.2.1	Soil.....	10.6
10.2.2	Groundwater	10.6
10.3	REVISED CONCEPTUAL SITE MODEL	10.7
10.4	DATA GAPS AND UNCERTANTIES	10.1
11.0	CONCLUSIONS	11.2
11.1	RECOMMENDATIONS	11.2
12.0	REFERENCES	12.1
13.0	LIMITATIONS	13.1

LIST OF TABLES

Table 2-1 Site Identification Details	3.1
Table 2-2 Surrounding Land Use	3.2
Table 2-3 Site Setting Information	3.2
Table 2-4 Site Inspection Details.....	3.3
Table 3-1 Summary of Previous Investigations	3.6
Table 4-1 Historical land titles summary.....	3.8
Table 4-2 Preliminary Conceptual Site Model	4.1
Table 5-1 Data Quality Objectives.....	5.1
Table 5-2 Data Quality Indicators.....	5.4
Table 6-1 Adopted Human Health Criteria – Soil Assessment Criteria	6.7
Table 6-2 Adopted Ecological Criteria – Soil Assessment Criteria.....	6.8
Table 6-3 EIL Criteria	6.9
Table 6-4 Assessment of Groundwater Environmental Values.....	6.10
Table 6-5 Groundwater Assessment Criteria.....	6.12
Table 7-1 Investigation Summary.....	7.14
Table 7-2: Primary and replicate sample analysis summary - soil	7.16
Table 7-3: Primary and replicate sample analysis summary - water	7.16



REPORT TITLE

Table 7-4: Monitoring Well Construction Details	7.17
Table 8-1 Typical Soil Profile.....	8.18
Table 8-2 Asbestos identification results summary.....	8.19
Table 8-3: Soil detections without applicable criteria	8.19
Table 8-4 Stabilised Physiochemical Field Parameters	8.21
Table 8-5 Groundwater Levels	8.21
Table 8-6 Groundwater criteria exceedances.....	8.22
Table 9-1: Fieldwork DQI implementation assessment.....	9.1
Table 9-2 Laboratory DQI conformance assessment	9.2
Table 9-3 Field duplicate sample summary	9.3
Table 9-4 RPD exceedances summary	9.3
Table 9-5 Laboratory QA/QC outlier's summary.....	9.4
Table 10-1 Revised Conceptual Site Model	10.1

LIST OF APPENDICES

APPENDIX A	FIGURES
APPENDIX B	HISTORICAL PROPERTY TITLES
APPENDIX C	DATA SUMMARY TABLES
APPENDIX D	GEOLOGICAL LOGS
APPENDIX E	LABORATORY CERTIFICATES
APPENDIX F	FIELD FORMS / FIELD RECORDS
APPENDIX G	CALIBRATION CERTIFICATES



Executive Summary

Stantec Australia Pty Ltd (Stantec) was engaged by Waluya Pty Ltd ('the client') to undertake a Detailed Site Investigation (DSI) for the property located at 7A-11 Racecourse Road, 1-3 Faunce Street and 38-50 Young Street, West Gosford NSW ('the site').

The site location is depicted on **Figure 1** of **Appendix A** and is situated within the Central Coast Council local government area. The site is comprised of fourteen contiguous lots owned by Busways Group.

The site contained a single detached residential dwelling, three former stable structures and an open space area used occasionally as overflow parking for the neighboring Gosford Racecourse. The proposed site redevelopment is use as a bus depot and is expected to accommodate bus parking, with associated servicing workshops, office administration and staff parking.

The purpose of this report is to outline an intrusive assessment undertaken to identify actual or potential contamination within the site. The objectives of this assessment and report included:

- Review of land titles to verify findings of the PSI and identify any new potential contamination sources;
- Undertaking an investigation program to identify whether contamination impacts are present and if so, to what extent; and
- Preparation of this report to outline the results of the investigation program and provide:
 - A statement on the suitability of the site for the proposed land use; and
 - Provide recommendations on any future actions including management, remediation or further investigation.

In order to achieve the above a scope of work was completed which included collection and review of historical land titles; sampling of soils from 26 test pits, 18 hand auger locations and four groundwater wells; laboratory analysis of collected samples and preparation of this report.

Based on the findings of this investigation asbestos in soil contamination has been identified west of the stables structure within the site that presents an unacceptable risk to human users of the site and will require management. Materials in this area are preliminarily classified as Special Waste (Asbestos) General Solid Waste (non-putrescible) for the purposes of offsite disposal.

Metals, TRH and PFOS contamination of soil and groundwater was identified in exceedance of adopted Tier 1 ecological criteria but are not considered to present an unacceptable risk to site users under the proposed land-use.

From the findings of this investigation, with the exception of areas impacted by friable asbestos in soil, the site is suitable for the proposed land-use as a bus depot with predominately hardstand cover. Areas impacted by friable asbestos can be made suitable following implementation of the recommendations outlined below.



Recommendations

Based on the findings of the DSI the following is recommended:

- Preparation of a Remediation Action Plan (RAP) that outlines the methodology for the remediation of the asbestos in soil contamination across the site.
 - Upon completion of the remediation works a Validation Assessment should be undertaken to confirm removal of asbestos contamination and suitability of impacted areas for the proposed site use.
- Where it is intended to use groundwater for any purpose, in particular application to landscape areas, undertake further assessment of groundwater contamination.
 - If no further assessment of groundwater is required, then groundwater wells should be decommissioned by grouting to surface in accordance with relevant guidance.
- Identified contamination and appropriate mitigations during construction should be considered within the Construction Environmental Management Plan (CEMP). This would include:
 - Guidance on the identification and management of additional asbestos finds.
 - Guidance on appropriate interactions with groundwater, including dewatering, where necessary.
 - An unexpected finds protocol for any other contamination issues that may not have been identified by this assessment.



DETAILED SITE INVESTIGATION

Introduction

1.0 INTRODUCTION

Stantec Australia Pty Ltd (Stantec) was engaged by Waluya Pty Ltd ('the client') to undertake a Detailed Site Investigation (DSI) for the property located at 7A-11 Racecourse Road, 1-3 Faunce Street and 38-50 Young Street, West Gosford NSW ('the site').

The site location is depicted on **Figure 1** of **Appendix A** and is situated within the Central Coast Council local government area. The site is comprised of fourteen contiguous lots owned by Busways Group, detailed in **Table 2-1** and shown on **Figure 2** of **Appendix A**.

The site contained a single detached residential dwelling, three former stable structures and an open space area used occasionally as overflow parking for the neighbouring Gosford Racecourse. The proposed site redevelopment is use as a bus depot and is expected to accommodate bus parking, with associated servicing workshops, office administration and staff parking.

Stantec has previously completed a Preliminary Site Investigation (PSI) which identified multiple areas of potential contamination to be present onsite.

1.1 PURPOSE AND OBJECTIVES

The purpose of this report is to outline an intrusive assessment undertaken to identify actual or potential contamination within the site. The objectives of this assessment and report included:

- Review of land titles to verify findings of the PSI and identify any new potential contamination sources;
- Undertaking an investigation program to identify whether contamination impacts are present and if so, to what extent; and
- Preparation of this report to outline the results of the investigation program and provide:
 - A statement on the suitability of the site for the proposed use; and
 - Provide recommendations on any future actions including management, remediation or further investigation.

1.2 SCOPE OF WORKS

A high-level summary of the scope of works undertaken during the DSI is provided below. In addition, a detailed summary of the investigation methodology is provided in **Section 7.0**.

1.2.1 Preliminaries

Prior to the commencement of fieldwork, the following was completed:

- Order and review of historical land titles.
- Preparation of safety documentation and completion of a Before You Dig Australia (BYDA) (formerly Dial-Before-You-Dig) underground utilities search.
- A Telstra accredited underground service locator was engaged and carried out locating and marking of underground services;



DETAILED SITE INVESTIGATION

Introduction

- Coordination of site access, subcontractors and sampling equipment.

1.2.2 Fieldwork

The fieldwork component of the DSI was completed over four events:

- 3 to 5 May 2023 – Test pitting at 20 locations on an approximate grid utilizing an 8-tonne track mounted excavator, and advancement of 11 hand auger locations around the residential dwelling and west of the former stables to delineate potential friable asbestos in soil impact.
- 22 to 23 May 2023 – Test pitting at six locations targeting accessible soils around the stables utilizing an 8-tonne track mounted excavator, advancement and installation of four groundwater monitoring wells, and collection of shallow samples from seven locations west of the stables to further delineate friable asbestos in soil impact.
- 31 May 2023 – Sampling of four groundwater wells using low-flow bladder pumps.
 - Soil samples were collected at each test pit and hand auger location at the following depths: near-surface, 0.5 meters below ground level (mBGL), and every 0.5m thereafter until 0.3m into natural soil or to the depth of either the reach of the excavator or the depth of excavation resistance.
- Field screening of soil samples for volatile organic compound (VOC) content using a calibrated photo-ionisation detector (PID).
- Logging of the geological profile and observations of each test pit and borehole in accordance with Australian Standard AS 1726:2017 – *Geotechnical Site Investigations*. All excavated materials were also inspected for potential indicators of contamination including odour, sheen, staining and the presence of asbestos containing materials (ACM).
- Laboratory testing of soil and groundwater samples at a National Association of Testing Authorities, Australia (NATA) accredited laboratory for analysis of the contaminants and parameters identified in the PSI (Stantec, 2023). All samples were stored on ice in a sealed ice box (esky) while on site and in transit under chain of custody (COC) documentation.

1.2.3 Reporting

- Preparation of a Detailed Site Investigation (DSI) style report in accordance with the NSW EPA *Consultants Reporting on Contaminated Land* (NSW EPA, 2020) and the *National Environment Protection (Assessment of Site Contamination) Measure* (1999) (NEPC, 2013).

1.3 LEGISLATION AND GUIDELINES

This DSI and report were completed in general accordance with the following guidelines and legislation:

- NSW Contaminated Land Management Act 1997 (CLM Act 1997);
- *National Environment Protection (Assessment of Site Contamination) Measure* 1999. National Environmental Protection Council (NEPC 2013);
- NSW EPA *Consultants Reporting on Contaminated Land - Contaminated Land Guidelines*, NSW Environment Protection Authority, April 2020, Updated 5 May 2020 (EPA 2020);
- NSW EPA *Contaminated Land Guidelines Sampling design part 1 – application*. New South Wales Environment Protection Authority (EPA, August 2022).



DETAILED SITE INVESTIGATION

Introduction

- NSW EPA *Waste Classification Guidelines, Part 1: Classifying waste*, November 2014 (EPA 2014)
- *Australian and New Zealand Guidelines for Fresh and Marine Water Quality*. Australian and New Zealand Governments and Australian state and territory governments, 2018 (ANZG 2018);
- NSW EPA *Contaminated Land Management, Guidelines for the NSW Site Auditor Scheme* (3rd Edition), NSW Environment Protection Authority, October 2017 (EPA 2017);
- Standards Australia (2005) Australian Standard AS 4482.1-2005 – *Guide to the investigation and sampling of sites with potentially contaminated soil. Part 1: Non-volatile and semi-volatile compounds*; and
- Standards Australia (1999) Australian Standard AS 4482.2-1999 - *Guide to the sampling and investigation of potentially contaminated soil. Part 2: Volatile substances*;



DETAILED SITE INVESTIGATION

Site Identification

2.0 SITE IDENTIFICATION

2.1 SITE DETAILS

Details related to the site are included in **Table 2-1** below whilst site features and surface contours are shown on **Figure 2** in **Appendix A**.

Table 2-1 Site Identification Details

Item	Details			
Site Address	7A-11 Racecourse Road, 1-3 Faunce Street and 38-50 Young Street, West Gosford, NSW 2250			
Approximate Site Area	2.1 ha			
Title Details	▪ Lot 1, DP651249 ▪ Lot 6, DP801261 ▪ Lot 11, DP758466 ▪ Lot 12, DP1100110 ▪ Lot 13, DP1100206 ▪ Lot 14, DP1100206 ▪ Lot 15, DP1100216		▪ Lot 16, DP1079150 ▪ Lot 18, DP1100223 ▪ Lot 20, DP758466 ▪ Lot 71, DP810836 ▪ Lot 72, DP810836 ▪ Lot 73, DP810836 ▪ Lot 74, DP810836.	
Local Government Area (LGA)	Central Coast Council			
Land Zoning	The site is entirely zoned as B6 (Enterprise Corridor) under the <i>Central Coast Local Environment Plan</i> (LEP) 2022. The zone has the following objectives: • To promote businesses along main roads and to encourage a mix of compatible uses. • To provide a range of employment uses (including business, office, retail and light industrial uses). • To maintain the economic strength of centres by limiting retailing activity. • To provide for residential uses, but only as part of a mixed use development. • To provide primarily for businesses along key corridors.			
Site Coordinates – Site Corners (GDA2020 MGA56)	Northing	Easting	Northing	Easting
	6300554.1	344666.3	6300734.9	344595.5
	6300563.8	344609.2	6300784.6	344616.6
	6300568	344609.9	6300787.6	344621.3
	6300573.4	344609.3	6300774	344701.3
	6300579.5	344571.1		
Current Land Use	The site currently contains grassed areas with a perimeter of remnant unmanaged bushland, areas of hard stand, and several empty buildings and an unsealed driveway. The buildings comprise a two-storey dwelling and several associated buildings for enclosing horses.			
Proposed Land Use	Bus depot including parking for 96 buses, staff parking, administration office and facilities, and maintenance/servicing workshops.			



DETAILED SITE INVESTIGATION

Site Identification

2.2 SURROUNDING LAND USE

The land uses immediately surrounding the site have remained consistent throughout PSI and DSI site activities and are summarised below in **Table 2-2** and shown in **Figure 2, Appendix A**.

Table 2-2 Surrounding Land Use

Direction	Land Use or Activity
North	Racecourse Road and Faunce Street with commercial and recreational (tennis courts and golf course) land use and Narara Creek further north.
East	Young Street with low-density residential and commercial properties and Waterview Park nature reserve further east.
South	Commercial and low-density residential properties and Central Coast Highway further south and Brisbane Water beyond.
West	Racecourse Road and Gosford Racecourse and Narara Creek further west.

2.3 REGIONAL AND SITE SETTINGS

Site setting information, as listed within publicly available data sets, is summarised below in **Table 2-3**.

Table 2-3 Site Setting Information

Item	Information
Site topography and drainage features (NSW DFSI, Spatial Services)	Overall, the site has a moderate slope, with all areas of the site sloping to the south-west. The elevation decreases by 12 m between 16 m Australian Height Datum (AHD) and 4 m AHD, from the top north-east corner to the bottom south-west. Surface run-off is expected to flow down gradient and infiltrate exposed surface soils on site.
Nearby water bodies (NSW DFSI, Spatial Services)	The site is located approximately 650 m east of Narara Creek (receiving waterbody) which feeds to Broad Water and the Brisbane Water estuary. Narara Creek is inferred to be tidally influenced at the points of closest proximity to the site. There are no waterways or waterbodies present on site.
Acid sulfate soil (DLWC, 1998)	A review of coastal Acid Sulfate Soil (ASS) risk maps shows the site is not mapped in an area of ASS risk. Lands adjacent east and south-east of the site across Racecourse Road are mapped as Disturbed Terrain with potential for ASS between 0 and 1 m below ground level (mBGL). Under the Central Coast LEP the site is mapped in a Class 5 area for ASS planning controls; in these areas development consent is required when " <i>Works within 500 m of adjacent Class 1, 2, 3 or 4 land that is below 5 m Australian Height Datum (AHD) and by which the watertable is likely to be lowered below 1 m AHD on adjacent Class 1, 2, 3 or 4 land.</i> "
Groundwater (WaterNSW, 2019)	A search of the WaterNSW publicly registered bore data base identified seven registered bores within 500 m of the site. The closest groundwater bore is located 136 m north-west of site within the Gosford Racecourse precinct, the bore is used for monitoring purposes and was drilled to a total depth of 42.5 mBGL. The Standing Water Level of this well was recorded at 12.60 mBGL. This groundwater bore is considered cross gradient to site. Groundwater is inferred to be dominated by local topography and geography, the site appears to be located on the boundary of alluvial sediments associated with Narara Creek to the west with President's Hill rising to a peak of 116 m AHD approximately 300m east of the site. Based on these factors groundwater is inferred to flow west to south west across the site.



DETAILED SITE INVESTIGATION

Site Identification

Item	Information
Site soil landscapes (NSW OEH, 2019)	The site is located within two (2) soil landscapes. The majority of the site is mapped as the Erina Landscape, and a small area in the south-west of the site is mapped as Disturbed Terrain. The soil landscapes present on site are described below: - Erina: undulating to rolling rises and low hills on the Terrigal Formation. Local relief <60 m; slope gradients <25%. Rounded narrow crests with moderately inclined slopes. Extensively cleared tall open-forest with open-heathland in exposed coastal areas. Limitations associated with this landscape include mass movement (localised), high soil erosion hazard, foundation hazard (localised), localised high run-on, seasonal waterlogging of footslopes, strongly acid soils of low fertility. - Disturbed Terrain: level plain to hummocky terrain, extensively disturbed by human activity, including complete disturbance, removal or burial of soil. Local relief and slopes highly variable. Landfill includes soil, rock, building and waste materials. Original vegetation completely cleared, replaced with turf or grassland. Limitations associated with this landscape include highly variability, mass movement hazard, steep slopes, foundation hazard, unconsolidated low wet bearing strength materials, impermeable soils, poor drainage, erosion hazard, very low fertility and toxic materials. dividing the eastern and western portions of the site.
Site surface geology (GS NSW, 2018)	The site lies within the Buralow Formation of the Narrabeen Group from the early Triassic (base) and Middle Triassic (top). The formation is typified by fine-grained micaceous quartz to quartz-lithic sandstone, interbedded with siltstone, grey shale and red-brown claystone.

2.4 SITE DESCRIPTION

The site observations summarised below in **Table 2-4** have been recorded from the PSI and updated or confirmed where appropriate following attendance at the site for the DSI intrusive investigation works. Photographs taken during the inspection can be found in the PSI, issued by Stantec in March 2023 (Stantec, 2023).

Table 2-4 Site Inspection Details

Item	Observations
Weather Conditions	DSI works program was completed over several site visits during 3 to 5 May 2023, 22 to 23 May and 31 May 2023. During this period, daily recorded rainfall recorded by the Australian Bureau of Meteorology (BOM) Gosford (Gosford AWS) weather station (ID: 061425), which is located approximately 3.27km southeast of the site, indicated minimal rainfall (<15mm) before and during all site investigations. Intrusive fieldwork, sampling (soil and groundwater) was generally scheduled during periods of favorable weather to prevent bogging of plant and machinery, and to provide ideal conditions for sample collection and data quality.
Site slope and drainage features	The site was observed to have an overall slope south west though eastern and northern areas of the site appeared generally flat as a result of landscaping and filling activities. No drains or culverts were noted on the site with the exception of some blocked and filled drains around the stables in the north west. Surface run-off is expected to flow down gradient and infiltrate exposed surface soils on site.
Nearby surface water bodies	The site is located approximately 1 km north of Brisbane Water and about 650m east of Narara Creek (inferred receiving waterbody). There are no waterways or waterbodies present on site.



DETAILED SITE INVESTIGATION

Site Identification

Item	Observations
Site surface coverings	The site surface was generally covered by a combination of grass, gravel and concrete/asphalt associated with historical building slabs and roads. Gravels were observed to include anthropogenic materials such as brick, likely coal washery reject and gravels were observed in-situ suggesting potential fill material. Some portions of the site were overgrown with long grass and woody trees or shrubs, therefore the ground surface could not be thoroughly inspected. Overgrown areas were generally associated with embankments along site boundaries and the edges of possible fill platforms. The driveways and access roads in proximity to the buildings and structures on site were predominantly asphalt. The driveway south of the residential dwelling and cleared area in the north-east portion of the site was comprised of compacted gravels. The historical access road that traversed the site to Young Street was overgrown with areas of asphalt visible. Several areas of hardstand or building foundations were observed within the southern half of the site, the largest located at the south-east portion of the site.
Surface soils	Exposed surface soils generally consisted of light brown to orange clayey sandy silts; fill materials such as gravel, coal washery reject and concrete were also observed in-situ.
Site cut and fill	The northern and eastern boundary of the site appeared to be cut and consisted of an embankment (about 4-6 metres high) and sandstone chunks were observed along the northern boundary. The graveled area north-east of the site appeared to be raised, with an embankment east of the northern open stable which appeared to be cut with fill and fly-tipped wastes observed. Generally, the western portion of the site appeared on grade with filling observed (i.e. anthropogenic materials in-situ) for driveways and within the cleared area. Mounding was also observed throughout the entirety of the large cleared area with evidence of anthropogenic materials on the surface.
Buildings and structures	There were six (6) buildings on the site at the time of inspection and intrusive works: • Residential building: double story, contains asbestos building materials (Getex, 2020) • Garage: one story, brick • Horse arena: open, metal roofing • Enclosed horse stables and detached shed: single story, contains asbestos in building materials (Getex, 2020), brick, besser block and welded mesh sheets • Open horse stables: single story, contains asbestos in building materials (Getex, 2020), besser block and welded mesh sheets.
Potential hazardous building materials	An asbestos building materials register and management plan for the site was prepared in 2020 (Getex, 2020). The plan identified the presence of asbestos in building materials in varying condition (i.e. good to poor) and friability in the form of sheeting, cladding, electrical backing boards, paneling, roof guttering. Friable asbestos was confirmed in the surficial soil drip lines of deteriorating roof guttering near the horse stables (Getex, 2020). Asbestos sheeting in poor condition was also recorded near the northern entrance of the enclosed stable. One fragment of potential asbestos containing material (PACM) in poor condition was observed by Stantec on the surface of the graveled area in the north-east portion of the site during the PSI site inspection.
Manufacturing, industrial or chemical processes and infrastructure	No manufacturing industrial or chemical processes were observed on the site, however anecdotally the stables are now used for cabinetry making by the residents of the site dwelling.
Fuel Storage (USTs/ASTs)	No above or underground fuel storage tanks, or associated infrastructure were observed on the site.



DETAILED SITE INVESTIGATION

Site Identification

Item	Observations
Hazardous chemicals	Small tins of paint and thinners were present on site in the detached shed north of the enclosed stables. Small jerry cans of fuel (likely used for power tools) and batteries were stored near the southern entrance of the enclosed stable. No staining or odours were noted in associated with exposed soils though some evidence of minor spoils (paint and grease spots) were noted on hardstand in the stables area.
Solid waste deposition	General waste and recycling bins were observed in the vicinity of the residential dwelling. A trailer containing cabinetry off-cuts was observed next to the detached building near the residential dwelling. Fly-tipping of building materials and other miscellaneous materials was observed along the borders of the site (predominantly north and east). The steep embankment between the graveled area (north-east portion of site) and open stable contained evidence of fly-tipping. This area contained materials such as concrete chunks, tyres, bricks, metal sheeting/objects. A large pallet of deteriorating Medium Density Fibreboard (MDF), carpet off-cuts and newspapers was observed amongst vegetation, south-east of the graveled area. Due to vegetation overgrowth some areas were not accessible, meaning there may be potential for scattered fly-tipped waste not observed during PSI and DSI activities to exist.
Liquid waste disposal features	A potential septic tank system was observed south of the detached building.
Evidence of previous site contamination investigations	No evidence of previous investigations other than the asbestos register (Getex, 2020) was observed on the site.
Evidence of land contamination (staining or odors)	White staining (inferred to be paint) was observed on the asphalt, down gradient of the open stable. No odours were noted on site.
Evidence of ground water contamination	No groundwater wells were observed on site.
Ground water use	Not observed.
Vegetation	Dense vegetation is present in the northern end of the site as well as the entire eastern boundary. The remaining site area is covered with grass in variable height and condition.
Site fencing	The site is fully fenced with two access gates from Racecourse Road, both with locks. Currently, the site is used as an overflow car park (parking in cleared areas) to support the Gosford Racecourse during racing days. Anecdotal evidence from the client stated that the fences bordering site have been repaired (i.e. holes) and upgraded twice since the acquisition of the property. One hole was observed in the fence on Young Street during the PSI.
Evidence of ground water contamination	No groundwater wells were observed on site.



DETAILED SITE INVESTIGATION

Site History

3.0 SITE HISTORY

A site history review was undertaken utilising publicly available and searchable registers and data sets to identify land uses and other information that may identify onsite or offsite sources of contamination.

3.1 PREVIOUS INVESTIGATIONS

Two previous reports were reviewed as part of this assessment:

- Getex Pty Ltd (2020). *Asbestos Building Materials Register and Management Plan for 9A-11 Racecourse Road, West Gosford NSW 2250*. Prepared for Busways Group Pty Ltd. Issued 12 December 2020. Report Number 1122.07.ASSR
- Stantec Australia Pty Ltd (2023). *Preliminary Site Investigation – 7a-11 Racecourse Road and 32-50 Young Street, West Gosford*. Prepared for Waluya Pty Ltd. Issued 27 March 2023.

A summary of the findings from the previous investigations are provided below in **Table 3-1**.

Table 3-1 Summary of Previous Investigations

Sections	Details
<i>Asbestos Building Materials Register and Management Plan for 9A-11 Racecourse Road, West Gosford NSW 2250, Getex, December 2020</i>	
Objectives	The objective of the survey was to determine the type, condition and extent of asbestos building materials that may be present and prepare an asbestos building materials register and asbestos management plan for the site.
Scope of Works	The scope of works for the Asbestos Materials Survey included the following: ▪ Inspect all accessible areas of the site and identify any suspected asbestos containing materials (ACM). ▪ Sample materials suspected to contain asbestos. ▪ Compile an asbestos register for the site. ▪ Provide advice regarding ongoing management of asbestos materials identified in the survey. Areas of the site not accessed included the following: ▪ Height restricted areas. ▪ Gas, electrical, chemical or pressurised service liens. ▪ Within service shafts, ducts and wall cavities. ▪ Areas obstructed by installed equipment. ▪ Locked areas to which no key was available at the time of the inspection. Further investigation of these areas is required if refurbishment or demolition activities within these areas are to proceed.
Key Findings	Non-friable asbestos of varying condition was detected in building materials at the northern stable, north-eastern shed, southern stable, house and garage. Generally, these areas were considered low to medium risk. Areas of high risk included areas containing friable asbestos, which was recorded in materials (i.e. detritus and soils) below drip lines of existing poor condition asbestos roofing or material at the northern stable, southern stable and north-eastern shed.



DETAILED SITE INVESTIGATION

Site History

Sections	Details
Preliminary Site Investigation – 7a -11 Racecourse Road and 32-50 Young Street, West Gosford, March 2023 (Stantec 2023)	
Objectives	The purpose of the investigation was to address the requirements by DPE for a PSI to be completed for the site to gather preliminary contamination information; the objectives of the PSI were to assess whether contamination has the potential to exist on site and whether further investigation is required.
Key Findings	Based on the results of this investigation the following known contaminating sources and activities have been identified: ▪ Deteriorating asbestos building materials in buildings/structures and proximal soils ▪ Cutting and fill materials of unknown quality or quantity across site ▪ Fly-tipped demolition and other wastes across the site ▪ Historical use as a materials storage and/or laydown area across the eastern portion of site in 1965-1991 (south-east) and 1994-2010 (north-east) including demolished buildings and foundations ▪ Historical use as a layover carpark for the Gosford Racecourse ▪ Historical industrial activities up gradient and in proximity to site (i.e. motor garages) ▪ Potential presence of two abandoned underground storage tanks, historically containing flammable liquids. Based on potentially completed Source-Pathway-Receptor (SPR) linkages these sources are considered to pose a potential risk to the following receptors: ▪ Current site users and future site users under a commercial and industrial setting ▪ Future demolition and construction workers undertaking excavations on site. ▪ Soil dependent biota. The identified potential sources of contamination were preliminarily classified as having a low or medium likelihood of complete exposure pathway for human and ecological receptors. Despite this, the information provided in this report is preliminary in nature and did not confirm actual conditions or potential contaminant concentrations through sampling and analysis of potentially impacted media.
Recommendations	The following recommendations were identified to manage potential contamination issues that may inform future land development planning approvals and construction design of the site: ▪ Conduct a Detailed Site Investigation (DSI) to confirm the presence of contaminant sources and contaminated materials within the identified sources. The DSI would seek to determine if a risk to human and ecological receptors exists, whether there is the potential for offsite migration of any identified contaminants and/or if management and consideration is required during construction. – Undertake a historical titles search of the site which may provide pertinent information in regards to whether the underground storage tanks exist on site. If confirmed, attempt to locate, sample during the DSI fieldwork. It is further recommended that additional groundwater wells be installed to assess groundwater the conditions beneath the site. – In the event the DSI identifies CoPC above the adopted site criteria investigation levels, the site may require further investigation in the form of a Data Gap Investigation (DGI). This would further clarify the risk to human and ecological receptors and/or recommend appropriate site remediation measures that can be implemented to mitigate potential impacts on human health and the environment, coupled with management and consideration required during construction. ▪ An updated Hazardous Building Materials (HBM) survey should be undertaken prior to any demolition to assess the condition of hazardous building materials and areas identified in the Getex, 2020 Asbestos Building Materials Register and Management Plan. Any information on asbestos clearance and/or remediation activities for friable soils on site, if available should be identified and provided.



DETAILED SITE INVESTIGATION

Site History

Sections	Details
	All materials that are to leave the site intended for waste disposal or beneficial re-use must be classified in accordance with the NSW EPA <i>Waste Classification Guidelines</i>, (November 2014) and/or applicable NSW EPA <i>Resource Recovery Orders</i>.

3.2 HISTORICAL LAND TITLES

In order to close out one of the data gaps identified within the PSI a search of historic land title records held by NSW Department of Land and Property Information was conducted for the lots that comprise the site. These records provide the identity of the site owner and may also indicate an occupation in the event of private ownership. The results of this search are summarised in **Table 3-2**, with full title records provided in **Appendix B**.

Notable owners are listed below and have been highlighted in **Table 3-2**.

- The Gosford Racing Club Limited
- The Minister for Public Works
- The Gosford Brick Tile and Pipe Proprietary Limited
- Public Transport Commission of New South Wales now State Rail Authority of New South Wales.

Gazettal notices identify acquisition of western areas of the site in 1916 for the purposes of construction of a railway between Gosford Racecourse and Gosford.

In addition, plans dated from 9 October 1912 and 12 May 1916 identify land adjacent to the north of the site on the opposite side of Faunce Street is identified as a “nightsoil depot”. Nightsoil is a historical euphemism for human waste. It is unclear based on available data whether this location was a place for deposition of this waste or merely where associated vehicles and equipment were stored. This area is currently occupied by a multi-occupancy commercial / industrial site with evidence of cut below ground-level along the Faunce Street boundary.

3.2.1 Interaction with Dangerous Goods Searches

Results of Schedule 11 Dangerous Goods on Premises searches during the PSI (Stantec, 2023) were provided based on an intersection match (cnr of Racecourse Road and Faunce Street) and not address match as street names around the site had changed. Returned records were for two underground storage tanks (UST) for diesel fuel for Robson Excavation Pty Ltd.

Based on historical aerial imagery (presence of excavation and haulage equipment) it was inferred that the premises containing the UST was in the north-west corner of the intersection and downgradient of the site. To support this conclusion historical titles include no record of Robson Excavation as a site owner or lessee.

Table 3-2 Historical land titles summary

Land Title	Date of Acquisition and term held	Registered Proprietor(s) & Occupations where available	Reference to Title at Acquisition and sale
Lot 6 in DP801261 (land no. 1)	07.11.1916 (1916 to 1917)	Arthur Fitzgerald Edward Lewis (Hotelkeeper)	Volume 2711 Folio 245



DETAILED SITE INVESTIGATION

Site History

Land Title	Date of Acquisition and term held	Registered Proprietor(s) & Occupations where available	Reference to Title at Acquisition and sale
Lot 6 in DP801261 (land no. 2)	07.11.1916 (1916 to 1917)	Catherine Lightfoot (Spinster)	Volume 2711 Folio 247
Lot 6 in DP801261 (land no. 3)	07.11.1916 (1916 to 1917)	Jessie Lewis (Married Woman)	Volume 2711 Folio 246
Lot 20 Section 82 in DP758466	14.11.1916 (1916 to 1938)	Jessie Lewis (Married Woman)	Volume 2715 Folio 158 (Crown Grant)
Lot 16 in DP1079150	28.11.1917 (1917 to 1938)	Isabella Catherine Gleeson (Married Woman)	Volume 2806 Folio 178
Lot 6 in DP801261 (land no. 1)	28.09.1917 (1917 to 1973)	The Minister for Public Works (Constructing Authority)	Volume 2711 Folio 245 Now Volume 2797 Folio 136
Lot 6 in DP801261 (land no. 3)	03.10.1917 (1917 to 1973)	The Minister for Public Works (Constructing Authority)	Volume 2711 Folio 247 Now Volume 2797 Folio 106
Lot 13 & 14 in DP1100206	06.10.1917 (1917 to 1938)	William Lovel Davis (Accountant)	Volume 2792 Folio 191
Lot 6 in DP801261 (land no. 2)	15.10.1917 (*1917 to 1973)	The Minister for Public Works (Constructing Authority)	Volume 2711 Folio 247 Now Volume 2806 Folio 146
Lot 11 of Section 82 in DP758466 & Lot 12 in DP1100110	18.10.1917 (1917 to 1937)	The Gosford Racing Club Limited	Volume 2796 Folio 32
Lot 16 in DP1100216	23.10.1917 (1917 to 1938)	Jessie Lewis (Married Woman)	Volume 2797 Folio 113
Lot 18 in DP1100233	24.10.1917 (1917 to 1938)	Arthur Fitzgerald Edward Lewis (Hotel Keeper)	Volume 2797 Folio 149
Lot 16 in DP1079150	28.11.1917 (1917 to 1938)	Isabella Catherine Gleeson (Married Woman)	Volume 2806 Folio 178
Lot 11 of Section 82 in DP758466 & Lot 12 in DP1100110	20.12.1937 (1937 to 1951)	John Alphaeus Sterland (Merchant)	Volume 2796 Folio 32
Lot 18 in DP1100233	02.02.1938 (1938 to 1938)	Permanent Trustee Company of New South Wales (Transmission Application not investigated)	Volume 2797 Folio 149
Lot 18 in DP1100233	22.06.1938 (1938 to 1951)	Arthur Stephen Sterland (Merchant)	Volume 2797 Folio 149
Lot 13 & 14 in DP1100206	13.10.1938 (1938 to 1939)	Charles Fairfax Waterloo Lloyd (Official Receiver)	Volume 2792 Folio 191
Lot 20 Section 82 in DP758466 Lot 16 in DP1079150 Lot 16 in DP1100216	21.12.1938 (1938 to 1947)	Arthur Stephen Sterland (Merchant)	Volume 2715 Folio 158 Volume 2806 Folio 178 Volume 2797 Folio 113
Lot 13 & 14 in DP1100206	29.03.1939 (1939 to 1951)	John Alphaeus Sterland (Merchant)	Volume 2792 Folio 191



DETAILED SITE INVESTIGATION

Site History

Land Title	Date of Acquisition and term held	Registered Proprietor(s) & Occupations where available	Reference to Title at Acquisition and sale
Lot 20 Section 82 in DP758466	30.07.1947 (1947 to 1951)	Arthur Stephen Sterland (Merchant) John Alphaeus Sterland (Merchant)	Volume 2715 Folio 158 Now Volume 5781 Folios 138 & 139
Lot 20 Section 82 in DP758466	16.05.1951 (1951 to 1961)	Sterland Bros. (Property) Pty. Limited	Volume 5781 Folios 138 & 139 Now Volume 6413 Folio 155
Lot 11 of Section 82 in DP758466 Lot 12 in DP1100110 Lot 13 & 14 in DP1100206	31.05.1951 (1951 to 1988)	The Gosford Brick Tile and Pipe Proprietary Limited	Volume 2796 Folio 32 Volume 2792 Folio 191
Lot 18 in DP1100233 Lot 16 in DP1079150 Lot 16 in DP1100216	16.11.1951 (1951 to 1951)	Maurice Arthur Kemp Sterland (Merchant) Valda Olive Vaughan (Married Woman) (Transmission Application not investigated)	Volume 2797 Folio 149 Volume 2806 Folio 178 Volume 2797 Folio 113
Lot 1 in DP651249	26.08.1960	Road now closed	
Lot 1 in DP651249	21.02.1961 (1961 – 1981)	The Gosford Brick Tile and Pipe Proprietary Limited	Volume 8104 Folio 130 (Grant), now, Volume 10167 Folio 127
Lot 20 Section 82 in DP758466	10.11.1961 (1961 to 1988)	Gosford Brick Tile and Pipe Proprietary Limited	Volume 6413 Folio 155
Lot 18 in DP1100233 Lot 16 in DP1079150 Lot 16 in DP1100216	16.11.1951 (1951 to 1988)	Gosford Brick Tile and Pipe Proprietary Limited	Volume 2797 Folio 149 Volume 2806 Folio 178 Volume 2797 Folio 113
Lot 6 in DP801261 (land no. 1) Lot 6 in DP801261 (land no. 2) Lot 6 in DP801261 (land no. 3)	31.10.1973 (1973 to 1990)	Public Transport Commission of New South Wales Now State Rail Authority of New South Wales	Volume 2797 Folio 136, then Volume 12981 Folio 27, now, 4/777417. Volume 2806 Folio 146, then Volume 12981 Folio 27, now 4/777417. Volume 2797 Folio 106, then Volume 12981 Folio 27, now, 4/777417
	31.10.1973 (1973 to 1990)	Public Transport Commission of New South Wales Now State Rail Authority of New South Wales	
Lot 20 Section 82 in DP758466 Lot 18 in DP1100233	30.06.1988 (1988 to 2000)	Kenneth Langdon Edwards Doreen Olive Kenneth	Volume 6413 Folio 155 Now 20/82/758466 Volume 2797 Folio 149



DETAILED SITE INVESTIGATION

Site History

Land Title	Date of Acquisition and term held	Registered Proprietor(s) & Occupations where available	Reference to Title at Acquisition and sale
Lot 11 of Section 82 in DP758466 & Lot 12 in DP1100110 Lot 16 in DP1079150 Lot 16 in DP1100216 Lot 13 & 14 in DP1100206	14.09.1988 (1988 to 1989)	Angel Pies Pty. Limited	Volume 2796 Folio 32 Volume 2806 Folio 178 Volume 2797 Folio 113 Volume 2792 Folio 191
Lot 1 in DP651249	12.04.1989 (1989 to 1989)	Angel Baking Company Pty. Limited	Volume 10167 Folio 127
Lot 1 in DP651249 Lot 11 of Section 82 in DP758466 & Lot 12 in DP1100110	13.07.1989 (1989 to 1996)	Dynoss Pty. Limited	Volume 10167 Folio 127 Now 1/651249 Volume 2796 Folio 32
Lot 16 in DP1079150 Lot 16 in DP1100216 Lot 13 & 14 in DP1100206	13.07.1989 (1989 to 1996)	Dynon Pty. Limited	Volume 2806 Folio 178 Volume 2797 Folio 113
Lot 6 in DP801261	30.04.1990 (1990 to 1991)	South Australian Cold Stores Limited	4/777417 Now 6/801261
Lot 6 in DP801261	12.03.1991 (1991 to 2011)	Gosford Race Club Limited	6/801261
Lot 1 in DP651249 Lot 11 of Section 82 in DP758466 & Lot 12 in DP1100110 Lot 16 in DP1079150 Lot 16 in DP1100216 Lot 13 & 14 in DP1100206	18.01.1996 (1996 to 2011)	Gosford Race Club Limited	1/651249 Volume 2796 Folio 32 Then 11/82/758466 & 12/1100110 Now Auto Consol 2796-32 Volume 2806 Folio 178 Now 16/1079150 Volume 2797 Folio 113 Now 15/1100216 Volume 2792 Folio 191 Now Auto Consol 2792-191
Lot 20 Section 82 in DP758466 Lot 18 in DP1100233	22.03.2000 (2000 to 2011)	Gosford Race Club Limited	20/82/758466 Volume 2797 Folio 149 Now 18/1100223



DETAILED SITE INVESTIGATION

Site History

Land Title	Date of Acquisition and term held	Registered Proprietor(s) & Occupations where available	Reference to Title at Acquisition and sale
Lot 1 in DP651249 Lot 6 in DP801261 Lot 11 of Section 82 in DP758466 & Lot 12 in DP1100110 Lot 20 Section 82 in DP758466 Lot 18 in DP1100233 Lot 16 in DP1079150 Lot 16 in DP1100216 Lot 13 & 14 in DP1100206	11.01.2011 (2011 to 2015)	Bhaajayu Pty Ltd South Pty Ltd North Coast Transit Pty Ltd Busways East Pty Ltd	1/651249 6/801261 Auto Consol 2796-32 20/82/758466 18/1100223 16/1079150 15/1100216 Auto Consol 2792-191
Lot 1 in DP651249 Lot 6 in DP801261 Lot 11 of Section 82 in DP758466 & Lot 12 in DP1100110 Lot 20 Section 82 in DP758466 Lot 16 in DP1079150 Lot 16 in DP1100216 Lot 13 & 14 in DP1100206	21.08.2015 (2015 to 2020)	Bhaajayu Pty Ltd South Pty Ltd Busways East Pty Ltd Verugu Pty Limited Galbrock Pty Limited	1/651249 6/801261 Auto Consol 2796-32 20/82/758466 16/1079150 15/1100216 Auto Consol 2792-191
Lot 1 in DP651249 Lot 6 in DP801261 Lot 11 of Section 82 in DP758466 & Lot 12 in DP1100110 Lot 20 Section 82 in DP758466 Lot 16 in DP1079150 Lot 16 in DP1100216 Lot 13 & 14 in DP1100206	30.11.2020 (2020 to 2021)	Bhaajayu Pty Ltd South Pty Ltd Verugu Pty Limited Galbrock Pty Limited	1/651249 6/801261 Auto Consol 2796-32 20/82/758466 16/1079150 15/1100216 Auto Consol 2792-191
Lot 1 in DP651249 Lot 6 in DP801261 Lot 11 of Section 82 in DP758466 & Lot 12 in DP1100110 Lot 20 Section 82 in DP758466 Lot 18 in DP1100233 Lot 16 in DP1079150 Lot 16 in DP1100216 Lot 13 & 14 in DP1100206	03.12.2021 (2021 to Date)	# Bhaajayu Pty Ltd # Galbrock Pty Limited	1/651249 6/801261 Auto Consol 2796-32 20/82/758466 18/1100223 16/1079150 15/1100216 Auto Consol 2792-191



DETAILED SITE INVESTIGATION

Conceptual Site Model

4.0 CONCEPTUAL SITE MODEL

A conceptual site model (CSM) provides an assessment of the fate and transport of contaminants of potential concern within the context of site-specific subsurface conditions with regard to their potential risk to human health and the environment. Risk to human health and the environment is identified through complete Source – Pathway – Receptor (SPR) linkages. In order to identify SPR linkages the CSM considers site specific factors including:

- Source(s) of contamination
- Identification of contaminants of concern associated with past (and present) source(s)
- Site specific information including soil type(s), depth to groundwater, inferred groundwater flow direction and surface water bodies and interactions.
- Location of any identified sources relative to the proposed site development
- Actual or potential receptors considering both current and future land use both for the site, adjacent properties and any sensitive ecological receptors.
- Based on a review of the desktop site history information, site walk-over observations, and sample results the following CSM has been developed showing potential SPR linkages considered to be potentially complete or incomplete under our understanding of the current and future land use.

4.1 IDENTIFIED CONTAMINATION SOURCES

Based on site history review during the PSI (Stantec, 2023) and historical titles reviewed in **Section 3.2**, Stantec have identified the following sources of contamination that may be encountered onsite:

- Deteriorating asbestos building materials in buildings / structures and proximal soils.
- Cutting and fill materials of unknown quality or quantity across the site.
- Fly-tipped demolition and other wastes across the site.
- Historical use as a materials storage and/or laydown area across the eastern portion of the site in 1965 – 1991 (southeast) and 1994-2010 (northeast) including demolished buildings and foundations.
- Historical use as a layover carpark for the Gosford Racecourse.
- Historical industrial activities up gradient and in proximity to site (i.e. motor garage).
- Historical nightsoil depot located on land adjacent north of the site.

4.2 IDENTIFIED RECEPTORS

A high-level summary of potential receptors considered to be susceptible to site contamination include:

- Human:
 - Current and future site users and ongoing commercial / industrial setting.
 - Future demolition and construction workers within the site.
- Ecological:
 - Soil dependent biota.



DETAILED SITE INVESTIGATION

Conceptual Site Model

Table 4-1 Preliminary Conceptual Site Model

Potential Contamination Source	Impacted Media	Contaminants of Concern	Potential Exposure Pathway	Receptors	Likelihood of Complete Exposure Pathway
Deteriorating asbestos building materials in buildings/structures and proximal soils	Surficial soils in the surrounds of buildings and structures (i.e. drip lines of roof gutters) containing asbestos.	- Asbestos - Friable asbestos in soil.	- Direct contact - Inhalation of asbestos fibres due to damage and disturbance of asbestos.	Human: - Current and future site users under and ongoing commercial / industrial setting - Future demolition and construction workers within the site.	High: Asbestos (friable and non-friable forms) have been identified within the site and no controls were observed during the site walkover. Stantec has not been provided with evidence that this has been remediated or removed. Appropriate management and controls, including removal of impacted soils, will be needed to minimise risk of exposure to acceptable levels.
Cutting and fill materials of unknown quality or quantity across site	Imported soils and site soils in contact with these materials.	- Asbestos - TRH - BTEX - PAH - Metals - Phenols - OCP/OPP - PCB - VOC - SVOC - PFAS.	- Direct contact - Incidental ingestion - Inhalation of volatile organic compound vapours and asbestos fibres.	Human: - Current and future site users under and ongoing commercial / industrial setting - Current and future construction workers undertaking excavations onsite. Ecological: - Soil dependent biota.	Low to moderate: Potentially complete in the event of any direct interaction with impacted media (i.e. excavations, use as growth medium). Fill is extensive across the site but a low likelihood is probable where an effective construction environmental management plan is in place.



DETAILED SITE INVESTIGATION

Conceptual Site Model

Potential Contamination Source	Impacted Media	Contaminants of Concern	Potential Exposure Pathway	Receptors	Likelihood of Complete Exposure Pathway
Fly-tipped demolition and other wastes across the site	- Surficial soils - Deeper soils in the event of liquid spills.	- ACM - TRH - BTEX - PAHs - Metals - Phenols - OCP/OPP - PCB - VOC/SVOC - PFAS	- Direct contact - Incidental ingestion - Inhalation of volatile organic compound vapours and asbestos fibres.	Human: - Current and future site users under and ongoing commercial / industrial setting - Current and future construction workers undertaking excavations onsite. Ecological: - Soil dependent biota.	
Historical use as a materials storage and/or laydown area across the eastern portion of site in 1965-1991 (south-east) and 1994-2010 (north-east) including demolished buildings and foundations	Surficial soils.	- ACM - TRH - BTEX - PAH - Metals - Phenols - OCP/OPP - PCB - VOC/SVOC - PFAS	- Direct contact - Incidental ingestion - Inhalation of volatile organic compound vapours and asbestos fibres.	Human: - Current and future site users under and ongoing commercial / industrial setting - Current and future demolition and construction workers within the site. Ecological: - Soil dependent biota.	Moderate: Identified anthropogenic materials potentially associated with material storage has potential to impact aesthetic suitability of soils. Asbestos (non-friable) was detected on the surface of this historical area, appropriate management and controls will be needed to minimise risk of exposure to acceptable levels.
Two historical underground storage tanks containing flammable liquid to exist on site	- Proximal soils - Groundwater - Deeper soils within proximity to groundwater.	- TRH - BTEX - PAH - Metals.	- Direct contact - Incidental ingestion - Inhalation of volatile organic compound vapours	Human: - Current and future site users under and ongoing commercial / industrial setting - Current and future demolition and construction workers within the site. Ecological: - Soil dependent biota.	Nil: Based on available lines of evidence including aerial imagery, historical titles and dangerous goods on premises records the two tanks are not considered to be present on sit. In addition, the inferred location north-west of the site is considered downgradient from the site and unlikely to impact the site from migration of contaminants with groundwater.



DETAILED SITE INVESTIGATION

Conceptual Site Model

Potential Contamination Source	Impacted Media	Contaminants of Concern	Potential Exposure Pathway	Receptors	Likelihood of Complete Exposure Pathway
Historical use as a layover carpark for the Gosford Racecourse	Soils (predominately surface soils) through spills / direct application.	- TRH - BTEX - PAHs - Metal - VOC/SVOC - PFAS.	- Direct contact - Incidental ingestion - Vapour intrusion.	Human: - Current and future site users under and ongoing commercial / industrial setting - Current and future demolition and construction workers within the site. Ecological: - Site vegetation and biota.	Low: Given the site has been used as a car park. The impacts have potential to be locally very high (such as from spills and oils leaks) Potentially complete in the event of spill or leak and direct interaction with impacted media (if present).
Historical industrial activities upgradient and in proximity to site (i.e. motor garages)	- Surficial soils - Groundwater - Deeper soils within proximity to groundwater.	- TRH - BTEX - PAH - Metals - VOC/SVOC - PFAS.	- Direct contact - Incidental ingestion - Vapour intrusion.	Human: - Current and future site users under and ongoing commercial / industrial setting - Current and future demolition and construction workers within the site. Ecological: - Soil dependent biota.	Low: While the potentially contaminating compounds may be present no evidence of spillage or inappropriate handling was identified. Only complete if evidence of spills is identified.



DETAILED SITE INVESTIGATION

Conceptual Site Model

Potential Contamination Source	Impacted Media	Contaminants of Concern	Potential Exposure Pathway	Receptors	Likelihood of Complete Exposure Pathway
Nightsoil depot located adjacent north	- Groundwater - Deeper soils within proximity to groundwater.	Metals	- Direct contact - Incidental ingestion	Human - Current and future site users under and ongoing commercial / industrial setting - Current and future demolition and construction workers within the site. Ecological: - Soil dependent biota.	Low to nil: Nightsoil depot was historically located on lands adjacent north of the site which may be considered cross-gradient. While the end date of the activity is not clear at this time the records providing evidence of the activity are over 100 years old and the current site layout is visible in 1965 imagery. Based on this any potential impact will be from environmentally persistent contaminants (i.e. metals) and potentially aged in such a way to reduce bioavailability.



DETAILED SITE INVESTIGATION

Conceptual Site Model

4.3 DATA GAPS

Based on Stantec's assessment of the site historical information, which included a historical review and inspection, the following data gaps were identified:

Not all areas of the site were accessible at the time of the site walkover, inaccessible areas are listed in **Section 3.1**:

- Portions of the site were unable to be inspected in detail due to the presence of dense vegetation. These areas were not subjected to a detailed assessment, and whilst dense vegetation was present at the time of the walkover this is not necessarily indicative of the historical land-form/use and potential for un-regulated filling and tipping should be considered as possible.
- Stantec was not supplied with any remediation or asbestos clearance certificates nor were the recommended controls for asbestos containing material outlined in Getex 2020 observed on site. Therefore, it is anticipated that asbestos contamination still exists on site.
- Best efforts were made to identify potential filling areas that exist within, beneath and surrounding the site that may have been imported during construction and maintenance. Despite this, and without earthworks and cut/fill records being provided by the client or other parties, areas of filling and mounding may exist outside of the areas identified by Stantec.



DETAILED SITE INVESTIGATION

Sampling and Analysis Quality Plan

5.0 SAMPLING AND ANALYSIS QUALITY PLAN

The sampling and analysis quality plan (SAQP) includes a program that helps ensure that the data collected is representative, accurate, precise, complete and comparable and provides a robust basis for site assessment and decisions.

The SAQP includes the following:

- Data quality objectives, including a summary of the objectives of the investigation and assessment;
- Field and laboratory data quality indicators;
- Investigation methodology including media to be sampled, details of analytes and parameters to be monitored and a description of intended sampling points;
- Sampling / monitoring methods and procedures;
- Field screening methods;
- Analysis methods;
- Sample handling, preservation and storage; and
- Analytical QA/QC.

5.1 DATA QUALITY OBJECTIVES

The NSW EPA (2017) *Guidelines for the NSW Site Auditor Scheme* (3rd Edition), the NEPM (NEPC, 2013), and the NSW EPA (2020) *Consultants Reporting on Contaminated Land: Contaminated Land Guidelines*, which are made or approved by the NSW EPA under s105 of the *Contaminated Land Management Act 1997* requires that Data Quality Objectives (DQOs) be identified for all assessment and remediation programs. The DQO process as adopted by the NSW EPA is described within the NSW EPA (2022a) Contaminated land guidelines: Sampling design part 1 - Application.

The DQOs are summarised in **Table 5-1** below.

Table 5-1 Data Quality Objectives

DQO Step	Discussion
Step 1: State the Problem (Summarise the contamination problem that will require new environmental data, and identify the resources available to resolve the problem, develop a conceptual site model)	Available information indicates that contamination is present at the site as a result of historical activities including but not limited to uncontrolled filling and fill importation, former industrial uses (brickworks), and hazardous materials (demolition and/or weathering of structures onsite). A preliminary Conceptual Site Model (CSM) is presented in Table 4-1 .



DETAILED SITE INVESTIGATION

Sampling and Analysis Quality Plan

DQO Step	Discussion
Step 2: Identify the decision / goal of the study (Identify the decisions that need to be made on the contamination problem and the new environmental data required to make them)	The goal of the study is to collect sufficient data to assess contamination of land at the site. In making this assessment the following decisions will be made: - Is there sufficient and suitable data from the sources listed in Step 3 to determine the nature and extent of contamination of land and impact on onsite and offsite receptors? - Is the site impacted by contamination of land? If contamination of land is identified then: - What is the source of the impact/s? - What impact do the site geologic and hydrogeological conditions have on the fate and transport of any impact/s? - Does the identified impact coupled with the fate and transport of identified contaminants represent an unacceptable risk to identified human and/or environmental receptors on or offsite? Where data is insufficient or unsuitable, or a potentially unacceptable risk is identified, the following decisions are to be made: - Is further investigation required? - Is remediation of site soils necessary to make the site suitable for the intended land use?
Step 3: Identify the Information Inputs (Identify the information needed to support any decision and specify which inputs require new environmental measurements)	The primary inputs to the decisions described above are: - Guidelines made or approved by the NSW EPA under the Contaminated Land Management Act 1997; - Information (including site history) or results from previous investigations completed at the site; - Information gathered during the previous and current investigation of site fill and natural soils and groundwater; - Information obtained through investigation of data gaps; - Aesthetic observations of soils, including odours, staining and waste inclusions; and - Laboratory analysis of soils and groundwater for relevant COPCs, based on historical land use and previous investigations. Assessment of the suitability of the analytical data obtained, against the Data Quality Indicators (DQIs) outlined below.
Step 4: Define the boundaries of the study (Specify the spatial and temporal aspects of the environmental media that the data must represent to support decision)	The boundaries of the study are: - Lateral – the intrusive investigation is limited to the lateral extent of the site, as shown in Figure 1 in Appendix A and defined in Table 2-1. - Vertical – the intrusive investigation is targeted to 0.3 m into undisturbed natural soil for soil sampling or 3 m past inferred standing water level with sampling depth limited by equipment capabilities. The greatest depth achieved during sampling was 9 m during groundwater well installations; and - Temporal – Results are valid from the day of data/sample collection and remain valid as long as no changes occur on site or contamination (if present) does not migrate on site or on to the site from offsite sources. The fieldwork investigation was undertaken during May 2023.



DETAILED SITE INVESTIGATION

Sampling and Analysis Quality Plan

DQO Step	Discussion
Step 5: Develop the analytical approach (To define the parameter of interest, specify the action level, and integrate previous DQO outputs into a single statement that describes a logical basis for choosing from alternative actions)	Parameters of interest include the laboratory results of primary and quality control soil and groundwater analytical testing. The CSM must also be considered sufficient and not limited by data gaps that bring question to the quality of the results. Data will be considered suitable for use where: ▪ The laboratories are NATA-accredited and quality assurance/quality control data are within the acceptable ranges, nominated in Table 5-2. Where data does not meet suitability criteria the following approaches will be considered: • Data may be considered unsuitable and not used for the site assessment (i.e. where blanks indicate cross-contamination); or • Data may be adopted with qualification (i.e. heterogenous distribution of metals within replicate samples). Further sampling may be necessary to close data gaps resulting from unsuitable data. Soil and sediment results will be considered less than (i.e. not exceeding) the adopted site criteria nominated in Section 6.1 if: ▪ Soil materials are aesthetically suitable for the proposed land-use; and ▪ The laboratory reported results are less than the relevant adopted criteria; or ▪ For a representative group of samples (i.e. from the same strata and area within the site): – The calculated 95% Upper Confidence Level of the arithmetic mean (95%UCL) contaminant concentration is less than criteria; and – The standard deviation of the results is less than 50% of the relevant adopted criteria; and, – No single analytical result for a contaminant of concern exceeds 250% of the relevant adopted criteria. Groundwater results will be considered less than adopted site criteria nominated in Section 6.1.3 if: ▪ The laboratory reported result is less than the relevant adopted criteria. If results are greater than the adopted criteria then they will be considered to indicate contamination of land and will trigger a decision on further assessment or remediation; otherwise if no results are greater than the adopted criteria then the material will be considered suitable for the intended land-use.



DETAILED SITE INVESTIGATION

Sampling and Analysis Quality Plan

DQO Step	Discussion
Step 6: Specify performance or acceptance criteria (Specify the decision-maker's acceptable limits on decision errors, which are used to establish performance goals for limiting uncertainties in the data)	Two primary decision error-types may occur due to uncertainties or limitations in the project dataset: - A sample/area may be deemed to pass the nominated criteria, when in fact it does not. This may occur if contamination is missed due to limitations in the sampling plan, or if the project analytical data set is unreliable; - A sample/area may be deemed to fail the nominated criteria, when in fact it does not. This may occur if the project analytical dataset is unreliable due to inappropriate sampling, sample handling or analytical procedures. The following aspects were considered when establishing the acceptable limits on decision errors: - The null hypothesis for the project is: the sample/investigation area is deemed to be contaminated. Sufficient weight of evidence, via the uses of statistical analysis (e.g. 95% upper confidence limit of the mean [UCL]) and/or gathering multiple lines of evidence (e.g. desktop review and laboratory analytical data), would be required to reject/disapprove the null hypothesis; - A quality assurance/quality control (QA/QC) assessment evaluating the reliability and useability of data, which are expressed as five DQIs summarised in Section 5.2.
Step 7: Develop the plan for obtaining data (Identify the most resource-effective sampling and analysis design for general data that are expected to satisfy the DQOs)	The work plan is designed to meet the project objectives in Section 1.1 and the DQOs outlined above. To ensure resource-effective sampling, analysis and data collection that satisfied the DQOs, the following actions are to be taken: - Written instructions will be used to guide field personnel in the required fieldwork activities. - Representative soil and groundwater samples will be collected from the site and analysed for characterisation purposes. - Groundwater samples will be collected after the monitoring wells are purged and groundwater quality parameters stabilise. - Field works and analyses will be undertaken in accordance with relevant Standard Operating Procedures. Further detail on the Investigation Methodology is provided in Section 7.0 below.

5.2 DATA QUALITY INDICATORS

To ensure that the investigation results of an acceptable quality, the data set was assessed against the data quality indicators (DQIs) outlined in **Table 5-2**.

Table 5-2 Data Quality Indicators

QA/QC Measure	Field Quality Indicator	Laboratory Quality Indicator
Precision: A quantitative measure of the variability (or reproducibility) of data	- SOPs are appropriate and complied with. - Field duplicates and Blind field duplicates are collected and analysed at a rate of 5% (1 per 20 samples). - Use of calibrated equipment.	- Laboratory analyses of laboratory and inter-laboratory duplicates, field duplicates, laboratory prepared volatile trip spiles. - Relative Percent Difference (RPD) calculation results: <30% Relative Percentage Difference (RPD).



DETAILED SITE INVESTIGATION

Sampling and Analysis Quality Plan

QA/QC Measure	Field Quality Indicator	Laboratory Quality Indicator
		The RPD values are calculated using the following equation: $RPD = \left(\frac{C_o - C_r}{\frac{[C_o + C_r]}{2}} \right) \times 100$ Where, C_O = Analyte concentration of the original sample C_R = Analyte concentration of the duplicate sample
Accuracy: A quantitative measure of the closeness of reported data to the "true" value	- Standard operating practices (SOPs) are appropriate and complied with. - Use of calibrated equipment. - Field interlaboratory duplicates sampled and analysed at a rate of 1 per 20 samples. <30% Relative Percentage Difference (RPD) - Analysis of rinsate sample collected at rate of 1 per day. - Trip spike and trip blanks were used.	- Laboratory holds NATA-accreditation for the analyses. - Laboratory limit of reporting is below the adopted investigation level. - Laboratory analysis of: field blanks, rinsate blank, reagent blank, method blank, matrix spike, matrix spike duplicate, surrogate spike, reference material, laboratory control sample, laboratory-prepared spikes. The nominal acceptance limits on laboratory control samples are: - Laboratory spikes: 70-130% recovery for metals 60-140% for organics - Laboratory duplicates. If contaminant concentration is: <10 x PQL, no RPD limit 10-20 x PQL, RPD is 0% to 50% >20 x PQL, RPD is 0% to 20% - Laboratory surrogates: 60-140% recovery. - Laboratory blanks: <PQL - Laboratory control samples, 70-130% recovery.
Representativeness: The confidence (expressed qualitatively) that data are representative of each media present on site and the conditions encountered in the field	- Appropriate media sampled. - Preservation and storage of samples upon collection and during transport to the laboratory occurs. - Sampling is undertaken by an experienced sampler.	- Blank samples run in parallel with field samples to confirm there are no unacceptable instances of laboratory artefacts. - Review of RPD values for field and laboratory duplicates to provide an indication that the samples are generally homogeneous, with no unacceptable instances of significant sample matrix heterogeneities. - The appropriateness of collection methodologies, handling, storage and preservation techniques will be assessed to ensure/confirm there was minimal opportunity for sample



DETAILED SITE INVESTIGATION

Sampling and Analysis Quality Plan

QA/QC Measure	Field Quality Indicator	Laboratory Quality Indicator
		interference or degradation (i.e. volatile loss during transport due to incorrect preservation / transport methods). Rinsate samples used when sampling equipment is reused have analytical results <LOR.
Completeness: A measure of the amount of useable data from the data collected during the fieldwork program	- All critical locations sampled. - All samples collected. - Standard operating practices (SOPs) appropriate and complied with. - Sampling is undertaken by an experienced sampler. - Suitable records of field work are documented. - Completed laboratory sample chain-of-custody and documentation.	- All critical samples are analysed according to the SAQP. - All COPC are analysed. - Appropriate methods and Practical Quantification Limits (PQLs) are implemented. - Sample documentation is complete. - Samples are analysed within holding times.
Comparability: The confidence (expressed qualitatively) that may be considered to be equivalent for each sampling and analytical event	- Same SOP is used on each field occasion. - Climatic conditions are documented. - Experienced sampler - Sample type, preservation and handling are consistent at sampling events. - Use of calibrated equipment.	- Sample analytical methods used (including clean-up) - Sample PQLs (justify/quantify if different) - Same laboratories are used and justification is given where differences occur. - Same analytical methods, PQLs, and units of measurement are used.



DETAILED SITE INVESTIGATION

Assessment Criteria

6.0 ASSESSMENT CRITERIA

The assessment of soils and groundwater has been undertaken in the framework of a Tier 1 risk assessment. A Tier 1 assessment is a risk-based analysis comparing site data with generic investigation levels and screening levels for relevant land uses to determine the need for further assessment or development of an appropriate management strategy. The application of investigation and screening levels is subject to a range of limitations.

The following sections detail the adopted Tier 1 Screening Criteria for the site.

6.1 SOIL ASSESSMENT CRITERIA

6.1.1 Human Health Criteria

The Tier 1 Screening Values compared to the soil analytical data are included on the summary data tables in **Appendix C**. The criteria that have been adopted from National and State Guidelines for human health exposure settings for the site has been provided below in **Table 6-1**, along with the rationale behind the application of these criterion.

Table 6-1 Adopted Human Health Criteria – Soil Assessment Criteria

Guidelines	Specific Criteria	Justification
NEPM (NEPC, 2013)	HIL-D, Schedule B1, Section 6, Tables 1A(1)	Health Investigation Level (HIL) D thresholds have been adopted to assess the risk to site users for commercial/industrial settings and are protective of current and future receptors. HIL-A criteria will be considered where necessary for samples in the vicinity of the residential dwelling to protect current occupants.
	HSL-D, Schedule B1, Section 6, and 1A(3); For asbestos: Section 4, Table 7.	Health Screening Level (HSL) D thresholds have been adopted to assess the potential for a vapour intrusion risk present in site soils from volatile hydrocarbons and asbestos in soil. For asbestos in soil this includes: ▪ No visible asbestos for surface soils; ▪ HSL-D: 0.05%w/w for bonded ACM in commercial/industrial settings; and ▪ 0.001% w/w for friable asbestos in soil. These criteria are applicable for commercial and industrial land use settings and are protective of current and future receptors. HSL-A criteria will be considered where necessary for samples in the vicinity of the residential dwelling to protect current occupants



DETAILED SITE INVESTIGATION

Assessment Criteria

Guidelines	Specific Criteria	Justification
	Aesthetic Criteria	In order to assess aesthetic suitability the following will be considered: - Whether chemical discolouration or large quantities of inert foreign materials may cause concern to future site users; - The depth of aesthetically unsuitable materials in relation to final site surface or soil use depths (i.e. for gardens and plantings) The need for, and practicality of, any long-term management of aesthetically unsuitable materials.
NEMP 2.0 (HEPA, 2020)	HIL-D, Table 2	HIL-D thresholds for potential PFAS contamination have been adopted and consider the same land-use setting as the NEPM HIL D. Where PFAS is present criteria are protective of current and future receptors. HIL A criteria will be considered where necessary for samples in the vicinity of the residential dwelling to protect current occupants.
CRC Care TRH HSL (CRC CARE, 2011)	HSL D, Part 1, Table A4	HSL-D thresholds for direct contact with TRH impacted soils have been adopted and consider the same land-use setting as the NEPM HIL-D. Where TRH impact is present the criteria are protective of current and future receptors. HSL-A criteria will be considered where necessary for samples in the vicinity of the residential dwelling to protect current occupants.

6.1.2 Ecological Soil Criteria

The ecological criteria adopted from NEPC 2013 are summarised below in **Table 6-2** have been adopted to assess the risk to current and future ecological receptors (i.e. terrestrial flora and fauna) under commercial/industrial land use scenario.

Table 6-2 Adopted Ecological Criteria – Soil Assessment Criteria

Guidelines	Specific Criteria	Justification
NEPM (2013)	EIL, Schedule B1, Section 6, Tables 1B(1-5)	Site-specific ecological investigation levels (EILs) will be derived by determining the physiochemical properties of shallow (maximum of 2 m) site natural soils. Samples will be collected across the site from each unique material type/soil domain and undergo laboratory analysis for pH, CEC and clay content (%), which will be input into the NEPM Worksheet Toolbox spreadsheet to derive material-specific EILs.
	ESL, Schedule B1, Tables 1B(6)	The generic ESL thresholds for coarse soils and commercial / industrial land use options will be adopted for site soils.
NEMP 2.0 (2020)	Interim ecological guideline values, Table 3	PFAS ecological direct exposure criteria are protective of onsite ecological receptors in direct contact with impacted soils. This value is derived from the HIL-A value as there is insufficient data to calculate an ecological screening value at this time. Ecological indirect exposure criteria are based on dietary exposure of a secondary consumer (typically native predatory animals) as the most sensitive exposure pathway assessed. Section 8.6.1 allows for use of higher screening values (up to 0.14 mg/kg) in the case of: - Extensive hardstand cover for a site (>80%); - Secondary consumers absent from a site; - Location of the site in an extensively built-up urban setting; and / or



DETAILED SITE INVESTIGATION

Assessment Criteria

Guidelines	Specific Criteria	Justification
		The site not being in close proximity to waterways, drainage networks or groundwater. As a result of the proposed site development and regional development, where the sensitive default criteria are exceeded less sensitive criteria may be considered.

Table 6-3 EIL Criteria

Sample ID	Parameters				Criteria - Aged			
	pH	CEC	Clay (%)	TOC (%)	Copper	Chromium	Nickel	Zinc
TP103_0.5	6.3	6.7	8	0.83	210	630	120	580
TP116_0.1	5.2	16	18	3.1	180	820	400	460
TP134_0.3	7.6	36	4	0.09	100	500	680	1800
Conservative Site-Specific Criteria					100	500	120	460

6.1.3 Waste classification

Soil samples from areas west of the stables structure will be compared to Contaminant Threshold criteria within the NSW EPA (2014) *Waste classification guidelines, Part 1: Classifying Waste* to provide a preliminary waste classification of materials to be used as part of remediation planning.

6.2 GROUNDWATER ASSESSMENT CRITERIA

The environmental quality of groundwater has been assessed against relevant environmental values that are applicable to the type of water use and potential human health and ecological exposures that could occur from its use.

The water quality analytical results are compared to Tier 1 assessment criteria as made or approved under s105 of the CLM Act 1997 by NSW EPA. A Tier 1 assessment is a risk-based analysis comparing site data with generic investigation levels and screening levels for various land uses to determine the need for further assessment or development of an appropriate management strategy.

The applicable environmental values and groundwater assessment criteria are outlined in **Table 6-5** below while the rationale for the criteria is provided in **Section 6.2.1**.

6.2.1 Rationale for Groundwater Assessment Criteria

In accordance with the *Guidelines for the Assessment and Management of Groundwater Contamination* (NSW DEC, 2007), groundwater acceptance criteria are based on environmental values considered relevant for groundwater use at the site and surrounding uses of groundwater and surface waters that may be affected by the site. Environmental values include:

- Aquatic ecosystems: surface water and groundwater ecosystems;



DETAILED SITE INVESTIGATION

Assessment Criteria

- Human uses: these include but are not limited to potable water supply, agricultural water supply (irrigation and stock watering), industrial water use, aquaculture and human consumption of aquatic foods, recreational use (primary and secondary contact with surface waters) and visual amenity of surface waters;
- Human health in non-use scenarios: this includes consideration of health risks that may arise without direct contact between humans and the groundwater, for example, exposure to volatile contaminants above groundwater contaminant plumes; and
- Buildings and structures: this includes protection from groundwater contaminants that can degrade building materials through contact; for example, the weakening of building footings resulting from chemically aggressive groundwater.

Cultural and spiritual values that are associated with the environment, including groundwater, should also be protected. Cultural and spiritual values may include spiritual relationships, sacred sites, customary uses, the plants and animals associated with the water, drinking water supplies and recreational activities. In managing groundwater contamination, it is generally considered that cultural and spiritual values will be protected where groundwater quality protects all other relevant environmental values on a site.

As identified in **Table 2-3**, a search of registered groundwater bores within a 500 m radius of the was completed and three bores identified west of the site at Gosford Racecourse. Standing water level is identified for only one of these at 12.6 mBGL and bore types are identified as monitoring and other. Based on this information, an assessment of the applicability of groundwater environmental values, both onsite and offsite, is provided in **Table 6-4**.

Table 6-4 Assessment of Groundwater Environmental Values

Environmental Value	Applicable	Rationale / Comment
Protection of aquatic ecosystems	Yes	The potential receiving water body for the site is Narara Creek which discharges into Brisbane Water estuary. Narara Creek is inferred to be tidal in proximity to the site with the closest point approximately 650 m from the site. Protection of marine aquatic ecosystems is considered an applicable environmental value.
Drinking water	No	The site is in an area serviced by reticulated drinking water supply. A bore search did not identify bores downgradient of the site registered for drinking water extraction. Based on the above, this environmental value is not considered to be directly relevant.
Irrigation	Yes	No onsite use of groundwater for irrigation purposes has been identified. Bores at Gosford Racecourse have been identified as Monitoring and Other, with no irrigation bores identified. Despite this, use of groundwater at the racecourse is considered a potential receptor, either as extraction or collection in low lying dams.
Stock Watering	No	The site has historically been used for stabling of horses though it is understood that this activity is not currently undertaken. No evidence of use of groundwater for stock watering for agricultural production purposes has been identified onsite or at the adjacent Racecourse. This environmental value is not considered relevant for the site.



DETAILED SITE INVESTIGATION

Assessment Criteria

Environmental Value	Applicable	Rationale / Comment
Industrial Use	No	No onsite or offsite use of groundwater for industrial purposes has been identified. Specific industrial processes would require separate assessment and is not considered further in this report.
Aquaculture and human consumption of aquatic foods	No	A review of the NSW Department of Primary Industries NSW Aquaculture Industry Directory 2019 did not list an aquaculture producer on or in close proximity to the site. A review of aerial imagery shows possible evidence of oyster farms at the southern end of Brisbane Water, approximately 5 km south of the site. Based on the distance and volume of water between the identified potential receptor and the site, this environmental value is not considered relevant.
Recreational Use	No	This environmental value may be relevant within the closest surface water bodies where groundwater migrates to the surface water body and secondary or primary exposure to the public occurs. From a review of aerial imagery Narara Creek is mangrove lined for most of its length and no dock, piers or water frontages are visible cross or downgradient from the site suggesting limited access. Northern areas of Brisbane Water approximately 1 km south-east of the site are used for recreational boating purposes, the nearest public beach is located approximately 2 km away. Based on the distance and volume of water between the identified potential receptor and the site, this environmental value is not considered relevant.
Non-use scenarios (i.e. vapour inhalation and intrusion)	Yes	Groundwater health screening levels for vapour intrusion (HSLs) are published in the NEPC 2013, Schedule B1 for selected petroleum compounds and fractions and are applicable to assessing human health risk via the inhalation pathways. Workers and future users/occupiers of the land may be exposed to vapours emanating from contaminated groundwater, if present. This environmental value should be assessed.
Buildings and Structures	Yes	Groundwater may come into contact with pilings and footings of proposed buildings and infrastructure. Corrosive waters, if present, are a cause of concern for buildings and infrastructure and so this environmental value should be assessed.
Visual amenity and aesthetics	No	Surface water are not present on the site and extraction of groundwater for use at surface is not proposed. Groundwater aesthetic or visual amenity issues are unlikely occur and should be assessed.

Based on the above assessment, the environmental values for the irrigation waters to be further assessed are:

- Protection of aquatic ecosystems.
- Irrigation.
- Non-use scenarios (vapour).
- Buildings and structures.
- Visual amenity and aesthetics.

Results should therefore be assessed against the assessment criteria outlined in **Table 6-4**.



DETAILED SITE INVESTIGATION

Assessment Criteria

Table 6-5 Groundwater Assessment Criteria

Environmental Value	Guideline or Standard	Criteria
Protection of aquatic ecosystems	ANZG 2018	Freshwater, 95% level of protection, toxicant default guideline values (DGVs)
	For PFAS: NEMP 2020 (Ver. 2.0), Table 5	Freshwater, 95% level of protection. The 95% level of protection defaults to the 99% level of protection as PFAS are bioaccumulative.
Irrigation	ANZECC 2000 Table 4.2.10 Table 4.2.12	ANZG (2018) defers to the guidelines for irrigation water published in the prior guidelines. Short-term trigger values for metals and interim trigger values for herbicides will be applied to site waters.
Non-use scenarios (i.e. vapour inhalation and intrusion)	NEPC 2013, Schedule B1, Table 1A(4)	HSL-D, Commercial / Industrial
Buildings and Structures	Australian Standard 2159-2009: Piling Design and Installation (AS2159)	Section 6 – Durability Design



DETAILED SITE INVESTIGATION

Investigation methodology

7.0 INVESTIGATION METHODOLOGY

7.1 SAMPLING LOCATIONS

The number of sampling locations were determined in accordance with NSW EPA (2022a) *Sampling Design Guidelines* based on a grid-based and targeted approach depending on the site area.

7.1.1 North-west site area

In the vicinity of the stables and residence a targeted approach was adopted targeting two areas:

- Sixteen (16) confirmatory and delineation sample locations on the western side of the stables to constrain indicated friable asbestos in soil impact and provide waste classification of impacted materials.
- Eleven (11) test pitting and hand auger locations of exposed soils to identify areas of fill and other potential friable asbestos in soil impact.

7.1.2 Remaining site areas

Excluding the north-western portion of the site a generally grid-based approach was adopted. This portion of the site has an approximate area of 16,700 m², from Table 2 of NSW EPA (2022a) the following sampling densities and grid spacings are recommended:

- 15,000 m² site area to have 25 sample locations on a 24 m grid which will detect a 28.9 m diameter circular hotspot to a 95% confidence level.
- 20,000 m² site area to have 30 sample locations on a 26 m grid which will detect a 30.5 m diameter circular hotspot to a 95% confidence level.

From the above, 29 sample locations were placed across this area.

7.1.3 Groundwater wells

Four groundwater wells were installed across the site in the north-east, south-east and south-west site corners. Wells were distributed to assess water quality entering and exiting the site (inferred from topography) and to allow for a high-level determination of groundwater contours and flow direction. "Nested" wells were installed in the south-west corner of the site (MW01 and MW02) as during test pitting in this area two potential saturated / water bearing zones were identified; each well was screened over only one of these zones.

7.2 SITE INVESTIGATION PROGRAM

The field sampling investigation program was undertaken as outlined in **Table 7-1**, which was undertaken in general accordance with NEPC 2013 guidelines.



DETAILED SITE INVESTIGATION

Investigation methodology

Table 7-1 Investigation Summary

Item	Details
Fieldwork Activity and Dates	<u>Service/Utility Locating:</u> 2 May 2023: Service and utility locating was completed. <u>Test pitting:</u> 3 May 2023 to 5 May 2023: Thirty (30) test pits (numbered TP101 to TP128, TP134 and TP136) were excavated. 22 May 2023: Six (6) test pits (numbered TP129 to TP133 and TP135) were excavated. <u>Drilling and Monitoring Well Installation:</u> 22 May 2023: Four (4) boreholes were drilled. 22 May 2023: Four (4) ground water wells (numbered MW01 to MW04) were installed, including nested wells (MW101 and MW102). <u>Groundwater Well Development:</u> 23 May 2023: Monitoring well development was completed. <u>Groundwater Monitoring:</u> 31 May 2023: Groundwater monitoring event completed and water samples were collected from each monitoring well. <u>Well survey</u> 23 June 2023: Survey of groundwater well locations
Service Location	A Before You Dig Australia (BYDA) enquiry was lodged prior to the site investigation. The plans were provided to a Telstra accredited service locator who was engaged to locate and mark underground services with spray paint in the vicinity of each sampling point, to avoid damage to subsurface utilities during investigation activities.
Test Pitting	Test-pitting was undertaken utilising an 8-tonne track mounted excavator and excavated down to maximum depths of 3 mBGL. The distribution of test pits within the site is shown on Figure 3 in Appendix A .
Drilling	Drilling was undertaken by using a tracked drill rig, utilizing solid flight augers. These boreholes were advanced to a maximum depth of 9 mBGL and the distribution of boreholes within the site is shown on Figure 3 in Appendix A . Given the unknown hydrogeological setting and fill profile within the site prior to the investigation, the construction of permanent monitoring wells was based on the conditions encountered during test pitting. Surplus material was stored in a lockable drum and one (1) soil sample was taken to characterize the material for appropriate disposal.
Soil Sampling	- A total of 182 individual soil samples were collected -166 primary samples and 16 quality control samples. - Soil samples were collected from each test pit location at near-surface, 0.5 meters below ground level (m bgl), and every 0.5m thereafter until 0.3m into natural soil or to the depth of either the reach of the excavator or the depth of excavator resistance; - During test pitting, samples were collected directly from the excavator bucket with care taken to ensure material collected had not been in contact with the bucket; - Each soil sample (including duplicates) was screened for volatile organic compounds (VOC) content with a calibrated photo-ionisation detector (PID). The methodology for PID headspace testing was to partially fill an airtight container with a fresh soil sample and then analyse the headspace vapour using an appropriately calibrated portable PID;



DETAILED SITE INVESTIGATION

Investigation methodology

Item	Details
	- The geological profile and observations of each test pit and borehole were logged onsite in accordance with Australian Standard AS 1726:2017 – Geotechnical Site Investigations. All excavated material was inspected for potential indicators of contamination including odour, sheen, staining and the presence of asbestos containing materials (ACM); - Where potential indicators of asbestos were identified, including building and demolition waste in fill or potential ACM fragments, 10L of soil was screened for ACM as per the methodology outlined in Section 11, Schedule B2 of the NEPM (NEPC, 2013) and a 500 mL subsample collected for laboratory analysis for asbestos fines. - Soil samples were collected using disposable nitrile gloves, transferring soils to the designated sampling containers. All soils were collected on the same days as excavation to ensure that contaminants prone to volatilization / degradation / weathering (such as pathogens, TRH and BTEX) are representative. - Analytical testing of soil samples generally targeted fill materials, however, where encountered, samples were also collected from the underlying natural soil and assessed for contamination indicators. A select number of natural soil samples were analysed for environmental contamination. - Field duplicate samples were collected for QA/QC purposes, by carefully mixing the material and distributing evenly between sampling containers; and - Primary, duplicate and triplicate soil samples were submitted to SGS Environment Testing (primary laboratory) and Envirolab (secondary laboratory) for analysis. - Field procedure for asbestos identification in soils included: - Visual assessment at each sample location; and - To assess for asbestos fines / friable asbestos (AF/FA), a minimum of 500ml of soil was collected from the targeted geological strata.
Groundwater Well Installation	The installation of groundwater wells was undertaken by the licenced driller in accordance with the <i>Minimum Construction Requirements for Water Bores in Australia. Fourth Edition</i> (NUDLC, 2020). The wells were installed in previously drilled bore holes and the screened intervals were determined on site in consideration of the observed hydrogeological conditions during drilling.
Groundwater Well Development	The following well development procedure was undertaken: - Well development was undertaken a minimum of 12 hours following well head grouting, and a minimum of one day following installation; - A minimum of three bore volumes of water was purged from the well utilising a dedicated and disposable PFAS-free plastic bailer. The purged water was visually assessed for residual fines, and development continued, where practical, until the water became clear; - Wastewater was taken off site and disposed of to a licensed facility.
Groundwater Sampling	A total of 7 water samples were collected - 4 primary samples and 3 quality control samples, including 1 rinsate. Groundwater monitoring was undertaken as per the methodology below: - The standing water level (SWLs) was measured in metres from the top of casing; - Physicochemical parameters including pH, electrical conductivity (EC), redox potential (ORP), dissolved oxygen (DO), and temperature were measured using a calibrated water quality meter. - For groundwater wells with sufficient recharge, groundwater samples were collected once field parameters had stabilised directly from low-flow sampling techniques, which included use of a dedicated and disposable PFAS-free plastic bailer. Where insufficient water was present upon sampling, a grab sample was obtained utilising a disposable bailer;



DETAILED SITE INVESTIGATION

Investigation methodology

Item	Details
	Collection and submission of samples to a National Association of Testing Authorities, Australia (NATA) accredited laboratory for analytical testing.
Decontamination Procedure	Reusable sampling equipment such as hand tools (shovel, trowel, mattock), and the interface probe, were decontaminated by washing with PFAS free decon (Liquinox), followed by a rinse with potable water and de-ionised water (rinsate water).
Sample Preservation & Transport	Soil and groundwater samples were placed in laboratory supplied containers. Groundwater sample analysis for metals included dissolved metals which were lab filtered from unpreserved glass bottles. Other analytes were collected in laboratory supplied containers with appropriate preservative. All samples were stored on ice in a sealed ice box (esky) while on site and in transit under strict chain of custody (COC) documentation.

7.3 ANALYTE SAMPLE RATES

Primary and replicate sample analysis rates for soils are shown below in **Table 7-2** and water in **Table 7-3**.

Table 7-2: Primary and replicate sample analysis summary - soil

Analyte Category	Number of Primary Samples	Number of Duplicate Samples	Duplicate : Primary Ratio	Number of Triplicate Samples	Triplicate : Primary Ratio
TRH	89	7	12.7 : 1	6	14.8 : 1
BTEX	89	7	12.7 : 1	6	14.8 : 1
Metals	89	7	12.7 : 1	3	14.8 : 1
PAH	89	7	12.7 : 1	6	14.8 : 1
OCP	19	-	19: 0	-	19: 0
OPP	19	-	19: 0	-	19: 0
VOC	22	-	22 : 0	-	22 : 0
SVOC	22	-	22 : 0	-	22 : 0
PFAS	32	1	32 : 1	1	32: 1
Asbestos in soil	10	-	-	-	-
Asbestos in building materials	2	-	-	-	-

Table 7-3: Primary and replicate sample analysis summary - water

Analyte Category	Number of Primary Samples	Number of Duplicate Samples	Duplicate : Primary Ratio	Number of Triplicate Samples	Triplicate : Primary Ratio
TRH	4	1	4 : 1	1	4 : 1
BTEX	4	1	4 : 1	1	4 : 1
Metals	4	1	4 : 1	1	4 : 1



DETAILED SITE INVESTIGATION

Investigation methodology

Analyte Category	Number of Primary Samples	Number of Duplicate Samples	Duplicate : Primary Ratio	Number of Triplicate Samples	Triplicate : Primary Ratio
VOC	4	1	4 : 1	1	4 : 1
SVOC	4	1	4 : 1	1	4 : 1
PFAS	4	1	4 : 1	1	4 : 1

7.4 MONITORING WELL CONSTRUCTION DETAILS

Four monitoring wells were installed into boreholes drilled during the DSI. A summary of the construction details is provided in **Table 7-4** below and the cross-sectional illustration of construction is provided with the borehole logs in **Appendix D**.

Table 7-4: Monitoring Well Construction Details

Location	Depth m (TOC)	Screen Interval (mBGL)	Filter-pack Interval (mBGL)	Bentonite Interval (mBGL)	Backfill Interval (mBGL)
MW01	1.44	0.94 – 1.44	0.5-1.44	0-0.5	-
MW02	3.7	1.7 – 3.7	1.7-3.7	0-1.7	-
MW03	8.88	5.88 – 8.88	5.88-8.88	4.88-5.88	0-4.88
MW04	4.2	2.2 – 4.2	0-1.2 and 2.2-4.2	1.2-2.2	-



DETAILED SITE INVESTIGATION

Results

8.0 RESULTS

8.1 SITE OBSERVATIONS

The typical sub-surface soil profile encountered onsite is summarised below in **Table 8-1**.

Table 8-1 Typical Soil Profile

Sub-Surface Horizon	Typical Depth Range (mBGL)	Description
Fill	0.0 to 2.2	Fill was observed across the entirety of the site, comprised mostly of silty sand and gravelly sand. The maximum depth of fill was noted to be 2.2 m BGL at TP113 (southern centre of the site) and 2.1m BGL at TP103 (southwest corner). Anthropogenic inclusions within fill material were observed, including bricks, terracotta clay tiles, rubber, glass, ceramic tiles, timber, metal, PVC piping, aggregates and charcoal. No discoloration, sheen or odours were observed at test pit locations.
Natural, Residual	0.1 to beyond 2.2	Clayey SAND – fine to coarse grained, generally grey to brown, with orange colours at some locations, well sorted, low plasticity.
Bedrock	2.2	Extremely weathered rock, sandstone, grey to orange with pinky brown mottling.

All examined soils were evaluated on a qualitative basis for odour and visual signs of contamination (e.g. hydrocarbon odours, oil staining, petrochemical filming, asbestos fragments, ash, charcoal etc.) and the following observations were noted:

- Frequent foreign materials and waste were observed within the fill profile at the following locations:
 - TP101-TP115, TP117, TP122, TP125, TP129-TP132 and TP135-TP136.
- The highest soil vapour measurement assessed using a PID was 6.2 ppm at TP113_2, indicating a slight level of volatile vapour at this location. Based on PID screening results no site soils are impacted by volatile hydrocarbon contamination detectable with a 10.6eV PID.;
- Groundwater seepage was encountered at TP130 at 2 m BGL. Indicators of contamination were not observed on visible seepage water and wet fill soils were also not observed.
- A brick lined tunnel was intersected at TP112 at approximately 0.3 m BGL. The tunnel was dry, approximately 1.5m high and was visible approximately 2.5 m west of TP112. It is inferred that the structure is associated with the historical land use as a brick works and may have been a kiln or oven.

8.2 SOIL RESULTS

8.2.1 Human Health Criteria

Friable asbestos in surficial soil was verified and delineated along the western site of the main stable, based on sample results the maximum extent of impact has been shown on **Figure 2, Appendix A**.



DETAILED SITE INVESTIGATION

Results

Bonded asbestos was identified in surficial soils at TP106, TP113 and TP125 whose locations are also indicated on **Figure 2, Appendix A**. Following identification of asbestos indicators (building and demolition waste or incidental fibre/asbestos cement fragments), gravimetric screening of soils was conducted as per NEPM (NEPC, 2013) methods, and no additional asbestos was identified. All results with identified asbestos are presented in **Table 8-2**.

Table 8-2 Asbestos identification results summary

		Asbestos
HSL D – Comm / Ind – Asbestos		ACM 0.05% AF / FA 0.001% None at surface
Sample ID	Area	
TP106_0.5	Main site area	ACM at reporting limit 0.01 %w/w
TP113_0.1_PACM	Main site area	Chrysotile asbestos detected
TP125_0.1	Main site area	ACM at reporting limit 0.01 %w/w
TP125_0.1_PACM	Main site area	Chrysotile asbestos detected
GS1	West of stable	AF/FA 0.017 %
GS3	West of stable	AF/FA 0.005 %
GS5	West of stable	AF/FA 0.015 %
GS7	West of stable	AF/FA 0.014 %

In addition to the asbestos finds, two compounds were detected which did not have comparable screening levels from the criteria identified in **Section 6.1.1**, these are presented in **Table 8-3**.

Table 8-3: Soil detections without applicable criteria

Sample ID	Analyte	Concentration (mg/kg)	Screening
TP102_0.1	Ethion	0.2 mg/kg	Regional Screening Levels (RSL) (USEPA, 2023) identify a non-cancer screening level for Ethion of 410 mg/kg, no cancer risk is identified. Based on this the measured concentration of ethion is low and acceptable.
TP121_0.3	Dibenzofuran	0.7 mg/kg	No screening levels have been identified for dibenzofuran; based on a review of available toxicity data from the USEPA Integrated Risk Information System (IRIS) and Provisional Peer-Review Toxicity Values (PPRTV) databases the following is noted: - The substance is non-carcinogenic. - From the PPRTV assessment “<i>While many of the dose levels tested and the organism effects considered in the following reports would be difficult to relate to humans, together they seem to emphasize the relatively low toxicity and mild effects of dibenzofuran across a variety of species.</i>” The detection is considered low level (0.7mg/kg vs limit of reporting of 0.5 mg/kg)



DETAILED SITE INVESTIGATION

Results

			Based on the low level of the detection, the single detection on the site and the low reported toxicity, the risk from dibenzofuran is considered low and acceptable.

All soil analytical results not specified above were reported either below the adopted human health screening criteria or below LOR. Samples from HA101 and HA102 were compared with HIL-A criteria to consider current site residents and no exceedances were identified. Full results are shown in **Appendix C** with laboratory certificates shown in **Appendix E**.

8.2.2 Ecological Screening Criteria

Zinc at TP110_0.1 (620 mg/kg) was identified in exceedance of conservative site-specific criteria (460 mg/kg) specified in **Table 6-3**. While the result here would be less than the criteria developed from soil conditions at TP134_0.3 (1,800 mg/kg) this criterion is not considered suitable based on the difference between soil types.

TRH F2 was identified at TP121_0.3 (180 mg/kg) in exceedance of the ecological screening level (170 mg/kg), this location was noted as containing coal and coal wash materials.

All other samples and results were less than conservative site-specific criteria or generic adopted ecological protection criteria. Full results are shown in **Appendix C** with laboratory certificates shown in **Appendix E**.

8.2.3 Aesthetic Considerations

Schedule B1, Section 3.6 of the NEPM (NEPC, 2013) provides guidance for the assessment of soils based on aesthetic values as a result of impacts from low concern or non-hazardous inert foreign material in soil or fill as a result of human activity.

Areas targeted by this investigation were selected based on having an elevated risk of contamination, including the presence of or potential presence of fill materials. Observations of anthropogenic materials in fill were frequently observed including substantial quantities of bricks and surficial tipping. Based on the proposed land-use were such materials visible at surface they are unlikely to cause substantial concern or risk of physical harm. Despite this, materials heavily impacted by construction and demolition waste are considered unsuitable to be used as surficial soils in landscaping areas under the proposed land use.

8.2.4 Waste Classification

Based on a comparison to assessment criteria within the *Waste Classification Guidelines, Part 1: Classifying Waste* (NSW EPA, 2014) the material impacted by friable asbestos is preliminarily classified as Special Waste (Asbestos) General Solid Waste (non-putrescible).

Drilling spoil from well installation locations was collected and stored in a 150L drum which was retained onsite; material within this drum is suitable to be retained onsite however if disposed offsite also meets the General Solid Waste (non-putrescible) criteria.



DETAILED SITE INVESTIGATION

Results

8.3 GROUNDWATER RESULTS

8.3.1 Groundwater Field Parameters

Stabilised groundwater quality parameters recorded during a sampling event on 31 May 2023 are summarised in **Table 8-4** below. Field records and calibration certificates are presented in **Appendix F** and **Appendix G**.

Table 8-4 Stabilised Physiochemical Field Parameters

Well ID	pH	EC ($\mu\text{S}/\text{cm}$)	DO (mg/L)	Temp ($^{\circ}\text{C}$)	Redox Potential ¹ (mV)	Observations (e.g. colour, turbidity)
MW01	5.14	526.1	44.9	19.9	179.7	Brown, moderate turbidity, insufficient flow to stabilize, sampled with bailer.
MW02	5.12	352.0	29.4	19.9	185.6	Light brown, low turbidity
MW03	4.99	706.0	3.9	19.8	170.2	Cloudy, low turbidity
MW04	6.01	100.9	27.4	21.3	73.3	Light brown, moderate turbidity

SWL – standing/static water level

EC – electrical conductivity

DO – dissolved oxygen

1 – Redox potential as recorded in field, uncorrected

8.3.2 Well Gauging and Levels

Each well was gauged using an oil/water interface probe to assess for the presence of light non-aqueous phase liquid (LNAPL) and to measure the standing water level. Each well was surveyed by Stantec to measure the top of casing and ground level to establish the relative level of the groundwater table and to assist with determining groundwater flow direction. A summary of the gauging and survey data is provided below in **Table 8-5**.

Table 8-5 Groundwater Levels

Well ID	Well depth (mbgl)	SWL (m btoc)	Elevation TOC (m AHD)	Elevation SWL (m AHD)	LNAPL
MW01	1.44	1.34	5.92	4.58	Not detected
MW02	3.7	1.34	5.85	4.51	Not detected
MW03	8.88	2.24	11.93	9.69	Not detected
MW04	4.2	3.3	14.40	11.10	Not detected

SWL: standing water level

TOC: top of casing

RL: relative level

AHD: Australian height datum



DETAILED SITE INVESTIGATION

Results

MW01 and MW02 were installed next to each other as “nested” wells to assess if there were two potential water bearing zones based on observations of soil saturation and inflows during previous test pitting. Wells were screened across these two potential zones however based upon the similar measured SWL and physiochemical parameters the observed change in soil saturation and inflows is now considered to be more likely associated with soil properties (low permeability / porosity) rather than two independent water bearing zones.

8.3.3 Laboratory Results

Table 8-6 summarises exceedances of adopted groundwater criteria.

Table 8-6 Groundwater criteria exceedances

Analyte		Copper (filtered)	Mercury (filtered)	Nickel (filtered)	Zinc (filtered)	Perfluorooctane sulfonic acid (PFOS)
Unit		µg/L	µg/L	µg/L	µg/L	µg/L
EQL		1	0.1	1	5	0.0002
ANZG (2018) Marine water 95% toxicant DGVs		1.3	0.4	70	15	
ANZG (2018) Marine water 99% toxicant DGVs			0.1	7		
PFAS NEMP 2020 Interim Marine 99%						0.00023
ANZECC 2000 Irrigation - Short-term trigger value		5,000	2	2,000	5,000	
ANZECC 2000 Irrigation - Long-term trigger value		200	2	200	2,000	
Location	Sample ID					
MW01	MW01	-	2.3	49	160	0.0029
MW02	MW02	14	-	27	200	0.0041
MW03	MW03	6	-	13	69	0.0012
MW03	QA100	7	-	14	68	0.0013
MW03	QC100	8	-	16	82	0.0010
MW04	MW04	-	-	18	34	0.0007

“-” – Value below applicable criteria and/or is a non-detect

The following analytes were not measured above LOR however LOR was above the adopted criteria for the analyte. Analytes are from the OCP, OPP, chlorinated hydrocarbon and phthalate chemical groups, OCP and OPP were measured at trace levels.

- 4,4-DDE
- Aldrin
- DDT
- Endosulfan
- Endrin
- g-BHC (Lindane)
- Heptachlor
- Methoxychlor
- Azinophos methyl
- Chlorpyrifos
- Fenitrothion
- Carbofuran
- Parathion
- Profenofos



DETAILED SITE INVESTIGATION

Results

- Hexachlorocyclopentadiene
- Bis(2-ethylhexyl)phthalate



DETAILED SITE INVESTIGATION

QA/QC Assessment

9.0 QA/QC ASSESSMENT

The field and laboratory quality were assessed against the data quality indicators Table 5-2.

Table 9-1: Fieldwork DQI implementation assessment

Field Quality Indicator	Conformance	Comment
SOPs are appropriate and complied with.	Yes	Reusable equipment, where used, was decontaminated on site and rinsates collected / analysed to confirm the effectiveness of the decontamination procedure.
Field duplicates and Blind field duplicates are collected and analysed at a rate of 5% (1 per 20 samples).	Partial	Refer to Table 7-2 and Table 7-3 . Soil - Replicates for VOC and SVOC not analysed, replicates for PFAS analysed at 1 in 32.
Use of calibrated equipment.	Yes	Refer to Appendix G
Samples <30% Relative Percentage Difference (RPD)	Partial	Refer to Table 9-4 below. Outliers for metals in soil only, inferred to be associated with soil heterogeneity
Analysis of rinsate sample collected at rate of 1 per day.	Yes	Rinsate samples only required during groundwater monitoring as reusable equipment was not used during soil sampling.
Trip spike and trip blanks were used.	No	No spikes or blanks used or analysed
Appropriate media sampled.	Yes	
Preservation and storage of samples upon collection and during transport to the laboratory occurs.	Yes	
Sampling is undertaken by an experienced sampler.	Yes	
All critical locations sampled.	Yes	Asbestos in soil near stables delineated
All samples collected (from grid and at depth).	Yes	
Suitable records of field work are documented.	Yes	See Appendix F .
Completed laboratory sample chain-of-custody and documentation.	Yes	See Appendix E .
Same SOP is used on each field occasion.	Yes	
Climatic conditions are documented.	Yes	



DETAILED SITE INVESTIGATION

QA/QC Assessment

Table 9-2 Laboratory DQI conformance assessment

Laboratory Quality Indicator	Conformance	Comment
Laboratory analyses of laboratory and inter-laboratory duplicates, field duplicates, laboratory prepared volatile trip spikes.	Yes	See Appendix E .
Laboratory holds NATA-accreditation for the analyses.	Yes	See Appendix E
Laboratory analysis of: field blanks, rinsate blank, reagent blank, method blank, matrix spike, matrix spike duplicate, surrogate spike, reference material, laboratory control sample, laboratory-prepared spikes. Results are within acceptance limits.	Partial	Outliers summarized in Table 9-5 .
Review of RPD values for field and laboratory duplicates to provide an indication that the samples are generally homogeneous, with no unacceptable instances of significant sample matrix heterogeneities.	Yes	Refer to Table 9-4 below. Outliers for metals in soil only, inferred to be associated with soil heterogeneity
The appropriateness of collection methodologies, handling, storage and preservation techniques will be assessed to ensure/confirm there was minimal opportunity for sample interference or degradation (i.e. volatile loss during transport due to incorrect preservation / transport methods).	Yes	
Rinsate samples used when sampling equipment is reused have analytical results <LOR.	Partial	Detection of mercury above LOR in rinsate blank
All COPC are analysed.	Yes	
Appropriate methods and PQLs are implemented.	Partial	See Section 8.3.3 , some PQL above adopted criteria.
Sample documentation is complete.	Yes.	See Appendix E
Samples are analysed within holding times.	Yes.	
Same laboratories are used and justification is given where differences occur.	Yes	Same primary and secondary laboratory for full program
Same analytical methods, PQL, and units of measurement are used.	Yes	Some acceptable variation between primary and secondary laboratory

The QA/QC samples analysed during the sampling program are summarised below in **Table 9-3** including inter- and intra-laboratory duplicate pairings. Due to an error on the COC only replicate samples were



DETAILED SITE INVESTIGATION

QA/QC Assessment

analysed for TP135_1, as a results the replicate analysed at the primary laboratory has been treated as a primary sample for the purposes of QA/QC assessment. Relative Percentile Differences between primary and duplicate samples are presented in the data summary tables in **Table 9-4**.

Table 9-3 Field duplicate sample summary

Sample Type	Matrix	Primary Sample	Intra-lab Replicate	Inter-lab Replicate
Field Replicates	Soil	TP105_0.5	QA100	QC100
		TP106_2	QA200	QC200
		TP107_0.1	QA300	QC300
		TP116_0.1	QA400	QC400
		TP120_0.5	QA500	QC500
		TP123_0.1	QA700	QC700
		QA100 – TP135_1	-	QC100
	Water	MW03	QA100	QA200
Rinsate	Water	Rinsate_310523	-	-

With the exception of the RPD exceedances noted in **Table 9-4** all RPD results were within the acceptance criteria nominated in **Table 5-2**. The variation between samples is minor and in metals only and likely the result of natural heterogeneity within the soil profile. The exceedances noted are not considered to impact the suitability of the report findings as generally, results were both below criteria. Replicate results have been considered alongside results for the purposes of assessing site suitability and risk to receptors, as a result the highest result from each sample location has been considered in all cases.

Table 9-4 RPD exceedances summary

Primary Sample	Replicate Sample	Analyte	Primary Result (mg/kg)	Replicate Result (mg/kg)	RPD (%)
TP105_0.5	QA100	Copper	13	44	109
		Zinc	53	31	52
	QC100	Chromium	6.8	13	63
		Copper	13	18	32
TP116_0.1	QA400	Zinc	130	260	67
	QC400	Copper	10	26	89
TP120_0.5	QA500	Chromium	7.5	21	95
QA100 – TP135_1	QC100-TP135_1	Nickel	27	16	51

A single rinsate sample was collected during the investigation during groundwater sampling from the interface probe which was the only piece of equipment to potentially contact sample media between locations. Mercury was detected in the rinsate above LOR (0.03 µg/L). As the rinsate was collected



DETAILED SITE INVESTIGATION

QA/QC Assessment

between sample locations MW01 and MW02 this is considered to reflect incomplete decontamination between these locations however as mercury was not measured at MW02 this is not considered to significantly impact results or conclusions.

9.1 LABORATORY QA/QC

In accordance with Stantec's Quality Assurance and Quality Control (QA/QC) procedures and AS4482.1 (2005), samples were stored in insulated transport containers containing ice and delivered to the designated laboratories under Chain of Custody documentation following sample collection. Chain of Custody records are included in **Appendix E**.

SGS Environmental and EnviroLab, the chosen analytical laboratories are NATA-accredited and undertook internal QA/QC procedures which include the analysis of method blanks, internal duplicate samples, laboratory control samples, matrix spikes and surrogate recovery. Additionally, laboratory QA/QC procedures include sample receipt, logging, storage, preservation and analysis within the method specified holding time.

A review of the laboratory QA/QC procedures indicated that, with the exception of the outliers noted in **Table 9-5**, laboratory QA/QC were recorded within acceptance criteria, samples were received and stored appropriately and all samples were analysed within the specified holding time.

Table 9-5 Laboratory QA/QC outlier's summary

Laboratory	Report ID	Analyte	Sample	QA/QC Outlier	Notes
SGS	SE247181	SVOC	TP101_0.5	Surrogate recovery outside of acceptable limit	At least 2 of 3 surrogates are within acceptance criteria.
		VOC, vTRH	HA109_0.5-0.7		
			QA300		
			TP107_1		
			TP108_2		
			TP115_0.5		
		Lead	SE247181.001	Laboratory control sample recovery outside of acceptance limits	Recovery failed acceptance criteria due to matrix interference.
	SE247182	SVOC	SE247182.040	Duplicate surrogate recovery outside of acceptable limit	At least 2 of 3 surrogates are within acceptance criteria.
		VOC, vTRH	SE247182.020	Matrix spike surrogate recovery outside acceptable limit	
	SE248449	SVOC	MW01, MW02, MW03, MW04, QC100, Rinsate	Surrogate recovery outside of acceptable limit	Recovery failed acceptance criteria due to matrix interference.



DETAILED SITE INVESTIGATION

QA/QC Assessment

Laboratory	Report ID	Analyte	Sample	QA/QC Outlier	Notes
		OCP	MW01, MW02, MW03		
SGS (cont.)	SE248449 (cont.)	OPP, PAH	MW01	Surrogate recovery outside of acceptable limit	Recovery failed acceptance criteria due to matrix interference.
		VOC, vTRH	SE28449.001	Duplicate surrogate recovery outside of acceptable limit	At least 2 of 3 surrogates are within acceptance criteria.

9.2 DATA USEABILITY

The data validation procedure employed in the assessment of the field and laboratory QA/QC data and shown above has indicated that the reported analytical results are representative of the conditions at the sample locations and that the analytical data can be relied upon for the purpose of these works. It is concluded that overall, the quality of the analytical data produced is acceptable and reliable for the intended purpose with the following items noted:

- Mercury was detected in the rinsate sample collected during water sampling. This is inferred to be from poor decontamination following sampling at MW01 where mercury was detected; no mercury was detected in subsequent samples suggesting limited impact on sample quality.
- No trip spike or trip blank samples were collected or used. Field screening for volatile compounds was conducted with a 10.6 eV PID, no significant volatile compounds were recorded in screening samples. Samples were stored chilled or on ice and delivered directly to the laboratory at the conclusion of each fieldwork event, receipt temperatures were recorded by the laboratory as between 4.7°C and 8.1°C. In addition, no significant detections of volatile compounds were recorded in samples. Based on the above, it is considered unlikely that there has been any significant unmeasured loss or cross-contamination of volatile compounds during sample handling and transit.



DETAILED SITE INVESTIGATION

Site Characterisation

10.0 SITE CHARACTERISATION

10.1 HUMAN HEALTH

Except for the identified asbestos in soils, findings of this assessment appear to indicate a low and acceptable level of risk to human health.

Friable asbestos identified adjacent west of the stables appears to be associated with the weathering of the asbestos cement sheeting roofing material. This source material should be removed before soil remediation is undertaken though impacted soil should be demarcated to prevent accidental disturbance by site users. In addition, sampling in this portion of the site attempted to target, in part, areas susceptible to impact from asbestos fibres associated with weathering of building materials, including the other side of the stable. No other impact was identified; however, further sampling for asbestos only may be warranted prior to demolition and remediation to confirm these findings.

Bonded asbestos fragments identified around the site are inferred to be associated with uncontrolled filling, poor demolition of historical structures, historical building techniques (formwork) and / or illegal tipping. Subsequent screening of soils, as per the methodology outlined within the NEPM (NEPC, 2013), at these locations did not identify any further fragments. These fragments do not present an unacceptable risk to human health however will require management during construction in accordance with SafeWork NSW guidelines on managing asbestos.

10.2 ECOLOGICAL HEALTH

10.2.1 Soil

A single detection of zinc in soil was identified in exceedance of the soil-specific criteria. The sample was surficial (from 0.1 m) and impact was not identified in underlying or adjacent samples. Based on this the impact is inferred to be associated with weathering of surficial tipping of metalliferous waste, such as galvanized steel.

The single detection of TRH F2 in exceedance of ecological criteria in a surficial sample is likely attributable to interference from coal or coal wash materials in soil and does not reflect petroleum hydrocarbon impact to soils.

Under the current and future proposed site use the risk to ecological receptors is considered low and acceptable. Care may need to be taken if this soil is nominated for re-use for landscaping purposes.

10.2.2 Groundwater

Copper, nickel and zinc concentrations are inferred to be predominately associated with background concentrations in water though the increase in concentrations at the downgradient MW01/MW02 location



DETAILED SITE INVESTIGATION

Site Characterisation

may indicate impact from an onsite source, such as metalliferous materials in fill. Mercury at MW01 is inferred to be associated with an onsite source, potentially in shallow fill as it was not detected in MW02 which was installed adjacent to MW01 but screened across a deeper portion of the profile.

Based on only one detection in a soil sample above the measured water concentration (QC300 at TP107 at 0.1m), the absence of a clear source from site history, and the detection at upgradient locations (MW03 and MW04) the measured PFOS impact is inferred to be from a regional or upgradient impact. A specific source has not been identified at this time.

Groundwater onsite is unlikely to be considered suitable for extraction and re-use onsite.

10.3 REVISED CONCEPTUAL SITE MODEL

Based on the findings of the DSI and the previous investigation, an updated CSM for the site is provided below in **Table 10-1**.



DETAILED SITE INVESTIGATION

Site Characterisation

Table 10-1 Revised Conceptual Site Model

Potential Contamination Source	Impacted Media	Contaminants of Concern	Potential Exposure Pathway	Receptors	Likelihood of Complete Exposure Pathway
Deteriorating asbestos building materials in buildings/structures and proximal soils	Surficial soils in the surrounds of buildings and structures (i.e. drip lines of roof gutters) containing asbestos.	Friable asbestos in soil.	- Direct contact - Inhalation of asbestos fibres due to damage and disturbance of asbestos.	Human: - Current and future site users under and ongoing commercial / industrial setting - Future demolition and construction workers within the site.	High: Asbestos (friable) has confirmed within surficial soils the site in areas adjacent west of the stable.
Cutting and fill materials of unknown quality or quantity across site Fly-tipped demolition and other wastes across the site Historical use as a materials storage and/or laydown area across the eastern portion of site in 1965-1991 (south-east) and 1994-2010 (north-east) including demolished buildings and foundations	- Soils - Groundwater	Human: - Asbestos Ecological: - Zinc (soil) - TRH F2 (soil) - Mercury (water) - Copper (water) - Nickel (water) - Zinc (water)	- Direct contact - Incidental ingestion - Inhalation of volatile organic compound vapours and asbestos fibres.	Human: - Current and future site users under and ongoing commercial / industrial setting - Current and future construction workers undertaking excavations onsite. Ecological: - Soil dependent biota.	Low to moderate: Potentially complete in the event of any direct interaction with impacted media (i.e. excavations, use as growth medium).



DETAILED SITE INVESTIGATION

Site Characterisation

Potential Contamination Source	Impacted Media	Contaminants of Concern	Potential Exposure Pathway	Receptors	Likelihood of Complete Exposure Pathway
Historical industrial activities upgradient and in proximity to site (i.e. motor garages)	Groundwater	PFOS	- Direct contact - Incidental ingestion - Vapour intrusion.	Ecological: Soil dependent biota.	Low: PFOS has been identified and confirmed in groundwater across the site and inferred to be from an offsite source. Groundwater is unsuitable for onsite use for irrigation and watering of landscaped areas.



DETAILED SITE INVESTIGATION

Site Characterisation

10.4 DATA GAPS AND UNCERTANTIES

Based on the findings of this investigation, the following data gaps were identified:

- Sampling in the vicinity of the stables and other structures in the north-west of the property has been constrained by the presence of hardstand and structures. Prior to and following demolition further assessment may be warranted in these areas to assess for asbestos in soil impacts from damaged and weathered structures.
- Assessment in wooded areas and on steep slopes has not been undertaken due to difficulties in access for machinery and limited safe access options for field personnel. Following clearing further assessment may be warranted if further potential indicators of contamination are identified.



DETAILED SITE INVESTIGATION

Conclusions

11.0 CONCLUSIONS

Stantec has completed a Detailed Site Investigation (with limitations as noted) to identify actual or potential contamination within the property located at, 7A-11 Racecourse Road, 1-3 Faunce Street and 38-50 Young Street, West Gosford, NSW 2250. The assessment included a grid-based assessment of site soils and targeted groundwater assessment to confirm the presence or absence of contaminants of concern identified by a previously completed PSI (Stantec, 2023).

Based on the findings of this investigation asbestos in soil contamination has been identified within the site that presents an unacceptable risk to human users of the site and will require management. Materials in this area are preliminarily classified as Special Waste (Asbestos) General Solid Waste (non-putrescible) for the purposes of offsite disposal.

Metals, TRH and PFOS contamination of soil and groundwater was identified in exceedance of adopted Tier 1 ecological criteria but are not considered to present an unacceptable risk to site users under the proposed land-use.

From the findings of this investigation, with the exception of areas impacted by friable asbestos in soil, the site is suitable for the proposed land-use as a bus depot with predominately hardstand cover. Areas impacted by friable asbestos can be made suitable following implementation of the recommendations outlined below.

11.1 RECOMMENDATIONS

Based on the findings of the DSI the following is recommended:

- Preparation of a Remediation Action Plan (RAP) that outlines the methodology for the remediation of the asbestos in soil contamination across the site.
 - Upon completion of the remediation works a Validation Assessment should be undertaken to confirm removal of asbestos contamination and suitability of impacted areas for the proposed site use.
- Where it is intended to use groundwater for any purpose, in particular application to landscape areas, undertake further assessment of groundwater contamination.
 - If no further assessment of groundwater is required, then groundwater wells should be decommissioned by grouting to surface in accordance with relevant guidance.
- Identified contamination and appropriate mitigations during construction should be considered within the Construction Environmental Management Plan (CEMP). This would include:
 - Guidance on the identification and management of additional asbestos finds.
 - Guidance on appropriate interactions with groundwater, including dewatering, where necessary.
 - An unexpected finds protocol for any other contamination issues that may not have been identified by this assessment.



DETAILED SITE INVESTIGATION

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12.0 REFERENCES

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<https://realtimedata.watarnsw.com.au/>



DETAILED SITE INVESTIGATION

Limitations

13.0 LIMITATIONS

This assessment has been undertaken in general accordance with the current “industry standards” for a Detailed Site Investigation for the purpose and objectives and scope identified in this report. These standards are set out in:

- NSW EPA (2020) *Consultants Reporting on Contaminated Land*, NSW Environment Protection Authority
- National Environment Protection (Assessment of Site Contamination) Measure (NEPM) 1999 (NEPC, 1999) as varied May 2013 (the ‘NEPM 2013’).
- AS4482.1- 2005: *Guide to the sampling and investigation of potentially contaminated soil Part 1: Nonvolatile and semi-volatile compounds*. Standards Australia (2005).

The agreed scope of this assessment has been limited for the current purposes of the Client, and based on access limitations identified herein. The assessment may not identify contamination occurring in all areas of the site or occurring after sampling was conducted. Subsurface conditions may vary considerably away from the sample locations where information has been obtained.

This Document has been provided by Stantec subject to the following limitations:

- This Document has been prepared for the particular purpose outlined in Stantec’s proposal and no responsibility is accepted for the use of this Document, in whole or in part, in other contexts or for any other purpose.
- The scope and the period of Stantec’s services are as described in Stantec’s proposal and are subject to restrictions and limitations. Stantec did not perform a complete assessment of all possible conditions or circumstances that may exist at the site referenced in the Document. If a service is not expressly indicated, do not assume it has been provided. If a matter is not addressed, do not assume that any determination has been made by Stantec in regard to it.
- Conditions may exist which were undetectable given the limited nature of the enquiry Stantec was retained to undertake with respect to the site. Variations in conditions may occur between investigatory locations, and there may be special conditions pertaining to the site which have not been revealed by the investigation and which have not therefore been considered in the Document. Accordingly, additional studies and actions may be required.
- In addition, it is recognised that the passage of time affects the information and assessment provided in this Document. Stantec’s opinions are based upon information that existed at the time of the production of the Document. It is understood that the services provided allowed Stantec to form no more than an opinion of the actual conditions of the site at the time this Document was prepared and cannot be used to assess the effect of any subsequent changes in the quality of the site, or its surroundings, or any laws or regulations.
- Any assessments made in this Document are based on the conditions indicated from published sources and the investigation described. No warranty is included, either express or implied, that the actual conditions will conform exactly to the assessments contained in this Document.



DETAILED SITE INVESTIGATION

Limitations

- Where data supplied by the client or other external sources, including previous site investigation data, have been used, it has been assumed that the information is correct unless otherwise stated. No responsibility is accepted by Stantec for incomplete or inaccurate data supplied by others.
- Stantec may have retained sub consultants affiliated with Stantec to provide services for the benefit of Stantec. To the maximum extent allowed by law, the Client acknowledges and agrees it will not have any direct legal recourse to, and waives any claim, demand, or cause of action against, Stantec's affiliated companies, and their employees, officers and directors.

This assessment report is not any of the following:

- A geotechnical report and the bore logs/test pit logs may not be sufficient for geotechnical advice.
- A site audit report or site audit statement as defined under the *Contaminated Land Management Act 1997*.
- A detailed hydrogeological assessment in conformance with NSW DEC (2007) Contaminated Sites: Guidelines for the Assessment and Management of Groundwater Contamination.
- An assessment of groundwater contaminants potentially arising from other sites or sources nearby.
- A total assessment of the study area to determine suitability of the entire parcel of land at the study area for one or more beneficial uses of land.
- A ground gas risk assessment.



APPENDIX A

Figures



Regional Vicinity

Racecourse Road
West Gosford, New South Wales

Project Code: 3000304375-GS-003
Drawn By: AC, Checked By: SM
Rev: 01
Date: 2023-01-31

Legend

- Site Boundary
- Watercourse
- Cadastre

DRAFT - NOT FOR CONSTRUCTION

Notes:
1. Map displayed in GDA2020 MGA Zone 56

- References:
- 1. Aerial imagery - MetroMap (September, 2022)
 - 2. Cadastre - NSW SS (2022)
 - 3. Watercourses - NSW SS



0 100 200 300 400 500
Metres
Scale at A3: 1:10,000





Sampling and Soil Exceedance Plan

Racecourse Road
West Gosford, New South Wales

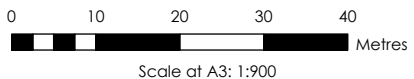
Project Code: 3000304375-GS-005
Drawn By: MMM, Checked By: JE
Figure: 2 | Rev: 01
Date: 2023-07-04

Legend

- Site Boundary
- Cadastre
- Friable Asbestos in Soil Impact
- Sample Type
 - Hand Auger
 - Monitoring Well
 - Test Pit
 - ACM Fragments in Soil
 - Ecological Exceedance - Zinc
 - Ecological Exceedance - TRH F2

Notes:
1. Map displayed in GDA2020 MGA Zone 56

References:
1. Aerial imagery (MetroMap, (Sept 2022)
2. Cadastre (NSW SS, 2022)





Groundwater Contour Plan

Racecourse Road
West Gosford, New South Wales

Project Code: 3000304375-GS-006
Drawn By: MMM, Checked By: JE
Figure: 2 | Rev: 01
Date: 2023-07-04

Legend

Site Boundary

Monitoring Well

Cadastre

Groundwater Contours

0.2m Contour

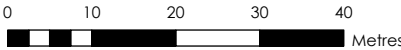
1m Contour

Notes:

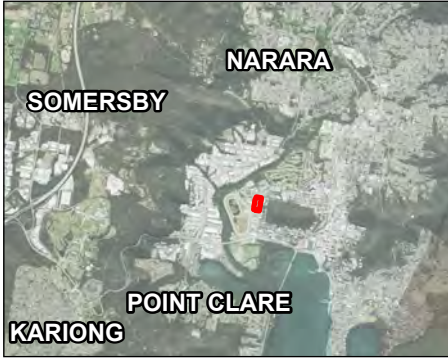
1. Map displayed in GDA2020 MGA Zone 56

References:

- Aerial imagery (MetroMap, (Sept 2022)
- Cadastre (NSW SS, 2022)



Scale at A3: 1:900



APPENDIX B

Historical Property Titles



ABN: 36 092 724 251
Ph: 02 9099 7400
(Ph: 0413 400 020)

Level 14, 135 King Street, Sydney
Sydney 2000
GPO Box 4103 Sydney NSW 2001
DX 967 Sydney

Summary of Owners Report

Address: - West Gosford (Part 1)

Description: - Lot 1 in D.P. 651249, Lot 6 in D.P. 801261, Lot 11 of Section 82 in D.P. 758466 & Lot 12 in D.P. 1100110

Lot 1 in D.P. 651249

<u>Date of Acquisition and term held</u>	<u>Registered Proprietor(s) & Occupations where available</u>	<u>Reference to Title at Acquisition and sale</u>
	This part was formerly part of Erina Street West provided for in the Crown Design of the Town of Gosford	
26.08.1960	Road now closed	
21.02.1961 (1961 to 1989)	The Gosford Brick Tile and Pipe Proprietary Limited	Volume 8104 Folio 130 (Grant) Now Volume 10167 Folio 127
12.04.1989 (1989 to 1989)	Angel Baking Company Pty. Limited	Volume 10167 Folio 127
13.07.1989 (1989 to 1996)	Dynoss Pty. Limited	Volume 10167 Folio 127 Now 1/651249
18.01.1996 (1996 to 2011)	Gosford Race Club Limited	1/651249
11.01.2011 (2011 to 2015)	Bhaajayu Pty Ltd South Pty Ltd North Coast Transit Pty Ltd Busways East Pty Ltd	1/651249
21.08.2015 (2015 to 2020)	Bhaajayu Pty Ltd South Pty Ltd Busways East Pty Ltd Verugu Pty Limited Galbrock Pty Limited	1/651249
30.11.2020 (2020 to 2021)	Bhaajayu Pty Ltd South Pty Ltd Verugu Pty Limited Galbrock Pty Limited	1/651249
03.12.2021 (2021 to Date)	# Bhaajayu Pty Ltd # Galbrock Pty Limited	1/651249

Denotes current registered proprietor

Leases: -

- Various leases were found during the course of this investigation that have expired or have since been surrendered.

Easements: -

- (H924401) Easement for drainage affecting part of the land designated (A) in the title diagram.



ABN: 36 092 724 251
Ph: 02 9099 7400
(Ph: 0413 400 020)

Level 14, 135 King Street, Sydney
Sydney 2000
GPO Box 4103 Sydney NSW 2001
DX 967 Sydney

Lot 6 in D.P. 801261

As regards the part of land numbered (1) on the attached Cadastral Records Enquiry report.

<u>Date of Acquisition and term held</u>	<u>Registered Proprietor(s) & Occupations where available</u>	<u>Reference to Title at Acquisition and sale</u>
07.11.1916 (1916 to 1917)	Arthur Fitzgerald Edward Lewis (Hotelkeeper)	Volume 2711 Folio 245
28.09.1917 (1917 to 1973)	The Minister for Public Works (Constructing Authority)	Volume 2711 Folio 245 Now Volume 2797 Folio 136
31.10.1973 (1973 to 1990)	Public Transport Commission of New South Wales Now State Rail Authority of New South Wales	Volume 2797 Folio 136 Then Volume 12981 Folio 27 Now 4/777417

As regards the part of land numbered (2) on the attached Cadastral Records Enquiry report.

<u>Date of Acquisition and term held</u>	<u>Registered Proprietor(s) & Occupations where available</u>	<u>Reference to Title at Acquisition and sale</u>
07.11.1916 (1916 to 1917)	Catherine Lightfoot (Spinster)	Volume 2711 Folio 247
15.10.1917 (1917 to 1973)	The Minister for Public Works (Constructing Authority)	Volume 2711 Folio 247 Now Volume 2806 Folio 146
31.10.1973 (1973 to 1990)	Public Transport Commission of New South Wales Now State Rail Authority of New South Wales	Volume 2806 Folio 146 Then Volume 12981 Folio 27 Now 4/777417

As regards the part of land numbered (3) on the attached Cadastral Records Enquiry report.

<u>Date of Acquisition and term held</u>	<u>Registered Proprietor(s) & Occupations where available</u>	<u>Reference to Title at Acquisition and sale</u>
07.11.1916 (1916 to 1917)	Jessie Lewis (Married Woman)	Volume 2711 Folio 246
03.10.1917 (1917 to 1973)	The Minister for Public Works (Constructing Authority)	Volume 2711 Folio 247 Now Volume 2797 Folio 106
31.10.1973 (1973 to 1990)	Public Transport Commission of New South Wales Now State Rail Authority of New South Wales	Volume 2797 Folio 106 Then Volume 12981 Folio 27 Now 4/777417



ABN: 36 092 724 251

Ph: 02 9099 7400

(Ph: 0413 400 020)

Level 14, 135 King Street, Sydney

Sydney 2000

GPO Box 4103 Sydney NSW 2001

DX 967 Sydney

Continued as regards the whole Lot 6 in D.P. 801261

<u>Date of Acquisition and term held</u>	<u>Registered Proprietor(s) & Occupations where available</u>	<u>Reference to Title at Acquisition and sale</u>
30.04.1990 (1990 to 1991)	South Australian Cold Stores Limited	4/777417 Now 6/801261
12.03.1991 (1991 to 2011)	Gosford Race Club Limited	6/801261
11.01.2011 (2011 to 2015)	Bhaajayu Pty Ltd South Pty Ltd North Coast Transit Pty Ltd Busways East Pty Ltd	6/801261
21.08.2015 (2015 to 2020)	Bhaajayu Pty Ltd South Pty Ltd Busways East Pty Ltd Verugu Pty Limited Galbrock Pty Limited	6/801261
30.11.2020 (2020 to 2021)	Bhaajayu Pty Ltd South Pty Ltd Verugu Pty Limited Galbrock Pty Limited	6/801261
03.12.2021 (2021 to Date)	# Bhaajayu Pty Ltd # Galbrock Pty Limited	6/801261

Denotes current registered proprietor

Leases: –

- Various leases were found during the course of this investigation that have expired or have since been surrendered.

Easements: – Nil



ABN: 36 092 724 251
Ph: 02 9099 7400
(Ph: 0413 400 020)

Level 14, 135 King Street, Sydney
Sydney 2000
GPO Box 4103 Sydney NSW 2001
DX 967 Sydney

Lot 11 of Section 82 in D.P. 758466 & Lot 12 in D.P. 1100110

<u>Date of Acquisition and term held</u>	<u>Registered Proprietor(s) & Occupations where available</u>	<u>Reference to Title at Acquisition and sale</u>
18.10.1917 (1917 to 1937)	The Gosford Racing Club Limited	Volume 2796 Folio 32
20.12.1937 (1937 to 1951)	John Alphaeus Sterland (Merchant)	Volume 2796 Folio 32
31.05.1951 (1951 to 1988)	The Gosford Brick Tile and Pipe Proprietary Limited	Volume 2796 Folio 32
14.09.1988 (1988 to 1989)	Angel Pies Pty. Limited	Volume 2796 Folio 32
13.07.1989 (1989 to 1996)	Dynoss Pty. Limited	Volume 2796 Folio 32
18.01.1996 (1996 to 2011)	Gosford Race Club Limited	Volume 2796 Folio 32 Then 11/82/758466 & 12/1100110 Now Auto Consol 2796-32
11.01.2011 (2011 to 2015)	Bhaajayu Pty Ltd South Pty Ltd North Coast Transit Pty Ltd Busways East Pty Ltd	Auto Consol 2796-32
21.08.2015 (2015 to 2020)	Bhaajayu Pty Ltd South Pty Ltd Busways East Pty Ltd Verugu Pty Limited Galbrock Pty Limited	Auto Consol 2796-32
30.11.2020 (2020 to 2021)	Bhaajayu Pty Ltd South Pty Ltd Verugu Pty Limited Galbrock Pty Limited	Auto Consol 2796-32
03.12.2021 (2021 to Date)	# Bhaajayu Pty Ltd # Galbrock Pty Ltd	Auto Consol 2796-32

Denotes current registered proprietor

Leases: –

- Various leases were found during the course of this investigation that have expired or have since been surrendered.

Easements: – Nil

Yours Sincerely
Harrison Byrne
21st April 2023



ABN: 36 092 724 251
Ph: 02 9099 7400
(Ph: 0412 199 304)

Level 14, 135 King Street, Sydney
Sydney 2000
GPO Box 4103 Sydney NSW 2001
DX 967 Sydney

Summary of Owners Report

Address: - 7a-11 Racecourse Road & 35-50 Young Street, West Gosford, NSW 2250 (Part 2)

**Description: - Lot 20 Section 82 D.P. 758466, Lot 18 D.P. 1100223, Lot 16 D.P. 1079150,
Lot 15 D.P. 1100216 & Lots 13 & 14 D.P. 110216**

As regards to Lot 20 Section 82 D.P. 758466: -

<u>Date of Acquisition and term held</u>	<u>Registered Proprietor(s) & Occupations where available</u>	<u>Reference to Title at Acquisition and sale</u>
14.11.1916 (1916 to 1938)	Jessie Lewis (Married Woman)	Volume 2715 Folio 158 (Crown Grant)
21.12.1938 (1938 to 1947)	Arthur Stephen Sterland (Merchant)	Volume 2715 Folio 158
30.07.1947 (1947 to 1951)	Arthur Stephen Sterland (Merchant) John Alphaeus Sterland (Merchant)	Volume 2715 Folio 158 Now Volume 5781 Folios 138 & 139
16.05.1951 (1951 to 1961)	Sterland Bros. (Property) Pty. Limited	Volume 5781 Folios 138 & 139 Now Volume 6413 Folio 155
10.11.1961 (1961 to 1988)	Gosford Brick Tile and Pipe Proprietary Limited	Volume 6413 Folio 155
30.06.1988 (1988 to 2000)	Kenneth Langdon Edwards Doreen Olive Kenneth	Volume 6413 Folio 155 Now 20/82/758466
22.03.2000 (2000 to 2011)	Gosford Race Club Limited	20/82/758466
11.01.2011 (2011 to 2015)	Bhaajayu Pty Ltd South Pty Ltd North Coast Transit Pty Ltd Busways East Pty Ltd	20/82/758466
21.08.2015 (2015 to 2020)	Bhaajayu Pty Ltd South Pty Ltd Busways East Pty Ltd Verugu Pty Limited Galbrock Pty Limited	20/82/758466
30.11.2020 (2020 to 2021)	Bhaajayu Pty Ltd South Pty Ltd Verugu Pty Limited Galbrock Pty Limited	20/82/758466
03.12.2021 (2021 to Date)	# Bhaajayu Pty Ltd # Galbrock Pty Limited	20/82/758466

Denotes current registered proprietor

Leases: - NIL

Easements: - NIL

Email: mark.groll@infotrack.com.au
Email: taylor.wilson@infotrack.com.au



ABN: 36 092 724 251
Ph: 02 9099 7400
(Ph: 0412 199 304)

Level 14, 135 King Street, Sydney
Sydney 2000
GPO Box 4103 Sydney NSW 2001
DX 967 Sydney

As regards to Lot 18 D.P. 1100223: -

<u>Date of Acquisition and term held</u>	<u>Registered Proprietor(s) & Occupations where available</u>	<u>Reference to Title at Acquisition and sale</u>
24.10.1917 (1917 to 1938)	Arthur Fitzgerald Edward Lewis (Hotel Keeper)	Volume 2797 Folio 149
02.02.1938 (1938 to 1938)	Permanent Trustee Company of New South Wales (Transmission Application not investigated)	Volume 2797 Folio 149
22.06.1938 (1938 to 1951)	Arthur Stephen Sterland (Merchant)	Volume 2797 Folio 149
16.11.1951 (1951 to 1951)	Maurice Arthur Kemp Sterland (Merchant) Valda Olive Vaughan (Married Woman) (Transmission Application not investigated)	Volume 2797 Folio 149
16.11.1951 (1951 to 1988)	Gosford Brick Tile and Pipe Proprietary Limited	Volume 2797 Folio 149
30.06.1988 (1988 to 2000)	Kenneth Langdon Edwards Doreen Olive Kenneth	Volume 2797 Folio 149
22.03.2000 (2000 to 2011)	Gosford Race Club Limited	Volume 2797 Folio 149 Now 18/1100223
11.01.2011 (2011 to 2015)	Bhaajayu Pty Ltd South Pty Ltd North Coast Transit Pty Ltd Busways East Pty Ltd	18/1100223
21.08.2015 (2015 to 2020)	Bhaajayu Pty Ltd South Pty Ltd Busways East Pty Ltd Verugu Pty Limited Galbrock Pty Limited	18/1100223
30.11.2020 (2020 to 2021)	Bhaajayu Pty Ltd South Pty Ltd Verugu Pty Limited Galbrock Pty Limited	18/1100223
03.12.2021 (2021 to Date)	# Bhaajayu Pty Ltd # Galbrock Pty Limited	18/1100223

Denotes current registered proprietor

Leases: - NIL

Easements: - NIL



ABN: 36 092 724 251
Ph: 02 9099 7400
(Ph: 0412 199 304)

Level 14, 135 King Street, Sydney
Sydney 2000
GPO Box 4103 Sydney NSW 2001
DX 967 Sydney

As regards to Lot 16 D.P. 1079150: -

<u>Date of Acquisition and term held</u>	<u>Registered Proprietor(s) & Occupations where available</u>	<u>Reference to Title at Acquisition and sale</u>
28.11.1917 (1917 to 1938)	Isabella Catherine Gleeson (Married Woman)	Volume 2806 Folio 178
21.12.1938 (1938 to 1951)	Arthur Stephen Sterland (Merchant)	Volume 2806 Folio 178
16.11.1951 (1951 to 1951)	Maurice Arthur Kemp Sterland (Merchant) Valda Olive Vaughan (Married Woman) (Transmission Application not investigated)	Volume 2806 Folio 178
16.11.1951 (1951 to 1988)	Gosford Brick Tile and Pipe Proprietary Limited	Volume 2806 Folio 178
14.09.1988 (1988 to 1989)	Angel Pies Pty. Limited	Volume 2806 Folio 178
13.07.1989 (1989 to 1996)	Dynon Pty. Limited	Volume 2806 Folio 178
18.01.1996 (1996 to 2011)	Gosford Race Club Limited	Volume 2806 Folio 178 Now 16/1079150
11.01.2011 (2011 to 2015)	Bhaajayu Pty Ltd South Pty Ltd North Coast Transit Pty Ltd Busways East Pty Ltd	16/1079150
21.08.2015 (2015 to 2020)	Bhaajayu Pty Ltd South Pty Ltd Busways East Pty Ltd Verugu Pty Limited Galbrock Pty Limited	16/1079150
30.11.2020 (2020 to 2021)	Bhaajayu Pty Ltd South Pty Ltd Verugu Pty Limited Galbrock Pty Limited	16/1079150
03.12.2021 (2021 to Date)	# Bhaajayu Pty Ltd # Galbrock Pty Limited	16/1079150

Denotes current registered proprietor

Leases: - NIL

Easements: - NIL



ABN: 36 092 724 251
Ph: 02 9099 7400
(Ph: 0412 199 304)

Level 14, 135 King Street, Sydney
Sydney 2000
GPO Box 4103 Sydney NSW 2001
DX 967 Sydney

As regards to Lot 16 D.P. 1100216: -

<u>Date of Acquisition and term held</u>	<u>Registered Proprietor(s) & Occupations where available</u>	<u>Reference to Title at Acquisition and sale</u>
23.10.1917 (1917 to 1938)	Jessie Lewis (Married Woman)	Volume 2797 Folio 113
21.12.1938 (1938 to 1951)	Arthur Stephen Sterland (Merchant)	Volume 2797 Folio 113
16.11.1951 (1951 to 1951)	Maurice Arthur Kemp Sterland (Merchant) Valda Olive Vaughan (Married Woman) (Transmission Application not investigated)	Volume 2797 Folio 113
16.11.1951 (1951 to 1988)	Gosford Brick Tile and Pipe Proprietary Limited	Volume 2797 Folio 113
14.09.1988 (1988 to 1989)	Angel Pies Pty. Limited	Volume 2797 Folio 113
13.07.1989 (1989 to 1996)	Dynon Pty. Limited	Volume 2797 Folio 113
18.01.1996 (1996 to 2011)	Gosford Race Club Limited	Volume 2797 Folio 113 Now 15/1100216
11.01.2011 (2011 to 2015)	Bhaajayu Pty Ltd South Pty Ltd North Coast Transit Pty Ltd Busways East Pty Ltd	15/1100216
21.08.2015 (2015 to 2020)	Bhaajayu Pty Ltd South Pty Ltd Busways East Pty Ltd Verugu Pty Limited Galbrock Pty Limited	15/1100216
30.11.2020 (2020 to 2021)	Bhaajayu Pty Ltd South Pty Ltd Verugu Pty Limited Galbrock Pty Limited	15/1100216
03.12.2021 (2021 to Date)	# Bhaajayu Pty Ltd # Galbrock Pty Limited	15/1100216

Denotes current registered proprietor

Leases: - NIL

Easements: - NIL



ABN: 36 092 724 251
Ph: 02 9099 7400
(Ph: 0412 199 304)

Level 14, 135 King Street, Sydney
Sydney 2000
GPO Box 4103 Sydney NSW 2001
DX 967 Sydney

As regards to Lots 13 & 14 D.P. 1100206: -

<u>Date of Acquisition and term held</u>	<u>Registered Proprietor(s) & Occupations where available</u>	<u>Reference to Title at Acquisition and sale</u>
06.10.1917 (1917 to 1938)	William Lovel Davis (Accountant)	Volume 2792 Folio 191
13.10.1938 (1938 to 1939)	Charles Fairfax Waterloo Lloyd (Official Receiver)	Volume 2792 Folio 191
29.03.1939 (1939 to 1951)	John Alphaeus Sterland (Merchant)	Volume 2792 Folio 191
31.05.1951 (1951 to 1988)	Gosford Brick Tile and Pipe Proprietary Limited	Volume 2792 Folio 191
14.09.1988 (1988 to 1989)	Angel Pies Pty. Limited	Volume 2792 Folio 191
13.07.1989 (1989 to 1996)	Dynon Pty. Limited	
18.01.1996 (1996 to 2011)	Gosford Race Club Limited	Volume 2792 Folio 191 Now Auto Consol 2792-191
11.01.2011 (2011 to 2015)	Bhaajayu Pty Ltd South Pty Ltd North Coast Transit Pty Ltd Busways East Pty Ltd	Auto Consol 2792-191
21.08.2015 (2015 to 2020)	Bhaajayu Pty Ltd South Pty Ltd Busways East Pty Ltd Verugu Pty Limited Galbrock Pty Limited	Auto Consol 2792-191
30.11.2020 (2020 to 2021)	Bhaajayu Pty Ltd South Pty Ltd Verugu Pty Limited Galbrock Pty Limited	Auto Consol 2792-191
03.12.2021 (2021 to Date)	# Bhaajayu Pty Ltd # Galbrock Pty Limited	Auto Consol 2792-191

Denotes current registered proprietor

Leases: - NIL

Easements: - NIL

Yours Sincerely,
Taylor Wilson
21st April 2023

Email: mark.groll@infotrack.com.au
Email: taylor.wilson@infotrack.com.au



ABN: 36 092 724 251
Ph: 02 9099 7400
(Ph: 0412 199 304)

Level 14, 135 King Street, Sydney
Sydney 2000
GPO Box 4103 Sydney NSW 2001
DX 967 Sydney

Summary of Owners Report

Re: - 7a-11 Racecourse Road & 35-50 Young Street, West Gosford, NSW 2250

Description: - Lots 71 to 74 D.P. 810836

As regards the part tinted yellow on the attached Cadastral Records Enquiry Report

<u>Date of Acquisition and term held</u>	<u>Registered Proprietor(s) & Occupations where available</u>	<u>Reference to Title at Acquisition and sale</u>
<u>07.11.1916</u> (1916 to 1916)	Catherine Lightfoot (Spinster) Now Catherine Isabella Gleeson (Married Woman)	Volume 2711 Folio 247 (Grant)
<u>12.05.1916</u> (1916 to 1973)	Minister for Public Works (Constructing Authority for the Gosford to Gosford Racecourse)	Volume 2711 Folio 247 (Gazette) Now Volume 2806 Folio 146
<u>12.05.1916</u>	Railway Commissioners for New South Wales Intervening name changes, then Public Transport Commission of New South Wales	Volume 2711 Folio 247 (Gazette) Then Volume 2806 Folio 146 Volume 12981 Folio 27

As regards the part tinted green on the attached Cadastral Records Enquiry Report

<u>Date of Acquisition and term held</u>	<u>Registered Proprietor(s) & Occupations where available</u>	<u>Reference to Title at Acquisition and sale</u>
<u>07.11.1916</u> (1916 to 1916)	Jessie Lewis (Married Woman)	Volume 2711 Folio 246
<u>12.05.1916</u> (1916 to 1973)	Minister for Public Works (Constructing Authority?)	Volume 2711 Folio 246 (Gazette) Now Volume 2797 Folio 106
<u>12.05.1916</u>	Railway Commissioners for New South Wales Intervening name changes, then Public Transport Commission of New South Wales	Volume 2797 Folio 10 (Gazette)s Then Volume 12981 Folio 27



ABN: 36 092 724 251
Ph: 02 9099 7400
(Ph: 0412 199 304)

Level 14, 135 King Street, Sydney
Sydney 2000
GPO Box 4103 Sydney NSW 2001
DX 967 Sydney

As regards the part tinted blue on the attached Cadastral Records Enquiry Report

<u>Date of Acquisition and term held</u>	<u>Registered Proprietor(s) & Occupations where available</u>	<u>Reference to Title at Acquisition and sale</u>
<u>07.11.1916</u> (1916 to 1916)	William Lovel Davis	Volume 2711 Folio 236
<u>12.05.1916</u> (1916 to 1973)	Minister for Public Works (Constructing Authority?)	Volume 2711 Folio 236 (Gazette) Now Volume 2792 Folio 182
<u>12.05.1916</u>	Railway Commissioners for New South Wales Intervening name changes, then Public Transport Commission of New South Wales	Volume 2792 Folio 182 (Gazette) Then Volume 12981 Folio 27

As regards the part tinted pink on the attached Cadastral Records Enquiry Report

<u>Date of Acquisition and term held</u>	<u>Registered Proprietor(s) & Occupations where available</u>	<u>Reference to Title at Acquisition and sale</u>
<u>07.11.1916</u> (1916 to 1916)	William Lovel Davis	Volume 2711 Folio 235
<u>12.05.1916</u> (1916 to 1973)	Minister for Public Works (Constructing Authority?)	Volume 2711 Folio 235 Now Volume 2792 Folio 182
<u>12.05.1916</u>	Railway Commissioners for New South Wales Intervening name changes, then Public Transport Commission of New South Wales Now State Rail Authority of New South Wales	Volume 2792 Folio 182 Then Volume 12981 Folio 27

As regards the part tinted brown on the attached Cadastral Records Enquiry Report

<u>Date of Acquisition and term held</u>	<u>Registered Proprietor(s) & Occupations where available</u>	<u>Reference to Title at Acquisition and sale</u>
<u>14.11.1916</u>	The Gosford Racing Club Limited	Volume 2715 Folio 117
<u>12.05.1916</u> (1916 to 1973)	Minister for Public Works (Constructing Authority?)	Volume 2711 Folio 235 Now Volume 2796 Folio 25
<u>12.05.1916</u>	Railway Commissioners for New South Wales Intervening name changes, then Public Transport Commission of New South Wales Now State Rail Authority of New South Wales	Volume 2796 Folio 25 Then Volume 12981 Folio 27



ABN: 36 092 724 251
Ph: 02 9099 7400
(Ph: 0412 199 304)

Level 14, 135 King Street, Sydney
Sydney 2000
GPO Box 4103 Sydney NSW 2001
DX 967 Sydney

As regards the part tinted red on the attached Cadastral Records Enquiry Report

<u>Date of Acquisition and term held</u>	<u>Registered Proprietor(s) & Occupations where available</u>	<u>Reference to Title at Acquisition and sale</u>
	This part was formerly part of Erina Street West provided for in the Crown Design of the Town of Gosford	
<u>12.05.1916</u>	Public Transport Commission of New South Wales Now State Rail Authority of New South Wales	Gazette Then Volume 12981 Folio 27

Continued as regards those parts within the blue edged area.

<u>Date of Acquisition and term held</u>	<u>Registered Proprietor(s) & Occupations where available</u>	<u>Reference to Title at Acquisition and sale</u>
To 1989	Public Transport Commission of New South Wales Now State Rail Authority of New South Wales	Volume 12981 Folio 27 Now 5/777417
17.11.1989 (1989 to 1991)	Ronald Ian Lamont	5/777417 Now 71 to 74/810836

Continued as regards those parts within the green edged area.

<u>Date of Acquisition and term held</u>	<u>Registered Proprietor(s) & Occupations where available</u>	<u>Reference to Title at Acquisition and sale</u>
To 1990	Public Transport Commission of New South Wales Now State Rail Authority of New South Wales	Volume 12981 Folio 27 Now 4/777417
30.04.1990 (1990 to 1991)	South Australian Cold Stores Limited	4/777417 Now 7/801261
12.04.1991 (1991 to 1991)	Ronald Ian Lamont	7/801261



ABN: 36 092 724 251
Ph: 02 9099 7400
(Ph: 0412 199 304)

Level 14, 135 King Street, Sydney
Sydney 2000
GPO Box 4103 Sydney NSW 2001
DX 967 Sydney

Continued as regards Lots 71 and 72 D.P. 810836.

<u>Date of Acquisition and term held</u>	<u>Registered Proprietor(s) & Occupations where available</u>	<u>Reference to Title at Acquisition and sale</u>
15.08.1991 (1991 to 2011)	Gosford Race Club Limited	71 & 72/810836
11.01.2011 (2011 to 2015)	Bhaajayu Pty Ltd South Pty Ltd North Coast Transit Pty Ltd Busways East Pty Ltd	71 & 72/810836
21.08.2015 (2015 to 2020)	Bhaajayu Pty Ltd South Pty Ltd Busways East Pty Ltd Verugu Pty Limited Galbrock Pty Limited	71 & 72/810836
30.11.2020 (2020 to 2021)	Bhaajayu Pty Ltd South Pty Ltd Verugu Pty Limited Galbrock Pty Limited	71 & 72/810836
03.12.2021 (2021 to Date)	# Bhaajayu Pty Ltd # Galbrock Pty Limited	71 & 72/810836

Denotes current registered proprietors

Easements: - NIL

Leases: -

- Various leases were found during the course of the investigation that have since expired or have been surrendered – not investigated.

Continued as regards Lots 73 and 74 D.P. 810836.

<u>Date of Acquisition and term held</u>	<u>Registered Proprietor(s) & Occupations where available</u>	<u>Reference to Title at Acquisition and sale</u>
28.10.1991 (1991 to 2011)	Gosford Race Club Limited	73 & 74/810836
11.01.2011 (2011 to 2015)	Bhaajayu Pty Ltd South Pty Ltd North Coast Transit Pty Ltd Busways East Pty Ltd	73 & 74/810836
21.08.2015 (2015 to 2020)	Bhaajayu Pty Ltd South Pty Ltd Busways East Pty Ltd Verugu Pty Limited Galbrock Pty Limited	73 & 74/810836
30.11.2020 (2020 to 2021)	Bhaajayu Pty Ltd South Pty Ltd Verugu Pty Limited Galbrock Pty Limited	73 & 74/810836
03.12.2021 (2021 to Date)	# Bhaajayu Pty Ltd # Galbrock Pty Limited	73 & 74/810836

Denotes current registered proprietors

Email: mark.groll@infotrack.com.au



ABN: 36 092 724 251
Ph: 02 9099 7400
(Ph: 0412 199 304)

Level 14, 135 King Street, Sydney
Sydney 2000
GPO Box 4103 Sydney NSW 2001
DX 967 Sydney

Continued as regards Lots 73 and 74 D.P. 810836.

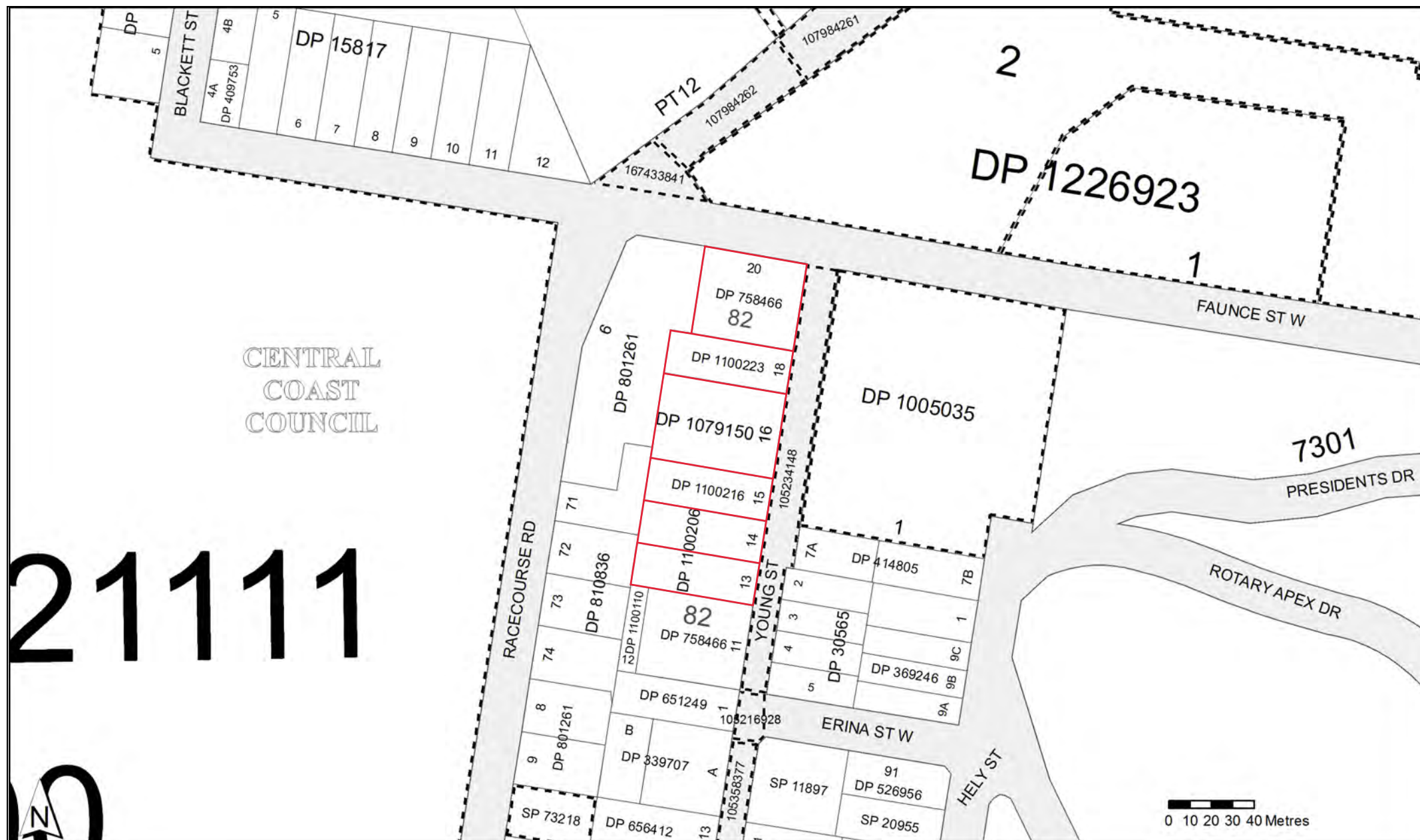
Denotes current registered proprietors

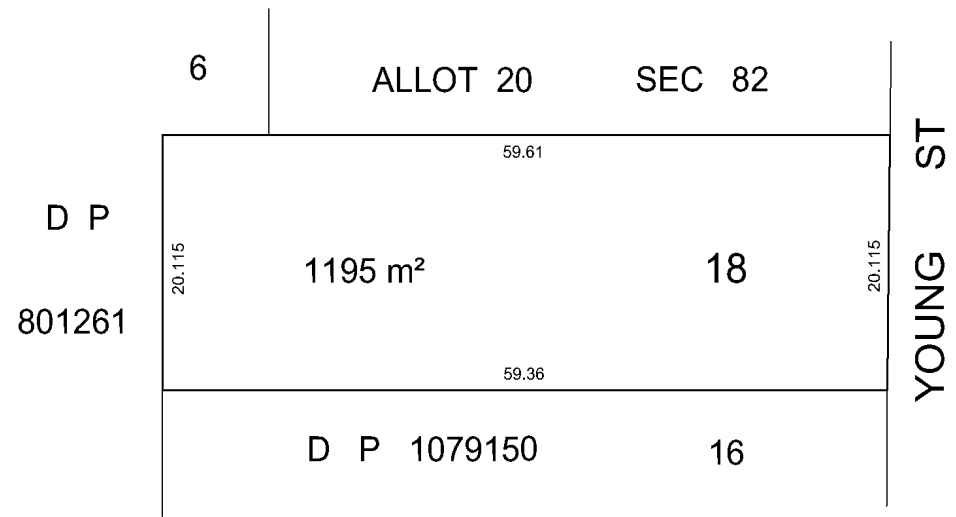
Easements: - NIL

Leases: -

- Various leases were found during the course of the investigation that have since expired or have been surrendered – not investigated.

Yours Sincerely
Mark Groll
21 April 2023





e-departmental

DP 1100223

Registered :  29.06.2006
Title System : TORRENS
Purpose : DEPARTMENTAL
Ref. Map : U2797-53
Last Plan : 61.1123

PLAN OF PART ALLOTMENT 18 OF SECTION 82
COMPRISED IN VOL 2797 FOL 149

Lengths are in metres. Reduction Ratio - NTS
LPI Ref. : TCB45

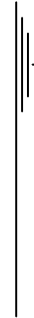
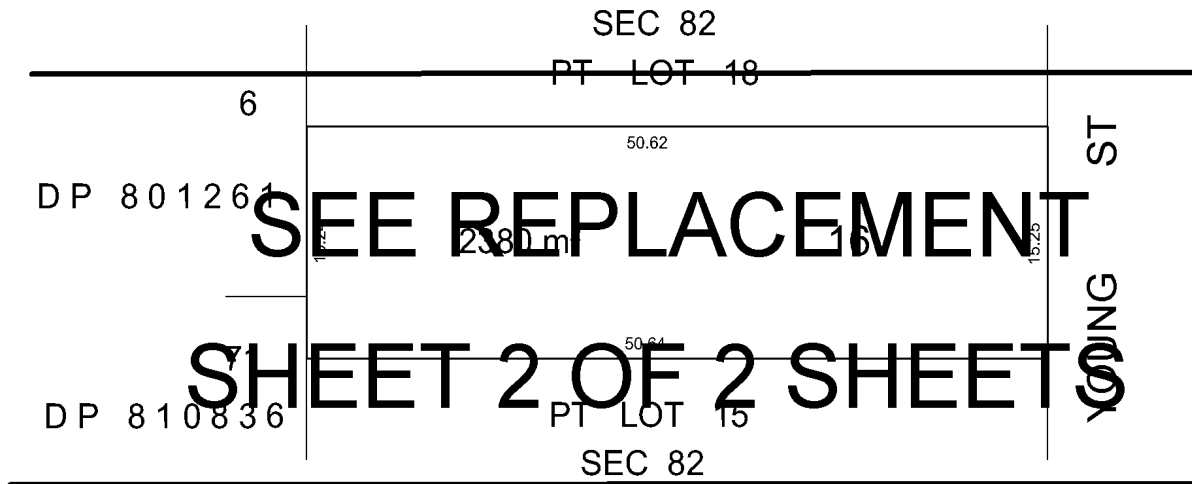
Sheet 1 of 1 sheet

L.G.A. : GOSFORD
LOCALITY: WEST GOSFORD
PARISH: GOSFORD
COUNTY: NORTHUMBERLAND

LOT	PRIOR IDENTITY

THIS PLAN HAS BEEN PREPARED TO PROVIDE
AN UNIQUE IDENTITY FOR THE LAND IN THE
CERTIFICATE OF TITLE REFERRED TO ABOVE.

IT IS NOT A CURRENT PLAN IN THE TERMS OF
7A OF THE CONVEYANCING ACT, 1919.



DP 1079150 (E)

Registered :  10.2.2005
Title System : TORRENS
Purpose : DEPARTMENTAL
Ref. Map : U2797-53
Last Plan : 61-1127

PLAN OF LAND COMPRISED IN
VOL. 2806 FOL. 178
BEING PART OF LOTS 16 AND 17 SECTION
82 IN THE TOWN OF GOSFORD

Lengths are in metres. Reduction Ratio - NTS
LPI Ref. : TCB40/15

Sheet 1 of 02 sheets

L.G.A. : GOSFORD
LOCALITY : GOSFORD
PARISH : GOSFORD
COUNTY : NORTHUMBERLAND

LOT	PRIOR IDENTITY

THIS PLAN HAS BEEN PREPARED TO PROVIDE
AN UNIQUE IDENTITY FOR THE LAND IN THE
CERTIFICATE OF TITLE REFERRED TO ABOVE.

IT IS NOT A CURRENT PLAN IN THE TERMS OF
7A OF THE CONVEYANCING ACT, 1919.

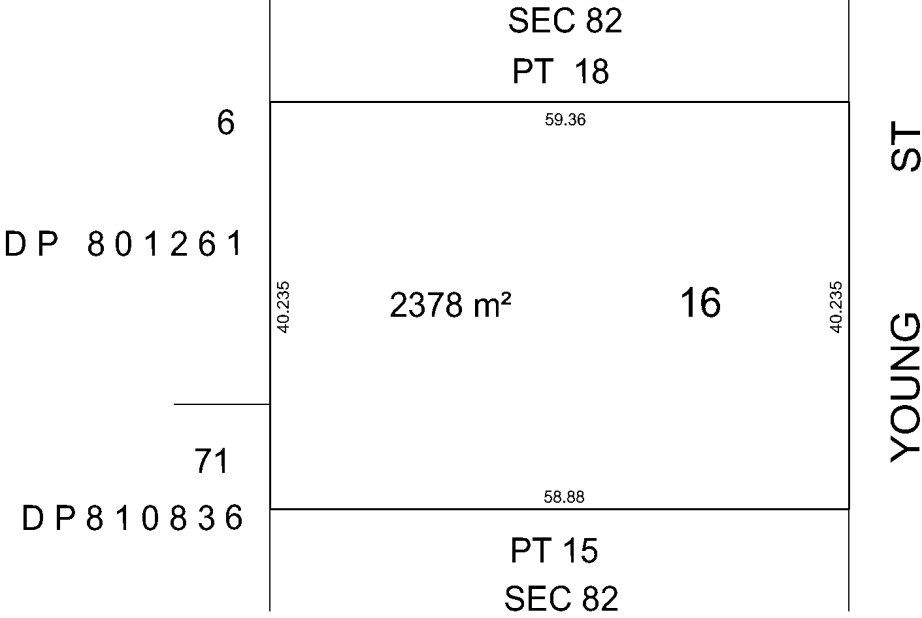


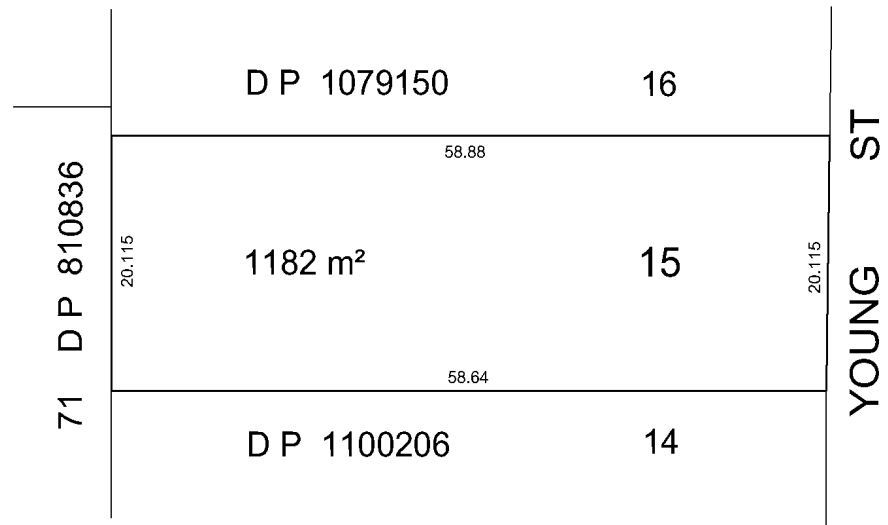
DP 1079150

Registered :  10.2.2005

This is sheet 2 of 2 sheets

Signatures and seals only





e-departmental

DP 1100216

Registered :  29.06.2006

Title System : TORRENS

Purpose : DEPARTMENTAL

Ref. Map : U2797-53

Last Plan : 61.1123

PLAN OF PART ALLOTMENT 15 OF SECTION 82
COMPRISED IN VOL 2797 FOL 113

Lengths are in metres. Reduction Ratio - NTS
LPI Ref. : TCB45

Sheet 1 of 1 sheet

L.G.A. : GOSFORD
LOCALITY: WEST GOSFORD
PARISH: GOSFORD
COUNTY: NORTHUMBERLAND

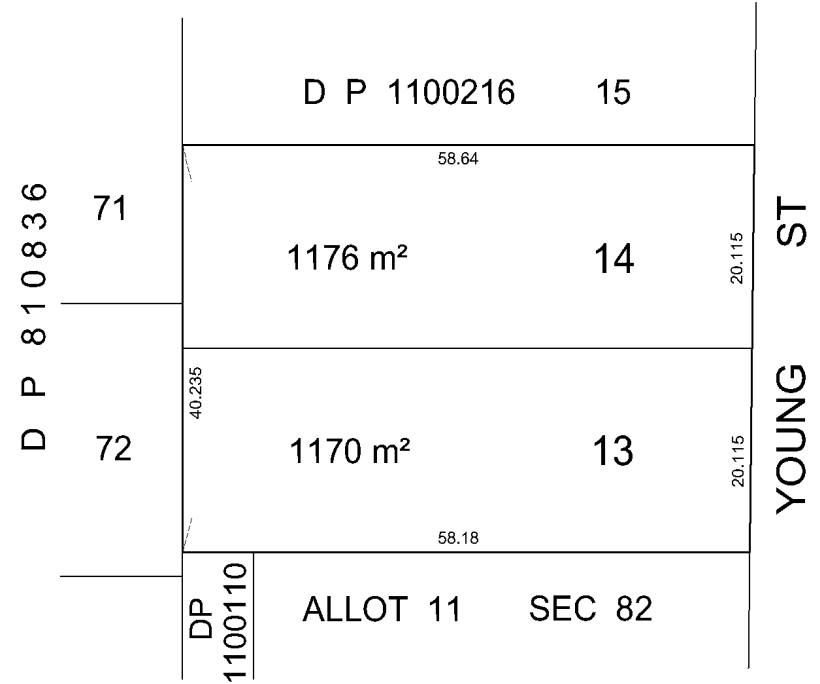
LOT	PRIOR IDENTITY

THIS PLAN HAS BEEN PREPARED TO PROVIDE
AN UNIQUE IDENTITY FOR THE LAND IN THE
CERTIFICATE OF TITLE REFERRED TO ABOVE.

IT IS NOT A CURRENT PLAN IN THE TERMS OF
7A OF THE CONVEYANCING ACT, 1919.



Full dimensions and/or area(s) are not available for all lots. Any division of the lands herein may necessitate the lodgement of a plan of survey.



e-departmental

DP 1100206

Registered :  29.06.2006
Title System : TORRENS
Purpose : DEPARTMENTAL
Ref. Map : U2797-53
Last Plan : 61.1123

PLAN OF PART ALLOTMENTS 13 & 14
OF SECTION 82 COMPRISED IN
VOL 2792 FOL 191

Lengths are in metres. Reduction Ratio - NTS
LPI Ref. : TCB45

Sheet 1 of 1 sheet

L.G.A. : GOSFORD
LOCALITY: WEST GOSFORD
PARISH: GOSFORD
COUNTY: NORTHUMBERLAND

LOT	PRIOR IDENTITY
13	PT ALLOT 13 OF SEC 82
14	PT ALLOT 14 OF SEC 82

THIS PLAN HAS BEEN PREPARED TO PROVIDE AN UNIQUE IDENTITY FOR THE LAND IN THE CERTIFICATE OF TITLE REFERRED TO ABOVE.
IT IS NOT A CURRENT PLAN IN THE TERMS OF 7A OF THE CONVEYANCING ACT, 1919.



SEARCH DATE

21/4/2023 9:16AM

FOLIO: 20/82/758466

First Title(s): SEE PRIOR TITLE(S)

Prior Title(s): VOL 6413 FOL 155

Recorded	Number	Type of Instrument	C.T. Issue
23/3/1990		TITLE AUTOMATION PROJECT	LOT RECORDED FOLIO NOT CREATED
6/1/1993		CONVERTED TO COMPUTER FOLIO	FOLIO CREATED CT NOT ISSUED
16/11/1994		AMENDMENT: TITLE DIAGRAM	
22/3/2000	6658137	TRANSFER Whole	EDITION 1
13/11/2000	7200322	MORTGAGE	EDITION 2
11/1/2011	AF937148	DISCHARGE OF MORTGAGE	
11/1/2011	AF937149	TRANSFER Whole	EDITION 3
21/8/2015	AJ698224	TRANSFER WITHOUT MONETARY CONSIDERATION	Change of Shares
21/8/2015	AJ698225	TRANSFER	EDITION 4
24/10/2016	AK866623	MORTGAGE	EDITION 5
8/9/2018	AN695391	DEPARTMENTAL DEALING	EDITION 6 CORD ISSUED
7/2/2019	AP46913	DISCHARGE OF MORTGAGE	EDITION 7
31/12/2019	AP808964	TRANSFER	Sale of half Shares owned by Busways East Pty Ltd EDITION 8
30/11/2020	AQ600960	TRANSFER	Sale of remaining Shares of Busways East Pty Ltd EDITION 9
3/12/2021	AR685342	TRANSFER	EDITION 10

*** END OF SEARCH ***

Form: 01T
Licence: 05-11-638
Licensee: Softdocs
E&A Lawyers

(14)

TRANSFER
New South Wales
Real Property Act 1900



AF937149L

PRIVACY NOTE: Section 31B of the Real Property Act 1900 (RP Act) authorises the Registrar General to collect the information required by this form for the establishment and maintenance of the Real Property Act Register. Section 96B RP Act requires that the Register is made available to any person for search upon payment of a fee, if any.

STAMP DUTY

Office of State Revenue use only

180

Office of State Revenue	
NSW Treasury	1712
Client No: 94286478	
Duty: \$10.00	Trans No: 6085239
Asst details:	

(A) TORRENS TITLE

71/810836, 72/810836, 73/810836, 74/810836, 6/801261, 20/82/758466, 18/1100223, 16/1079150, 15/1100216, 13/1100206, 14/1100206, 11/82/758466, 1/651249 & 12/1100110
Vol 2792 Fol 113 Vol 2806 Fol 118 Vol 2792 Fol 119

(B) LODGED BY

Document Collection Box	Name, Address or DX, Telephone, and Customer Account Number if any	CODES
272N	EDINCTION & ALFONSO LAWYERS. 125 177 J.	T JT
	Reference (optional): MS/100 479	TJ TW

(C) TRANSFEROR

GOSFORD RACE CLUB LIMITED ACN 003 846 124

(D) CONSIDERATION The transferor acknowledges receipt of the consideration of \$ 5,335,000.00 and as regards the land

(E) ESTATE specified above transfers to the transferee an estate in fee simple.

(F) SHARE TRANSFERRED

(G) Encumbrances (if applicable):

(H) TRANSFEE

BHAAJAYU PTY LTD ACN 084 980 263 (80/100 share), SOUTH PTY LTD ACN 084 946 083 (5/100 share), NORTH COAST TRANSIT PTY LTD ACN 106 201 834 (5/100 share) and BUSWAYS EAST PTY LTD ACN 001 910 854 (10/100 share)

(I) TENANCY: Tenants in Common in Unequal Shares

DATE 07/10/10

(J) Certified correct for the purposes of the Real Property Act 1900 and executed on behalf of the corporation named below by the authorised person(s) whose signature(s) appear(s) below pursuant to the authority specified.

Corporation: GOSFORD RACE CLUB LIMITED

Authority: Section 127(1) of the Corporations Act 2001

Signature of authorised person:

Name of authorised person: ANSELM PETER NORRGARD
Office held: CHAIRMAN
DIRECTOR

Signature of authorised person:

Name of authorised person: James Reddy
Office held: Chief Executive Officer
Company Secretary

Certified correct for the purposes of the Real Property Act 1900 by the person whose signature appears below.

Matthew Jones
Lawyer - BA LLB LLM
Sydney, Australia

Signature: Law Society of NSW No. 21859

Signatory's name: Matthew Jones
Capacity: Solicitor for the transferee

RELODGED
10 JAN 2011
TIME: 3.50

(K) The transferee / transferee's solicitor / transferee's agent certifies that the eNOS data relevant to this dealing has been submitted and stored under eNOS ID No. Full Name: Signature:

Licence: 05-11-638
LicenSee: Softdocs
E&A Lawyers

(N.S.W. TREASURY) **TRANSFER**
1411509 26 New South Wales
Real Property Act 1900
ALTERATION NOTED



AJ698224C

PRIVACY NOTE: Section 31B of the Real Property Act 1900 (RP Act) authorises the use of this form for the establishment and maintenance of the Real Property Act Register. Section 96B RP Act requires that the Register is made available to any person for search upon payment of a fee, if any.

Extra fee raised

STAMP DUTY
18 AUG 2015

Office of State Revenue use only

NEW SOUTH WALES DUTY
12-09-2014 0007779438-001
SECTION 35(11)-ORIGINAL
NO DUTY PAYABLE

TIME: 2:40

(A) S.TORRENS TITLE
1411509 26

71/810836, 72/810836, 73/810836, 74/810836, 6/801261, 20/82/758466, 18/1100223, 16/1079150,
15/1100216, 13/1100206, 14/1100206, 11/82/758466, 1/651249 & 12/1100110
Auto Consol 2742-14
28 Auto Consol 2746-32

(B) FLODGED BYED

Document Collection Box 323X 272X	Name, Address or DX, Telephone, and Customer Account Number if any Acc No 123177 U E&A Lawyers DX 9007 MONA VILLAGE 123211X Tel: (02) 9997 2111 Reference (optional): MJ/400470 49008136 HWL	SAI GLOBAL Property DX 885 SYDNEY 02 8210 0700	CODES T TW

(C) TRANSFEROR

BHAAJAYU PTY LTD ACN 084 980 263, SOUTH PTY LTD ACN 084 946 083, NORTH COAST
TRANSIT PTY LTD ACN 106 201 834 and BUSWAYS EAST PTY LTD ACN 001 910 854

(D) CONSIDERATION

The transferor acknowledges receipt of the consideration of \$ 1.00 and as regards the land

(E) ESTATE

specified above transfers to the transferee an estate in fee simple.

(F) SHARE
TRANSFERRED

(G)

Encumbrances (if applicable):

(H) TRANSFEE

BHAAJAYU PTY LTD ACN 084 980 263 as to a 80/100 share, SOUTH PTY LTD ACN 084 946 083
as to a 5/100 share, NORTH COAST TRANSIT PTY LTD ACN 106 201 834 as to a 10/100 share
and BUSWAYS EAST PTY LTD ACN 001 910 854 as to a 5/100 share

(I)

TENANCY: Tenants in Common in Unequal Shares

DATE

20/1/2017 DATE

(J) I certify I am an eligible witness and that the transferor
signed this dealing in my presence.
[See note* below]

Certified correct for the purposes of the Real Property Act
1900 by the transferor.

Signature of witness:

Signature of transferor:

Name of witness:

SEE ANNEXURE "A"

Address of witness:

Certified correct for the purposes of the Real Property Act
1900 by the person whose signature appears below.

Signature:

Matthew Jones
Lawyer - BA LLB LLM
Sydney, Australia

Signatory's name: Matthew Jones
Capacity: Solicitor for the transferee
Law Society of NSW No. 21859

(K) The transferee / transferee's solicitor / transferee's agent certifies that the eNOS data relevant to this dealing has been submitted and
stored under eNOS ID No. 82071 Full Name: Signature:

* s117 RP Act requires that you must have known the signatory for more than 12 months or have sighted identifying documentation.

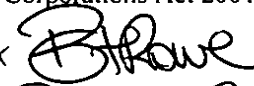
CT in prod
S99D 8/17/18 for the T

Parties: From BHAAJAYU PTY LTD, SOUTH PTY LTD, NORTH COAST TRANSIT PTY LTD AND BUSWAYS EAST PTY LTD TO
BHAAJAYU PTY LTD, SOUTH PTY LTD, NORTH COAST TRANSIT PTY LTD AND BUSWAYS EAST PTY LTD

Dated: DO / NOT / DATE

Certified correct for the purposes of the Real Property Act 1900
and executed on behalf of the company named below by the
authorised person(s) whose signature(s) appear(s) below
pursuant to the authority specified.

Company: BHAAJAYU PTY LTD ACN 084 980 263
Authority: Section 127(1) of the Corporations Act 2001

Signature of authorised person: X 

Name of authorised person: X Byron Rowe

Office held: X Director

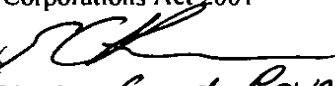
Signature of authorised person: X 

Name of authorised person: X KHERIE GOH

Office held: X SECRETARY

Certified correct for the purposes of the Real Property Act 1900
and executed on behalf of the company named below by the
authorised person(s) whose signature(s) appear(s) below
pursuant to the authority specified.

Company: SOUTH PTY LTD ACN 084 946 083
Authority: Section 127(1) of the Corporations Act 2001

Signature of authorised person: X 

Name of authorised person: X Stephen Grant Rowe

Office held: X Director

Signature of authorised person: X 

Name of authorised person: X KHERIE GOH

Office held: X SECRETARY

Certified correct for the purposes of the Real Property Act 1900
and executed on behalf of the company named below by the
authorised person(s) whose signature(s) appear(s) below
pursuant to the authority specified.

Company: NORTH COAST TRANSIT PTY LTD ACN 106 201
834

Authority: Section 127(1) of the Corporations Act 2001

Signature of authorised person: X

Name of authorised person: X

Office held: X

Certified correct for the purposes of the Real Property Act 1900
and executed on behalf of the company named below by the
authorised person(s) whose signature(s) appear(s) below
pursuant to the authority specified.

Company: BUSWAYS EAST PTY LTD ACN001 910 854
Authority: Section 127(1) of the Corporations Act 2001

Signature of authorised person: X 

Name of authorised person: X RICHARD WILLIAM ROWE

Office held: X DIRECTOR

Signature of authorised person: X 

Name of authorised person: X JOYCE ROWE

Office held: X SECRETARY

Annexure A to TRANSFER

Parties: From BHAAJAYU PTY LTD, SOUTH PTY LTD, NORTH COAST TRANSIT PTY LTD AND BUSWAYS EAST PTY LTD TO
BHAAJAYU PTY LTD, SOUTH PTY LTD, NORTH COAST TRANSIT PTY LTD AND BUSWAYS EAST PTY LTD

Dated: / /

Certified correct for the purposes of the Real Property Act 1900
and executed on behalf of the corporation named below by the
authorised person(s) whose signature(s) appear(s) below
pursuant to the authority specified.

Corporation: BHAAJAYU PTY LTD ACN 084 980 263
Authority: Section 127(1) of the Corporations Act 2001

Signature of authorised person:

Name of authorised person:

Office held:

Signature of authorised person:

Name of authorised person:

Office held:

Certified correct for the purposes of the Real Property Act 1900
and executed on behalf of the corporation named below by the
authorised person(s) whose signature(s) appear(s) below
pursuant to the authority specified.

Corporation: SOUTH PTY LTD ACN 084 946 083
Authority: Section 127(1) of the Corporations Act 2001

Signature of authorised person:

Name of authorised person:

Office held:

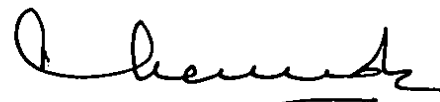
Signature of authorised person:

Name of authorised person:

Office held:

Certified correct for the purposes of the Real Property Act 1900
and executed on behalf of the corporation named below by the
authorised person(s) whose signature(s) appear(s) below
pursuant to the authority specified.

Corporation: NORTH COAST TRANSIT PTY LTD ACN 106 201
834
Authority: Section 127(1) of the Corporations Act 2001



Signature of authorised person:

Name of authorised person: George Mahendra

Tisseverasinghe

Office held: Sole Director and Sole Company Secretary

Signature of authorised person:

Name of authorised person:

Office held:

Certified correct for the purposes of the Real Property Act 1900
and executed on behalf of the corporation named below by the
authorised person(s) whose signature(s) appear(s) below
pursuant to the authority specified.

Corporation: BUSWAYS EAST PTY LTD ACN 001 910 854
Authority: Section 127(1) of the Corporations Act 2001

Signature of authorised person:

Name of authorised person:

Office held:

Signature of authorised person:

Name of authorised person:

Office held:

Form: 01T
Licence: 05-11-638
Licensee: Softdocs
HWL Ebsworth

(12)

TRANSFER

New South Wales
Real Property Act 1900



AJ698225A

PRIVACY NOTE: Section 31B of the Real Property Act 1900 (RP Act) authorises the use of this form for the establishment and maintenance of the Real Property Act Register. Section 96B RP Act requires that the Register is made available to any person for search upon payment of a fee, if any.

STAMP DUTY

1 8 AUG 2015

2.40

TIME (A) TORRENS TITLE

Office of State Revenue use only

NEW SOUTH WALES DUTY

30-04-2015

0008027963-001

SECTION 18(2)

DUTY

\$ *****10.00

6/801261, 71/810836, 72/810836, 73/810836, 74/810836, 18/1100223, 20/82/758466,
Auto Consol 2792-191, 15/1100216, 16/1079150, 1/651249, Auto Consol 2796-32

(B) LODGED BY

Document Collection Box **323X**
Name, Address or DX, Telephone, and Customer Account Number if any
LLPN: SAI GLOBAL Property
123211X DX 885 SYDNEY
02 9210 0700

CODES

T
TW

Reference (optional): 49008136 HWL

(C) TRANSFEROR

NORTH COAST TRANSIT PTY LIMITED ACN 106 201 834

(D) CONSIDERATION

The transferor acknowledges receipt of the consideration of \$ 639,528.34

and as regards the land

specified above transfers to the transferee an estate in fee simple.



10/100 OF THE ENTIRETY

Encumbrances (if applicable):

(H) TRANSFEREE

VERUGU PTY LIMITED ACN 003 884 188 AND GALBROCK PTY LIMITED ACN 078 310 657

(I)

TENANCY: Tenants in common in equal shares

DATE

..... / /

(J) Certified correct for the purposes of the Real Property Act 1900 and executed on behalf of the corporation named below by the authorised person(s) whose signature(s) appear(s) below pursuant to the authority specified.

Corporation: North Coast Transit Pty Limited

Authority: Section 127(1) of the Corporations Act 2001

Signature of authorised person:

Name of authorised person:

Office held:

Signature of authorised person:

Name of authorised person: George Mahendra

Tisseverasinghe

Office held: Sole Director and Sole Company Secretary

Certified correct for the purposes of the Real Property Act 1900 by the person whose signature appears below.

Signature:

Signatory's name: Andrew John Buchanan

Capacity: Solicitor for the transferee

(K) The transferee's solicitor certifies that the eNOS data relevant to this dealing has been submitted and stored under eNOS ID No. 682421 Full Name: Andrew John Buchanan Signature:

* s117 RP Act requires that you must have known the signatory for more than 12 months or have sighted identifying documentation.

System Document Identification

Land Registry Document Identification

Form Number:01T-e
Template Number:T_nsw16
ELN Document ID:547989032
ELN NOS ID: 547989646

TRANSFER

New South Wales
Real Property Act 1900

AP808964

Stamp Duty: 9734670-001

PRIVACY NOTE: Section 31B of the Real Property Act 1900 (RP Act) authorises the Registrar General to collect the information required by this form for the establishment and maintenance of the Real Property Act Register. Section 96B RP Act requires that the Register is made available to any person for search upon payment of a fee, if any.

LODGED BY:

Responsible Subscriber: E&A LAWYERS ABN 36118690485
Address: PO BOX 320
Mona Vale 1660
Telephone:
PEXA Subscriber Number: 3661
Customer Account Number: 500759U
Document Collection Box: 272N
Client Reference: MJ/190584/17

LAND TITLE REFERENCE

6/801261
15/1100216
2796-32
16/1079150
74/810836
71/810836
72/810836
1/651249
20/82/758466
73/810836
2792-191
18/1100223

TRANSFEROR

BUSWAYS EAST PTY LTD ACN 001910868
Registered company
Total share transferred: 25/1000

TRANSFeree

GALBROCK PTY LTD ACN 078310657
Registered company
Share of whole of land/interest: 75/ 1000
BHAAJAYU PTY LTD ACN 084980263
Registered company
Share of whole of land/interest: 800/ 1000
BUSWAYS EAST PTY LTD ACN 001910868
Registered company
Share of whole of land/interest: 25/ 1000
VERUGU PTY LTD ACN 003884188
Registered company
Share of whole of land/interest: 50/ 1000
SOUTH PTY LTD ACN 084946083
Registered company
Share of whole of land/interest: 50/ 1000
Tenancy: Tenants in Common

CONSIDERATION

The transferor acknowledges receipt of the consideration of \$144,625.00

ESTATE TRANSFERRED

FEE SIMPLE

The Transferor transfers to the Transferee the Estate specified in this Instrument and acknowledges receipt of any Consideration shown.

SIGNING FOR TRANSFEROR

I certify that:

1. The Certifier has taken reasonable steps to ensure that this Registry Instrument or Document is correct and compliant with relevant legislation and any Prescribed Requirement.
2. The Certifier has retained the evidence supporting this Registry Instrument or Document.
3. The Certifier holds a properly completed Client Authorisation for the Conveyancing Transaction including this Registry Instrument or Document.
4. The Certifier has taken reasonable steps to verify the identity of the transferor.

Party Represented by Subscriber:

BUSWAYS EAST PTY LTD

Signed By: Matthew Jones
PEXA Signer Number:8760

Signer Capacity:Practitioner Certifier
Digital Signing Certificate Number:41156

Signed for
Subscriber: E&A LEGAL SERVICES PTY LIMITED ABN 36118690485
E&A LAWYERS

Subscriber Capacity:Representative Subscriber
PEXA Subscriber Number:3661
Date: 31/12/2019

Customer Account Number:500759

SIGNING FOR TRANSFEE

I certify that:

1. The Certifier has taken reasonable steps to ensure that this Registry Instrument or Document is correct and compliant with relevant legislation and any Prescribed Requirement.
2. The Certifier has retained the evidence supporting this Registry Instrument or Document.
3. The Certifier holds a properly completed Client Authorisation for the Conveyancing Transaction including this Registry Instrument or Document.
4. The Certifier has taken reasonable steps to verify the identity of the transferee.

Party Represented by Subscriber:

GALBROCK PTY LTD

Signed By: Matthew Jones
PEXA Signer Number:8760

Signer Capacity:Practitioner Certifier
Digital Signing Certificate Number:41156

Signed for
Subscriber: E&A LEGAL SERVICES PTY LIMITED ABN 36118690485
E&A LAWYERS

Subscriber Capacity:Representative Subscriber
PEXA Subscriber Number:3661
Date: 31/12/2019

Customer Account Number:500759

System Document Identification

Land Registry Document Identification

Form Number:01T-e
Template Number:t_nsw18
ELN Document ID:553757553
ELN NOS ID: 553757554

TRANSFER
New South Wales
Real Property Act 1900

AQ600960

Stamp Duty: 9951609-001

PRIVACY NOTE: Section 31B of the Real Property Act 1900 (RP Act) authorises the Registrar General to collect the information required by this form for the establishment and maintenance of the Real Property Act Register. Section 96B RP Act requires that the Register is made available to any person for search upon payment of a fee, if any.

LODGED BY:

Responsible Subscriber: E&A LAWYERS ABN 36118690485
Address: PO BOX 320
Mona Vale 1660
Email: ryan@ealawyers.com.au
ELNO Subscriber Number: 3661
Customer Account Number: 500844
Document Collection Box: 272N
Client Reference: MJ/201509/Q

LAND TITLE REFERENCE

71/810836
73/810836
16/1079150
1/651249
15/1100216
18/1100223
2796-32
72/810836
2792-191
6/801261
74/810836
20/82/758466

TRANSFEROR

BUSWAYS EAST PTY LTD ACN 001910854
Registered company
Total share transferred: 25/1000

TRANSFeree

GALBROCK PTY LTD ACN 078310657
Registered company
Share of whole of land/interest: 100/ 1000
BHAAJAYU PTY LTD ACN 084980263
Registered company
Share of whole of land/interest: 800/ 1000
VERUGU PTY LTD ACN 003884188
Registered company
Share of whole of land/interest: 50/ 1000
SOUTH PTY LTD ACN 084946083
Registered company
Share of whole of land/interest: 50/ 1000
Tenancy: Tenants in Common

CONSIDERATION

The transferor acknowledges receipt of the consideration of \$144,635.00

ESTATE TRANSFERRED

FEE SIMPLE

The Transferor transfers to the Transferee the Estate specified in this Instrument and acknowledges receipt of any Consideration shown.

SIGNING FOR TRANSFEROR

SIGNING FOR TRANSFEROR

I certify that:

1. The Certifier has taken reasonable steps to ensure that this Registry Instrument or Document is correct and compliant with relevant legislation and any Prescribed Requirement.
2. The Certifier has retained the evidence supporting this Registry Instrument or Document.
3. The Certifier holds a properly completed Client Authorisation for the Conveyancing Transaction including this Registry Instrument or Document.
4. The Certifier has taken reasonable steps to verify the identity of the transferor.

Party Represented by Subscriber:

BUSWAYS EAST PTY LTD

Signed By: Matthew Jones
ELNO Signer Number: 8760

Signer Capacity: Practitioner Certifier
Digital Signing Certificate Number:

Signed for Subscriber: E&A LEGAL SERVICES PTY LIMITED ABN 36118690485
E&A LAWYERS

Subscriber Capacity: Representative Subscriber
ELNO Subscriber Number: 3661
Date: 30/11/2020

Customer Account Number: 500759

SIGNING FOR TRANSFeree

I certify that:

1. The Certifier has taken reasonable steps to ensure that this Registry Instrument or Document is correct and compliant with relevant legislation and any Prescribed Requirement.
2. The Certifier has retained the evidence supporting this Registry Instrument or Document.
3. The Certifier holds a properly completed Client Authorisation for the Conveyancing Transaction including this Registry Instrument or Document.
4. The Certifier has taken reasonable steps to verify the identity of the transferee.

Party Represented by Subscriber:

GALBROCK PTY LTD

Signed By: Matthew Jones
ELNO Signer Number: 8760

Signer Capacity: Practitioner Certifier
Digital Signing Certificate Number:

Signed for Subscriber: E&A LEGAL SERVICES PTY LIMITED ABN 36118690485
E&A LAWYERS

Subscriber Capacity: Representative Subscriber
ELNO Subscriber Number: 3661
Date: 30/11/2020

Customer Account Number: 500759



FOLIO: 20/82/758466

SEARCH DATE	TIME	EDITION NO	DATE
21/4/2023	8:47 AM	10	3/12/2021

LAND

LOT 20 OF SECTION 82 IN DEPOSITED PLAN 758466
AT GOSFORD
LOCAL GOVERNMENT AREA CENTRAL COAST
PARISH OF GOSFORD COUNTY OF NORTHUMBERLAND
(FORMERLY KNOWN AS ALLOTMENT 20 OF SECTION 82)
TITLE DIAGRAM CROWN PLAN 61.1123

FIRST SCHEDULE

GALBROCK PTY LTD
IN 200/1000 SHARE
BHAAJAYU PTY LTD
IN 800/1000 SHARE
AS TENANTS IN COMMON

(T AR685342)

SECOND SCHEDULE (1 NOTIFICATION)

1 LAND EXCLUDES MINERALS AND IS SUBJECT TO RESERVATIONS AND
CONDITIONS IN FAVOUR OF THE CROWN - SEE CROWN GRANT(S)

NOTATIONS

UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***



SEARCH DATE

21/4/2023 9:16AM

FOLIO: 18/1100223

First Title(s): VOL 2711 FOL 245

Prior Title(s): VOL 2797 FOL 149

Recorded	Number	Type of Instrument	C.T. Issue
-----	-----	-----	-----
29/6/2006	DP1100223	DEPOSITED PLAN	FOLIO CREATED CT NOT ISSUED
11/1/2011	AF937148	DISCHARGE OF MORTGAGE	
11/1/2011	AF937149	TRANSFER Whole	EDITION 1
21/8/2015	AJ698224	TRANSFER WITHOUT MONETARY CONSIDERATION	Change of Shares
21/8/2015	AJ698225	TRANSFER Sale of Share of North Coast Transit	EDITION 2
24/10/2016	AK866623	MORTGAGE	EDITION 3
8/9/2018	AN695391	DEPARTMENTAL DEALING	EDITION 4 CORD ISSUED
7/2/2019	AP46913	DISCHARGE OF MORTGAGE	EDITION 5
31/12/2019	AP808964	TRANSFER Sale of half Shares owned by Busways East Pty Ltd	EDITION 6
30/11/2020	AQ600960	TRANSFER Sale of remaining Shares of Busways East Pty Ltd	EDITION 7
3/12/2021	AR685342	TRANSFER	EDITION 8

*** END OF SEARCH ***



FOLIO: 18/1100223

SEARCH DATE	TIME	EDITION NO	DATE
21/4/2023	8:47 AM	8	3/12/2021

LAND

LOT 18 IN DEPOSITED PLAN 1100223

AT WEST GOSFORD

LOCAL GOVERNMENT AREA CENTRAL COAST

PARISH OF GOSFORD COUNTY OF NORTHUMBERLAND

TITLE DIAGRAM DP1100223

FIRST SCHEDULE

GALBROCK PTY LTD

IN 200/1000 SHARE

BHAAJAYU PTY LTD

IN 800/1000 SHARE

AS TENANTS IN COMMON

(T AR685342)

SECOND SCHEDULE (1 NOTIFICATION)

1 LAND EXCLUDES MINERALS AND IS SUBJECT TO RESERVATIONS AND
CONDITIONS IN FAVOUR OF THE CROWN - SEE CROWN GRANT(S)

NOTATIONS

UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***



SEARCH DATE

21/4/2023 9:16AM

FOLIO: 16/1079150

First Title(s): VOL 2711 FOL 247

Prior Title(s): VOL 2806 FOL 178

Recorded	Number	Type of Instrument	C.T. Issue
-----	-----	-----	-----
10/2/2005	DP1079150	DEPOSITED PLAN	FOLIO CREATED CT NOT ISSUED
11/1/2011	AF937148	DISCHARGE OF MORTGAGE	
11/1/2011	AF937149	TRANSFER Whole	EDITION 1
21/8/2015	AJ698224	TRANSFER WITHOUT MONETARY CONSIDERATION	Change of Shares
21/8/2015	AJ698225	TRANSFER Sale of Share of North Coast Transit	EDITION 2
24/10/2016	AK866623	MORTGAGE	EDITION 3
8/9/2018	AN695391	DEPARTMENTAL DEALING	EDITION 4 CORD ISSUED
7/2/2019	AP46913	DISCHARGE OF MORTGAGE	EDITION 5
31/12/2019	AP808964	TRANSFER Sale of half Shares owned by Busways East Pty Ltd	EDITION 6
30/11/2020	AQ600960	TRANSFER Sale of remaining Shares of Busways East Pty Ltd	EDITION 7
3/12/2021	AR685342	TRANSFER	EDITION 8

*** END OF SEARCH ***



FOLIO: 16/1079150

SEARCH DATE	TIME	EDITION NO	DATE
21/4/2023	8:47 AM	8	3/12/2021

LAND

LOT 16 IN DEPOSITED PLAN 1079150

AT GOSFORD

LOCAL GOVERNMENT AREA CENTRAL COAST

PARISH OF GOSFORD COUNTY OF NORTHUMBERLAND

TITLE DIAGRAM DP1079150

FIRST SCHEDULE

GALBROCK PTY LTD

IN 200/1000 SHARE

BHAAJAYU PTY LTD

IN 800/1000 SHARE

AS TENANTS IN COMMON

(T AR685342)

SECOND SCHEDULE (1 NOTIFICATION)

- 1 LAND EXCLUDES MINERALS AND IS SUBJECT TO RESERVATIONS AND
CONDITIONS IN FAVOUR OF THE CROWN - SEE CROWN GRANT(S)

NOTATIONS

UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***



SEARCH DATE

21/4/2023 9:16AM

FOLIO: 15/1100216

First Title(s): VOL 2711 FOL 246

Prior Title(s): VOL 2797 FOL 113

Recorded	Number	Type of Instrument	C.T. Issue
29/6/2006	DP1100216	DEPOSITED PLAN	FOLIO CREATED CT NOT ISSUED
11/1/2011	AF937148	DISCHARGE OF MORTGAGE	
11/1/2011	AF937149	TRANSFER Whole	EDITION 1
21/8/2015	AJ698224	TRANSFER WITHOUT MONETARY CONSIDERATION	Change of Shares
21/8/2015	AJ698225	TRANSFER Sale of Share of North Coast Transit	EDITION 2
24/10/2016	AK866623	MORTGAGE	EDITION 3
8/9/2018	AN695391	DEPARTMENTAL DEALING	EDITION 4 CORD ISSUED
7/2/2019	AP46913	DISCHARGE OF MORTGAGE	EDITION 5
31/12/2019	AP808964	TRANSFER Sale of half Shares owned by Busways East Pty Ltd	EDITION 6
30/11/2020	AQ600960	TRANSFER Sale of remaining Shares of Busways East Pty Ltd	EDITION 7
3/12/2021	AR685342	TRANSFER	EDITION 8

*** END OF SEARCH ***



FOLIO: 15/1100216

SEARCH DATE	TIME	EDITION NO	DATE
21/4/2023	8:47 AM	8	3/12/2021

LAND

LOT 15 IN DEPOSITED PLAN 1100216

AT WEST GOSFORD

LOCAL GOVERNMENT AREA CENTRAL COAST

PARISH OF GOSFORD COUNTY OF NORTHUMBERLAND

TITLE DIAGRAM DP1100216

FIRST SCHEDULE

GALBROCK PTY LTD

IN 200/1000 SHARE

BHAAJAYU PTY LTD

IN 800/1000 SHARE

AS TENANTS IN COMMON

(T AR685342)

SECOND SCHEDULE (1 NOTIFICATION)

1 LAND EXCLUDES MINERALS AND IS SUBJECT TO RESERVATIONS AND
CONDITIONS IN FAVOUR OF THE CROWN - SEE CROWN GRANT(S)

NOTATIONS

UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***



SEARCH DATE

21/4/2023 9:16AM

FOLIO: AUTO CONSOL 2792-191

Recorded	Number	Type of Instrument	C.T. Issue

29/6/2006	DP1100206	DEPOSITED PLAN	
29/6/2006	AC421823	CONSOL HISTORY RECORD CREATED FOR AUTO CONSOL 2792-191	

PARCELS IN CONSOL ARE:
13-14/1100206.

11/1/2011	AF937148	DISCHARGE OF MORTGAGE	
11/1/2011	AF937149	TRANSFER Whole	EDITION 1
21/8/2015	AJ698224	TRANSFER WITHOUT MONETARY CONSIDERATION	Change of Shares
21/8/2015	AJ698225	TRANSFER Sale of Share of North Coast Transit	EDITION 2
24/10/2016	AK866623	MORTGAGE	EDITION 3
8/9/2018	AN695391	DEPARTMENTAL DEALING	EDITION 4 CORD ISSUED
7/2/2019	AP46913	DISCHARGE OF MORTGAGE	EDITION 5
31/12/2019	AP808964	TRANSFER Sale of half Shares owned by Busways East Pty Ltd	EDITION 6
30/11/2020	AQ600960	TRANSFER Sale of remaining Shares of Busways East Pty Ltd	EDITION 7
3/12/2021	AR685342	TRANSFER	EDITION 8

*** END OF SEARCH ***



FOLIO: AUTO CONSOL 2792-191

SEARCH DATE	TIME	EDITION NO	DATE
21/4/2023	8:47 AM	8	3/12/2021

LAND

LAND DESCRIBED IN SCHEDULE OF PARCELS

AT WEST GOSFORD
LOCAL GOVERNMENT AREA CENTRAL COAST
PARISH OF GOSFORD COUNTY OF NORTHUMBERLAND
TITLE DIAGRAM DP1100206

FIRST SCHEDULE

GALBROCK PTY LTD
IN 200/1000 SHARE
BHAAJAYU PTY LTD
IN 800/1000 SHARE
AS TENANTS IN COMMON

(T AR685342)

SECOND SCHEDULE (1 NOTIFICATION)

1 LAND EXCLUDES MINERALS AND IS SUBJECT TO RESERVATIONS AND
CONDITIONS IN FAVOUR OF THE CROWN - SEE CROWN GRANT(S)

NOTATIONS

UNREGISTERED DEALINGS: NIL

SCHEDULE OF PARCELS

LOTS 13-14 IN DP1100206.

*** END OF SEARCH ***

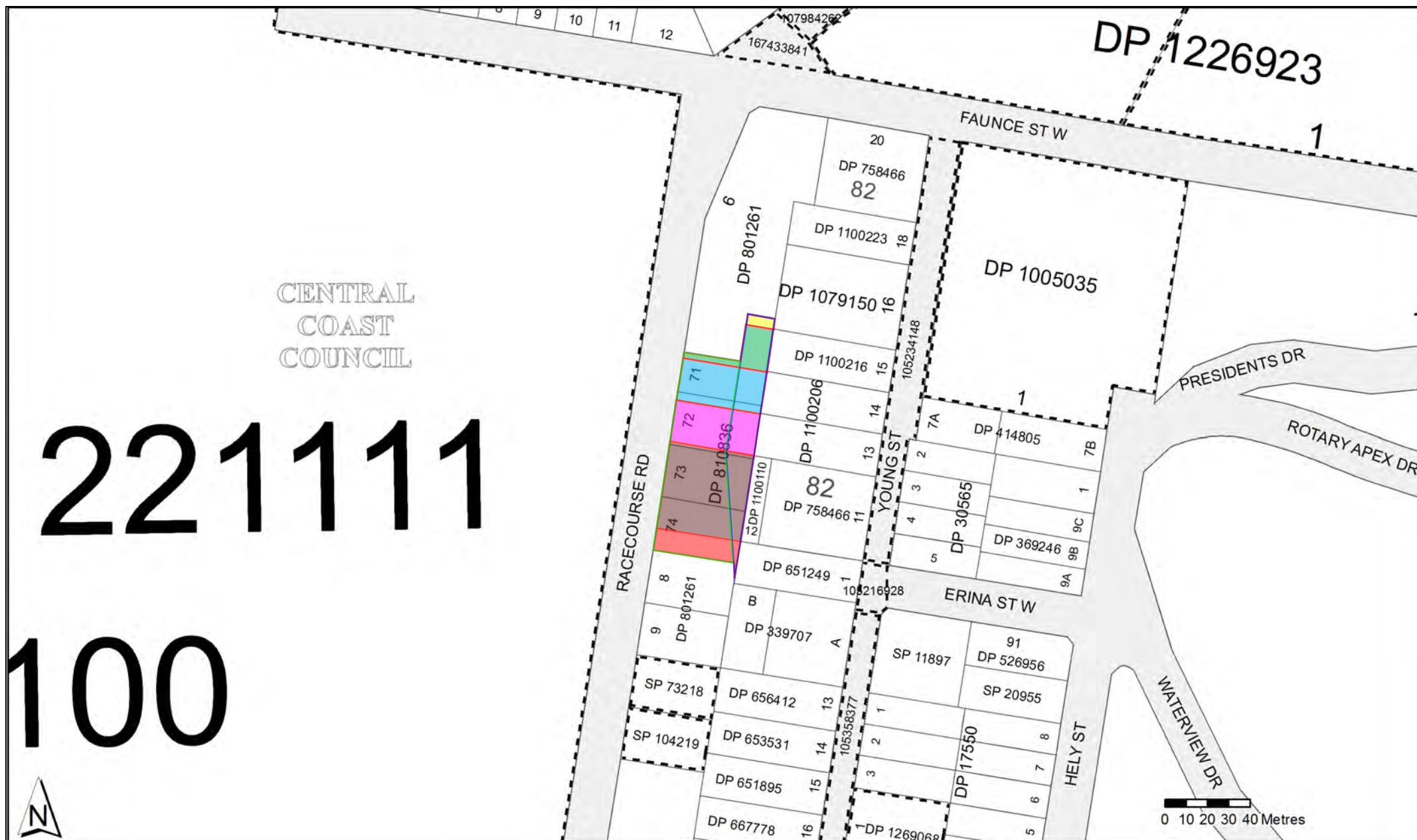
Cadastral Records Enquiry Report : Lot 72 DP 810836

Locality : WEST GOSFORD

Parish : GOSFORD

LGA : CENTRAL COAST

County : NORTHUMBERLAND



N.S.W. RYs

TO GOSFORD RACECOURSE
GOSFORD

WORKING PLAN

SCALE: 4 CHAINS TO 1 INCH.

Commencing at a point marked A at 0.2965 and terminating at a point marked B at 1M 20C 00ZL
being a distance of 0M.50C.35+L.

Plan referred to in Proclamation in the Government Gazette dated the
The land to be taken for Railway purposes shown by red lines, resumed under the Public Works Act of 1912.

Continuation of Proclamation from 0m 29c 65lks to 1m 20c 00ZLs gazetted 12th May 1916

Charted on H.O. County, Parish and Town Maps, also on original plans
Examined *W. H. H. H.* 26th January 1917
PLAN MICROFILMED
NO. 2189-3070

COUNTY OF NORTHUMBERLAND
Ms 2189 Md

2189.3070



deviation of the said line, and to make and complete the said Railway between Glenreagh and Derrigo, and to erect certain Works and Conveniences in connection therewith, His Excellency the Governor, with the advice aforesaid, has approved, under the provisions of the "Public Works Act, 1912," of the taking of certain parcels of land, particularly set out and edged red in the map or plan and Book of Reference to be seen in the Office of the Constructing Authority, Phillip-street, Sydney, and at the Office of the Clerk of Petty Sessions, Grafton: Commencing at a point marked X on plan at 14 miles 47 chains 1.96 links and terminating at a point marked Y on plan at 19 miles 2 chains 51.03 links, having a total length of 4 miles 35 chains 49.07 links. All persons, therefore, who may be interested in the said lands or affected by the said works are hereby required to forward to the said Constructing Authority, within one month from the publication of this notice in the Government Gazette, any objection that may appear to them to exist to the deviation of the said Railway or to the erection of the said works.—Dated at Sydney, this sixth day of May, in the year of our Lord one thousand nine hundred and sixteen.

[R. and T. 1916-5,810]

(L.S.) J. H. CANN,
Constructing Authority.

The Seal of the Constructing Authority was affixed hereto, at Sydney, this sixth day of May, 1916, in the presence of—

[6586]

T. B. COOPER.

[6428]

Department of Public Works,
Sydney, 8th May, 1916.

IT is hereby notified, for public information, under the provisions of section 151, subsection 5, of the "Public Works Act, 1912," that it is intended to construct a line of Railway from Wyalong to Lake Cudgellico, Part 5, in accordance with the plans and books of reference prepared in connection with the said line, which are now to be seen in the Office of the Constructing Authority, Phillip-street, Sydney, and at the Office of the Clerk of Petty Sessions, Hillston.

J. H. CANN,
Constructing Authority.

GOVERNMENT RAILWAYS.

WYALONG TO LAKE CUDGELICO, PART 5.

IT is hereby notified that the construction of a Railway from Wyalong to Lake Cudgellico, Part 5 (commencing at a point marked B on plan at 391 miles 60 chains 01.9 links, and terminating at a point marked F on plan, at 407 miles 55 chains 23 links, being a distance of 15 miles 75 chains 20.1 links), has been duly authorised under the provisions of the "Public Works Act, 1912," and there is now open for inspection, at the Office of the Secretary for Public Works, the said Secretary being the Constructing Authority for the said line, a plan of the said line and of the lands through which it will pass, together with a book of reference, in which are set forth a description of the said lands and the names of the owners and proprietors thereof, so far as the same can be ascertained. All persons, therefore, who may be interested in the said lands are hereby required to forward to the said Constructing Authority, within one month from the first date of the publication hereof, a notice in writing of any objection that may appear to them to exist to the adoption of the said line, or any part thereof, or to any of the works proposed in connection therewith.—Dated at Sydney, this eighth day of May, in the year of our Lord one thousand nine hundred and sixteen.

[R. and T. 1916-2,009]

(L.S.) J. H. CANN,
Constructing Authority.

The Seal of the Constructing Authority was affixed hereto, at Sydney, this eighth day of May, 1916, in the presence of—

[6429]

T. B. COOPER.

GOVERNMENT RAILWAYS.

GOSFORD TO GOSFORD RACECOURSE.

Notice of Confirmation of Plan and Book of Reference.

WITH reference to the notice of the Minister for Public Works, dated 14th March last, relative to the taking of certain lands required for the purpose of constructing a railway from Gosford to Gosford Racecourse, and to make and complete certain works and conveniences in connection therewith: Notice is

hereby given that, no valid objection having been made to the taking of the lands required for the said railway, or to the erection of the said works, the said plan and book of reference have been duly confirmed by His Excellency the Governor, with the advice of the Executive Council, in accordance with the "Public Works Act, 1912."

[R. and T. 1916-947]

(L.S.) J. H. CANN,
Constructing Authority.

The Seal of the Constructing Authority was affixed hereto, at Sydney, this eleventh day of May, in the year of our Lord one thousand nine hundred and sixteen, in the presence of,—

[6031]

T. B. COOPER.

COUNTRY TOWNS WATER AND SEWERAGE ACTS, 1880-1905.

BATHURST SEWERAGE—CERTIFICATE OF AMOUNT EXPENDED.

WHEREAS by Proclamation published in the Government Gazette No. 222 of the 30th December, 1914, the Governor of the State of New South Wales, in pursuance of the power in that behalf given to or vested in him, did thereby notify that the works of sewerage for the town of Bathurst, described in the Schedule thereto, constructed under the direction of the Minister for Public Works for the time being, in accordance with the provisions of the Country Towns Water and Sewerage Acts, 1880-1905, had been completed: And whereas by Proclamation published in the Government Gazette No. 31 of the 11th February, 1916, the said Governor, in pursuance of the aforesaid power, did thereby notify that the further works of sewerage for the town of Bathurst described in the Schedule thereto, constructed under the direction of the Minister for Public Works, in accordance with the provisions of the said Acts, had been completed: Now I, JOHN HENRY CANN, the Minister for Public Works for the time being in and for the said State, in accordance with the provisions of the said Acts, do hereby certify that the whole amount expended by the Government of the said State on the said works, with interest at the rate of four pounds per centum on the sums making up such amount calculated from the time such sums were expended to the thirtieth day of April, one thousand nine hundred and sixteen, inclusive, amounts to the sum of forty-nine thousand seven hundred and sixty-two pounds one shilling and one penny (£49,762 ls. 1d.).

Given under my Hand, this fourth day of May, in the year of our Lord one thousand nine hundred and sixteen.

[6786]

J. H. CANN,
Minister for Public Works.

COUNTRY TOWNS WATER AND SEWERAGE ACTS, 1880-1905.

NOWRA WATER SUPPLY—CERTIFICATE OF AMOUNT EXPENDED ON ADDITIONAL WORKS.

WHEREAS by Proclamation published in the Government Gazette No. 149 of the 18th August, 1915, the Governor of the State of New South Wales, in pursuance of the power in that behalf given to or vested in him, did thereby notify that certain additional works of water supply for the town of Nowra, constructed under the direction of the Minister for Public Works for the time being, in accordance with the provisions of the Country Towns Water and Sewerage Acts, 1880-1905, had been completed: Now I, JOHN HENRY CANN, the Minister for Public Works for the time being in and for the said State, in accordance with the provisions of the said Acts, do hereby certify that the whole amount expended by the Government of the said State on the said works, with interest at the rate of four pounds per centum on the sums making up such amount, calculated from the time such sums were expended to the thirtieth day of April, one thousand nine hundred and sixteen, inclusive, amounts to the sum of two thousand five hundred and fifty-five pounds five shillings and threepence (£2,555 5s. 3d.).

Given under my Hand, this third day of May, in the year of our Lord one thousand nine hundred and sixteen.

[6787]

J. H. CANN,
Minister for Public Works.

5345450454.

[Signature]
DEPUTY SOLICITOR

Public Transport Commission of New South Wales
OFFICE USE ONLY

NEW SOUTH WALES

**Application Pursuant to Section 31A(2) of the
Real Property Act, 1900, to bring Resumed
Land under the Provisions of the Act**

—	S 12-00	

19/12/73

Application is hereby made for the issue of a certificate of title in favour of

PUBLIC TRANSPORT COMMISSION OF NEW SOUTH WALES a corporation constituted by the
Public Transport Commission Act 1972.

(a) Insert id and plan number.

for (a) Lots 2, 4, 5, 6, 7, 12, 15 and 16 in D.P. 244192

(b) State whether whole
or part.

being ^(b) part of the land resumed by notification in *Government Gazette* dated

9th March, 1973 folio 749. (a true copy of which is set out hereunder or ~~annexed hereto~~)

NOTIFICATION OF APPROPRIATION AND RESUMPTION OF LAND FOR RAILWAYS PURPOSES
UNDER THE MINISTRY OF TRANSPORT ACT, 1932, AND THE PUBLIC WORKS ACT, 1912

WHEREAS the Public Transport Commission of New South Wales is desirous of acquiring the land referred to in the Schedule hereto for the purpose of confirming its title to such land which was acquired and has been used in connection with the authorized line of railway from Gosford to Gosford Racecourse, and whereas the said land is, in my opinion, required: Now, therefore, I, the Governor, with the advice of the Executive Council, in pursuance of the Ministry of Transport Act, 1932, and Public Works Act, 1912, do hereby direct that the said land may be acquired and taken for the purpose aforesaid, and I do declare by this notification to be published in the Government Gazette and in one or more newspapers published or circulated in the Police District wherein the said land is situated that the land referred to in the Schedule hereto is hereby appropriated and resumed for the purpose hereinbefore referred to.

SCHEDULE

All that parcel of land situate at GOSFORD in the Shire of Gosford Parish of Gosford County of Northumberland and State of New South Wales being part of land acquired for railway purposes being lots 2, 4, 5, 6, 7, 12, 15, 16 and 20 in Deposited Plan 244192 and containing an area of approximately 3989.2 square metres.

Signed at Sydney, this seventh day of February, 1973.

A. R. CUTLER, Governor.

By His Excellency's Command

M.A. MORRIS, Minister for Transport.

(c) Full name, address and occupation of authorized officer.

And (c) ALLAN REES COLEMAN, Deputy Solicitor-General, Public Transport Commission of New South Wales, hereby certify that

(1) I am authorised to make the within application;

(2) the said land has not been divested from the said Public Transport Commission of New South Wales

_____ and no estate or interest therein has been created in favour of any other person;

(3) the said land is not under the provisions of the Real Property Act, 1900, and no sale, lease or other transaction affecting it is intended to be completed prior to the issue of the certificate of title; and

(4) this application is correct for the purposes of the Real Property Act, 1900.

Dated at Sydney

this

nineteenth

day of December

19 73.

Signed in my presence by the said

ALIAN REES COLEMAN

K. D. Cowse

Signature of witness

Signature of witness
KEITH JAMES DOWSETT

Name of witness (BLOCK LETTERS)

New Certificate of Title Issued

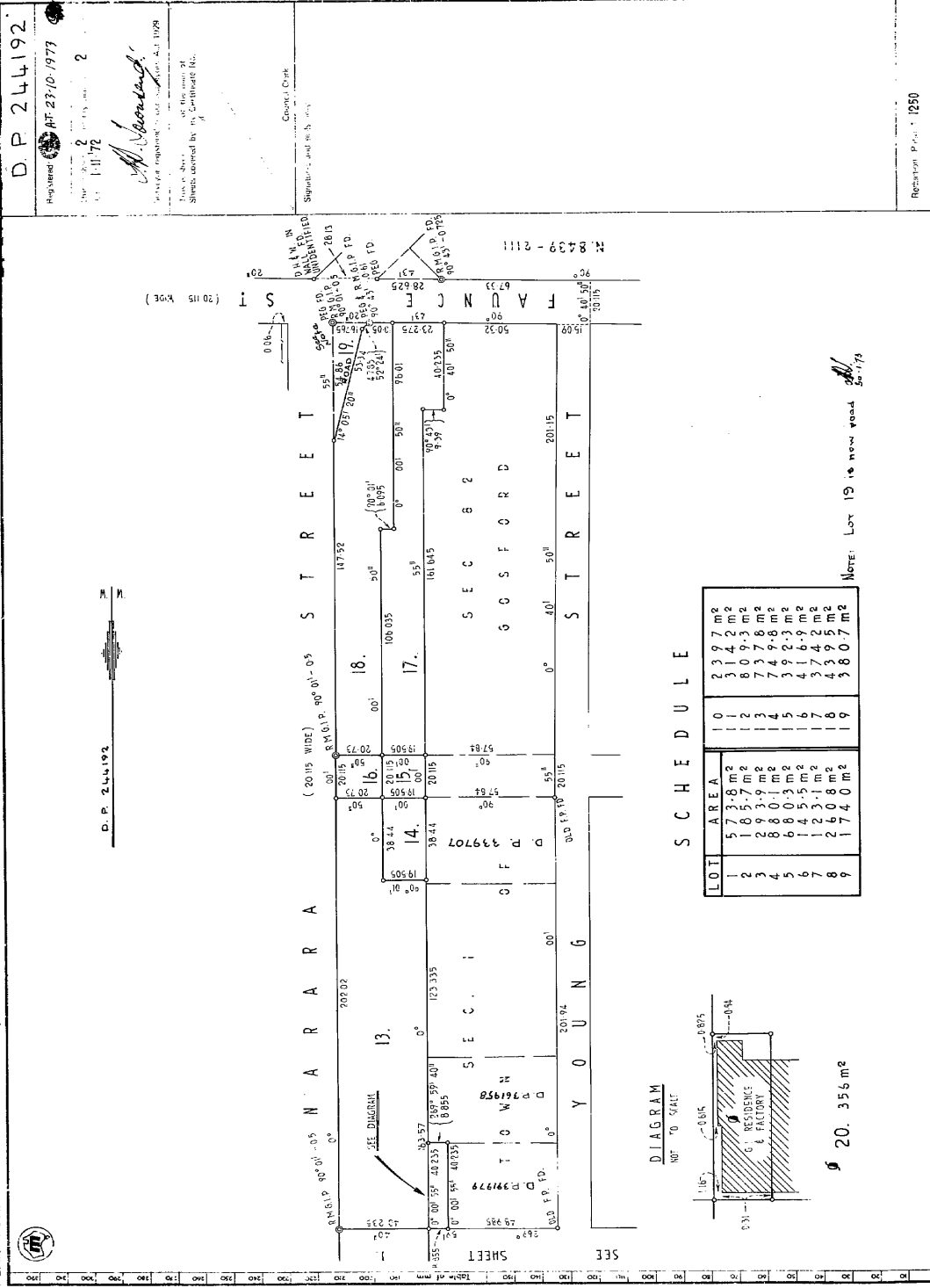
Vol. 12981 Fol. 27

TO BE LODGED IN EXAMINERS BRANCH, REGISTRAR GENERAL'S DEPARTMENT

AGREES WITH GAZETTE.

See 213 P. 173 Pt. Aff'd. 16. Sec 2. Edd. to Francis Mitchell 11 12-4-1851
See 213 P. 166 Pt. 213. 17. Sec 2. "Sophus Lord Curlews" "
See Lands for which an Crown Grant has issued.

DEPARTMENTAL USE ONLY	TO BE COMPLETED BY LODGING PARTY DEPUTY SOLICITOR Lodged by PUBLIC TRANSPORT COMMISSION OF NEW SOUTH WALES	
<i>Lots 2, 4, 5, 6, 7, 12, 15 & 16</i> <i>DP 244192 - Area 3633.2m²</i> <i>50454</i> <i>19/11/22</i>	Address: 19 YORK STREET, SYDNEY	
	Phone No.: 29-1021	
	Documents lodged herewith	
	1. _____	
	2. _____	
	3. _____	
	4. _____	
	5. _____	
	Received Documents _____	Receiving Clerk _____



AMENDMENTS AND/OR ADDITIONS MADE ON PLAN IN THE LAND TITLES OFFICE

This negative is a photograph made as a permanent record of a document in the custody of the Registrar General this day 17th May, 1994

PLAN FORM 2

Plan Drawing only to appear in this space

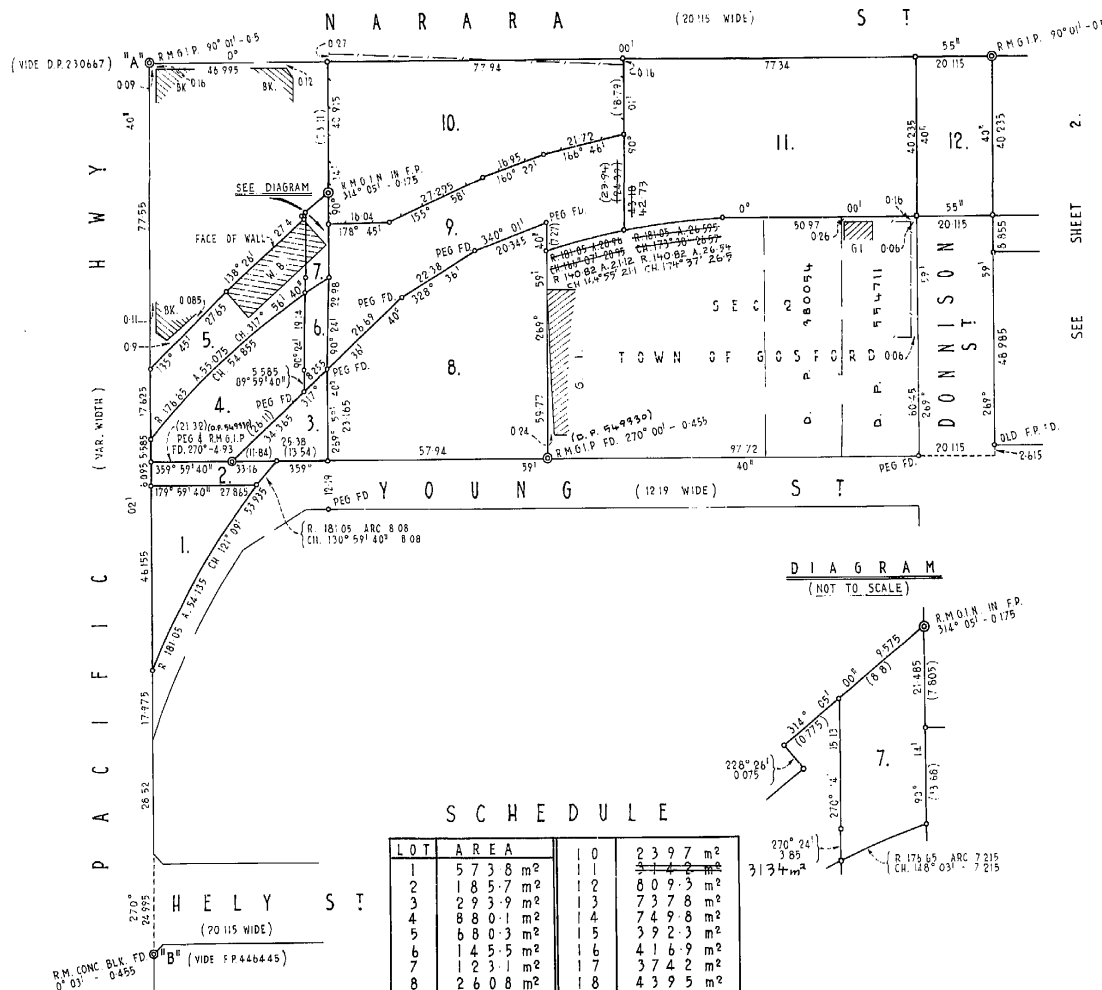
DP 244192

OFFICE USE ONLY

Signatures and seals only



D. P. 244192



"PLAN AMENDED IN L.T.O AT SURVEYORS REQUEST."

Joint Clerk's Office

hereby certify that:
(a) the requirements of the Local Government Act, 1919 (other than the provisions for the registration of plans), and
(b) the requirements of section 34B of the Metropolitan Water, Sewerage and Drainage Act, 1924, as amended (Hunter District Water, Sewerage, and Drainage Act, 1926, as amended)
have been complied with by the applicant in relation to the above plan.
(This "new road", "subdivision" or "consolidated lot" set out herein)
is No. ...
Date ...
Signature ... Council Clerk

SCHEDULE

LOT	AREA	10	23 97 m ²
1	57338 m ²	11	3134 m ²
2	18577 m ²	12	8097 m ²
3	29339 m ²	13	7378 m ²
4	8801 m ²	14	7498 m ²
5	6803 m ²	15	3923 m ²
6	14555 m ²	16	4169 m ²
7	1231 m ²	17	3742 m ²
8	2608 m ²	18	4395 m ²
9	7480 m ²	19	3807 m ²

DIAGRAM
(NOT TO SCALE)

SEE SHEET 2.

D P 244192

Registered: AT-23-10-1973

CAL: TORRENS CROWN LAND
Title System: OLD SYSTEM
Purpose: LEASE

Ref. Map: GOSFORD SH 2
D.P. 9130 91979 95794 95799
Last Plan: 95805 95796 95700 95812
95803 95815 95805

PLAN OF CONSOLIDATION OF PART OF THE LANDS ACQUIRED FOR THE GOSFORD TO GOSFORD RACECOURSE RAILWAY.

Reduction Ratio: 800
Lengths are in metres

Shire: GOSFORD
Locality: GOSFORD
Parish: GOSFORD
County: NORTHUMBERLAND

This is sheet 1 of my plan in TWO sheets.
(Delete if inapplicable)

KEVIN PATRICK TOWNSEND
SURVEY SECT. DEPT. RAILWAYS, N.S.W.
I, a surveyor registered under the Surveyors Act, 1929, as amended, hereby certify that the survey represented on this plan is accurate and has been made in accordance with the Survey Practice Regulations, 1933, and was completed on 1-11-72
Signature: [Signature]
Surveyor registered under Surveyors Act, 1929, as amended.
Datum Line of Azimuth: A-B
Stake out value 11 or 12. Insert date of survey

Panel for use only for statements of intention to dedicate public roads or to create public reserves, drainage reserves, easements or restrictions as to user.

WARNING: CREASING OR FOLDING WILL LEAD TO REJECTION

AMENDMENTS AND/OR ADDITIONS MADE ON PLAN IN THE LAND TITLES OFFICE

This negative is a photograph made as a permanent record of a document in the custody of the Registrar General this day, 17th May, 1988

10 20 30 40 50 60 70 80 90 100 110 120 130 140

7759002 W.H. 1151
SURVEYOR'S REFERENCE:

197-31A



CIFICATE OF TITLE



12981027

NEW SOUTH WALES

Appl. Nos. 25775 & 50454 (parts)

For Crown Grants see Schedule

Prior Titles:
 Vol. 2712 Fol. 229 Vol. 2792 Fol. 102
 Vol. 2752 Fol. 121 Vol. 2796 Fol. 25
 Vol. 2762 Fol. 54 Vol. 2797 Fol. 102
 Vol. 2762 Fol. 65 Vol. 2797 Fol. 136
 Vol. 2772 Fol. 236 Vol. 2806 Fol. 146
 Vol. 2774 Fol. 158 Vol. 2811 Fol. 173
 Vol. 2774 Fol. 159 Vol. 11845 Fol. 154
 Vol. 2781 Fol. 54 Vol. 12744 Fol. 207
 Vol. 2792 Fol. 49 Vol. 12744 Fol. 208



Vol. **12981** Fol. **27**

EDITION ISSUED

27 1 1976

I certify that the person described in the First Schedule is the registered proprietor of the undermentioned estate in the land within described subject nevertheless to such exceptions encumbrances and interests as are shown in the Second Schedule.

Lawson
 Registrar General.



ESTATE AND LAND REFERRED TO

Estate in Fee Simple in **Lots 1 to 18 inclusive in Deposited Plan 244192** at Gosford in the Shire of Gosford Parish of Gosford and County of Northumberland being the lands granted by the Crown Grants set out in the Schedule hereunder and lands for which no Crown Grants have issued. **EXCEPTING THEREOUT** all mines of coal reserved by the Crown Grants of Allotments 16 and 17 of Section 2, the minerals reserved by all Crown Grants except those of Allotments 16 and 17 of Section 2 and all minerals as regards the lands for which no Crown Grants have issued.

SCHEDULE OF GRANTS

Allotment	Section	Name of Grantee	Date of Grant	Grant Reference Volume	Folio
Pt. 16	2	Francis Mitchell	13 - 4 - 1841	-	-
Pt. 17	2	Septimus Lord Curlewis	13 - 4 - 1841	-	-
Pt. 17	1			1754	91
Pt. 12	1			1847	167
Pt. 10	2			1861	121
Pt. 13	1			1943	100
Pt. 18	2			2029	100
Pt. 18	1			2029	119
Pt. 14	1			2054	104
Pt. 19	1			2054	125
Pt. 15	1			2061	134
Pt. 9	2			2187	96
13 & 14	2			2508	246
Pt. 11	2			2564	23
Pt. 12	2			2564	24
15	2			2569	192
Pt. 13	82			2711	235
Pt. 14	82			2711	236
Pt. 18 & 19	82			2711	245
Pt. 15	82			2711	246
Pt. 16 & 17	82			2711	247
Pt. 12	82			2715	117
Pt. 16	1			2735	216

FIRST SCHEDULE

PUBLIC TRANSPORT COMMISSION OF NEW SOUTH WALES.

SECOND SCHEDULE

- Reservations and conditions, if any, contained in the Crown Grants above referred to, except those of Allotments 16 and 17 of Section 2.
- ~~Lease No. M910009 of part to Galtex Oil (Australia) Pty. Limited. Registered 7-11-1972. Expired~~
- Lease No. N389620 of Lots 11, 13 and 18 in Deposited Plan 244192 to Central Coast Cold Stores Pty. Limited. Registered 3-4-1974. **and Lot 3 in Deposited Plan 244192 NUA**
- Lease No. P38587 of Lot 1 in Deposited Plan 563572, to Charles Gustavus Whittaker of Gosford, Shopkeeper and David Garth Smallman of Wyoming, Company Manager. Registered 1-5-1975.

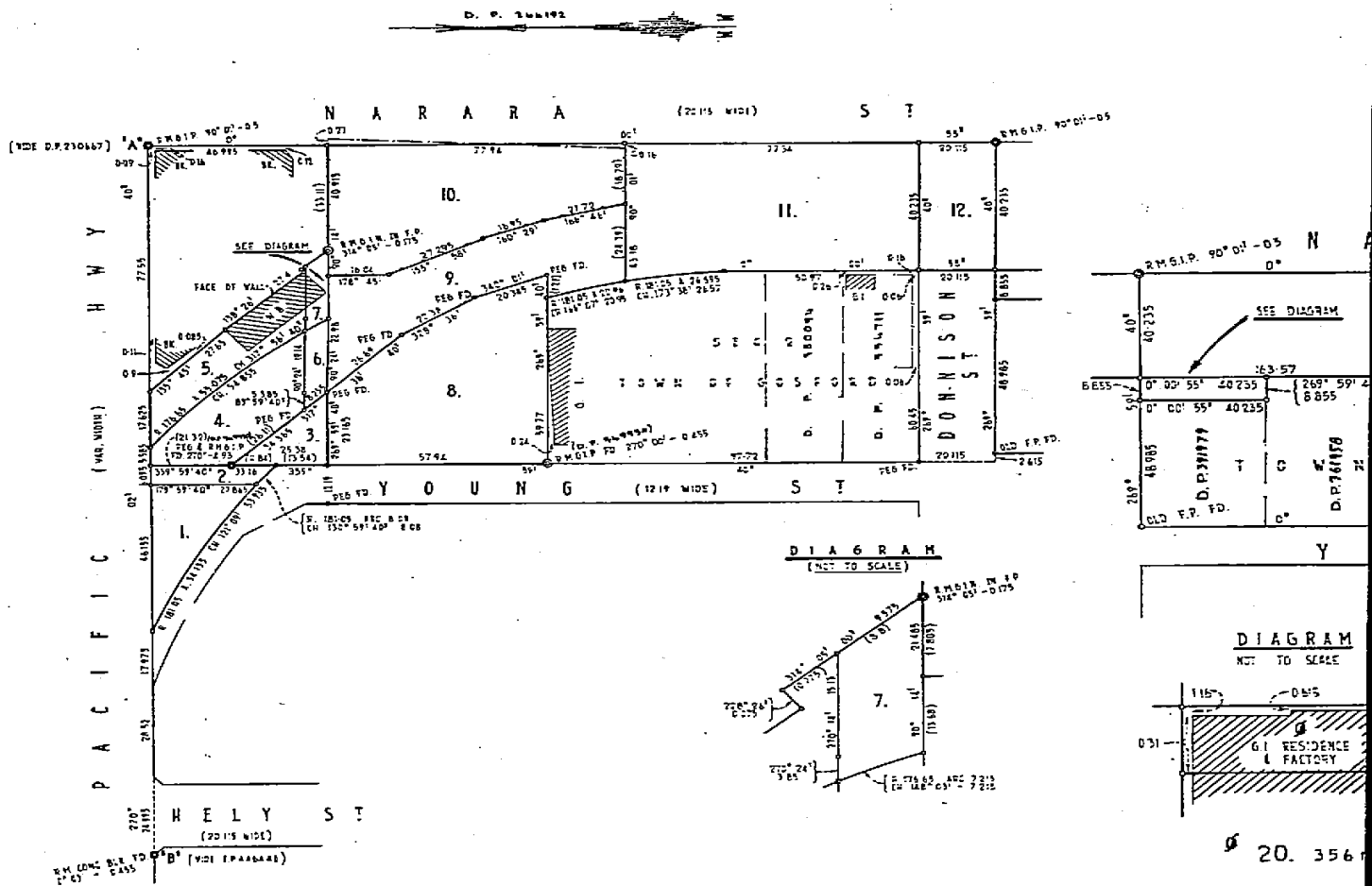
16
 26/10/76

WARNING: THIS DOCUMENT MUST NOT BE REMOVED FROM THE LAND TILES OFFICE.



PLAN SHOWING L

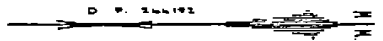
LENGTHS A





PLAN SHOWING LOCATION OF LAND

LENGTHS ARE IN METRES



D. P. 244192

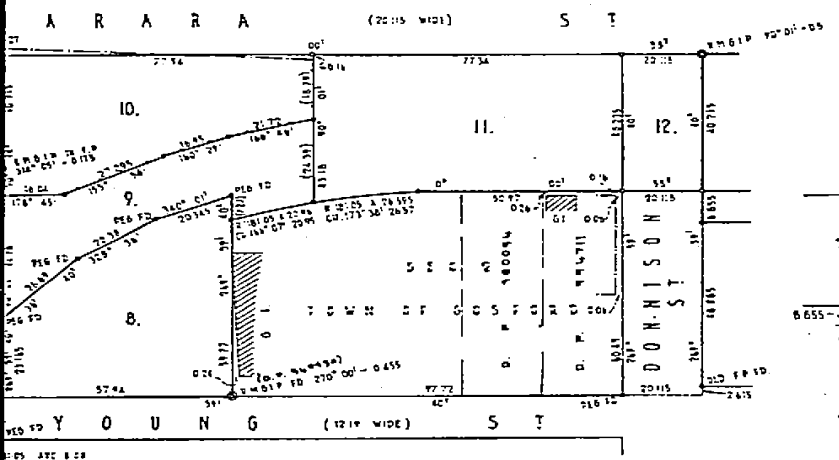


DIAGRAM
(NOT TO SCALE)

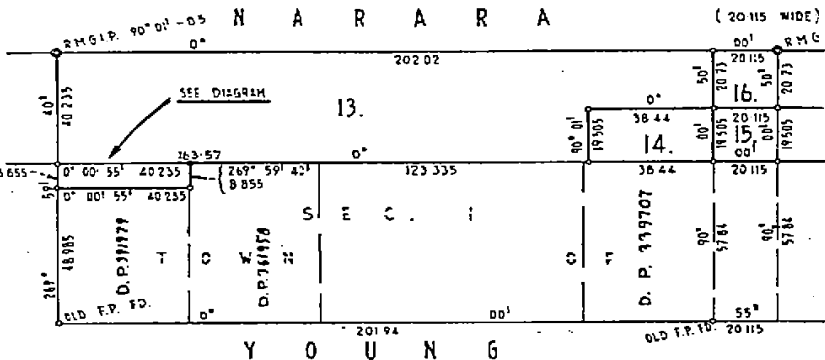
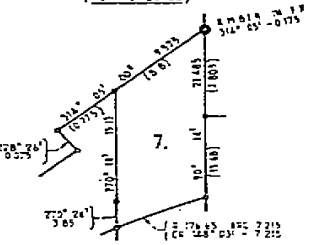
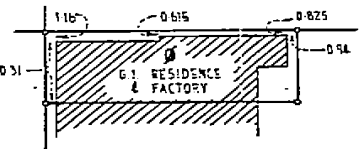


DIAGRAM
NOT TO SCALE

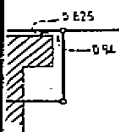


20.356 m²

SCHEDULE

LOT	AREA	
1	573.8 m ²	1
2	185.7 m ²	1
3	293.9 m ²	1
4	880.1 m ²	1
5	680.3 m ²	1
6	145.5 m ²	1
7	123.1 m ²	1
8	260.8 m ²	1
9	174.0 m ²	1

RE IN METRES



LOT	AREA						
1	57.8	3.8	2	10	23	9	m
2	75.7	5.7	2	12	30	7	2
3	93.9	3.9	2	13	33	8	2
4	80.0	0.1	1	14	33	8	m
5	68.0	0.5	3	15	39	6	m
6	113.1	3.1	5	16	41	2	m
7	26.0	3.0	2	17	37	9	m
8	27.0	0.0	1	18	43	2	m
9	27.0	6.0	2	19	38	5	m

NOTE: Lot 19 is now road

578296
 L5042451
 P640999
 P641000
 Lot 2 DP 578296
 P641001
 - 24c
 Lot 1-3 DP 578296
 Q51017/L
 (P31557)h
 Q 406646
 (Lot P 285)
 R40258 h
 9 CCL
 (Part)
 R 7421867h
 (Lot P 2855)
 W37379
 rejected
 20/11/86
 1987 m 300 196
 X185241
 27
 341
 DP 777417

FIRST SCHEDULE (continued)

REGISTERED PROPRIETOR

INSTRUMENT

NATURE

NUMBER

DATE

ENTERED

Signature of Registrar General

DP 578 777417 Registered 11/11/1988
 This folio is cancelled as to whole/part upon creation of computer folios for lots 1-5 in the above mentioned plan.



SECOND SCHEDULE (continued)

INSTRUMENT
 NATURE NUMBER DATE

PARTICULARS

ENTERED

Signature of Registrar General

CANCELLATION

Lease	P640999	—	of part being Lot 2 in D.P. 578296 to Gosford Brick Tile and Pipe Proprietary Limited	9-8-1976	<i>Signature</i>		
Lease	P641001	—	of part being lots 1 and 3 in D.P. 578296 to Central Coast Cold Stores Pty. Limited	9-8-1976	<i>Signature</i>		
Mortgage	540646	—	to The National Bank of Australasia Limited.				
P38587	Lease	Lessee	now Central Coast Pharmaceuticals Pty Limited		<i>Signature</i>		
	by Transfer	Q 5901	Registered 22-12-1976				
P38587	Lease	Q 406646	Mortgage to The National Bank of Australasia Limited		<i>Signature</i>		
	Registered	15-3-1978					
P38587	Lease	R 342186	Transfer- Right of Carriageway affecting part of the land within described. Registered 15-7-1981	1981	<i>Signature</i>		
~~R49938~~	~~Lease to~~	~~Caltex~~	~~Oil (Australia) Pty Limited of lot 10 in~~	~~DP 244192~~	<i>Signature</i>		
	~~Expires~~	~~30-6-1981~~	~~Registered 15-7-1981~~				
P38587	Lease	X185242	Transfer of Lease to Robert James Thomas Bourne. Registered 14-12-1987				
P38587	Lease	X185243	Mortgage of Lease to Westpac Banking Corporation. Registered 14-12-1987				

Discharged X185241



NOTE: ENTRIES RULED THROUGH AND AUTHENTICATED BY THE SEAL OF THE REGISTRAR GENERAL ARE CANCELLED

PLAN FORM 2

SIGNATURE AND SEALS ONLY.

Plan Drawing only to appear in this space

OFFICE USE ONLY

DP 777417

Registered  7/11/1988

C.A.

Title System: TORRENS

Purpose: SUBDIVISION

Ref. Map: U 2797-53 & 81

Last Plan:

PLAN OF SUBDIVISION OF LOTS
1 TO 18 IN D.P. 244192

Lengths are in metres. Reduction Ratio: 1:1000

City: GOSFORD

Locality: GOSFORD

Parish: GOSFORD

County: NORTHUMBERLAND

This is sheet 1 of my plan in 2 sheets.

(Delete if inapplicable).

I, IAN STUART JONES,

of 11/11/1988, 11/11/1988, 11/11/1988,

a surveyor registered under the Surveyors Act, 1988, as

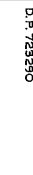
the person who has caused this plan to be prepared, hereby

certifies that the plan is a true and correct representation

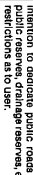
of the land and that the plan is in accordance with the Survey

Department of Lands and was completed on

the 28th day of 08/1988.

Signature: 

Surveyor registered under the Surveyors Act, 1988, as amended.

Witness: 

Witness: 

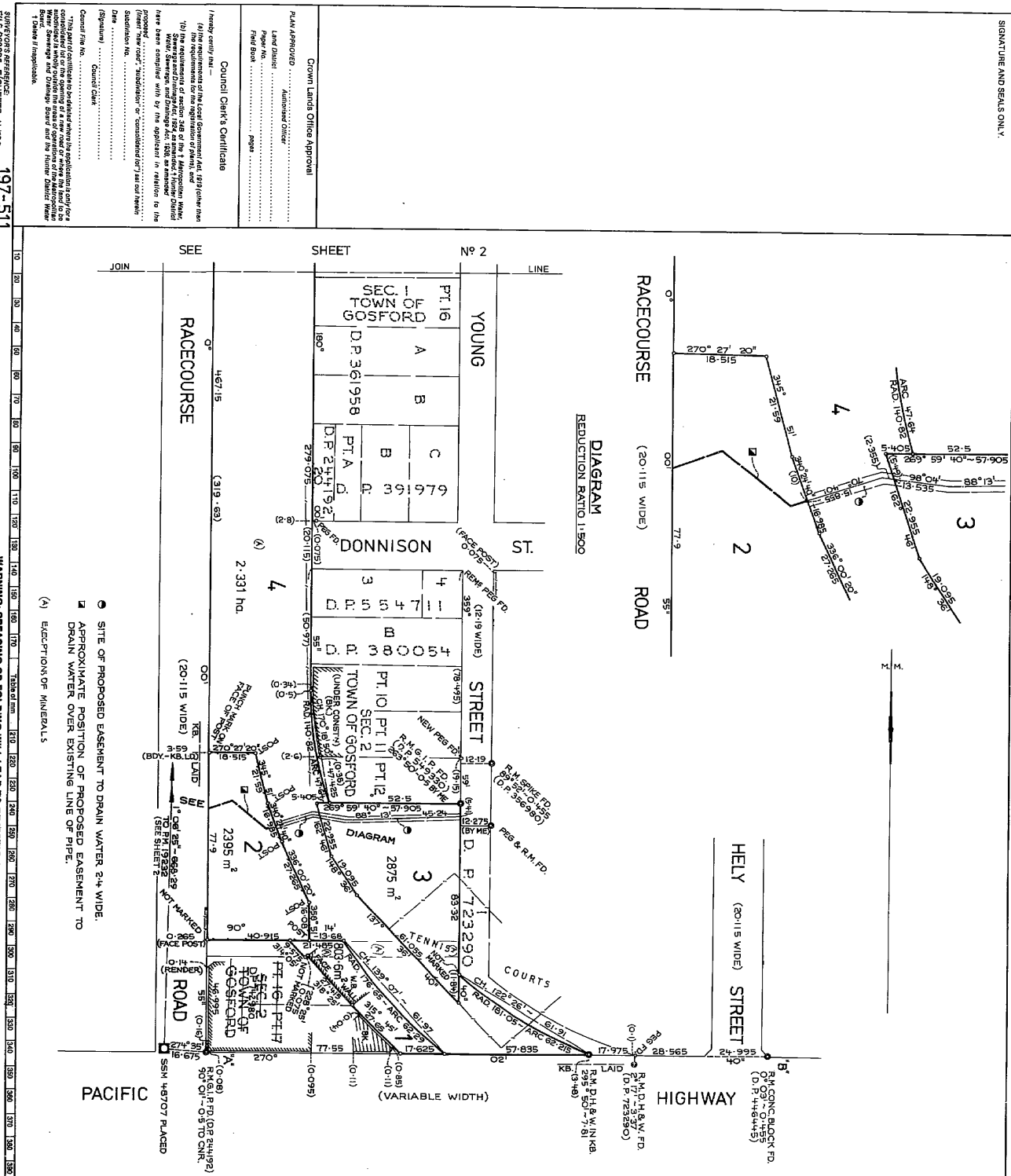
Plans used in preparation of survey/compilation:

D.P. 244192, D.P. 339707, D.P. 361956,

D.P. 380054, D.P. 391979, D.P. 554711,

D.P. 723290

PANEL FOR USE ONLY for statements of
intention to dedicate public roads or to create
restrictions as to user



197-511

WARNING: CREASING OR FOLDING WILL LEAD TO REJECTION

PACIFIC

PLAN OF SUBDIVISION OF LOTS
1 TO 18 IN D.P. 244192

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2

• OFFICE USE ONLY

Reduction Ratio 1:1000
Lengths are in metres





SEARCH DATE

21/4/2023 8:09AM

FOLIO: 5/777417

First Title(s): VOL 2711 FOL 235 VOL 2711 FOL 236
VOL 2711 FOL 246 VOL 2711 FOL 247
VOL 2715 FOL 117

Prior Title(s): VOL 12981 FOL 27

Recorded	Number	Type of Instrument	C.T. Issue
18/11/1988	DP777417	DEPOSITED PLAN	FOLIO CREATED EDITION 1
17/11/1989	Y709063	SURRENDER OF LEASE	
17/11/1989	Y709064	TRANSFER	EDITION 2
25/6/1991	DP810836	DEPOSITED PLAN	FOLIO CANCELLED

*** END OF SEARCH ***



Y709064



TRANSFER

REAL PROPERTY ACT, 1900

T

3	2	02	X
\$ 44			

R2/2

DESCRIPTION
OF LAND
Note (a)

Torrens Title Reference	If Part Only, Delete Whole and Give Details	Location
FOLIO IDENTIFIER 5/777417	WHOLE	AT GOSFORD

TRANSFEROR
Note (b)

STATE RAIL AUTHORITY OF NEW SOUTH WALES (formerly known as the Public Transport Commission of New South Wales) a corporation constituted by the Transport Administration Act, 1988

ESTATE
Note (c)

(the abovenamed TRANSFEROR) hereby acknowledges receipt of the consideration of \$ 35,000.00 /
and transfers an estate in fee simple
in the land above described to the TRANSFEREE

TRANSFEREE
Note (d)

RONALD IAN LAMONT of RMB 3390 Wisemans Ferry Road, Somersby
Accountant

OFFICE USE ONLY

S

TENANCY
Note (e)

XXXXXXXXXXXXXXXXXXXXXXXXXXXX

PRIOR
ENCUMBRANCES
Note (f)

subject to the following PRIOR ENCUMBRANCES 1. nil

2. 3.

DATE 1st NOVEMBER, 1989

We hereby certify this dealing to be correct for the purposes of the Real Property Act, 1900

EXECUTION
Note (g)

Signed in my presence by the transferor who is personally known to me

The Common Seal of STATE RAIL
AUTHORITY OF NEW SOUTH WALES

was hereunto affixed in the

presence of:

Signature of Witness

Address and occupation of Witness

Authorized Officer

Note (g)

Signed in my presence by the transferee who is personally known to me

Signature of Witness

Name of Witness (BLOCK LETTERS)

Address and occupation of Witness

Signature of Transferee

C.A. Elder
Solicitor Gosford

TO BE COMPLETED
BY LODGING PARTY
Notes (h)
and (i)

LODGED BY		LOCATION OF DOCUMENTS			
RAVES, MARSH, & CO. SOLICITORS 70 CASTLEREAGH STREET, SYDNEY. DX 255		CT	OTHER		
		1		Herewith. ✓	
				In L.T.O. with	
				Produced by	
Delivery Box Number 717A					
Checked	Passed	REGISTERED 17 NOV 1989			
ECG					
Signature	Extra Fee	Secondary Directions			
		Delivery Directions			
		CT 717A			

OFFICE USE ONLY



SEARCH DATE

21/4/2023 8:09AM

FOLIO: 4/777417

First Title(s): OLD SYSTEM

VOL 1754 FOL 91
VOL 1847 FOL 167
VOL 1861 FOL 121
VOL 1943 FOL 110
VOL 2029 FOL 100
VOL 2029 FOL 119
VOL 2054 FOL 125
VOL 2054 FOL 144
VOL 2061 FOL 134
VOL 2187 FOL 96
VOL 2508 FOL 246
VOL 2564 FOL 23
VOL 2564 FOL 24
VOL 2569 FOL 192
VOL 2711 FOL 235
VOL 2711 FOL 236
VOL 2711 FOL 245
VOL 2711 FOL 246
VOL 2711 FOL 247
VOL 2715 FOL 117
VOL 2735 FOL 216

Prior Title(s): VOL 12981 FOL 27

Recorded	Number	Type of Instrument	C.T. Issue
18/11/1988	DP777417	DEPOSITED PLAN	FOLIO CREATED EDITION 1
30/4/1990	Y805103	TRANSFER	
30/4/1990	DP801261	DEPOSITED PLAN	FOLIO CANCELLED

*** END OF SEARCH ***

RP 13A

STAMP DUTY



Y805103

TRANSFER
(INCLUDING EASEMENT/COVENANTS)

REAL PROPERTY ACT, 1900
(See Instructions for Completion on back of form)

CA 1	2	x
\$ 44.		

R 1/2

DESCRIPTION
OF LAND
Note (a)

LAND being transferred		
Torrens Title Reference	If Part Only, Delete Whole and Give Details	Location
4/777417	WHOLE	At Gosford

TENEMENTS
PANEL
Note (b)
This panel also to be
completed for
covenants by transfer

Servient Tenement (Land burdened by easement)		Dominant Tenement (Land benefited by easement)	
Torrens Title Reference	Torrens Title Reference	Torrens Title Reference	Torrens Title Reference
4/777417			

TRANSFEROR
Note (c)

STATE RAIL AUTHORITY OF NEW SOUTH WALES (a Corporation constituted
by the Transport Administration Act, 1988) 11-31 York Street,
Sydney

OFFICE USE ONLY

N

Note (d)

(the abovenamed TRANSFEROR) hereby acknowledges receipt of the consideration of \$ 1.5 million
and transfers an estate in fee simple in the land being transferred above described to the TRANSFEE

TRANSFEE
Note (e)

SOUTH AUSTRALIAN COLD STORES LIMITED 158 Railway Terrace, Mile End
South Australia

OFFICE USE ONLY

OKT

TENANCY
Note (e)

as joint tenants/tenants in common

PRIOR
ENCUMBRANCES
Note (f)

subject to the following PRIOR ENCUMBRANCES 1. N389620

Note (g)

AND the TRANSFEROR:—

- (i) GRANTS/RESERVES an easement as set out in SCHEDULE ONE hereto
(ii) COVENANTS with the TRANSFEE as set out in SCHEDULE TWO hereto

Note (g)

AND the TRANSFEE COVENANTS with the TRANSFEROR as set out in SCHEDULE THREE hereto

DATE OF TRANSFER

4th January 1990.

We hereby certify this dealing to be correct for the purposes of the Real Property Act, 1900.

EXECUTION
Note (h)

Signed in my presence by the Transferor who is personally known to me.
THE COMMON SEAL OF STATE RAIL AUTHORITY)
OF NEW SOUTH WALES was hereunto affixed)
in the presence of: M. M. M. M.

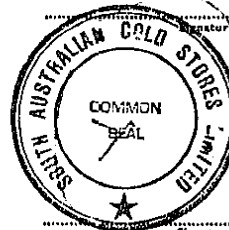
Name of Witness (BLOCK LETTERS)

Address and occupation of Witness

Note (h)

Signed in my presence by the Transferee who is personally known to me.
THE COMMON SEAL OF SOUTH AUSTRALIAN
COLD STORES LIMITED was hereunto
affixed by the authority of the
Directors whose signatures are set out)
opposite hereto in the presence of:)

Address and occupation of Witness



Signature of Transferee

TO BE COMPLETED
BY LODGING PARTY
Notes (i) and (j)

LODGED BY		LOCATION OF DOCUMENTS	
CT	OTHER	Herewith.	In R.G.O. with
1		13	
		Produced by	

Delivery Box Number	8351		
Extra Fee	Checked by	REGISTERED	- 19
	2018	30 APR 1990	
	Regard	Registrar General	

OFFICE USE ONLY

418

RP 13A

SCHEDULE ONE HEREINBEFORE REFERRED TO

The Transferor hereby ~~grants/reserves~~ unto THE COUNCIL OF THE CITY OF GOSFORD an easement
in gross to drain water along that part of the Servient Tenement shown as
the site proposed easement to drain water 2.4 wide" on Deposited Plan 777417

Notes (k) and (l)

SCHEDULE TWO HEREINBEFORE REFERRED TO

The Transferor hereby covenants with

Notes (m) and (l)

Also complete
tenements panel on
front of form

SCHEDULE THREE HEREINBEFORE REFERRED TO

Notes (n) and (l) The Transferee hereby covenants with

RP 13A

INSTRUCTIONS FOR COMPLETION

This form is only to be used for the transfer of land together with the granting or reservation of easements and/or the creation of restrictive covenants. For other transfers use forms RP 13, RP 13B, RP 13C, as appropriate.

This dealing should be marked by the Commissioner of Stamp Duties before lodgment at the Registrar General's Office.

Typewriting and handwriting should be clear, legible and in permanent black non-copying ink.

Alterations are not to be made by erasure; the words rejected are to be ruled through and initialed by the parties to the dealing.

If the space provided is insufficient, additional sheets of the same size and quality of paper and having the same margins as this form should be used. Each additional sheet must be identified as an annexure and signed by the parties and the attesting witnesses.

Registered mortgagees, chargees and lessees of the servient tenement should consent to any grant or reservation of easement; otherwise the mortgage, charge or lease should be noted in the memorandum of prior encumbrances.

The signatures of the parties and the attesting witnesses should appear below the last provision in the last completed schedule.

Rule up all blanks.

The following instructions relate to the side notes on the form.

(a) Description of land.

- (i) **TORRENS TITLE REFERENCE.**—Insert the current Folio Identifier or Volume and Folio of the Certificate of Title/Crown Grant for the land being transferred, e.g., 135/SP12345 or Vol. 8514 Fol. 126.
- (ii) **PART/WHOLE.**—If part only of the land in the folio of the Register is being transferred, delete the word "WHOLE" and insert the lot and plan number, portion, &c. See also sections 327 and 327AA of the Local Government Act, 1919.
- (iii) **LOCATION.**—Insert the locality shown on the Certificate of Title/Crown Grant, e.g., at Chullora. If the locality is not shown, insert the Parish and County, e.g., Ph. Lismore Co. Rous.

(b) Tenement panel.—Insert the current Folio Identifier or Volume and Folio of the Certificate of Title/Crown Grant for both the servient and dominant tenements of the easements, e.g., 135/SP12345 or Vol. 8514 Fol. 126, &c. This panel is also to be completed for covenants by the transferor.

(c) Show the full name, address and occupation or description.

(d) If the estate being transferred is a lesser estate than an estate in fee simple, delete "fee simple" and insert appropriate estate.

(e) Delete if only one transferee. If more than one transferee, delete either "joint tenants" or "tenants in common", and, if the transferees hold as tenants in common, state the shares in which they hold.

(f) In the memorandum of prior encumbrances, state only the registered number of any mortgage, charge or lease (except where the consent of the mortgagee, chargee or lessee is furnished) and of any writ recorded in the Register.

(g) Delete whichever words are inappropriate.

(h) Execution.

GENERALLY

(i) Should there be insufficient space for execution of this dealing, use an annexure sheet.

(ii) The certificate of correctness under the Real Property Act, 1900 must be signed by all parties to the transfer, each party to execute the dealing in the presence of an adult witness, not being a party to the dealing, to whom he is personally known. The solicitor for the transferee may sign the certificate on behalf of the transferee, the solicitor's name (not that of his firm), to be typewritten or printed adjacent to his signature.

Any person falsely or negligently certifying is liable to the penalties provided by section 117 of the Real Property Act, 1900.

ATTORNEY

(iii) If the transfer is executed by an attorney for the transferor/transferee pursuant to a registered power of attorney, the form of attestation must set out the full name of the attorney, and the form of execution must indicate the source of his authority, e.g., "AB by his attorney (or receiver or delegate, as the case may be) XY pursuant to power of attorney registered Book No. , and I declare that I have no notice of the revocation of the said power of attorney".

AUTHORITY

(iv) If the transfer is executed pursuant to an authority (other than specified in (iii)) the form of execution must indicate the statutory, judicial or other authority pursuant to which the transfer has been executed.

CORPORATION

(v) If the transfer is executed by a corporation under seal, the form of execution should include a statement that the seal has been properly affixed, e.g., in accordance with the Articles of Association of the corporation. Each person attesting the affixing of the seal must state his position (e.g., director, secretary) in the corporation.

(i) Insert the name, postal address, Document Exchange reference, telephone number and delivery box number of the lodging party.

(j) The lodging party is to complete the LOCATION OF DOCUMENTS panel. Place a tick in the appropriate box to indicate the whereabouts of the Certificate of Title. List, in an abbreviated form, other documents lodged, e.g., stat. dec. for statutory declaration, probate, LJA for letters of administration, &c.

(k) State the nature of the easement (see, e.g., section 181A of the Conveyancing Act, 1919) and accurately describe the site of the easement. The grant or reservation of easement (other than an easement in gross) must comply with section 88 of the Conveyancing Act, 1919. If not applicable, rule through this space.

(l) Annexures should be of the same size and quality of paper and have the same margins as the transfer form. Each such annexure must be identified as an annexure and signed by the parties and the attesting witnesses. Any plan annexed should comply with regulation 37 of the Real Property Act regulations, 1970.

(m) This space is provided for any restrictive covenant by the transferor (which must comply with section 88 of the Conveyancing Act, 1919). If not applicable, rule through this space.

(n) This space is provided for any restrictive covenant by the transferee (which must comply with section 88 of the Conveyancing Act, 1919). If not applicable, rule through this space.

OFFICE USE ONLY

DIRECTION: PROP					FIRST SCHEDULE DIRECTIONS	
No. OF NAMES:						
(A)	FOLIO IDENTIFIER	(B) No.	(C) SHARE	(D) I	(E)	NAME AND DESCRIPTION
SECOND SCHEDULE & OTHER DIRECTIONS						
(F)	FOLIO IDENTIFIER (OR REGD. DEALING & FOLIO IDENTIFIER)	(G)	DIRECTION	(H) NOTFN TYPE	(I)	DEALING NUMBER
	4/777417		ON	EA		
						EASEMENT TO DRAIN WATER AFFECTING THE PART OF THE LAND ABOVE DESCRIBED ~~AS~~ SHOWN AS "SITE OF PROPOSED EASEMENT TO DRAIN WATER 2.4 WIDE" IN DP 777417



SEARCH DATE

21/4/2023 8:09AM

FOLIO: 7/801261

First Title(s): VOL 2715 FOL 117 VOL 2711 FOL 235
VOL 2711 FOL 236 VOL 2711 FOL 246
VOL 2711 FOL 247

Prior Title(s): 4/777417

Recorded	Number	Type of Instrument	C.T. Issue
30/4/1990	DP801261	DEPOSITED PLAN	FOLIO CREATED EDITION 1
11/5/1990	Z12498	SURRENDER OF LEASE	EDITION 2
1/6/1990	Z34816	SURRENDER OF LEASE	EDITION 3
12/4/1991	Z585022	TRANSFER	EDITION 4
25/6/1991	DP810836	DEPOSITED PLAN	FOLIO CANCELLED

*** END OF SEARCH ***

1985



STAMP DUTY



B



7
585022

OFFICE OF STATE REVENUE
(N.S.W. TREASURY)
1990/91 S13
DULY STAMPED

TRANSFER

REAL PROPERTY ACT, 1900

A	1 of 1	✓
\$ 47		

Ry
1

DESCRIPTION
OF LAND
Note (a)

Torrens Title Reference	If Part Only, Delete Whole and Give Details	Location
FOLIO IDENTIFIER 7/801261	WHOLE	AT GOSFORD

TRANSFEROR
Note (b)

SOUTH AUSTRALIAN COLD STORES LIMITED A.C.N. 007 873 994

ESTATE
Note (c)

(the abovenamed TRANSFEROR) hereby acknowledges receipt of the consideration of \$165,000.00 ✓
and transfers an estate in fee simple
in the land above described to the TRANSFeree

TRANSFeree
Note (d)

RONALD IAN LAMONT of RMB 3390 Wisemans Ferry Road, Somersby
Accountant

OFFICE USE ONLY

5

TENANCY
Note (e)

XXXXXXXXXXXXXXXXXXXX
as joint tenants/tenants in common

PRIOR
ENCUMBRANCES
Note (f)

subject to the following PRIOR ENCUMBRANCES 1. nil

2. 3.

DATE 28 - 3 - 91

We hereby certify this dealing to be correct for the purposes of the Real Property Act, 1900.

EXECUTION
Note (g)

XXXXXX
THE COMMON SEAL of SOUTH AUSTRALIAN COLD
STORES LIMITED A.C.N. 007 873 994
was hereunto affixed by authority
of the Board of Directors in the presence
of XXXXXXXX



XXXXXX Director

Secretary

Signature of Transferor

Note (g)

Signed in my presence by the transferee who is personally known to me

Signature of Witness

Name of Witness (BLOCK LETTERS)

Address and occupation of Witness

C.A. Elder
Solicitor Gosford

TO BE COMPLETED
BY LODGING PARTY
Notes (h)
and (i)

LODGED BY		RAVES MARSH MURRAY & BACKHOUSE SOLICITORS 219 - 227 ELIZABETH STREET, SYDNEY DX 255		LOCATION OF DOCUMENTS	
Delivery Box Number 717A		CT	OTHER	Herewith	
Checked 	Passed			In L.T.O. with	
Signed	Extra Fee			Produced by	
REGISTERED - -19		Secondary Directions			
12 APR 1991		Delivery Directions	CT 717A		

OFFICE USE ONLY



SEARCH DATE

21/4/2023 8:08AM

FOLIO: 71/810836

First Title(s): VOL 2711 FOL 236 VOL 2711 FOL 246
VOL 2711 FOL 247

Prior Title(s): 5/777417 7/801261

Recorded	Number	Type of Instrument	C.T. Issue
25/6/1991	DP810836	DEPOSITED PLAN	FOLIO CREATED EDITION 1
15/8/1991	Z825539	TRANSFER WHOLE	EDITION 2
13/11/2000	7200322	MORTGAGE	EDITION 3
11/1/2011	AF937148	DISCHARGE OF MORTGAGE	
11/1/2011	AF937149	TRANSFER WHOLE	EDITION 4
24/10/2013	AI111130	DEPARTMENTAL DEALING	
21/8/2015	AJ698224	TRANSFER WITHOUT MONETARY CONSIDERATION	CHANGE OF SHARES
21/8/2015	AJ698225	TRANSFER	EDITION 5
		SALE OF SHARE OF NORTH COAST TRANSIT	
24/10/2016	AK866623	MORTGAGE	EDITION 6
8/9/2018	AN695391	DEPARTMENTAL DEALING	EDITION 7 CORD ISSUED
7/2/2019	AP46913	DISCHARGE OF MORTGAGE	EDITION 8
31/12/2019	AP808964	TRANSFER	SALE OF HALF SHARES OWNED BY BUSWAYS EAST EDITION 9
30/11/2020	AQ600960	TRANSFER	EDITION 10
		SALE OF REMAINING SHARES OWNED BY BUSWAYS EAST	
3/12/2021	AR685342	TRANSFER	EDITION 11

*** END OF SEARCH ***

RP 13
1985

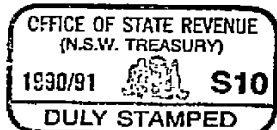


B



Z
825539 W

STAMP DUTY



TRANSFER

REAL PROPERTY ACT, 1900

T

A	1 of 1	X
\$ 48-50		R1/1

DESCRIPTION
OF LAND
Note (a)

Torrens Title Reference	If Part Only, Delete Whole and Give Details	Location
Identifier 71/810836 Identifier 72/810836	WHOLE	at Gosford

TRANSFEROR
Note (b)

RONALD IAN LAMONT

ESTATE
Note (c)

(the abovenamed TRANSFEROR) hereby acknowledges receipt of the consideration of \$ 200,000.00
and transfers an estate in fee simple
in the land above described to the TRANSFEREE

TRANSFEREE
Note (d)

GOSFORD RACE CLUB LIMITED of Racecourse Road, West Gosford

OFFICE USE ONLY

S

TENANCY
Note (e)

as joint tenants/tenants in common

PRIOR
ENCUMBRANCES
Note (f)

subject to the following PRIOR ENCUMBRANCES 1.
2. 3.

DATE 31-7-91

We hereby certify this dealing to be correct for the purposes of the Real Property Act, 1900.
Signed in my presence by the transferor who is personally known to me

EXECUTION
Note (g)

Witness ✓

[Signature]
Signature of Witness

✓ LISA O'KEEFE
Name of Witness (BLOCK LETTERS)

✓ 56 GEORGE EVANS RD
Address and occupation of Witness

✓ KILLARNEY VALE, SECRETARY.

Note (g)

Signed in my presence by the transferee who is personally known to me

R1/1 ✓ *[Signature]*
Signature of Transferor

Signature of Witness

Name of Witness (BLOCK LETTERS)

Address and occupation of Witness

TO BE COMPLETED
BY LODGING PARTY
Notes (h)
and (i)

LODGED BY		LOCATION OF DOCUMENTS	
TAPEREILL, PUTLEDGE SOLICITORS 35 MANN STREET, GOSFORD. 2250 DX 7207 Gosford. Ph: (043) 23-3333 831 C Delivery Box Number		CT ☒	OTHER ☐
Checked R1/1	Passed	2	Herewith.
Signed	Extra Fee		In L.T.O. with
			Produced by
REGISTERED -19		Secondary Directions	
15 AUG 1991		Delivery Directions	CT 831C

OFFICE USE ONLY

Form: 01T
Licence: 05-11-638
Licensee: Softdocs
E&A Law/ers

(14)

TRANSFER
New South Wales
Real Property Act 1900



AF937149L

PRIVACY NOTE: Section 31B of the Real Property Act 1900 (RP Act) authorises the Registrar General to collect the information required by this form for the establishment and maintenance of the Real Property Act Register. Section 96B RP Act requires that the Register is made available to any person for search upon payment of a fee, if any.

STAMP DUTY

Office of State Revenue use only

180

Office of State Revenue	
NSW Treasury	1712
Client No: 94286478	
Duty: \$10.00	Trans No: 6085239
Asst details:	

(A) TORRENS TITLE

71/810836, 72/810836, 73/810836, 74/810836, 6/801261, 20/82/758466, 18/4100223, 16/1079150, 15/1100216, 13/1100206, 14/1100206, 11/82/758466, 1/651249 & 12/4100110
Vol 2792 Fol 113 Vol 2806 Fol 118 Vol 2792 Fol 113 Vol 2806 Fol 118 Vol 2792 Fol 113

(B) LODGED BY

Document Collection Box	Name, Address or DX, Telephone, and Customer Account Number if any	CODES
272N	EDINCTION & ALFONSO LAWYERS. 125 177 J.	T JT
	Reference (optional): MS/100 479	TJ TW

(C) TRANSFEROR

GOSFORD RACE CLUB LIMITED ACN 003 846 124

(D) CONSIDERATION The transferor acknowledges receipt of the consideration of \$ 5,335,000.00 and as regards the land

(E) ESTATE specified above transfers to the transferee an estate in fee simple.

(F) SHARE TRANSFERRED

(G) Encumbrances (if applicable):

(H) TRANSFEREE

BHAAJAYU PTY LTD ACN 084 980 263 (80/100 share), SOUTH PTY LTD ACN 084 946 083 (5/100 share), NORTH COAST TRANSIT PTY LTD ACN 106 201 834 (5/100 share) and BUSWAYS EAST PTY LTD ACN 001 910 854 (10/100 share)

(I) TENANCY: Tenants in Common in Unequal Shares

DATE 07/10/10

(J) Certified correct for the purposes of the Real Property Act 1900 and executed on behalf of the corporation named below by the authorised person(s) whose signature(s) appear(s) below pursuant to the authority specified.

Corporation: GOSFORD RACE CLUB LIMITED

Authority: Section 127(1) of the Corporations Act 2001

Signature of authorised person:

Name of authorised person: ANSELM PETER NORRGARD
Office held: CHAIRMAN
DIRECTOR

Signature of authorised person:

Name of authorised person: James Reddy
Office held: Chief Executive Officer
Company Secretary

Certified correct for the purposes of the Real Property Act 1900 by the person whose signature appears below.

Matthew Jones
Lawyer - BA LLB LLM
Sydney, Australia

Signature: Law Society of NSW No. 21859

Signatory's name: Matthew Jones
Capacity: Solicitor for the transferee

RELODGED
10 JAN 2011
TIME: 3.50

(K) The transferee / transferee's solicitor / transferee's agent certifies that the eNOS data relevant to this dealing has been submitted and stored under eNOS ID No. Full Name: Signature:

Licence: 05-11-638
LicenSee: Softdocs
E&A Lawyers

(N.S.W. TREASURY) **TRANSFER**
1411509 26 New South Wales
Real Property Act 1900
ALTERATION NOTED



AJ698224C

PRIVACY NOTE: Section 31B of the Real Property Act 1900 (RP Act) authorises the use of this form for the establishment and maintenance of the Real Property Act Register. Section 96B RP Act requires that the Register is made available to any person for search upon payment of a fee, if any.

Extra fee raised

STAMP DUTY
18 AUG 2015

Office of State Revenue use only

NEW SOUTH WALES DUTY
12-09-2014 0007779438-001
SECTION 35(11)-ORIGINAL
NO DUTY PAYABLE

TIME: 2:40

(A) S.TORRENS TITLE
1411509 26

71/810836, 72/810836, 73/810836, 74/810836, 6/801261, 20/82/758466, 18/1100223, 16/1079150,
15/1100216, 13/1100206, 14/1100206, 11/82/758466, 1/651249 & 12/1100110
Auto Consol 2742-14
28 Auto Consol 2746-32

(B) FLODGED BYED

Document Collection Box 323X 272X	Name, Address or DX, Telephone, and Customer Account Number if any Acc No 123177 U E&A Lawyers DX 9007 MONA VILLAGE 123211X Tel: (02) 9997 2111 Reference (optional): MJ/400470 49008136 HWL	SAI GLOBAL Property DX 885 SYDNEY 02 8210 0700	CODES T TW

(C) TRANSFEROR

BHAAJAYU PTY LTD ACN 084 980 263, SOUTH PTY LTD ACN 084 946 083, NORTH COAST
TRANSIT PTY LTD ACN 106 201 834 and BUSWAYS EAST PTY LTD ACN 001 910 854

(D) CONSIDERATION The transferor acknowledges receipt of the consideration of \$ 1.00 and as regards the land
(E) ESTATE specified above transfers to the transferee an estate in fee simple.

(F) SHARE
TRANSFERRED

(G) Encumbrances (if applicable):

(H) TRANSFEE

BHAAJAYU PTY LTD ACN 084 980 263 as to a 80/100 share, SOUTH PTY LTD ACN 084 946 083
as to a 5/100 share, NORTH COAST TRANSIT PTY LTD ACN 106 201 834 as to a 10/100 share
and BUSWAYS EAST PTY LTD ACN 001 910 854 as to a 5/100 share

(I) TENANCY: Tenants in Common in Unequal Shares

DATE 20/11/2015 DATE

(J) I certify I am an eligible witness and that the transferor
signed this dealing in my presence.
[See note* below]

Certified correct for the purposes of the Real Property Act
1900 by the transferor.

Signature of witness:

Signature of transferor:

Name of witness:

SEE ANNEXURE "A"

Address of witness:

Certified correct for the purposes of the Real Property Act
1900 by the person whose signature appears below.

Signature:

Matthew Jones
Lawyer - BA LLB LLM
Sydney, Australia

Signatory's name: Matthew Jones
Capacity: Solicitor for the transferee
Law Society of NSW No. 21859

(K) The transferee / transferee's solicitor / transferee's agent certifies that the eNOS data relevant to this dealing has been submitted and
stored under eNOS ID No. 82071 Full Name: Signature:

* s117 RP Act requires that you must have known the signatory for more than 12 months or have sighted identifying documentation.

CT in prod
S99D 8/17/15 for the T

Parties: From BHAAJAYU PTY LTD, SOUTH PTY LTD, NORTH COAST TRANSIT PTY LTD AND BUSWAYS EAST PTY LTD TO
BHAAJAYU PTY LTD, SOUTH PTY LTD, NORTH COAST TRANSIT PTY LTD AND BUSWAYS EAST PTY LTD

Dated: DO / NOT / DATE

Certified correct for the purposes of the Real Property Act 1900
and executed on behalf of the company named below by the
authorised person(s) whose signature(s) appear(s) below
pursuant to the authority specified.

Company: BHAAJAYU PTY LTD ACN 084 980 263
Authority: Section 127(1) of the Corporations Act 2001

Signature of authorised person: X



Name of authorised person: X

Byron Rowe

Office held: X

Director

Signature of authorised person: X



Name of authorised person: X

KERIE GOH

Office held: X

SECRETARY

Certified correct for the purposes of the Real Property Act 1900
and executed on behalf of the company named below by the
authorised person(s) whose signature(s) appear(s) below
pursuant to the authority specified.

Company: SOUTH PTY LTD ACN 084 946 083
Authority: Section 127(1) of the Corporations Act 2001

Signature of authorised person: X



Name of authorised person: X

Stephen Grant Rowe

Office held: X

Director

Signature of authorised person: X



Name of authorised person: X

KERIE GOH

Office held: X

SECRETARY

Certified correct for the purposes of the Real Property Act 1900
and executed on behalf of the company named below by the
authorised person(s) whose signature(s) appear(s) below
pursuant to the authority specified.

Company: NORTH COAST TRANSIT PTY LTD ACN 106 201
834
Authority: Section 127(1) of the Corporations Act 2001

Signature of authorised person: X

Name of authorised person: X

Office held: X

Certified correct for the purposes of the Real Property Act 1900
and executed on behalf of the company named below by the
authorised person(s) whose signature(s) appear(s) below
pursuant to the authority specified.

Company: BUSWAYS EAST PTY LTD ACN001 910 854
Authority: Section 127(1) of the Corporations Act 2001

Signature of authorised person: X



Name of authorised person: X

RICHARD WILLIAM ROWE

Office held: X

DIRECTOR

Signature of authorised person: X



Name of authorised person: X

JOYCE ROWE

Office held: X

SECRETARY

Annexure A to TRANSFER

Parties: From BHAAJAYU PTY LTD, SOUTH PTY LTD, NORTH COAST TRANSIT PTY LTD AND BUSWAYS EAST PTY LTD TO
BHAAJAYU PTY LTD, SOUTH PTY LTD, NORTH COAST TRANSIT PTY LTD AND BUSWAYS EAST PTY LTD

Dated: / /

Certified correct for the purposes of the Real Property Act 1900
and executed on behalf of the corporation named below by the
authorised person(s) whose signature(s) appear(s) below
pursuant to the authority specified.

Corporation: BHAAJAYU PTY LTD ACN 084 980 263
Authority: Section 127(1) of the Corporations Act 2001

Signature of authorised person:

Name of authorised person:

Office held:

Signature of authorised person:

Name of authorised person:

Office held:

Certified correct for the purposes of the Real Property Act 1900
and executed on behalf of the corporation named below by the
authorised person(s) whose signature(s) appear(s) below
pursuant to the authority specified.

Corporation: SOUTH PTY LTD ACN 084 946 083
Authority: Section 127(1) of the Corporations Act 2001

Signature of authorised person:

Name of authorised person:

Office held:

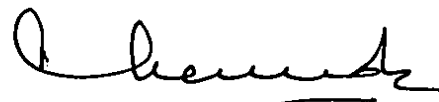
Signature of authorised person:

Name of authorised person:

Office held:

Certified correct for the purposes of the Real Property Act 1900
and executed on behalf of the corporation named below by the
authorised person(s) whose signature(s) appear(s) below
pursuant to the authority specified.

Corporation: NORTH COAST TRANSIT PTY LTD ACN 106 201
834
Authority: Section 127(1) of the Corporations Act 2001



Signature of authorised person:

Name of authorised person: George Mahendra

Tisseverasinghe

Office held: Sole Director and Sole Company Secretary

Signature of authorised person:

Name of authorised person:

Office held:

Certified correct for the purposes of the Real Property Act 1900
and executed on behalf of the corporation named below by the
authorised person(s) whose signature(s) appear(s) below
pursuant to the authority specified.

Corporation: BUSWAYS EAST PTY LTD ACN 001 910 854
Authority: Section 127(1) of the Corporations Act 2001

Signature of authorised person:

Name of authorised person:

Office held:

Signature of authorised person:

Name of authorised person:

Office held:

Form: 01T
Licence: 05-11-638
Licensee: Softdocs
HWL Ebsworth

(12)

TRANSFER

New South Wales
Real Property Act 1900



AJ698225A

PRIVACY NOTE: Section 31B of the Real Property Act 1900 (RP Act) authorises the use of this form for the establishment and maintenance of the Real Property Act Register. Section 96B RP Act requires that the Register is made available to any person for search upon payment of a fee, if any.

STAMP DUTY

18 AUG 2015

2.40

TIME (A) TORRENS TITLE

Office of State Revenue use only

NEW SOUTH WALES DUTY

30-04-2015

0008027963-001

SECTION 18(2)

DUTY

\$ *****10.00

6/801261, 71/810836, 72/810836, 73/810836, 74/810836, 18/1100223, 20/82/758466,
Auto Consol 2792-191, 15/1100216, 16/1079150, 1/651249, Auto Consol 2796-32

(B) LODGED BY

Document
Collection
Box **323X**

Name, Address or DX, Telephone, and Customer Account Number if any
LLPN: SAI GLOBAL Property
123211X DX 885 SYDNEY
02 9210 0700

Reference (optional):

49008136 HWL

CODES

T

TW

(C) TRANSFEROR

NORTH COAST TRANSIT PTY LIMITED ACN 106 201 834

(D) CONSIDERATION

The transferor acknowledges receipt of the consideration of \$ 639,528.34

and as regards the land

specified above transfers to the transferee an estate in fee simple.

10/100 OF THE ENTIRETY

Encumbrances (if applicable):

(H) TRANSFEE

VERUGU PTY LIMITED ACN 003 884 188 AND GALBROCK PTY LIMITED ACN 078 310 657

(I)

TENANCY: Tenants in common in equal shares

DATE

..... / /

(J) Certified correct for the purposes of the Real Property Act 1900 and executed on behalf of the corporation named below by the authorised person(s) whose signature(s) appear(s) below pursuant to the authority specified.

Corporation: North Coast Transit Pty Limited

Authority: Section 127(1) of the Corporations Act 2001

Signature of authorised person:

Name of authorised person:

Office held:

Signature of authorised person:

Name of authorised person: George Mahendra

Tisseverasinghe

Office held: Sole Director and Sole Company Secretary

Certified correct for the purposes of the Real Property Act 1900 by the person whose signature appears below.

Signature:

Signatory's name: Andrew John Buchanan

Capacity: Solicitor for the transferee

(K) The transferee's solicitor certifies that the eNOS data relevant to this dealing has been submitted and stored under eNOS ID No. **682421** Full Name: Andrew John Buchanan Signature:

* s117 RP Act requires that you must have known the signatory for more than 12 months or have sighted identifying documentation.

System Document Identification

Land Registry Document Identification

Form Number:01T-e
Template Number:T_nsw16
ELN Document ID:547989032
ELN NOS ID: 547989646

TRANSFER

New South Wales
Real Property Act 1900

AP808964

Stamp Duty: 9734670-001

PRIVACY NOTE: Section 31B of the Real Property Act 1900 (RP Act) authorises the Registrar General to collect the information required by this form for the establishment and maintenance of the Real Property Act Register. Section 96B RP Act requires that the Register is made available to any person for search upon payment of a fee, if any.

LODGED BY:

Responsible Subscriber: E&A LAWYERS ABN 36118690485
Address: PO BOX 320
Mona Vale 1660
Telephone:
PEXA Subscriber Number: 3661
Customer Account Number: 500759U
Document Collection Box: 272N
Client Reference: MJ/190584/17

LAND TITLE REFERENCE

6/801261
15/1100216
2796-32
16/1079150
74/810836
71/810836
72/810836
1/651249
20/82/758466
73/810836
2792-191
18/1100223

TRANSFEROR

BUSWAYS EAST PTY LTD ACN 001910868
Registered company

Total share transferred: 25/1000

TRANSFeree

GALBROCK PTY LTD ACN 078310657
Registered company
Share of whole of land/interest: 75/ 1000
BHAAJAYU PTY LTD ACN 084980263
Registered company
Share of whole of land/interest: 800/ 1000
BUSWAYS EAST PTY LTD ACN 001910868
Registered company
Share of whole of land/interest: 25/ 1000
VERUGU PTY LTD ACN 003884188
Registered company
Share of whole of land/interest: 50/ 1000
SOUTH PTY LTD ACN 084946083
Registered company
Share of whole of land/interest: 50/ 1000
Tenancy: Tenants in Common

CONSIDERATION

The transferor acknowledges receipt of the consideration of \$144,625.00

ESTATE TRANSFERRED

FEE SIMPLE

The Transferor transfers to the Transferee the Estate specified in this Instrument and acknowledges receipt of any Consideration shown.

SIGNING FOR TRANSFEROR

I certify that:

1. The Certifier has taken reasonable steps to ensure that this Registry Instrument or Document is correct and compliant with relevant legislation and any Prescribed Requirement.
2. The Certifier has retained the evidence supporting this Registry Instrument or Document.
3. The Certifier holds a properly completed Client Authorisation for the Conveyancing Transaction including this Registry Instrument or Document.
4. The Certifier has taken reasonable steps to verify the identity of the transferor.

Party Represented by Subscriber:

BUSWAYS EAST PTY LTD

Signed By: Matthew Jones
PEXA Signer Number:8760

Signer Capacity:Practitioner Certifier
Digital Signing Certificate Number:41156

**Signed for
Subscriber:** E&A LEGAL SERVICES PTY LIMITED ABN 36118690485
E&A LAWYERS

Subscriber Capacity:Representative Subscriber
PEXA Subscriber Number:3661
Date: 31/12/2019

Customer Account Number:500759

SIGNING FOR TRANSFEE

I certify that:

1. The Certifier has taken reasonable steps to ensure that this Registry Instrument or Document is correct and compliant with relevant legislation and any Prescribed Requirement.
2. The Certifier has retained the evidence supporting this Registry Instrument or Document.
3. The Certifier holds a properly completed Client Authorisation for the Conveyancing Transaction including this Registry Instrument or Document.
4. The Certifier has taken reasonable steps to verify the identity of the transferee.

Party Represented by Subscriber:

GALBROCK PTY LTD

Signed By: Matthew Jones
PEXA Signer Number:8760

Signer Capacity:Practitioner Certifier
Digital Signing Certificate Number:41156

**Signed for
Subscriber:** E&A LEGAL SERVICES PTY LIMITED ABN 36118690485
E&A LAWYERS

Subscriber Capacity:Representative Subscriber
PEXA Subscriber Number:3661
Date: 31/12/2019

Customer Account Number:500759

System Document Identification

Land Registry Document Identification

Form Number:01T-e
Template Number:t_nsw18
ELN Document ID:553757553
ELN NOS ID: 553757554

TRANSFER
New South Wales
Real Property Act 1900

AQ600960

Stamp Duty: 9951609-001

PRIVACY NOTE: Section 31B of the Real Property Act 1900 (RP Act) authorises the Registrar General to collect the information required by this form for the establishment and maintenance of the Real Property Act Register. Section 96B RP Act requires that the Register is made available to any person for search upon payment of a fee, if any.

LODGED BY:

Responsible Subscriber: E&A LAWYERS ABN 36118690485
Address: PO BOX 320
Mona Vale 1660
Email: ryan@ealawyers.com.au
ELNO Subscriber Number: 3661
Customer Account Number: 500844
Document Collection Box: 272N
Client Reference: MJ/201509/Q

LAND TITLE REFERENCE

71/810836
73/810836
16/1079150
1/651249
15/1100216
18/1100223
2796-32
72/810836
2792-191
6/801261
74/810836
20/82/758466

TRANSFEROR

BUSWAYS EAST PTY LTD ACN 001910854
Registered company
Total share transferred: 25/1000

TRANSFEEEE

GALBROCK PTY LTD ACN 078310657
Registered company
Share of whole of land/interest: 100/ 1000
BHAAJAYU PTY LTD ACN 084980263
Registered company
Share of whole of land/interest: 800/ 1000
VERUGU PTY LTD ACN 003884188
Registered company
Share of whole of land/interest: 50/ 1000
SOUTH PTY LTD ACN 084946083
Registered company
Share of whole of land/interest: 50/ 1000
Tenancy: Tenants in Common

CONSIDERATION

The transferor acknowledges receipt of the consideration of \$144,635.00

ESTATE TRANSFERRED

FEE SIMPLE

The Transferor transfers to the Transferee the Estate specified in this Instrument and acknowledges receipt of any Consideration shown.

SIGNING FOR TRANSFEROR

SIGNING FOR TRANSFEROR

I certify that:

1. The Certifier has taken reasonable steps to ensure that this Registry Instrument or Document is correct and compliant with relevant legislation and any Prescribed Requirement.
2. The Certifier has retained the evidence supporting this Registry Instrument or Document.
3. The Certifier holds a properly completed Client Authorisation for the Conveyancing Transaction including this Registry Instrument or Document.
4. The Certifier has taken reasonable steps to verify the identity of the transferor.

Party Represented by Subscriber:

BUSWAYS EAST PTY LTD

Signed By: Matthew Jones

Signer Capacity: Practitioner Certifier

ELNO Signer Number: 8760

Digital Signing Certificate Number:

**Signed for
Subscriber:**

E&A LEGAL SERVICES PTY LIMITED ABN 36118690485

E&A LAWYERS

Subscriber Capacity: Representative Subscriber

ELNO Subscriber Number: 3661

Customer Account Number: 500759

Date: 30/11/2020

SIGNING FOR TRANSFeree

I certify that:

1. The Certifier has taken reasonable steps to ensure that this Registry Instrument or Document is correct and compliant with relevant legislation and any Prescribed Requirement.
2. The Certifier has retained the evidence supporting this Registry Instrument or Document.
3. The Certifier holds a properly completed Client Authorisation for the Conveyancing Transaction including this Registry Instrument or Document.
4. The Certifier has taken reasonable steps to verify the identity of the transferee.

Party Represented by Subscriber:

GALBROCK PTY LTD

Signed By: Matthew Jones

Signer Capacity: Practitioner Certifier

ELNO Signer Number: 8760

Digital Signing Certificate Number:

**Signed for
Subscriber:**

E&A LEGAL SERVICES PTY LIMITED ABN 36118690485

E&A LAWYERS

Subscriber Capacity: Representative Subscriber

ELNO Subscriber Number: 3661

Customer Account Number: 500759

Date: 30/11/2020



FOLIO: 71/810836

SEARCH DATE	TIME	EDITION NO	DATE
-----	----	-----	----
21/4/2023	8:07 AM	11	3/12/2021

LAND

LOT 71 IN DEPOSITED PLAN 810836
AT GOSFORD
LOCAL GOVERNMENT AREA CENTRAL COAST
PARISH OF GOSFORD COUNTY OF NORTHUMBERLAND
TITLE DIAGRAM DP810836

FIRST SCHEDULE

GALBROCK PTY LTD
IN 200/1000 SHARE
BHAAJAYU PTY LTD
IN 800/1000 SHARE
AS TENANTS IN COMMON

(T AR685342)

SECOND SCHEDULE (2 NOTIFICATIONS)

- 1 RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)
- 2 LAND EXCLUDES MINERALS AS REGARDS THE PART OF THE LAND DESIGNATED
(X) IN THE TITLE DIAGRAM

NOTATIONS

UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***



FOLIO: 72/810836

SEARCH DATE	TIME	EDITION NO	DATE
21/4/2023	8:07 AM	11	3/12/2021

LAND

LOT 72 IN DEPOSITED PLAN 810836
AT GOSFORD
LOCAL GOVERNMENT AREA CENTRAL COAST
PARISH OF GOSFORD COUNTY OF NORTHUMBERLAND
TITLE DIAGRAM DP810836

FIRST SCHEDULE

GALBROCK PTY LTD
IN 200/1000 SHARE
BHAAJAYU PTY LTD
IN 800/1000 SHARE
AS TENANTS IN COMMON

(T AR685342)

SECOND SCHEDULE (1 NOTIFICATION)

1 LAND EXCLUDES MINERALS AND IS SUBJECT TO RESERVATIONS AND
CONDITIONS IN FAVOUR OF THE CROWN - SEE CROWN GRANT(S)

NOTATIONS

UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***



SEARCH DATE

21/4/2023 11:28AM

FOLIO: 73/810836

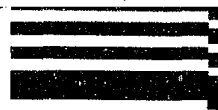
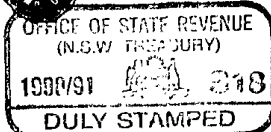
First Title(s): VOL 2715 FOL 117

Prior Title(s): 5/777417 7/801261

Recorded	Number	Type of Instrument	C.T. Issue
-----	-----	-----	-----
25/6/1991	DP810836	DEPOSITED PLAN	FOLIO CREATED EDITION 1
28/10/1991	E17147	TRANSFER WHOLE	EDITION 2
13/11/2000	7200322	MORTGAGE	EDITION 3
11/1/2011	AF937148	DISCHARGE OF MORTGAGE	
11/1/2011	AF937149	TRANSFER WHOLE	EDITION 4
21/8/2015	AJ698224	TRANSFER WITHOUT MONETARY CONSIDERATION CHANGE OF SHARES	
21/8/2015	AJ698225	TRANSFER SALE OF SHARE OF NORTH COAST TRANSIT	EDITION 5
24/10/2016	AK866623	MORTGAGE	EDITION 6
8/9/2018	AN695391	DEPARTMENTAL DEALING	EDITION 7 CORD ISSUED
7/2/2019	AP46913	DISCHARGE OF MORTGAGE	EDITION 8
31/12/2019	AP808964	TRANSFER SALE OF HALF SHARES OWNED BY EDWARDS EAST	EDITION 9
30/11/2020	AQ600960	TRANSFER SALE OF REMAINING SHARES OWNED BY BUSWAYS EAST	EDITION 10
3/12/2021	AR685342	TRANSFER	EDITION 11

*** END OF SEARCH ***

1985

E
017147 W

TRANSFER

REAL PROPERTY ACT, 1900

T

	of	
\$		

DESCRIPTION
OF LAND

Note (a)

Torrens Title Reference

Folio Identifier 73/810836
74/810836

If Part Only, Delete Whole and Give Details

WHOLE

Location

at Gosford

TRANSFEROR

Note (b)

RONALD IAN LAMONT

ESTATE

Note (c)

(the abovenamed TRANSFEROR) hereby acknowledges receipt of the consideration of \$ 235,000.00
and transfers an estate in fee simple
in the land above described to the TRANSFEREE

TRANSFEREE

Note (d)

GOSFORD RACE CLUB LIMITED

OFFICE USE ONLY

TENANCY

Note (e)

as joint tenants/tenants in common

PRIOR
ENCUMBRANCES

Note (f)

subject to the following PRIOR ENCUMBRANCES 1.

2.

3.

DATE 21st October 1991

We hereby certify this dealing to be correct for the purposes of the Real Property Act, 1900.

EXECUTION

Note (g)

Signed in my presence by the transferor who is personally known to me

Signature of Witness

Name of Witness (BLOCK LETTERS)

Address and occupation of Witness

Signature of Transferor

Note (g)

Signed in my presence by the transferee who is personally known to me

Signature of Witness

Name of Witness (BLOCK LETTERS)

Address and occupation of Witness

Solicitor for Signature of Transferee

TO BE COMPLETED
BY LODGING PARTYNotes (h)
and (i)

LODGED BY

VAPEREIL RUTLEDGE
SOLICITORS21 MANN STREET, GOSFORD 2250
LIX 7207 Gosford, Ph: (043) 23-3333
831 C

Delivery Box Number

W.R. GOSFORD RACE CLUB.

LOCATION OF DOCUMENTS

CT

OTHER

Herewith.

In L.T.O. with

Produced by

OFFICE USE ONLY

Checked

Passed

REGISTERED

-19

28 OCT 1991

Signed

Extra Fee

Secondary
DirectionsDelivery
Directions



FOLIO: 73/810836

SEARCH DATE	TIME	EDITION NO	DATE
21/4/2023	8:07 AM	11	3/12/2021

LAND

LOT 73 IN DEPOSITED PLAN 810836
AT GOSFORD
LOCAL GOVERNMENT AREA CENTRAL COAST
PARISH OF GOSFORD COUNTY OF NORTHUMBERLAND
TITLE DIAGRAM DP810836

FIRST SCHEDULE

GALBROCK PTY LTD
IN 200/1000 SHARE
BHAAJAYU PTY LTD
IN 800/1000 SHARE
AS TENANTS IN COMMON

(T AR685342)

SECOND SCHEDULE (1 NOTIFICATION)

1 LAND EXCLUDES MINERALS AND IS SUBJECT TO RESERVATIONS AND
CONDITIONS IN FAVOUR OF THE CROWN - SEE CROWN GRANT(S)

NOTATIONS

UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***



FOLIO: 74/810836

SEARCH DATE	TIME	EDITION NO	DATE
-----	----	-----	----
21/4/2023	8:07 AM	11	3/12/2021

LAND

LOT 74 IN DEPOSITED PLAN 810836
AT GOSFORD
LOCAL GOVERNMENT AREA CENTRAL COAST
PARISH OF GOSFORD COUNTY OF NORTHUMBERLAND
TITLE DIAGRAM DP810836

FIRST SCHEDULE

GALBROCK PTY LTD
IN 200/1000 SHARE
BHAAJAYU PTY LTD
IN 800/1000 SHARE
AS TENANTS IN COMMON

(T AR685342)

SECOND SCHEDULE (1 NOTIFICATION)

1 LAND EXCLUDES MINERALS AND IS SUBJECT TO RESERVATIONS AND
CONDITIONS IN FAVOUR OF THE CROWN - SEE CROWN GRANT(S)

NOTATIONS

UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***

APPENDIX C

Data Summary Tables

					TPH Fractions								BTEX								MAH																		
					C6-C10	C10-C16	C16-C34	C34-C40	C10 - C40 (Sum of total)	F1: C6-C10 less BTEX	F2: >C10-C16 less NAPHTHALENE	Naphthalene (VOC)	Benzene	Toluene	Ethylbenzene	Xylene (m & p)	Xylene (o)	Total BTEX	Xylene Total	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	Isopropylbenzene	n-butylbenzene	n-propylbenzene	p-isopropyltoluene	sec-butylbenzene	Styrene	tert-butylbenzene	Arsenic	Cadmium					Chromium (III+VI)	Copper			
EQL					25	25	90	100	50	25	25	0.1	0.1	0.1	0.1	0.2	0.1	0.6	0.3	0.1	0.1	0.1	0.1	0.1	0.1	1	0.3	0.5	0.5										
PFAS NEMP 2020 Ecological indirect exposure																																							
PFAS NEMP 2020 Residential with garden/accessible soil (HIL A)																																							
NEPM 2013 EIL Comm./Ind. Conservative site specific																										160		500	100										
NEPM 2013 ESL Comm./Ind., Coarse Soil							1,700	3,300		215	170		75	135	165			180																					
PFAS NEMP 2020 Industrial/ commercial (HIL D)																																							
CRCCARE 2011 Soil HSL for Direct Contact, HSL-D Com/Ind					26,000	20,000	27,000	38,000					430	99,000	27,000				81,000																				
NEPM 2013 HIL, Commercial/Industrial D																												3,000	900		240,000								
NEPM 2013 Soil HSL Commercial/Industrial D, for Vapour Intrusion, Sand					>=0m, <1m					260			3					230																					
					>=1m, <2m					370			3																										
					>=2m, <4m					630			3																										
					>=4m								3																										
Field ID	Location Code	Depth	Matrix Type	Date																																			
DRUM_1	DRUM	1	Soil	23 May 2023	<25	<25	<90	<120	<210	<25	<25	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.6	<0.3	-	-	-	-	-	-	-	3	<0.3	12	8.4									
GS1	GS1		Soil	23 May 2023	<25	<25	<90	<120	<210	<25	<25	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.6	<0.3	-	-	-	-	-	-	-	4	<0.3	11	14									
GS3	GS3		Soil	23 May 2023	<25	<25	95	<120	<210	<25	<25	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.6	<0.3	-	-	-	-	-	-	-	2	<0.3	7.8	14									
GS5	GS5		Soil	23 May 2023	<25	<25	<90	<120	<210	<25	<25	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.6	<0.3	-	-	-	-	-	-	-	2	<0.3	7.4	12									
GS7	GS7		Soil	23 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
HA101_0.1-0.2	HA101	0.1 - 0.2	Soil	03 May 2023	<25	<25	<90	<120	<210	<25	<25	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.6	<0.3	-	-	-	-	-	-	-	3	<0.3	6.4	3.8									
HA101_0.5-0.7	HA101	0.5 - 0.7	Soil	03 May 2023	<25	<25	<90	<120	<210	<25	<25	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.6	<0.3	-	-	-	-	-	-	-	3	<0.3	7.6	4.2									
HA102_0-0.1	HA102	0 - 0.1	Soil	03 May 2023	<25	<25	<90	<120	<210	<25	<25	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.6	<0.3	-	-	-	-	-	-	-	5	<0.3	11	6.8									
HA103_0.1-0.2	HA103	0.1 - 0.2	Soil	03 May 2023	<25	<25	<90	<120	<210	<25	<25	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.6	<0.3	-	-	-	-	-	-	-	3	<0.3	14	11									
HA106_0.1-0.2	HA106	0.1 - 0.2	Soil	03 May 2023	<25	<25	<90	<120	<210	<25	<25	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.6	<0.3	-	-	-	-	-	-	-	3	<0.3	9.2	7.5									
HA106_0.3-0.6	HA106	0.3 - 0.6	Soil	03 May 2023	<25	<25	<90	<120	<210	<25	<25	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.6	<0.3	-	-	-	-	-	-	-	3	<0.3	6.3	5.2									
HA109_0.1-0.3	HA109	0.1 - 0.3	Soil	03 May 2023	<25	<25	<90	<120	<210	<25	<25	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.6	<0.3	-	-	-	-	-	-	-	2	<0.3	6.2	6.2									
HA109_0.5-0.7	HA109	0.5 - 0.7	Soil	03 May 2023	<25	<25	<90	<120	<210	<25	<25	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.6	<0.3	-	-	-	-	-	-	-	3	<0.3	6.4	10									
TP101_0.5	TP101	0.5	Soil	03 May 2023	<25	<25	110	<120	<210	<25	<25	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.6	<0.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	6	<0.3	9.6	14									
TP101_0.5	TP101	0.5	Soil	03 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
TP101_1.8	TP101	1.8	Soil	03 May 2023	<25	<25	<90	<120	<210	<25	<25	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.6	<0.3	-	-	-	-	-	-	-	3	<0.3	7.2	<0.5									
TP102_0.1	TP102	0.1	Soil	03 May 2023	<25	<25	190	<120	<210	<25	<25	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.6	<0.3	-	-	-	-	-	-	-	6	<0.3	8.4	14									
TP102_2	TP102	2	Soil	03 May 2023	<25	<25	<90	<120	<210	<25	<25	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.6	<0.3	-	-	-	-	-	-	-	2	<0.3	9.2	<0.5									
TP103_0.5	TP103	0.5	Soil	03 May 2023	<25	<25	<90	<120	<210	<25	<25	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.6	<0.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	4	<0.3	8.5	11									
TP103_2	TP103	2	Soil	03 May 2023	<25	<25	<90	<120	<210	<25	<25	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.6	<0.3	-	-	-	-	-	-	-	2	<0.3	5.4	1.2									
TP104_0.5	TP104	0.5	Soil	03 May 2023	<25	<25	<90	<120	<210	<25	<25	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.6	<0.3	-	-	-	-	-	-	-	8	<0.3	2.6	12									
TP104_1	TP104	1	Soil	03 May 2023	<25	<25	<90	<120	<210	<25	<25	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.6	<0.3	-	-	-	-	-	-	-	12	<0.3	4.8	15									
QA100	TP105	0.5	Soil	03 May 2023	<25	<25	160	<120	<210	<25	<25	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.6	<0.3	-																			

					TPH Fractions							BTEX							MAH																
					C6-C10	C10-C16	C16-C34	C34-C40	C10 - C40 (Sum of total)	F1: C6-C10 less BTEX	F2: >C10-C16 less NAPHTHALENE	Naphthalene (VOC)	Benzene	Toluene	Ethylbenzene	Xylene (m & p)	Xylene (o)	Total BTEX	Xylene Total	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	Isopropylbenzene	n-butylbenzene	n-propylbenzene	p-isopropyltoluene	sec-butylbenzene	Styrene	tert-butylbenzene	Arsenic	Cadmium	Chromium (III+VI)	Copper			
EQL					25	25	90	100	50	25	25	0.1	0.1	0.1	0.1	0.2	0.1	0.6	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1	0.3	0.5	0.5				
PFAS NEMP 2020 Ecological indirect exposure																																			
PFAS NEMP 2020 Residential with garden/accessible soil (HIL A)																																			
NEPM 2013 EIL Comm./Ind. Conservative site specific																											160		500	100					
NEPM 2013 ESL Comm./Ind., Coarse Soil							1,700	3,300		215	170		75	135	165				180																
PFAS NEMP 2020 Industrial/ commercial (HIL D)																																			
CRCCARE 2011 Soil HSL for Direct Contact, HSL-D Com/Ind					26,000	20,000	27,000	38,000					430	99,000	27,000				81,000																
NEPM 2013 HIL, Commercial/Industrial D																												3,000	900			240,000			
NEPM 2013 Soil HSL Commercial/Industrial D, for Vapour Intrusion, Sand					>=0m, <1m					260			3						230																
					>=1m, <2m					370			3																						
					>=2m, <4m					630			3																						
					>=4m								3																						
Field ID	Location Code	Depth	Matrix Type	Date	<25	48	230	<120	280	<25	48	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.6	<0.3	-	-	-	-	-	-	-	-	4	<0.3	9.2	7.8				
QA400	TP116	0.1	Soil	05 May 2023	<25	53	240	<100	300	<25	53	<1	<0.2	<0.5	<1	<2	<1	-	<1	-	-	-	-	-	-	-	-	<4	<0.4	8	26				
TP116_0.1	TP116	0.1	Soil	05 May 2023	<25	27	200	<120	220	<25	27	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.6	<0.3	-	-	-	-	-	-	-	-	5	<0.3	9.6	10				
TP116_2	TP116	2	Soil	05 May 2023	<25	<25	<90	<120	<210	<25	<25	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.6	<0.3	-	-	-	-	-	-	-	-	2	<0.3	6.3	<0.5				
TP117_0.1	TP117	0.1	Soil	05 May 2023	<25	<25	<90	<120	<210	<25	<25	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.6	<0.3	-	-	-	-	-	-	-	-	6	<0.3	10	8.2				
TP117_1	TP117	1	Soil	05 May 2023	<25	<25	<90	<120	<210	<25	<25	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.6	<0.3	-	-	-	-	-	-	-	-	2	<0.3	11	<0.5				
TP118_0.1	TP118	0.1	Soil	04 May 2023	<25	55	230	<120	290	<25	55	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.6	<0.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	7	<0.3	4.1	5.7				
TP118_0.1	TP118	0.1	Soil	04 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
TP118_1.2	TP118	1.2	Soil	04 May 2023	<25	<25	<90	<120	<210	<25	<25	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.6	<0.3	-	-	-	-	-	-	-	-	3	<0.3	13	<0.5				
TP119_0.1	TP119	0.1	Soil	05 May 2023	<25	<25	<90	<120	<210	<25	<25	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.6	<0.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	4	<0.3	28	<0.5				
TP119_0.5	TP119	0.5	Soil	05 May 2023	<25	<25	<90	<120	<210	<25	<25	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.6	<0.3	-	-	-	-	-	-	-	-	2	<0.3	12	<0.5				
TP120_0.1	TP120	0.1	Soil	05 May 2023	<25	<25	<90	<120	<210	<25	<25	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.6	<0.3	-	-	-	-	-	-	-	-	3	<0.3	5.6	25				
QA500	TP120	0.5	Soil	05 May 2023	<25	<25	<90	<120	<210	<25	<25	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.6	<0.3	-	-	-	-	-	-	-	-	5	<0.3	21	<0.5				
QC500	TP120	0.5	Soil	05 May 2023	<25	<50	<100	<100	<50	<25	<50	<1	<0.2	<0.5	<1	<2	<1	-	<1	-	-	-	-	-	-	-	-	<4	<0.4	9	<1				
TP120_0.5	TP120	0.5	Soil	05 May 2023	<25	<25	<90	<120	<210	<25	<25	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.6	<0.3	-	-	-	-	-	-	-	-	<1	<0.3	7.5	<0.5				
TP121_0.3	TP121	0.3	Soil	05 May 2023	<25	180	1,000	170	1,300	<25	180	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.6	<0.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	7	<0.3	7.5	11				
TP121_0.3	TP121	0.3	Soil	05 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
TP121_0.7	TP121	0.7	Soil	05 May 2023	<25	<25	<90	<120	<210	<25	<25	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.6	<0.3	-	-	-	-	-	-	-	-	<1	<0.3	9.6	<0.5				
TP122_0.1	TP122	0.1	Soil	05 May 2023	<25	<25	<90	<120	<210	<25	<25	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.6	<0.3	-	-	-	-	-	-	-	-	7	<0.3	15	3.3				
TP122_1	TP122	1	Soil	05 May 2023	<25	<25	<90	<120	<210	<25	<25	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.6	<0.3	-	-	-	-	-	-	-	-	3	<0.3	14	<0.5				
QA700	TP123	0.1	Soil	05 May 2023	<25	<25	<90	<120	<210	<25	<25	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.6	<0.3	-	-	-	-	-	-	-	-	2	<0.3	7.6	1.5				
QC700	TP123	0.1	Soil	05 May 2023	<25	<50	<100	<100	<50	<25	<50	<1	<0.2	<0.5	<1	<2	<1	-	<1	-	-	-	-	-	-	-	-	<4	<0.4	7	1				
TP123_0.1	TP123	0.1	Soil	05 May 2023	<25	<25	<90	<120	<210	<25	<25	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.6	<0.3	<0.1	<0.1														

					TPH Fractions							BTEX							MAH													
					C6-C10	C10-C16	C16-C34	C34-C40	C10 - C40 (Sum of total)	F1: C6-C10 less BTEX	F2: >C10-C16 less NAPHTHALENE	Naphthalene (VOC)	Benzene	Toluene	Ethylbenzene	Xylene (m & p)	Xylene (o)	Total BTEX	Xylene Total	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	Isopropylbenzene	n-butylbenzene	n-propylbenzene	p-Isopropyltoluene	sec-butylbenzene	Styrene	tert-butylbenzene				
					mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL					25	25	90	100	50	25	25	0.1	0.1	0.1	0.1	0.2	0.1	0.6	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1	0.3	0.5	0.5
PFAS NEMP 2020 Ecological indirect exposure																																
PFAS NEMP 2020 Residential with garden/accessible soil (HIL A)																																
NEPM 2013 EIL Comm./Ind. Conservative site specific																											160		500	100		
NEPM 2013 ESL Comm./Ind., Coarse Soil							1,700	3,300		215	170		75	135	165			180														
PFAS NEMP 2020 Industrial/ commercial (HIL D)																																
CRCCARE 2011 Soil HSL for Direct Contact, HSL-D Com/Ind					26,000	20,000	27,000	38,000					430	99,000	27,000			81,000														
NEPM 2013 HIL, Commercial/Industrial D																												3,000	900		240,000	
NEPM 2013 Soil HSL Commercial/Industrial D, for Vapour Intrusion, Sand	>=0m, <1m									260			3						230													
	>=1m, <2m									370			3																			
	>=2m, <4m									630			3																			
	>=4m												3																			
Field ID	Location Code	Depth	Matrix Type	Date	<25	<25	<90	<120	<210	<25	<25	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.6	<0.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	5	<0.3	10	11
TP136_0.1	TP136	0.1	Soil	04 May 2023	<25	<25	<90	<120	<210	<25	<25	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.6	<0.3	-	-	-	-	-	-	-	-	55	0.5	8.8	1.9	
Statistics																																
Number of Results					103	103	103	103	103	103	103	103	103	103	103	103	103	96	103	22	22	22	22	22	22	22	22	22	103	103	103	103
Number of Detects					0	7	18	2	7	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	93	5	103	72	
Minimum Concentration					<25	25	<90	<100	<50	<25	25	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.6	<0.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	1	<0.3	2.3	<0.5	
Minimum Detect					ND	25	91	140	130	ND	25	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	0.4	2.3	0.8	
Maximum Concentration					<25	180	1,000	170	1,300	<25	180	<1	<0.2	<0.5	<1	<2	<1	<0.6	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	62	0.8	29	44	
Maximum Detect					ND	180	1,000	170	1,300	ND	180	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	62	0.8	29	44	
Average Concentration *					12	17	73	61	121	12	17	0.081	0.053	0.064	0.081	0.16	0.081	0.3	0.17	0.05	0.05	0.05	0.05	0.05	0.05	0.05	5.6	0.17	9.9	7.6		
Geometric Average *					13	14	57	60	105	13	14	0.058	0.052	0.056	0.058	0.12	0.058	0.3	0.16	0.05	0.05	0.05	0.05	0.05	0.05	0.05	3.3	0.16	8.7	2.7		
Median Concentration *					12.5	12.5	45	60	105	12.5	12.5	0.05	0.05	0.05	0.05	0.1	0.05	0.3	0.15	0.05	0.05	0.05	0.05	0.05	0.05	0.05	3	0.15	8.5	4.8		
Standard Deviation *					0	18	103	14	124	0	18	0.11	0.013	0.051	0.11	0.23	0.11	0	0.089	0	0	0	0	0	0	0	9.8	0.083	5.3	8.9		
Geometric Standard Deviation *					1	1.5	1.7	1.2	1.6	1	1.5	1.8	1.2	1.5	1.8	1.8	1.8	1	1.4	1	1	1	1	1	1	1	2.3	1.3	1.7	5.7		
% of Detects					0	7	17	2	7	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	90	5	100	70		
% of Non-Detects					100	93	83	98	93	100	93	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	10	95	0	30	

* A Non Detect Multiplier of 0.5 has been applied.

					Metals					Asbestos Identification in Soil								PAH											
					Lead	Mercury	Nickel	Selenium	Zinc	FA and AF Estimator*	Asbestos in soil (>7mm ACM)	weight of sample	Asbestos result	Naphthalene	2-methylnaphthalene	1-Methylnaphthalene	Acenaphthylene	Acenaphthene	Fluorene	Phenanthrene	Anthracene	Fluoranthene	Pyrene	Benz(a)anthracene	Chrysene	Benzo(k)fluoranthene	Benzo(b)&(k)fluoranthene		
EQL					1	0.05	0.5	2	1	%w/w	%w/w	g	No unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg			
PFAS NEMP 2020 Ecological indirect exposure																													
PFAS NEMP 2020 Residential with garden/accessible soil (HIL A)																													
NEPM 2013 EIL Comm./Ind. Conservative site specific					1,800		120		460					370															
NEPM 2013 ESL Comm./Ind., Coarse Soil																													
PFAS NEMP 2020 Industrial/ commercial (HIL D)																													
CRCCARE 2011 Soil HSL for Direct Contact, HSL-D Com/Ind														11,000															
NEPM 2013 HIL, Commercial/Industrial D					1,500	730	6,000	10,000	400,000	0.001	0.05		No asbestos at surface																
NEPM 2013 Soil HSL Commercial/Industrial D, for Vapour Intrusion, Sand					>=0m, <1m																								
					>=1m, <2m																								
					>=2m, <4m																								
					>=4m																								
Field ID	Location Code	Depth	Matrix Type	Date																									
DRUM_1	DRUM	1	Soil	23 May 2023	7	<0.05	4.7	-	6.1	<0.001	<0.01	567	Asbestos fibres detected above reporting threshold of 0.001% w/w	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-			
GS1	GS1		Soil	23 May 2023	8	<0.05	21	-	180	0.008	<0.01	482	Asbestos fibres detected above reporting threshold of 0.001% w/w	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-			
GS3	GS3		Soil	23 May 2023	18	<0.05	7.7	-	89	<0.001	<0.01	171	Asbestos fibres detected below reporting threshold of 0.001% w/w	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-			
GS5	GS5		Soil	23 May 2023	4	<0.05	17	-	38	0.015	<0.01	460	Asbestos fibres detected above reporting threshold of 0.001% w/w	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-			
GS7	GS7		Soil	23 May 2023	-	-	-	-	-	0.014	<0.01	284	Asbestos fibres detected above reporting threshold of 0.001% w/w	-	-	-	-	-	-	-	-	-	-	-	-	-			
HA101_0.1-0.2	HA101	0.1 - 0.2	Soil	03 May 2023	43	<0.05	1.3	-	25	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-			
HA101_0.5-0.7	HA101	0.5 - 0.7	Soil	03 May 2023	20	<0.05	1.2	-	54	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-			
HA102_0-0.1	HA102	0 - 0.1	Soil	03 May 2023	15	<0.05	2.8	-	110	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-			
HA103_0.1-0.2	HA103	0.1 - 0.2	Soil	03 May 2023	16	<0.05	18	-	23	-	-	-	No asbestos detected	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-			
HA106_0.1-0.2	HA106	0.1 - 0.2	Soil	03 May 2023	12	<0.05	5.8	-	29	-	-	-	No asbestos detected	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-			
HA106_0.3-0.6	HA106	0.3 - 0.6	Soil	03 May 2023	18	<0.05	1.4	-	22	-	-	-	No asbestos detected	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-			
HA109_0.1-0.3	HA109	0.1 - 0.3	Soil	03 May 2023	14	<0.05	2.0	-	19	-	-	-	No asbestos detected	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-			
HA109_0.5-0.7	HA109	0.5 - 0.7	Soil	03 May 2023	22	<0.05	1.4	-	25	-	-	-	No asbestos detected	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-			
TP101_0.5	TP101	0.5	Soil	03 May 2023	18	<0.05	11	-	280	-	-	-	No asbestos detected	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2			
TP101_0.5	TP101	0.5	Soil	03 May 2023	-	-	-	-	-	-	-	-	-	-	-	0.2	-	-	-	0.2	-	0.2	-	-	-	-			
TP101_1.8	TP101	1.8	Soil	03 May 2023	7	<0.05	<0.5	-	3.2	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-			
TP102_0.1	TP102	0.1	Soil	03 May 2023	30	<0.05	7.1	-	350	-	-	-	No asbestos detected	<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	-		
TP102_2	TP102	2	Soil	03 May 2023	6	<0.05	0.8	-	3.0	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-			
TP103_0.5	TP103	0.5	Soil	03 May 2023	24	<0.05	6.7	-	170	-	-	-	No asbestos detected	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2			
TP103_2	TP103	2	Soil	03 May 2023	6	<0.05	0.6	-	30	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-			
TP104_0.5	TP104	0.5	Soil	03 May 2023	5	<0.05	7.2	-	45	-	-	-	No asbestos detected	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-			
TP104_1	TP104	1	Soil	03 May 2023	9	<0.05	5.0	-	150	-	-	-	No asbestos detected	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	-			
QA100	TP105	0.5	Soil	03 May 2023	6	<0.05	16	-	31	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-			
QC100	TP105	0.5	Soil	03 May 2023	6	<0.1	23	-	55	-	-	-	-	<0.1	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	-			
TP105_0.5	TP105	0.5	Soil	03 May 2023	4	<0.05	18	-	53	-	-	-	No asbestos detected	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-			
TP105_3	TP105	3	Soil	03 May 2023	7	<0.05	0.6	-	2.4	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-			
TP106_0.5	TP106	0.5	Soil	04 May 2023	14	<0.05	6.0	-	290	-	-	-	ACM in soil detected above reporting limit of 0.01% w/w	<0.1															

					Metals					Asbestos Identification in Soil									PAH													
					Lead	Mercury	Nickel	Selenium	Zinc	FA and AF Estimator*	Asbestos in soil (>7mm ACM)	weight of sample	Asbestos result	Naphthalene	2-methylnaphthalene	1-Methylnaphthalene	Acenaphthylene	Acenaphthene	Fluorene	Phenanthrene	Anthracene	Fluoranthene	Pyrene	Benz(a)anthracene	Chrysene	Benzo(k)fluoranthene	Benzo(b)&(k)fluoranthene					
EQL					1	0.05	0.5	2	1		0.01	1		No unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg			
PFAS NEMP 2020 Ecological indirect exposure																																
PFAS NEMP 2020 Residential with garden/accessible soil (HIL A)																																
NEPM 2013 EIL Comm./Ind. Conservative site specific					1,800		120		460						370																	
NEPM 2013 ESL Comm./Ind., Coarse Soil																																
PFAS NEMP 2020 Industrial/ commercial (HIL D)																																
CRCCARE 2011 Soil HSL for Direct Contact, HSL-D Com/Ind															11,000																	
NEPM 2013 HIL, Commercial/Industrial D					1,500	730	6,000	10,000	400,000	0.001	0.05			No asbestos at surface																		
NEPM 2013 Soil HSL Commercial/Industrial D, for Vapour Intrusion, Sand					>=0m, <1m																											
					>=1m, <2m																											
					>=2m, <4m																											
					>=4m																											
Field ID	Location Code	Depth	Matrix Type	Date																												
QA400	TP116	0.1	Soil	05 May 2023	15	<0.05	5.0	-	260	-	-	-	-	-	0.2	0.5	0.6	<0.1	<0.1	<0.1	1.2	<0.1	0.5	0.3	0.2	0.2	<0.1	-	-			
QC400	TP116	0.1	Soil	05 May 2023	13	<0.1	4	-	110	-	-	-	-	-	<0.1	-	-	<0.1	<0.1	<0.1	0.7	<0.1	0.3	0.2	0.1	0.2	-	-	-			
TP116_0.1	TP116	0.1	Soil	05 May 2023	14	<0.05	4.7	-	130	-	-	-	No asbestos detected	-	0.1	0.3	0.3	<0.1	<0.1	<0.1	0.6	<0.1	0.3	0.2	0.1	0.1	<0.1	<0.1	-			
TP116_2	TP116	2	Soil	05 May 2023	5	<0.05	<0.5	-	2.7	-	-	-	-	-	<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	-			
TP117_0.1	TP117	0.1	Soil	05 May 2023	14	0.06	5.8	-	410	-	-	-	No asbestos detected	-	<0.1	0.2	0.2	<0.1	<0.1	<0.1	0.5	<0.1	0.3	0.3	0.2	0.2	<0.1	-	-			
TP117_1	TP117	1	Soil	05 May 2023	4	<0.05	<0.5	-	32	-	-	-	-	-	<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	-			
TP118_0.1	TP118	0.1	Soil	04 May 2023	9	<0.05	3.9	-	29	-	-	-	No asbestos detected	-	<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	<0.2			
TP118_0.1	TP118	0.1	Soil	04 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5	-	0.2	-	-	-	-	-	-			
TP118_1.2	TP118	1.2	Soil	04 May 2023	7	<0.05	0.9	-	3.0	-	-	-	-	-	<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	-			
TP119_0.1	TP119	0.1	Soil	05 May 2023	10	<0.05	0.9	-	4.5	-	-	-	No asbestos detected	-	<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	<0.2			
TP119_0.5	TP119	0.5	Soil	05 May 2023	7	<0.05	0.6	-	2.5	-	-	-	No asbestos detected	-	<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	-			
TP120_0.1	TP120	0.1	Soil	05 May 2023	7	<0.05	3.1	-	37	-	-	-	No asbestos detected	-	<0.1	0.2	0.3	<0.1	<0.1	<0.1	0.6	<0.1	0.3	0.1	0.1	0.1	<0.1	-	-			
QA500	TP120	0.5	Soil	05 May 2023	7	<0.05	0.7	-	4.2	-	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-				
QC500	TP120	0.5	Soil	05 May 2023	6	<0.1	<1	-	2	-	-	-	-	-	<0.1	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	-			
TP120_0.5	TP120	0.5	Soil	05 May 2023	5	<0.05	0.7	-	<2	-	-	-	No asbestos detected	-	<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	-			
TP121_0.3	TP121	0.3	Soil	05 May 2023	11	<0.05	8.4	<2	19	-	-	-	No asbestos detected	-	0.3	0.8	0.9	<0.1	0.1	0.1	2.0	0.2	1.0	0.8	0.5	0.5	0.1	0.3	-			
TP121_0.3	TP121	0.3	Soil	05 May 2023	-	-	-	-	-	-	-	-	-	-	0.4	0.9	1.2	-	-	-	2.8	0.3	1.4	1.0	0.6	0.7	-	-	-			
TP121_0.7	TP121	0.7	Soil	05 May 2023	7	<0.05	0.9	-	<2	-	-	-	No asbestos detected	-	<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	-			
TP122_0.1	TP122	0.1	Soil	05 May 2023	12	<0.05	6.6	-	41	-	-	-	No asbestos detected	-	<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	-	-			
TP122_1	TP122	1	Soil	05 May 2023	7	<0.05	0.5	-	5.6	-	-	-	-	-	<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	-	-			
QA700	TP123	0.1	Soil	05 May 2023	6	<0.05	1.1	-	8.0	-	-	-	-	-	<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	-	-			
QC700	TP123	0.1	Soil	05 May 2023	6	<0.1	1	-	10	-	-	-	-	-	<0.1	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	-			
TP123_0.1	TP123	0.1	Soil	05 May 2023	6	0.08	1.4	-	9.2	-	-	-	No asbestos detected	-	<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	<0.2			
TP123_1	TP123	1	Soil	05 May 2023	5	<0.05	<0.5	-	<2	-	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	-			
TP124_0.1	TP124	0.1	Soil	05 May 2023	2	<0.05	64	-	34	-	-	-	No asbestos detected	-	<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	-			
TP124_1	TP124	1	Soil	05 May 2023	7	<0.05	<0.5	-	<2	-	-	-	No asbestos detected	-	<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	-			
TP125_0.1	TP125	0.1	Soil	05 May 2023	71	<0.05	5.1	-	49	-	-	-	ACM in soil detected above reporting limit of 0.01% w/w	-	<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	<0.2			
TP125_0.1_PACM	TP125	0.1	Other	05 May 2023	-	-	-	-	-	-	-	-	Asbestos detected in fibre cement fragment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
TP125_1.2	TP125	1.2	Soil	05 May 2023	32	<0.05	9.8	-	43	-	-	-	No asbestos detected	-	<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	<0.2			
TP125_1.8	TP125	1.8	Soil	05 May 2023	7	<0.05	<0.5	-	<2	-	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-			
TP126_0.2	TP126	0.2	Soil	05 May 2023	9	<0.05	0.6	-	3.5	-	-	-	No asbestos detected	-</																		

					Metals					Asbestos Identification in Soil				PAH																	
					Lead	Mercury	Nickel	Selenium	Zinc					FA and AF Estimation*	Asbestos in soil (>7mm ACM)	Weight of sample	Asbestos result	Naphthalene	2-methylnaphthalene	1-Methylnaphthalene	Acenaphthylene	Acenaphthene	Fluorene	Phenanthrene	Anthracene	Fluoranthene	Pyrene	Benz(a)anthracene	Chrysene	Benzo(k)fluoranthene	Benzo(b)&(k)fluoranthene
Field ID	Location Code	Depth	Matrix Type	Date	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	%w/w	%w/w	g	No unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg						
EQL		1			0.05	0.5		2	1		0.01	1		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2						
PFAS NEMP 2020 Ecological indirect exposure																															
PFAS NEMP 2020 Residential with garden/accessible soil (HIL A)																															
NEPM 2013 EIL Comm./Ind. Conservative site specific																															
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* A Non Detect Multiplier of 0.5 has been applied.

															Phenol																				
					Benzo(b)fluoranthene	Benzo(a)pyrene	Indeno(1,2,3-c,d)pyrene	Dibenzo(a,h)anthracene	Benzo(ghi)perylene	Benzo(a)pyrene TEQ (Zero LOR)	Benzo(a)pyrene TEQ (Half LOR)	Benzo(a)pyrene TEQ (Full LOR)	PAHs (Sum of total)	3-methylcholanthrene	7,12-dimethylbenz(a)anthracene	3,4-Methylphenol (mp-cresol)	2-methylphenol	2-nitrophenol	4-chloro-3-methylphenol	4-nitrophenol	Phenol	2,4-DDT	4,4-DDE	α-BHC	Aldrin	β-BHC	Chlordane (cis)	gamma-Chlordane	δ-BHC	DDD	DDT	Dieldrin			
					mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg		
EQL					0.1	0.05	0.1	0.1	0.1	0.5	0.5	0.5	0.8	0.5	0.5	1	0.5	0.5	2	1	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2		
PFAS NEMP 2020 Ecological indirect exposure																																			
PFAS NEMP 2020 Residential with garden/accessible soil (HIL A)																																			
NEPM 2013 EIL Comm./Ind. Conservative site specific																																			
NEPM 2013 ESL Comm./Ind., Coarse Soil						1.4																										640			
PFAS NEMP 2020 Industrial/ commercial (HIL D)																																			
CRCCARE 2011 Soil HSL for Direct Contact, HSL-D Com/Ind																																			
NEPM 2013 HIL, Commercial/Industrial D											40		4,000									240,000													
NEPM 2013 Soil HSL Commercial/Industrial D, for Vapour Intrusion, Sand					>=0m, <1m																														
					>=1m, <2m																														
					>=2m, <4m																														
					>=4m																														
Field ID	Location Code	Depth	Matrix Type	Date																															
DRUM_1	DRUM	1	Soil	23 May 2023	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.3	<0.8	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2			
GS1	GS1		Soil	23 May 2023	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.3	<0.8	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2			
GS3	GS3		Soil	23 May 2023	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.3	<0.8	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2			
GS5	GS5		Soil	23 May 2023	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.3	<0.8	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2			
GS7	GS7		Soil	23 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
HA101_0.1-0.2	HA101	0.1 - 0.2	Soil	03 May 2023	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.3	<0.8	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2			
HA101_0.5-0.7	HA101	0.5 - 0.7	Soil	03 May 2023	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.3	<0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
HA102_0-0.1	HA102	0 - 0.1	Soil	03 May 2023	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.3	<0.8	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2			
HA103_0.1-0.2	HA103	0.1 - 0.2	Soil	03 May 2023	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.3	<0.8	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2			
HA106_0.1-0.2	HA106	0.1 - 0.2	Soil	03 May 2023	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.3	<0.8	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2			
HA106_0.3-0.6	HA106	0.3 - 0.6	Soil	03 May 2023	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.3	<0.8	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2			
HA109_0.1-0.3	HA109	0.1 - 0.3	Soil	03 May 2023	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.3	<0.8	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2			
HA109_0.5-0.7	HA109	0.5 - 0.7	Soil	03 May 2023	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.3	<0.8	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2			
TP101_0.5	TP101	0.5	Soil	03 May 2023	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.3	<0.8	<0.5	<0.5	<1	<0.5	<0.5	<2	<1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2			
TP101_0.5	TP101	0.5	Soil	03 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
TP101_1.8	TP101	1.8	Soil	03 May 2023	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.3	<0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
TP102_0.1	TP102	0.1	Soil	03 May 2023	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.3	<0.8	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2			
TP102_2	TP102	2	Soil	03 May 2023	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.3	<0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
TP103_0.5	TP103	0.5	Soil	03 May 2023	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.3	<0.8	<0.5	<0.5	<1	<0.5	<0.5	<2	<1	<0.5	-	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2			
TP103_2	TP103	2	Soil	03 May 2023	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.3	<0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
TP104_0.5	TP104	0.5	Soil	03 May 2023	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.3	<0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
TP104_1	TP104	1	Soil	03 May 2023	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.3	<0.8	-	-	-	-	-																	

Appendix C - Results Table 1: 8 of 47

															Phenol																			
					Benzo(b+h)fluoranthene	Benzo(a)pyrene	Indeno(1,2,3-c,d)pyrene	Dibenzo(a,h)anthracene	Benzo(g,h,i)perylene	Benzo(a)pyrene TEQ (Zero LOR)	Benzo(a)pyrene TEQ (Half LOR)	Benzo(a)pyrene TEQ (Full LOR)	PAHs (Sum of total)	3-methylcholanthrene	7,12-dimethylbenz(a)anthracene	3,4-Methylphenol (mp-cresol)	2-methylphenol	2-nitrophenol	4-chloro-3-methylphenol	4-nitrophenol	Phenol	2,4-DDT	4,4-DDE	a-BHC	Aldrin	b-BHC	Chlordane (cis)	gamma-Chlordane	d-BHC	DDD	DDT	Dieldrin		
					mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg		
EQL					0.1	0.05	0.1	0.1	0.1	0.5	0.5	0.5	0.8	0.5	0.5	1	0.5	0.5	2	1	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	
PFAS NEMP 2020 Ecological indirect exposure																																		
PFAS NEMP 2020 Residential with garden/accessible soil (HIL A)																																		
NEPM 2013 EIL Comm./Ind. Conservative site specific																														640				
NEPM 2013 ESL Comm./Ind., Coarse Soil						1.4																												
PFAS NEMP 2020 Industrial/ commercial (HIL D)																																		
CRCCARE 2011 Soil HSL for Direct Contact, HSL-D Com/Ind																																		
NEPM 2013 HIL, Commercial/Industrial D											40		4,000									240,000												
NEPM 2013 Soil HSL Commercial/Industrial D, for Vapour Intrusion, Sand	>=0m, <1m																																	
	>=1m, <2m																																	
	>=2m, <4m																																	
	>=4m																																	
Field ID	Location Code	Depth	Matrix Type	Date																														
TP136_0.1	TP136	0.1	Soil	04 May 2023	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.3	<0.8	<0.5	<0.5	<1	<0.5	<0.5	<2	<1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2		
TP136_0.5	TP136	0.5	Soil	04 May 2023	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.3	<0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Statistics																																		
Number of Results					98	104	103	103	103	104	104	104	96	22	22	22	22	22	22	22	22	28	40	40	40	40	40	40	40	40	40	40		
Number of Detects					6	2	0	0	0	2	2	2	6	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0		
Minimum Concentration					0.1	<0.05	<0.1	<0.1	<0.1	0.2	<0.2	0.3	<0.8	<0.5	<0.5	<1	<0.5	<0.5	<2	<1	<0.5	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2		
Minimum Detect					0.1	0.1	ND	ND	ND	0.2	0.3	0.3	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Maximum Concentration					0.3	0.1	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	7.5	<0.5	<0.5	<1	<0.5	<0.5	<2	<1	<0.5	<0.1	0.1	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2		
Maximum Detect					0.3	0.1	ND	ND	ND	0.2	0.3	0.3	7.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Average Concentration *					0.059	0.049	0.05	0.05	0.05	0.11	0.11	0.16	0.56	0.25	0.25	0.5	0.25	0.25	1	0.5	0.25	0.05	0.051	0.05	0.05	0.11	0.05	0.05	0.05	0.05	0.05	0.1		
Geometric Average *					0.054	0.048	0.05	0.05	0.05	0.11	0.11	0.16	0.45	0.25	0.25	0.5	0.25	0.25	1	0.5	0.25	0.05	0.051	0.05	0.05	0.081	0.05	0.05	0.05	0.05	0.05	0.1		
Median Concentration *					0.05	0.05	0.05	0.05	0.05	0.1	0.1	0.15	0.4	0.25	0.25	0.5	0.25	0.25	1	0.5	0.25	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.1		
Standard Deviation *					0.033	0.0081	0	0	0	0.039	0.042	0.029	0.83	0	0	0	0	0	0	0	0	0	0.0079	0	0	0.093	0	0	0	0	0	0		
Geometric Standard Deviation *					1.4	1.2	1	1	1	1.3	1.3	1.2	1.6	1	1	1	1	1	1	1	1	1	1.1	1	1	2.1	1	1	1	1	1	1		
% of Detects					6	2	0	0	0	2	2	2	6	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0		
% of Non-Detects					94	98	100	100	100	98	98	98	94	100	100	100	100	100	100	100	100	100	98	100	100	100	100	100	100	100	100	100		

* A Non Detect Multiplier of 0.5 has been applied.

Appendix C - Results Table 1: 10 of 47

Prepared by: CC
Reviewed by: MB

					Organochlorine Pesticides																													
					Endosulfan	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	Endrin ketone	γ-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	o,p-DDD	o,p'-DDE	trans-Nonachlor	Azinophos methyl	Bromophos-ethyl	Carbophenothion	Chlorfenvinphos E	Chlorpyrifos	Chlorpyrifos-methyl	Coumaphos	Diazinon	cis-Chlorfenvinphos	Dichlorvos	Dimethoate	Disulfoton	Ethion		
					mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg			
EQL					0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.5	0.5	0.2	0.5	0.5	0.5	2	0.5	0.5	0.5	0.5	0.2			
PFAS NEMP 2020 Ecological indirect exposure																																		
PFAS NEMP 2020 Residential with garden/accessible soil (HIL A)																																		
NEPM 2013 EIL Comm./Ind. Conservative site specific																																		
NEPM 2013 ESL Comm./Ind., Coarse Soil																																		
PFAS NEMP 2020 Industrial/ commercial (HIL D)																																		
CRCCARE 2011 Soil HSL for Direct Contact, HSL-D Com/Ind																																		
NEPM 2013 HIL, Commercial/Industrial D					2,000				100				50		80	2,500							2,000											
NEPM 2013 Soil HSL Commercial/Industrial D, for Vapour Intrusion, Sand					>=0m, <1m																													
					>=1m, <2m																													
					>=2m, <4m																													
					>=4m																													
Field ID	Location Code	Depth	Matrix Type	Date																														
TP136_0.1	TP136	0.1	Soil	04 May 2023	<0.2	<0.2	<0.2	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.5	<0.2			
TP136_0.5	TP136	0.5	Soil	04 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Statistics																																		
Number of Results					22	40	40	40	40	28	40	40	40	40	40	28	28	28	42	42	22	22	42	22	22	42	22	42	42	22	42			
Number of Detects					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1			
Minimum Concentration					<0.2	<0.2	<0.2	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.5	0.2			
Minimum Detect					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2		
Maximum Concentration					<0.2	<0.2	<0.2	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.5	0.2			
Maximum Detect					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2		
Average Concentration *					0.1	0.1	0.1	0.05	0.1	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.1	0.1	0.25	0.25	0.1	0.25	0.25	0.25	1	0.25	0.25	0.25	0.1			
Geometric Average *					0.1	0.1	0.1	0.05	0.1	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.1	0.1	0.25	0.25	0.1	0.25	0.25	0.25	1	0.25	0.25	0.25	0.1			
Median Concentration *					0.1	0.1	0.1	0.05	0.1	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.1	0.1	0.25	0.25	0.1	0.25	0.25	0.25	1	0.25	0.25	0.25	0.1			
Standard Deviation *					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.015			
Geometric Standard Deviation *					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			
% of Detects					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2			
% of Non-Detects					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	98			

* A Non Detect Multiplier of 0.5 has been applied.

Prepared by: CC
Reviewed by: MB

					Organophosphorous Pesticides															Herbicides	Pesticides														
					Ethoprop	Ethyl methanesulfonate	Fenitrothion	Fenthion	Isosafrole (cis)	Isosafrole (trans)	Malathion	Methidathion	Methyl methanesulfonate	Methyl parathion	Mevinphos (Phosdrin)	Phorate	Prothiofos	Ronnel	Safrole	Stirophos	Trifluralin	Carbaryl	Carboturan	Demeton-S-methyl	Fenamiphos	Famphur	Isodrin	Mirex	Parathion	Priniphos-methyl	Priniphos-ethyl	Profanofos			
EQL					0.5	1	0.2	0.5	1	1	0.2	0.5	1	0.5	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.1	0.1	0.2	0.5	0.5	0.5					
PFAS NEMP 2020 Ecological indirect exposure																																			
PFAS NEMP 2020 Residential with garden/accessible soil (HIL A)																																			
NEPM 2013 EIL Comm./Ind. Conservative site specific																																			
NEPM 2013 ESL Comm./Ind., Coarse Soil																																			
PFAS NEMP 2020 Industrial/ commercial (HIL D)																																			
CRCCARE 2011 Soil HSL for Direct Contact, HSL-D Com/Ind																																			
NEPM 2013 HIL, Commercial/Industrial D																																			
NEPM 2013 Soil HSL Commercial/Industrial D, for Vapour Intrusion, Sand					>=0m, <1m																					100									
					>=1m, <2m																														
					>=2m, <4m																														
					>=4m																														
Field ID	Location Code	Depth	Matrix Type	Date																															
QA400	TP116	0.1	Soil	05 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
QC400	TP116	0.1	Soil	05 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
TP116_0.1	TP116	0.1	Soil	05 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
TP116_2	TP116	2	Soil	05 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
TP117_0.1	TP117	0.1	Soil	05 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
TP117_1	TP117	1	Soil	05 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
TP118_0.1	TP118	0.1	Soil	04 May 2023	<0.5	<1	<0.2	<0.5	<1	<1	<0.2	<0.5	<1	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.2	<0.5	<0.5	<0.5					
TP118_0.1	TP118	0.1	Soil	04 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
TP118_1.2	TP118	1.2	Soil	04 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
TP119_0.1	TP119	0.1	Soil	05 May 2023	<0.5	<1	<0.2	<0.5	<1	<1	<0.2	<0.5	<1	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.2	<0.5	<0.5	<0.5					
TP119_0.5	TP119	0.5	Soil	05 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
TP120_0.1	TP120	0.1	Soil	05 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
QA500	TP120	0.5	Soil	05 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
QC500	TP120	0.5	Soil	05 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
TP120_0.5	TP120	0.5	Soil	05 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
TP121_0.3	TP121	0.3	Soil	05 May 2023	<0.5	<1	<0.2	<0.5	<1	<1	<0.2	<0.5	<1	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.2	<0.5	<0.5	<0.5					
TP121_0.3	TP121	0.3	Soil	05 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
TP121_0.7	TP121	0.7	Soil	05 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
TP122_0.1	TP122	0.1	Soil	05 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
TP122_1	TP122	1	Soil	05 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
QA700	TP123	0.1	Soil	05 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
QC700	TP123	0.1	Soil	05 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
TP123_0.1	TP123	0.1	Soil	05 May 2023	<0.5	<1	<0.2	<0.5	<1	<1	<0.2	<0.5	<1	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.2	<0.5	<0.5	<0.5					
TP123_1	TP123	1	Soil	05 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
TP124_0.1	TP124	0.1	Soil	05 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
TP124_1	TP124	1	Soil	05 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
TP125_0.1	TP125	0.1	Soil	05 May 2023	<0.5	<1	<0.2	<0.5	<1	<1	<0.2	<0.5	<1	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.2	<0.5	<0.5	<0.5					
TP125_0.1_PACM	TP125	0.1	Other	05 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
TP125_1.2	TP125	1.2	Soil	05 May 2023	<0.5	<1	<0.2	<0.5	<1	<1	<0.2	<0.5	<1	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.2	<0.5	<0.5	<0.5					
TP125_1.8	TP125	1.8	Soil	05 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
TP126_0.																																			

					Organophosphorous Pesticides														Herbicides	Pesticides													
					Ethoprop	Ethyl methanesulfonate	Fenitrothion	Fenthion	Isosafrole (cis)	Isosafrole (trans)	Malathion	Methidathion	Methyl methanesulfonate	Methyl parathion	Mevinphos (Phosdrin)	Phorate	Prothiofos	Ronnel	Safrole	Strophos	Trifluralin	Carbaryl	Carbofuran	Demeton-S-methyl	Fenamiphos	Famphur	Isodrin	Mirex	Parathion	Pririphos-methyl	Pririphos-ethyl	Profenofos	
					mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg		
EQL					0.5	1	0.2	0.5	1	1	0.2	0.5	1	0.5	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.1	0.1	0.2	0.5	0.5	0.5			
PFAS NEMP 2020 Ecological indirect exposure																																	
PFAS NEMP 2020 Residential with garden/accessible soil (HIL A)																																	
NEPM 2013 EIL Comm./Ind. Conservative site specific																																	
NEPM 2013 ESL Comm./Ind., Coarse Soil																																	
PFAS NEMP 2020 Industrial/ commercial (HIL D)																																	
CRCCARE 2011 Soil HSL for Direct Contact, HSL-D Com/Ind																																	
NEPM 2013 HIL, Commercial/Industrial D																																	
NEPM 2013 Soil HSL Commercial/Industrial D, for Vapour Intrusion, Sand					>=0m, <1m																					100							
					>=1m, <2m																												
					>=2m, <4m																												
					>=4m																												
Field ID	Location Code	Depth	Matrix Type	Date																													
TP136_0.1	TP136	0.1	Soil	04 May 2023	<0.5	<1	<0.2	<0.5	<1	<1	<0.2	<0.5	<1	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.2	<0.5	<0.5	<0.5		
TP136_0.5	TP136	0.5	Soil	04 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Statistics																																	
Number of Results					22	22	42	22	22	22	42	42	22	22	22	22	22	22	22	22	22	22	22	22	22	40	40	42	22	22	22		
Number of Detects					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Minimum Concentration					<0.5	<1	<0.2	<0.5	<1	<1	<0.2	<0.5	<1	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.2	<0.5	<0.5	<0.5		
Minimum Detect					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Maximum Concentration					<0.5	<1	<0.2	<0.5	<1	<1	<0.2	<0.5	<1	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.2	<0.5	<0.5	<0.5		
Maximum Detect					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Average Concentration *					0.25	0.5	0.1	0.25	0.5	0.5	0.1	0.25	0.5	0.25	0.5	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.05	0.05	0.1	0.25	0.25	0.25		
Geometric Average *					0.25	0.5	0.1	0.25	0.5	0.5	0.1	0.25	0.5	0.25	0.5	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.05	0.05	0.1	0.25	0.25	0.25		
Median Concentration *					0.25	0.5	0.1	0.25	0.5	0.5	0.1	0.25	0.5	0.25	0.5	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.05	0.05	0.1	0.25	0.25	0.25		
Standard Deviation *					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Geometric Standard Deviation *					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		
% of Detects					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
% of Non-Detects					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		

* A Non Detect Multiplier of 0.5 has been applied.

					Polychlorinated Biphenyls												SVOCs																	
					Sulfatepp	Thionazin	Arochlor 1016	Arochlor 1221	Arochlor 1232	Arochlor 1242	Arochlor 1248	Arochlor 1254	Arochlor 1260	Arochlor 1268	Aroclor 1262	PCBs (Sum of total)	1,4-Naphthoquinone	2-(acetylamino) fluorene	4-(dimethylamino) azobenzene	4-bromophenyl phenyl ether	4-chlorophenyl phenyl ether	Acetophenone	Benzyl alcohol	Bis(2-chloroethoxy) methane	Bis(2-chloroethyl)ether	Bis(2-chloroisopropyl) ether	Dibenzofuran	EPN	Hexachloropropene	N-nitrosomorpholine	N-nitrosopiperidine	N-nitrosopyrrolidine		
					mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL					0.5	1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	1	0.5	0.5	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1		
PFAS NEMP 2020 Ecological indirect exposure																																		
PFAS NEMP 2020 Residential with garden/accessible soil (HIL A)																																		
NEPM 2013 EIL Comm./Ind. Conservative site specific																																		
NEPM 2013 ESL Comm./Ind., Coarse Soil																																		
PFAS NEMP 2020 Industrial/ commercial (HIL D)																																		
CRCCARE 2011 Soil HSL for Direct Contact, HSL-D Com/Ind																																		
NEPM 2013 HIL, Commercial/Industrial D															7																			
NEPM 2013 Soil HSL Commercial/Industrial D, for Vapour Intrusion, Sand					>=0m, <1m																													
					>=1m, <2m																													
					>=2m, <4m																													
					>=4m																													
Field ID	Location Code	Depth	Matrix Type	Date																														
DRUM_1	DRUM	1	Soil	23 May 2023	-	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
GS1	GS1		Soil	23 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
GS3	GS3		Soil	23 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
GS5	GS5		Soil	23 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
GS7	GS7		Soil	23 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
HA101_0.1-0.2	HA101	0.1 - 0.2	Soil	03 May 2023	-	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
HA101_0.5-0.7	HA101	0.5 - 0.7	Soil	03 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
HA102_0-0.1	HA102	0 - 0.1	Soil	03 May 2023	-	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
HA103_0.1-0.2	HA103	0.1 - 0.2	Soil	03 May 2023	-	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
HA106_0.1-0.2	HA106	0.1 - 0.2	Soil	03 May 2023	-	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
HA106_0.3-0.6	HA106	0.3 - 0.6	Soil	03 May 2023	-	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
HA109_0.1-0.3	HA109	0.1 - 0.3	Soil	03 May 2023	-	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
HA109_0.5-0.7	HA109	0.5 - 0.7	Soil	03 May 2023	-	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
TP101_0.5	TP101	0.5	Soil	03 May 2023	<0.5	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1			
TP101_0.5	TP101	0.5	Soil	03 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
TP101_1.8	TP101	1.8	Soil	03 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
TP102_0.1	TP102	0.1	Soil	03 May 2023	-	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
TP102_2	TP102	2	Soil	03 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
TP103_0.5	TP103	0.5	Soil	03 May 2023	<0.5	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1			
TP103_2	TP103	2	Soil	03 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
TP104_0.5	TP104	0.5	Soil	03 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
TP104_1	TP104	1	Soil	03 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
QA100	TP105	0.5	Soil	03 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
QC100	TP105	0.5	Soil	03 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
TP105_0.5	TP105	0.5	Soil	03 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
TP105_3	TP105	3	Soil	03 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
TP106_0.5	TP106	0.5	Soil	04 May 2023	<0.5	<1	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1			
TP106_0.5	TP106	0.5	Soil	04 May 2023	-	-	-	-	-	-	-	-																						

					Polychlorinated Biphenyls												SVOCs																			
					Sulfatepp	Thionazin	Arochlor 1016	Arochlor 1221	Arochlor 1232	Arochlor 1242	Arochlor 1248	Arochlor 1254	Arochlor 1260	Arochlor 1268	Arochlor 1262	PCBs (Sum of total)	1,4-Naphthoquinone	2-(acetylamino) fluorene	4-(dimethylamino) azobenzene	4-bromophenyl phenyl ether	4-chlorophenyl phenyl ether	Acetophenone	Benzyl alcohol	Bis(2-chloroethoxy) methane	Bis(2-chloroethyl)ether	Bis(2-chloroisopropyl) ether	Dibenzofuran	EPN	Hexachloropropene	N-nitrosomorpholine	N-nitrosopiperidine	N-nitrosopyrrolidine				
					mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg		
EQL					0.5	1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	1	0.5	0.5	1	0.5	0.5	0.5	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1				
PFAS NEMP 2020 Ecological indirect exposure																																				
PFAS NEMP 2020 Residential with garden/accessible soil (HIL A)																																				
NEPM 2013 EIL Comm./Ind. Conservative site specific																																				
NEPM 2013 ESL Comm./Ind., Coarse Soil																																				
PFAS NEMP 2020 Industrial/ commercial (HIL D)																																				
CRCCARE 2011 Soil HSL for Direct Contact, HSL-D Com/Ind																																				
NEPM 2013 HIL, Commercial/Industrial D															7																					
NEPM 2013 Soil HSL Commercial/Industrial D, for Vapour Intrusion, Sand					>=0m, <1m																															
					>=1m, <2m																															
					>=2m, <4m																															
					>=4m																															
Field ID	Location Code	Depth	Matrix Type	Date																																
QA400	TP116	0.1	Soil	05 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
QC400	TP116	0.1	Soil	05 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
TP116_0.1	TP116	0.1	Soil	05 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
TP116_2	TP116	2	Soil	05 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
TP117_0.1	TP117	0.1	Soil	05 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
TP117_1	TP117	1	Soil	05 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
TP118_0.1	TP118	0.1	Soil	04 May 2023	<0.5	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1					
TP118_0.1	TP118	0.1	Soil	04 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
TP118_1.2	TP118	1.2	Soil	04 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
TP119_0.1	TP119	0.1	Soil	05 May 2023	<0.5	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1					
TP119_0.5	TP119	0.5	Soil	05 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
TP120_0.1	TP120	0.1	Soil	05 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
QA500	TP120	0.5	Soil	05 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
QC500	TP120	0.5	Soil	05 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
TP120_0.5	TP120	0.5	Soil	05 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
TP121_0.3	TP121	0.3	Soil	05 May 2023	<0.5	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	0.7	<0.5	<0.5	<0.5	<1					
TP121_0.3	TP121	0.3	Soil	05 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
TP121_0.7	TP121	0.7	Soil	05 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
TP122_0.1	TP122	0.1	Soil	05 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
TP122_1	TP122	1	Soil	05 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
QA700	TP123	0.1	Soil	05 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
QC700	TP123	0.1	Soil	05 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
TP123_0.1	TP123	0.1	Soil	05 May 2023	<0.5	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1					
TP123_1	TP123	1	Soil	05 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
TP124_0.1	TP124	0.1	Soil	05 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
TP124_1	TP124	1	Soil	05 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
TP125_0.1	TP125	0.1	Soil	05 May 2023	<0.5	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1					
TP125_0.1_PACM	TP125	0.1	Other	05 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
TP125_1.2	TP125	1.2	Soil	05 May 2023	<0.5	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1					
TP125_1.8	TP125	1.8																																		

					Polychlorinated Biphenyls												SVOCs																
					Sulfatepp	Thionazin	Arochlor 1016	Arochlor 1221	Arochlor 1232	Arochlor 1242	Arochlor 1248	Arochlor 1254	Arochlor 1260	Arochlor 1268	Aroclor 1262	PCBs (Sum of total)	1,4-Naphthoquinone	2-(acetylamino) fluorene	4-(dimethylamino) azobenzene	4-bromophenyl phenyl ether	4-chlorophenyl phenyl ether	Acetophenone	Benzyl alcohol	Bis(2-chloroethoxy) methane	Bis(2-chloroethyl)ether	Bis(2-chloroisopropyl) ether	Dibenzofuran	EPN	Hexachloropropene	N-nitrosomorpholine	N-nitrosopiperidine	N-nitrosopyrrolidine	
					mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL					0.5	1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	1	0.5	0.5	1	0.5	0.5	0.5	0.5	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1
PFAS NEMP 2020 Ecological indirect exposure																																	
PFAS NEMP 2020 Residential with garden/accessible soil (HIL A)																																	
NEPM 2013 EIL Comm./Ind. Conservative site specific																																	
NEPM 2013 ESL Comm./Ind., Coarse Soil																																	
PFAS NEMP 2020 Industrial/ commercial (HIL D)																																	
CRCCARE 2011 Soil HSL for Direct Contact, HSL-D Com/Ind																																	
NEPM 2013 HIL, Commercial/Industrial D															7																		
NEPM 2013 Soil HSL Commercial/Industrial D, for Vapour Intrusion, Sand	>=0m, <1m																																
	>=1m, <2m																																
	>=2m, <4m																																
	>=4m																																
Field ID	Location Code	Depth	Matrix Type	Date	<0.5	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	
TP136_0.1	TP136	0.1	Soil	04 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
TP136_0.5	TP136	0.5	Soil	04 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Statistics																																	
Number of Results					22	22	34	34	34	34	34	34	34	34	34	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	
Number of Detects					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	
Minimum Concentration					<0.5	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	
Minimum Detect					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7	ND	ND	ND	ND	ND	ND
Maximum Concentration					<0.5	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	0.7	<0.5	<0.5	<0.5	<0.5	<1	
Maximum Detect					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7	ND	ND	ND	ND	ND	ND
Average Concentration *					0.25	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.5	0.25	0.25	0.5	0.25	0.25	0.25	0.25	0.5	0.25	0.25	0.25	0.25	0.27	0.25	0.25	0.25	0.5	
Geometric Average *					0.25	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.5	0.25	0.25	0.5	0.25	0.25	0.25	0.25	0.5	0.25	0.25	0.25	0.25	0.26	0.25	0.25	0.25	0.5	
Median Concentration *					0.25	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.5	0.25	0.25	0.5	0.25	0.25	0.25	0.25	0.5	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.5	
Standard Deviation *					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.096	0	0	0	0	0	
Geometric Standard Deviation *					1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.2	1	1	1	1	1	
% of Detects					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	
% of Non-Detects					100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	95	100	100	100	100	100	

* A Non Detect Multiplier of 0.5 has been applied.

					VOCs				Chlorinated Hydrocarbons																											
					Phenacetin	2-Nitropropane	Pentachloroethane	trans-1,4-Dichloro-2-butene	1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2,2-tetrachloroethane	1,1,2-trichloroethane	1,1-dichloroethane	1,1-dichloroethene	1,1-dichloropropene	1,2,3-trichloropropane	1,2-dibromo-3-chloropropane	1,2-dichloroethane	1,2-dichloropropane	1,3-dichloropropane	2,2-dichloropropane	Bromochloromethane	Bromodichloromethane	Bromoform	Carbon tetrachloride	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane	cis-1,2-dichloroethene	cis-1,3-dichloropropene	Dibromomethane				
					mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg			
EQL					1	10	0.5	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	1	0.1	1	0.1	0.1	0.1						
PFAS NEMP 2020 Ecological indirect exposure																																				
PFAS NEMP 2020 Residential with garden/accessible soil (HIL A)																																				
NEPM 2013 EIL Comm./Ind. Conservative site specific																																				
NEPM 2013 ESL Comm./Ind., Coarse Soil																																				
PFAS NEMP 2020 Industrial/ commercial (HIL D)																																				
CRCCARE 2011 Soil HSL for Direct Contact, HSL-D Com/Ind																																				
NEPM 2013 HIL, Commercial/Industrial D																																				
NEPM 2013 Soil HSL Commercial/Industrial D, for Vapour Intrusion, Sand					>=0m, <1m																															
					>=1m, <2m																															
					>=2m, <4m																															
					>=4m																															
Field ID	Location Code	Depth	Matrix Type	Date																																
DRUM_1	DRUM	1	Soil	23 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
GS1	GS1		Soil	23 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
GS3	GS3		Soil	23 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
GS5	GS5		Soil	23 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
GS7	GS7		Soil	23 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
HA101_0.1-0.2	HA101	0.1 - 0.2	Soil	03 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
HA101_0.5-0.7	HA101	0.5 - 0.7	Soil	03 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
HA102_0-0.1	HA102	0 - 0.1	Soil	03 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
HA103_0.1-0.2	HA103	0.1 - 0.2	Soil	03 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
HA106_0.1-0.2	HA106	0.1 - 0.2	Soil	03 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
HA106_0.3-0.6	HA106	0.3 - 0.6	Soil	03 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
HA109_0.1-0.3	HA109	0.1 - 0.3	Soil	03 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
HA109_0.5-0.7	HA109	0.5 - 0.7	Soil	03 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
TP101_0.5	TP101	0.5	Soil	03 May 2023	<1	<10	<0.5	<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	<1	<0.1	<1	<0.1	<0.1						
TP101_0.5	TP101	0.5	Soil	03 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
TP101_1.8	TP101	1.8	Soil	03 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
TP102_0.1	TP102	0.1	Soil	03 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
TP102_2	TP102	2	Soil	03 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
TP103_0.5	TP103	0.5	Soil	03 May 2023	<1	<10	<0.5	<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	<1	<0.1	<1	<0.1	<0.1						
TP103_2	TP103	2	Soil	03 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
TP104_0.5	TP104	0.5	Soil	03 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
TP104_1	TP104	1	Soil	03 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
QA100	TP105	0.5	Soil	03 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
QC100	TP105	0.5	Soil	03 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
TP105_0.5	TP105	0.5	Soil	03 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
TP105_3	TP105	3	Soil	03 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
TP106_0.5	TP106	0.5	Soil	04 May 2023	<1	<10	<0.5	<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	<1	<0.1	<1	<0.1	<0.1						
TP106_0.5	TP106	0.5	Soil	04 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
QA200	TP106	2	Soil	04 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
QC200	TP106	2	Soil	04 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
TP106_2	TP106	2	Soil	04 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
QA300	TP107	0.1	Soil																																	

					VOCs				Chlorinated Hydrocarbons																							
					Phenacetin	2-Nitropropane	Pentachloroethane	trans-1,4-Dichloro-2-butene	1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2,2-tetrachloroethane	1,1,2-trichloroethane	1,1-dichloroethane	1,1-dichloroethene	1,1-dichloropropene	1,2,3-trichloropropene	1,2-dibromo-3-chloropropane	1,2-dichloroethane	1,2-dichloropropene	1,3-dichloropropene	2,2-dichloropropene	Bromochloromethane	Bromodichloromethane	Bromoform	Carbon tetrachloride	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane	cis-1,2-dichloroethene	cis-1,3-dichloropropene	Dibromomethane
mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg			
EQL	1	10	0.5	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	1	0.1	1	0.1	0.1	0.1			
PFAS NEMP 2020 Ecological indirect exposure																																
PFAS NEMP 2020 Residential with garden/accessible soil (HIL A)																																
NEPM 2013 EIL Comm./Ind. Conservative site specific																																
NEPM 2013 ESL Comm./Ind., Coarse Soil																																
PFAS NEMP 2020 Industrial/ commercial (HIL D)																																
CRCCARE 2011 Soil HSL for Direct Contact, HSL-D Com/Ind																																
NEPM 2013 HIL, Commercial/Industrial D																																
NEPM 2013 Soil HSL Commercial/Industrial D, for Vapour Intrusion, Sand					>=0m, <1m																											
					>=1m, <2m																											
					>=2m, <4m																											
					>=4m																											
Field ID	Location Code	Depth	Matrix Type	Date																												
QA400	TP116	0.1	Soil	05 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
QC400	TP116	0.1	Soil	05 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
TP116_0.1	TP116	0.1	Soil	05 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
TP116_2	TP116	2	Soil	05 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
TP117_0.1	TP117	0.1	Soil	05 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
TP117_1	TP117	1	Soil	05 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
TP118_0.1	TP118	0.1	Soil	04 May 2023	<1	<10	<0.5	<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	<1	<0.1	<1	<0.1	<0.1	<0.1	<0.1		
TP118_0.1	TP118	0.1	Soil	04 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
TP118_1.2	TP118	1.2	Soil	04 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
TP119_0.1	TP119	0.1	Soil	05 May 2023	<1	<10	<0.5	<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	<1	<0.1	<1	<0.1	<0.1	<0.1	<0.1		
TP119_0.5	TP119	0.5	Soil	05 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
TP120_0.1	TP120	0.1	Soil	05 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
QA500	TP120	0.5	Soil	05 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
QC500	TP120	0.5	Soil	05 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
TP120_0.5	TP120	0.5	Soil	05 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
TP121_0.3	TP121	0.3	Soil	05 May 2023	<1	<10	<0.5	<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	<1	<0.1	<1	<0.1	<0.1		
TP121_0.3	TP121	0.3	Soil	05 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
TP121_0.7	TP121	0.7	Soil	05 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
TP122_0.1	TP122	0.1	Soil	05 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
TP122_1	TP122	1	Soil	05 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
QA700	TP123	0.1	Soil	05 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
QC700	TP123	0.1	Soil	05 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
TP123_0.1	TP123	0.1	Soil	05 May 2023	<1	<10	<0.5	<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	<1	<0.1	<1	<0.1	<0.1		
TP123_1	TP123	1	Soil	05 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
TP124_0.1	TP124	0.1	Soil	05 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
TP124_1	TP124	1	Soil	05 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
TP125_0.1	TP125	0.1	Soil	05 May 2023	<1	<10	<0.5	<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	<1	<0.1	<1	<0.1	<0.1		
TP125_0.1_PACM	TP125	0.1	Other	05 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
TP125_1.2	TP125	1.2	Soil	05 May 2023	<1	<10	<0.5	<1	<0.1																							

					VOCs				Chlorinated Hydrocarbons																									
					Phenacetin	2-Nitropropane	Pentachloroethane	trans-1,4-Dichloro-2-butene	1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2,2-tetrachloroethane	1,1,2-trichloroethane	1,1-dichloroethane	1,1-dichloroethene	1,1-dichloropropene	1,2,3-trichloropropane	1,2-dibromo-3-chloropropane	1,2-dichloroethane	1,2-dichloropropene	1,3-dichloropropane	2,2-dichloropropane	Bromochloromethane	Bromodichloromethane	Bromoform	Carbon tetrachloride	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane	cis-1,2-dichloroethene	cis-1,3-dichloropropene	Dibromomethane		
					mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg		
EQL					1	10	0.5	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	1	0.1	1	0.1	0.1	0.1		
PFAS NEMP 2020 Ecological indirect exposure																																		
PFAS NEMP 2020 Residential with garden/accessible soil (HIL A)																																		
NEPM 2013 EIL Comm./Ind. Conservative site specific																																		
NEPM 2013 ESL Comm./Ind., Coarse Soil																																		
PFAS NEMP 2020 Industrial/ commercial (HIL D)																																		
CRCCARE 2011 Soil HSL for Direct Contact, HSL-D Com/Ind																																		
NEPM 2013 HIL, Commercial/Industrial D																																		
NEPM 2013 Soil HSL Commercial/Industrial D, for Vapour Intrusion, Sand					>=0m, <1m																													
					>=1m, <2m																													
					>=2m, <4m																													
					>=4m																													
Field ID	Location Code	Depth	Matrix Type	Date																														
TP136_0.1	TP136	0.1	Soil	04 May 2023	<1	<10	<0.5	<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	<1	<0.1	<1	<0.1	<0.1	<0.1			
TP136_0.5	TP136	0.5	Soil	04 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Statistics																																		
Number of Results					22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22			
Number of Detects					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Minimum Concentration					<1	<10	<0.5	<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	<1	<0.1	<1	<0.1	<0.1	<0.1			
Minimum Detect					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Maximum Concentration					<1	<10	<0.5	<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	<1	<0.1	<1	<0.1	<0.1	<0.1			
Maximum Detect					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Average Concentration *					0.5	5	0.25	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	0.5	0.05	0.5	0.05	0.05	0.05			
Geometric Average *					0.5	5	0.25	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	0.5	0.05	0.5	0.05	0.05	0.05			
Median Concentration *					0.5	5	0.25	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	0.5	0.05	0.5	0.05	0.05	0.05			
Standard Deviation *					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Geometric Standard Deviation *					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		
% of Detects					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
% of Non-Detects					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		

* A Non Detect Multiplier of 0.5 has been applied.

Appendix C - Results Table 1: 22 of 47

Prepared by: CC
Reviewed by: MB

					Halogenated Hydrocarbons																													
					Dichloromethane	Hexachlorobutadiene	Hexachlorocyclopentadiene	Hexachloroethane	Trichloroethene	Tetrachloroethene	trans-1,2-dichloroethene	trans-1,3-dichloropropene	Vinyl chloride	1,2,3,4-tetrachlorobenzene	1,2,3,5 & 1,2,4,5 Tetrachlorobenzene	1,2,3-trichlorobenzene	1,2,4-trichlorobenzene	1,2-dibromoethane	1,2-dichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	2-chlorotoluene	4-chlorotoluene	Bromobenzene	Bromomethane	Chlorobenzene	Dichlorodifluoromethane	Iodomethane	Pentachlorobenzene	Trichlorofluoromethane	1,1,1,2,2,2-Hexafluorooctane Sulfonate (6:2) (PFOS)	Perfluorobutane sulfonate (PFBS)		
					mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	µg/L	µg/L		
EQL					0.5	0.1	1	0.5	0.1	0.1	0.1	0.1	0.1	0.5	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1	0.1	1	5	0.5	1	1.6	1.6		
PFAS NEMP 2020 Ecological indirect exposure																																		
PFAS NEMP 2020 Residential with garden/accessible soil (HIL A)																																		
NEPM 2013 EIL Comm./Ind. Conservative site specific																																		
NEPM 2013 ESL Comm./Ind., Coarse Soil																																		
PFAS NEMP 2020 Industrial/ commercial (HIL D)																																		
CRCCARE 2011 Soil HSL for Direct Contact, HSL-D Com/Ind																																		
NEPM 2013 HIL, Commercial/Industrial D																																		
NEPM 2013 Soil HSL Commercial/Industrial D, for Vapour Intrusion, Sand	>=0m, <1m																																	
	>=1m, <2m																																	
	>=2m, <4m																																	
	>=4m																																	
Field ID	Location Code	Depth	Matrix Type	Date																														
TP136_0.1	TP136	0.1	Soil	04 May 2023	<0.5	<0.1	<1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1	<0.1	<1	<5	<0.5	<1	<1.6	<1.6		
TP136_0.5	TP136	0.5	Soil	04 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Statistics																																		
Number of Results					22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	34	34		
Number of Detects					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Minimum Concentration					<0.5	<0.1	<1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1	<0.1	<1	<5	<0.5	<1	<1.6	<1.6	
Minimum Detect					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Maximum Concentration					<0.5	<0.1	<1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1	<0.1	<1	<5	<0.5	<1	<1.6	<1.6	
Maximum Detect					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration *					0.25	0.05	0.5	0.25	0.05	0.05	0.05	0.05	0.05	0.25	0.5	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.5	0.05	0.5	2.5	0.25	0.5	0.8	0.8	
Geometric Average *					0.25	0.05	0.5	0.25	0.05	0.05	0.05	0.05	0.05	0.25	0.5	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.5	0.05	0.5	2.5	0.25	0.5	0.8	0.8	
Median Concentration *					0.25	0.05	0.5	0.25	0.05	0.05	0.05	0.05	0.05	0.25	0.5	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.5	0.05	0.5	2.5	0.25	0.5	0.8	0.8	
Standard Deviation *					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Geometric Standard Deviation *					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	
% of Detects					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
% of Non-Detects					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	

* A Non Detect Multiplier of 0.5 has been applied.

Appendix C - Results Table 1: 25 of 47

Appendix C - Results Table 1: 26 of 47

					Perfluorocarbons													Phthalates									
					Perfluorononane sulfonate (PFNS)	8:2 Fluorotelomer sulfonate	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	Perfluorobutanoic acid (PFBA)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctane sulfonic acid (PFOS)	Perfluoropentane sulfonic acid (PFPeS)	Perfluoropentanoic acid (PFPeA)	Sum of PFAS	Sum of PFHxS and PFOS	8:2 Fluorotelomer Sulfonate (6:2 FTS)	Perfluorooctanoate (PFOA)	Bis(2-ethylhexyl) phthalate	Butyl benzyl phthalate	Diethylphthalate	Dimethyl phthalate	Di-n-butyl phthalate	Di-n-octyl phthalate		
					µg/L	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
EQL					1.6	0.0002	0.0016	0.0016	0.0016	0.0016	0.0016	0.0001	0.0001	0.0016	0.0016	0.0001	0.0001	0.0001	0.0001	5	0.5	0.5	0.5	0.5	0.5		
PFAS NEMP 2020 Ecological indirect exposure													0.01														
PFAS NEMP 2020 Residential with garden/accessible soil (HIL A)																0.007		0.1									
NEPM 2013 EIL Comm./Ind. Conservative site specific																											
NEPM 2013 ESL Comm./Ind., Coarse Soil																											
PFAS NEMP 2020 Industrial/ commercial (HIL D)																20		50									
CRCCARE 2011 Soil HSL for Direct Contact, HSL-D Com/Ind																											
NEPM 2013 HIL, Commercial/Industrial D																	900										
NEPM 2013 Soil HSL Commercial/Industrial D, for Vapour Intrusion, Sand					>=0m, <1m																						
					>=1m, <2m																						
					>=2m, <4m																						
					>=4m																						
Field ID	Location Code	Depth	Matrix Type	Date																							
TP136_0.1	TP136	0.1	Soil	04 May 2023	<1.6	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	-	<0.0016	-	<0.0008	<5	<0.5	<0.5	<0.5	<0.5	<0.5			
TP136_0.5	TP136	0.5	Soil	04 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Statistics																											
Number of Results					34	35	34	34	34	34	34	35	35	34	34	1	35	1	35	22	22	22	22	22	22		
Number of Detects					0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0		
Minimum Concentration					<1.6	<0.0002	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0001	0.0002	<0.0016	<0.0016	0.0002	0.0002	<0.0001	<0.0001	<5	<0.5	<0.5	<0.5	<0.5	<0.5		
Minimum Detect					ND	ND	ND	ND	ND	ND	ND	ND	0.0002	ND	ND	0.0002	0.0002	ND	ND	ND	ND	ND	ND	ND	ND		
Maximum Concentration					<1.6	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	0.0002	<0.0016	<0.0001	<0.0008	<5	<0.5	<0.5	<0.5	<0.5	<0.5		
Maximum Detect					ND	ND	ND	ND	ND	ND	ND	ND	0.0002	ND	ND	0.0002	0.0002	ND	ND	ND	ND	ND	ND	ND	ND		
Average Concentration *					0.8	0.00078	0.0008	0.0008	0.0008	0.0008	0.0008	0.00078	0.00078	0.0008	0.0008	0.00078		0.00078		0.00039	2.5	0.25	0.25	0.25	0.25	0.25	
Geometric Average *					0.8	0.00075	0.0008	0.0008	0.0008	0.0008	0.0008	0.00074	0.00077	0.0008	0.0008	0.0002	0.00077	0.00005	0.00038	2.5	0.25	0.25	0.25	0.25	0.25	0.25	
Median Concentration *					0.8	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0002	0.0008	0.00005	0.0004	2.5	0.25	0.25	0.25	0.25	0.25	0.25	
Standard Deviation *					0	0.00012	0	0	0	0	0	0.00013	0.0001	0	0		0.0001		0.000059	0	0	0	0	0	0		
Geometric Standard Deviation *					1	1.4	1	1	1	1	1	1.6	1.3	1	1		1.3		1.4	1	1	1	1	1	1		
% of Detects					0	0	0	0	0	0	0	0	3	0	0	100	3	0	0	0	0	0	0	0	0		
% of Non-Detects					100	100	100	100	100	100	100	100	97	100	100	0	97	100	100	100	100	100	100	100	100	100	

* A Non Detect Multiplier of 0.5 has been applied.

					Asbestos		TPH		BTEX				Metals						PAH		Pesticides					PCB	PFAS	
					Asbestos fibres	C6 - C9	C10 - C36 (Sum of total)	Benzene	Toluene	Ethylbenzene	Xylene Total	Arsenic	Cadmium	Chromium (III+VI)	Lead	Mercury	Nickel	Benzo(a)pyrene	PAHs (Sum of total)	Endosulfan I	Endosulfan II	Endosulfan sulphate	Chlorpyrifos	PCBs (Sum of total)	Sum of PFHxS and PFOS	Perfluorooctanoate (PFOA)		
EQL					No unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
NSW 2014 General Solid Waste CT1 (No Leaching)					650	10,000	10	288	600	1,000	100	20	100	100	4	40	0.8	200	60	60	60	4	50					
NSW 2014 Restricted Solid Waste SCC1 (with leached)																									1.8	18		
NSW 2014 Restricted Solid Waste CT2 (No Leaching)					2,600	40,000	40	1,152	2,400	4,000	400	80	400	400	16	160	3.2		240	240	240	16	50					
Field ID	Location Code	Depth	Matrix Type	Date																								
DRUM_1	DRUM	1	Soil	23 May 2023	No asbestos detected	<20	<110	<0.1	<0.1	<0.1	<0.3	3	<0.3	12	7	<0.05	4.7	<0.1	<0.8	<0.2	<0.2	<0.1	<0.2	<1	<0.0016	<0.0008		
GS1	GS1		Soil	23 May 2023	Asbestos Detected	<20	<110	<0.1	<0.1	<0.1	<0.3	4	<0.3	11	8	<0.05	21	<0.1	<0.8	<0.2	<0.2	<0.1	<0.2	-	-	-		
GS3	GS3		Soil	23 May 2023	Asbestos Detected	<20	<110	<0.1	<0.1	<0.1	<0.3	2	<0.3	7.8	18	<0.05	7.7	<0.1	<0.8	<0.2	<0.2	<0.1	<0.2	-	-	-		
GS5	GS5		Soil	23 May 2023	Asbestos Detected	<20	<110	<0.1	<0.1	<0.1	<0.3	2	<0.3	7.4	4	<0.05	17	<0.1	<0.8	<0.2	<0.2	<0.1	<0.2	-	-	-		
GS7	GS7		Soil	23 May 2023	Asbestos Detected	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
HA101_0.1-0.2	HA101	0.1 - 0.2	Soil	03 May 2023	-	<20	<110	<0.1	<0.1	<0.1	<0.3	3	<0.3	6.4	43	<0.05	1.3	<0.1	<0.8	<0.2	<0.2	<0.1	<0.2	<1	-	-		
HA101_0.5-0.7	HA101	0.5 - 0.7	Soil	03 May 2023	-	<20	<110	<0.1	<0.1	<0.1	<0.3	3	<0.3	7.6	20	<0.05	1.2	<0.1	<0.8	-	-	-	-	-	-	-		
HA102_0-0.1	HA102	0 - 0.1	Soil	03 May 2023	-	<20	<110	<0.1	<0.1	<0.1	<0.3	5	<0.3	11	15	<0.05	2.8	<0.1	<0.8	<0.2	<0.2	<0.1	<0.2	<1	-	-		
HA103_0.1-0.2	HA103	0.1 - 0.2	Soil	03 May 2023	No asbestos detected	<20	<110	<0.1	<0.1	<0.1	<0.3	3	<0.3	14	16	<0.05	18	<0.1	<0.8	<0.2	<0.2	<0.1	<0.2	<1	-	-		
HA106_0.1-0.2	HA106	0.1 - 0.2	Soil	03 May 2023	No asbestos detected	<20	<110	<0.1	<0.1	<0.1	<0.3	3	<0.3	9.2	12	<0.05	5.8	<0.1	<0.8	<0.2	<0.2	<0.1	<0.2	<1	-	-		
HA106_0.3-0.6	HA106	0.3 - 0.6	Soil	03 May 2023	No asbestos detected	<20	<110	<0.1	<0.1	<0.1	<0.3	3	<0.3	6.3	18	<0.05	1.4	<0.1	<0.8	<0.2	<0.2	<0.1	<0.2	<1	-	-		
HA109_0.1-0.3	HA109	0.1 - 0.3	Soil	03 May 2023	No asbestos detected	<20	<110	<0.1	<0.1	<0.1	<0.3	2	<0.3	6.2	14	<0.05	2.0	<0.1	<0.8	<0.2	<0.2	<0.1	<0.2	<1	-	-		
HA109_0.5-0.7	HA109	0.5 - 0.7	Soil	03 May 2023	No asbestos detected	<20	<110	<0.1	<0.1	<0.1	<0.3	3	<0.3	6.4	22	<0.05	1.4	<0.1	<0.8	<0.2	<0.2	<0.1	<0.2	<1	-	-		
Statistics																												
Number of Results					10	12	12	12	12	12	12	12	12	12	12	12	12	12	12	11	11	11	11	8	1	1		
Number of Detects					10	0	0	0	0	0	0	12	0	12	12	0	12	0	0	0	0	0	0	0	0	0		
Minimum Concentration					0	<20	<110	<0.1	<0.1	<0.1	<0.3	2	<0.3	6.2	4	<0.05	1.2	<0.1	<0.8	<0.2	<0.2	<0.1	<0.2	<1	<0.0016	<0.0008		
Minimum Detect					0	ND	ND	ND	ND	ND	ND	2	ND	6.2	4	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Maximum Concentration					1	<20	<110	<0.1	<0.1	<0.1	<0.3	5	<0.3	14	43	<0.05	21	<0.1	<0.8	<0.2	<0.2	<0.1	<0.2	<1	<0.0016	<0.0008		
Maximum Detect					1	ND	ND	ND	ND	ND	ND	5	ND	14	43	ND	21	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Average Concentration *					0.3	10	55	0.05	0.05	0.05	0.15	3	0.15	8.8	16	0.025	7	0.05	0.4	0.1	0.1	0.05	0.1	0.5				
Geometric Average *					0	10	55	0.05	0.05	0.05	0.15	2.9	0.15	8.4	14	0.025	4.1	0.05	0.4	0.1	0.1	0.05	0.1	0.5	0.0008	0.0004		
Median Concentration *					0	10	55	0.05	0.05	0.05	0.15	3	0.15	7.7	15.5	0.025	3.75	0.05	0.4	0.1	0.1	0.05	0.1	0.5	0.0008	0.0004		
Standard Deviation *					0.48	0	0	0	0	0	0	0.85	0	2.6	10	0	7.4	0	0	0	0	0	0	0	0	0		
Geometric Standard Deviation *						1	1	1	1	1	1	1.3	1	1.3	1.8	1	3	1	1	1	1	1	1	1	1			
95% UCL (Student's-t) *					0.58	10	55	0.05	0.05	0.05	0.15	3.442	0.15	10.14	21.59	0.025	10.84	0.05	0.4	0.1	0.1	0.05	0.1	0.5				
% of Detects					100	0	0	0	0	0	0	100	0	100	100	0	100	0	0	0	0	0	0	0	0	0		
% of Non-Detects					0	100	100	100	100	100	100	0	100	0	0	100	0	100	100	100	100	100	100	100	100	100		

* A Non Detect Multiplier of 0.5 has been applied.

			TPH Fractions						BTEX							MAH										Metals							
			C6-C10	C10-C16	C16-C34	C34-C40	C10 - C40 (Sum of total)	F1: C6-C10 less BTEX	F2: >C10-C16 less NAPHTHALENE	Naphthalene (VOC)	Benzene	Toluene	Ethylbenzene	Xylene (m & p)	Xylene (o)	Total BTEX	Xylene Total	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	Isopropylbenzene	n-butylbenzene	n-propylbenzene	p-isopropyltoluene	sec-butylbenzene	Styrene	tert-butylbenzene	Arsenic (filtered)	Cadmium (filtered)	Chromium (III+VI) (filtered)	Copper (filtered)	Lead (filtered)		
µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L		
EQL	50	60	500	500	320	50	60	0.5	0.5	0.5	0.5	1	0.5	3	1.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	0.1	1	1	1	1		
ANZG (2018) Marine water (unknown reliability) toxicant DGVs											180	5		350					30														
ANZG (2018) Marine water 95% toxicant DGVs										700																		5.5		1.3	4.4		
ANZG (2018) Marine water 99% toxicant DGVs																																	
PFAS NEMP 2020 Interim Marine 99%																																	
ANZECC 2000 Irrigation - Short-term trigger value																										2,000	50	1,000	5,000	5,000			
ANZECC 2000 Irrigation - Long-term trigger value																										100	10	100	200	2,000			
NEPM 2013 GW HSL Commercial/Industrial D, for Vapour Intrusion, Sand	>=2m, <4m							6,000			5,000																						
	>=4m, <8m							6,000			5,000																						
	>=8m							7,000			5,000																						
Location Code	Matrix Type	Date	<50	<60	<500	<500	<320	<50	<60	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<3	<1.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	0.2	<1	1	<1
MW01	Water	31 May 2023	<50	<60	<500	<500	<320	<50	<60	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<3	<1.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	0.1	<1	14	<1	
MW02	Water	31 May 2023	<50	<60	<500	<500	<320	<50	<60	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<3	<1.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	0.1	<1	14	<1	
MW03	Water	31 May 2023	<50	<60	<500	<500	<320	<50	<60	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<3	<1.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.1	<1	6	<1	
MW03	Water	31 May 2023	<50	<60	<500	<500	<320	<50	<60	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<3	<1.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.1	<1	7	<1	
MW03	Water	31 May 2023	<50	<60	<500	<500	<320	<50	<60	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<3	<1.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.1	<1	8	<1	
MW04	Water	31 May 2023	<50	<60	<500	<500	<320	<50	<60	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<3	<1.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	0.1	<1	<1	<1		
Statistics																																	
Number of Results			6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	
Number of Detects			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	5	0		
Minimum Concentration			<50	<60	<500	<500	<320	<50	<60	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<3	<1.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	0.1	<1	1	<1		
Minimum Detect			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1	ND	1	ND	
Maximum Concentration			<50	<60	<500	<500	<320	<50	<60	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<3	<1.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	0.2	<1	14	<1		
Maximum Detect			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2	ND	14	ND		
Average Concentration *			25	30	250	250	160	25	30	0.25	0.25	0.25	0.25	0.5	0.25	1.5	0.75	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.5	0.092	0.5	6.1	0.5		
Geometric Average *			25	30	250	250	160	25	30	0.25	0.25	0.25	0.25	0.5	0.25	1.5	0.75	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.5	0.079	0.5	3.6	0.5		
Median Concentration *			25	30	250	250	160	25	30	0.25	0.25	0.25	0.25	0.5	0.25	1.5	0.75	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.5	0.075	0.5	6.5	0.5		
Standard Deviation *			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.058	0	5	0		
Geometric Standard Deviation *			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	1.8	1	3.7	1		
95% UCL (Student's-t) *			25	30	250	250	160	25	30	0.25	0.25	0.25	0.25	0.5	0.25	1.5	0.75	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.5	0.14	0.5	10.18	0.5		
% of Detects			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50	0	83	0		
% of Non-Detects			100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	50	100	17	100		

* A Non Detect Multiplier of 0.5 has been applied.

EQL	Mercury (filtered)	Nickel (filtered)	Zinc (filtered)	Naphthalene	2-methylnaphthalene	1-Methylnaphthalene	Acenaphthylene	Acenaphthene	Fluorene	Phenanthrene	Anthracene	Fluoranthene	Pyrene	Benz(a)anthracene	Chrysene	Benzo(k)fluoranthene	Benzo(b)&(k)fluoranthene	Benzo(a)fluoranthene	Benzo(a)pyrene	Indeno(1,2,3-c,d)pyrene	Dibenzo(a,h)anthracene	Benzo(g,h,i)perylene	Benzo(a)pyrene TEQ (Zero LOR)	PAHs (Sum of total)	3-methylcholanthrene	7,12-dimethylbenz(a)anthracene	2,3,6,8-tetrachlorophenol	3,4-Methylphenol (m/p-cresol)	2,4-dimethylphenol							
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	TEQ (µg/L)	µg/L	µg/L	µg/L	mg/L	mg/L	µg/L							
	0.1	1	5	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.1	0.02	0.1	0.00001	0.01	0.01	0.01		0.1	0.5	0.5	0.001	0.001	0.5						
ANZG (2018) Marine water (unknown reliability) toxicant DGVs										0.6	0.1	1							0.0001											2						
ANZG (2018) Marine water 95% toxicant DGVs				0.4	70	15	70																													
ANZG (2018) Marine water 99% toxicant DGVs				0.1	7		50																													
PFAS NEMP 2020 Interim Marine 99%																																				
ANZECC 2000 Irrigation - Short-term trigger value				2	2,000	5,000																														
ANZECC 2000 Irrigation - Long-term trigger value				2	200	2,000																														
NEPM 2013 GW HSL Commercial/Industrial D, for Vapour Intrusion, Sand	>=2m, <4m																																			
	>=4m, <8m																																			
	>=8m																																			
Location Code	Matrix Type	Date		2.3	49	160	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.1	<0.02	<0.1	<0.00001	<0.01	<0.01	<0.01	<0.012	<0.1	<0.5	<0.5	<0.001	<0.001	<0.5							
MW01	Water	31 May 2023		<0.1	27	200	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	<0.01	0.02	0.02	<0.01	<0.01	<0.1	<0.02	<0.1	<0.00001	<0.01	<0.01	<0.01	<0.012	<0.1	<0.5	<0.5	<0.001	<0.001	<0.5				
MW02	Water	31 May 2023		<0.1	13	69	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	0.01	0.01	<0.01	<0.01	<0.1	<0.02	<0.1	<0.00001	<0.01	<0.01	<0.01	<0.012	<0.1	<0.5	<0.5	<0.001	<0.001	<0.5				
MW03	Water	31 May 2023		<0.1	14	68	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	0.02	0.01	<0.01	<0.01	<0.1	<0.02	<0.1	<0.00001	<0.01	<0.01	<0.01	<0.012	<0.1	<0.5	<0.5	<0.001	<0.001	<0.5				
MW03	Water	31 May 2023		<0.1	16	82	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	0.01	0.01	<0.01	<0.01	<0.1	<0.02	<0.1	<0.00001	<0.01	<0.01	<0.01	<0.012	<0.1	<0.5	<0.5	<0.001	<0.001	<0.5				
MW04	Water	31 May 2023		<0.1	18	34	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.1	<0.02	<0.1	<0.00001	<0.01	<0.01	<0.01	<0.012	<0.1	<0.5	<0.5	<0.001	<0.001	<0.5					
Statistics																																				
Number of Results				6	6	6	6	6	6	6	6	6	11	6	10	12	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6					
Number of Detects				1	6	6	0	0	0	0	0	0	5	0	4	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Minimum Concentration				<0.1	13	34	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	0.01	0.01	<0.01	<0.01	<0.1	<0.02	<0.1	<0.00001	<0.01	<0.01	<0.01	<0.012	<0.1	<0.5	<0.5	<0.001	<0.001	<0.5				
Minimum Detect				2.3	13	34	ND	ND	ND	ND	ND	ND	0.01	ND	0.01	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
Maximum Concentration				2.3	49	200	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.1	<0.01	<0.1	<0.1	<0.01	<0.01	<0.1	<0.02	<0.1	<0.00001	<0.01	<0.01	<0.01	<0.012	<0.1	<0.5	<0.5	<0.001	<0.001	<0.5				
Maximum Detect				2.3	49	200	ND	ND	ND	ND	ND	ND	0.02	ND	0.02	0.02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
Average Concentration *				0.42	23	102	0.01	0.005	0.005	0.005	0.005	0.005	0.029	0.005	0.027	0.031	0.005	0.005	0.05	0.01	0.05	0.000005	0.005	0.005	0.005	0.006	0.05	0.25	0.25	0.0005	0.0005	0.25				
Geometric Average *				0.095	20	86	0.01	0.005	0.005	0.005	0.005	0.005	0.021	0.005	0.019	0.024	0.005	0.005	0.05	0.01	0.05	0.000005	0.005	0.005	0.005	0.006	0.05	0.25	0.25	0.0005	0.0005	0.25				
Median Concentration *				0.05	17	75.5	0.01	0.005	0.005	0.005	0.005	0.005	0.02	0.005	0.02	0.035	0.005	0.005	0.05	0.01	0.05	0.000005	0.005	0.005	0.005	0.006	0.05	0.25	0.25	0.0005	0.0005	0.25				
Standard Deviation *				0.92	14	64	0	0	0	0	0	0	0.021	0	0.02	0.02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Geometric Standard Deviation *				4.8	1.7	1.9	1	1	1	1	1	1	2.4	1	2.6	2.2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1				
95% UCL (Student's-t) *				1.181	34.15	154.5	0.01	0.005	0.005	0.005	0.005	0.005	0.04	0.005	0.0388	0.0413	0.005	0.005	0.05	0.01	0.05	0.000005	0.005	0.005	0.005	0.006	0.05	0.25	0.25	0.0005	0.0005	0.25				
% of Detects				17	100	100	0	0	0	0	0	0	45	0	40	50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
% of Non-Detects				83	0	0	100	100	100	100	100	100	55	100	60	50	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100				

* A Non Detect Multiplier of 0.5 has been applied.

			Phenols					Organochlorine Pesticides																									
			2-methylphenol	2-nitrophenol	4-chloro-3-methylphenol	4-nitrophenol	Phenol	4,4-DDE	a-BHC	Aldrin	b-BHC	Chlordane (cis)	gamma-Chlordane	d-BHC	DDD	DDT	Dieldrin	Endosulfan	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	Endrin ketone	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Oxychlordane	Azinophos methyl		
			µg/L	µg/L	µg/L	ug/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	µg/L			
EQL			0.5	0.5	2	1	0.5	0.01	0.05	0.01	0.05	0.01	0.01	0.05	0.01	0.01	0.01	0.2	0.02	0.02	0.02	0.02	0.02	0.05	0.05	0.02	0.02	0.01	0.1	0.00001	0.05		
ANZG (2018) Marine water (unknown reliability) toxicant DGVs				2		58		0.0005		0.003						0.0004	0.01								0.007	0.0004		0.05	0.004			0.01	
ANZG (2018) Marine water 95% toxicant DGVs							400											0.01				0.008											
ANZG (2018) Marine water 99% toxicant DGVs																		0.005				0.004											
PFAS NEMP 2020 Interim Marine 99%																																	
ANZECC 2000 Irrigation - Short-term trigger value																																	
ANZECC 2000 Irrigation - Long-term trigger value																																	
NEPM 2013 GW HSL Commercial/Industrial D, for Vapour Intrusion, Sand	>=2m, <4m																																
	>=4m, <8m																																
	>=8m																																
Location Code	Matrix Type	Date																															
MW01	Water	31 May 2023	<0.5	<0.5	<2	<1	<0.5	<0.01	<0.05	<0.01	<0.05	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.2	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.02	<0.02	<0.01	<0.1	<0.00001	<0.05		
MW02	Water	31 May 2023	<0.5	<0.5	<2	<1	<0.5	<0.01	<0.05	<0.01	<0.05	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.2	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.02	<0.02	<0.01	<0.1	<0.00001	<0.05		
MW03	Water	31 May 2023	<0.5	<0.5	<2	<1	<0.5	<0.01	<0.05	<0.01	<0.05	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.2	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.02	<0.02	<0.01	<0.1	<0.00001	<0.05		
MW03	Water	31 May 2023	<0.5	<0.5	<2	<1	<0.5	<0.01	<0.05	<0.01	<0.05	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.2	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.02	<0.02	<0.01	<0.1	<0.00001	<0.05		
MW03	Water	31 May 2023	<0.5	<0.5	<2	<1	<0.5	<0.01	<0.05	<0.01	<0.05	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.2	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.02	<0.02	<0.01	<0.1	<0.00001	<0.05		
MW04	Water	31 May 2023	<0.5	<0.5	<2	<1	<0.5	<0.01	<0.05	<0.01	<0.05	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.2	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.02	<0.02	<0.01	<0.1	<0.00001	<0.05		
Statistics																																	
Number of Results			6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6			
Number of Detects			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Minimum Concentration			<0.5	<0.5	<2	<1	<0.5	<0.01	<0.05	<0.01	<0.05	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.2	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.02	<0.02	<0.01	<0.1	<0.00001	<0.05		
Minimum Detect			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Maximum Concentration			<0.5	<0.5	<2	<1	<0.5	<0.01	<0.05	<0.01	<0.05	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.2	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.02	<0.02	<0.01	<0.1	<0.00001	<0.05		
Maximum Detect			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Average Concentration *			0.25	0.25	1	0.5	0.25	0.005	0.025	0.005	0.025	0.005	0.005	0.025	0.005	0.005	0.005	0.1	0.01	0.01	0.01	0.01	0.01	0.025	0.025	0.01	0.01	0.005	0.05	0.000005	0.025		
Geometric Average *			0.25	0.25	1	0.5	0.25	0.005	0.025	0.005	0.025	0.005	0.005	0.025	0.005	0.005	0.005	0.1	0.01	0.01	0.01	0.01	0.01	0.025	0.025	0.01	0.01	0.005	0.05	0.000005	0.025		
Median Concentration *			0.25	0.25	1	0.5	0.25	0.005	0.025	0.005	0.025	0.005	0.005	0.025	0.005	0.005	0.005	0.1	0.01	0.01	0.01	0.01	0.01	0.025	0.025	0.01	0.01	0.005	0.05	0.000005	0.025		
Standard Deviation *			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Geometric Standard Deviation *			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		
95% UCL (Student's-t) *			0.25	0.25	1	0.5	0.25	0.005	0.025	0.005	0.025	0.005	0.005	0.025	0.005	0.005	0.005	0.1	0.01	0.01	0.01	0.01	0.01	0.025	0.025	0.01	0.01	0.005	0.05	0.000005	0.025		
% of Detects			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
% of Non-Detects			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		

* A Non Detect Multiplier of 0.5 has been applied.

Organophosphorous Pesticides																												Herbicides	
	Bromophos-ethyl	Carbophenothion	Chlorfenvinphos E	Chlorpyrifos	Chlorpyrifos-methyl	Coumaphos	Diazinon	cis-Chlorfenvinphos	Dichlorvos	Dimethoate	Disulfoton	Ethion	Ethoprop	Ethyl methanesulfonate	Fenitrothion	Fenthion	Isosafrole (cis)	Isosafrole (trans)	Malathion	Methidathion	Methyl methanesulfonate	Methyl parathion	Mevinphos (Phosdrin)	Phorate	Prothiorfos	Ronnel	Safrole	Trifluralin	Carbaryl
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL	0.05	0.5	0.5	0.01	0.5	0.5	0.01	0.005	0.5	0.15	0.5	0.05	0.5	1	0.2	0.5	1	1	0.05	0.05	1	0.5	1	0.5	0.5	0.5	1	0.5	0.5
ANZG (2018) Marine water (unknown reliability) toxicant DGVs																													
ANZG (2018) Marine water 95% toxicant DGVs																													
ANZG (2018) Marine water 99% toxicant DGVs																													
PFAS NEMP 2020 Interim Marine 99%																													
ANZECC 2000 Irrigation - Short-term trigger value																													
ANZECC 2000 Irrigation - Long-term trigger value																													
NEPM 2013 GW HSL Commercial/Industrial D, for Vapour Intrusion, Sand	>=2m, <4m																												
	>=4m, <8m																												
	>=8m																												
Location Code	Matrix Type	Date																											
MW01	Water	31 May 2023	<0.05	<0.5	<0.5	<0.01	<0.5	<0.5	<0.01	<0.005	<0.5	<0.15	<0.5	<0.05	<0.5	<1	<0.2	<0.5	<1	<1	<0.05	<0.05	<1	<0.5	<1	<0.5	<0.5	<0.5	<0.5
MW02	Water	31 May 2023	<0.05	<0.5	<0.5	<0.01	<0.5	<0.5	<0.01	<0.005	<0.5	<0.15	<0.5	<0.05	<0.5	<1	<0.2	<0.5	<1	<1	<0.05	<0.05	<1	<0.5	<1	<0.5	<0.5	<0.5	<0.5
MW03	Water	31 May 2023	<0.05	<0.5	<0.5	<0.01	<0.5	<0.5	<0.01	<0.005	<0.5	<0.15	<0.5	<0.05	<0.5	<1	<0.2	<0.5	<1	<1	<0.05	<0.05	<1	<0.5	<1	<0.5	<0.5	<0.5	<0.5
MW03	Water	31 May 2023	<0.05	<0.5	<0.5	<0.01	<0.5	<0.5	<0.01	<0.005	<0.5	<0.15	<0.5	<0.05	<0.5	<1	<0.2	<0.5	<1	<1	<0.05	<0.05	<1	<0.5	<1	<0.5	<0.5	<0.5	<0.5
MW03	Water	31 May 2023	<0.05	<0.5	<0.5	<0.01	<0.5	<0.5	<0.01	<0.005	<0.5	<0.15	<0.5	<0.05	<0.5	<1	<0.2	<0.5	<1	<1	<0.05	<0.05	<1	<0.5	<1	<0.5	<0.5	<0.5	<0.5
MW04	Water	31 May 2023	<0.05	<0.5	<0.5	<0.01	<0.5	<0.5	<0.01	<0.005	<0.5	<0.15	<0.5	<0.05	<0.5	<1	<0.2	<0.5	<1	<1	<0.05	<0.05	<1	<0.5	<1	<0.5	<0.5	<0.5	<0.5
Statistics																													
Number of Results	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Number of Detects	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minimum Concentration	<0.05	<0.5	<0.5	<0.01	<0.5	<0.5	<0.01	<0.005	<0.5	<0.15	<0.5	<0.05	<0.5	<1	<0.2	<0.5	<1	<1	<0.05	<0.05	<1	<0.5	<1	<0.5	<0.5	<0.5	<1	<0.5	<0.5
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<0.05	<0.5	<0.5	<0.01	<0.5	<0.5	<0.01	<0.005	<0.5	<0.15	<0.5	<0.05	<0.5	<1	<0.2	<0.5	<1	<1	<0.05	<0.05	<1	<0.5	<1	<0.5	<0.5	<0.5	<1	<0.5	<0.5
Maximum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration *	0.025	0.25	0.25	0.005	0.25	0.25	0.005	0.0025	0.25	0.075	0.25	0.025	0.25	0.5	0.1	0.25	0.5	0.5	0.025	0.025	0.5	0.25	0.5	0.25	0.25	0.25	0.25	0.5	0.25
Geometric Average *	0.025	0.25	0.25	0.005	0.25	0.25	0.005	0.0025	0.25	0.075	0.25	0.025	0.25	0.5	0.1	0.25	0.5	0.5	0.025	0.025	0.5	0.25	0.5	0.25	0.25	0.25	0.25	0.5	0.25
Median Concentration *	0.025	0.25	0.25	0.005	0.25	0.25	0.005	0.0025	0.25	0.075	0.25	0.025	0.25	0.5	0.1	0.25	0.5	0.5	0.025	0.025	0.5	0.25	0.5	0.25	0.25	0.25	0.25	0.5	0.25
Standard Deviation *	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Geometric Standard Deviation *	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
95% UCL (Student's-t) *	0.025	0.25	0.25	0.005	0.25	0.25	0.005	0.0025	0.25	0.075	0.25	0.025	0.25	0.5	0.1	0.25	0.5	0.5	0.025	0.025	0.5	0.25	0.5	0.25	0.25	0.25	0.5	0.25	0.25
% of Detects	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Non-Detects	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

* A Non Detect Multiplier of 0.5 has been applied.

Pesticides													SVOCs																		
	Carbofuran	Demeton-S-methyl	Fenamiphos	Famphur	Isodrin	Mirex	Parathion	Pirimphos-methyl	Pirimphos-ethyl	Profenofos	Sulfatepp	Thionazin	1,4-Naphthoquinone	2-(acetylamino) fluorene	4-(dimethylamino) azobenzene	4-bromophenyl phenyl ether	4-chlorophenyl phenyl ether	Acetophenone	Benzyl alcohol	Bis(2-chloroethoxy) methane	Bis(2-chloroethyl)ether	Bis(2-chloroisopropyl) ether	Di(2-ethylhexyl)adipate	Dibenzofuran	EPN	Hexachloropropene	N-nitrosomorpholine	N-nitrosopiperidine	N-nitrosopyrrolidine		
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
EQL	0.5	0.5	0.5	0.5	0.02	0.01	0.01	0.5	0.5	0.5	0.5	0.001	0.001	0.5	1	1	1	1	1	1	1	1	1	1	0.5	0.5	1	1	1		
ANZG (2018) Marine water (unknown reliability) toxicant DGVs																															
ANZG (2018) Marine water 95% toxicant DGVs																															
ANZG (2018) Marine water 99% toxicant DGVs																															
PFAS NEMP 2020 Interim Marine 99%																															
ANZECC 2000 Irrigation - Short-term trigger value																															
ANZECC 2000 Irrigation - Long-term trigger value																															
NEPM 2013 GW HSL Commercial/Industrial D, for Vapour Intrusion, Sand	>=2m, <4m																														
	>=4m, <8m																														
	>=8m																														
Location Code	Matrix Type	Date	<0.5	<0.5	<0.5	<0.5	<0.02	<0.01	<0.01	<0.5	<0.5	<0.5	<0.5	<0.001	<0.001	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
MW01	Water	31 May 2023	<0.5	<0.5	<0.5	<0.5	<0.02	<0.01	<0.01	<0.5	<0.5	<0.5	<0.5	<0.001	<0.001	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
MW02	Water	31 May 2023	<0.5	<0.5	<0.5	<0.5	<0.02	<0.01	<0.01	<0.5	<0.5	<0.5	<0.5	<0.001	<0.001	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
MW03	Water	31 May 2023	<0.5	<0.5	<0.5	<0.5	<0.02	<0.01	<0.01	<0.5	<0.5	<0.5	<0.5	<0.001	<0.001	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
MW03	Water	31 May 2023	<0.5	<0.5	<0.5	<0.5	<0.02	<0.01	<0.01	<0.5	<0.5	<0.5	<0.5	<0.001	<0.001	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
MW03	Water	31 May 2023	<0.5	<0.5	<0.5	<0.5	<0.02	<0.01	<0.01	<0.5	<0.5	<0.5	<0.5	<0.001	<0.001	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
MW04	Water	31 May 2023	<0.5	<0.5	<0.5	<0.5	<0.02	<0.01	<0.01	<0.5	<0.5	<0.5	<0.5	<0.001	<0.001	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Statistics																															
Number of Results		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	
Number of Detects		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Minimum Concentration		<0.5	<0.5	<0.5	<0.5	<0.02	<0.01	<0.01	<0.5	<0.5	<0.5	<0.5	<0.001	<0.001	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Minimum Detect		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration		<0.5	<0.5	<0.5	<0.5	<0.02	<0.01	<0.01	<0.5	<0.5	<0.5	<0.5	<0.001	<0.001	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Maximum Detect		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration *		0.25	0.25	0.25	0.25	0.01	0.005	0.005	0.25	0.25	0.25	0.25	0.0005	0.0005	0.25	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.25	0.25	0.5	0.5	0.5	
Geometric Average *		0.25	0.25	0.25	0.25	0.01	0.005	0.005	0.25	0.25	0.25	0.25	0.0005	0.0005	0.25	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.25	0.25	0.5	0.5	0.5	
Median Concentration *		0.25	0.25	0.25	0.25	0.01	0.005	0.005	0.25	0.25	0.25	0.25	0.0005	0.0005	0.25	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.25	0.25	0.5	0.5	0.5	
Standard Deviation *		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Geometric Standard Deviation *		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	
95% UCL (Student's-t) *		0.25	0.25	0.25	0.25	0.01	0.005	0.005	0.25	0.25	0.25	0.25	0.0005	0.0005	0.25	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.25	0.25	0.5	0.5	0.5	
% of Detects		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
% of Non-Detects		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	

* A Non Detect Multiplier of 0.5 has been applied.

			VOCs				Chlorinated Hydrocarbons																									
			Phenacetin	2-Nitropropane	Pentachloroethane	trans-1,4-Dichloro-2-butene	1 & 2 Chloronaphthalene	1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2,2-tetrachloroethane	1,1,2-trichloroethane	1,1-dichloroethane	1,1-dichloroethene	1,1-dichloropropene	1,2,3-trichloropropene	1,2-dibromo-3-chloropropene	1,2-dichloroethane	1,2-dichloropropene	1,3-dichloropropene	2,2-dichloropropene	Bromochloromethane	Bromodichloromethane	Bromoform	Carbon tetrachloride	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane	cis-1,2-dichloroethene	cis-1,3-dichloropropene	Dibromomethane	
			µg/L	mg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
EQL			1	0.1	0.5	1	0.001	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	5	0.5	5	0.5	0.5	0.5	
ANZG (2018) Marine water (unknown reliability) toxicant DGVs					80				270				700				1,900	900	1,100					240			370					
ANZG (2018) Marine water 95% toxicant DGVs										1,900																						
ANZG (2018) Marine water 99% toxicant DGVs																																
PFAS NEMP 2020 Interim Marine 99%																																
ANZECC 2000 Irrigation - Short-term trigger value																																
ANZECC 2000 Irrigation - Long-term trigger value																																
NEPM 2013 GW HSL Commercial/Industrial D, for Vapour Intrusion, Sand	>=2m, <4m																															
	>=4m, <8m																															
	>=8m																															
Location Code	Matrix Type	Date	<1	<0.1	<0.5	<1	<0.001	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5		
MW01	Water	31 May 2023	<1	<0.1	<0.5	<1	<0.001	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5		
MW02	Water	31 May 2023	<1	<0.1	<0.5	<1	<0.001	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5		
MW03	Water	31 May 2023	<1	<0.1	<0.5	<1	<0.001	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5		
MW03	Water	31 May 2023	<1	<0.1	<0.5	<1	<0.001	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5		
MW03	Water	31 May 2023	<1	<0.1	<0.5	<1	<0.001	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5		
MW04	Water	31 May 2023	<1	<0.1	<0.5	<1	<0.001	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	1.0	<5	<0.5	<0.5	<0.5		
Statistics																																
Number of Results			6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	
Number of Detects			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
Minimum Concentration			<1	<0.1	<0.5	<1	<0.001	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5		
Minimum Detect			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND
Maximum Concentration			<1	<0.1	<0.5	<1	<0.001	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	1	<5	<0.5	<0.5	<0.5		
Maximum Detect			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND
Average Concentration *			0.5	0.05	0.25	0.5	0.0005	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	2.5	0.38	2.5	0.25	0.25	0.25		
Geometric Average *			0.5	0.05	0.25	0.5	0.0005	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	2.5	0.31	2.5	0.25	0.25	0.25		
Median Concentration *			0.5	0.05	0.25	0.5	0.0005	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	2.5	0.25	2.5	0.25	0.25	0.25		
Standard Deviation *			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0											

* A Non Detect Multiplier of 0.5 has been applied.

											Halogenated Hydrocarbons																																	
											Dichloromethane	Hexachlorobutadiene	Hexachlorocyclopentadiene	Hexachloroethane	Trichloroethene	Tetrachloroethene	trans-1,2-dichloroethene	trans-1,3-dichloropropene	Vinyl chloride	1,2,3,4-tetrachlorobenzene	1,2,3,5 & 1,2,4,5 Tetrachlorobenzene	1,2,3-trichlorobenzene	1,2,4-trichlorobenzene	1,2-dibromoethane	1,2-dichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	2-chlorotoluene	4-chlorotoluene	Bromobenzene	Bromomethane	Chlorobenzene	Dichlorodifluoromethane	Iodomethane	Pentachlorobenzene	Trichlorofluoromethane	Perfluoro-n-hexadecanoic acid	Perfluorododecane sulfonate (PFDoS)	1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (PFOS)					
											µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L			
EQL											5	0.5	2	0.5	0.5	0.5	0.5	0.5	0.3	0.5	1	0.5	0.5	0.5	0.5	0.5	0.3	0.5	0.5	0.5	10	0.5	5	5	0.5	1	0.002	0.0005	0.0005					
ANZG (2018) Marine water (unknown reliability) toxicant DGVs											4,000		0.05	290		70			100	2		3			160	260	60					55				1.5								
ANZG (2018) Marine water 95% toxicant DGVs																							80																					
ANZG (2018) Marine water 99% toxicant DGVs																							20																					
PFAS NEMP 2020 Interim Marine 99%																																												
ANZECC 2000 Irrigation - Short-term trigger value																																												
ANZECC 2000 Irrigation - Long-term trigger value																																												
NEPM 2013 GW HSL Commercial/Industrial D, for Vapour Intrusion, Sand											>=2m, <4m																																	
											>=4m, <8m																																	
											>=8m																																	
Location Code	Matrix Type	Date									<5	<0.5	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.3	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.3	<0.5	<0.5	<0.5	<0.5	<10	<0.5	<5	<5	<0.5	<1	<0.002	<0.0005	0.076				
MW01	Water	31 May 2023									<5	<0.5	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.3	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.3	<0.5	<0.5	<0.5	<10	<0.5	<5	<5	<0.5	<1	<0.002	<0.0005	0.014					
MW02	Water	31 May 2023									<5	<0.5	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.3	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.3	<0.5	<0.5	<0.5	<10	<0.5	<5	<5	<0.5	<1	<0.002	<0.0005	0.014					
MW03	Water	31 May 2023									<5	<0.5	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.3	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.3	<0.5	<0.5	<0.5	<10	<0.5	<5	<5	<0.5	<1	<0.002	<0.0005	0.0055						
MW03	Water	31 May 2023									<5	<0.5	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.3	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.3	<0.5	<0.5	<0.5	<10	<0.5	<5	<5	<0.5	<1	<0.002	<0.0005	0.0045						
MW03	Water	31 May 2023									<5	<0.5	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.3	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.3	<0.5	<0.5	<0.5	<10	<0.5	<5	<5	<0.5	<1	<0.002	<0.0005	0.0056						
MW04	Water	31 May 2023									<5	<0.5	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.3	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.3	<0.5	<0.5	<0.5	<10	<0.5	<5	<5	<0.5	<1	<0.002	<0.0005	0.0076						
Statistics																																												
Number of Results		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6							
Number of Detects		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6							
Minimum Concentration		<5	<0.5	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.3	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.3	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.3	<0.5	<0.5	<0.5	<10	<0.5	<5	<5	<0.5	<1	<0.002	<0.0005	0.0045						
Minimum Detect		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0045						
Maximum Concentration		<5	<0.5	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.3	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.3	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.3	<0.5	<0.5	<0.5	<10	<0.5	<5	<5	<0.5	<1	<0.002	<0.0005	0.076						
Maximum Detect		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.076						
Average Concentration *		2.5	0.25	1	0.25	0.25	0.25	0.25	0.25	0.25	0.15	0.25	0.5	0.25	0.25	0.25	0.25	0.25	0.15	0.25	0.25	0.25	0.25	0.25	0.25	0.15	0.25	0.25	0.25	5	0.25	2.5	2.5	0.25	0.5	0.001	0.00025	0.019						
Geometric Average *		2.5	0.25	1	0.25	0.25	0.25	0.25	0.25	0.25	0.15	0.25	0.5	0.25	0.25	0.25	0.25	0.25	0.15	0.25	0.25	0.25	0.25	0.25	0.25	0.15	0.25	0.25	0.25	5	0.25	2.5	2.5	0.25	0.5	0.001	0.00025	0.01						
Median Concentration *		2.5	0.25	1	0.25	0.25	0.25	0.25	0.25	0.25	0.15	0.25	0.5	0.25	0.25	0.25	0.25	0.25	0.15	0.25	0.25	0.25	0.25	0.25	0.25	0.15	0.25	0.25	0.25	5	0.25	2.5	2.5	0.25	0.5	0.001	0.00025	0.0066						
Standard Deviation *		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.028							
Geometric Standard Deviation *		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	2.9							
95% UCL (Student's-t) *		2.5	0.25	1	0.25	0.25	0.25	0.25	0.25	0.25	0.15	0.25	0.5	0.25	0.25	0.25	0.25	0.25	0.15	0.25	0.25	0.25	0.25	0.25	0.25	0.15	0.25	0.25	0.25	5	0.25	2.5	2.5	0.25	0.5	0.001	0.00025	0.0421						
% of Detects		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100							
% of Non-Detects		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	0							

* A Non Detect Multiplier of 0.5 has been applied.

			Perfluorocarbons																													
			Perfluorobutane sulfonate (PFBS)	Perfluorononane sulfonate (PFNS)	2-(N-methylperfluoro-1-octane sulfonamido) ethanol (N-MeFOSE)	N-Ethyl perfluorooctane sulfonamide (EFOSA)	N-Ethyl perfluorooctane sulfonamidoethanol (EiFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluorononanoic acid (PFNA)	Perfluorooctane sulfonamide (FOSA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTriDA)	Perfluoroundecanoic acid (PFUnDA)	8:2 Fluorotelomer sulfonate	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	N-Ethyl perfluorooctane sulfonamidoacetic acid (EFOSAA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	Perfluorobutanoic acid (PFBA)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctane sulfonic acid (PFOS)	Perfluoropentane sulfonic acid (PFPeS)	Perfluoropentanoic acid (PFPeA)	Sum of PFAS	Perfluorodecanesulfonic acid (PFDS)	Sum of PFHxS and PFOS	Perfluorooctanoate (PFOA)	
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	ug/L	µg/L	µg/L	µg/L	
EQL			0.001	0.0005	0.0025	0.0025	0.0025	0.0025	0.001	0.001	0.001	0.002	0.001	0.001	0.001	0.0005	0.0005	0.0005	0.0005	0.0025	0.0025	0.0005	0.0002	0.0002	0.0002	0.001	0.0005	0.006	0.0005	0.0002	0.0005	
ANZG (2018) Marine water (unknown reliability) toxicant DGVs																																
ANZG (2018) Marine water 95% toxicant DGVs																																
ANZG (2018) Marine water 99% toxicant DGVs																																
PFAS NEMP 2020 Interim Marine 99%																																
ANZECC 2000 Irrigation - Short-term trigger value																										0.00023						19
ANZECC 2000 Irrigation - Long-term trigger value																																
NEPM 2013 GW HSL Commercial/Industrial D, for Vapour Intrusion, Sand	>=2m, <4m																															
	>=4m, <8m																															
	>=8m																															
Location Code	Matrix Type	Date																														
MW01	Water	31 May 2023	0.002	<0.0005	<0.0025	<0.0025	<0.0025	<0.0025	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.0005	0.0013	0.0023	<0.0005	<0.0025	<0.0025	0.0018	<0.0002	0.0066	0.0029	<0.001	0.0013	0.098	<0.0005	0.0096	0.0032	
MW02	Water	31 May 2023	0.003	<0.0005	<0.0025	<0.0025	<0.0025	<0.0025	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.0005	<0.0005	0.0016	<0.0005	<0.0025	<0.0025	0.0018	<0.0002	0.0079	0.0041	<0.001	0.0009	0.036	<0.0005	0.012	0.0029	
MW03	Water	31 May 2023	<0.001	<0.0005	<0.0025	<0.0025	<0.0025	<0.0025	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.0005	<0.0005	0.0006	<0.0005	<0.0025	<0.0025	<0.0005	<0.0002	0.0024	0.0012	<0.001	<0.0005	0.010	<0.0005	0.0036	0.0005	
MW03	Water	31 May 2023	<0.001	<0.0005	<0.0025	<0.0025	<0.0025	<0.0025	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.0005	<0.0005	0.0007	<0.0005	<0.0025	<0.0025	<0.0005	<0.0002	0.0032	0.0013	<0.001	<0.0005	0.010	<0.0005	0.0045	0.0005	
MW03	Water	31 May 2023	<0.001	<0.0005	<0.0025	<0.0025	<0.0025	<0.0025	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.0005	<0.0005	0.0005	<0.0005	<0.0025	<0.0025	<0.0005	<0.0002	0.0028	0.0010	<0.001	<0.0005	0.010	<0.0005	0.0039	<0.0005	
MW04	Water	31 May 2023	<0.001	<0.0005	<0.0025	<0.0025	<0.0025	<0.0025	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.0005	0.0006	0.0019	<0.0005	<0.0025	<0.0025	<0.0005	<0.0002	0.0022	0.0007	<0.001	<0.0005	0.015	<0.0005	0.0029	0.0023	
Statistics																																
Number of Results			6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	
Number of Detects			2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	6	0	0	0	2	0	6	6	0	2	6	0	6	5	
Minimum Concentration			<0.001	<0.0005	<0.0025	<0.0025	<0.0025	<0.0025	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.0005	<0.0005	0.0005	<0.0005	<0.0025	<0.0025	<0.0005	<0.0002	0.0022	0.0007	<0.001	<0.0005	0.01	<0.0005	0.0029	0.0005	
Minimum Detect			0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0006	0.0005	ND	ND	ND	0.0018	ND	0.0022	0.0007	ND	0.0009	0.01	ND	0.0029	0.0005	
Maximum Concentration			0.003	<0.0005	<0.0025	<0.0025	<0.0025	<0.0025	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.0005	0.0013	0.0023	<0.0005	<0.0025	<0.0025	0.0018	<0.0002	0.0079	0.0041	<0.001	0.0013	0.098	<0.0005	0.012	0.0032	
Maximum Detect			0.003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0013	0.0023	ND	ND	ND	0.0018	ND	0.0079	0.0041	ND	0.0013	0.098	ND	0.012	0.0032	
Average Concentration *			0.0012	0.00025	0.0012	0.0012	0.0012	0.0012	0.0005	0.0005	0.0005	0.001	0.0005	0.0005	0.0005	0.00025	0.00048	0.0013	0.00025	0.0012	0.0012	0.00077	0.0001	0.0042	0.0019	0.0005	0.00053	0.03	0.00025	0.0061	0.0016	
Geometric Average *			0.00085	0.00025	0.0012	0.0012	0.0012	0.0012	0.0005	0.0005	0.0005	0.001	0.0005	0.0005	0.0005	0.00025	0.00038	0.0011	0.00025	0.0012	0.0012	0.00048	0.0001	0.0037	0.0015	0.0005	0.00041	0.019	0.00025	0.0053	0.001	
Median Concentration *			0.0005	0.00025	0.00125	0.00125	0.00125	0.00125	0.0005	0.0005	0.0005	0.001	0.0005	0.0005	0.0005	0.00025	0.00025	0.00115	0.00025	0.00125	0.00125	0.00025	0.0001	0.003	0.00125	0.0005	0.00025	0.0125	0.00025	0.0042	0.0014	
Standard Deviation *			0.0011	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00042	0.00077	0	0	0	0.0008	0	0.0024	0.0013	0	0.00046	0.035	0	0.0038	0.0013	
Geometric Standard Deviation *			2.3	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1.9	1	1	1	2.8	1	1.7	2	1	2.1	2.6	1	1.8	3	
95% UCL (Student's-t) *			0.00206	0.00025	0.00125	0.00125	0.00125	0.00125	0.0005	0.0005	0.0005	0.001	0.0005	0.0005	0.0005	0.00025	0.00083203	0.0019	0.00025	0.00125	0.00125	0.00143	0.0001	0.00619	0.00297	0.0005	0.00090912	0.0585	0.00025	0.00918	0.00271	
% of Detects			33	0	0	0	0	0	0	0	0	0	0	0	0	0	33	100	0	0	0	33	100	100	100	0	33	100	0	100	83	
% of Non-Detects			67	100	100	100	100	100	100	100	100	100	100	100	100	100	67	0	100	100	100	100	67	100	0	0	100	67	0	100	0	17

* A Non Detect Multiplier of 0.5 has been applied.

			Phthalates						Amino Aliphatics			Amino Aromatics			Anilines						Explosives				Halogenated Phenols							
			Bis(2-ethylhexyl) phthalate	Butyl benzyl phthalate	Diethylphthalate	Dimethyl phthalate	Di-n-butyl phthalate	Di-n-octyl phthalate	N-nitrosodiethylamine	N-nitrosodi-n-butylamine	N-nitrosodi-n-propylamine	1-naphthylamine	2-naphthylamine	Diphenylamine	2-nitroaniline	3-nitroaniline	4-chloroaniline	4-nitroaniline	2-methyl-5-nitroaniline	Aniline	2-methylaniline	1,3-Dinitrobenzene	2,4-Dinitrotoluene	2,6-dinitrotoluene	Nitrobenzene	2,4,5-trichlorophenol	2,4,6-trichlorophenol	2,4-dichlorophenol	2,6-dichlorophenol	2-chlorophenol	Pentachlorophenol	
µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L		
EQL	50	1	5	1	10	1	1	1	1	2	2	1	1	1	1	1	1	1	5	1	0.001	1	1	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
ANZG (2018) Marine water (unknown reliability) toxicant DGVs			1																8	0.013	16		550	4	3	120	34	340				
ANZG (2018) Marine water 95% toxicant DGVs																															22	
ANZG (2018) Marine water 99% toxicant DGVs																															11	
PFAS NEMP 2020 Interim Marine 99%																																
ANZECC 2000 Irrigation - Short-term trigger value																																
ANZECC 2000 Irrigation - Long-term trigger value																																
NEPM 2013 GW HSL Commercial/Industrial D, for Vapour Intrusion, Sand	>=2m, <4m																															
	>=4m, <8m																															
	>=8m																															
Location Code	Matrix Type	Date																														
MW01	Water	31 May 2023	<50	<1	<5	<1	<10	<1	<1	<1	<1	<2	<2	<1	<1	<1	<1	<1	<5	<1	<0.001	<1	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
MW02	Water	31 May 2023	<50	<1	<5	<1	<10	<1	<1	<1	<1	<2	<2	<1	<1	<1	<1	<1	<5	<1	<0.001	<1	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
MW03	Water	31 May 2023	<50	<1	<5	<1	<10	<1	<1	<1	<1	<2	<2	<1	<1	<1	<1	<1	<5	<1	<0.001	<1	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
MW03	Water	31 May 2023	<50	<1	<5	<1	<10	<1	<1	<1	<1	<2	<2	<1	<1	<1	<1	<1	<5	<1	<0.001	<1	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
MW03	Water	31 May 2023	<50	<1	<5	<1	<10	<1	<1	<1	<1	<2	<2	<1	<1	<1	<1	<1	<5	<1	<0.001	<1	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
MW04	Water	31 May 2023	<50	<1	<5	<1	<10	<1	<1	<1	<1	<2	<2	<1	<1	<1	<1	<1	<5	<1	<0.001	<1	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
Statistics																																
Number of Results			6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	
Number of Detects			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Minimum Concentration			<50	<1	<5	<1	<10	<1	<1	<1	<1	<2	<2	<1	<1	<1	<1	<1	<5	<1	<0.001	<1	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
Minimum Detect			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration			<50	<1	<5	<1	<10	<1	<1	<1	<1	<2	<2	<1	<1	<1	<1	<1	<5	<1	<0.001	<1	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
Maximum Detect			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration *			25	0.5	2.5	0.5	5	0.5	0.5	0.5	0.5	1	1	0.5	0.5	0.5	0.5	0.5	2.5	0.5	0.0005	0.5	0.5	0.5	0.25	0.25	0.25	0.25	0.25	0.25	0.25	
Geometric Average *			25	0.5	2.5	0.5	5	0.5	0.5	0.5	0.5	1	1	0.5	0.5	0.5	0.5	0.5	2.5	0.5	0.0005	0.5	0.5	0.5	0.25	0.25	0.25	0.25	0.25	0.25	0.25	
Median Concentration *			25	0.5	2.5	0.5	5	0.5	0.5	0.5	0.5	1	1	0.5	0.5	0.5	0.5	0.5	2.5	0.5	0.0005	0.5	0.5	0.5	0.25	0.25	0.25	0.25	0.25	0.25	0.25	
Standard Deviation *			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Geometric Standard Deviation *			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	
95% UCL (Student's-t) *			25	0.5	2.5	0.5	5	0.5	0.5	0.5	0.5	1	1	0.5	0.5	0.5	0.5	0.5	2.5	0.5	0.0005	0.5	0.5	0.5	0.25	0.25	0.25	0.25	0.25	0.25	0.25	
% of Detects			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
% of Non-Detects			100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	

* A Non Detect Multiplier of 0.5 has been applied.

			Nitroaromatics		Other	PCBs						Solvents										
			4-aminobiphenyl	Pentachloronitrobenzene	o,o,o'-Triethylphosphorothioate	PCB 101	PCB 118	PCB 138	PCB 153	PCB 180	PCB 28	PCB 52	Methyl Ethyl Ketone	2-hexanone (MBK)	4-Methyl-2-pentanone	Acetone	Acrylonitrile	Allyl chloride	Carbon disulfide	Isophorone	MTBE	Vinyl acetate
EQL			1	1	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	10	5	5	10	0.5	2	2	1	2	10
ANZG (2018) Marine water (unknown reliability) toxicant DGVs																	8	3	20	130		
ANZG (2018) Marine water 95% toxicant DGVs																						
ANZG (2018) Marine water 99% toxicant DGVs																						
PFAS NEMP 2020 Interim Marine 99%																						
ANZECC 2000 Irrigation - Short-term trigger value																						
ANZECC 2000 Irrigation - Long-term trigger value																						
NEPM 2013 GW HSL Commercial/Industrial D, for Vapour Intrusion, Sand			>=2m, <4m																			
			>=4m, <8m																			
			>=8m																			
Location Code	Matrix Type	Date																				
MW01	Water	31 May 2023	<1	<1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<10	<5	<5	<10	<0.5	<2	<2	<1	<2	<10
MW02	Water	31 May 2023	<1	<1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<10	<5	<5	<10	<0.5	<2	<2	<1	<2	<10
MW03	Water	31 May 2023	<1	<1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<10	<5	<5	<10	<0.5	<2	<2	<1	<2	<10
MW03	Water	31 May 2023	<1	<1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<10	<5	<5	<10	<0.5	<2	<2	<1	<2	<10
MW03	Water	31 May 2023	<1	<1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<10	<5	<5	<10	<0.5	<2	<2	<1	<2	<10
MW04	Water	31 May 2023	<1	<1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<10	<5	<5	<10	<0.5	<2	<2	<1	<2	<10
Statistics																						
Number of Results			6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Number of Detects			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minimum Concentration			<1	<1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<10	<5	<5	<10	<0.5	<2	<2	<1	<2	<10
Minimum Detect			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration			<1	<1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<10	<5	<5	<10	<0.5	<2	<2	<1	<2	<10
Maximum Detect			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration *			0.5	0.5	0.25	0.05	0.05	0.05	0.05	0.05	0.05	0.05	5	2.5	2.5	5	0.25	1	1	0.5	1	5
Geometric Average *			0.5	0.5	0.25	0.05	0.05	0.05	0.05	0.05	0.05	0.05	5	2.5	2.5	5	0.25	1	1	0.5	1	5
Median Concentration *			0.5	0.5	0.25	0.05	0.05	0.05	0.05	0.05	0.05	0.05	5	2.5	2.5	5	0.25	1	1	0.5	1	5
Standard Deviation *			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Geometric Standard Deviation *			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
95% UCL (Student's-t) *			0.5	0.5	0.25	0.05	0.05	0.05	0.05	0.05	0.05	0.05	5	2.5	2.5	5	0.25	1	1	0.5	1	5
% of Detects			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Non-Detects			100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

* A Non Detect Multiplier of 0.5 has been applied.

		Field ID		TP105_0.5	QA100	RPD	TP105_0.5	QC100	RPD	TP106_2	QA200	RPD	TP106_2	QC200	RPD	TP107_0.1	QA300	RPD
		Matrix Type		Soil	Soil		Soil	Soil		Soil	Soil		Soil	Soil		Soil	Soil	
		Date		03 May 2023	03 May 2023		03 May 2023	03 May 2023		04 May 2023	04 May 2023		04 May 2023	04 May 2023		04 May 2023	04 May 2023	
		Lab Report Number		SE247181	SE247181		SE247181	322668		SE247181	SE247181		SE247181	322668		SE247181	SE247181	
		unit	EQL															
TPH	C6 - C9	mg/kg	20	<20	<20	0	<20	<25	0	<20	<20	0	<20	<25	0	<20	<20	0
	C10 - C14	mg/kg	20	<20	<20	0	<20	<50	0	<20	<20	0	<20	<50	0	<20	<20	0
	C15 - C28	mg/kg	45	52	78	40	52	<100	0	<45	<45	0	<45	<100	0	86	73	16
	C29-C36	mg/kg	45	95	120	23	95	110	15	<45	<45	0	<45	<100	0	130	100	26
	+C10 - C36 (Sum of total)	mg/kg	50	150	190	24	150	110	31	<110	<110	0	<110	<50	0	210	180	15
CRC Care TPH Fractions	C6-C10	mg/kg	25	<25	<25	0	<25	<25	0	<25	<25	0	<25	<25	0	<25	<25	0
	C10-C16	mg/kg	25	<25	<25	0	<25	<50	0	<25	<25	0	<25	<50	0	<25	<25	0
	C16-C34	mg/kg	90	120	160	29	120	130	8	<90	<90	0	<90	<100	0	180	150	18
	C34-C40	mg/kg	100	<120	<120	0	<120	<100	0	<120	<120	0	<120	<100	0	<120	<120	0
	C10 - C40 (Sum of total)	mg/kg	50	<210	<210	0	<210	130	0	<210	<210	0	<210	<50	0	<210	<210	0
	F1: C6-C10 less BTEX	mg/kg	25	<25	<25	0	<25	<25	0	<25	<25	0	<25	<25	0	<25	<25	0
	F2: >C10-C16 less NAPHTHALENE	mg/kg	25	<25	<25	0	<25	<50	0	<25	<25	0	<25	<50	0	<25	<25	0
	Naphthalene (VOC)	mg/kg	0.1	<0.1	<0.1	0	<0.1	<1	0	<0.1	<0.1	0	<0.1	<1	0	<0.1	<0.1	0
BTEX	Benzene	mg/kg	0.1	<0.1	<0.1	0	<0.1	<0.2	0	<0.1	<0.1	0	<0.1	<0.2	0	<0.1	<0.1	0
	Toluene	mg/kg	0.1	<0.1	<0.1	0	<0.1	<0.5	0	<0.1	<0.1	0	<0.1	<0.5	0	<0.1	<0.1	0
	Ethylbenzene	mg/kg	0.1	<0.1	<0.1	0	<0.1	<1	0	<0.1	<0.1	0	<0.1	<1	0	<0.1	<0.1	0
	Xylene (m & p)	mg/kg	0.2	<0.2	<0.2	0	<0.2	<2	0	<0.2	<0.2	0	<0.2	<2	0	<0.2	<0.2	0
	Xylene (o)	mg/kg	0.1	<0.1	<0.1	0	<0.1	<1	0	<0.1	<0.1	0	<0.1	<1	0	<0.1	<0.1	0
	Total BTEX	mg/kg	0.6	<0.6	<0.6	0	<0.6			<0.6	<0.6	0	<0.6			<0.6	<0.6	0
	Xylene Total	mg/kg	0.3	<0.3	<0.3	0	<0.3	<1	0	<0.3	<0.3	0	<0.3	<1	0	<0.3	<0.3	0
Metals	Arsenic	mg/kg	1	2	2	0	2	<4	0	3	2	40	3	<4	0	3	3	0
	Cadmium	mg/kg	0.3	<0.3	<0.3	0	<0.3	<0.4	0	<0.3	<0.3	0	<0.3	<0.4	0	<0.3	<0.3	0
	Chromium (III+VI)	mg/kg	0.5	6.8	6.9	1	6.8	13	63	7.9	8.1	2	7.9	10	23	7.8	9.2	16
	Copper	mg/kg	0.5	13	44	109	13	18	32	<0.5	0.8	46	<0.5	<1	0	13	15	14
	Lead	mg/kg	1	4	6	40	4	6	40	6	5	18	6	6	0	9	10	11
	Mercury	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.1	0	<0.05	<0.05	0	<0.05	<0.1	0	<0.05	<0.05	0
	Nickel	mg/kg	0.5	18	16	12	18	23	24	0.7	0.7	0	0.7	1	35	17	19	11
	Zinc	mg/kg	1	53	31	52	53	55	4	4.6	5.4	16	4.6	8	54	140	170	19
PAH	Naphthalene	mg/kg	0.1	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0
	2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	0	<0.1			<0.1	<0.1	0	<0.1			<0.1	<0.1	0
	1-Methylnaphthalene	mg/kg	0.1	<0.1	<0.1	0	<0.1			<0.1	<0.1	0	<0.1			<0.1	<0.1	0
	Acenaphthylene	mg/kg	0.1	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0
	Acenaphthene	mg/kg	0.1	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0
	Fluorene	mg/kg	0.1	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0
	Phenanthrene	mg/kg	0.1	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0
	Anthracene	mg/kg	0.1	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0
	Fluoranthene	mg/kg	0.1	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	0.1	0.2	67
	Pyrene	mg/kg	0.1	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	0.2	67
	Benz(a)anthracene	mg/kg	0.1	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0
	Chrysene	mg/kg	0.1	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0
	Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	0	<0.1			<0.1	<0.1	0	<0.1			<0.1	<0.1	0
	Benzo(b)&(k)fluoranthene	mg/kg	0.2													<0.2		
	Benzo(b+j)fluoranthene	mg/kg	0.1	<0.1	<0.1	0	<0.1			<0.1	<0.1	0	<0.1			<0.1	<0.1	0
	Benzo(a)pyrene	mg/kg	0.05	<0.1	<0.1	0	<0.1	<0.05	0	<0.1	<0.1	0	<0.1	<0.05	0	<0.1	<0.1	0
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0
	Dibenzo(a,h)anthracene	mg/kg	0.1	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0
	Benzo(g,h,i)perylene	mg/kg	0.1	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0
	Benzo(a)pyrene TEQ (Zero LOR)	mg/kg	0.5	<0.2	<0.2	0	<0.2	<0.5	0	<0.2	<0.2	0	<0.2	<0.5	0	<0.2	<0.2	0
	Benzo(a)pyrene TEQ (Half LOR) 1	mg/kg	0.5	<0.2	<0.2	0	<0.2	<0.5	0	<0.2	<0.2	0	<0.2	<0.5	0	<0.2	<0.2	0
	Benzo(a)pyrene TEQ (Full LOR)	mg/kg	0.5	<0.3	<0.3	0	<0.3	<0.5	0	<0.3	<0.3	0	<0.3	<0.5	0	<0.3	<0.3	0
	PAHs (Sum of total)	mg/kg	0.8	<0.8	<0.8	0	<0.8			<0.8	<0.8	0	<0.8			<0.8	<0.8	0
Perfluorocarbons	1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 F	µg/L	1.6	<1.6			<1.6									<1.6	<1.6	0
	Perfluorobutane sulfonate (PFBS)	µg/L	1.6	<1.6			<1.6									<1.6	<1.6	0
	Perfluorononane sulfonate (PFNS)	µg/L	1.6	<1.6			<1.6									<1.6	<1.6	0
	8:2 Fluorotelomer sulfonate	mg/kg	0.0002	<0.0016			<0.0016									<0.0016	<0.0016	0
	Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0016	<0.0016			<0.0016									<0.0016	<0.0016	0
	Perfluorohexanoic acid (PFHxA)	mg/kg	0.0016	<0.0016			<0.0016									<0.0016	<0.0016	0
	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	mg/kg	0.0016	<0.0016			<0.0016									<0.0016	<0.0016	0
	Perfluorobutanoic acid (PFBA)	mg/kg	0.0016	<0.0016			<0.0016									<0.0016	<0.0016	0
	Perfluoroheptane sulfonic acid (PFHpS)	mg/kg	0.0016	<0.0016			<0.0016									<0.0016	<0.0016	0
	Perfluorohexane sulfonic acid (PFHxS)	mg/kg	0.0001	<0.0016			<0.0016									<0.0016	<0.0016	0
	Perfluorooctane sulfonic acid (PFOS)	mg/kg	0.0001	<0.0016			<0.0016									<0.0016	<0.0016	0
	Perfluoropentane sulfonic acid (PFPeS)	mg/kg	0.0016	<0.0016			<0.0016									<0.0016	<0.0016	0
	Perfluoropentanoic acid (PFPeA)	mg/kg	0.0016	<0.0016			<0.0016									<0.0016	<0.0016	0
	Sum of PFAS	mg/kg	0.0001															
	Sum of PFHxS and PFOS	mg/kg	0.0001	<0.0016			<0.0016									<0.0016	<0.0016	0
	6:2 Fluorotelomer Sulfonate (6:2 Fts)	mg/kg	0.0001															
	Perfluorooctanoate (PFOA)	mg/kg	0.0001	<0.0008			<0.0008									<0.0008	<0.0008	0

			Field ID	Matrix Type		TP107_0.1	QC300	TP116_0.1		QA400	TP116_0.1		QC400		TP120_0.5		QA500	TP120_0.5		QC500							
				Date	Soil			Soil	Soil		Soil	Soil			Soil	Soil		Soil	Soil								
																						04 May 2023	04 May 2023	05 May 2023	05 May 2023	05 May 2023	05 May 2023
Lab Report Number		SE247181	322668	RPD	SE247182	SE247182	RPD	SE247182	322668	RPD	SE247182	SE247182	RPD	SE247182	322668	RPD											
TPH		unit	EQL																								
	C6 - C9	mg/kg	20	<20	<25	0	<20	<20	0	<20	<25	0	<20	<20	0	<20	<20	0	<20	<25	0						
	C10 - C14	mg/kg	20	<20	<50	0	<20	23	14	<20	<50	0	<20	<20	0	<20	<20	0	<20	<50	0						
	C15 - C28	mg/kg	45	86	<100	0	170	220	26	170	190	11	<45	<45	0	<45	<45	0	<45	<100	0						
	C29-C36	mg/kg	45	130	<100	26	<45	<45	0	<45	100	76	<45	<45	0	<45	<45	0	<45	<100	0						
+C10 - C36 (Sum of total)		mg/kg	50	210	<50	123	170	240	34	170	290	52	<110	<110	0	<110	<110	0	<110	<50	0						
CRC Care TPH Fractions	C6-C10	mg/kg	25	<25	<25	0	<25	<25	0	<25	<25	0	<25	<25	0	<25	<25	0	<25	<25	0						
	C10-C16	mg/kg	25	<25	<50	0	27	48	56	27	53	65	<25	<25	0	<25	<25	0	<25	<50	0						
	C16-C34	mg/kg	90	180	<100	57	200	230	14	200	240	18	<90	<90	0	<90	<90	0	<90	<100	0						
	C34-C40	mg/kg	100	<120	<100	0	<120	<120	0	<120	<100	0	<120	<120	0	<120	<120	0	<120	<100	0						
	C10 - C40 (Sum of total)	mg/kg	50	<210	<50	0	220	280	24	220	300	31	<210	<210	0	<210	<210	0	<210	<50	0						
	F1: C6-C10 less BTEX	mg/kg	25	<25	<25	0	<25	<25	0	<25	<25	0	<25	<25	0	<25	<25	0	<25	<25	0						
	F2: >C10-C16 less NAPHTHALENE	mg/kg	25	<25	<50	0	27	48	56	27	53	65	<25	<25	0	<25	<25	0	<25	<50	0						
BTEX	Naphthalene (VOC)	mg/kg	0.1	<0.1	<1	0	<0.1	<0.1	0	<0.1	<1	0	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<1	0						
	Benzene	mg/kg	0.1	<0.1	<0.2	0	<0.1	<0.1	0	<0.1	<0.2	0	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.2	0						
	Toluene	mg/kg	0.1	<0.1	<0.5	0	<0.1	<0.1	0	<0.1	<0.5	0	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.5	0						
	Ethylbenzene	mg/kg	0.1	<0.1	<1	0	<0.1	<0.1	0	<0.1	<1	0	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<1	0						
	Xylene (m & p)	mg/kg	0.2	<0.2	<2	0	<0.2	<0.2	0	<0.2	<2	0	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<2	0						
	Xylene (o)	mg/kg	0.1	<0.1	<1	0	<0.1	<0.1	0	<0.1	<1	0	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<1	0						
	Total BTEX	mg/kg	0.6	<0.6			<0.6	<0.6	0	<0.6			<0.6	<0.6	0	<0.6	<0.6	0	<0.6								
	Xylene Total	mg/kg	0.3	<0.3	<1	0	<0.3	<0.3	0	<0.3	<1	0	<0.3	<0.3	0	<0.3	<0.3	0	<0.3	<1	0						
Metals	Arsenic	mg/kg	1	3	<4	0	5	4	22	5	<4	22	<1	5	133	<1	5	133	<1	<4	0						
	Cadmium	mg/kg	0.3	<0.3	<0.4	0	<0.3	<0.3	0	<0.3	<0.4	0	<0.3	<0.3	0	<0.3	<0.3	0	<0.3	<0.4	0						
	Chromium (III+VI)	mg/kg	0.5	7.8	10	25	9.6	9.2	4	9.6	8	18	7.5	21	95	7.5	21	95	7.5	9	18						
	Copper	mg/kg	0.5	13	17	27	10	7.8	25	10	26	89	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<1	0						
	Lead	mg/kg	1	9	7	25	14	15	7	14	13	7	5	7	33	5	7	33	5	6	18						
	Mercury	mg/kg	0.05	<0.05	<0.1	0	<0.05	<0.05	0	<0.05	<0.1	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.1	0						
	Nickel	mg/kg	0.5	17	18	6	4.7	5.0	6	4.7	4	16	0.7	0.7	0	0.7	0.7	0	0.7	<1	0						
	Zinc	mg/kg	1	140	110	24	130	260	67	130	110	17	<2	4.2	71	<2	4.2	71	<2	2	0						
PAH	Naphthalene	mg/kg	0.1	<0.1	<0.1	0	0.1	0.2	67	0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0						
	2-methylnaphthalene	mg/kg	0.1	<0.1			0.3	0.5	50	0.3			<0.1	<0.1	0	<0.1	<0.1	0	<0.1								
	1-Methylnaphthalene	mg/kg	0.1	<0.1			0.3	0.6	67	0.3			<0.1	<0.1	0	<0.1	<0.1	0	<0.1								
	Acenaphthylene	mg/kg	0.1	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0						
	Acenaphthene	mg/kg	0.1	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0						
	Fluorene	mg/kg	0.1	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0						
	Phenanthrene	mg/kg	0.1	<0.1	<0.1	0	0.6	1.2	67	0.6	0.7	15	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0						
	Anthracene	mg/kg	0.1	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0						
	Fluoranthene	mg/kg	0.1	0.1	<0.1	0	0.3	0.5	50	0.3	0.3	0	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0						
	Pyrene	mg/kg	0.1	<0.1	<0.1	0	0.2	0.3	40	0.2	0.2	0	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0						
	Benz(a)anthracene	mg/kg	0.1	<0.1	<0.1	0	0.1	0.2	67	0.1	0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0						
	Chrysene	mg/kg	0.1	<0.1	<0.1	0	0.1	0.2	67	0.1	0.2	67	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0						
	Benzo(k)fluoranthene	mg/kg	0.1	<0.1			<0.1	<0.1	0	<0.1			<0.1	<0.1	0	<0.1	<0.1	0	<0.1								
	Benzo(b)&(k)fluoranthene	mg/kg	0.2	<0.2																							
	Benzo(b+j)fluoranthene	mg/kg	0.1	<0.1			<0.1	0.2	67	<0.1			<0.1	<0.1	0	<0.1	<0.1	0	<0.1								
	Benzo(a)pyrene	mg/kg	0.05	<0.1	<0.05	0	<0.1	<0.1	0	<0.1	<0.05	0	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.05	0						
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0						
	Dibenzo(a,h)anthracene	mg/kg	0.1	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0						
	Benzo(g,h,i)perylene	mg/kg	0.1	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0						
	Benzo(a)pyrene TEQ (Zero LOR)	mg/kg	0.5	<0.2	<0.5	0	<0.2	<0.2	0	<0.2	<0.5	0	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.5	0						
	Benzo(a)pyrene TEQ (Half LOR) 1	mg/kg	0.5	<0.2	<0.5	0	<0.2	<0.2	0	<0.2	<0.5	0	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.5	0						
	Benzo(a)pyrene TEQ (Full LOR)	mg/kg	0.5	<0.3	<0.5	0	<0.3	<0.3	0	<0.3	<0.5	0	<0.3	<0.3	0	<0.3	<0.3	0	<0.3	<0.5	0						
	PAHs (Sum of total)	mg/kg	0.8	<0.8			1.9	3.6	62	1.9			<0.8	<0.8	0	<0.8	<0.8	0	<0.8								
	Perfluorocarbons	1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) F	µg/L	1.6	<1.6			<1.6			<1.6																
		Perfluorobutane sulfonate (PFBS)	µg/L	1.6	<1.6			<1.6			<1.6																
		Perfluorononane sulfonate (PFNS)	µg/L	1.6	<1.6			<1.6			<1.6																
8:2 Fluorotelomer sulfonate		mg/kg	0.0002	<0.0016	<0.0002	0	<0.0016			<0.0016																	
Perfluoroheptanoic acid (PFHpA)		mg/kg	0.0016	<0.0016			<0.0016			<0.0016																	
Perfluorohexanoic acid (PFHxA)		mg/kg	0.0016	<0.0016			<0.0016			<0.0016																	
4:2 Fluorotelomer sulfonic acid (4:2 FTS)		mg/kg	0.0016	<0.0016			<0.0016			<0.0016																	
Perfluorobutanoic acid (PFBA)		mg/kg	0.0016	<0.0016			<0.0016			<0.0016																	
Perfluoroheptane sulfonic acid (PFHpS)		mg/kg	0.0016	<0.0016			<0.001																				

				Field ID	TP123_0.1	QA700		TP123_0.1	QC700		QA100 - TP135_1	QC100	
				Matrix Type	Soil	Soil		Soil	Soil		Soil	Soil	
				Date	05 May 2023	05 May 2023		05 May 2023	05 May 2023		23 May 2023	22 May 2023	
				Lab Report Number	SE247182	SE247182	RPD	SE247182	322668	RPD	SE247983	324759	RPD
		unit	EQ										
TPH	C6 - C9	mg/kg	20		<20	<20	0	<20	<25	0	<20	<25	0
	C10 - C14	mg/kg	20		<20	<20	0	<20	<50	0	<20	<50	0
	C15 - C28	mg/kg	45		54	<45	18	54	<100	0	<45	<100	0
	C29-C36	mg/kg	45		<45	<45	0	<45	<100	0	<45	<100	0
	+C10 - C36 (Sum of total)	mg/kg	50		<110	<110	0	<110	<50	0	<110	<50	0
CRC Care TPH Fractions	C6-C10	mg/kg	25		<25	<25	0	<25	<25	0	<25	<25	0
	C10-C16	mg/kg	25		<25	<25	0	<25	<50	0	<25	<50	0
	C16-C34	mg/kg	90		<90	<90	0	<90	<100	0	<90	<100	0
	C34-C40	mg/kg	100		<120	<120	0	<120	<100	0	<120	<100	0
	C10 - C40 (Sum of total)	mg/kg	50		<210	<210	0	<210	<50	0	<210	<50	0
	F1: C6-C10 less BTEX	mg/kg	25		<25	<25	0	<25	<25	0	<25	<25	0
	F2: >C10-C16 less NAPHTHALENE	mg/kg	25		<25	<25	0	<25	<50	0	<25	<50	0
	Naphthalene (VOC)	mg/kg	0.1		<0.1	<0.1	0	<0.1	<1	0	<0.1	<1	0
BTEX	Benzene	mg/kg	0.1		<0.1	<0.1	0	<0.1	<0.2	0	<0.1	<0.2	0
	Toluene	mg/kg	0.1		<0.1	<0.1	0	<0.1	<0.5	0	<0.1	<0.5	0
	Ethylbenzene	mg/kg	0.1		<0.1	<0.1	0	<0.1	<1	0	<0.1	<1	0
	Xylene (m & p)	mg/kg	0.2		<0.2	<0.2	0	<0.2	<2	0	<0.2	<2	0
	Xylene (o)	mg/kg	0.1		<0.1	<0.1	0	<0.1	<1	0	<0.1	<1	0
	Total BTEX	mg/kg	0.6		<0.6	<0.6	0	<0.6			<0.6		
	Xylene Total	mg/kg	0.3		<0.3	<0.3	0	<0.3	<1	0	<0.3	<1	0
Metals	Arsenic	mg/kg	1		2	2	0	2	<4	0	3	6	67
	Cadmium	mg/kg	0.3		<0.3	<0.3	0	<0.3	<0.4	0	<0.3	<0.4	0
	Chromium (III+VI)	mg/kg	0.5		5.9	7.6	25	5.9	7	17	16	18	12
	Copper	mg/kg	0.5		1.0	1.5	40	1.0	1	0	13	11	17
	Lead	mg/kg	1		6	6	0	6	6	0	9	9	0
	Mercury	mg/kg	0.05		0.08	<0.05	46	0.08	<0.1	0	<0.05	<0.1	0
	Nickel	mg/kg	0.5		1.4	1.1	24	1.4	1	33	27	16	51
	Zinc	mg/kg	1		9.2	8.0	14	9.2	10	8	27	21	25
PAH	Naphthalene	mg/kg	0.1		<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0
	2-methylnaphthalene	mg/kg	0.1		<0.1	<0.1	0	<0.1			<0.1		
	1-Methylnaphthalene	mg/kg	0.1		<0.1	<0.1	0	<0.1			<0.1		
	Acenaphthylene	mg/kg	0.1		<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0
	Acenaphthene	mg/kg	0.1		<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0
	Fluorene	mg/kg	0.1		<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0
	Phenanthrene	mg/kg	0.1		<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0
	Anthracene	mg/kg	0.1		<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0
	Fluoranthene	mg/kg	0.1		<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0
	Pyrene	mg/kg	0.1		<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0
	Benz(a)anthracene	mg/kg	0.1		<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0
	Chrysene	mg/kg	0.1		<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0
	Benzo(k)fluoranthene	mg/kg	0.1		<0.1	<0.1	0	<0.1			<0.1		
	Benzo(b)&(k)fluoranthene	mg/kg	0.2		<0.2			<0.2					
	Benzo(b+j)fluoranthene	mg/kg	0.1		<0.1	<0.1	0	<0.1			<0.1		
	Benzo(a)pyrene	mg/kg	0.05		<0.1	<0.1	0	<0.1	<0.05	0	<0.1	<0.05	0
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.1		<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0
	Dibenzo(a,h)anthracene	mg/kg	0.1		<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0
	Benzo(g,h,i)perylene	mg/kg	0.1		<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0
	Benzo(a)pyrene TEQ (Zero LOR)	mg/kg	0.5		<0.2	<0.2	0	<0.2	<0.5	0	<0.2	<0.5	0
	Benzo(a)pyrene TEQ (Half LOR)_1	mg/kg	0.5		<0.2	<0.2	0	<0.2	<0.5	0	<0.2	<0.5	0
	Benzo(a)pyrene TEQ (Full LOR)	mg/kg	0.5		<0.3	<0.3	0	<0.3	<0.5	0	<0.3	<0.5	0
	PAHs (Sum of total)	mg/kg	0.8		<0.8	<0.8	0	<0.8			<0.8		
Perfluorocarbons	1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 F	µg/L	1.6		<1.6			<1.6					
	Perfluorobutane sulfonate (PFBS)	µg/L	1.6		<1.6			<1.6					
	Perfluorononane sulfonate (PFNS)	µg/L	1.6		<1.6			<1.6					
	8:2 Fluorotelomer sulfonate	mg/kg	0.0002		<0.0016			<0.0016					
	Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0016		<0.0016			<0.0016					
	Perfluorohexanoic acid (PFHxA)	mg/kg	0.0016		<0.0016			<0.0016					
	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	mg/kg	0.0016		<0.0016			<0.0016					
	Perfluorobutanoic acid (PFBA)	mg/kg	0.0016		<0.0016			<0.0016					
	Perfluoroheptane sulfonic acid (PFHpS)	mg/kg	0.0016		<0.0016			<0.0016					
	Perfluorohexane sulfonic acid (PFHxS)	mg/kg	0.0001		<0.0016			<0.0016					
	Perfluorooctane sulfonic acid (PFOS)	mg/kg	0.0001		<0.0016			<0.0016					
	Perfluoropentane sulfonic acid (PFPeS)	mg/kg	0.0016		<0.0016			<0.0016					
	Perfluoropentanoic acid (PFPeA)	mg/kg	0.0016		<0.0016			<0.0016					
	Sum of PFAS	mg/kg	0.0001										
	Sum of PFHxS and PFOS	mg/kg	0.0001		<0.0016			<0.0016					
	6:2 Fluorotelomer Sulfonate (6:2 FTS)	mg/kg	0.0001										
	Perfluorooctanoate (PFOA)	mg/kg	0.0001		<0.0008			<0.0008					

			Field ID	MW03	QC100			MW03	QA100	
			Matrix Type	Water	Water			Water	Water	
			Date	31 May 2023	31 May 2023			31 May 2023	31 May 2023	
			Lab Report Number	SE248449	SE248449	RPD	SE248449	SE248449	RPD	
		Unit	EQL							
Amino Aliphatics	N-nitrosodiethylamine	µg/L	1	<1	<1	0	<1	<1	0	
	N-nitrosodi-n-butylamine	µg/L	1	<1	<1	0	<1	<1	0	
	N-nitrosodi-n-propylamine	µg/L	1	<1	<1	0	<1	<1	0	
Amino Aromatics	1-naphthylamine	µg/L	2	<2	<2	0	<2	<2	0	
	2-naphthylamine	µg/L	2	<2	<2	0	<2	<2	0	
	Diphenylamine	µg/L	1	<1	<1	0	<1	<1	0	
Anilines	2-nitroaniline	µg/L	1	<1	<1	0	<1	<1	0	
	3-nitroaniline	µg/L	1	<1	<1	0	<1	<1	0	
	4-chloroaniline	µg/L	1	<1	<1	0	<1	<1	0	
	4-nitroaniline	µg/L	1	<1	<1	0	<1	<1	0	
	2-methyl-5-nitroaniline	µg/L	1	<1	<1	0	<1	<1	0	
	Aniline	µg/L	5	<5	<5	0	<5	<5	0	
	2-methylaniline	µg/L	1	<1	<1	0	<1	<1	0	
Explosives	1,3-Dinitrobenzene	mg/L	0.001	<0.001	<0.001	0	<0.001	<0.001	0	
	2,4-Dinitrotoluene	µg/L	1	<1	<1	0	<1	<1	0	
	2,6-dinitrotoluene	µg/L	1	<1	<1	0	<1	<1	0	
	Nitrobenzene	µg/L	1	<1	<1	0	<1	<1	0	
Halogenated Phenols	2,4,5-trichlorophenol	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0	
	2,4,6-trichlorophenol	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0	
	2,4-dichlorophenol	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0	
	2,6-dichlorophenol	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0	
	2-chlorophenol	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0	
	Pentachlorophenol	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0	
Misc	2346&2356-Tetrachlorophenol	mg/L	0.001	<0.001	<0.001	0	<0.001	<0.001	0	
	3/4-Methylphenol (m/p-cresol)	mg/L	0.001	<0.001	<0.001	0	<0.001	<0.001	0	
	1 & 2 Chloronaphthalene	mg/L	0.001	<0.001	<0.001	0	<0.001	<0.001	0	
	Di(2-ethylhexyl)adipate	µg/L	1	<1	<1	0	<1	<1	0	
	o,o,o-Triethylphosphorothioate	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0	
Nitroaromatics	4-aminobiphenyl	µg/L	1	<1	<1	0	<1	<1	0	
	Pentachloronitrobenzene	µg/L	1	<1	<1	0	<1	<1	0	
PCBs	PCB 101	µg/L	0.1	<0.1	<0.1	0	<0.1	<0.1	0	
	PCB 118	µg/L	0.1	<0.1	<0.1	0	<0.1	<0.1	0	
	PCB 138	µg/L	0.1	<0.1	<0.1	0	<0.1	<0.1	0	
	PCB 153	µg/L	0.1	<0.1	<0.1	0	<0.1	<0.1	0	
	PCB 180	µg/L	0.1	<0.1	<0.1	0	<0.1	<0.1	0	
	PCB 28	µg/L	0.1	<0.1	<0.1	0	<0.1	<0.1	0	
	PCB 52	µg/L	0.1	<0.1	<0.1	0	<0.1	<0.1	0	
Solvents	Methyl Ethyl Ketone	µg/L	10	<10	<10	0	<10	<10	0	
	2-hexanone (MBK)	µg/L	5	<5	<5	0	<5	<5	0	
	4-Methyl-2-pentanone	µg/L	5	<5	<5	0	<5	<5	0	
	Acetone	µg/L	10	<10	<10	0	<10	<10	0	
	Acrylonitrile	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0	
	Allyl chloride	µg/L	2	<2	<2	0	<2	<2	0	
	Carbon disulfide	µg/L	2	<2	<2	0	<2	<2	0	
	Isophorone	µg/L	1	<1	<1	0	<1	<1	0	
	MTBE	µg/L	2	<2	<2	0	<2	<2	0	
TPH	Vinyl acetate	µg/L	10	<10	<10	0	<10	<10	0	
	C6 - C9	µg/L	40	<40	<40	0	<40	<40	0	
	C10 - C14	µg/L	50	<50	<50	0	<50	<50	0	
	C15 - C28	µg/L	200	<200	<200	0	<200	<200	0	
CRC Care TPH Fractions	C29-C36	µg/L	200	<200	<200	0	<200	<200	0	
	C6-C10	µg/L	50	<50	<50	0	<50	<50	0	
	C10-C16	µg/L	60	<60	<60	0	<60	<60	0	
	C16-C34	µg/L	500	<500	<500	0	<500	<500	0	
	C34-C40	µg/L	500	<500	<500	0	<500	<500	0	
	C10 - C40 (Sum of total)	µg/L	320	<320	<320	0	<320	<320	0	
	F1: C6-C10 less BTEX	µg/L	50	<50	<50	0	<50	<50	0	
BTEX	F2: >C10-C16 less NAPHTHALENE	µg/L	60	<60	<60	0	<60	<60	0	
	Naphthalene (VOC)	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0	
	Benzene	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0	
	Toluene	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0	
	Ethylbenzene	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0	
	Xylene (m & p)	µg/L	1	<1	<1	0	<1	<1	0	
	Xylene (o)	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0	
	Total BTEX	µg/L	3	<3	<3	0	<3	<3	0	
	Xylene Total	ug/L	1.5	<1.5	<1.5	0	<1.5	<1.5	0	
MAH	1,2,4-trimethylbenzene	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0	
	1,3,5-trimethylbenzene	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0	
	Isopropylbenzene	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0	
	n-butylbenzene	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0	
	n-propylbenzene	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0	
	p-isopropyltoluene	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0	
	sec-butylbenzene	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0	
	Styrene	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0	
	tert-butylbenzene	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0	
Metals	Arsenic (filtered)	µg/L	1	<1	<1	0	<1	<1	0	
	Cadmium (filtered)	µg/L	0.1	<0.1	<0.1	0	<0.1	<0.1	0	
	Chromium (III+VI) (filtered)	µg/L	1	<1	<1	0	<1	<1	0	
	Copper (filtered)	µg/L	1	6	8	29	6	7	15	
	Lead (filtered)	µg/L	1	<1	<1	0	<1	<1	0	
	Mercury (filtered)	µg/L	0.1	<0.1	<0.1	0	<0.1	<0.1	0	
	Nickel (filtered)	µg/L	1	13	16	21	13	14	7	
	Zinc (filtered)	µg/L	5	69	82	17	69	68	1	
PAH	Naphthalene	µg/L	0.02	<0.02	<0.02	0	<0.02	<0.02	0	
	2-methylnaphthalene	µg/L	0.01	<0.01	<0.01	0	<0.01	<0.01	0	
	1-Methylnaphthalene	µg/L	0.01	<0.01	<0.01	0	<0.01	<0.01	0	
	Acenaphthylene	µg/L	0.01	<0.01	<0.01	0	<0.01	<0.01	0	
	Acenaphthene	µg/L	0.01	<0.01	<0.01	0	<0.01	<0.01	0	
	Fluorene	µg/L	0.01	<0.01	<0.01	0	<0.01	<0.01	0	
	Phenanthrene	µg/L	0.01	0.01	0.01	0	0.01	0.01	0	
	Anthracene	µg/L	0.01	<0.01	<0.01	0	<0.01	<0.01	0	
	Fluoranthene	µg/L	0.01	0.01	0.01	0	0.01	0.02	67	
	Pyrene	µg/L	0.01	0.01	0.01	0	0.01	0.01	0	
	Benz(a)anthracene	µg/L	0.01	<0.01	<0.01	0	<0.01	<0.01	0	
	Chrysene	µg/L	0.01	<0.01	<0.01	0	<0.01	<0.01	0	
	Benzo(k)fluoranthene	µg/L	0.1	<0.1	<0.1	0	<0.1	<0.1	0	
	Benzo(b)&(k)fluoranthene	µg/L	0.02	<0.02	<0.02	0	<0.02	<0.02	0	
	Benzo(b+ j)fluoranthene	µg/L	0.1	<0.1	<0.1	0	<0.1	<0.1	0	
	Benzo(a)pyrene	mg/L	0.00001	<0.00001	<0.00001	0	<0.00001	<0.00001	0	
	Indeno(1,2,3-c,d)pyrene	µg/L	0.01	<0.01	<0.01	0	<0.01	<0.01	0	
	Dibenzo(a,h)anthracene	µg/L	0.01	<0.01	<0.01	0	<0.01	<0.01	0	
	Benzo(g,h,i)perylene	µg/L	0.01	<0.01	<0.01	0	<0.01	<0.01	0	
	Benzo(a)pyrene TEQ (Zero LOR)	TEQ (µg/L)		<0.012	<0.012	0	<0.012	<0.012	0	
	PAHs (Sum of total)	µg/L	0.1	<0.1	<0.1	0	<0.1	<0.1	0	
	3-methylcholanthrene	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0	
	7,12-dimethylbenz(a)anthracene	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0	
Phenols	2,4-dimethylphenol	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0	
	2-methylphenol	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0	
	2-nitrophenol	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0	
	4-chloro-3-methylphenol	µg/L	2	<2	<2	0	<2	<2	0	
	4-nitrophenol	ug/L	1	<1	<1	0	<1	<1	0	
	Phenol	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0	

		Field ID		MW03	QC100	RPD	MW03	QA100	RPD
		Matrix Type		Water	Water		Water	Water	
		Date		31 May 2023	31 May 2023		31 May 2023	31 May 2023	
		Lab Report Number		SE248449	SE248449		SE248449	SE248449	
		Unit	EQL						
Organochlorine Pesticides	4,4-DDE	µg/L	0.01	<0.01	<0.01	0	<0.01	<0.01	0
	a-BHC	µg/L	0.05	<0.05	<0.05	0	<0.05	<0.05	0
	Aldrin	µg/L	0.01	<0.01	<0.01	0	<0.01	<0.01	0
	b-BHC	µg/L	0.05	<0.05	<0.05	0	<0.05	<0.05	0
	Chlordane (cis)	µg/L	0.01	<0.01	<0.01	0	<0.01	<0.01	0
	gamma-Chlordane	µg/L	0.01	<0.01	<0.01	0	<0.01	<0.01	0
	d-BHC	µg/L	0.05	<0.05	<0.05	0	<0.05	<0.05	0
	DDD	µg/L	0.01	<0.01	<0.01	0	<0.01	<0.01	0
	DDT	µg/L	0.01	<0.01	<0.01	0	<0.01	<0.01	0
	Dieldrin	µg/L	0.01	<0.01	<0.01	0	<0.01	<0.01	0
	Endosulfan	µg/L	0.2	<0.2	<0.2	0	<0.2	<0.2	0
	Endosulfan I	µg/L	0.02	<0.02	<0.02	0	<0.02	<0.02	0
	Endosulfan II	µg/L	0.02	<0.02	<0.02	0	<0.02	<0.02	0
	Endosulfan sulphate	µg/L	0.02	<0.02	<0.02	0	<0.02	<0.02	0
	Endrin	µg/L	0.02	<0.02	<0.02	0	<0.02	<0.02	0
	Endrin aldehyde	µg/L	0.02	<0.02	<0.02	0	<0.02	<0.02	0
	Endrin ketone	µg/L	0.05	<0.05	<0.05	0	<0.05	<0.05	0
	g-BHC (Lindane)	µg/L	0.05	<0.05	<0.05	0	<0.05	<0.05	0
	Heptachlor	µg/L	0.02	<0.02	<0.02	0	<0.02	<0.02	0
	Heptachlor epoxide	µg/L	0.02	<0.02	<0.02	0	<0.02	<0.02	0
	Hexachlorobenzene	µg/L	0.01	<0.01	<0.01	0	<0.01	<0.01	0
	Methoxychlor	µg/L	0.1	<0.1	<0.1	0	<0.1	<0.1	0
	Oxychlordane	mg/L	0.00001	<0.00001	<0.00001	0	<0.00001	<0.00001	0
Organophosphorous Pesticides	Azinophos methyl	µg/L	0.05	<0.05	<0.05	0	<0.05	<0.05	0
	Bromophos-ethyl	µg/L	0.05	<0.05	<0.05	0	<0.05	<0.05	0
	Carbophenothion	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0
	Chlorfenvinphos E	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0
	Chlorpyrifos	µg/L	0.01	<0.01	<0.01	0	<0.01	<0.01	0
	Chlorpyrifos-methyl	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0
	Coumaphos	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0
	Diazinon	µg/L	0.01	<0.01	<0.01	0	<0.01	<0.01	0
	cis-Chlorfenvinphos	mg/L	0.005	<0.005	<0.005	0	<0.005	<0.005	0
	Dichlorvos	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0
	Dimethoate	µg/L	0.15	<0.15	<0.15	0	<0.15	<0.15	0
	Disulfoton	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0
	Ethion	µg/L	0.05	<0.05	<0.05	0	<0.05	<0.05	0
	Ethoprop	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0
	Ethyl methanesulfonate	µg/L	1	<1	<1	0	<1	<1	0
	Fenitrothion	µg/L	0.2	<0.2	<0.2	0	<0.2	<0.2	0
	Fenthion	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0
	Isosafrole (cis)	µg/L	1	<1	<1	0	<1	<1	0
	Isosafrole (trans)	µg/L	1	<1	<1	0	<1	<1	0
	Malathion	µg/L	0.05	<0.05	<0.05	0	<0.05	<0.05	0
	Methidathion	µg/L	0.05	<0.05	<0.05	0	<0.05	<0.05	0
	Methyl methanesulfonate	µg/L	1	<1	<1	0	<1	<1	0
	Methyl parathion	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0
	Mevinphos (Phosdrin)	µg/L	1	<1	<1	0	<1	<1	0
	Phorate	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0
	Prothiofos	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0
	Ronnel	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0
	Safrole	µg/L	1	<1	<1	0	<1	<1	0
Herbicides	Trifluralin	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0
Pesticides	Carbaryl	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0
	Carbofuran	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0
	Demeton-S-methyl	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0
	Fenamiphos	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0
	Famphur	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0
	Isodrin	µg/L	0.02	<0.02	<0.02	0	<0.02	<0.02	0
	Mirex	µg/L	0.01	<0.01	<0.01	0	<0.01	<0.01	0
	Parathion	µg/L	0.01	<0.01	<0.01	0	<0.01	<0.01	0
	Pirimiphos-methyl	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0
	Pirimphos-ethyl	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0
	Profenofos	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0
	Sulfotepp	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0
	Thionazin	mg/L	0.001	<0.001	<0.001	0	<0.001	<0.001	0
SVOCs	1,4-Naphthoquinone	mg/L	0.001	<0.001	<0.001	0	<0.001	<0.001	0
	2-(acetylamino) fluorene	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0
	4-(dimethylamino) azobenzene	µg/L	1	<1	<1	0	<1	<1	0
	4-bromophenyl phenyl ether	µg/L	1	<1	<1	0	<1	<1	0
	4-chlorophenyl phenyl ether	µg/L	1	<1	<1	0	<1	<1	0
	Acetophenone	µg/L	1	<1	<1	0	<1	<1	0
	Benzyl alcohol	µg/L	1	<1	<1	0	<1	<1	0
	Bis(2-chloroethoxy) methane	µg/L	1	<1	<1	0	<1	<1	0
	Bis(2-chloroethyl)ether	µg/L	1	<1	<1	0	<1	<1	0
	Bis(2-chloroisopropyl) ether	µg/L	1	<1	<1	0	<1	<1	0
	Dibenzofuran	µg/L	1	<1	<1	0	<1	<1	0
	EPN	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0
	Hexachloropropene	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0
	N-nitrosomorpholine	µg/L	1	<1	<1	0	<1	<1	0
	N-nitrosopiperidine	µg/L	1	<1	<1	0	<1	<1	0
	N-nitrosopyrrolidine	µg/L	1	<1	<1	0	<1	<1	0
	Phenacetin	µg/L	1	<1	<1	0	<1	<1	0
VOCs	2-Nitropropane	mg/L	0.1	<0.1	<0.1	0	<0.1	<0.1	0
	Pentachloroethane	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0
	trans-1,4-Dichloro-2-butene	µg/L	1	<1	<1	0	<1	<1	0
Chlorinated Hydrocarbons	1,1,1,1,2-tetrachloroethane	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0
	1,1,1-trichloroethane	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0
	1,1,2,2-tetrachloroethane	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0
	1,1,2-trichloroethane	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0
	1,1-dichloroethane	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0
	1,1-dichloroethene	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0
	1,1-dichloropropene	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0
	1,2,3-trichloropropane	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0
	1,2-dibromo-3-chloropropane	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0
	1,2-dichloroethane	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0
	1,2-dichloropropane	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0
	1,3-dichloropropane	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0
	2,2-dichloropropane	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0
	Bromochloromethane	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0
	Bromodichloromethane	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0
	Bromoform	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0
	Carbon tetrachloride	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0
	Chlorodibromomethane	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0
	Chloroethane	µg/L	5	<5	<5	0	<5	<5	0
	Chloroform	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0
	Chloromethane	µg/L	5	<5	<5	0	<5	<5	0
	cis-1,2-dichloroethene	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0
	cis-1,3-dichloropropene	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0
	Dibromomethane	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0
	Dichloromethane	µg/L	5	<5	<5	0	<5	<5	0
	Hexachlorobutadiene	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0
	Hexachlorocyclopentadiene	µg/L	2	<2	<2	0	<2	<2	0
	Hexachloroethane	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0

			Field ID		MW03	QC100			MW03	QA100	RPD
					Water	Water			Water	Water	
			Matrix Type		Date		31 May 2023		31 May 2023		
					Lab Report Number		SE248449	SE248449	RPD	SE248449	
			Unit	EQL							
	Trichloroethene	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0		
	Tetrachloroethene	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0		
	trans-1,2-dichloroethene	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0		
	trans-1,3-dichloropropene	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0		
	Vinyl chloride	µg/L	0.3	<0.3	<0.3	0	<0.3	<0.3	0		
Halogenated Hydrocarbons	1,2,3,4-tetrachlorobenzene	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0		
	1,2,3,5 & 1,2,4,5 Tetrachlorobenzene	µg/L	1	<1	<1	0	<1	<1	0		
	1,2,3-trichlorobenzene	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0		
	1,2,4-trichlorobenzene	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0		
	1,2-dibromoethane	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0		
	1,2-dichlorobenzene	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0		
	1,3-dichlorobenzene	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0		
	1,4-dichlorobenzene	µg/L	0.3	<0.3	<0.3	0	<0.3	<0.3	0		
	2-chlorotoluene	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0		
	4-chlorotoluene	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0		
	Bromobenzene	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0		
	Bromomethane	µg/L	10	<10	<10	0	<10	<10	0		
	Chlorobenzene	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0		
	Dichlorodifluoromethane	µg/L	5	<5	<5	0	<5	<5	0		
	Iodomethane	µg/L	5	<5	<5	0	<5	<5	0		
	Pentachlorobenzene	µg/L	0.5	<0.5	<0.5	0	<0.5	<0.5	0		
	Trichlorofluoromethane	µg/L	1	<1	<1	0	<1	<1	0		
Perfluorocarbons	Perfluorododecane sulfonate (PFDoS)	µg/L	0.0005	<0.0005	<0.0005	0	<0.0005	<0.0005	0		
	1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 F	µg/L	0.0005	0.0055	0.0056	2	0.0055	0.0045	20		
	Perfluorobutane sulfonate (PFBS)	µg/L	0.001	<0.001	<0.001	0	<0.001	<0.001	0		
	Perfluorononane sulfonate (PFNS)	µg/L	0.0005	<0.0005	<0.0005	0	<0.0005	<0.0005	0		
	2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	µg/L	0.0025	<0.0025	<0.0025	0	<0.0025	<0.0025	0		
	N-Ethyl perfluorooctane sulfonamide (EtFOSA)	µg/L	0.0025	<0.0025	<0.0025	0	<0.0025	<0.0025	0		
	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	µg/L	0.0025	<0.0025	<0.0025	0	<0.0025	<0.0025	0		
	N-Methyl perfluorooctane sulfonamide (MeFOSA)	µg/L	0.0025	<0.0025	<0.0025	0	<0.0025	<0.0025	0		
	Perfluorodecanoic acid (PFDA)	µg/L	0.001	<0.001	<0.001	0	<0.001	<0.001	0		
	Perfluorododecanoic acid (PFDoDA)	µg/L	0.001	<0.001	<0.001	0	<0.001	<0.001	0		
	Perfluorononanoic acid (PFNA)	µg/L	0.001	<0.001	<0.001	0	<0.001	<0.001	0		
	Perfluorooctane sulfonamide (FOSA)	µg/L	0.002	<0.002	<0.002	0	<0.002	<0.002	0		
	Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.001	<0.001	<0.001	0	<0.001	<0.001	0		
	Perfluorotridecanoic acid (PFTrDA)	µg/L	0.001	<0.001	<0.001	0	<0.001	<0.001	0		
	Perfluoroundecanoic acid (PFUnDA)	µg/L	0.001	<0.001	<0.001	0	<0.001	<0.001	0		
	8:2 Fluorotelomer sulfonate	µg/L	0.0005	<0.0005	<0.0005	0	<0.0005	<0.0005	0		
	Perfluoroheptanoic acid (PFHpA)	µg/L	0.0005	<0.0005	<0.0005	0	<0.0005	<0.0005	0		
	Perfluorohexanoic acid (PFHxA)	µg/L	0.0005	0.0006	0.0005	18	0.0006	0.0007	15		
	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	µg/L	0.0005	<0.0005	<0.0005	0	<0.0005	<0.0005	0		
	N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	µg/L	0.0025	<0.0025	<0.0025	0	<0.0025	<0.0025	0		
	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	µg/L	0.0025	<0.0025	<0.0025	0	<0.0025	<0.0025	0		
	Perfluorobutanoic acid (PFBA)	µg/L	0.0005	<0.0005	<0.0005	0	<0.0005	<0.0005	0		
	Perfluoroheptane sulfonic acid (PFHpS)	µg/L	0.0002	<0.0002	<0.0002	0	<0.0002	<0.0002	0		
	Perfluorohexane sulfonic acid (PFHxS)	µg/L	0.0002	0.0024	0.0028	15	0.0024	0.0032	29		
	Perfluorooctane sulfonic acid (PFOS)	µg/L	0.0002	0.0012	0.0010	18	0.0012	0.0013	8		
	Perfluoropentane sulfonic acid (PFPeS)	µg/L	0.001	<0.001	<0.001	0	<0.001	<0.001	0		
	Perfluoropentanoic acid (PFPeA)	µg/L	0.0005	<0.0005	<0.0005	0	<0.0005	<0.0005	0		
	Sum of PFAS	ug/L	0.006	0.010	0.010	0	0.010	0.010	0		
	Perfluorodecanesulfonic acid (PFDS)	µg/L	0.0005	<0.0005	<0.0005	0	<0.0005	<0.0005	0		
	Sum of PFHxS and PFOS	µg/L	0.0002	0.0036	0.0039	8	0.0036	0.0045	22		
	Perfluorooctanoate (PFOA)	µg/L	0.0005	0.0005	<0.0005	0	0.0005	0.0005	0		
Phthalates	Bis(2-ethylhexyl) phthalate	µg/L	50	<50	<50	0	<50	<50	0		
	Butyl benzyl phthalate	µg/L	1	<1	<1	0	<1	<1	0		
	Diethylphthalate	µg/L	5	<5	<5	0	<5	<5	0		
	Dimethyl phthalate	µg/L	1	<1	<1	0	<1	<1	0		
	Di-n-butyl phthalate	µg/L	10	<10	<10	0	<10	<10	0		
	Di-n-octyl phthalate	µg/L	1	<1	<1	0	<1	<1	0		

		Matrix Type		Water
		Date		31 May 2023
		Lab Report Number		SE248449
		Unit	EQL	
Amino Aliphatics	N-nitrosodiethylamine	µg/L	1	<1
	N-nitrosodi-n-butylamine	µg/L	1	<1
	N-nitrosodi-n-propylamine	µg/L	1	<1
Amino Aromatics	1-naphthylamine	µg/L	2	<2
	2-naphthylamine	µg/L	2	<2
	Diphenylamine	µg/L	1	<1
Anilines	2-nitroaniline	µg/L	1	<1
	3-nitroaniline	µg/L	1	<1
	4-chloroaniline	µg/L	1	<1
	4-nitroaniline	µg/L	1	<1
	2-methyl-5-nitroaniline	µg/L	1	<1
	Aniline	µg/L	5	<5
	2-methylaniline	µg/L	1	<1
	1,3-Dinitrobenzene	mg/L	0.001	<0.001
Explosives	2,4-Dinitrotoluene	µg/L	1	<1
	2,6-dinitrotoluene	µg/L	1	<1
	Nitrobenzene	µg/L	1	<1
Halogenated Phenols	2,4,5-trichlorophenol	µg/L	0.5	<0.5
	2,4,6-trichlorophenol	µg/L	0.5	<0.5
	2,4-dichlorophenol	µg/L	0.5	<0.5
	2,6-dichlorophenol	µg/L	0.5	<0.5
	2-chlorophenol	µg/L	0.5	<0.5
	Pentachlorophenol	µg/L	0.5	<0.5
Misc	2346&2356-Tetrachlorophenol	mg/L	0.001	<0.001
	3/4-Methylphenol (m/p-cresol)	mg/L	0.001	<0.001
	1 & 2 Chloronaphthalene	mg/L	0.001	<0.001
	Di(2-ethylhexyl)adipate	µg/L	1	<1
	o,o,o-Triethylphosphorothioate	µg/L	0.5	<0.5
Nitroaromatics	4-aminobiphenyl	µg/L	1	<1
	Pentachloronitrobenzene	µg/L	1	<1
PCBs	PCB 101	µg/L	0.1	<0.1
	PCB 118	µg/L	0.1	<0.1
	PCB 138	µg/L	0.1	<0.1
	PCB 153	µg/L	0.1	<0.1
	PCB 180	µg/L	0.1	<0.1
	PCB 28	µg/L	0.1	<0.1
	PCB 52	µg/L	0.1	<0.1
Solvents	Methyl Ethyl Ketone	µg/L	10	<10
	2-hexanone (MBK)	µg/L	5	<5
	4-Methyl-2-pentanone	µg/L	5	<5
	Acetone	µg/L	10	<10
	Acrylonitrile	µg/L	0.5	<0.5
	Allyl chloride	µg/L	2	<2
	Carbon disulfide	µg/L	2	<2
	Isophorone	µg/L	1	<1
	MTBE	µg/L	2	<2
	Vinyl acetate	µg/L	10	<10
TPH	C6 - C9	µg/L	40	<40
	C10 - C14	µg/L	50	<50
	C15 - C28	µg/L	200	<200
	C29-C36	µg/L	200	<200
CRC Care TPH Fractions	C6-C10	µg/L	50	<50
	C10-C16	µg/L	60	<60
	C16-C34	µg/L	500	<500
	C34-C40	µg/L	500	<500
	C10 - C40 (Sum of total)	µg/L	320	<320
	F1: C6-C10 less BTEX	µg/L	50	<50
	F2: >C10-C16 less NAPHTHALENE	µg/L	60	<60
	Naphthalene (VOC)	µg/L	0.5	<0.5
BTEX	Benzene	µg/L	0.5	<0.5
	Toluene	µg/L	0.5	<0.5
	Ethylbenzene	µg/L	0.5	<0.5
	Xylene (m & p)	µg/L	1	<1
	Xylene (o)	µg/L	0.5	<0.5
	Total BTEX	µg/L	3	<3
	Xylene Total	ug/L	1.5	<1.5
MAH	1,2,4-trimethylbenzene	µg/L	0.5	<0.5
	1,3,5-trimethylbenzene	µg/L	0.5	<0.5
	Isopropylbenzene	µg/L	0.5	<0.5
	n-butylbenzene	µg/L	0.5	<0.5
	n-propylbenzene	µg/L	0.5	<0.5
	p-isopropyltoluene	µg/L	0.5	<0.5
	sec-butylbenzene	µg/L	0.5	<0.5
	Styrene	µg/L	0.5	<0.5
	tert-butylbenzene	µg/L	0.5	<0.5
Metals	Arsenic (filtered)	µg/L	1	<1
	Cadmium (filtered)	µg/L	0.1	<0.1
	Chromium (III+VI) (filtered)	µg/L	1	<1
	Copper (filtered)	µg/L	1	<1
	Lead (filtered)	µg/L	1	<1
	Mercury (filtered)	µg/L	0.1	0.3
	Nickel (filtered)	µg/L	1	<1
	Zinc (filtered)	µg/L	5	<5
PAH	Naphthalene	µg/L	0.1	<0.1
	2-methylnaphthalene	µg/L	0.1	<0.1
	1-Methylnaphthalene	µg/L	0.1	<0.1
	Acenaphthylene	µg/L	0.1	<0.1
	Acenaphthene	µg/L	0.1	<0.1
	Fluorene	µg/L	0.1	<0.1
	Phenanthrene	µg/L	0.1	<0.1
	Anthracene	µg/L	0.1	<0.1
	Fluoranthene	µg/L	0.1	<0.1
	Pyrene	µg/L	0.1	<0.1
	Benz(a)anthracene	µg/L	0.1	<0.1
	Chrysene	µg/L	0.1	<0.1
	Benzo(k)fluoranthene	µg/L	0.1	<0.1
	Benzo(b)&(k)fluoranthene	µg/L	0.2	<0.2
	Benzo(b+j)fluoranthene	µg/L	0.1	<0.1
	Benzo(a)pyrene	mg/L	0.0001	<0.0001
	Indeno(1,2,3-c,d)pyrene	µg/L	0.1	<0.1
	Dibenzo(a,h)anthracene	µg/L	0.1	<0.1
	Benzo(g,h,i)perylene	µg/L	0.1	<0.1
	PAHs (Sum of total)	µg/L	1	<1
	3-methylcholanthrene	µg/L	0.5	<0.5
	7,12-dimethylbenz(a)anthracene	µg/L	0.5	<0.5
Phenols	2,4-dimethylphenol	µg/L	0.5	<0.5
	2-methylphenol	µg/L	0.5	<0.5
	2-nitrophenol	µg/L	0.5	<0.5
	4-chloro-3-methylphenol	µg/L	2	<2
	4-nitrophenol	ug/L	1	<1
	Phenol	µg/L	0.5	<0.5

		Matrix Type		Water
		Date		31 May 2023
		Lab Report Number		SE248449
		Unit	EQL	
Organochlorine Pesticides	2,4-DDT	µg/L	0.1	<0.1
	4,4-DDE	µg/L	0.1	<0.1
	a-BHC	µg/L	0.1	<0.1
	Aldrin	µg/L	0.1	<0.1
	b-BHC	µg/L	0.1	<0.1
	Chlordane (cis)	µg/L	0.1	<0.1
	gamma-Chlordane	µg/L	0.1	<0.1
	d-BHC	µg/L	0.1	<0.1
	DDD	µg/L	0.1	<0.1
	DDT	µg/L	0.1	<0.1
	Dieldrin	µg/L	0.1	<0.1
	Endosulfan	µg/L	0.2	<0.2
	Endosulfan I	µg/L	0.1	<0.1
	Endosulfan II	µg/L	0.1	<0.1
	Endosulfan sulphate	µg/L	0.1	<0.1
	Endrin	µg/L	0.1	<0.1
	Endrin aldehyde	µg/L	0.1	<0.1
	Endrin ketone	µg/L	0.1	<0.1
	g-BHC (Lindane)	µg/L	0.1	<0.1
	Heptachlor	µg/L	0.1	<0.1
	Heptachlor epoxide	µg/L	0.1	<0.1
	Hexachlorobenzene	µg/L	0.1	<0.1
	Methoxychlor	µg/L	0.1	<0.1
	o,p-DDD	µg/L	0.1	<0.1
	o,p'-DDE	µg/L	0.1	<0.1
	trans-Nonachlor	µg/L	0.1	<0.1
Organophosphorous Pesticides	Azinophos methyl	µg/L	0.2	<0.2
	Bromophos-ethyl	µg/L	0.2	<0.2
	Carbophenothion	µg/L	0.5	<0.5
	Chlorfenvinphos E	µg/L	0.5	<0.5
	Chlorpyrifos	µg/L	0.2	<0.2
	Chlorpyrifos-methyl	µg/L	0.5	<0.5
	Coumaphos	µg/L	0.5	<0.5
	Diazinon	µg/L	0.5	<0.5
	cis-Chlorfenvinphos	mg/L	0.005	<0.005
	Dichlorvos	µg/L	0.5	<0.5
	Dimethoate	µg/L	0.5	<0.5
	Disulfoton	µg/L	0.5	<0.5
	Ethion	µg/L	0.2	<0.2
	Ethoprop	µg/L	0.5	<0.5
	Ethyl methanesulfonate	µg/L	1	<1
	Fenitrothion	µg/L	0.2	<0.2
	Fenthion	µg/L	0.5	<0.5
	Isosafrole (cis)	µg/L	1	<1
	Isosafrole (trans)	µg/L	1	<1
	Malathion	µg/L	0.2	<0.2
	Methidathion	µg/L	0.5	<0.5
	Methyl methanesulfonate	µg/L	1	<1
	Methyl parathion	µg/L	0.5	<0.5
	Mevinphos (Phosdrin)	µg/L	1	<1
	Phorate	µg/L	0.5	<0.5
	Prothiofos	µg/L	0.5	<0.5
	Ronnel	µg/L	0.5	<0.5
	Safrole	µg/L	1	<1
Herbicides	Trifluralin	µg/L	0.5	<0.5
Pesticides	Carbaryl	µg/L	0.5	<0.5
	Carbofuran	µg/L	0.5	<0.5
	Demeton-S-methyl	µg/L	0.5	<0.5
	Fenamiphos	µg/L	0.5	<0.5
	Famphur	µg/L	0.5	<0.5
	Isodrin	µg/L	0.1	<0.1
	Mirex	µg/L	0.1	<0.1
	Parathion	µg/L	0.2	<0.2
	Pirimiphos-methyl	µg/L	0.5	<0.5
	Pirimphos-ethyl	µg/L	0.5	<0.5
	Profenofos	µg/L	0.5	<0.5
	Sulfotepp	µg/L	0.5	<0.5
	Thionazin	mg/L	0.001	<0.001
SVOCs	1,4-Naphthoquinone	mg/L	0.001	<0.001
	2-(acetylamino) fluorene	µg/L	0.5	<0.5
	4-(dimethylamino) azobenzene	µg/L	1	<1
	4-bromophenyl phenyl ether	µg/L	1	<1
	4-chlorophenyl phenyl ether	µg/L	1	<1
	Acetophenone	µg/L	1	<1
	Benzyl alcohol	µg/L	1	<1
	Bis(2-chloroethoxy) methane	µg/L	1	<1
	Bis(2-chloroethyl)ether	µg/L	1	<1
	Bis(2-chloroisopropyl) ether	µg/L	1	<1
	Dibenzofuran	µg/L	1	<1
	EPN	µg/L	0.5	<0.5
	Hexachloropropene	µg/L	0.5	<0.5
	N-nitrosomorpholine	µg/L	1	<1
	N-nitrosopiperidine	µg/L	1	<1
	N-nitrosopyrrolidine	µg/L	1	<1
	Phenacetin	µg/L	1	<1
VOCs	2-Nitropropane	mg/L	0.1	<0.1
	Pentachloroethane	µg/L	0.5	<0.5
	trans-1,4-Dichloro-2-butene	µg/L	1	<1
Chlorinated Hydrocarbons	1,1,1,2-tetrachloroethane	µg/L	0.5	<0.5
	1,1,1-trichloroethane	µg/L	0.5	<0.5
	1,1,2,2-tetrachloroethane	µg/L	0.5	<0.5
	1,1,2-trichloroethane	µg/L	0.5	<0.5
	1,1-dichloroethane	µg/L	0.5	<0.5
	1,1-dichloroethene	µg/L	0.5	<0.5
	1,1-dichloropropene	µg/L	0.5	<0.5
	1,2,3-trichloropropane	µg/L	0.5	<0.5
	1,2-dibromo-3-chloropropane	µg/L	0.5	<0.5
	1,2-dichloroethane	µg/L	0.5	<0.5
	1,2-dichloropropane	µg/L	0.5	<0.5
	1,3-dichloropropane	µg/L	0.5	<0.5
	2,2-dichloropropane	µg/L	0.5	<0.5
	Bromochloromethane	µg/L	0.5	<0.5
	Bromodichloromethane	µg/L	0.5	<0.5
	Bromoform	µg/L	0.5	<0.5
	Carbon tetrachloride	µg/L	0.5	<0.5
	Chlorodibromomethane	µg/L	0.5	<0.5
	Chloroethane	µg/L	5	<5
	Chloroform	µg/L	0.5	<0.5
	Chloromethane	µg/L	5	<5
	cis-1,2-dichloroethene	µg/L	0.5	<0.5
	cis-1,3-dichloropropene	µg/L	0.5	<0.5
	Dibromomethane	µg/L	0.5	<0.5
	Dichloromethane	µg/L	5	<5
	Hexachlorobutadiene	µg/L	0.5	<0.5

		Matrix Type		Water
		Date		31 May 2023
		Lab Report Number		SE248449
		Unit	EQL	
	Hexachlorocyclopentadiene	µg/L	2	<2
	Hexachloroethane	µg/L	0.5	<0.5
	Trichloroethene	µg/L	0.5	<0.5
	Tetrachloroethene	µg/L	0.5	<0.5
	trans-1,2-dichloroethene	µg/L	0.5	<0.5
	trans-1,3-dichloropropene	µg/L	0.5	<0.5
	Vinyl chloride	µg/L	0.3	<0.3
Halogenated Hydrocarbons	1,2,3,4-tetrachlorobenzene	µg/L	0.5	<0.5
	1,2,3,5 & 1,2,4,5 Tetrachlorobenzene	µg/L	1	<1
	1,2,3-trichlorobenzene	µg/L	0.5	<0.5
	1,2,4-trichlorobenzene	µg/L	0.5	<0.5
	1,2-dibromoethane	µg/L	0.5	<0.5
	1,2-dichlorobenzene	µg/L	0.5	<0.5
	1,3-dichlorobenzene	µg/L	0.5	<0.5
	1,4-dichlorobenzene	µg/L	0.3	<0.3
	2-chlorotoluene	µg/L	0.5	<0.5
	4-chlorotoluene	µg/L	0.5	<0.5
	Bromobenzene	µg/L	0.5	<0.5
	Bromomethane	µg/L	10	<10
	Chlorobenzene	µg/L	0.5	<0.5
	Dichlorodifluoromethane	µg/L	5	<5
	Iodomethane	µg/L	5	<5
	Pentachlorobenzene	µg/L	0.5	<0.5
Phthalates	Trichlorofluoromethane	µg/L	1	<1
	Bis(2-ethylhexyl) phthalate	µg/L	50	<50
	Butyl benzyl phthalate	µg/L	1	<1
	Diethylphthalate	µg/L	5	<5
	Dimethyl phthalate	µg/L	1	<1
	Di-n-butyl phthalate	µg/L	10	<10
	Di-n-octyl phthalate	µg/L	1	<1

APPENDIX D

Geological Logs / Construction Details

Client: Waluya Pty Ltd Project: Bus Depot - Racecourse Road Location: 7a - 11 Racecourse Road, West Gosford	Job No: 300304375	Sheet: 1 of 1

Position: See Site Plan	Angle from Horizontal: 90°	Surface Elevation:

Equipment: Hand Auger		

Casing Diameter:	Contractor:	

Data Started: 3/5/23	Logged By: ED	Checked By:

Drilling			Water	Sampling & Testing	Depth (m)	Material Description								
Method	Resistance	Casing		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations			
			Dry	ES 0.10 - 0.20 m PID: 0.3ppm				FILL: Clayey SAND; Fine to coarse grained, brown, with gravel, with organics (roots/grass).			FILL			
												0.40m		
				ES 0.50 - 0.70 m PID: 0.4ppm	0.5							FILL: Clayey SAND; Fine to coarse grained, light brown, with gravel. Higher Clay content.		0.40 m: Trace glass.
				ES 0.90 - 1.00 m PID: 0.5ppm	1.0							1.00m		
								TERMINATED AT 1.00 m Target depth						
					1.5									
					2.0									

METHOD EX Excavator bucket R Ripper HA Hand auger PT Push tube SON Sonic drilling AH Air hammer PS Percussion sampler AS Short spiral auger AD/V Solid flight auger: V-Bit AD/T Solid flight auger: TC-Bit HFA Hollow flight auger WB Washbore drilling RR Rock roller	PENETRATION VE Very Easy (No Resistance) E Easy F Firm H Hard VH Very Hard (Refusal) WATER  Water Level on Date shown  water inflow  water outflow	FIELD TESTS SPT - Standard Penetration Test HP - Hand/Pocket Penetrometer DCP - Dynamic Cone Penetrometer PSP - Perth Sand Penetrometer MC - Moisture Content PBT - Plate Bearing Test IMP - Borehole Impression Test PID - Photoionisation Detector VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)	SAMPLES B - Bulk disturbed sample D - Disturbed sample ES - Environmental sample U - Thin wall tube 'undisturbed' MOISTURE D - Dry M - Moist W - Wet PL - Plastic limit LL - Liquid limit w - Moisture content	SOIL CONSISTENCY VS - Very Soft S - Soft F - Firm St - Stiff VSt - Very Stiff H - Hard RELATIVE DENSITY VL - Very Loose L - Loose MD - Medium Dense D - Dense VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

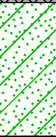
Client: Waluya Pty Ltd Project: Bus Depot - Racecourse Road Location: 7a - 11 Racecourse Road, West Gosford	Job No: 300304375	Sheet: 1 of 1

Position: See Site Plan	Angle from Horizontal: 90°	Surface Elevation:

Equipment: Hand Auger

Casing Diameter:	Contractor:

Data Started: 3/5/23	Logged By: ED	Checked By:

Drilling			Water	Sampling & Testing	Depth (m)	Material Description						
Method	Resistance	Casing		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations	
			Dry	ES 0.00 - 0.10 m PID: 0.4ppm				TOPSOIL FILL: Clayey SAND; Fine to coarse grained, brown, trace gravel, trace organics (roots).	D		FILL	
								0.20m			Sandy CLAY/Clayey SAND: Red and grey, trace gravel.	RESIDUAL SOIL
				ES 0.30 - 0.40 m PID: 0.5ppm				0.45m			TERMINATED AT 0.45 m Target depth	
					0.5							
					1.0							
					1.5							
					2.0							

METHOD EX Excavator bucket R Ripper HA Hand auger PT Push tube SON Sonic drilling AH Air hammer PS Percussion sampler AS Short spiral auger AD/V Solid flight auger: V-Bit AD/T Solid flight auger: TC-Bit HFA Hollow flight auger WB Washbore drilling RR Rock roller	PENETRATION VE Very Easy (No Resistance) E Easy F Firm H Hard VH Very Hard (Refusal) WATER  Water Level on Date shown  water inflow  water outflow	FIELD TESTS SPT - Standard Penetration Test HP - Hand/Pocket Penetrometer DCP - Dynamic Cone Penetrometer PSP - Perth Sand Penetrometer MC - Moisture Content PBT - Plate Bearing Test IMP - Borehole Impression Test PID - Photoionisation Detector VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)	SAMPLES B - Bulk disturbed sample D - Disturbed sample ES - Environmental sample U - Thin wall tube 'undisturbed' MOISTURE D - Dry M - Moist W - Wet PL - Plastic limit LL - Liquid limit w - Moisture content	SOIL CONSISTENCY VS - Very Soft S - Soft F - Firm St - Stiff VSt - Very Stiff H - Hard RELATIVE DENSITY VL - Very Loose L - Loose MD - Medium Dense D - Dense VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

Client: Waluya Pty Ltd Project: Bus Depot - Racecourse Road Location: 7a - 11 Racecourse Road, West Gosford	Job No: 300304375	Sheet: 1 of 1

Position: See Site Plan	Angle from Horizontal: 90°	Surface Elevation:

Equipment: Hand Auger

Casing Diameter:	Contractor:

Data Started: 3/5/23	Logged By: ED	Checked By:

Drilling			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Casing		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
			Dry				0.30m				FILL
				ES 0.10 - 0.20 m PID: 0.2ppm							
					0.5		TERMINATED AT 0.30 m Refusal on rock				
					1.0						
					1.5						
					2.0						

METHOD EX Excavator bucket R Ripper HA Hand auger PT Push tube SON Sonic drilling AH Air hammer PS Percussion sampler AS Short spiral auger AD/V Solid flight auger: V-Bit AD/T Solid flight auger: TC-Bit HFA Hollow flight auger WB Washbore drilling RR Rock roller	PENETRATION VE Very Easy (No Resistance) E Easy F Firm H Hard VH Very Hard (Refusal) WATER  Water Level on Date shown  water inflow  water outflow	FIELD TESTS SPT - Standard Penetration Test HP - Hand/Pocket Penetrometer DCP - Dynamic Cone Penetrometer PSP - Perth Sand Penetrometer MC - Moisture Content PBT - Plate Bearing Test IMP - Borehole Impression Test PID - Photoionisation Detector VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)	SAMPLES B - Bulk disturbed sample D - Disturbed sample ES - Environmental sample U - Thin wall tube 'undisturbed' MOISTURE D - Dry M - Moist W - Wet PL - Plastic limit LL - Liquid limit w - Moisture content	SOIL CONSISTENCY VS - Very Soft S - Soft F - Firm St - Stiff VSt - Very Stiff H - Hard RELATIVE DENSITY VL - Very Loose L - Loose MD - Medium Dense D - Dense VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

Client: Waluya Pty Ltd		Job No: 300304375		Sheet: 1 of 1	
Project: Bus Depot - Racecourse Road		Angle from Horizontal: 90°		Surface Elevation:	
Location: 7a - 11 Racecourse Road, West Gosford					
Position: See Site Plan					
Equipment: Hand Auger					
Casing Diameter:		Logged By: ED		Contractor:	
Data Started: 3/5/23				Checked By:	

Drilling			Sampling & Testing		Material Description						
Method	Resistance	Casing	Water	Sample or Field Test	Depth (m)	Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
			Dry	ES 0.10 - 0.20 m PID: 0.3ppm			0.20m	FILL: Gravelly SAND; Fine to coarse grained, dark brown-grey, trace clay.			FILL
					0.5			TERMINATED AT 0.20 m Refusal on rock			
					1.0						
					1.5						
					2.0						

METHOD EX Excavator bucket R Ripper HA Hand auger PT Push tube SON Sonic drilling AH Air hammer PS Percussion sampler AS Short spiral auger AD/V Solid flight auger: V-Bit AD/T Solid flight auger: TC-Bit HFA Hollow flight auger WB Washbore drilling RR Rock roller	PENETRATION VE Very Easy (No Resistance) E Easy F Firm H Hard VH Very Hard (Refusal) WATER  Water Level on Date shown  water inflow  water outflow	FIELD TESTS SPT - Standard Penetration Test HP - Hand/Pocket Penetrometer DCP - Dynamic Cone Penetrometer PSP - Perth Sand Penetrometer MC - Moisture Content PBT - Plate Bearing Test IMP - Borehole Impression Test PID - Photoionisation Detector VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)	SAMPLES B - Bulk disturbed sample D - Disturbed sample ES - Environmental sample U - Thin wall tube 'undisturbed' MOISTURE D - Dry M - Moist W - Wet PL - Plastic limit LL - Liquid limit w - Moisture content	SOIL CONSISTENCY VS - Very Soft S - Soft F - Firm St - Stiff VSt - Very Stiff H - Hard RELATIVE DENSITY VL - Very Loose L - Loose MD - Medium Dense D - Dense VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

Client: Waluya Pty Ltd Project: Bus Depot - Racecourse Road Location: 7a - 11 Racecourse Road, West Gosford	Job No: 300304375	Sheet: 1 of 1

Position: See Site Plan	Angle from Horizontal: 90°	Surface Elevation:

Equipment: Hand Auger

Casing Diameter:	Contractor:

Data Started: 3/5/23	Logged By: ED	Checked By:

Drilling			Water	Sampling & Testing	Depth (m)	Material Description						
Method	Resistance	Casing		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations	
			Dry	ES 0.00 - 0.20 m PID: 0.3ppm	0.5		0.20m	FILL: Gravely SAND; Fine to coarse grained, dark grey, trace organics (roots).			FILL	
								0.20m				FILL: Clayey SAND; Fine to coarse grained, dark grey-brown, with gravel.
				ES 0.30 - 0.50 m PID: 0.5ppm				0.50m				
					0.5			TERMINATED AT 0.50 m Refusal on rock				
					1.0							
					1.5							
					2.0							
					2.5							

METHOD EX Excavator bucket R Ripper HA Hand auger PT Push tube SON Sonic drilling AH Air hammer PS Percussion sampler AS Short spiral auger AD/V Solid flight auger: V-Bit AD/T Solid flight auger: TC-Bit HFA Hollow flight auger WB Washbore drilling RR Rock roller	PENETRATION VE Very Easy (No Resistance) E Easy F Firm H Hard VH Very Hard (Refusal) WATER  Water Level on Date shown  water inflow  water outflow	FIELD TESTS SPT - Standard Penetration Test HP - Hand/Pocket Penetrometer DCP - Dynamic Cone Penetrometer PSP - Perth Sand Penetrometer MC - Moisture Content PBT - Plate Bearing Test IMP - Borehole Impression Test PID - Photoionisation Detector VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)	SAMPLES B - Bulk disturbed sample D - Disturbed sample ES - Environmental sample U - Thin wall tube 'undisturbed' MOISTURE D - Dry M - Moist W - Wet PL - Plastic limit LL - Liquid limit w - Moisture content	SOIL CONSISTENCY VS - Very Soft S - Soft F - Firm St - Stiff VSt - Very Stiff H - Hard RELATIVE DENSITY VL - Very Loose L - Loose MD - Medium Dense D - Dense VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

Client: Waluya Pty Ltd Project: Bus Depot - Racecourse Road Location: 7a - 11 Racecourse Road, West Gosford	Job No: 300304375	Sheet: 1 of 1

Position: See Site Plan	Angle from Horizontal: 90°	Surface Elevation:

Equipment: Hand Auger

Casing Diameter:	Contractor:

Data Started: 3/5/23	Logged By: ED	Checked By:

Drilling			Water	Sampling & Testing	Depth (m)	Material Description						
Method	Resistance	Casing		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations	
			Dry	ES 0.10 - 0.20 m PID: 0.2ppm				FILL: Clayey SAND; Fine to coarse grained, brown, with organics (roots) trace gravel.			FILL	
								0.30m	FILL: Clayey SAND; Fine to medium grained, brown-orange, with gravel. Higher Clay content.			
				ES 0.50 - 0.60 m PID: 0.4ppm	0.5			0.60m	TERMINATED AT 0.60 m Refusal on rock			
					1.0							
					1.5							
					2.0							
					2.5							

METHOD EX Excavator bucket R Ripper HA Hand auger PT Push tube SON Sonic drilling AH Air hammer PS Percussion sampler AS Short spiral auger AD/V Solid flight auger: V-Bit AD/T Solid flight auger: TC-Bit HFA Hollow flight auger WB Washbore drilling RR Rock roller	PENETRATION VE Very Easy (No Resistance) E Easy F Firm H Hard VH Very Hard (Refusal) WATER  Water Level on Date shown  water inflow  water outflow	FIELD TESTS SPT - Standard Penetration Test HP - Hand/Pocket Penetrometer DCP - Dynamic Cone Penetrometer PSP - Perth Sand Penetrometer MC - Moisture Content PBT - Plate Bearing Test IMP - Borehole Impression Test PID - Photoionisation Detector VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)	SAMPLES B - Bulk disturbed sample D - Disturbed sample ES - Environmental sample U - Thin wall tube 'undisturbed' MOISTURE D - Dry M - Moist W - Wet PL - Plastic limit LL - Liquid limit w - Moisture content	SOIL CONSISTENCY VS - Very Soft S - Soft F - Firm St - Stiff VSt - Very Stiff H - Hard RELATIVE DENSITY VL - Very Loose L - Loose MD - Medium Dense D - Dense VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

Hole No: HA107

Client:	Waluya Pty Ltd
Project:	Bus Depot - Racecourse Road
Location:	7a - 11 Racecourse Road, West Gosford

Job No: 300304375

Sheet: 1 of 1

Position: See Site Plan

Angle from Horizontal: 90°

Surface Elevation:

Equipment: Hand Auger

Contractor:

Casing Diameter:

Logged By: ED

Checked By:

Drilling			Water	Sampling & Testing		Depth (m)	Material Description				
Method	Resistance	Casing		Sample or Field Test	Graphic Log		Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
			Dry	ES 0.10 - 0.20 m PID: 0.2ppm				FILL: Clayey SAND; Fine to coarse grained, brown, with organics (roots) trace gravel.			FILL
				ES 0.40 - 0.50 m PID: 0.2ppm	0.5		0.30m	FILL: Clayey SAND; Fine to medium grained, brown-orange, with gravel. Higher Clay content.			
							0.55m	TERMINATED AT 0.55 m Refusal on rock			
					1.0						
					1.5						
					2.0						
					2.5						

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)
 Water Level on Date shown
 water inflow
 water outflow

FIELD TESTS
SPT - Standard Penetration Test
HP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'
MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard
RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

Stantec Australia PTY LTD

Client: Waluya Pty Ltd Project: Bus Depot - Racecourse Road Location: 7a - 11 Racecourse Road, West Gosford	Job No: 300304375	Sheet: 1 of 1

Position: See Site Plan	Angle from Horizontal: 90°	Surface Elevation:

Equipment: Hand Auger

Casing Diameter:	Contractor:

Data Started: 3/5/23	Logged By: ED	Checked By:

Drilling			Water	Sampling & Testing	Depth (m)	Material Description								
Method	Resistance	Casing		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations			
			Dry	ES 0.10 - 0.30 m PID: 0.2ppm			0.35m				FILL			
					0.5		TERMINATED AT 0.35 m Refusal on rock							
					2.5									

METHOD EX Excavator bucket R Ripper HA Hand auger PT Push tube SON Sonic drilling AH Air hammer PS Percussion sampler AS Short spiral auger AD/V Solid flight auger: V-Bit AD/T Solid flight auger: TC-Bit HFA Hollow flight auger WB Washbore drilling RR Rock roller	PENETRATION VE Very Easy (No Resistance) E Easy F Firm H Hard VH Very Hard (Refusal) WATER  Water Level on Date shown  water inflow  water outflow	FIELD TESTS SPT - Standard Penetration Test HP - Hand/Pocket Penetrometer DCP - Dynamic Cone Penetrometer PSP - Perth Sand Penetrometer MC - Moisture Content PBT - Plate Bearing Test IMP - Borehole Impression Test PID - Photoionisation Detector VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)	SAMPLES B - Bulk disturbed sample D - Disturbed sample ES - Environmental sample U - Thin wall tube 'undisturbed' MOISTURE D - Dry M - Moist W - Wet PL - Plastic limit LL - Liquid limit w - Moisture content	SOIL CONSISTENCY VS - Very Soft S - Soft F - Firm St - Stiff VSt - Very Stiff H - Hard RELATIVE DENSITY VL - Very Loose L - Loose MD - Medium Dense D - Dense VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

Client: Waluya Pty Ltd Project: Bus Depot - Racecourse Road Location: 7a - 11 Racecourse Road, West Gosford	Job No: 300304375	Sheet: 1 of 1

Position: See Site Plan	Angle from Horizontal: 90°	Surface Elevation:

Equipment: Hand Auger

Casing Diameter:	Contractor:

Data Started: 3/5/23	Logged By: ED	Checked By:

Drilling			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Casing		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
			Dry	ES 0.10 - 0.30 m PID: 0.3ppm				FILL: Clayey SAND; Fine to medium grained, brown, with gravel, trace organics (roots). Clay pipe.			FILL
				ES 0.50 - 0.70 m PID: 0.4ppm	0.5						
							0.70m	TERMINATED AT 0.70 m Target depth			
					1.0						
					1.5						
					2.0						
					2.5						

METHOD EX Excavator bucket R Ripper HA Hand auger PT Push tube SON Sonic drilling AH Air hammer PS Percussion sampler AS Short spiral auger AD/V Solid flight auger: V-Bit AD/T Solid flight auger: TC-Bit HFA Hollow flight auger WB Washbore drilling RR Rock roller	PENETRATION VE Very Easy (No Resistance) E Easy F Firm H Hard VH Very Hard (Refusal) WATER  Water Level on Date shown  water inflow  water outflow	FIELD TESTS SPT - Standard Penetration Test HP - Hand/Pocket Penetrometer DCP - Dynamic Cone Penetrometer PSP - Perth Sand Penetrometer MC - Moisture Content PBT - Plate Bearing Test IMP - Borehole Impression Test PID - Photoionisation Detector VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)	SAMPLES B - Bulk disturbed sample D - Disturbed sample ES - Environmental sample U - Thin wall tube 'undisturbed' MOISTURE D - Dry M - Moist W - Wet PL - Plastic limit LL - Liquid limit w - Moisture content	SOIL CONSISTENCY VS - Very Soft S - Soft F - Firm St - Stiff VSt - Very Stiff H - Hard RELATIVE DENSITY VL - Very Loose L - Loose MD - Medium Dense D - Dense VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

Client: Waluya Pty Ltd Project: Bus Depot - Racecourse Road Location: 7a - 11 Racecourse Road, West Gosford	Job No: 300304375	Sheet: 1 of 1

Position: See Site Plan	Angle from Horizontal: 90°	Surface Elevation:

Equipment: Hand Auger

Casing Diameter:	Contractor:

Data Started: 3/5/23	Logged By: ED	Checked By:

Drilling			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Casing		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
			Dry	ES 0.10 - 0.20 m PID: 0.4ppm				FILL: Clayey SAND; Fine to coarse grained, brown, with gravel.			FILL
								As Above; Colour change to orange-brown.			
				ES 0.50 - 0.60 m PID: 0.5ppm	0.5			0.60m			
					1.0						
					1.5						
					2.0						
					2.5						

METHOD EX Excavator bucket R Ripper HA Hand auger PT Push tube SON Sonic drilling AH Air hammer PS Percussion sampler AS Short spiral auger AD/V Solid flight auger: V-Bit AD/T Solid flight auger: TC-Bit HFA Hollow flight auger WB Washbore drilling RR Rock roller	PENETRATION VE Very Easy (No Resistance) E Easy F Firm H Hard VH Very Hard (Refusal) WATER  Water Level on Date shown  water inflow  water outflow	FIELD TESTS SPT - Standard Penetration Test HP - Hand/Pocket Penetrometer DCP - Dynamic Cone Penetrometer PSP - Perth Sand Penetrometer MC - Moisture Content PBT - Plate Bearing Test IMP - Borehole Impression Test PID - Photoionisation Detector VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)	SAMPLES B - Bulk disturbed sample D - Disturbed sample ES - Environmental sample U - Thin wall tube 'undisturbed' MOISTURE D - Dry M - Moist W - Wet PL - Plastic limit LL - Liquid limit w - Moisture content	SOIL CONSISTENCY VS - Very Soft S - Soft F - Firm St - Stiff VSt - Very Stiff H - Hard RELATIVE DENSITY VL - Very Loose L - Loose MD - Medium Dense D - Dense VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

Client: Waluya Pty Ltd		Job No: 300304375		Sheet: 1 of 1	
Project: Bus Depot - Racecourse Road		Angle from Horizontal: 90°		Surface Elevation:	
Location: 7a - 11 Racecourse Road, West Gosford		Equipment: Hand Auger		Contractor:	
Casing Diameter:		Data Started: 3/5/23		Logged By: ED	
Checked By:		Position: See Site Plan		Casing:	

Drilling			Sampling & Testing		Material Description							
Method	Resistance	Casing	Water	Sample or Field Test	Depth (m)	Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations	
			Dry					FILL: Gravelly SAND; Medium to coarse grained, brown, trace organics (roots).			FILL	
				ES 0.10 - 0.20 m PID: 0.2ppm				0.30m	FILL: SAND; Coarse grained, orange.			
					0.5							
				ES 0.60 - 0.70 m PID: 0.3ppm			0.70m					
					1.0			TERMINATED AT 0.70 m Target depth				
					1.5							
					2.0							
					2.5							

METHOD EX Excavator bucket R Ripper HA Hand auger PT Push tube SON Sonic drilling AH Air hammer PS Percussion sampler AS Short spiral auger AD/V Solid flight auger: V-Bit AD/T Solid flight auger: TC-Bit HFA Hollow flight auger WB Washbore drilling RR Rock roller	PENETRATION VE Very Easy (No Resistance) E Easy F Firm H Hard VH Very Hard (Refusal) WATER  Water Level on Date shown  water inflow  water outflow	FIELD TESTS SPT - Standard Penetration Test HP - Hand/Pocket Penetrometer DCP - Dynamic Cone Penetrometer PSP - Perth Sand Penetrometer MC - Moisture Content PBT - Plate Bearing Test IMP - Borehole Impression Test PID - Photoionisation Detector VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)	SAMPLES B - Bulk disturbed sample D - Disturbed sample ES - Environmental sample U - Thin wall tube 'undisturbed' MOISTURE D - Dry M - Moist W - Wet PL - Plastic limit LL - Liquid limit w - Moisture content	SOIL CONSISTENCY VS - Very Soft S - Soft F - Firm St - Stiff VSt - Very Stiff H - Hard RELATIVE DENSITY VL - Very Loose L - Loose MD - Medium Dense D - Dense VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

Client: Waluya Pty Ltd Project: Bus Depot - Racecourse Road Location: 7a - 11 Racecourse Road, West Gosford				Job No: 300304375 Sheet: 1 of 1			
Position: See Site Plan				Angle from Horizontal: 90°		Surface Elevation:	
Rig Type: Drill rig				Driller:			
Casing Diameter:				Contractor:			
Data Started: 23/5/23		Date Completed: 23/5/23		Logged By: KE		Checked By:	

Drilling			Sampling & Testing		Material Description						Monitoring Well Details		
Method	Resistance	Casing	Water	Sample or Field Test	Depth (m)	Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density		STRUCTURE & Other Observations	
			Drilled Over Water			[Graphic Log Pattern]		FILL: Silty SAND; Fine to coarse grained, with gravel.	D			FILL	
							0.5				M		
					1.0								
					1.5			1.50m Sandy CLAY; Fine to medium grained, grey with purple/red.				RESIDUAL SOIL	
					1.60m			TERMINATED AT 1.60 m Target depth					
					2.0								
					2.5								

METHOD EX Excavator bucket R Ripper HA Hand auger PT Push tube SON Sonic drilling AH Air hammer PS Percussion sampler AS Short spiral auger AD/V Solid flight auger: V-Bit AD/T Solid flight auger: TC-Bit HFA Hollow flight auger WB Washbore drilling RR Rock roller	PENETRATION VE Very Easy (No Resistance) E Easy F Firm H Hard VH Very Hard (Refusal) WATER  Water Level on Date shown  water inflow  water outflow	FIELD TESTS SPT - Standard Penetration Test HP - Hand/Pocket Penetrometer DCP - Dynamic Cone Penetrometer PSP - Perth Sand Penetrometer MC - Moisture Content PBT - Plate Bearing Test IMP - Borehole Impression Test PID - Photoionisation Detector VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)	SAMPLES B - Bulk disturbed sample D - Disturbed sample ES - Environmental sample U - Thin wall tube 'undisturbed' MOISTURE D - Dry M - Moist W - Wet PL - Plastic limit LL - Liquid limit w - Moisture content	SOIL CONSISTENCY VS - Very Soft S - Soft F - Firm St - Stiff VSt - Very Stiff H - Hard RELATIVE DENSITY VL - Very Loose L - Loose MD - Medium Dense D - Dense VD - Very Dense

Hole No: MW02

Client: Waluya Pty Ltd
 Project: Bus Depot - Racecourse Road
 Location: 7a - 11 Racecourse Road, West Gosford
 Job No: 300304375
 Sheet: 1 of 1

Position: See Site Plan
 Angle from Horizontal: 90°
 Surface Elevation:

Rig Type: Drill rig
 Driller:

Casing Diameter:
 Contractor:

Data Started: 23/5/23
 Date Completed: 23/5/23
 Logged By: KE
 Checked By:

Drilling				Sampling & Testing		Material Description						Monitoring Well Details
Method	Resistance	Casing	Water	Sample or Field Test	Depth (m)	Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations	
			Drilled Over Water					FILL: Silty SAND; Fine to coarse grained, dark grey to brown, poorly sorted, trace gravels.			FILL	
					0.5							
					1.0							
					1.5		1.50m	Sandy CLAY; Fine to medium grained, orange to brown, trace silt.	D		RESIDUAL SOIL	
					2.0						1.80 m: Screen	
					2.2		2.20m	Clayey SAND; Fine to medium grained, mottled red to orange, well sorted, trace silt.				
					2.5							
					3.0		3.00m	Silty CLAY; fine grained, grey to brown, well sorted.	M			
					3.5		3.50m	Sandy CLAY; fine to coarse grained, red to brown, moderately sorted.	W			
					3.8		3.80m	TERMINATED AT 3.80 m Ground water reached				

METHOD EX Excavator bucket R Ripper HA Hand auger PT Push tube SON Sonic drilling AH Air hammer PS Percussion sampler AS Short spiral auger AD/V Solid flight auger: V-Bit AD/T Solid flight auger: TC-Bit HFA Hollow flight auger WB Washbore drilling RR Rock roller	PENETRATION VE Very Easy (No Resistance) E Easy F Firm H Hard VH Very Hard (Refusal) WATER Water Level on Date shown water inflow water outflow	FIELD TESTS SPT - Standard Penetration Test HP - Hand/Pocket Penetrometer DCP - Dynamic Cone Penetrometer PSP - Perth Sand Penetrometer MC - Moisture Content PBT - Plate Bearing Test IMP - Borehole Impression Test PID - Photoionisation Detector VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)	SAMPLES B - Bulk disturbed sample D - Disturbed sample ES - Environmental sample U - Thin wall tube 'undisturbed' MOISTURE D - Dry M - Moist W - Wet PL - Plastic limit LL - Liquid limit w - Moisture content	SOIL CONSISTENCY VS - Very Soft S - Soft F - Firm St - Stiff VSt - Very Stiff H - Hard RELATIVE DENSITY VL - Very Loose L - Loose MD - Medium Dense D - Dense VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

Client: Waluya Pty Ltd Project: Bus Depot - Racecourse Road Location: 7a - 11 Racecourse Road, West Gosford		Job No: 300304375 Sheet: 1 of 1	
Position: See Site Plan Rig Type: Drill rig Casing Diameter:		Angle from Horizontal: 90° Driller: Contractor:	
Data Started: 23/5/23 Date Completed: 23/5/23 Logged By: KE Checked By:			

Drilling			Sampling & Testing		Material Description					Monitoring Well Details		
Method	Resistance	Casing	Water	Sample or Field Test	Depth (m)	Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition		Consistency Relative Density	STRUCTURE & Other Observations
			Drilled Over Water		1			FILL: Silty SAND; Fine to coarse grained, dark brown, poorly sorted, trace gravells.	D		FILL	
					2			Clayey SAND; Fine to medium grained, red to grey, moderately sorted, trace gravels and silt.	M		RESIDUAL SOIL	
					3							
					4							
					5							
					6							
					7							
					8			Silty CLAY; Fine grained, light grey, well sorted.	W			
					9			TERMINATED AT 9.00 m Ground water reached				

METHOD EX Excavator bucket R Ripper HA Hand auger PT Push tube SON Sonic drilling AH Air hammer PS Percussion sampler AS Short spiral auger AD/V Solid flight auger: V-Bit AD/T Solid flight auger: TC-Bit HFA Hollow flight auger WB Washbore drilling RR Rock roller	PENETRATION VE Very Easy (No Resistance) E Easy F Firm H Hard VH Very Hard (Refusal) WATER Water Level on Date shown water inflow water outflow	FIELD TESTS SPT - Standard Penetration Test HP - Hand/Pocket Penetrometer DCP - Dynamic Cone Penetrometer PSP - Perth Sand Penetrometer MC - Moisture Content PBT - Plate Bearing Test IMP - Borehole Impression Test PID - Photoionisation Detector VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)	SAMPLES B - Bulk disturbed sample D - Disturbed sample ES - Environmental sample U - Thin wall tube 'undisturbed' MOISTURE D - Dry M - Moist W - Wet PL - Plastic limit LL - Liquid limit w - Moisture content	SOIL CONSISTENCY VS - Very Soft S - Soft F - Firm St - Stiff VSt - Very Stiff H - Hard RELATIVE DENSITY VL - Very Loose L - Loose MD - Medium Dense D - Dense VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

Hole No: MW04

Client: Waluya Pty Ltd
Project: Bus Depot - Racecourse Road
Location: 7a - 11 Racecourse Road, West Gosford
Job No: 300304375
Sheet: 1 of 1

Position: See Site Plan
Angle from Horizontal: 90°
Surface Elevation:

Rig Type: Drill rig
Driller:

Casing Diameter:
Contractor:

Data Started: 23/5/23
Date Completed: 23/5/23
Logged By: KE
Checked By:

Drilling				Sampling & Testing		Material Description						Monitoring Well Details
Method	Resistance	Casing	Water	Sample or Field Test	Depth (m)	Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations	
			Groundwater Not Observed					FILL: Gravelly SAND; Fine to coarse grained, dark brown, poorly sorted, trace silt.			FILL	
					0.5			Clayey SAND; fine to medium grained, orangey brown, silt and gravels present.			RESIDUAL SOIL	
					1.0							
					1.5							
					2.0							
					2.5							
					3.0							
					3.5							
					4.0			Sandy CLAY; Ground bedrock rock from auger, fine to medium grained, pinky brown.			ROCK	
					4.5			TERMINATED AT 4.40 m Refusal on bedrock				

METHOD EX Excavator bucket R Ripper HA Hand auger PT Push tube SON Sonic drilling AH Air hammer PS Percussion sampler AS Short spiral auger AD/V Solid flight auger: V-Bit AD/T Solid flight auger: TC-Bit HFA Hollow flight auger WB Washbore drilling RR Rock roller	PENETRATION VE Very Easy (No Resistance) E Easy F Firm H Hard VH Very Hard (Refusal) WATER Water Level on Date shown water inflow water outflow	FIELD TESTS SPT - Standard Penetration Test HP - Hand/Pocket Penetrometer DCP - Dynamic Cone Penetrometer PSP - Perth Sand Penetrometer MC - Moisture Content PBT - Plate Bearing Test IMP - Borehole Impression Test PID - Photoionisation Detector VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)	SAMPLES B - Bulk disturbed sample D - Disturbed sample ES - Environmental sample U - Thin wall tube 'undisturbed' MOISTURE D - Dry M - Moist W - Wet PL - Plastic limit LL - Liquid limit w - Moisture content	SOIL CONSISTENCY VS - Very Soft S - Soft F - Firm St - Stiff VSt - Very Stiff H - Hard RELATIVE DENSITY VL - Very Loose L - Loose MD - Medium Dense D - Dense VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

Stantec Australia PTY LTD

Client: Waluya Pty Ltd Project: Bus Depot - Racecourse Road Location: 7a - 11 Racecourse Road, West Gosford				Job No: 300304375 Sheet: 1 of 1			
Position: See Site Plan				Angle from Horizontal: 90°		Surface Elevation:	
Machine Type: Excavator				Excavation Method: Test Pit			
Excavation Dimensions:				Contractor:			
Date Excavated: 3/5/23				Logged By: ED		Checked By:	

Excavation			Sampling & Testing		Material Description						
Method	Resistance	Stability	Water	Sample or Field Test	Depth (m)	Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
			Dry	ES 0.10 m PID: 0.4ppm				FILL: Silty SAND; Fine to coarse grained, dark grey-brown, with gravel.	M - W		FILL 0.00 m: Trace bricks, tile, clay tile, rubber, glass, wooden logs.
				ES 0.50 m PID: 0.4ppm	0.5						
				ES 1.00 m PID: 0.4ppm	1.0						
				ES 1.80 m PID: 0.5ppm	1.5						
					1.60m			Clayey SAND; Fine to medium grained, well sorted, grey mottled red and orange/brown.	M		RESIDUAL SOIL
					1.90m			TERMINATED AT 1.90 m Target depth			
					2.0						
					2.5						

METHOD EX Excavator bucket R Ripper HA Hand auger PT Push tube SON Sonic drilling AH Air hammer PS Percussion sampler AS Short spiral auger AD/V Solid flight auger: V-Bit AD/T Solid flight auger: TC-Bit HFA Hollow flight auger WB Washbore drilling RR Rock roller	PENETRATION VE Very Easy (No Resistance) E Easy F Firm H Hard VH Very Hard (Refusal) WATER  Water Level on Date shown  water inflow  water outflow	FIELD TESTS SPT - Standard Penetration Test HP - Hand/Pocket Penetrometer DCP - Dynamic Cone Penetrometer PSP - Perth Sand Penetrometer MC - Moisture Content PBT - Plate Bearing Test IMP - Borehole Impression Test PID - Photoionisation Detector VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)	SAMPLES B - Bulk disturbed sample D - Disturbed sample ES - Environmental sample U - Thin wall tube 'undisturbed' MOISTURE D - Dry M - Moist W - Wet PL - Plastic limit LL - Liquid limit w - Moisture content	SOIL CONSISTENCY VS - Very Soft S - Soft F - Firm St - Stiff VSt - Very Stiff H - Hard RELATIVE DENSITY VL - Very Loose L - Loose MD - Medium Dense D - Dense VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

Client: Waluya Pty Ltd Project: Bus Depot - Racecourse Road Location: 7a - 11 Racecourse Road, West Gosford	Job No: 300304375 Angle from Horizontal: 90° Excavation Method: Test Pit	Sheet: 1 of 1 Surface Elevation:

Position: See Site Plan Machine Type: Excavator Excavation Dimensions:	Logged By: ED Checked By:	Contractor:

Excavation			Sampling & Testing		Material Description					
Method	Resistance	Stability	Water	Sample or Field Test	Depth (m)	Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density
		Stable	Dry	ES 0.10 m PID: 0.3ppm				FILL: Silty SAND; Fine to coarse grained, with gravel.		
				ES 0.50 m PID: 0.8ppm	0.5					
				ES 1.00 m PID: 0.5ppm	1.0					
				ES 1.60 m PID: 0.7ppm	1.5		1.50m	Sandy CLAY; Fine to medium grained, grey with purple/red.		
				ES 2.00 m PID: 0.5ppm	2.0		1.80m	Clayey SAND; Fine to medium grained, well sorted, grey mottled red and orange/brown.		
					2.10m		2.10m	TERMINATED AT 2.10 m Target depth		
					2.5					

METHOD EX Excavator bucket R Ripper HA Hand auger PT Push tube SON Sonic drilling AH Air hammer PS Percussion sampler AS Short spiral auger AD/V Solid flight auger: V-Bit AD/T Solid flight auger: TC-Bit HFA Hollow flight auger WB Washbore drilling RR Rock roller	PENETRATION VE Very Easy (No Resistance) E Easy F Firm H Hard VH Very Hard (Refusal) WATER  Water Level on Date shown  water inflow  water outflow	FIELD TESTS SPT - Standard Penetration Test HP - Hand/Pocket Penetrometer DCP - Dynamic Cone Penetrometer PSP - Perth Sand Penetrometer MC - Moisture Content PBT - Plate Bearing Test IMP - Borehole Impression Test PID - Photoionisation Detector VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)	SAMPLES B - Bulk disturbed sample D - Disturbed sample ES - Environmental sample U - Thin wall tube 'undisturbed' MOISTURE D - Dry M - Moist W - Wet PL - Plastic limit LL - Liquid limit w - Moisture content	SOIL CONSISTENCY VS - Very Soft S - Soft F - Firm St - Stiff VSt - Very Stiff H - Hard RELATIVE DENSITY VL - Very Loose L - Loose MD - Medium Dense D - Dense VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

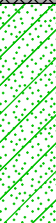
Client: Waluya Pty Ltd Project: Bus Depot - Racecourse Road Location: 7a - 11 Racecourse Road, West Gosford	Job No: 300304375 Sheet: 1 of 1	

Position: See Site Plan	Angle from Horizontal: 90°	Surface Elevation:

Machine Type: Excavator	Excavation Method: Test Pit	

Excavation Dimensions:	Contractor:	

Date Excavated: 3/5/23	Logged By: ED	Checked By:

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
			Dry Stable	ES 0.10 m PID: 0.5ppm				FILL: Silty SAND; fine to coarse grained, dark brown.	W		FILL 0.00 m: Trace glass, brick.
				ES 0.50 m PID: 0.3ppm			0.30m	FILL: Clayey SAND; Fine to coarse grained, dark brown, with gravel.			0.30 m: With bricks, trace wooden log.
				ES 1.00 m PID: 0.5ppm							
				ES 2.00 m PID: 0.5ppm							
				ES 2.30 m PID: 0.5ppm							
								FILL: Clayey SAND; Fine to medium grained, well sorted, brown/orange.			RESIDUAL SOIL
								Clayey SAND; Fine to medium grained, well sorted, grey mottled red and orange/brown.			
								TERMINATED AT 2.60 m Target depth			

METHOD

EX Excavator bucket
 R Ripper
 HA Hand auger
 PT Push tube
 SON Sonic drilling
 AH Air hammer
 PS Percussion sampler
 AS Short spiral auger
 AD/V Solid flight auger: V-Bit
 AD/T Solid flight auger: TC-Bit
 HFA Hollow flight auger
 WB Washbore drilling
 RR Rock roller

PENETRATION

VE Very Easy (No Resistance)
 E Easy
 F Firm
 H Hard
 VH Very Hard (Refusal)

WATER

 Water Level on Date shown
 water inflow
 water outflow

FIELD TESTS

SPT - Standard Penetration Test
 HP - Hand/Pocket Penetrometer
 DCP - Dynamic Cone Penetrometer
 PSP - Perth Sand Penetrometer
 MC - Moisture Content
 PBT - Plate Bearing Test
 IMP - Borehole Impression Test
 PID - Photoionisation Detector
 VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES

B - Bulk disturbed sample
 D - Disturbed sample
 ES - Environmental sample
 U - Thin wall tube 'undisturbed'

MOISTURE

D - Dry
 M - Moist
 W - Wet
 PL - Plastic limit
 LL - Liquid limit
 w - Moisture content

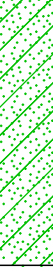
SOIL CONSISTENCY

VS - Very Soft
 S - Soft
 F - Firm
 St - Stiff
 VSt - Very Stiff
 H - Hard

RELATIVE DENSITY

VL - Very Loose
 L - Loose
 MD - Medium Dense
 D - Dense
 VD - Very Dense

Client: Waluya Pty Ltd		Job No: 300304375		Sheet: 1 of 1	
Project: Bus Depot - Racecourse Road		Angle from Horizontal: 90°		Surface Elevation:	
Location: 7a - 11 Racecourse Road, West Gosford		Excavation Method: Test Pit		Contractor:	
Machine Type: Excavator		Excavation Dimensions:		Logged By: ED	
Date Excavated: 3/5/23		Checked By:			

Excavation			Sampling & Testing		Material Description						
Method	Resistance	Stability	Water	Sample or Field Test	Depth (m)	Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
				ES 0.10 m PID: 0.4ppm				FILL: Clayey SAND; Fine to coarse grained, dark brown, trace gravel, trace organics (rootlets).	M		FILL
				ES 0.50 m PID: 0.5ppm	0.5			FILL: Sandy GRAVEL; Fine to coarse grained, grey/brown.			0.15 m: Trace asphalt.
				ES 1.00 m PID: 0.6ppm	1.0			As Above, colour change to brown/red.			0.70 m: Trace brick.
					1.5						
					2.0			Clayey SAND; Fine to medium grained, well sorted, grey mottled red and orange/brown.			RESIDUAL SOIL
				ES 2.20 m PID: 0.4ppm	2.30m			TERMINATED AT 2.30 m Target depth			
					2.5						

METHOD EX Excavator bucket R Ripper HA Hand auger PT Push tube SON Sonic drilling AH Air hammer PS Percussion sampler AS Short spiral auger AD/V Solid flight auger: V-Bit AD/T Solid flight auger: TC-Bit HFA Hollow flight auger WB Washbore drilling RR Rock roller	PENETRATION VE Very Easy (No Resistance) E Easy F Firm H Hard VH Very Hard (Refusal) WATER  Water Level on Date shown  water inflow  water outflow	FIELD TESTS SPT - Standard Penetration Test HP - Hand/Pocket Penetrometer DCP - Dynamic Cone Penetrometer PSP - Perth Sand Penetrometer MC - Moisture Content PBT - Plate Bearing Test IMP - Borehole Impression Test PID - Photoionisation Detector VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)	SAMPLES B - Bulk disturbed sample D - Disturbed sample ES - Environmental sample U - Thin wall tube 'undisturbed' MOISTURE D - Dry M - Moist W - Wet PL - Plastic limit LL - Liquid limit w - Moisture content	SOIL CONSISTENCY VS - Very Soft S - Soft F - Firm St - Stiff VSt - Very Stiff H - Hard RELATIVE DENSITY VL - Very Loose L - Loose MD - Medium Dense D - Dense VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

Client:	Waluya Pty Ltd
Project:	Bus Depot - Racecourse Road
Location:	7a - 11 Racecourse Road, West Gosford

Job No: 300304375

Sheet: 1 of 1

Position: See Site Plan

Angle from Horizontal: 90°

Surface Elevation:

Machine Type: Excavator

Excavation Method: Test Pit

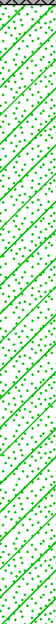
Excavation Dimensions:

Contractor:

Date Excavated: 3/5/23

Logged By: ED

Checked By:

Excavation			Sampling & Testing	Depth (m)	Material Description									
Method	Resistance	Stability			Water	Sample or Field Test	Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations		
			Stable	Dry	ES 0.10 m PID: 0.5ppm			FILL: Silty SAND: Fine to coarse grained, dark brown, with gravel.	M		FILL			
					ES 0.50 m PID: 0.6ppm QA100 + QC100		0.5			0.80m	FILL: Clayey SAND: Fine to coarse grained, brown/grey, with gravel.		0.50 m: With bricks, concrete, metal pole.	
					ES 1.00 m PID: 0.1ppm		1.0			1.60m			0.80 m: Trace bricks.	
					ES 2.00 m PID: 4.0ppm		2.0				Clayey SAND: Fine to medium grained, well sorted, grey mottled red and orange/brown.		RESIDUAL SOIL	
					ES 2.90 - 3.00 m PID: 4.0ppm		2.5			3.00m				
METHOD EX Excavator bucket R Ripper HA Hand auger PT Push tube SON Sonic drilling AH Air hammer PS Percussion sampler AS Short spiral auger AD/V Solid flight auger: V-Bit AD/T Solid flight auger: TC-Bit HFA Hollow flight auger WB Washbore drilling RR Rock roller			PENETRATION VE Very Easy (No Resistance) E Easy F Firm H Hard VH Very Hard (Refusal) WATER  Water Level on Date shown  water inflow  water outflow			FIELD TESTS SPT - Standard Penetration Test HP - Hand/Pocket Penetrometer DCP - Dynamic Cone Penetrometer PSP - Perth Sand Penetrometer MC - Moisture Content PBT - Plate Bearing Test IMP - Borehole Impression Test PID - Photoionisation Detector VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)			SAMPLES B - Bulk disturbed sample D - Disturbed sample ES - Environmental sample U - Thin wall tube 'undisturbed' MOISTURE D - Dry M - Moist W - Wet PL - Plastic limit LL - Liquid limit w - Moisture content			SOIL CONSISTENCY VS - Very Soft S - Soft F - Firm St - Stiff VSt - Very Stiff H - Hard RELATIVE DENSITY VL - Very Loose L - Loose MD - Medium Dense D - Dense VD - Very Dense		
Refer to explanatory notes for details of abbreviations and basis of descriptions														
Stantec Australia PTY LTD														

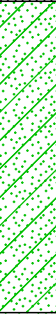
Client: Waluya Pty Ltd Project: Bus Depot - Racecourse Road Location: 7a - 11 Racecourse Road, West Gosford	Job No: 300304375	Sheet: 1 of 1

Position: See Site Plan	Angle from Horizontal: 90°	Surface Elevation:

Machine Type: Excavator	Excavation Method: Test Pit

Excavation Dimensions:	Contractor:

Date Excavated: 4/5/23	Logged By: ED	Checked By:

Excavation			Sampling & Testing		Material Description						
Method	Resistance	Stability	Water	Sample or Field Test	Depth (m)	Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
		Stable	Dry	ES 0.10 m PID: 0.7ppm				FILL: Gravely SAND; Fine to coarse grained, brown, trace organics (grass cuttings).			FILL 0.00 m: Trace bricks, tile, metal.
				ES 0.50 m PID: 0.6ppm	0.5				Higher Clay content.		
				ES 1.00 m PID: 1.3ppm	1.0						
				ES 2.00 m QA200 + QC200	2.0						
					1.50m			Clayey SAND; Fine to medium grained, well sorted, grey mottled red and orange/brown.			RESIDUAL SOIL
					2.20m			TERMINATED AT 2.20 m Target depth			
					2.5						

METHOD

EX Excavator bucket
 R Ripper
 HA Hand auger
 PT Push tube
 SON Sonic drilling
 AH Air hammer
 PS Percussion sampler
 AS Short spiral auger
 AD/V Solid flight auger: V-Bit
 AD/T Solid flight auger: TC-Bit
 HFA Hollow flight auger
 WB Washbore drilling
 RR Rock roller

PENETRATION

VE Very Easy (No Resistance)
 E Easy
 F Firm
 H Hard
 VH Very Hard (Refusal)

WATER

 Water Level on Date shown
 water inflow
 water outflow

FIELD TESTS

SPT - Standard Penetration Test
 HP - Hand/Pocket Penetrometer
 DCP - Dynamic Cone Penetrometer
 PSP - Perth Sand Penetrometer
 MC - Moisture Content
 PBT - Plate Bearing Test
 IMP - Borehole Impression Test
 PID - Photoionisation Detector
 VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES

B - Bulk disturbed sample
 D - Disturbed sample
 ES - Environmental sample
 U - Thin wall tube 'undisturbed'

MOISTURE

D - Dry
 M - Moist
 W - Wet
 PL - Plastic limit
 LL - Liquid limit
 w - Moisture content

SOIL CONSISTENCY

VS - Very Soft
 S - Soft
 F - Firm
 St - Stiff
 VSt - Very Stiff
 H - Hard

RELATIVE DENSITY

VL - Very Loose
 L - Loose
 MD - Medium Dense
 D - Dense
 VD - Very Dense

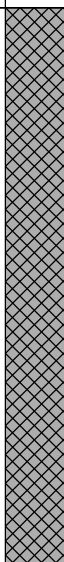
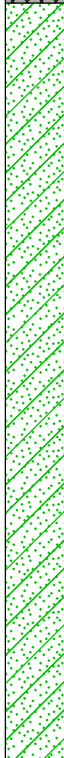
Client: Waluya Pty Ltd Project: Bus Depot - Racecourse Road Location: 7a - 11 Racecourse Road, West Gosford	Job No: 300304375	Sheet: 1 of 2

Position: See Site Plan	Angle from Horizontal: 90°	Surface Elevation:

Machine Type: Excavator	Excavation Method: Test Pit

Excavation Dimensions:	Contractor:

Date Excavated: 4/5/23	Logged By: ED	Checked By:

Excavation			Water	Sampling & Testing	Depth (m)	Material Description						
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations	
			Stable	Dry				FILL: Silty Gravelly SAND; Fine to coarse grained, dark brown, trace organics (rootlets).	M		FILL 0.00 m: With bricks, metal, plastic.	
					ES 0.10 m PID: 1.5ppm QA300 + QC300			0.40m			FILL: Clayey SAND; Fine to coarse grained, with gravel.	0.40 m: Trace bricks.
					ES 0.50 m PID: 1.2ppm		0.5	0.90m			FILL: Clayey SAND; Fine to medium grained, grey with orange and dark grey, trace gravel.	
					ES 1.00 m PID: 1.3ppm	1.0	1.25m	Clayey SAND; Fine to medium grained, well sorted, grey mottled red and orange/brown.	M	RESIDUAL SOIL		
												
						</						

METHOD EX Excavator bucket R Ripper HA Hand auger PT Push tube SON Sonic drilling AH Air hammer PS Percussion sampler AS Short spiral auger AD/V Solid flight auger: V-Bit AD/T Solid flight auger: TC-Bit HFA Hollow flight auger WB Washbore drilling RR Rock roller	PENETRATION VE Very Easy (No Resistance) E Easy F Firm H Hard VH Very Hard (Refusal) WATER  Water Level on Date shown  water inflow  water outflow	FIELD TESTS SPT - Standard Penetration Test HP - Hand/Pocket Penetrometer DCP - Dynamic Cone Penetrometer PSP - Perth Sand Penetrometer MC - Moisture Content PBT - Plate Bearing Test IMP - Borehole Impression Test PID - Photoionisation Detector VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)	SAMPLES B - Bulk disturbed sample D - Disturbed sample ES - Environmental sample U - Thin wall tube 'undisturbed' MOISTURE D - Dry M - Moist W - Wet PL - Plastic limit LL - Liquid limit w - Moisture content	SOIL CONSISTENCY VS - Very Soft S - Soft F - Firm St - Stiff VSt - Very Stiff H - Hard RELATIVE DENSITY VL - Very Loose L - Loose MD - Medium Dense D - Dense VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

Client: Waluya Pty Ltd Project: Bus Depot - Racecourse Road Location: 7a - 11 Racecourse Road, West Gosford				Job No: 300304375 Sheet: 2 of 2			
Position: See Site Plan				Angle from Horizontal: 90°		Surface Elevation:	
Machine Type: Excavator				Excavation Method: Test Pit			
Excavation Dimensions:				Contractor:			
Date Excavated: 4/5/23				Logged By: ED		Checked By:	

Excavation			Water	Sampling & Testing		Depth (m)	Material Description				
Method	Resistance	Stability		Sample or Field Test	Graphic Log		Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
			Dry			3.10m	Clayey SAND; Fine to medium grained, well sorted, grey mottled red and orange/brown. (continued)			RESIDUAL SOIL	
						3.10m	TERMINATED AT 3.10 m Target depth				
						3.5					
						4.0					
						4.5					
						5.0					
						5.5					

METHOD EX Excavator bucket R Ripper HA Hand auger PT Push tube SON Sonic drilling AH Air hammer PS Percussion sampler AS Short spiral auger AD/V Solid flight auger: V-Bit AD/T Solid flight auger: TC-Bit HFA Hollow flight auger WB Washbore drilling RR Rock roller	PENETRATION VE Very Easy (No Resistance) E Easy F Firm H Hard VH Very Hard (Refusal) WATER  Water Level on Date shown  water inflow  water outflow	FIELD TESTS SPT - Standard Penetration Test HP - Hand/Pocket Penetrometer DCP - Dynamic Cone Penetrometer PSP - Perth Sand Penetrometer MC - Moisture Content PBT - Plate Bearing Test IMP - Borehole Impression Test PID - Photoionisation Detector VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)	SAMPLES B - Bulk disturbed sample D - Disturbed sample ES - Environmental sample U - Thin wall tube 'undisturbed' MOISTURE D - Dry M - Moist W - Wet PL - Plastic limit LL - Liquid limit w - Moisture content	SOIL CONSISTENCY VS - Very Soft S - Soft F - Firm St - Stiff VSt - Very Stiff H - Hard RELATIVE DENSITY VL - Very Loose L - Loose MD - Medium Dense D - Dense VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

Client: Waluya Pty Ltd Project: Bus Depot - Racecourse Road Location: 7a - 11 Racecourse Road, West Gosford		Job No: 300304375 Sheet: 1 of 1	
Position: See Site Plan Machine Type: Excavator Excavation Dimensions:		Angle from Horizontal: 90° Excavation Method: Test Pit Contractor:	
Date Excavated: 4/5/23 Logged By: ED Checked By:			

Excavation				Sampling & Testing		Material Description					
Method	Resistance	Stability	Water	Sample or Field Test	Depth (m)	Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
		Stable	Dry	ES 0.10 m PID: 2.2ppm	0.5			FILL: Gravelly SAND; Fine to coarse grained, dark grey, trace organics (rootlets).			FILL 0.00 m: With bricks.
	ES 0.50 m PID: 1.6ppm			As Above; Colour change to light grey.				As Above; Colour change to brown.			
	ES 1.00 m PID: 1.7ppm			As Above; Colour change to red/brown.							
					1.5			Clayey SAND; Fine to medium grained, well sorted, grey mottled red and orange/brown.			RESIDUAL SOIL
				ES 2.00 m PID: 1.4ppm	2.0			TERMINATED AT 2.00 m Target depth			
					2.5						

METHOD EX Excavator bucket R Ripper HA Hand auger PT Push tube SON Sonic drilling AH Air hammer PS Percussion sampler AS Short spiral auger AD/V Solid flight auger: V-Bit AD/T Solid flight auger: TC-Bit HFA Hollow flight auger WB Washbore drilling RR Rock roller	PENETRATION VE Very Easy (No Resistance) E Easy F Firm H Hard VH Very Hard (Refusal) WATER Water Level on Date shown water inflow water outflow	FIELD TESTS SPT - Standard Penetration Test HP - Hand/Pocket Penetrometer DCP - Dynamic Cone Penetrometer PSP - Perth Sand Penetrometer MC - Moisture Content PBT - Plate Bearing Test IMP - Borehole Impression Test PID - Photoionisation Detector VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)	SAMPLES B - Bulk disturbed sample D - Disturbed sample ES - Environmental sample U - Thin wall tube 'undisturbed' MOISTURE D - Dry M - Moist W - Wet PL - Plastic limit LL - Liquid limit w - Moisture content	SOIL CONSISTENCY VS - Very Soft S - Soft F - Firm St - Stiff VSt - Very Stiff H - Hard RELATIVE DENSITY VL - Very Loose L - Loose MD - Medium Dense D - Dense VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

Client:	Waluya Pty Ltd
Project:	Bus Depot - Racecourse Road
Location:	7a - 11 Racecourse Road, West Gosford

Job No: 300304375

Sheet: 1 of 1

Position: See Site Plan

Angle from Horizontal: 90°

Surface Elevation:

Machine Type: Excavator

Excavation Method: Test Pit

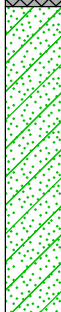
Excavation Dimensions:

Contractor:

Date Excavated: 4/5/23

Logged By: ED

Checked By:

Excavation			Water	Sampling & Testing		Depth (m)	Material Description				
Method	Resistance	Stability		Sample or Field Test	Graphic Log		Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
		Stable	Dry	ES 0.10 m PID: 0.9ppm			FILL: Silty SAND; Coarse grained, dark brown, with gravel, trace organics.			FILL 0.00 m: With bricks.	
				ES 0.50 m PID: 1.6ppm		0.5		FILL: Clayey SAND; Fine to medium grained, orange/brown with red, trace gravel.			
						ES 1.20 m PID: 0.4ppm			Clayey SAND; Fine to medium grained, well sorted, orange/red mottled grey.		
							1.30m	TERMINATED AT 1.30 m Target depth			
						1.5					
						2.0					
						2.5					

METHOD EX Excavator bucket R Ripper HA Hand auger PT Push tube SON Sonic drilling AH Air hammer PS Percussion sampler AS Short spiral auger AD/V Solid flight auger: V-Bit AD/T Solid flight auger: TC-Bit HFA Hollow flight auger WB Washbore drilling RR Rock roller	PENETRATION VE Very Easy (No Resistance) E Easy F Firm H Hard VH Very Hard (Refusal) WATER  Water Level on Date shown  water inflow  water outflow	FIELD TESTS SPT - Standard Penetration Test HP - Hand/Pocket Penetrometer DCP - Dynamic Cone Penetrometer PSP - Perth Sand Penetrometer MC - Moisture Content PBT - Plate Bearing Test IMP - Borehole Impression Test PID - Photoionisation Detector VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)	SAMPLES B - Bulk disturbed sample D - Disturbed sample ES - Environmental sample U - Thin wall tube 'undisturbed' MOISTURE D - Dry M - Moist W - Wet PL - Plastic limit LL - Liquid limit w - Moisture content	SOIL CONSISTENCY VS - Very Soft S - Soft F - Firm St - Stiff VSt - Very Stiff H - Hard RELATIVE DENSITY VL - Very Loose L - Loose MD - Medium Dense D - Dense VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

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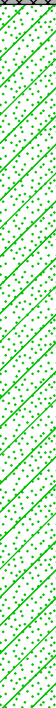
Client: Waluya Pty Ltd Project: Bus Depot - Racecourse Road Location: 7a - 11 Racecourse Road, West Gosford	Job No: 300304375	Sheet: 1 of 1

Position: See Site Plan	Angle from Horizontal: 90°	Surface Elevation:

Machine Type: Excavator	Excavation Method: Test Pit

Excavation Dimensions:	Contractor:

Date Excavated: 4/5/23	Logged By: ED	Checked By:

Excavation			Sampling & Testing		Material Description						
Method	Resistance	Stability	Water	Sample or Field Test	Depth (m)	Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
		Stable	Dry	ES 0.10 m PID: 2.0ppm				FILL: Gravely SAND; Fine to coarse grained, brown.			FILL 0.00 m: With bricks, wood.
				ES 0.50 m PID: 4.9ppm	0.5			FILL: Clayey SAND; Fine to medium grained, red/orange, with gravel.			
				ES 1.00 m PID: 2.4ppm	1.0						
					1.5			As Above; Colour change to red mottled grey.			

METHOD EX Excavator bucket R Ripper HA Hand auger PT Push tube SON Sonic drilling AH Air hammer PS Percussion sampler AS Short spiral auger AD/V Solid flight auger: V-Bit AD/T Solid flight auger: TC-Bit HFA Hollow flight auger WB Washbore drilling RR Rock roller	PENETRATION VE Very Easy (No Resistance) E Easy F Firm H Hard VH Very Hard (Refusal) WATER  Water Level on Date shown  water inflow  water outflow	FIELD TESTS SPT - Standard Penetration Test HP - Hand/Pocket Penetrometer DCP - Dynamic Cone Penetrometer PSP - Perth Sand Penetrometer MC - Moisture Content PBT - Plate Bearing Test IMP - Borehole Impression Test PID - Photoionisation Detector VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)	SAMPLES B - Bulk disturbed sample D - Disturbed sample ES - Environmental sample U - Thin wall tube 'undisturbed' MOISTURE D - Dry M - Moist W - Wet PL - Plastic limit LL - Liquid limit w - Moisture content	SOIL CONSISTENCY VS - Very Soft S - Soft F - Firm St - Stiff VSt - Very Stiff H - Hard RELATIVE DENSITY VL - Very Loose L - Loose MD - Medium Dense D - Dense VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

Client: Waluya Pty Ltd		Job No: 300304375		Sheet: 1 of 1	
Project: Bus Depot - Racecourse Road		Angle from Horizontal: 90°		Surface Elevation:	
Location: 7a - 11 Racecourse Road, West Gosford		Excavation Method: Test Pit		Contractor:	
Machine Type: Excavator		Excavation Dimensions:		Logged By: ED	
Date Excavated: 4/5/23		Checked By:			

Excavation			Sampling & Testing		Material Description							
Method	Resistance	Stability	Water	Sample or Field Test	Depth (m)	Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations	
			Dry	ES 0.10 m PID: 3.1ppm				FILL: Silty SAND; Fine to medium grained, dark brown, trace organics (rootlets).	M		FILL 0.00 m: Trace brick and plastic.	
												FILL: Silty SAND; Fine to medium grained, grey/orange, with clay.
				ES 0.50 m PID: 3.8ppm	0.5							
				ES 1.00 m PID: 4.8ppm	1.0							
				ES 2.00 m PID: 2.3ppm	1.5							
				ES 2.30 m PID: 4.9ppm	2.0			Clayey SAND; Fine to medium grained, red with orange mottled grey, trace gravel.			RESIDUAL SOIL	
					2.5			TERMINATED AT 2.50 m Target depth				

METHOD EX Excavator bucket R Ripper HA Hand auger PT Push tube SON Sonic drilling AH Air hammer PS Percussion sampler AS Short spiral auger AD/V Solid flight auger: V-Bit AD/T Solid flight auger: TC-Bit HFA Hollow flight auger WB Washbore drilling RR Rock roller	PENETRATION VE Very Easy (No Resistance) E Easy F Firm H Hard VH Very Hard (Refusal) WATER Water Level on Date shown water inflow water outflow	FIELD TESTS SPT - Standard Penetration Test HP - Hand/Pocket Penetrometer DCP - Dynamic Cone Penetrometer PSP - Perth Sand Penetrometer MC - Moisture Content PBT - Plate Bearing Test IMP - Borehole Impression Test PID - Photoionisation Detector VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)	SAMPLES B - Bulk disturbed sample D - Disturbed sample ES - Environmental sample U - Thin wall tube 'undisturbed' MOISTURE D - Dry M - Moist W - Wet PL - Plastic limit LL - Liquid limit w - Moisture content	SOIL CONSISTENCY VS - Very Soft S - Soft F - Firm St - Stiff VSt - Very Stiff H - Hard RELATIVE DENSITY VL - Very Loose L - Loose MD - Medium Dense D - Dense VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

Client: Waluya Pty Ltd Project: Bus Depot - Racecourse Road Location: 7a - 11 Racecourse Road, West Gosford		Job No: 300304375 Sheet: 1 of 1	
Position: See Site Plan Machine Type: Excavator Excavation Dimensions:		Angle from Horizontal: 90° Excavation Method: Test Pit Contractor:	
Date Excavated: 4/5/23 Logged By: ED Checked By:			

Excavation			Sampling & Testing		Material Description						
Method	Resistance	Stability	Water	Sample or Field Test	Depth (m)	Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition Consistency Relative Density	STRUCTURE & Other Observations	
		Stable	Dry	ES 0.10 m PID: 0.7ppm				FILL: Gravelly SAND; Fine to coarse grained, light brown-brown, trace clay, trace cobbles.		FILL	
				ES 0.50 m PID: 1.5ppm	0.5						0.10 m: With bricks, wiring.
				ES 1.00 m PID: 0.8ppm	1.0			FILL: silty Gravelly SAND; Fine to coarse grained, light brown-brown, trace carbonaceous materials.		0.45 m: Brick archway uncovered. 0.50 m: With bricks.	
				ES 1.80 m PID: 2.8ppm	1.5			Clayey SAND; Fine to medium grained, red and grey		RESIDUAL SOIL	
					1.90m			TERMINATED AT 1.90 m Target depth			
					2.0						
					2.5						

METHOD EX Excavator bucket R Ripper HA Hand auger PT Push tube SON Sonic drilling AH Air hammer PS Percussion sampler AS Short spiral auger AD/V Solid flight auger: V-Bit AD/T Solid flight auger: TC-Bit HFA Hollow flight auger WB Washbore drilling RR Rock roller	PENETRATION VE Very Easy (No Resistance) E Easy F Firm H Hard VH Very Hard (Refusal) WATER Water Level on Date shown water inflow water outflow	FIELD TESTS SPT - Standard Penetration Test HP - Hand/Pocket Penetrometer DCP - Dynamic Cone Penetrometer PSP - Perth Sand Penetrometer MC - Moisture Content PBT - Plate Bearing Test IMP - Borehole Impression Test PID - Photoionisation Detector VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)	SAMPLES B - Bulk disturbed sample D - Disturbed sample ES - Environmental sample U - Thin wall tube 'undisturbed' MOISTURE D - Dry M - Moist W - Wet PL - Plastic limit LL - Liquid limit w - Moisture content	SOIL CONSISTENCY VS - Very Soft S - Soft F - Firm St - Stiff VSt - Very Stiff H - Hard RELATIVE DENSITY VL - Very Loose L - Loose MD - Medium Dense D - Dense VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

Client: Waluya Pty Ltd Project: Bus Depot - Racecourse Road Location: 7a - 11 Racecourse Road, West Gosford	Job No: 300304375	Sheet: 1 of 1

Position: See Site Plan	Angle from Horizontal: 90°	Surface Elevation:

Machine Type: Excavator	Excavation Method: Test Pit

Excavation Dimensions:	Contractor:

Date Excavated: 4/5/23	Logged By: ED	Checked By:

Excavation			Water	Sampling & Testing	Depth (m)	Material Description							
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations		
			Stable	Dry	ES 0.10 m PID: 3.8ppm	0.5		0.30m	FILL: Clayey SAND; Fine to coarse grained, dark brown, with gravel.		M		FILL 0.00 m: Potential Asbestos containing materials, trace tiles. 0.30 m: With bricks.

METHOD

EX Excavator bucket
 R Ripper
 HA Hand auger
 PT Push tube
 SON Sonic drilling
 AH Air hammer
 PS Percussion sampler
 AS Short spiral auger
 AD/V Solid flight auger: V-Bit
 AD/T Solid flight auger: TC-Bit
 HFA Hollow flight auger
 WB Washbore drilling
 RR Rock roller

PENETRATION

VE Very Easy (No Resistance)
 E Easy
 F Firm
 H Hard
 VH Very Hard (Refusal)

WATER

 Water Level on Date shown
 water inflow
 water outflow

FIELD TESTS

SPT - Standard Penetration Test
 HP - Hand/Pocket Penetrometer
 DCP - Dynamic Cone Penetrometer
 PSP - Perth Sand Penetrometer
 MC - Moisture Content
 PBT - Plate Bearing Test
 IMP - Borehole Impression Test
 PID - Photoionisation Detector
 VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES

B - Bulk disturbed sample
 D - Disturbed sample
 ES - Environmental sample
 U - Thin wall tube 'undisturbed'

MOISTURE

D - Dry
 M - Moist
 W - Wet
 PL - Plastic limit
 LL - Liquid limit
 w - Moisture content

SOIL CONSISTENCY

VS - Very Soft
 S - Soft
 F - Firm
 St - Stiff
 VSt - Very Stiff
 H - Hard

RELATIVE DENSITY

VL - Very Loose
 L - Loose
 MD - Medium Dense
 D - Dense
 VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

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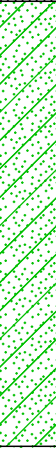
Client: Waluya Pty Ltd Project: Bus Depot - Racecourse Road Location: 7a - 11 Racecourse Road, West Gosford	Job No: 300304375	Sheet: 1 of 1

Position: See Site Plan	Angle from Horizontal: 90°	Surface Elevation:

Machine Type: Excavator	Excavation Method: Test Pit

Excavation Dimensions:	Contractor:

Date Excavated: 4/5/23	Logged By: ED	Checked By:

Excavation			Sampling & Testing		Material Description						
Method	Resistance	Stability	Water	Sample or Field Test	Depth (m)	Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
		Stable	Dry	ES 0.10 m PID: 1.0ppm				FILL: Gravely SAND; Fine to coarse grained, brown, with cobbles, with boulders, trace clay, trace organics (rootlets).			FILL 0.00 m: With concrete, brick, trace metal, plastic.
				ES 0.50 m PID: 0.2ppm	0.5		0.60m	FILL: Clayey SAND; Fine to medium grained, orange/brown, trace gravel.			
				ES 1.00 m PID: 1.1ppm	1.0	1.50m	Clayey SAND; Fine to medium grained, well sorted, grey mottled red and orange/brown.	D			RESIDUAL SOIL
				ES 2.00 m PID: 0.6ppm	2.0						
					2.5		2.50m	TERMINATED AT 2.50 m Target depth			

METHOD EX Excavator bucket R Ripper HA Hand auger PT Push tube SON Sonic drilling AH Air hammer PS Percussion sampler AS Short spiral auger AD/V Solid flight auger: V-Bit AD/T Solid flight auger: TC-Bit HFA Hollow flight auger WB Washbore drilling RR Rock roller	PENETRATION VE Very Easy (No Resistance) E Easy F Firm H Hard VH Very Hard (Refusal) WATER  Water Level on Date shown  water inflow  water outflow	FIELD TESTS SPT - Standard Penetration Test HP - Hand/Pocket Penetrometer DCP - Dynamic Cone Penetrometer PSP - Perth Sand Penetrometer MC - Moisture Content PBT - Plate Bearing Test IMP - Borehole Impression Test PID - Photoionisation Detector VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)	SAMPLES B - Bulk disturbed sample D - Disturbed sample ES - Environmental sample U - Thin wall tube 'undisturbed' MOISTURE D - Dry M - Moist W - Wet PL - Plastic limit LL - Liquid limit w - Moisture content	SOIL CONSISTENCY VS - Very Soft S - Soft F - Firm St - Stiff VSt - Very Stiff H - Hard RELATIVE DENSITY VL - Very Loose L - Loose MD - Medium Dense D - Dense VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

Client: Waluya Pty Ltd Project: Bus Depot - Racecourse Road Location: 7a - 11 Racecourse Road, West Gosford		Job No: 300304375 Sheet: 1 of 1	
Position: See Site Plan Machine Type: Excavator Excavation Dimensions:		Angle from Horizontal: 90° Excavation Method: Test Pit Contractor:	
Date Excavated: 4/5/23 Logged By: ED Checked By:			

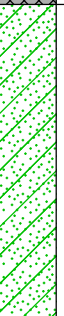
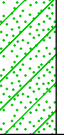
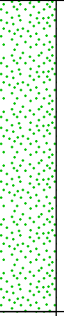
Excavation			Sampling & Testing		Depth (m)	Material Description					
Method	Resistance	Stability	Water	Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
		Stable	Dry	ES 0.10 m PID: 2.8ppm	0.5			FILL: Gravelly SAND; Fine to coarse grained, brown, with clay, with cobbles, with boulders.		0.30 m: Trace metal, ceramics.	FILL 0.00 m: Trace concrete boulders, metal, plastic, asphalt.
				ES 0.50 m PID: 1.8ppm				FILL: Clayey SAND; Fine to coarse grained, brown, with gravel, trace cobbles.			
					1.0			TERMINATED AT 1.00 m Target depth			
					1.5						
					2.0						
					2.5						

METHOD EX Excavator bucket R Ripper HA Hand auger PT Push tube SON Sonic drilling AH Air hammer PS Percussion sampler AS Short spiral auger AD/V Solid flight auger: V-Bit AD/T Solid flight auger: TC-Bit HFA Hollow flight auger WB Washbore drilling RR Rock roller	PENETRATION VE Very Easy (No Resistance) E Easy F Firm H Hard VH Very Hard (Refusal) WATER  Water Level on Date shown  water inflow  water outflow	FIELD TESTS SPT - Standard Penetration Test HP - Hand/Pocket Penetrometer DCP - Dynamic Cone Penetrometer PSP - Perth Sand Penetrometer MC - Moisture Content PBT - Plate Bearing Test IMP - Borehole Impression Test PID - Photoionisation Detector VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)	SAMPLES B - Bulk disturbed sample D - Disturbed sample ES - Environmental sample U - Thin wall tube 'undisturbed' MOISTURE D - Dry M - Moist W - Wet PL - Plastic limit LL - Liquid limit w - Moisture content	SOIL CONSISTENCY VS - Very Soft S - Soft F - Firm St - Stiff VSt - Very Stiff H - Hard RELATIVE DENSITY VL - Very Loose L - Loose MD - Medium Dense D - Dense VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

Client: Waluya Pty Ltd Project: Bus Depot - Racecourse Road Location: 7a - 11 Racecourse Road, West Gosford	Job No: 300304375 Angle from Horizontal: 90° Excavation Method: Test Pit	Sheet: 1 of 1 Surface Elevation:

Position: See Site Plan Machine Type: Excavator Excavation Dimensions:	Logged By: ED Checked By:	Contractor:

Excavation				Sampling & Testing				Material Description			
Method	Resistance	Stability	Water	Sample or Field Test	Depth (m)	Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
				ES 0.10 m PID: 1.1ppm				FILL: Sandy Gravel; Fine to coarse grained, dark brown, with carbonaceous materials, trace cobbles.			FILL
				ES 0.50 m PID: 1.5ppm	0.5			Clayey SAND; Fine to medium grained, well sorted, red and grey, with gravel, trace cobbles.			RESIDUAL SOIL
				ES 1.00 m PID: 2.0ppm	1.0						
					1.5			SAND; Fine grained, white and red/grey.			EXTREMELY WEATHERED
				ES 2.00 m PID: 2.0ppm	2.0			TERMINATED AT 2.00 m Target depth			
					2.5						

METHOD EX Excavator bucket R Ripper HA Hand auger PT Push tube SON Sonic drilling AH Air hammer PS Percussion sampler AS Short spiral auger AD/V Solid flight auger: V-Bit AD/T Solid flight auger: TC-Bit HFA Hollow flight auger WB Washbore drilling RR Rock roller	PENETRATION VE Very Easy (No Resistance) E Easy F Firm H Hard VH Very Hard (Refusal) WATER  Water Level on Date shown  water inflow  water outflow	FIELD TESTS SPT - Standard Penetration Test HP - Hand/Pocket Penetrometer DCP - Dynamic Cone Penetrometer PSP - Perth Sand Penetrometer MC - Moisture Content PBT - Plate Bearing Test IMP - Borehole Impression Test PID - Photoionisation Detector VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)	SAMPLES B - Bulk disturbed sample D - Disturbed sample ES - Environmental sample U - Thin wall tube 'undisturbed' MOISTURE D - Dry M - Moist W - Wet PL - Plastic limit LL - Liquid limit w - Moisture content	SOIL CONSISTENCY VS - Very Soft S - Soft F - Firm St - Stiff VSt - Very Stiff H - Hard RELATIVE DENSITY VL - Very Loose L - Loose MD - Medium Dense D - Dense VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

Client: Waluya Pty Ltd		Job No: 300304375		Sheet: 1 of 1	
Project: Bus Depot - Racecourse Road		Angle from Horizontal: 90°		Surface Elevation:	
Location: 7a - 11 Racecourse Road, West Gosford		Excavation Method: Test Pit		Contractor:	
Machine Type: Excavator		Excavation Dimensions:		Logged By: ED	
Date Excavated: 4/5/23		Checked By:			

Excavation			Sampling & Testing		Material Description						
Method	Resistance	Stability	Water	Sample or Field Test	Depth (m)	Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
				ES 0.10 m PID: 0.8ppm				FILL: Gravelly SAND; Fine to coarse grained, brown, with coal.			FILL 0.00 m: With bricks and metal.
		Stable	Dry	ES 0.50 m PID: 1.0ppm	0.5			Clayey SAND; Fine to medium grained, well sorted, red mottled grey, trace gravel.			RESIDUAL SOIL
				ES 1.00 m PID: 1.0ppm	1.0			TERMINATED AT 1.10 m Target depth			
					1.5						
					2.0						
					2.5						

METHOD EX Excavator bucket R Ripper HA Hand auger PT Push tube SON Sonic drilling AH Air hammer PS Percussion sampler AS Short spiral auger AD/V Solid flight auger: V-Bit AD/T Solid flight auger: TC-Bit HFA Hollow flight auger WB Washbore drilling RR Rock roller	PENETRATION VE Very Easy (No Resistance) E Easy F Firm H Hard VH Very Hard (Refusal) WATER  Water Level on Date shown  water inflow  water outflow	FIELD TESTS SPT - Standard Penetration Test HP - Hand/Pocket Penetrometer DCP - Dynamic Cone Penetrometer PSP - Perth Sand Penetrometer MC - Moisture Content PBT - Plate Bearing Test IMP - Borehole Impression Test PID - Photoionisation Detector VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)	SAMPLES B - Bulk disturbed sample D - Disturbed sample ES - Environmental sample U - Thin wall tube 'undisturbed' MOISTURE D - Dry M - Moist W - Wet PL - Plastic limit LL - Liquid limit w - Moisture content	SOIL CONSISTENCY VS - Very Soft S - Soft F - Firm St - Stiff VSt - Very Stiff H - Hard RELATIVE DENSITY VL - Very Loose L - Loose MD - Medium Dense D - Dense VD - Very Dense

Client: Waluya Pty Ltd Project: Bus Depot - Racecourse Road Location: 7a - 11 Racecourse Road, West Gosford				Job No: 300304375 Sheet: 1 of 1			
Position: See Site Plan				Angle from Horizontal: 90°		Surface Elevation:	
Machine Type: Excavator				Excavation Method: Test Pit			
Excavation Dimensions:				Contractor:			
Date Excavated: 4/5/23				Logged By: ED		Checked By:	

Excavation			Sampling & Testing		Material Description						
Method	Resistance	Stability	Water	Sample or Field Test	Depth (m)	Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
		Stable	Dry	ES 0.10 m PID: 1.3ppm				FILL: Gravelly SAND; Fine to coarse grained, dark brown, with cobbles.			FILL
				ES 0.50 m PID: 2.1ppm	0.5			FILL: SAND; Fine grained, well sorted, orange/grey, trace clay.			
				ES 1.20 m PID: 3.6ppm	1.0			Clayey SAND; Fine to medium grained, well sorted, grey mottled red and orange/brown.			
					1.5			TERMINATED AT 1.50 m Target depth			RESIDUAL SOIL
					2.0						
					2.5						

METHOD EX Excavator bucket R Ripper HA Hand auger PT Push tube SON Sonic drilling AH Air hammer PS Percussion sampler AS Short spiral auger AD/V Solid flight auger: V-Bit AD/T Solid flight auger: TC-Bit HFA Hollow flight auger WB Washbore drilling RR Rock roller	PENETRATION VE Very Easy (No Resistance) E Easy F Firm H Hard VH Very Hard (Refusal) WATER  Water Level on Date shown  water inflow  water outflow	FIELD TESTS SPT - Standard Penetration Test HP - Hand/Pocket Penetrometer DCP - Dynamic Cone Penetrometer PSP - Perth Sand Penetrometer MC - Moisture Content PBT - Plate Bearing Test IMP - Borehole Impression Test PID - Photoionisation Detector VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)	SAMPLES B - Bulk disturbed sample D - Disturbed sample ES - Environmental sample U - Thin wall tube 'undisturbed' MOISTURE D - Dry M - Moist W - Wet PL - Plastic limit LL - Liquid limit w - Moisture content	SOIL CONSISTENCY VS - Very Soft S - Soft F - Firm St - Stiff VSt - Very Stiff H - Hard RELATIVE DENSITY VL - Very Loose L - Loose MD - Medium Dense D - Dense VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

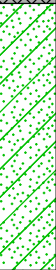
Client: Waluya Pty Ltd		Job No: 300304375		Sheet: 1 of 1	
Project: Bus Depot - Racecourse Road		Angle from Horizontal: 90°		Surface Elevation:	
Location: 7a - 11 Racecourse Road, West Gosford		Excavation Method: Test Pit		Contractor:	
Machine Type: Excavator		Excavation Dimensions:		Logged By: ED	
Date Excavated: 4/5/23		Checked By:			

Excavation				Sampling & Testing		Material Description					
Method	Resistance	Stability	Water	Sample or Field Test	Depth (m)	Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
		Stable	Dry	ES 0.10 m PID: 2.3ppm				0.05m TOPSOIL FILL: Gravelly SAND; Fine to coarse grained, with organics (rootlets). Clayey SAND; Fine to medium grained, red with orange and grey, trace gravel.	D		FILL RESIDUAL SOIL
				ES 0.50 m PID: 0.5ppm	0.5						
					1.0			0.70m TERMINATED AT 0.70 m Target depth			
					1.5						
					2.0						
					2.5						

METHOD EX Excavator bucket R Ripper HA Hand auger PT Push tube SON Sonic drilling AH Air hammer PS Percussion sampler AS Short spiral auger AD/V Solid flight auger: V-Bit AD/T Solid flight auger: TC-Bit HFA Hollow flight auger WB Washbore drilling RR Rock roller	PENETRATION VE Very Easy (No Resistance) E Easy F Firm H Hard VH Very Hard (Refusal) WATER  Water Level on Date shown  water inflow  water outflow	FIELD TESTS SPT - Standard Penetration Test HP - Hand/Pocket Penetrometer DCP - Dynamic Cone Penetrometer PSP - Perth Sand Penetrometer MC - Moisture Content PBT - Plate Bearing Test IMP - Borehole Impression Test PID - Photoionisation Detector VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)	SAMPLES B - Bulk disturbed sample D - Disturbed sample ES - Environmental sample U - Thin wall tube 'undisturbed' MOISTURE D - Dry M - Moist W - Wet PL - Plastic limit LL - Liquid limit w - Moisture content	SOIL CONSISTENCY VS - Very Soft S - Soft F - Firm St - Stiff VSt - Very Stiff H - Hard RELATIVE DENSITY VL - Very Loose L - Loose MD - Medium Dense D - Dense VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

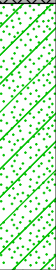
Client: Waluya Pty Ltd Project: Bus Depot - Racecourse Road Location: 7a - 11 Racecourse Road, West Gosford		Job No: 300304375 Sheet: 1 of 1	
Position: See Site Plan Machine Type: Excavator		Angle from Horizontal: 90° Excavation Method: Test Pit	
Excavation Dimensions: Date Excavated: 4/5/23		Contractor: Logged By: ED Checked By:	

Excavation			Sampling & Testing		Material Description					
Method	Resistance	Stability	Water	Sample or Field Test	Depth (m)	Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition Consistency Relative Density	STRUCTURE & Other Observations
		Stable	Dry	ES 0.10 m PID: 1.5ppm				FILL: Sandy GRAVEL; Fine to coarse grained, dark brown, with cobbles, with carbonaceous materials.	D	FILL
				ES 0.50 m PID: 2.0ppm	0.5			Clayey SAND; Fine to medium grained, well sorted, red mottled grey, with gravel.		RESIDUAL SOIL
				ES 1.00 m PID: 2.7ppm	1.0			TERMINATED AT 1.10 m Target depth		
					1.5					
					2.0					
					2.5					

METHOD EX Excavator bucket R Ripper HA Hand auger PT Push tube SON Sonic drilling AH Air hammer PS Percussion sampler AS Short spiral auger AD/V Solid flight auger: V-Bit AD/T Solid flight auger: TC-Bit HFA Hollow flight auger WB Washbore drilling RR Rock roller	PENETRATION VE Very Easy (No Resistance) E Easy F Firm H Hard VH Very Hard (Refusal) WATER  Water Level on Date shown  water inflow  water outflow	FIELD TESTS SPT - Standard Penetration Test HP - Hand/Pocket Penetrometer DCP - Dynamic Cone Penetrometer PSP - Perth Sand Penetrometer MC - Moisture Content PBT - Plate Bearing Test IMP - Borehole Impression Test PID - Photoionisation Detector VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)	SAMPLES B - Bulk disturbed sample D - Disturbed sample ES - Environmental sample U - Thin wall tube 'undisturbed' MOISTURE D - Dry M - Moist W - Wet PL - Plastic limit LL - Liquid limit w - Moisture content	SOIL CONSISTENCY VS - Very Soft S - Soft F - Firm St - Stiff VSt - Very Stiff H - Hard RELATIVE DENSITY VL - Very Loose L - Loose MD - Medium Dense D - Dense VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

Client: Waluya Pty Ltd		Job No: 300304375		Sheet: 1 of 1	
Project: Bus Depot - Racecourse Road		Angle from Horizontal: 90°		Surface Elevation:	
Location: 7a - 11 Racecourse Road, West Gosford		Excavation Method: Test Pit		Contractor:	
Machine Type: Excavator		Excavation Dimensions:		Logged By: ED	
Date Excavated: 4/5/23		Checked By:			

Excavation			Sampling & Testing		Material Description						
Method	Resistance	Stability	Water	Sample or Field Test	Depth (m)	Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
		Stable	Dry	ES 0.10 m PID: 0.4ppm				FILL: Clayey SAND; Fine to coarse grained, brown, with gravel, trace carbonaceous materials, trace organics (rootlets).			FILL
					0.30m		FILL: Gravelly SAND; Fine to coarse grained, dark grey, coal fragments.				
				ES 0.30 m		0.50m	Clayey SAND; Fine to medium grained, well sorted, grey mottled red and orange/brown.		RESIDUAL SOIL		
				ES 0.70 m PID: 0.4ppm		1.0					
				ES 1.00 m PID: 0.8ppm			1.10m	TERMINATED AT 1.10 m Target depth			
					1.5						
					2.0						
					2.5						

METHOD EX Excavator bucket R Ripper HA Hand auger PT Push tube SON Sonic drilling AH Air hammer PS Percussion sampler AS Short spiral auger AD/V Solid flight auger: V-Bit AD/T Solid flight auger: TC-Bit HFA Hollow flight auger WB Washbore drilling RR Rock roller	PENETRATION VE Very Easy (No Resistance) E Easy F Firm H Hard VH Very Hard (Refusal) WATER  Water Level on Date shown  water inflow  water outflow	FIELD TESTS SPT - Standard Penetration Test HP - Hand/Pocket Penetrometer DCP - Dynamic Cone Penetrometer PSP - Perth Sand Penetrometer MC - Moisture Content PBT - Plate Bearing Test IMP - Borehole Impression Test PID - Photoionisation Detector VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)	SAMPLES B - Bulk disturbed sample D - Disturbed sample ES - Environmental sample U - Thin wall tube 'undisturbed' MOISTURE D - Dry M - Moist W - Wet PL - Plastic limit LL - Liquid limit w - Moisture content	SOIL CONSISTENCY VS - Very Soft S - Soft F - Firm St - Stiff VSt - Very Stiff H - Hard RELATIVE DENSITY VL - Very Loose L - Loose MD - Medium Dense D - Dense VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

Client: Waluya Pty Ltd Project: Bus Depot - Racecourse Road Location: 7a - 11 Racecourse Road, West Gosford				Job No: 300304375 Sheet: 1 of 1			
Position: See Site Plan				Angle from Horizontal: 90°		Surface Elevation:	
Machine Type: Excavator				Excavation Method: Test Pit			
Excavation Dimensions:				Contractor:			
Date Excavated: 4/5/23				Logged By: ED		Checked By:	

Excavation			Sampling & Testing		Material Description						
Method	Resistance	Stability	Water	Sample or Field Test	Depth (m)	Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
				ES 0.10 m PID: 0.4ppm				FILL: Gravelly SAND; Fine to coarse grained, brown, trace organics (rootlets), trace carbonaceous materials.			FILL 0.00 m: Trace bricks.
				ES 0.50 m PID: 0.4ppm QA600 +QC600	0.5			Clayey SAND; Fine to medium grained, well sorted, grey mottled red and orange/brown.			RESIDUAL SOIL
				ES 1.00 m PID: 0.4ppm	1.0						
								TERMINATED AT 1.20 m Target depth			
					1.5						
					2.0						
					2.5						

METHOD EX Excavator bucket R Ripper HA Hand auger PT Push tube SON Sonic drilling AH Air hammer PS Percussion sampler AS Short spiral auger AD/V Solid flight auger: V-Bit AD/T Solid flight auger: TC-Bit HFA Hollow flight auger WB Washbore drilling RR Rock roller	PENETRATION VE Very Easy (No Resistance) E Easy F Firm H Hard VH Very Hard (Refusal) WATER  Water Level on Date shown  water inflow  water outflow	FIELD TESTS SPT - Standard Penetration Test HP - Hand/Pocket Penetrometer DCP - Dynamic Cone Penetrometer PSP - Perth Sand Penetrometer MC - Moisture Content PBT - Plate Bearing Test IMP - Borehole Impression Test PID - Photoionisation Detector VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)	SAMPLES B - Bulk disturbed sample D - Disturbed sample ES - Environmental sample U - Thin wall tube 'undisturbed' MOISTURE D - Dry M - Moist W - Wet PL - Plastic limit LL - Liquid limit w - Moisture content	SOIL CONSISTENCY VS - Very Soft S - Soft F - Firm St - Stiff VSt - Very Stiff H - Hard RELATIVE DENSITY VL - Very Loose L - Loose MD - Medium Dense D - Dense VD - Very Dense

Client: Waluya Pty Ltd
Project: Bus Depot - Racecourse Road
Location: 7a - 11 Racecourse Road, West Gosford

Job No: 300304375

Sheet: 1 of 1

Position: See Site Plan

Angle from Horizontal: 90°

Surface Elevation:

Machine Type: Excavator

Excavation Method: Test Pit

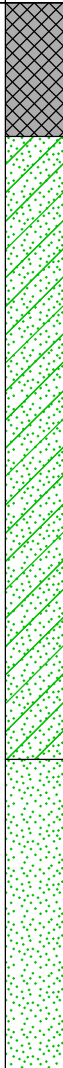
Excavation Dimensions:

Contractor:

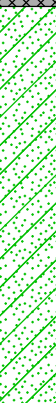
Date Excavated: 4/5/23

Logged By: ED

Checked By:

Excavation			Water	Sampling & Testing		Depth (m)	Material Description				Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations						
Method	Resistance	Stability		Sample or Field Test	Graphic Log		Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure											
		Stable	Dry	ES 0.10 m PID: 0.2ppm QA700 + QC700			FILL: SAND; Fine to coarse grained, light brown to orange, with gravel, trace cobbles, trace organics (roots).	0.30m	Clayey SAND; Fine to medium grained, well sorted, grey mottled red and orange/brown.	1.70m	SAND; Fine grained, light grey.	2.40m	TERMINATED AT 2.40 m Target depth			FILL			
				ES 0.60 m PID: 1.2ppm												RESIDUAL SOIL			
				ES 1.00 m PID: 0.9ppm												EXTREMELY WEATHERED			
				ES 2.20 m PID: 0.8ppm															
						2.5													
METHOD EX Excavator bucket R Ripper HA Hand auger PT Push tube SON Sonic drilling AH Air hammer PS Percussion sampler AS Short spiral auger AD/V Solid flight auger: V-Bit AD/T Solid flight auger: TC-Bit HFA Hollow flight auger WB Washbore drilling RR Rock roller				PENETRATION VE Very Easy (No Resistance) E Easy F Firm H Hard VH Very Hard (Refusal) WATER  Water Level on Date shown  water inflow  water outflow				FIELD TESTS SPT - Standard Penetration Test HP - Hand/Pocket Penetrometer DCP - Dynamic Cone Penetrometer PSP - Perth Sand Penetrometer MC - Moisture Content PBT - Plate Bearing Test IMP - Borehole Impression Test PID - Photoionisation Detector VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)				SAMPLES B - Bulk disturbed sample D - Disturbed sample ES - Environmental sample U - Thin wall tube 'undisturbed' MOISTURE D - Dry M - Moist W - Wet PL - Plastic limit LL - Liquid limit w - Moisture content				SOIL CONSISTENCY VS - Very Soft S - Soft F - Firm St - Stiff VSt - Very Stiff H - Hard RELATIVE DENSITY VL - Very Loose L - Loose MD - Medium Dense D - Dense VD - Very Dense			
Refer to explanatory notes for details of abbreviations and basis of descriptions																			
Stantec Australia PTY LTD																			

Client: Waluya Pty Ltd Project: Bus Depot - Racecourse Road Location: 7a - 11 Racecourse Road, West Gosford	Job No: 300304375 Angle from Horizontal: 90° Excavation Method: Test Pit	Sheet: 1 of 1 Surface Elevation: Contractor:
Position: See Site Plan		Logged By: ED
Machine Type: Excavator		Checked By:
Excavation Dimensions:		
Date Excavated: 4/5/23		

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
		Stable	Dry	ES 0.10 m PID: 0.7ppm				FILL: Sandy GRAVEL; Fine to coarse sub-angular to angular, dark grey/brown, fine to coarse grained sand.			FILL
				ES 0.50 m PID: 0.8ppm	0.5			Clayey SAND; Fine to medium grained, well sorted, red/orange/brown, with gravel.			RESIDUAL SOIL
				ES 1.00 m PID: 0.6ppm	1.0			Clayey SAND; Fine to medium grained, well sorted, red/ orange and grey.			
							1.20m	As Above; Colour change to grey with red and orange.			
								TERMINATED AT 1.20 m Target depth			

METHOD EX Excavator bucket R Ripper HA Hand auger PT Push tube SON Sonic drilling AH Air hammer PS Percussion sampler AS Short spiral auger AD/V Solid flight auger: V-Bit AD/T Solid flight auger: TC-Bit HFA Hollow flight auger WB Washbore drilling RR Rock roller	PENETRATION VE Very Easy (No Resistance) E Easy F Firm H Hard VH Very Hard (Refusal) WATER Water Level on Date shown water inflow water outflow	FIELD TESTS SPT - Standard Penetration Test HP - Hand/Pocket Penetrometer DCP - Dynamic Cone Penetrometer PSP - Perth Sand Penetrometer MC - Moisture Content PBT - Plate Bearing Test IMP - Borehole Impression Test PID - Photoionisation Detector VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)	SAMPLES B - Bulk disturbed sample D - Disturbed sample ES - Environmental sample U - Thin wall tube 'undisturbed' MOISTURE D - Dry M - Moist W - Wet PL - Plastic limit LL - Liquid limit w - Moisture content	SOIL CONSISTENCY VS - Very Soft S - Soft F - Firm St - Stiff VSt - Very Stiff H - Hard RELATIVE DENSITY VL - Very Loose L - Loose MD - Medium Dense D - Dense VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

Client: Waluya Pty Ltd Project: Bus Depot - Racecourse Road Location: 7a - 11 Racecourse Road, West Gosford	Job No: 300304375	Sheet: 1 of 1

Position: See Site Plan	Angle from Horizontal: 90°	Surface Elevation:

Machine Type: Excavator	Excavation Method: Test Pit

Excavation Dimensions:	Contractor:

Date Excavated: 4/5/23	Logged By: ED	Checked By:

Excavation			Sampling & Testing		Material Description						
Method	Resistance	Stability	Water	Sample or Field Test	Depth (m)	Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
		Stable	Dry	ES 0.10 m PID: 0.7ppm ZL 0.10 m Potential Asbestos Containing Material				FILL: Gravely SAND; Fine to coarse grained, brown, with cobbles, with boulders, trace plastic. As Above; Higher clay content.			FILL 0.00 m: Potential Asbestos Containing Material, trace tile. 0.40 m: Trace concrete boulders, ceramic cups, tile, potentially asbestos containing material, PVC pipe.
				ES 0.70 m PID: 0.5ppm	0.5						
				ES 1.20 m PID: 0.5ppm	1.0						
				ES 1.80 m PID: 1.1ppm	1.5						
								Clayey SAND; Fine to medium grained, well sorted, grey mottled red and orange.			RESIDUAL SOIL
								SAND: Fine to coarse grained, red/grey.			EXTREMELY WEATHERED
				ES 2.30 m PID: 1.1ppm	2.30m			TERMINATED AT 2.30 m Target depth			
					2.5						

METHOD

EX Excavator bucket
 R Ripper
 HA Hand auger
 PT Push tube
 SON Sonic drilling
 AH Air hammer
 PS Percussion sampler
 AS Short spiral auger
 AD/V Solid flight auger: V-Bit
 AD/T Solid flight auger: TC-Bit
 HFA Hollow flight auger
 WB Washbore drilling
 RR Rock roller

PENETRATION

VE Very Easy (No Resistance)
 E Easy
 F Firm
 H Hard
 VH Very Hard (Refusal)

WATER

 Water Level on Date shown
 water inflow
 water outflow

FIELD TESTS

SPT - Standard Penetration Test
 HP - Hand/Pocket Penetrometer
 DCP - Dynamic Cone Penetrometer
 PSP - Perth Sand Penetrometer
 MC - Moisture Content
 PBT - Plate Bearing Test
 IMP - Borehole Impression Test
 PID - Photoionisation Detector
 VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES

B - Bulk disturbed sample
 D - Disturbed sample
 ES - Environmental sample
 U - Thin wall tube 'undisturbed'

MOISTURE

D - Dry
 M - Moist
 W - Wet
 PL - Plastic limit
 LL - Liquid limit
 w - Moisture content

SOIL CONSISTENCY

VS - Very Soft
 S - Soft
 F - Firm
 St - Stiff
 VSt - Very Stiff
 H - Hard

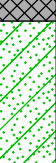
RELATIVE DENSITY

VL - Very Loose
 L - Loose
 MD - Medium Dense
 D - Dense
 VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

Stantec Australia PTY LTD

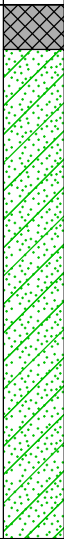
Client: Waluya Pty Ltd		Job No: 300304375		Sheet: 1 of 1	
Project: Bus Depot - Racecourse Road		Angle from Horizontal: 90°		Surface Elevation:	
Location: 7a - 11 Racecourse Road, West Gosford		Excavation Method: Test Pit		Contractor:	
Excavation Dimensions:		Logged By: ED		Checked By:	
Date Excavated: 4/5/23					

Excavation			Sampling & Testing		Material Description						
Method	Resistance	Stability	Water	Sample or Field Test	Depth (m)	Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
				ES 0.20 m PID: 0.6ppm QA800 + QC800				0.05m TOPSOIL FILL: SILT; Dark brown, with gravel, Clayey SAND; Fine to medium grained, orange to dark orange, with gravel.			FILL RESIDUAL SOIL
		Stable	Dry	ES 0.60 m PID: 0.8ppm	0.5			0.40m SAND: Fine grained, red/orange/grey.			EXTREMELY WEATHERED
				ES 1.20 m PID: 1.1ppm	1.0			1.20m TERMINATED AT 1.20 m Target depth			
					1.5						
					2.0						
					2.5						

METHOD EX Excavator bucket R Ripper HA Hand auger PT Push tube SON Sonic drilling AH Air hammer PS Percussion sampler AS Short spiral auger AD/V Solid flight auger: V-Bit AD/T Solid flight auger: TC-Bit HFA Hollow flight auger WB Washbore drilling RR Rock roller	PENETRATION VE Very Easy (No Resistance) E Easy F Firm H Hard VH Very Hard (Refusal) WATER  Water Level on Date shown  water inflow  water outflow	FIELD TESTS SPT - Standard Penetration Test HP - Hand/Pocket Penetrometer DCP - Dynamic Cone Penetrometer PSP - Perth Sand Penetrometer MC - Moisture Content PBT - Plate Bearing Test IMP - Borehole Impression Test PID - Photoionisation Detector VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)	SAMPLES B - Bulk disturbed sample D - Disturbed sample ES - Environmental sample U - Thin wall tube 'undisturbed' MOISTURE D - Dry M - Moist W - Wet PL - Plastic limit LL - Liquid limit w - Moisture content	SOIL CONSISTENCY VS - Very Soft S - Soft F - Firm St - Stiff VSt - Very Stiff H - Hard RELATIVE DENSITY VL - Very Loose L - Loose MD - Medium Dense D - Dense VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

Client: Waluya Pty Ltd Project: Bus Depot - Racecourse Road Location: 7a - 11 Racecourse Road, West Gosford		Job No: 300304375 Sheet: 1 of 1	
Position: See Site Plan Machine Type: Excavator Excavation Dimensions:		Angle from Horizontal: 90° Excavation Method: Test Pit Contractor:	
Date Excavated: 4/5/23 Logged By: ED Checked By:			

Excavation				Sampling & Testing		Material Description						
Method	Resistance	Stability	Water	Sample or Field Test	Depth (m)	Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations	
				ES 0.20 m PID: 1.2ppm				TOPSOIL FILL: Gravelly SAND; Fine to coarse, brown. 0.10m Clayey SAND; Fine to medium grained, orange/brown, with gravel. 0.10m As Above; Colour change to light grey and red. 1.0m			FILL RESIDUAL SOIL	
				ES 0.50 m PID: 1.5ppm	0.5							
				ES 1.00 m PID: 1.1ppm	1.0							
								TERMINATED AT 1.20 m Target depth				
					1.5							
					2.0							
					2.5							

METHOD EX Excavator bucket R Ripper HA Hand auger PT Push tube SON Sonic drilling AH Air hammer PS Percussion sampler AS Short spiral auger AD/V Solid flight auger: V-Bit AD/T Solid flight auger: TC-Bit HFA Hollow flight auger WB Washbore drilling RR Rock roller	PENETRATION VE Very Easy (No Resistance) E Easy F Firm H Hard VH Very Hard (Refusal) WATER  Water Level on Date shown  water inflow  water outflow	FIELD TESTS SPT - Standard Penetration Test HP - Hand/Pocket Penetrometer DCP - Dynamic Cone Penetrometer PSP - Perth Sand Penetrometer MC - Moisture Content PBT - Plate Bearing Test IMP - Borehole Impression Test PID - Photoionisation Detector VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)	SAMPLES B - Bulk disturbed sample D - Disturbed sample ES - Environmental sample U - Thin wall tube 'undisturbed' MOISTURE D - Dry M - Moist W - Wet PL - Plastic limit LL - Liquid limit w - Moisture content	SOIL CONSISTENCY VS - Very Soft S - Soft F - Firm St - Stiff VSt - Very Stiff H - Hard RELATIVE DENSITY VL - Very Loose L - Loose MD - Medium Dense D - Dense VD - Very Dense

Client: Waluya Pty Ltd Project: Bus Depot - Racecourse Road Location: 7a - 11 Racecourse Road, West Gosford		Job No: 300304375 Sheet: 1 of 1	
Position: See Site Plan Machine Type: Excavator Excavation Dimensions:		Angle from Horizontal: 90° Excavation Method: Test Pit Contractor:	
Date Excavated: 4/5/23 Logged By: ED Checked By:			

Excavation			Sampling & Testing		Material Description						
Method	Resistance	Stability	Water	Sample or Field Test	Depth (m)	Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition Consistency Relative Density	STRUCTURE & Other Observations	
				ES 0.10 m PID: 1.0ppm				0.05m TOPSOIL FILL: Gravelly SAND; Fine to coarse, brown. Clayey SAND; Fine to medium grained, orange with red and white/grey.	D	FILL RESIDUAL SOIL	
		Stable	Dry	ES 0.50 m PID: 0.4ppm	0.5			SAND; Orange/pale grey.			EXTREMELY WEATHERED
					1.0			TERMINATED AT 1.00 m Target depth			
					1.5						
					2.0						
					2.5						

METHOD EX Excavator bucket R Ripper HA Hand auger PT Push tube SON Sonic drilling AH Air hammer PS Percussion sampler AS Short spiral auger AD/V Solid flight auger: V-Bit AD/T Solid flight auger: TC-Bit HFA Hollow flight auger WB Washbore drilling RR Rock roller	PENETRATION VE Very Easy (No Resistance) E Easy F Firm H Hard VH Very Hard (Refusal) WATER Water Level on Date shown water inflow water outflow	FIELD TESTS SPT - Standard Penetration Test HP - Hand/Pocket Penetrometer DCP - Dynamic Cone Penetrometer PSP - Perth Sand Penetrometer MC - Moisture Content PBT - Plate Bearing Test IMP - Borehole Impression Test PID - Photoionisation Detector VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)	SAMPLES B - Bulk disturbed sample D - Disturbed sample ES - Environmental sample U - Thin wall tube 'undisturbed' MOISTURE D - Dry M - Moist W - Wet PL - Plastic limit LL - Liquid limit w - Moisture content	SOIL CONSISTENCY VS - Very Soft S - Soft F - Firm St - Stiff VSt - Very Stiff H - Hard RELATIVE DENSITY VL - Very Loose L - Loose MD - Medium Dense D - Dense VD - Very Dense

STANTEC 2.016 LIB\GLB Log STANTEC NON-CORED 300304375 BUS DEPOT - RACECOURSE ROAD.GPJ <<DrawingFile>> 28/06/2023 10:49 10.03.00.09 Datgel AGS RTA, Photo, Monitoring Tools

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Client: Waluya Pty Ltd		Job No: 300304375		Sheet: 1 of 1	
Project: Bus Depot - Racecourse Road		Angle from Horizontal: 90°		Surface Elevation:	
Location: 7a - 11 Racecourse Road, West Gosford		Excavation Method: Test Pit		Contractor:	
Machine Type: Excavator		Excavation Dimensions:		Logged By: KE	
Date Excavated: 22/5/23		Checked By:			

Excavation			Sampling & Testing		Material Description						
Method	Resistance	Stability	Water	Sample or Field Test	Depth (m)	Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
				ES 0.30 m PID: 0.8ppm				FILL: Silty SAND; Fine to coarse grained, darkbrown, trace gravells and rootlets.			FILL
				ES 0.50 m PID: 1.3ppm	0.5			FILL: Clayey SAND; Fine to meduim grained, orangey brown, poorly sorted.			0.10 m: Bricks
				ES 1.00 m PID: 2.1ppm	1.0			Sandy CLAY: Fine to meduim grained, grey mottles orange and red, well sorted, trace silt.			RESIDUAL SOIL
					1.20m			TERMINATED AT 1.20 m Target depth			
					1.5						
					2.0						
					2.5						

METHOD EX Excavator bucket R Ripper HA Hand auger PT Push tube SON Sonic drilling AH Air hammer PS Percussion sampler AS Short spiral auger AD/V Solid flight auger: V-Bit AD/T Solid flight auger: TC-Bit HFA Hollow flight auger WB Washbore drilling RR Rock roller	PENETRATION VE Very Easy (No Resistance) E Easy F Firm H Hard VH Very Hard (Refusal) WATER  Water Level on Date shown  water inflow  water outflow	FIELD TESTS SPT - Standard Penetration Test HP - Hand/Pocket Penetrometer DCP - Dynamic Cone Penetrometer PSP - Perth Sand Penetrometer MC - Moisture Content PBT - Plate Bearing Test IMP - Borehole Impression Test PID - Photoionisation Detector VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)	SAMPLES B - Bulk disturbed sample D - Disturbed sample ES - Environmental sample U - Thin wall tube 'undisturbed' MOISTURE D - Dry M - Moist W - Wet PL - Plastic limit LL - Liquid limit w - Moisture content	SOIL CONSISTENCY VS - Very Soft S - Soft F - Firm St - Stiff VSt - Very Stiff H - Hard RELATIVE DENSITY VL - Very Loose L - Loose MD - Medium Dense D - Dense VD - Very Dense

Client: Waluya Pty Ltd Project: Bus Depot - Racecourse Road Location: 7a - 11 Racecourse Road, West Gosford	Job No: 300304375	Sheet: 1 of 1

Position: See Site Plan	Angle from Horizontal: 90°	Surface Elevation:

Machine Type: Excavator	Excavation Method: Test Pit

Excavation Dimensions:	Contractor:

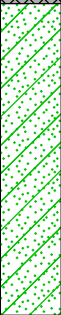
Date Excavated: 22/5/23	Logged By: KE	Checked By:

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
		Stable	Dry	ES 0.30 m PID: 0.2ppm	0.5		0.35m	FILL: Gravely SAND; Fine to coarse grained, dark grey, poorly sorted, trace silt and rootlets.			FILL
				ES 0.50 m PID: 0.3ppm				FILL: Sandy CLAY; Fine to medium grained, grey mottled red, poorly sorted, trace silt.			0.10 m: Bricks and terrocotta pieces.
				ES 1.00 m PID: 0.9ppm			0.80m	FILL: Gravely sandy CLAY; Fine to coarse grained, dark brown to grey, very poorly sorted, trace silt.			0.50 m: Charcoal pieces.
				ES 1.50 m PID: 0.9ppm			1.30m	FILL: Clayey SAND; Fine to medium grained, grey to brown, well sorted, trace silt.			1.00 m: Large pieces of wood.
				ES 2.00 m PID: 0.8ppm			1.90m	CLAY: Fine to medium grained, grey with red, well sorted, trace silt and sand.			RESIDUAL SOIL
					2.0		2.20m	TERMINATED AT 2.20 m Refusal on bedrock			
					2.5						

METHOD EX Excavator bucket R Ripper HA Hand auger PT Push tube SON Sonic drilling AH Air hammer PS Percussion sampler AS Short spiral auger AD/V Solid flight auger: V-Bit AD/T Solid flight auger: TC-Bit HFA Hollow flight auger WB Washbore drilling RR Rock roller	PENETRATION VE Very Easy (No Resistance) E Easy F Firm H Hard VH Very Hard (Refusal) WATER  Water Level on Date shown  water inflow  water outflow	FIELD TESTS SPT - Standard Penetration Test HP - Hand/Pocket Penetrometer DCP - Dynamic Cone Penetrometer PSP - Perth Sand Penetrometer MC - Moisture Content PBT - Plate Bearing Test IMP - Borehole Impression Test PID - Photoionisation Detector VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)	SAMPLES B - Bulk disturbed sample D - Disturbed sample ES - Environmental sample U - Thin wall tube 'undisturbed' MOISTURE D - Dry M - Moist W - Wet PL - Plastic limit LL - Liquid limit w - Moisture content	SOIL CONSISTENCY VS - Very Soft S - Soft F - Firm St - Stiff VSt - Very Stiff H - Hard RELATIVE DENSITY VL - Very Loose L - Loose MD - Medium Dense D - Dense VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

Client: Waluya Pty Ltd		Job No: 300304375		Sheet: 1 of 1	
Project: Bus Depot - Racecourse Road		Angle from Horizontal: 90°		Surface Elevation:	
Location: 7a - 11 Racecourse Road, West Gosford		Excavation Method: Test Pit		Contractor:	
Machine Type: Excavator		Logged By: KE		Checked By:	
Excavation Dimensions:		Date Excavated: 22/5/23			

Excavation			Sampling & Testing		Material Description						
Method	Resistance	Stability	Water	Sample or Field Test	Depth (m)	Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
		Stable	Dry	ES 0.30 m PID: 3.2ppm				FILL: Gravelly SAND; Fine to coarse grained, dark brown, poorly sorted, trace silt and rootlets.			FILL 0.10 m: Bricks and wood pieces.
				ES 0.50 m PID: 0.7ppm	0.5			Clayey SAND; Fine to medium grained, red with grey, well sorted, As above; Colour change to only grey.			RESIDUAL SOIL 0.60 m: Large sandstone pieces.
				ES 1.00 m PID: 0.8ppm	1.0			TERMINATED AT 1.10 m Target depth			
					1.5						
					2.0						
					2.5						

METHOD EX Excavator bucket R Ripper HA Hand auger PT Push tube SON Sonic drilling AH Air hammer PS Percussion sampler AS Short spiral auger AD/V Solid flight auger: V-Bit AD/T Solid flight auger: TC-Bit HFA Hollow flight auger WB Washbore drilling RR Rock roller	PENETRATION VE Very Easy (No Resistance) E Easy F Firm H Hard VH Very Hard (Refusal) WATER  Water Level on Date shown  water inflow  water outflow	FIELD TESTS SPT - Standard Penetration Test HP - Hand/Pocket Penetrometer DCP - Dynamic Cone Penetrometer PSP - Perth Sand Penetrometer MC - Moisture Content PBT - Plate Bearing Test IMP - Borehole Impression Test PID - Photoionisation Detector VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)	SAMPLES B - Bulk disturbed sample D - Disturbed sample ES - Environmental sample U - Thin wall tube 'undisturbed' MOISTURE D - Dry M - Moist W - Wet PL - Plastic limit LL - Liquid limit w - Moisture content	SOIL CONSISTENCY VS - Very Soft S - Soft F - Firm St - Stiff VSt - Very Stiff H - Hard RELATIVE DENSITY VL - Very Loose L - Loose MD - Medium Dense D - Dense VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

Client: Waluya Pty Ltd Project: Bus Depot - Racecourse Road Location: 7a - 11 Racecourse Road, West Gosford	Job No: 300304375 Sheet: 1 of 1

Position: See Site Plan	Angle from Horizontal: 90°	Surface Elevation:

Machine Type: Excavator	Excavation Method: Test Pit	Contractor:

Excavation Dimensions:	Logged By: ED	Checked By:

Date Excavated: 4/5/23				Logged By: ED		Checked By:						
Excavation			Sampling & Testing	Depth (m)	Material Description							
Method	Resistance	Stability			Water	Sample or Field Test	Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
			Stable	Dry	ES 0.10 m PID: 0.3ppm ES 0.50 m PID: 0.8ppm ES 1.00 m PID: 2.6ppm			0.05m TOPSOIL FILL			FILL	
								FILL: Sandy GRAVEL; Fine to coarse grained, dark grey, with cobbles, trace organics (rootlets).				
								0.30m				FILL:Gravelly SAND; Fine to coarse grained, dark brown, with clay, with cobbles, trace organics (roots).
								1.50m				FILL: Sandy CLAY; Fine grained, dark grey, with gravel, lenses of Clayey Sand.
					ES 2.00 m PID: 3.4ppm		2.0	2.00m	TERMINATED AT 2.00 m Refusal on Concrete			

METHOD EX Excavator bucket R Ripper HA Hand auger PT Push tube SON Sonic drilling AH Air hammer PS Percussion sampler AS Short spiral auger AD/V Solid flight auger: V-Bit AD/T Solid flight auger: TC-Bit HFA Hollow flight auger WB Washbore drilling RR Rock roller	PENETRATION VE Very Easy (No Resistance) E Easy F Firm H Hard VH Very Hard (Refusal) WATER  Water Level on Date shown  water inflow  water outflow	FIELD TESTS SPT - Standard Penetration Test HP - Hand/Pocket Penetrometer DCP - Dynamic Cone Penetrometer PSP - Perth Sand Penetrometer MC - Moisture Content PBT - Plate Bearing Test IMP - Borehole Impression Test PID - Photoionisation Detector VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)	SAMPLES B - Bulk disturbed sample D - Disturbed sample ES - Environmental sample U - Thin wall tube 'undisturbed' MOISTURE D - Dry M - Moist W - Wet PL - Plastic limit LL - Liquid limit w - Moisture content	SOIL CONSISTENCY VS - Very Soft S - Soft F - Firm St - Stiff VSt - Very Stiff H - Hard RELATIVE DENSITY VL - Very Loose L - Loose MD - Medium Dense D - Dense VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

Client: Waluya Pty Ltd Project: Bus Depot - Racecourse Road Location: 7a - 11 Racecourse Road, West Gosford	Job No: 300304375	Sheet: 1 of 1

Position: See Site Plan	Angle from Horizontal: 90°	Surface Elevation:

Machine Type: Excavator	Excavation Method: Test Pit

Excavation Dimensions:	Contractor:

Date Excavated: 22/5/23	Logged By: KE	Checked By:

Excavation			Sampling & Testing		Material Description						
Method	Resistance	Stability	Water	Sample or Field Test	Depth (m)	Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
			Dry	ES 0.30 m PID: 4.3ppm				FILL: Gravely SAND; Fine to coarse grained, dark brown with white sand, well sorted, trace rootlets.			FILL
				ES 0.50 m PID: 1.2ppm	0.5		0.45m	Clayey SAND; fine to meduim grained, red with grey, well sorted, trace silt.			RESIDUAL SOIL
				ES 1.00 m PID: 1.1ppm	1.0			As above; Colour change to only white.			
				ES 1.50 m PID: 1.1ppm	1.5						
					2.0			2.00m			TERMINATED AT 2.00 m Refusal on bedrock
					2.5						

METHOD EX Excavator bucket R Ripper HA Hand auger PT Push tube SON Sonic drilling AH Air hammer PS Percussion sampler AS Short spiral auger AD/V Solid flight auger: V-Bit AD/T Solid flight auger: TC-Bit HFA Hollow flight auger WB Washbore drilling RR Rock roller	PENETRATION VE Very Easy (No Resistance) E Easy F Firm H Hard VH Very Hard (Refusal) WATER  Water Level on Date shown  water inflow  water outflow	FIELD TESTS SPT - Standard Penetration Test HP - Hand/Pocket Penetrometer DCP - Dynamic Cone Penetrometer PSP - Perth Sand Penetrometer MC - Moisture Content PBT - Plate Bearing Test IMP - Borehole Impression Test PID - Photoionisation Detector VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)	SAMPLES B - Bulk disturbed sample D - Disturbed sample ES - Environmental sample U - Thin wall tube 'undisturbed' MOISTURE D - Dry M - Moist W - Wet PL - Plastic limit LL - Liquid limit w - Moisture content	SOIL CONSISTENCY VS - Very Soft S - Soft F - Firm St - Stiff VSt - Very Stiff H - Hard RELATIVE DENSITY VL - Very Loose L - Loose MD - Medium Dense D - Dense VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

Client: Waluya Pty Ltd		Job No: 300304375		Sheet: 1 of 1	
Project: Bus Depot - Racecourse Road		Angle from Horizontal: 90°		Surface Elevation:	
Location: 7a - 11 Racecourse Road, West Gosford		Excavation Method: Test Pit		Contractor:	
Machine Type: Excavator		Excavation Dimensions:		Logged By: KE	
Date Excavated: 22/5/23		Checked By:			

Excavation			Sampling & Testing		Material Description						
Method	Resistance	Stability	Water	Sample or Field Test	Depth (m)	Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
		Stable	Dry	ES 0.30 m PID: 0.8ppm				FILL: Gravelly SAND; Fine to coarse grained, dark brown to grey, trace silt and rootlets.			FILL
				ES 0.50 m PID: 1.1ppm	0.5			Clayey SAND; Fine to medium grained, red to orange with grey, well sorted, trace silt.			RESIDUAL SOIL
								TERMINATED AT 0.80 m Target depth			
					1.0						
					1.5						
					2.0						
					2.5						

METHOD EX Excavator bucket R Ripper HA Hand auger PT Push tube SON Sonic drilling AH Air hammer PS Percussion sampler AS Short spiral auger AD/V Solid flight auger: V-Bit AD/T Solid flight auger: TC-Bit HFA Hollow flight auger WB Washbore drilling RR Rock roller	PENETRATION VE Very Easy (No Resistance) E Easy F Firm H Hard VH Very Hard (Refusal) WATER  Water Level on Date shown  water inflow  water outflow	FIELD TESTS SPT - Standard Penetration Test HP - Hand/Pocket Penetrometer DCP - Dynamic Cone Penetrometer PSP - Perth Sand Penetrometer MC - Moisture Content PBT - Plate Bearing Test IMP - Borehole Impression Test PID - Photoionisation Detector VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)	SAMPLES B - Bulk disturbed sample D - Disturbed sample ES - Environmental sample U - Thin wall tube 'undisturbed' MOISTURE D - Dry M - Moist W - Wet PL - Plastic limit LL - Liquid limit w - Moisture content	SOIL CONSISTENCY VS - Very Soft S - Soft F - Firm St - Stiff VSt - Very Stiff H - Hard RELATIVE DENSITY VL - Very Loose L - Loose MD - Medium Dense D - Dense VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

Client: Waluya Pty Ltd Project: Bus Depot - Racecourse Road Location: 7a - 11 Racecourse Road, West Gosford	Job No: 300304375	Sheet: 1 of 1

Position: See Site Plan	Angle from Horizontal: 90°	Surface Elevation:

Machine Type: Excavator	Excavation Method: Test Pit

Excavation Dimensions:	Contractor:

Date Excavated: 22/5/23	Logged By: KE	Checked By:

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
		Stable	Dry	ES 0.30 m PID: 1.2ppm		0.5	0.50m	FILL: Gravelly SAND; Fine to coarse grained, dark brown to grey, trace silt and rootlets.			FILL 0.10 m: Wood pieces.
				ES 0.50 m PID: 3.2ppm				FILL: Clayey SAND; Fine to medium grained, red to brown, well sorted, trace silt.			
				ES 1.00 m PID: 2.4ppm				As above; Gravells present and colour change to dark brown.			
				ES 1.50 m PID: 1.3ppm				FILL: Sandy CLAY; Fine to medium grained, grey, well sorted, trace silt.			
				ES 2.00 m PID: 1.2ppm		2.0	2.00m	TERMINATED AT 2.00 m Refusal on Concrete			
						2.5					

METHOD

EX Excavator bucket
 R Ripper
 HA Hand auger
 PT Push tube
 SON Sonic drilling
 AH Air hammer
 PS Percussion sampler
 AS Short spiral auger
 AD/V Solid flight auger: V-Bit
 AD/T Solid flight auger: TC-Bit
 HFA Hollow flight auger
 WB Washbore drilling
 RR Rock roller

PENETRATION

VE Very Easy (No Resistance)
 E Easy
 F Firm
 H Hard
 VH Very Hard (Refusal)

WATER

 Water Level on Date shown
 water inflow
 water outflow

FIELD TESTS

SPT - Standard Penetration Test
 HP - Hand/Pocket Penetrometer
 DCP - Dynamic Cone Penetrometer
 PSP - Perth Sand Penetrometer
 MC - Moisture Content
 PBT - Plate Bearing Test
 IMP - Borehole Impression Test
 PID - Photoionisation Detector
 VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES

B - Bulk disturbed sample
 D - Disturbed sample
 ES - Environmental sample
 U - Thin wall tube 'undisturbed'

MOISTURE

D - Dry
 M - Moist
 W - Wet
 PL - Plastic limit
 LL - Liquid limit
 w - Moisture content

SOIL CONSISTENCY

VS - Very Soft
 S - Soft
 F - Firm
 St - Stiff
 VSt - Very Stiff
 H - Hard

RELATIVE DENSITY

VL - Very Loose
 L - Loose
 MD - Medium Dense
 D - Dense
 VD - Very Dense

Client: Waluya Pty Ltd Project: Bus Depot - Racecourse Road Location: 7a - 11 Racecourse Road, West Gosford		Job No: 300304375 Sheet: 1 of 1	
Position: See Site Plan Machine Type: Excavator Excavation Dimensions:		Angle from Horizontal: 90° Excavation Method: Test Pit Contractor:	
Date Excavated: 4/5/23 Logged By: ED Checked By:			

Excavation			Sampling & Testing		Material Description							
Method	Resistance	Stability	Water	Sample or Field Test	Depth (m)	Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations	
			Dry	ES 0.10 m PID: 1.2ppm				FILL: Gravelly SAND; Fine to medium grained, brown/dark grey, trace carbonaceous material.			FILL 0.00 m: Trace bricks, tile/ceramic.	
				ES 0.50 m PID: 2.1ppm	0.5				FILL: SAND; Fine to coarse grained, light brown, with gravel, trace clay.			
				ES 1.20 m PID: 4.0ppm	1.0				FILL: Clayey SAND; Fine to coarse grained, brown/red and grey, with gravel.			0.95 m: Hit old sewage pipe.
					1.5				Clayey SAND; Fine to medium grained, well sorted, grey mottled red and orange/brown.			RESIDUAL SOIL
				ES 2.00 m PID: 0.8ppm	2.0			TERMINATED AT 2.00 m Target depth				
					2.5							

METHOD EX Excavator bucket R Ripper HA Hand auger PT Push tube SON Sonic drilling AH Air hammer PS Percussion sampler AS Short spiral auger AD/V Solid flight auger: V-Bit AD/T Solid flight auger: TC-Bit HFA Hollow flight auger WB Washbore drilling RR Rock roller	PENETRATION VE Very Easy (No Resistance) E Easy F Firm H Hard VH Very Hard (Refusal) WATER Water Level on Date shown water inflow water outflow	FIELD TESTS SPT - Standard Penetration Test HP - Hand/Pocket Penetrometer DCP - Dynamic Cone Penetrometer PSP - Perth Sand Penetrometer MC - Moisture Content PBT - Plate Bearing Test IMP - Borehole Impression Test PID - Photoionisation Detector VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)	SAMPLES B - Bulk disturbed sample D - Disturbed sample ES - Environmental sample U - Thin wall tube 'undisturbed' MOISTURE D - Dry M - Moist W - Wet PL - Plastic limit LL - Liquid limit w - Moisture content	SOIL CONSISTENCY VS - Very Soft S - Soft F - Firm St - Stiff VSt - Very Stiff H - Hard RELATIVE DENSITY VL - Very Loose L - Loose MD - Medium Dense D - Dense VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

Stantec Australia PTY LTD

APPENDIX E

Laboratory Certificates

CLIENT DETAILS

Contact Evelyn Dillon
Client STANTEC AUSTRALIA PTY LTD
Address Shop 1, Level 1
16 Burelli St
Wollongong
NSW 2500
Telephone 0467 639 062
Facsimile (Not specified)
Email evelyn.dillon@cardno.com.au
Project **300304375 Racecourse Rd**
Order Number (Not specified)
Samples 38

LABORATORY DETAILS

Manager Huong Crawford
Laboratory SGS Alexandria Environmental
Address Unit 16, 33 Maddox St
Alexandria NSW 2015
Telephone +61 2 8594 0400
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Email au.environmental.sydney@sgs.com
SGS Reference **SE247181 R0**
Date Received 05 May 2023
Date Reported 17 May 2023

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

No respirable fibres detected in all soil samples using trace analysis technique.

Sample #9: Chrysotile and Crocidolite asbestos found in approx 15x10x4mm cement sheet fragment.

Asbestos analysed by Approved Identifiers Ravee Sivasubramaniam and Yusuf Kuthpudin

PFAS subcontracted to SGS Melbourne, Unit 10/585 Blackburn Road Notting Hill VIC 3168, NATA Accreditation Number 2562, Site number 14420.
Report NO. ME334055.

SIGNATORIES

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ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE247181.001 Soil 03 May 2023 HA101_0.1-0.2	SE247181.002 Soil 03 May 2023 HA101_0.5-0.7	SE247181.003 Soil 03 May 2023 HA102 0-0.1	SE247181.004 Soil 03 May 2023 HA103_0.1-0.2

VOC's in Soil Method: AN433 Tested: 10/5/2023

Fumigants

2,2-dichloropropane	mg/kg	0.1	-	-	-	-
1,2-dichloropropane	mg/kg	0.1	-	-	-	-
cis-1,3-dichloropropene	mg/kg	0.1	-	-	-	-
trans-1,3-dichloropropene	mg/kg	0.1	-	-	-	-
1,2-dibromoethane (EDB)	mg/kg	0.1	-	-	-	-

Halogenated Aliphatics

Dichlorodifluoromethane (CFC-12)	mg/kg	1	-	-	-	-
Chloromethane	mg/kg	1	-	-	-	-
Vinyl chloride (Chloroethene)	mg/kg	0.1	-	-	-	-
Bromomethane	mg/kg	1	-	-	-	-
Chloroethane	mg/kg	1	-	-	-	-
Trichlorofluoromethane	mg/kg	1	-	-	-	-
1,1-dichloroethene	mg/kg	0.1	-	-	-	-
Iodomethane	mg/kg	5	-	-	-	-
Dichloromethane (Methylene chloride)	mg/kg	0.5	-	-	-	-
Allyl chloride	mg/kg	0.1	-	-	-	-
trans-1,2-dichloroethene	mg/kg	0.1	-	-	-	-
1,1-dichloroethane	mg/kg	0.1	-	-	-	-
cis-1,2-dichloroethene	mg/kg	0.1	-	-	-	-
Bromochloromethane	mg/kg	0.1	-	-	-	-
1,2-dichloroethane	mg/kg	0.1	-	-	-	-
1,1,1-trichloroethane	mg/kg	0.1	-	-	-	-
1,1-dichloropropene	mg/kg	0.1	-	-	-	-
Carbon tetrachloride	mg/kg	0.1	-	-	-	-
Dibromomethane	mg/kg	0.1	-	-	-	-
Trichloroethene (Trichloroethylene,TCE)	mg/kg	0.1	-	-	-	-
1,1,2-trichloroethane	mg/kg	0.1	-	-	-	-
1,3-dichloropropane	mg/kg	0.1	-	-	-	-
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	-	-	-	-
1,1,1,2-tetrachloroethane	mg/kg	0.1	-	-	-	-
1,1,2,2-tetrachloroethane	mg/kg	0.1	-	-	-	-
1,2,3-trichloropropane	mg/kg	0.1	-	-	-	-
trans-1,4-dichloro-2-butene	mg/kg	1	-	-	-	-
1,2-dibromo-3-chloropropane	mg/kg	0.1	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	-	-	-	-

Halogenated Aromatics

Chlorobenzene	mg/kg	0.1	-	-	-	-
Bromobenzene	mg/kg	0.1	-	-	-	-
2-chlorotoluene	mg/kg	0.1	-	-	-	-
4-chlorotoluene	mg/kg	0.1	-	-	-	-
1,3-dichlorobenzene	mg/kg	0.1	-	-	-	-
1,4-dichlorobenzene	mg/kg	0.1	-	-	-	-
1,2-dichlorobenzene	mg/kg	0.1	-	-	-	-
1,2,4-trichlorobenzene	mg/kg	0.1	-	-	-	-
1,2,3-trichlorobenzene	mg/kg	0.1	-	-	-	-

Monocyclic Aromatic Hydrocarbons

Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Styrene (Vinyl benzene)	mg/kg	0.1	-	-	-	-
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Isopropylbenzene (Cumene)	mg/kg	0.1	-	-	-	-
n-propylbenzene	mg/kg	0.1	-	-	-	-
1,3,5-trimethylbenzene	mg/kg	0.1	-	-	-	-

Parameter	Units	LOR	Sample Number	SE247181.001	SE247181.002	SE247181.003	SE247181.004
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	03 May 2023	03 May 2023	03 May 2023	03 May 2023
			Sample Name	HA101_0.1-0.2	HA101_0.5-0.7	HA102 0-0.1	HA103_0.1-0.2

VOC's in Soil Method: AN433 Tested: 10/5/2023 (continued)

tert-butylbenzene	mg/kg	0.1	-	-	-	-
1,2,4-trimethylbenzene	mg/kg	0.1	-	-	-	-
sec-butylbenzene	mg/kg	0.1	-	-	-	-
p-isopropyltoluene	mg/kg	0.1	-	-	-	-
n-butylbenzene	mg/kg	0.1	-	-	-	-

Nitrogenous Compounds

Acrylonitrile	mg/kg	0.1	-	-	-	-
2-nitropropane	mg/kg	10	-	-	-	-

Oxygenated Compounds

Acetone (2-propanone)	mg/kg	10	-	-	-	-
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	-	-	-	-
Vinyl acetate*	mg/kg	10	-	-	-	-
MIBK (4-methyl-2-pentanone)	mg/kg	1	-	-	-	-
2-hexanone (MBK)	mg/kg	5	-	-	-	-

Polycyclic VOCs

Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1

Sulphonated Compounds

Carbon disulfide	mg/kg	0.5	-	-	-	-

Surrogates

d4-1,2-dichloroethane (Surrogate)	%	-	103	113	119	94
d8-toluene (Surrogate)	%	-	79	94	98	93
Bromofluorobenzene (Surrogate)	%	-	95	122	128	89

Totals

Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	-	-	-	-
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	-	-	-	-
Total BTEX*	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	-	-	-	-
Total VOC*	mg/kg	24	-	-	-	-
Total Xylenes*	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR	Sample Number	SE247181.001	SE247181.002	SE247181.003	SE247181.004
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	03 May 2023	03 May 2023	03 May 2023	03 May 2023
			Sample Name	HA101_0.1-0.2	HA101_0.5-0.7	HA102 0-0.1	HA103_0.1-0.2

VOC's in Soil Method: AN433 Tested: 10/5/2023 (continued)

Trihalomethanes

Chloroform (THM)	mg/kg	0.1	-	-	-	-
Bromodichloromethane (THM)	mg/kg	0.1	-	-	-	-
Dibromochloromethane (THM)	mg/kg	0.1	-	-	-	-
Bromoform (THM)	mg/kg	0.1	-	-	-	-

Volatile Petroleum Hydrocarbons in Soil Method: AN433 Tested: 10/5/2023

TRH C6-C10	mg/kg	25	<25	<25	<25	<25
TRH C6-C9	mg/kg	20	<20	<20	<20	<20

Surrogates

d4-1,2-dichloroethane (Surrogate)	%	-	103	113	119	94
d8-toluene (Surrogate)	%	-	79	94	98	93
Bromofluorobenzene (Surrogate)	%	-	95	122	128	89

VPH F Bands

Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25

TRH (Total Recoverable Hydrocarbons) in Soil Method: AN403 Tested: 10/5/2023

TRH C10-C14	mg/kg	20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210

TRH F Bands

TRH >C10-C16	mg/kg	25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR

Sample Number	SE247181.001	SE247181.002	SE247181.003	SE247181.004
Sample Matrix	Soil	Soil	Soil	Soil
Sample Date	03 May 2023	03 May 2023	03 May 2023	03 May 2023
Sample Name	HA101_0.1-0.2	HA101_0.5-0.7	HA102 0-0.1	HA103_0.1-0.2

PAH (Polynuclear Aromatic Hydrocarbons) in Soil Method: AN420 Tested: 10/5/2023

Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8

Surrogates

d5-nitrobenzene (Surrogate)	%	-	89	92	104	92
2-fluorobiphenyl (Surrogate)	%	-	86	87	97	87
d14-p-terphenyl (Surrogate)	%	-	96	97	106	98

OC Pesticides in Soil Method: AN420 Tested: 10/5/2023

Alpha BHC	mg/kg	0.1	<0.1	-	<0.1	<0.1
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	-	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	-	<0.1	<0.1
Lindane (gamma BHC)	mg/kg	0.1	<0.1	-	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	-	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	-	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	-	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	-	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	-	<0.1	<0.1
Gamma Chlordane	mg/kg	0.1	<0.1	-	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	-	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	-	<0.2	<0.2
o,p'-DDE*	mg/kg	0.1	<0.1	-	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	-	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	-	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	-	<0.2	<0.2
Beta Endosulfan	mg/kg	0.2	<0.2	-	<0.2	<0.2
o,p'-DDD*	mg/kg	0.1	<0.1	-	<0.1	<0.1
p,p'-DDD	mg/kg	0.1	<0.1	-	<0.1	<0.1
Endrin aldehyde	mg/kg	0.1	<0.1	-	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	-	<0.1	<0.1
o,p'-DDT*	mg/kg	0.1	<0.1	-	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	-	<0.1	<0.1
Endrin ketone	mg/kg	0.1	<0.1	-	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	-	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	-	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	-	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	-	<1	<1
Total OC VIC EPA	mg/kg	1	<1	-	<1	<1



ANALYTICAL REPORT

SE247181 R0

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OC Pesticides in Soil Method: AN420 Tested: 10/5/2023 (continued)

Surrogates

Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	91	-	88	91

OP Pesticides in Soil Method: AN420 Tested: 10/5/2023

Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	-	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	-	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	-	<0.2	<0.2
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	-	<0.5	<0.5
Dichlorvos	mg/kg	0.5	<0.5	-	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	-	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	-	<0.2	<0.2
Fenitrothion	mg/kg	0.2	<0.2	-	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	-	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	-	<0.5	<0.5
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	-	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	-	<1.7	<1.7

Surrogates

2-fluorobiphenyl (Surrogate)	%	-	86	-	97	87
d14-p-terphenyl (Surrogate)	%	-	96	-	106	98

PCBs in Soil Method: AN420 Tested: 10/5/2023

Arochlor 1016	mg/kg	0.2	<0.2	-	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	-	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	-	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	-	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	-	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	-	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	-	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	-	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	-	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	-	<1	<1

Surrogates

TCMX (Surrogate)	%	-	90	-	87	90



ANALYTICAL REPORT

SE247181 R0

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			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	03 May 2023	03 May 2023	03 May 2023	03 May 2023
			Sample Name	HA101_0.1-0.2	HA101_0.5-0.7	HA102 0-0.1	HA103_0.1-0.2

Full 8270 SVOC in Soil Method: AN420 Tested: 16/5/2023

PAHs

Acenaphthene	mg/kg	0.1	-	-	-	-
Acenaphthylene	mg/kg	0.1	-	-	-	-
Anthracene	mg/kg	0.1	-	-	-	-
Benzo(a)anthracene	mg/kg	0.1	-	-	-	-
Benzo(b&j)fluoranthene	mg/kg	0.1	-	-	-	-
Benzo(b&j&k)fluoranthene	mg/kg	0.2	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.1	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.1	-	-	-	-
Benzo(a)pyrene	mg/kg	0.1	-	-	-	-
Chrysene	mg/kg	0.1	-	-	-	-
Dibenzo(ah)anthracene	mg/kg	0.1	-	-	-	-
Fluoranthene	mg/kg	0.1	-	-	-	-
Fluorene	mg/kg	0.1	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	-	-	-	-
1-methylnaphthalene	mg/kg	0.1	-	-	-	-
2-methylnaphthalene	mg/kg	0.1	-	-	-	-
Naphthalene	mg/kg	0.1	-	-	-	-
Phenanthrene	mg/kg	0.1	-	-	-	-
Pyrene	mg/kg	0.1	-	-	-	-
Carcinogenic PAHs, BaP TEQ, <LOR=LOR/2*	TEQ (mg/kg)	0.2	-	-	-	-
Carcinogenic PAHs, BaP TEQ, <LOR=LOR*	TEQ (mg/kg)	0.3	-	-	-	-
Carcinogenic PAHs, BaP TEQ, <LOR=0*	TEQ (mg/kg)	0.2	-	-	-	-
2-acetylaminofluorene	mg/kg	0.5	-	-	-	-
7,12-dimethyl-benz(a)anthracene	mg/kg	0.5	-	-	-	-
3-methylcholanthrene	mg/kg	0.5	-	-	-	-

OCs

Aldrin	mg/kg	0.1	-	-	-	-
Alpha-BHC	mg/kg	0.1	-	-	-	-
Beta-BHC	mg/kg	0.5	-	-	-	-
Delta-BHC	mg/kg	0.1	-	-	-	-
Gamma-BHC (Lindane)	mg/kg	0.1	-	-	-	-
p,p-DDD	mg/kg	0.1	-	-	-	-
p,p-DDE	mg/kg	0.1	-	-	-	-
p,p-DDT	mg/kg	0.1	-	-	-	-
Dieldrin	mg/kg	0.2	-	-	-	-
Alpha-endosulfan	mg/kg	0.2	-	-	-	-
Beta-endosulfan	mg/kg	0.2	-	-	-	-
Endosulfan sulphate	mg/kg	0.1	-	-	-	-
Endrin	mg/kg	0.2	-	-	-	-
Heptachlor	mg/kg	0.1	-	-	-	-
Heptachlor epoxide	mg/kg	0.1	-	-	-	-
Isodrin	mg/kg	0.1	-	-	-	-
Methoxychlor	mg/kg	0.1	-	-	-	-
Mirex	mg/kg	0.1	-	-	-	-
Alpha-chlordane	mg/kg	0.1	-	-	-	-
Gamma-chlordane	mg/kg	0.1	-	-	-	-
Endrin ketone	mg/kg	0.1	-	-	-	-
Total (Alpha+Beta+SO4) Endosulfan*	mg/kg	0.2	-	-	-	-

OPs

Azinphos-methyl (Guthion)	mg/kg	0.2	-	-	-	-
Bromophos ethyl	mg/kg	0.2	-	-	-	-
Carbophenothion	mg/kg	0.5	-	-	-	-
Chlorfenvinphos-cis	mg/kg	2	-	-	-	-
Chlorfenvinphos-trans	mg/kg	0.5	-	-	-	-
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	-	-	-	-
Chlorpyrifos-methyl	mg/kg	0.5	-	-	-	-



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR	Sample Number	SE247181.001	SE247181.002	SE247181.003	SE247181.004
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	03 May 2023	03 May 2023	03 May 2023	03 May 2023
			Sample Name	HA101_0.1-0.2	HA101_0.5-0.7	HA102 0-0.1	HA103_0.1-0.2

Full 8270 SVOC in Soil Method: AN420 Tested: 16/5/2023 (continued)

Co-Ral (Coumaphos)	mg/kg	0.5	-	-	-	-
Diazinon (Dimpylate)	mg/kg	0.5	-	-	-	-
Dichlorvos	mg/kg	0.5	-	-	-	-
Demeton-S-methyl	mg/kg	0.5	-	-	-	-
Dimethoate	mg/kg	0.5	-	-	-	-
Disulfoton (Di-syston)	mg/kg	0.5	-	-	-	-
EPN*	mg/kg	0.5	-	-	-	-
Ethion	mg/kg	0.2	-	-	-	-
Ethoprophos (ethoprop or prophos)	mg/kg	0.5	-	-	-	-
Famphur (Famophos)	mg/kg	0.5	-	-	-	-
Fenamiphos (Phenamiphos)	mg/kg	0.5	-	-	-	-
Fenchlorophos (Ronnel)	mg/kg	0.5	-	-	-	-
Fenitrothion	mg/kg	0.2	-	-	-	-
Fenthion	mg/kg	0.5	-	-	-	-
Malathion (Maldison)	mg/kg	0.2	-	-	-	-
Methidathion	mg/kg	0.5	-	-	-	-
Mevinphos-cis/trans	mg/kg	1	-	-	-	-
o,o,o-triethyl phosphorothioate	mg/kg	0.5	-	-	-	-
Parathion ethyl (Parathion)	mg/kg	0.2	-	-	-	-
Parathion methyl	mg/kg	0.5	-	-	-	-
Phorate	mg/kg	0.5	-	-	-	-
Pirimiphos-ethyl	mg/kg	0.5	-	-	-	-
Pirimiphos-methyl	mg/kg	0.5	-	-	-	-
Profenofos	mg/kg	0.5	-	-	-	-
Prothiophos (Tokuthion)*	mg/kg	0.5	-	-	-	-
Sulfotepp	mg/kg	0.5	-	-	-	-
Tetrachlorvinphos (Stirophos)*	mg/kg	0.5	-	-	-	-

PCB UPAC(7) Congeners

PCB Congener C28	mg/kg	0.1	-	-	-	-
PCB Congener C52	mg/kg	0.1	-	-	-	-
PCB Congener C101	mg/kg	0.1	-	-	-	-
PCB Congener C118	mg/kg	0.1	-	-	-	-
PCB Congener C138	mg/kg	0.1	-	-	-	-
PCB Congener C153	mg/kg	0.1	-	-	-	-
PCB Congener C180	mg/kg	0.1	-	-	-	-

SVCH (Cl Benzenes, Hydrocarbons & VOCs)

Hexachlorobenzene (HCB)	mg/kg	0.1	-	-	-	-
1,2-dichlorobenzene	mg/kg	0.5	-	-	-	-
1,3-dichlorobenzene	mg/kg	0.5	-	-	-	-
1,4-dichlorobenzene	mg/kg	0.5	-	-	-	-
Hexachlorobutadiene	mg/kg	0.5	-	-	-	-
Hexachlorocyclopentadiene	mg/kg	1	-	-	-	-
Hexachloroethane	mg/kg	0.5	-	-	-	-
Hexachloropropene	mg/kg	0.5	-	-	-	-
Pentachlorobenzene	mg/kg	0.5	-	-	-	-
Pentachloroethane	mg/kg	0.5	-	-	-	-
1,2,3,5 and 1,2,4,5 -tetrachlorobenzene	mg/kg	1	-	-	-	-
1,2,3,4-tetrachlorobenzene	mg/kg	0.5	-	-	-	-
1/2-Chloronaphthalene	mg/kg	1	-	-	-	-
1,2,4-trichlorobenzene	mg/kg	0.5	-	-	-	-

Phthalates

Bis(2-ethylhexyl)phthalate	mg/kg	5	-	-	-	-
Bis(2-ethylhexyl)adipate	mg/kg	0.5	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.5	-	-	-	-
Di-n-butyl phthalate	mg/kg	0.5	-	-	-	-
Diethyl phthalate	mg/kg	0.5	-	-	-	-



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR	Sample Number	SE247181.001	SE247181.002	SE247181.003	SE247181.004
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	03 May 2023	03 May 2023	03 May 2023	03 May 2023
			Sample Name	HA101_0.1-0.2	HA101_0.5-0.7	HA102 0-0.1	HA103_0.1-0.2

Full 8270 SVOC in Soil Method: AN420 Tested: 16/5/2023 (continued)

Dimethyl phthalate	mg/kg	0.5	-	-	-	-
Di-n-octyl phthalate	mg/kg	0.5	-	-	-	-

Carbamates

Carbofuran	mg/kg	0.5	-	-	-	-
Carbaryl	mg/kg	0.5	-	-	-	-

Herbicides (normal)

Trifluralin	mg/kg	0.5	-	-	-	-

Nitrosamines

N-nitroso-di-n-butylamine (NDBA)	mg/kg	0.5	-	-	-	-
N-nitroso-diethylamine (NDEA)	mg/kg	1	-	-	-	-
N-nitroso-di-n-propylamine (NDPA)	mg/kg	0.5	-	-	-	-
N-nitroso-morpholine (NMOR)	mg/kg	0.5	-	-	-	-
N-nitroso-piperidine (NPIP)	mg/kg	0.5	-	-	-	-
N-nitroso-pyrrolidine (NPYR)	mg/kg	1	-	-	-	-
4-amino biphenyl	mg/kg	1	-	-	-	-

Nitroaromatics and Ketones

Acetophenone	mg/kg	0.5	-	-	-	-
1,3-dinitrobenzene	mg/kg	1	-	-	-	-
2,4-dinitrotoluene	mg/kg	0.5	-	-	-	-
2,6-dinitrotoluene	mg/kg	0.5	-	-	-	-
Isophorone	mg/kg	0.5	-	-	-	-
Nitrobenzene	mg/kg	0.5	-	-	-	-
p-(dimethylamino) azobenzene	mg/kg	1	-	-	-	-
Phenacetin	mg/kg	1	-	-	-	-
Pentachloronitrobenzene (quintozene)	mg/kg	0.5	-	-	-	-

Anilines and Amines

Aniline	mg/kg	3	-	-	-	-
4-chloroaniline	mg/kg	1	-	-	-	-
2-nitroaniline	mg/kg	1	-	-	-	-
3-nitroaniline	mg/kg	1	-	-	-	-
4-nitroaniline	mg/kg	1	-	-	-	-
Diphenylamine	mg/kg	0.5	-	-	-	-
o-toluidine	mg/kg	1	-	-	-	-
5-nitro-o-toluidine	mg/kg	1	-	-	-	-
1-naphthylamine	mg/kg	1	-	-	-	-
2-naphthylamine	mg/kg	1	-	-	-	-

Haloethers

Bis(2-chloroethoxy) methane	mg/kg	0.5	-	-	-	-
Bis(2-chloroethyl) ether	mg/kg	0.5	-	-	-	-
Bis(2-chloroisopropyl) ether	mg/kg	0.5	-	-	-	-
4-chlorophenyl phenyl ether	mg/kg	0.5	-	-	-	-
4-bromophenyl phenyl ether	mg/kg	0.5	-	-	-	-



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR	Sample Number	SE247181.001	SE247181.002	SE247181.003	SE247181.004
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	03 May 2023	03 May 2023	03 May 2023	03 May 2023
			Sample Name	HA101_0.1-0.2	HA101_0.5-0.7	HA102 0-0.1	HA103_0.1-0.2

Full 8270 SVOC in Soil Method: AN420 Tested: 16/5/2023 (continued)

Other SVOCs

Methyl methanesulfonate	mg/kg	1	-	-	-	-
Ethyl methanesulfonate	mg/kg	1	-	-	-	-
Dibenzofuran	mg/kg	0.5	-	-	-	-
Benzyl alcohol	mg/kg	1	-	-	-	-
Safrrole	mg/kg	0.5	-	-	-	-
Isosafrole Isomer 1	mg/kg	1	-	-	-	-
Isosafrole Isomer 2	mg/kg	1	-	-	-	-
1,4-naphthoquinone	mg/kg	0.5	-	-	-	-
Thionazin	mg/kg	1	-	-	-	-

Speciated Routine Phenols

3/4-methyl phenol (m/p-cresol)	mg/kg	1	-	-	-	-
2-methyl phenol (o-cresol)	mg/kg	0.5	-	-	-	-
2,6-dichlorophenol	mg/kg	0.5	-	-	-	-
2,3,4,6-tetrachlorophenol	mg/kg	0.5	-	-	-	-
2,4,5-trichlorophenol	mg/kg	0.5	-	-	-	-
4-chloro-3-methylphenol	mg/kg	2	-	-	-	-
2-chlorophenol	mg/kg	0.5	-	-	-	-
2,4-dichlorophenol	mg/kg	0.5	-	-	-	-
2,4-dimethylphenol	mg/kg	0.5	-	-	-	-
2-nitrophenol	mg/kg	0.5	-	-	-	-
Phenol	mg/kg	0.5	-	-	-	-
2,4,6-trichlorophenol	mg/kg	0.5	-	-	-	-
Pentachlorophenol	mg/kg	0.5	-	-	-	-
4-nitrophenol	mg/kg	1	-	-	-	-

Surrogates

d5-phenol (Surrogate)	%	-	-	-	-	-
d5-nitrobenzene (Surrogate)	%	-	-	-	-	-
2-fluorobiphenyl (Surrogate)	%	-	-	-	-	-
2,4,6-tribromophenol (Surrogate)	%	-	-	-	-	-
d14-p-terphenyl (Surrogate)	%	-	-	-	-	-

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES Method: AN040/AN320 Tested: 10/5/2023

Arsenic, As	mg/kg	1	3	3	5	3
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	6.4	7.6	11	14
Copper, Cu	mg/kg	0.5	3.8	4.2	6.8	11
Nickel, Ni	mg/kg	0.5	1.3	1.2	2.8	18
Lead, Pb	mg/kg	1	43	20	15	16
Zinc, Zn	mg/kg	2	25	54	110	23

Mercury in Soil Method: AN312 Tested: 10/5/2023

Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05

Moisture Content Method: AN002 Tested: 10/5/2023

% Moisture	%w/w	1	15.0	11.6	16.7	8.9



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR	Sample Number	SE247181.001	SE247181.002	SE247181.003	SE247181.004
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	03 May 2023	03 May 2023	03 May 2023	03 May 2023
			Sample Name	HA101_0.1-0.2	HA101_0.5-0.7	HA102 0-0.1	HA103_0.1-0.2

Fibre Identification in soil **Method: AS4964/AN602** **Tested: 16/5/2023**

FibreID

Asbestos Detected	No unit	-	-	-	-	No

SemiQuant

Estimated Fibres*	%w/w	0.01	-	-	-	<0.01

Fibre ID in bulk materials **Method: AN602/AS4964** **Tested: 16/5/2023**

FibreID

Asbestos Detected	No unit	-	-	-	-	-

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples **Method: MA-1523** **Tested: 17/5/2023**

Perfluorobutanoic acid (PFBA)	mg/kg	0.0016	-	-	-	-
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0016	-	-	-	-
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0016	-	-	-	-
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0016	-	-	-	-
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0008	-	-	-	-
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0016	-	-	-	-
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0016	-	-	-	-
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0016	-	-	-	-
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0016	-	-	-	-
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0016	-	-	-	-
Sum PFOS and PFHXS	mg/kg	0.0016	-	-	-	-
Perfluorononane sulfonate (PFNS)	mg/kg	0.0016	-	-	-	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.0016	-	-	-	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.0016	-	-	-	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.0016	-	-	-	-
(13C4-PFBA) Isotopically Labelled Internal Recovery	%	-	-	-	-	-
(13C5-PFPeA) Isotopically Labelled Internal Recovery	%	-	-	-	-	-
(13C5-PFHxA) Isotopically Labelled Internal Recovery	%	-	-	-	-	-
(13C4-PFHpA) Isotopically Labelled Internal Recovery	%	-	-	-	-	-
(13C4_PFOA) Isotopically Labelled Internal Recovery	%	-	-	-	-	-
(13C3-PFBS) Isotopically Labelled Internal Recovery	%	-	-	-	-	-
(13C3-PFHxS) Isotopically Labelled Internal Recovery	%	-	-	-	-	-
(13C8-PFOS) Isotopically Labelled Internal Recovery	%	-	-	-	-	-



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE247181.005 Soil 03 May 2023 HA106_0.1-0.2	SE247181.006 Soil 03 May 2023 HA106 0.3-0.6	SE247181.007 Soil 03 May 2023 HA109_0.1-0.3	SE247181.008 Soil 03 May 2023 HA109_0.5-0.7

VOC's in Soil Method: AN433 Tested: 10/5/2023

Fumigants

2,2-dichloropropane	mg/kg	0.1	-	-	-	-
1,2-dichloropropane	mg/kg	0.1	-	-	-	-
cis-1,3-dichloropropene	mg/kg	0.1	-	-	-	-
trans-1,3-dichloropropene	mg/kg	0.1	-	-	-	-
1,2-dibromoethane (EDB)	mg/kg	0.1	-	-	-	-

Halogenated Aliphatics

Dichlorodifluoromethane (CFC-12)	mg/kg	1	-	-	-	-
Chloromethane	mg/kg	1	-	-	-	-
Vinyl chloride (Chloroethene)	mg/kg	0.1	-	-	-	-
Bromomethane	mg/kg	1	-	-	-	-
Chloroethane	mg/kg	1	-	-	-	-
Trichlorofluoromethane	mg/kg	1	-	-	-	-
1,1-dichloroethene	mg/kg	0.1	-	-	-	-
Iodomethane	mg/kg	5	-	-	-	-
Dichloromethane (Methylene chloride)	mg/kg	0.5	-	-	-	-
Allyl chloride	mg/kg	0.1	-	-	-	-
trans-1,2-dichloroethene	mg/kg	0.1	-	-	-	-
1,1-dichloroethane	mg/kg	0.1	-	-	-	-
cis-1,2-dichloroethene	mg/kg	0.1	-	-	-	-
Bromochloromethane	mg/kg	0.1	-	-	-	-
1,2-dichloroethane	mg/kg	0.1	-	-	-	-
1,1,1-trichloroethane	mg/kg	0.1	-	-	-	-
1,1-dichloropropene	mg/kg	0.1	-	-	-	-
Carbon tetrachloride	mg/kg	0.1	-	-	-	-
Dibromomethane	mg/kg	0.1	-	-	-	-
Trichloroethene (Trichloroethylene,TCE)	mg/kg	0.1	-	-	-	-
1,1,2-trichloroethane	mg/kg	0.1	-	-	-	-
1,3-dichloropropane	mg/kg	0.1	-	-	-	-
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	-	-	-	-
1,1,1,2-tetrachloroethane	mg/kg	0.1	-	-	-	-
1,1,2,2-tetrachloroethane	mg/kg	0.1	-	-	-	-
1,2,3-trichloropropane	mg/kg	0.1	-	-	-	-
trans-1,4-dichloro-2-butene	mg/kg	1	-	-	-	-
1,2-dibromo-3-chloropropane	mg/kg	0.1	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	-	-	-	-

Halogenated Aromatics

Chlorobenzene	mg/kg	0.1	-	-	-	-
Bromobenzene	mg/kg	0.1	-	-	-	-
2-chlorotoluene	mg/kg	0.1	-	-	-	-
4-chlorotoluene	mg/kg	0.1	-	-	-	-
1,3-dichlorobenzene	mg/kg	0.1	-	-	-	-
1,4-dichlorobenzene	mg/kg	0.1	-	-	-	-
1,2-dichlorobenzene	mg/kg	0.1	-	-	-	-
1,2,4-trichlorobenzene	mg/kg	0.1	-	-	-	-
1,2,3-trichlorobenzene	mg/kg	0.1	-	-	-	-

Monocyclic Aromatic Hydrocarbons

Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Styrene (Vinyl benzene)	mg/kg	0.1	-	-	-	-
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Isopropylbenzene (Cumene)	mg/kg	0.1	-	-	-	-
n-propylbenzene	mg/kg	0.1	-	-	-	-
1,3,5-trimethylbenzene	mg/kg	0.1	-	-	-	-

Parameter	Units	LOR	Sample Number	SE247181.005	SE247181.006	SE247181.007	SE247181.008
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	03 May 2023	03 May 2023	03 May 2023	03 May 2023
			Sample Name	HA106_0.1-0.2	HA106_0.3-0.6	HA109_0.1-0.3	HA109_0.5-0.7

VOC's in Soil Method: AN433 Tested: 10/5/2023 (continued)

tert-butylbenzene	mg/kg	0.1	-	-	-	-
1,2,4-trimethylbenzene	mg/kg	0.1	-	-	-	-
sec-butylbenzene	mg/kg	0.1	-	-	-	-
p-isopropyltoluene	mg/kg	0.1	-	-	-	-
n-butylbenzene	mg/kg	0.1	-	-	-	-

Nitrogenous Compounds

Acrylonitrile	mg/kg	0.1	-	-	-	-
2-nitropropane	mg/kg	10	-	-	-	-

Oxygenated Compounds

Acetone (2-propanone)	mg/kg	10	-	-	-	-
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	-	-	-	-
Vinyl acetate*	mg/kg	10	-	-	-	-
MIBK (4-methyl-2-pentanone)	mg/kg	1	-	-	-	-
2-hexanone (MBK)	mg/kg	5	-	-	-	-

Polycyclic VOCs

Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1

Sulphonated Compounds

Carbon disulfide	mg/kg	0.5	-	-	-	-

Surrogates

d4-1,2-dichloroethane (Surrogate)	%	-	88	101	112	125
d8-toluene (Surrogate)	%	-	89	100	91	101
Bromofluorobenzene (Surrogate)	%	-	84	100	119	132

Totals

Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	-	-	-	-
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	-	-	-	-
Total BTEX*	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	-	-	-	-
Total VOC*	mg/kg	24	-	-	-	-
Total Xylenes*	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR	Sample Number	SE247181.005	SE247181.006	SE247181.007	SE247181.008
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	03 May 2023	03 May 2023	03 May 2023	03 May 2023
			Sample Name	HA106_0.1-0.2	HA106 0.3-0.6	HA109_0.1-0.3	HA109_0.5-0.7

VOC's in Soil Method: AN433 Tested: 10/5/2023 (continued)

Trihalomethanes

Chloroform (THM)	mg/kg	0.1	-	-	-	-
Bromodichloromethane (THM)	mg/kg	0.1	-	-	-	-
Dibromochloromethane (THM)	mg/kg	0.1	-	-	-	-
Bromoform (THM)	mg/kg	0.1	-	-	-	-

Volatile Petroleum Hydrocarbons in Soil Method: AN433 Tested: 10/5/2023

TRH C6-C10	mg/kg	25	<25	<25	<25	<25
TRH C6-C9	mg/kg	20	<20	<20	<20	<20

Surrogates

d4-1,2-dichloroethane (Surrogate)	%	-	88	101	112	125
d8-toluene (Surrogate)	%	-	89	100	91	101
Bromofluorobenzene (Surrogate)	%	-	84	100	119	132

VPH F Bands

Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25

TRH (Total Recoverable Hydrocarbons) in Soil Method: AN403 Tested: 10/5/2023

TRH C10-C14	mg/kg	20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210

TRH F Bands

TRH >C10-C16	mg/kg	25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR	Sample Number	SE247181.005	SE247181.006	SE247181.007	SE247181.008
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	03 May 2023	03 May 2023	03 May 2023	03 May 2023
			Sample Name	HA106_0.1-0.2	HA106 0.3-0.6	HA109_0.1-0.3	HA109_0.5-0.7

PAH (Polynuclear Aromatic Hydrocarbons) in Soil Method: AN420 Tested: 10/5/2023

Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8

Surrogates

d5-nitrobenzene (Surrogate)	%	-	93	92	90	91
2-fluorobiphenyl (Surrogate)	%	-	88	87	88	90
d14-p-terphenyl (Surrogate)	%	-	99	97	94	97

OC Pesticides in Soil Method: AN420 Tested: 10/5/2023

Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Lindane (gamma BHC)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDE*	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD*	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Endrin aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT*	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Endrin ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1
Total OC VIC EPA	mg/kg	1	<1	<1	<1	<1



ANALYTICAL REPORT

SE247181 R0

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OC Pesticides in Soil Method: AN420 Tested: 10/5/2023 (continued)

Surrogates

Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	90	88	91	90

OP Pesticides in Soil Method: AN420 Tested: 10/5/2023

Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7

Surrogates

2-fluorobiphenyl (Surrogate)	%	-	88	87	88	90
d14-p-terphenyl (Surrogate)	%	-	99	97	94	97

PCBs in Soil Method: AN420 Tested: 10/5/2023

Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1

Surrogates

TCMX (Surrogate)	%	-	89	81	84	83



ANALYTICAL REPORT

SE247181 R0

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			Sample Date	03 May 2023	03 May 2023	03 May 2023	03 May 2023
			Sample Name	HA106_0.1-0.2	HA106 0.3-0.6	HA109_0.1-0.3	HA109_0.5-0.7

Full 8270 SVOC in Soil Method: AN420 Tested: 16/5/2023

PAHs

Acenaphthene	mg/kg	0.1	-	-	-	-
Acenaphthylene	mg/kg	0.1	-	-	-	-
Anthracene	mg/kg	0.1	-	-	-	-
Benzo(a)anthracene	mg/kg	0.1	-	-	-	-
Benzo(b&j)fluoranthene	mg/kg	0.1	-	-	-	-
Benzo(b&j&k)fluoranthene	mg/kg	0.2	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.1	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.1	-	-	-	-
Benzo(a)pyrene	mg/kg	0.1	-	-	-	-
Chrysene	mg/kg	0.1	-	-	-	-
Dibenzo(ah)anthracene	mg/kg	0.1	-	-	-	-
Fluoranthene	mg/kg	0.1	-	-	-	-
Fluorene	mg/kg	0.1	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	-	-	-	-
1-methylnaphthalene	mg/kg	0.1	-	-	-	-
2-methylnaphthalene	mg/kg	0.1	-	-	-	-
Naphthalene	mg/kg	0.1	-	-	-	-
Phenanthrene	mg/kg	0.1	-	-	-	-
Pyrene	mg/kg	0.1	-	-	-	-
Carcinogenic PAHs, BaP TEQ, <LOR=LOR/2*	TEQ (mg/kg)	0.2	-	-	-	-
Carcinogenic PAHs, BaP TEQ, <LOR=LOR*	TEQ (mg/kg)	0.3	-	-	-	-
Carcinogenic PAHs, BaP TEQ, <LOR=0*	TEQ (mg/kg)	0.2	-	-	-	-
2-acetylaminofluorene	mg/kg	0.5	-	-	-	-
7,12-dimethyl-benz(a)anthracene	mg/kg	0.5	-	-	-	-
3-methylcholanthrene	mg/kg	0.5	-	-	-	-

OCs

Aldrin	mg/kg	0.1	-	-	-	-
Alpha-BHC	mg/kg	0.1	-	-	-	-
Beta-BHC	mg/kg	0.5	-	-	-	-
Delta-BHC	mg/kg	0.1	-	-	-	-
Gamma-BHC (Lindane)	mg/kg	0.1	-	-	-	-
p,p-DDD	mg/kg	0.1	-	-	-	-
p,p-DDE	mg/kg	0.1	-	-	-	-
p,p-DDT	mg/kg	0.1	-	-	-	-
Dieldrin	mg/kg	0.2	-	-	-	-
Alpha-endosulfan	mg/kg	0.2	-	-	-	-
Beta-endosulfan	mg/kg	0.2	-	-	-	-
Endosulfan sulphate	mg/kg	0.1	-	-	-	-
Endrin	mg/kg	0.2	-	-	-	-
Heptachlor	mg/kg	0.1	-	-	-	-
Heptachlor epoxide	mg/kg	0.1	-	-	-	-
Isodrin	mg/kg	0.1	-	-	-	-
Methoxychlor	mg/kg	0.1	-	-	-	-
Mirex	mg/kg	0.1	-	-	-	-
Alpha-chlordane	mg/kg	0.1	-	-	-	-
Gamma-chlordane	mg/kg	0.1	-	-	-	-
Endrin ketone	mg/kg	0.1	-	-	-	-
Total (Alpha+Beta+SO4) Endosulfan*	mg/kg	0.2	-	-	-	-

OPs

Azinphos-methyl (Guthion)	mg/kg	0.2	-	-	-	-
Bromophos ethyl	mg/kg	0.2	-	-	-	-
Carbophenothion	mg/kg	0.5	-	-	-	-
Chlorfenvinphos-cis	mg/kg	2	-	-	-	-
Chlorfenvinphos-trans	mg/kg	0.5	-	-	-	-
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	-	-	-	-
Chlorpyrifos-methyl	mg/kg	0.5	-	-	-	-



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR	Sample Number	SE247181.005	SE247181.006	SE247181.007	SE247181.008
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	03 May 2023	03 May 2023	03 May 2023	03 May 2023
			Sample Name	HA106_0.1-0.2	HA106 0.3-0.6	HA109_0.1-0.3	HA109_0.5-0.7

Full 8270 SVOC in Soil Method: AN420 Tested: 16/5/2023 (continued)

Co-Ral (Coumaphos)	mg/kg	0.5	-	-	-	-
Diazinon (Dimpylate)	mg/kg	0.5	-	-	-	-
Dichlorvos	mg/kg	0.5	-	-	-	-
Demeton-S-methyl	mg/kg	0.5	-	-	-	-
Dimethoate	mg/kg	0.5	-	-	-	-
Disulfoton (Di-syston)	mg/kg	0.5	-	-	-	-
EPN*	mg/kg	0.5	-	-	-	-
Ethion	mg/kg	0.2	-	-	-	-
Ethoprophos (ethoprop or prophos)	mg/kg	0.5	-	-	-	-
Famphur (Famophos)	mg/kg	0.5	-	-	-	-
Fenamiphos (Phenamiphos)	mg/kg	0.5	-	-	-	-
Fenchlorophos (Ronnel)	mg/kg	0.5	-	-	-	-
Fenitrothion	mg/kg	0.2	-	-	-	-
Fenthion	mg/kg	0.5	-	-	-	-
Malathion (Maldison)	mg/kg	0.2	-	-	-	-
Methidathion	mg/kg	0.5	-	-	-	-
Mevinphos-cis/trans	mg/kg	1	-	-	-	-
o,o,o-triethyl phosphorothioate	mg/kg	0.5	-	-	-	-
Parathion ethyl (Parathion)	mg/kg	0.2	-	-	-	-
Parathion methyl	mg/kg	0.5	-	-	-	-
Phorate	mg/kg	0.5	-	-	-	-
Pirimiphos-ethyl	mg/kg	0.5	-	-	-	-
Pirimiphos-methyl	mg/kg	0.5	-	-	-	-
Profenofos	mg/kg	0.5	-	-	-	-
Prothiophos (Tokuthion)*	mg/kg	0.5	-	-	-	-
Sulfotepp	mg/kg	0.5	-	-	-	-
Tetrachlorvinphos (Stirophos)*	mg/kg	0.5	-	-	-	-

PCB UPAC(7) Congeners

PCB Congener C28	mg/kg	0.1	-	-	-	-
PCB Congener C52	mg/kg	0.1	-	-	-	-
PCB Congener C101	mg/kg	0.1	-	-	-	-
PCB Congener C118	mg/kg	0.1	-	-	-	-
PCB Congener C138	mg/kg	0.1	-	-	-	-
PCB Congener C153	mg/kg	0.1	-	-	-	-
PCB Congener C180	mg/kg	0.1	-	-	-	-

SVCH (Cl Benzenes, Hydrocarbons & VOCs)

Hexachlorobenzene (HCB)	mg/kg	0.1	-	-	-	-
1,2-dichlorobenzene	mg/kg	0.5	-	-	-	-
1,3-dichlorobenzene	mg/kg	0.5	-	-	-	-
1,4-dichlorobenzene	mg/kg	0.5	-	-	-	-
Hexachlorobutadiene	mg/kg	0.5	-	-	-	-
Hexachlorocyclopentadiene	mg/kg	1	-	-	-	-
Hexachloroethane	mg/kg	0.5	-	-	-	-
Hexachloropropene	mg/kg	0.5	-	-	-	-
Pentachlorobenzene	mg/kg	0.5	-	-	-	-
Pentachloroethane	mg/kg	0.5	-	-	-	-
1,2,3,5 and 1,2,4,5 -tetrachlorobenzene	mg/kg	1	-	-	-	-
1,2,3,4-tetrachlorobenzene	mg/kg	0.5	-	-	-	-
1/2-Chloronaphthalene	mg/kg	1	-	-	-	-
1,2,4-trichlorobenzene	mg/kg	0.5	-	-	-	-

Phthalates

Bis(2-ethylhexyl)phthalate	mg/kg	5	-	-	-	-
Bis(2-ethylhexyl)adipate	mg/kg	0.5	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.5	-	-	-	-
Di-n-butyl phthalate	mg/kg	0.5	-	-	-	-
Diethyl phthalate	mg/kg	0.5	-	-	-	-



ANALYTICAL REPORT

SE247181 R0

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Full 8270 SVOC in Soil Method: AN420 Tested: 16/5/2023 (continued)

Dimethyl phthalate	mg/kg	0.5	-	-	-	-
Di-n-octyl phthalate	mg/kg	0.5	-	-	-	-

Carbamates

Carbofuran	mg/kg	0.5	-	-	-	-
Carbaryl	mg/kg	0.5	-	-	-	-

Herbicides (normal)

Trifluralin	mg/kg	0.5	-	-	-	-

Nitrosamines

N-nitroso-di-n-butylamine (NDBA)	mg/kg	0.5	-	-	-	-
N-nitroso-diethylamine (NDEA)	mg/kg	1	-	-	-	-
N-nitroso-di-n-propylamine (NDPA)	mg/kg	0.5	-	-	-	-
N-nitroso-morpholine (NMOR)	mg/kg	0.5	-	-	-	-
N-nitroso-piperidine (NPIP)	mg/kg	0.5	-	-	-	-
N-nitroso-pyrrolidine (NPYR)	mg/kg	1	-	-	-	-
4-amino biphenyl	mg/kg	1	-	-	-	-

Nitroaromatics and Ketones

Acetophenone	mg/kg	0.5	-	-	-	-
1,3-dinitrobenzene	mg/kg	1	-	-	-	-
2,4-dinitrotoluene	mg/kg	0.5	-	-	-	-
2,6-dinitrotoluene	mg/kg	0.5	-	-	-	-
Isophorone	mg/kg	0.5	-	-	-	-
Nitrobenzene	mg/kg	0.5	-	-	-	-
p-(dimethylamino) azobenzene	mg/kg	1	-	-	-	-
Phenacetin	mg/kg	1	-	-	-	-
Pentachloronitrobenzene (quintozene)	mg/kg	0.5	-	-	-	-

Anilines and Amines

Aniline	mg/kg	3	-	-	-	-
4-chloroaniline	mg/kg	1	-	-	-	-
2-nitroaniline	mg/kg	1	-	-	-	-
3-nitroaniline	mg/kg	1	-	-	-	-
4-nitroaniline	mg/kg	1	-	-	-	-
Diphenylamine	mg/kg	0.5	-	-	-	-
o-toluidine	mg/kg	1	-	-	-	-
5-nitro-o-toluidine	mg/kg	1	-	-	-	-
1-naphthylamine	mg/kg	1	-	-	-	-
2-naphthylamine	mg/kg	1	-	-	-	-

Haloethers

Bis(2-chloroethoxy) methane	mg/kg	0.5	-	-	-	-
Bis(2-chloroethyl) ether	mg/kg	0.5	-	-	-	-
Bis(2-chloroisopropyl) ether	mg/kg	0.5	-	-	-	-
4-chlorophenyl phenyl ether	mg/kg	0.5	-	-	-	-
4-bromophenyl phenyl ether	mg/kg	0.5	-	-	-	-



ANALYTICAL REPORT

SE247181 R0

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Full 8270 SVOC in Soil Method: AN420 Tested: 16/5/2023 (continued)

Other SVOCs

Methyl methanesulfonate	mg/kg	1	-	-	-	-
Ethyl methanesulfonate	mg/kg	1	-	-	-	-
Dibenzofuran	mg/kg	0.5	-	-	-	-
Benzyl alcohol	mg/kg	1	-	-	-	-
Safrole	mg/kg	0.5	-	-	-	-
Isosafrole Isomer 1	mg/kg	1	-	-	-	-
Isosafrole Isomer 2	mg/kg	1	-	-	-	-
1,4-naphthoquinone	mg/kg	0.5	-	-	-	-
Thionazin	mg/kg	1	-	-	-	-

Speciated Routine Phenols

3/4-methyl phenol (m/p-cresol)	mg/kg	1	-	-	-	-
2-methyl phenol (o-cresol)	mg/kg	0.5	-	-	-	-
2,6-dichlorophenol	mg/kg	0.5	-	-	-	-
2,3,4,6-tetrachlorophenol	mg/kg	0.5	-	-	-	-
2,4,5-trichlorophenol	mg/kg	0.5	-	-	-	-
4-chloro-3-methylphenol	mg/kg	2	-	-	-	-
2-chlorophenol	mg/kg	0.5	-	-	-	-
2,4-dichlorophenol	mg/kg	0.5	-	-	-	-
2,4-dimethylphenol	mg/kg	0.5	-	-	-	-
2-nitrophenol	mg/kg	0.5	-	-	-	-
Phenol	mg/kg	0.5	-	-	-	-
2,4,6-trichlorophenol	mg/kg	0.5	-	-	-	-
Pentachlorophenol	mg/kg	0.5	-	-	-	-
4-nitrophenol	mg/kg	1	-	-	-	-

Surrogates

d5-phenol (Surrogate)	%	-	-	-	-	-
d5-nitrobenzene (Surrogate)	%	-	-	-	-	-
2-fluorobiphenyl (Surrogate)	%	-	-	-	-	-
2,4,6-tribromophenol (Surrogate)	%	-	-	-	-	-
d14-p-terphenyl (Surrogate)	%	-	-	-	-	-

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES Method: AN040/AN320 Tested: 10/5/2023

Arsenic, As	mg/kg	1	3	3	2	3
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	9.2	6.3	6.2	6.4
Copper, Cu	mg/kg	0.5	7.5	5.2	6.2	10
Nickel, Ni	mg/kg	0.5	5.8	1.4	2.0	1.4
Lead, Pb	mg/kg	1	12	18	14	22
Zinc, Zn	mg/kg	2	29	22	19	25

Mercury in Soil Method: AN312 Tested: 10/5/2023

Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05

Moisture Content Method: AN002 Tested: 10/5/2023

% Moisture	%w/w	1	12.7	8.8	9.9	11.3



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE247181.005 Soil 03 May 2023 HA106_0.1-0.2	SE247181.006 Soil 03 May 2023 HA106 0.3-0.6	SE247181.007 Soil 03 May 2023 HA109_0.1-0.3	SE247181.008 Soil 03 May 2023 HA109_0.5-0.7

Fibre Identification in soil Method: AS4964/AN602 Tested: 15/5/2023

FibreID

Asbestos Detected	No unit	-	No	No	No	No

SemiQuant

Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01

Fibre ID in bulk materials Method: AN602/AS4964 Tested: 16/5/2023

FibreID

Asbestos Detected	No unit	-	-	-	-	-

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples Method: MA-1523 Tested: 17/5/2023

Perfluorobutanoic acid (PFBA)	mg/kg	0.0016	-	-	-	-
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0016	-	-	-	-
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0016	-	-	-	-
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0016	-	-	-	-
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0008	-	-	-	-
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0016	-	-	-	-
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0016	-	-	-	-
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0016	-	-	-	-
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0016	-	-	-	-
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0016	-	-	-	-
Sum PFOS and PFHXS	mg/kg	0.0016	-	-	-	-
Perfluorononane sulfonate (PFNS)	mg/kg	0.0016	-	-	-	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.0016	-	-	-	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.0016	-	-	-	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.0016	-	-	-	-
(13C4-PFBA) Isotopically Labelled Internal Recovery	%	-	-	-	-	-
(13C5-PFPeA) Isotopically Labelled Internal Recovery	%	-	-	-	-	-
(13C5-PFHxA) Isotopically Labelled Internal Recovery	%	-	-	-	-	-
(13C4-PFHpA) Isotopically Labelled Internal Recovery	%	-	-	-	-	-
(13C4_PFOA) Isotopically Labelled Internal Recovery	%	-	-	-	-	-
(13C3-PFBS) Isotopically Labelled Internal Recovery	%	-	-	-	-	-
(13C3-PFHxS) Isotopically Labelled Internal Recovery	%	-	-	-	-	-
(13C8-PFOS) Isotopically Labelled Internal Recovery	%	-	-	-	-	-



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE247181.009 Soil 04 May 2023 TP106_0.5	SE247181.010 Soil 04 May 2023 TP106_2	SE247181.011 Soil 04 May 2023 QA200	SE247181.012 Soil 04 May 2023 TP107_0.1

VOC's in Soil Method: AN433 Tested: 10/5/2023

Fumigants

2,2-dichloropropane	mg/kg	0.1	<0.1	-	-	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	-	-	<0.1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	-	-	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	-	-	<0.1
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	-	-	<0.1

Halogenated Aliphatics

Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	-	-	<1
Chloromethane	mg/kg	1	<1	-	-	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	-	-	<0.1
Bromomethane	mg/kg	1	<1	-	-	<1
Chloroethane	mg/kg	1	<1	-	-	<1
Trichlorofluoromethane	mg/kg	1	<1	-	-	<1
1,1-dichloroethene	mg/kg	0.1	<0.1	-	-	<0.1
Iodomethane	mg/kg	5	<5	-	-	<5
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	-	-	<0.5
Allyl chloride	mg/kg	0.1	<0.1	-	-	<0.1
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	-	-	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	-	-	<0.1
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	-	-	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	-	-	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	-	-	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	-	-	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	-	-	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	-	-	<0.1
Dibromomethane	mg/kg	0.1	<0.1	-	-	<0.1
Trichloroethene (Trichloroethylene,TCE)	mg/kg	0.1	<0.1	-	-	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	-	-	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	-	-	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	-	-	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	-	-	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	-	-	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	-	-	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	-	-	<1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	-	-	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	-	-	<0.1

Halogenated Aromatics

Chlorobenzene	mg/kg	0.1	<0.1	-	-	<0.1
Bromobenzene	mg/kg	0.1	<0.1	-	-	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	-	-	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	-	-	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	-	-	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	-	-	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	-	-	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	-	-	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	-	-	<0.1

Monocyclic Aromatic Hydrocarbons

Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	-	-	<0.1
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	-	-	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	-	-	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	-	-	<0.1



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR	Sample Number	SE247181.009	SE247181.010	SE247181.011	SE247181.012
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	04 May 2023	04 May 2023	04 May 2023	04 May 2023
			Sample Name	TP106_0.5	TP106_2	QA200	TP107_0.1

VOC's in Soil Method: AN433 Tested: 10/5/2023 (continued)

tert-butylbenzene	mg/kg	0.1	<0.1	-	-	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	-	-	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	-	-	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	-	-	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	-	-	<0.1

Nitrogenous Compounds

Acrylonitrile	mg/kg	0.1	<0.1	-	-	<0.1
2-nitropropane	mg/kg	10	<10	-	-	<10

Oxygenated Compounds

Acetone (2-propanone)	mg/kg	10	<10	-	-	<10
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	-	-	<0.1
Vinyl acetate*	mg/kg	10	<10	-	-	<10
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	-	-	<1
2-hexanone (MBK)	mg/kg	5	<5	-	-	<5

Polycyclic VOCs

Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1

Sulphonated Compounds

Carbon disulfide	mg/kg	0.5	<0.5	-	-	<0.5

Surrogates

d4-1,2-dichloroethane (Surrogate)	%	-	82	122	125	83
d8-toluene (Surrogate)	%	-	73	96	96	88
Bromofluorobenzene (Surrogate)	%	-	87	127	126	95

Totals

Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	-	-	<1.8
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	-	-	<1.8
Total BTEX*	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	-	-	<3.0
Total VOC*	mg/kg	24	<24	-	-	<24
Total Xylenes*	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR

Sample Number	SE247181.009	SE247181.010	SE247181.011	SE247181.012
Sample Matrix	Soil	Soil	Soil	Soil
Sample Date	04 May 2023	04 May 2023	04 May 2023	04 May 2023
Sample Name	TP106_0.5	TP106_2	QA200	TP107_0.1

VOC's in Soil Method: AN433 Tested: 10/5/2023 (continued)

Trihalomethanes

Chloroform (THM)	mg/kg	0.1	<0.1	-	-	<0.1
Bromodichloromethane (THM)	mg/kg	0.1	<0.1	-	-	<0.1
Dibromochloromethane (THM)	mg/kg	0.1	<0.1	-	-	<0.1
Bromoform (THM)	mg/kg	0.1	<0.1	-	-	<0.1

Volatile Petroleum Hydrocarbons in Soil Method: AN433 Tested: 10/5/2023

TRH C6-C10	mg/kg	25	<25	<25	<25	<25
TRH C6-C9	mg/kg	20	<20	<20	<20	<20

Surrogates

d4-1,2-dichloroethane (Surrogate)	%	-	82	122	125	83
d8-toluene (Surrogate)	%	-	73	96	96	88
Bromofluorobenzene (Surrogate)	%	-	87	127	126	95

VPH F Bands

Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25

TRH (Total Recoverable Hydrocarbons) in Soil Method: AN403 Tested: 10/5/2023

TRH C10-C14	mg/kg	20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	110	<45	<45	86
TRH C29-C36	mg/kg	45	<45	<45	<45	130
TRH C37-C40	mg/kg	100	<100	<100	<100	<100
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	210
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210

TRH F Bands

TRH >C10-C16	mg/kg	25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	140	<90	<90	180
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR	Sample Number	SE247181.009	SE247181.010	SE247181.011	SE247181.012
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	04 May 2023	04 May 2023	04 May 2023	04 May 2023
			Sample Name	TP106_0.5	TP106_2	QA200	TP107_0.1

PAH (Polynuclear Aromatic Hydrocarbons) in Soil Method: AN420 Tested: 10/5/2023

Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	0.2	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	0.2	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8

Surrogates

d5-nitrobenzene (Surrogate)	%	-	92	91	90	93
2-fluorobiphenyl (Surrogate)	%	-	89	88	89	91
d14-p-terphenyl (Surrogate)	%	-	96	96	96	99

OC Pesticides in Soil Method: AN420 Tested: 10/5/2023

Alpha BHC	mg/kg	0.1	-	-	-	<0.1
Hexachlorobenzene (HCB)	mg/kg	0.1	-	-	-	<0.1
Beta BHC	mg/kg	0.1	-	-	-	<0.1
Lindane (gamma BHC)	mg/kg	0.1	-	-	-	<0.1
Delta BHC	mg/kg	0.1	-	-	-	<0.1
Heptachlor	mg/kg	0.1	-	-	-	<0.1
Aldrin	mg/kg	0.1	-	-	-	<0.1
Isodrin	mg/kg	0.1	-	-	-	<0.1
Heptachlor epoxide	mg/kg	0.1	-	-	-	<0.1
Gamma Chlordane	mg/kg	0.1	-	-	-	<0.1
Alpha Chlordane	mg/kg	0.1	-	-	-	<0.1
Alpha Endosulfan	mg/kg	0.2	-	-	-	<0.2
o,p'-DDE*	mg/kg	0.1	-	-	-	<0.1
p,p'-DDE	mg/kg	0.1	-	-	-	<0.1
Dieldrin	mg/kg	0.2	-	-	-	<0.2
Endrin	mg/kg	0.2	-	-	-	<0.2
Beta Endosulfan	mg/kg	0.2	-	-	-	<0.2
o,p'-DDD*	mg/kg	0.1	-	-	-	<0.1
p,p'-DDD	mg/kg	0.1	-	-	-	<0.1
Endrin aldehyde	mg/kg	0.1	-	-	-	<0.1
Endosulfan sulphate	mg/kg	0.1	-	-	-	<0.1
o,p'-DDT*	mg/kg	0.1	-	-	-	<0.1
p,p'-DDT	mg/kg	0.1	-	-	-	<0.1
Endrin ketone	mg/kg	0.1	-	-	-	<0.1
Methoxychlor	mg/kg	0.1	-	-	-	<0.1
Mirex	mg/kg	0.1	-	-	-	<0.1
trans-Nonachlor	mg/kg	0.1	-	-	-	<0.1
Total CLP OC Pesticides	mg/kg	1	-	-	-	<1
Total OC VIC EPA	mg/kg	1	-	-	-	<1



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR	Sample Number	SE247181.009	SE247181.010	SE247181.011	SE247181.012
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	04 May 2023	04 May 2023	04 May 2023	04 May 2023
			Sample Name	TP106_0.5	TP106_2	QA200	TP107_0.1

OC Pesticides in Soil Method: AN420 Tested: 10/5/2023 (continued)

Surrogates

Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	-	-	-	93

OP Pesticides in Soil Method: AN420 Tested: 10/5/2023

Azinphos-methyl (Guthion)	mg/kg	0.2	-	-	-	<0.2
Bromophos Ethyl	mg/kg	0.2	-	-	-	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	-	-	-	<0.2
Diazinon (Dimpylate)	mg/kg	0.5	-	-	-	<0.5
Dichlorvos	mg/kg	0.5	-	-	-	<0.5
Dimethoate	mg/kg	0.5	-	-	-	<0.5
Ethion	mg/kg	0.2	-	-	-	<0.2
Fenitrothion	mg/kg	0.2	-	-	-	<0.2
Malathion	mg/kg	0.2	-	-	-	<0.2
Methidathion	mg/kg	0.5	-	-	-	<0.5
Parathion-ethyl (Parathion)	mg/kg	0.2	-	-	-	<0.2
Total OP Pesticides*	mg/kg	1.7	-	-	-	<1.7

Surrogates

2-fluorobiphenyl (Surrogate)	%	-	-	-	-	91
d14-p-terphenyl (Surrogate)	%	-	-	-	-	99

PCBs in Soil Method: AN420 Tested: 10/5/2023

Arochlor 1016	mg/kg	0.2	-	-	-	<0.2
Arochlor 1221	mg/kg	0.2	-	-	-	<0.2
Arochlor 1232	mg/kg	0.2	-	-	-	<0.2
Arochlor 1242	mg/kg	0.2	-	-	-	<0.2
Arochlor 1248	mg/kg	0.2	-	-	-	<0.2
Arochlor 1254	mg/kg	0.2	-	-	-	<0.2
Arochlor 1260	mg/kg	0.2	-	-	-	<0.2
Arochlor 1262	mg/kg	0.2	-	-	-	<0.2
Arochlor 1268	mg/kg	0.2	-	-	-	<0.2
Total PCBs (Arochlors)	mg/kg	1	-	-	-	<1

Surrogates

TCMX (Surrogate)	%	-	-	-	-	86



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR	Sample Number	SE247181.009	SE247181.010	SE247181.011	SE247181.012
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	04 May 2023	04 May 2023	04 May 2023	04 May 2023
			Sample Name	TP106_0.5	TP106_2	QA200	TP107_0.1

Full 8270 SVOC in Soil Method: AN420 Tested: 10/5/2023

PAHs

Acenaphthene	mg/kg	0.1	<0.1	-	-	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	-	-	<0.1
Anthracene	mg/kg	0.1	<0.1	-	-	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	-	-	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	0.1	-	-	<0.1
Benzo(b&j&k)fluoranthene	mg/kg	0.2	<0.2	-	-	<0.2
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	-	-	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	-	-	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	-	-	<0.1
Chrysene	mg/kg	0.1	0.2	-	-	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	-	-	<0.1
Fluoranthene	mg/kg	0.1	0.2	-	-	0.1
Fluorene	mg/kg	0.1	<0.1	-	-	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	-	-	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	-	-	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	-	-	<0.1
Naphthalene	mg/kg	0.1	<0.1	-	-	<0.1
Phenanthrene	mg/kg	0.1	0.3	-	-	<0.1
Pyrene	mg/kg	0.1	0.2	-	-	<0.1
Carcinogenic PAHs, BaP TEQ, <LOR=LOR/2*	TEQ (mg/kg)	0.2	<0.2	-	-	<0.2
Carcinogenic PAHs, BaP TEQ, <LOR=LOR*	TEQ (mg/kg)	0.3	<0.3	-	-	<0.3
Carcinogenic PAHs, BaP TEQ, <LOR=0*	TEQ (mg/kg)	0.2	<0.2	-	-	<0.2
2-acetylaminofluorene	mg/kg	0.5	<0.5	-	-	<0.5
7,12-dimethyl-benz(a)anthracene	mg/kg	0.5	<0.5	-	-	<0.5
3-methylcholanthrene	mg/kg	0.5	<0.5	-	-	<0.5

OCs

Aldrin	mg/kg	0.1	<0.1	-	-	<0.1
Alpha-BHC	mg/kg	0.1	<0.1	-	-	<0.1
Beta-BHC	mg/kg	0.5	<0.5	-	-	<0.5
Delta-BHC	mg/kg	0.1	<0.1	-	-	<0.1
Gamma-BHC (Lindane)	mg/kg	0.1	<0.1	-	-	<0.1
p,p-DDD	mg/kg	0.1	<0.1	-	-	<0.1
p,p-DDE	mg/kg	0.1	<0.1	-	-	<0.1
p,p-DDT	mg/kg	0.1	<0.1	-	-	<0.1
Dieldrin	mg/kg	0.2	<0.2	-	-	<0.2
Alpha-endosulfan	mg/kg	0.2	<0.2	-	-	<0.2
Beta-endosulfan	mg/kg	0.2	<0.2	-	-	<0.2
Endosulfan sulphate	mg/kg	0.1	<0.1	-	-	<0.1
Endrin	mg/kg	0.2	<0.2	-	-	<0.2
Heptachlor	mg/kg	0.1	<0.1	-	-	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	-	-	<0.1
Isodrin	mg/kg	0.1	<0.1	-	-	<0.1
Methoxychlor	mg/kg	0.1	<0.1	-	-	<0.1
Mirex	mg/kg	0.1	<0.1	-	-	<0.1
Alpha-chlordane	mg/kg	0.1	<0.1	-	-	<0.1
Gamma-chlordane	mg/kg	0.1	<0.1	-	-	<0.1
Endrin ketone	mg/kg	0.1	<0.1	-	-	<0.1
Total (Alpha+Beta+SO4) Endosulfan*	mg/kg	0.2	<0.2	-	-	<0.2

OPs

Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	-	-	<0.2
Bromophos ethyl	mg/kg	0.2	<0.2	-	-	<0.2
Carbophenothion	mg/kg	0.5	<0.5	-	-	<0.5
Chlorfenvinphos-cis	mg/kg	2	<2	-	-	<2
Chlorfenvinphos-trans	mg/kg	0.5	<0.5	-	-	<0.5
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	-	-	<0.2
Chlorpyrifos-methyl	mg/kg	0.5	<0.5	-	-	<0.5



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR

Sample Number	SE247181.009	SE247181.010	SE247181.011	SE247181.012
Sample Matrix	Soil	Soil	Soil	Soil
Sample Date	04 May 2023	04 May 2023	04 May 2023	04 May 2023
Sample Name	TP106_0.5	TP106_2	QA200	TP107_0.1

Full 8270 SVOC in Soil Method: AN420 Tested: 10/5/2023 (continued)

Co-Ral (Coumaphos)	mg/kg	0.5	<0.5	-	-	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	-	-	<0.5
Dichlorvos	mg/kg	0.5	<0.5	-	-	<0.5
Demeton-S-methyl	mg/kg	0.5	<0.5	-	-	<0.5
Dimethoate	mg/kg	0.5	<0.5	-	-	<0.5
Disulfoton (Di-syston)	mg/kg	0.5	<0.5	-	-	<0.5
EPN*	mg/kg	0.5	<0.5	-	-	<0.5
Ethion	mg/kg	0.2	<0.2	-	-	<0.2
Ethoprophos (ethoprop or prophos)	mg/kg	0.5	<0.5	-	-	<0.5
Famphur (Famophos)	mg/kg	0.5	<0.5	-	-	<0.5
Fenamiphos (Phenamiphos)	mg/kg	0.5	<0.5	-	-	<0.5
Fenchlorophos (Ronnel)	mg/kg	0.5	<0.5	-	-	<0.5
Fenitrothion	mg/kg	0.2	<0.2	-	-	<0.2
Fenthion	mg/kg	0.5	<0.5	-	-	<0.5
Malathion (Maldison)	mg/kg	0.2	<0.2	-	-	<0.2
Methidathion	mg/kg	0.5	<0.5	-	-	<0.5
Mevinphos-cis/trans	mg/kg	1	<1	-	-	<1
o,o,o-triethyl phosphorothioate	mg/kg	0.5	<0.5	-	-	<0.5
Parathion ethyl (Parathion)	mg/kg	0.2	<0.2	-	-	<0.2
Parathion methyl	mg/kg	0.5	<0.5	-	-	<0.5
Phorate	mg/kg	0.5	<0.5	-	-	<0.5
Pirimiphos-ethyl	mg/kg	0.5	<0.5	-	-	<0.5
Pirimiphos-methyl	mg/kg	0.5	<0.5	-	-	<0.5
Profenofos	mg/kg	0.5	<0.5	-	-	<0.5
Prothiophos (Tokuthion)*	mg/kg	0.5	<0.5	-	-	<0.5
Sulfotepp	mg/kg	0.5	<0.5	-	-	<0.5
Tetrachlorvinphos (Stirophos)*	mg/kg	0.5	<0.5	-	-	<0.5

PCB UPAC(7) Congeners

PCB Congener C28	mg/kg	0.1	<0.1	-	-	<0.1
PCB Congener C52	mg/kg	0.1	<0.1	-	-	<0.1
PCB Congener C101	mg/kg	0.1	<0.1	-	-	<0.1
PCB Congener C118	mg/kg	0.1	<0.1	-	-	<0.1
PCB Congener C138	mg/kg	0.1	<0.1	-	-	<0.1
PCB Congener C153	mg/kg	0.1	<0.1	-	-	<0.1
PCB Congener C180	mg/kg	0.1	<0.1	-	-	<0.1

SVCH (Cl Benzenes, Hydrocarbons & VOCs)

Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	-	-	<0.1
1,2-dichlorobenzene	mg/kg	0.5	<0.5	-	-	<0.5
1,3-dichlorobenzene	mg/kg	0.5	<0.5	-	-	<0.5
1,4-dichlorobenzene	mg/kg	0.5	<0.5	-	-	<0.5
Hexachlorobutadiene	mg/kg	0.5	<0.5	-	-	<0.5
Hexachlorocyclopentadiene	mg/kg	1	<1	-	-	<1
Hexachloroethane	mg/kg	0.5	<0.5	-	-	<0.5
Hexachloropropene	mg/kg	0.5	<0.5	-	-	<0.5
Pentachlorobenzene	mg/kg	0.5	<0.5	-	-	<0.5
Pentachloroethane	mg/kg	0.5	<0.5	-	-	<0.5
1,2,3,5 and 1,2,4,5 -tetrachlorobenzene	mg/kg	1	<1	-	-	<1
1,2,3,4-tetrachlorobenzene	mg/kg	0.5	<0.5	-	-	<0.5
1/2-Chloronaphthalene	mg/kg	1	<1	-	-	<1
1,2,4-trichlorobenzene	mg/kg	0.5	<0.5	-	-	<0.5

Phthalates

Bis(2-ethylhexyl)phthalate	mg/kg	5	<5	-	-	<5
Bis(2-ethylhexyl)adipate	mg/kg	0.5	<0.5	-	-	<0.5
Butyl benzyl phthalate	mg/kg	0.5	<0.5	-	-	<0.5
Di-n-butyl phthalate	mg/kg	0.5	<0.5	-	-	<0.5
Diethyl phthalate	mg/kg	0.5	<0.5	-	-	<0.5



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR	Sample Number	SE247181.009	SE247181.010	SE247181.011	SE247181.012
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	04 May 2023	04 May 2023	04 May 2023	04 May 2023
			Sample Name	TP106_0.5	TP106_2	QA200	TP107_0.1

Full 8270 SVOC in Soil Method: AN420 Tested: 10/5/2023 (continued)

Dimethyl phthalate	mg/kg	0.5	<0.5	-	-	<0.5
Di-n-octyl phthalate	mg/kg	0.5	<0.5	-	-	<0.5

Carbamates

Carbofuran	mg/kg	0.5	<0.5	-	-	<0.5
Carbaryl	mg/kg	0.5	<0.5	-	-	<0.5

Herbicides (normal)

Trifluralin	mg/kg	0.5	<0.5	-	-	<0.5

Nitrosamines

N-nitroso-di-n-butylamine (NDBA)	mg/kg	0.5	<0.5	-	-	<0.5
N-nitroso-diethylamine (NDEA)	mg/kg	1	<1	-	-	<1
N-nitroso-di-n-propylamine (NDPA)	mg/kg	0.5	<0.5	-	-	<0.5
N-nitroso-morpholine (NMOR)	mg/kg	0.5	<0.5	-	-	<0.5
N-nitroso-piperidine (NPIP)	mg/kg	0.5	<0.5	-	-	<0.5
N-nitroso-pyrrolidine (NPYR)	mg/kg	1	<1	-	-	<1
4-amino biphenyl	mg/kg	1	<1	-	-	<1

Nitroaromatics and Ketones

Acetophenone	mg/kg	0.5	<0.5	-	-	<0.5
1,3-dinitrobenzene	mg/kg	1	<1	-	-	<1
2,4-dinitrotoluene	mg/kg	0.5	<0.5	-	-	<0.5
2,6-dinitrotoluene	mg/kg	0.5	<0.5	-	-	<0.5
Isophorone	mg/kg	0.5	<0.5	-	-	<0.5
Nitrobenzene	mg/kg	0.5	<0.5	-	-	<0.5
p-(dimethylamino) azobenzene	mg/kg	1	<1	-	-	<1
Phenacetin	mg/kg	1	<1	-	-	<1
Pentachloronitrobenzene (quintozene)	mg/kg	0.5	<0.5	-	-	<0.5

Anilines and Amines

Aniline	mg/kg	3	<3	-	-	<3
4-chloroaniline	mg/kg	1	<1	-	-	<1
2-nitroaniline	mg/kg	1	<1	-	-	<1
3-nitroaniline	mg/kg	1	<1	-	-	<1
4-nitroaniline	mg/kg	1	<1	-	-	<1
Diphenylamine	mg/kg	0.5	<0.5	-	-	<0.5
o-toluidine	mg/kg	1	<1	-	-	<1
5-nitro-o-toluidine	mg/kg	1	<1	-	-	<1
1-naphthylamine	mg/kg	1	<1	-	-	<1
2-naphthylamine	mg/kg	1	<1	-	-	<1

Haloethers

Bis(2-chloroethoxy) methane	mg/kg	0.5	<0.5	-	-	<0.5
Bis(2-chloroethyl) ether	mg/kg	0.5	<0.5	-	-	<0.5
Bis(2-chloroisopropyl) ether	mg/kg	0.5	<0.5	-	-	<0.5
4-chlorophenyl phenyl ether	mg/kg	0.5	<0.5	-	-	<0.5
4-bromophenyl phenyl ether	mg/kg	0.5	<0.5	-	-	<0.5



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE247181.009 Soil 04 May 2023 TP106_0.5	SE247181.010 Soil 04 May 2023 TP106_2	SE247181.011 Soil 04 May 2023 QA200	SE247181.012 Soil 04 May 2023 TP107_0.1

Full 8270 SVOC in Soil Method: AN420 Tested: 10/5/2023 (continued)

Other SVOCs

Methyl methanesulfonate	mg/kg	1	<1	-	-	<1
Ethyl methanesulfonate	mg/kg	1	<1	-	-	<1
Dibenzofuran	mg/kg	0.5	<0.5	-	-	<0.5
Benzyl alcohol	mg/kg	1	<1	-	-	<1
Safrole	mg/kg	0.5	<0.5	-	-	<0.5
Isosafrole Isomer 1	mg/kg	1	<1	-	-	<1
Isosafrole Isomer 2	mg/kg	1	<1	-	-	<1
1,4-naphthoquinone	mg/kg	0.5	<0.5	-	-	<0.5
Thionazin	mg/kg	1	<1	-	-	<1

Speciated Routine Phenols

3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	-	-	<1
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	-	-	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	-	-	<0.5
2,3,4,6-tetrachlorophenol	mg/kg	0.5	<0.5	-	-	<0.5
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	-	-	<0.5
4-chloro-3-methylphenol	mg/kg	2	<2	-	-	<2
2-chlorophenol	mg/kg	0.5	<0.5	-	-	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	-	-	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	-	-	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	-	-	<0.5
Phenol	mg/kg	0.5	<0.5	-	-	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	-	-	<0.5
Pentachlorophenol	mg/kg	0.5	<0.5	-	-	<0.5
4-nitrophenol	mg/kg	1	<1	-	-	<1

Surrogates

d5-phenol (Surrogate)	%	-	93	-	-	98
d5-nitrobenzene (Surrogate)	%	-	116	-	-	120
2-fluorobiphenyl (Surrogate)	%	-	116	-	-	112
2,4,6-tribromophenol (Surrogate)	%	-	114	-	-	119
d14-p-terphenyl (Surrogate)	%	-	106	-	-	90

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES Method: AN040/AN320 Tested: 10/5/2023

Arsenic, As	mg/kg	1	62	3	2	3
Cadmium, Cd	mg/kg	0.3	0.8	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	9.6	7.9	8.1	7.8
Copper, Cu	mg/kg	0.5	10	<0.5	0.8	13
Nickel, Ni	mg/kg	0.5	6.0	0.7	0.7	17
Lead, Pb	mg/kg	1	14	6	5	9
Zinc, Zn	mg/kg	2	290	4.6	5.4	140

Mercury in Soil Method: AN312 Tested: 10/5/2023

Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05

Moisture Content Method: AN002 Tested: 10/5/2023

% Moisture	%w/w	1	15.6	14.9	15.8	14.9



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR	Sample Number	SE247181.009	SE247181.010	SE247181.011	SE247181.012
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	04 May 2023	04 May 2023	04 May 2023	04 May 2023
			Sample Name	TP106_0.5	TP106_2	QA200	TP107_0.1

Fibre Identification in soil Method: AS4964/AN602 Tested: 15/5/2023

FibreID

Asbestos Detected	No unit	-	Yes	-	-	No

SemiQuant

Estimated Fibres*	%w/w	0.01	>0.01	-	-	<0.01

Fibre ID in bulk materials Method: AN602/AS4964 Tested: 16/5/2023

FibreID

Asbestos Detected	No unit	-	-	-	-	-

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples Method: MA-1523 Tested: 17/5/2023

Perfluorobutanoic acid (PFBA)	mg/kg	0.0016	<0.0016	-	-	<0.0016
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0016	<0.0016	-	-	<0.0016
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0016	<0.0016	-	-	<0.0016
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0016	<0.0016	-	-	<0.0016
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0008	<0.0008	-	-	<0.0008
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0016	<0.0016	-	-	<0.0016
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0016	<0.0016	-	-	<0.0016
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0016	<0.0016	-	-	<0.0016
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0016	<0.0016	-	-	<0.0016
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0016	<0.0016	-	-	<0.0016
Sum PFOS and PFHXS	mg/kg	0.0016	<0.0016	-	-	<0.0016
Perfluorononane sulfonate (PFNS)	mg/kg	0.0016	<0.0016	-	-	<0.0016
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.0016	<0.0016	-	-	<0.0016
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.0016	<0.0016	-	-	<0.0016
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.0016	<0.0016	-	-	<0.0016
(13C4-PFBA) Isotopically Labelled Internal Recovery	%	-	104	-	-	103
(13C5-PFPeA) Isotopically Labelled Internal Recovery	%	-	106	-	-	103
(13C5-PFHxA) Isotopically Labelled Internal Recovery	%	-	102	-	-	111
(13C4-PFHpA) Isotopically Labelled Internal Recovery	%	-	100	-	-	111
(13C4_PFOA) Isotopically Labelled Internal Recovery	%	-	93	-	-	97
(13C3-PFBS) Isotopically Labelled Internal Recovery	%	-	97	-	-	101
(13C3-PFHxS) Isotopically Labelled Internal Recovery	%	-	88	-	-	108
(13C8-PFOS) Isotopically Labelled Internal Recovery	%	-	104	-	-	128



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE247181.013 Soil 04 May 2023 QA300	SE247181.014 Soil 04 May 2023 TP107_1	SE247181.015 Soil 04 May 2023 TP108_0.1	SE247181.016 Soil 04 May 2023 TP108_2

VOC's in Soil Method: AN433 Tested: 10/5/2023

Fumigants

2,2-dichloropropane	mg/kg	0.1	-	-	-	-
1,2-dichloropropane	mg/kg	0.1	-	-	-	-
cis-1,3-dichloropropene	mg/kg	0.1	-	-	-	-
trans-1,3-dichloropropene	mg/kg	0.1	-	-	-	-
1,2-dibromoethane (EDB)	mg/kg	0.1	-	-	-	-

Halogenated Aliphatics

Dichlorodifluoromethane (CFC-12)	mg/kg	1	-	-	-	-
Chloromethane	mg/kg	1	-	-	-	-
Vinyl chloride (Chloroethene)	mg/kg	0.1	-	-	-	-
Bromomethane	mg/kg	1	-	-	-	-
Chloroethane	mg/kg	1	-	-	-	-
Trichlorofluoromethane	mg/kg	1	-	-	-	-
1,1-dichloroethene	mg/kg	0.1	-	-	-	-
Iodomethane	mg/kg	5	-	-	-	-
Dichloromethane (Methylene chloride)	mg/kg	0.5	-	-	-	-
Allyl chloride	mg/kg	0.1	-	-	-	-
trans-1,2-dichloroethene	mg/kg	0.1	-	-	-	-
1,1-dichloroethane	mg/kg	0.1	-	-	-	-
cis-1,2-dichloroethene	mg/kg	0.1	-	-	-	-
Bromochloromethane	mg/kg	0.1	-	-	-	-
1,2-dichloroethane	mg/kg	0.1	-	-	-	-
1,1,1-trichloroethane	mg/kg	0.1	-	-	-	-
1,1-dichloropropene	mg/kg	0.1	-	-	-	-
Carbon tetrachloride	mg/kg	0.1	-	-	-	-
Dibromomethane	mg/kg	0.1	-	-	-	-
Trichloroethene (Trichloroethylene,TCE)	mg/kg	0.1	-	-	-	-
1,1,2-trichloroethane	mg/kg	0.1	-	-	-	-
1,3-dichloropropane	mg/kg	0.1	-	-	-	-
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	-	-	-	-
1,1,1,2-tetrachloroethane	mg/kg	0.1	-	-	-	-
1,1,2,2-tetrachloroethane	mg/kg	0.1	-	-	-	-
1,2,3-trichloropropane	mg/kg	0.1	-	-	-	-
trans-1,4-dichloro-2-butene	mg/kg	1	-	-	-	-
1,2-dibromo-3-chloropropane	mg/kg	0.1	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	-	-	-	-

Halogenated Aromatics

Chlorobenzene	mg/kg	0.1	-	-	-	-
Bromobenzene	mg/kg	0.1	-	-	-	-
2-chlorotoluene	mg/kg	0.1	-	-	-	-
4-chlorotoluene	mg/kg	0.1	-	-	-	-
1,3-dichlorobenzene	mg/kg	0.1	-	-	-	-
1,4-dichlorobenzene	mg/kg	0.1	-	-	-	-
1,2-dichlorobenzene	mg/kg	0.1	-	-	-	-
1,2,4-trichlorobenzene	mg/kg	0.1	-	-	-	-
1,2,3-trichlorobenzene	mg/kg	0.1	-	-	-	-

Monocyclic Aromatic Hydrocarbons

Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Styrene (Vinyl benzene)	mg/kg	0.1	-	-	-	-
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Isopropylbenzene (Cumene)	mg/kg	0.1	-	-	-	-
n-propylbenzene	mg/kg	0.1	-	-	-	-
1,3,5-trimethylbenzene	mg/kg	0.1	-	-	-	-

Parameter	Units	LOR	Sample Number	SE247181.013	SE247181.014	SE247181.015	SE247181.016
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	04 May 2023	04 May 2023	04 May 2023	04 May 2023
			Sample Name	QA300	TP107_1	TP108_0.1	TP108_2

VOC's in Soil Method: AN433 Tested: 10/5/2023 (continued)

tert-butylbenzene	mg/kg	0.1	-	-	-	-
1,2,4-trimethylbenzene	mg/kg	0.1	-	-	-	-
sec-butylbenzene	mg/kg	0.1	-	-	-	-
p-isopropyltoluene	mg/kg	0.1	-	-	-	-
n-butylbenzene	mg/kg	0.1	-	-	-	-

Nitrogenous Compounds

Acrylonitrile	mg/kg	0.1	-	-	-	-
2-nitropropane	mg/kg	10	-	-	-	-

Oxygenated Compounds

Acetone (2-propanone)	mg/kg	10	-	-	-	-
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	-	-	-	-
Vinyl acetate*	mg/kg	10	-	-	-	-
MIBK (4-methyl-2-pentanone)	mg/kg	1	-	-	-	-
2-hexanone (MBK)	mg/kg	5	-	-	-	-

Polycyclic VOCs

Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1

Sulphonated Compounds

Carbon disulfide	mg/kg	0.5	-	-	-	-

Surrogates

d4-1,2-dichloroethane (Surrogate)	%	-	117	122	119	127
d8-toluene (Surrogate)	%	-	100	100	97	104
Bromofluorobenzene (Surrogate)	%	-	131	133	120	133

Totals

Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	-	-	-	-
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	-	-	-	-
Total BTEX*	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	-	-	-	-
Total VOC*	mg/kg	24	-	-	-	-
Total Xylenes*	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR	Sample Number	SE247181.013	SE247181.014	SE247181.015	SE247181.016
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	04 May 2023	04 May 2023	04 May 2023	04 May 2023
			Sample Name	QA300	TP107_1	TP108_0.1	TP108_2

VOC's in Soil Method: AN433 Tested: 10/5/2023 (continued)

Trihalomethanes

Chloroform (THM)	mg/kg	0.1	-	-	-	-
Bromodichloromethane (THM)	mg/kg	0.1	-	-	-	-
Dibromochloromethane (THM)	mg/kg	0.1	-	-	-	-
Bromoform (THM)	mg/kg	0.1	-	-	-	-

Volatile Petroleum Hydrocarbons in Soil Method: AN433 Tested: 10/5/2023

TRH C6-C10	mg/kg	25	<25	<25	<25	<25
TRH C6-C9	mg/kg	20	<20	<20	<20	<20

Surrogates

d4-1,2-dichloroethane (Surrogate)	%	-	117	122	119	127
d8-toluene (Surrogate)	%	-	100	100	97	104
Bromofluorobenzene (Surrogate)	%	-	131	133	120	133

VPH F Bands

Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25

TRH (Total Recoverable Hydrocarbons) in Soil Method: AN403 Tested: 10/5/2023

TRH C10-C14	mg/kg	20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	73	<45	<45	56
TRH C29-C36	mg/kg	45	100	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100
TRH C10-C36 Total	mg/kg	110	180	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210

TRH F Bands

TRH >C10-C16	mg/kg	25	<25	<25	<25	25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	25
TRH >C16-C34 (F3)	mg/kg	90	150	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR

Sample Number	SE247181.013	SE247181.014	SE247181.015	SE247181.016
Sample Matrix	Soil	Soil	Soil	Soil
Sample Date	04 May 2023	04 May 2023	04 May 2023	04 May 2023
Sample Name	QA300	TP107_1	TP108_0.1	TP108_2

PAH (Polynuclear Aromatic Hydrocarbons) in Soil Method: AN420 Tested: 10/5/2023

Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	0.2	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	0.2	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8

Surrogates

d5-nitrobenzene (Surrogate)	%	-	91	91	92	92
2-fluorobiphenyl (Surrogate)	%	-	89	89	91	88
d14-p-terphenyl (Surrogate)	%	-	98	96	97	94

OC Pesticides in Soil Method: AN420 Tested: 10/5/2023

Alpha BHC	mg/kg	0.1	-	-	-	-
Hexachlorobenzene (HCB)	mg/kg	0.1	-	-	-	-
Beta BHC	mg/kg	0.1	-	-	-	-
Lindane (gamma BHC)	mg/kg	0.1	-	-	-	-
Delta BHC	mg/kg	0.1	-	-	-	-
Heptachlor	mg/kg	0.1	-	-	-	-
Aldrin	mg/kg	0.1	-	-	-	-
Isodrin	mg/kg	0.1	-	-	-	-
Heptachlor epoxide	mg/kg	0.1	-	-	-	-
Gamma Chlordane	mg/kg	0.1	-	-	-	-
Alpha Chlordane	mg/kg	0.1	-	-	-	-
Alpha Endosulfan	mg/kg	0.2	-	-	-	-
o,p'-DDE*	mg/kg	0.1	-	-	-	-
p,p'-DDE	mg/kg	0.1	-	-	-	-
Dieldrin	mg/kg	0.2	-	-	-	-
Endrin	mg/kg	0.2	-	-	-	-
Beta Endosulfan	mg/kg	0.2	-	-	-	-
o,p'-DDD*	mg/kg	0.1	-	-	-	-
p,p'-DDD	mg/kg	0.1	-	-	-	-
Endrin aldehyde	mg/kg	0.1	-	-	-	-
Endosulfan sulphate	mg/kg	0.1	-	-	-	-
o,p'-DDT*	mg/kg	0.1	-	-	-	-
p,p'-DDT	mg/kg	0.1	-	-	-	-
Endrin ketone	mg/kg	0.1	-	-	-	-
Methoxychlor	mg/kg	0.1	-	-	-	-
Mirex	mg/kg	0.1	-	-	-	-
trans-Nonachlor	mg/kg	0.1	-	-	-	-
Total CLP OC Pesticides	mg/kg	1	-	-	-	-
Total OC VIC EPA	mg/kg	1	-	-	-	-



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR	Sample Number	SE247181.013	SE247181.014	SE247181.015	SE247181.016
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	04 May 2023	04 May 2023	04 May 2023	04 May 2023
			Sample Name	QA300	TP107_1	TP108_0.1	TP108_2

Full 8270 SVOC in Soil Method: AN420 Tested: 16/5/2023

PAHs

Acenaphthene	mg/kg	0.1	-	-	-	-
Acenaphthylene	mg/kg	0.1	-	-	-	-
Anthracene	mg/kg	0.1	-	-	-	-
Benzo(a)anthracene	mg/kg	0.1	-	-	-	-
Benzo(b&j)fluoranthene	mg/kg	0.1	-	-	-	-
Benzo(b&j&k)fluoranthene	mg/kg	0.2	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.1	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.1	-	-	-	-
Benzo(a)pyrene	mg/kg	0.1	-	-	-	-
Chrysene	mg/kg	0.1	-	-	-	-
Dibenzo(ah)anthracene	mg/kg	0.1	-	-	-	-
Fluoranthene	mg/kg	0.1	-	-	-	-
Fluorene	mg/kg	0.1	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	-	-	-	-
1-methylnaphthalene	mg/kg	0.1	-	-	-	-
2-methylnaphthalene	mg/kg	0.1	-	-	-	-
Naphthalene	mg/kg	0.1	-	-	-	-
Phenanthrene	mg/kg	0.1	-	-	-	-
Pyrene	mg/kg	0.1	-	-	-	-
Carcinogenic PAHs, BaP TEQ, <LOR=LOR/2*	TEQ (mg/kg)	0.2	-	-	-	-
Carcinogenic PAHs, BaP TEQ, <LOR=LOR*	TEQ (mg/kg)	0.3	-	-	-	-
Carcinogenic PAHs, BaP TEQ, <LOR=0*	TEQ (mg/kg)	0.2	-	-	-	-
2-acetylaminofluorene	mg/kg	0.5	-	-	-	-
7,12-dimethyl-benz(a)anthracene	mg/kg	0.5	-	-	-	-
3-methylcholanthrene	mg/kg	0.5	-	-	-	-

OCs

Aldrin	mg/kg	0.1	-	-	-	-
Alpha-BHC	mg/kg	0.1	-	-	-	-
Beta-BHC	mg/kg	0.5	-	-	-	-
Delta-BHC	mg/kg	0.1	-	-	-	-
Gamma-BHC (Lindane)	mg/kg	0.1	-	-	-	-
p,p-DDD	mg/kg	0.1	-	-	-	-
p,p-DDE	mg/kg	0.1	-	-	-	-
p,p-DDT	mg/kg	0.1	-	-	-	-
Dieldrin	mg/kg	0.2	-	-	-	-
Alpha-endosulfan	mg/kg	0.2	-	-	-	-
Beta-endosulfan	mg/kg	0.2	-	-	-	-
Endosulfan sulphate	mg/kg	0.1	-	-	-	-
Endrin	mg/kg	0.2	-	-	-	-
Heptachlor	mg/kg	0.1	-	-	-	-
Heptachlor epoxide	mg/kg	0.1	-	-	-	-
Isodrin	mg/kg	0.1	-	-	-	-
Methoxychlor	mg/kg	0.1	-	-	-	-
Mirex	mg/kg	0.1	-	-	-	-
Alpha-chlordane	mg/kg	0.1	-	-	-	-
Gamma-chlordane	mg/kg	0.1	-	-	-	-
Endrin ketone	mg/kg	0.1	-	-	-	-
Total (Alpha+Beta+SO4) Endosulfan*	mg/kg	0.2	-	-	-	-

OPs

Azinphos-methyl (Guthion)	mg/kg	0.2	-	-	-	-
Bromophos ethyl	mg/kg	0.2	-	-	-	-
Carbophenothion	mg/kg	0.5	-	-	-	-
Chlorfenvinphos-cis	mg/kg	2	-	-	-	-
Chlorfenvinphos-trans	mg/kg	0.5	-	-	-	-
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	-	-	-	-
Chlorpyrifos-methyl	mg/kg	0.5	-	-	-	-



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE247181.013 Soil 04 May 2023 QA300	SE247181.014 Soil 04 May 2023 TP107_1	SE247181.015 Soil 04 May 2023 TP108_0.1	SE247181.016 Soil 04 May 2023 TP108_2

Full 8270 SVOC in Soil Method: AN420 Tested: 16/5/2023 (continued)

Co-Ral (Coumaphos)	mg/kg	0.5	-	-	-	-
Diazinon (Dimpylate)	mg/kg	0.5	-	-	-	-
Dichlorvos	mg/kg	0.5	-	-	-	-
Demeton-S-methyl	mg/kg	0.5	-	-	-	-
Dimethoate	mg/kg	0.5	-	-	-	-
Disulfoton (Di-syston)	mg/kg	0.5	-	-	-	-
EPN*	mg/kg	0.5	-	-	-	-
Ethion	mg/kg	0.2	-	-	-	-
Ethoprophos (ethoprop or prophos)	mg/kg	0.5	-	-	-	-
Famphur (Famophos)	mg/kg	0.5	-	-	-	-
Fenamiphos (Phenamiphos)	mg/kg	0.5	-	-	-	-
Fenchlorophos (Ronnel)	mg/kg	0.5	-	-	-	-
Fenitrothion	mg/kg	0.2	-	-	-	-
Fenthion	mg/kg	0.5	-	-	-	-
Malathion (Maldison)	mg/kg	0.2	-	-	-	-
Methidathion	mg/kg	0.5	-	-	-	-
Mevinphos-cis/trans	mg/kg	1	-	-	-	-
o,o,o-triethyl phosphorothioate	mg/kg	0.5	-	-	-	-
Parathion ethyl (Parathion)	mg/kg	0.2	-	-	-	-
Parathion methyl	mg/kg	0.5	-	-	-	-
Phorate	mg/kg	0.5	-	-	-	-
Pirimiphos-ethyl	mg/kg	0.5	-	-	-	-
Pirimiphos-methyl	mg/kg	0.5	-	-	-	-
Profenofos	mg/kg	0.5	-	-	-	-
Prothiophos (Tokuthion)*	mg/kg	0.5	-	-	-	-
Sulfotepp	mg/kg	0.5	-	-	-	-
Tetrachlorvinphos (Stirophos)*	mg/kg	0.5	-	-	-	-

PCB UPAC(7) Congeners

PCB Congener C28	mg/kg	0.1	-	-	-	-
PCB Congener C52	mg/kg	0.1	-	-	-	-
PCB Congener C101	mg/kg	0.1	-	-	-	-
PCB Congener C118	mg/kg	0.1	-	-	-	-
PCB Congener C138	mg/kg	0.1	-	-	-	-
PCB Congener C153	mg/kg	0.1	-	-	-	-
PCB Congener C180	mg/kg	0.1	-	-	-	-

SVCH (Cl Benzenes, Hydrocarbons & VOCs)

Hexachlorobenzene (HCB)	mg/kg	0.1	-	-	-	-
1,2-dichlorobenzene	mg/kg	0.5	-	-	-	-
1,3-dichlorobenzene	mg/kg	0.5	-	-	-	-
1,4-dichlorobenzene	mg/kg	0.5	-	-	-	-
Hexachlorobutadiene	mg/kg	0.5	-	-	-	-
Hexachlorocyclopentadiene	mg/kg	1	-	-	-	-
Hexachloroethane	mg/kg	0.5	-	-	-	-
Hexachloropropene	mg/kg	0.5	-	-	-	-
Pentachlorobenzene	mg/kg	0.5	-	-	-	-
Pentachloroethane	mg/kg	0.5	-	-	-	-
1,2,3,5 and 1,2,4,5 -tetrachlorobenzene	mg/kg	1	-	-	-	-
1,2,3,4-tetrachlorobenzene	mg/kg	0.5	-	-	-	-
1/2-Chloronaphthalene	mg/kg	1	-	-	-	-
1,2,4-trichlorobenzene	mg/kg	0.5	-	-	-	-

Phthalates

Bis(2-ethylhexyl)phthalate	mg/kg	5	-	-	-	-
Bis(2-ethylhexyl)adipate	mg/kg	0.5	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.5	-	-	-	-
Di-n-butyl phthalate	mg/kg	0.5	-	-	-	-
Diethyl phthalate	mg/kg	0.5	-	-	-	-



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR	Sample Number	SE247181.013	SE247181.014	SE247181.015	SE247181.016
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	04 May 2023	04 May 2023	04 May 2023	04 May 2023
			Sample Name	QA300	TP107_1	TP108_0.1	TP108_2

Full 8270 SVOC in Soil Method: AN420 Tested: 16/5/2023 (continued)

Dimethyl phthalate	mg/kg	0.5	-	-	-	-
Di-n-octyl phthalate	mg/kg	0.5	-	-	-	-

Carbamates

Carbofuran	mg/kg	0.5	-	-	-	-
Carbaryl	mg/kg	0.5	-	-	-	-

Herbicides (normal)

Trifluralin	mg/kg	0.5	-	-	-	-

Nitrosamines

N-nitroso-di-n-butylamine (NDBA)	mg/kg	0.5	-	-	-	-
N-nitroso-diethylamine (NDEA)	mg/kg	1	-	-	-	-
N-nitroso-di-n-propylamine (NDPA)	mg/kg	0.5	-	-	-	-
N-nitroso-morpholine (NMOR)	mg/kg	0.5	-	-	-	-
N-nitroso-piperidine (NPIP)	mg/kg	0.5	-	-	-	-
N-nitroso-pyrrolidine (NPYR)	mg/kg	1	-	-	-	-
4-amino biphenyl	mg/kg	1	-	-	-	-

Nitroaromatics and Ketones

Acetophenone	mg/kg	0.5	-	-	-	-
1,3-dinitrobenzene	mg/kg	1	-	-	-	-
2,4-dinitrotoluene	mg/kg	0.5	-	-	-	-
2,6-dinitrotoluene	mg/kg	0.5	-	-	-	-
Isophorone	mg/kg	0.5	-	-	-	-
Nitrobenzene	mg/kg	0.5	-	-	-	-
p-(dimethylamino) azobenzene	mg/kg	1	-	-	-	-
Phenacetin	mg/kg	1	-	-	-	-
Pentachloronitrobenzene (quintozene)	mg/kg	0.5	-	-	-	-

Anilines and Amines

Aniline	mg/kg	3	-	-	-	-
4-chloroaniline	mg/kg	1	-	-	-	-
2-nitroaniline	mg/kg	1	-	-	-	-
3-nitroaniline	mg/kg	1	-	-	-	-
4-nitroaniline	mg/kg	1	-	-	-	-
Diphenylamine	mg/kg	0.5	-	-	-	-
o-toluidine	mg/kg	1	-	-	-	-
5-nitro-o-toluidine	mg/kg	1	-	-	-	-
1-naphthylamine	mg/kg	1	-	-	-	-
2-naphthylamine	mg/kg	1	-	-	-	-

Haloethers

Bis(2-chloroethoxy) methane	mg/kg	0.5	-	-	-	-
Bis(2-chloroethyl) ether	mg/kg	0.5	-	-	-	-
Bis(2-chloroisopropyl) ether	mg/kg	0.5	-	-	-	-
4-chlorophenyl phenyl ether	mg/kg	0.5	-	-	-	-
4-bromophenyl phenyl ether	mg/kg	0.5	-	-	-	-



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE247181.013 Soil 04 May 2023 QA300	SE247181.014 Soil 04 May 2023 TP107_1	SE247181.015 Soil 04 May 2023 TP108_0.1	SE247181.016 Soil 04 May 2023 TP108_2

Full 8270 SVOC in Soil Method: AN420 Tested: 16/5/2023 (continued)

Other SVOCs

Methyl methanesulfonate	mg/kg	1	-	-	-	-
Ethyl methanesulfonate	mg/kg	1	-	-	-	-
Dibenzofuran	mg/kg	0.5	-	-	-	-
Benzyl alcohol	mg/kg	1	-	-	-	-
Safrrole	mg/kg	0.5	-	-	-	-
Isosafrole Isomer 1	mg/kg	1	-	-	-	-
Isosafrole Isomer 2	mg/kg	1	-	-	-	-
1,4-naphthoquinone	mg/kg	0.5	-	-	-	-
Thionazin	mg/kg	1	-	-	-	-

Speciated Routine Phenols

3/4-methyl phenol (m/p-cresol)	mg/kg	1	-	-	-	-
2-methyl phenol (o-cresol)	mg/kg	0.5	-	-	-	-
2,6-dichlorophenol	mg/kg	0.5	-	-	-	-
2,3,4,6-tetrachlorophenol	mg/kg	0.5	-	-	-	-
2,4,5-trichlorophenol	mg/kg	0.5	-	-	-	-
4-chloro-3-methylphenol	mg/kg	2	-	-	-	-
2-chlorophenol	mg/kg	0.5	-	-	-	-
2,4-dichlorophenol	mg/kg	0.5	-	-	-	-
2,4-dimethylphenol	mg/kg	0.5	-	-	-	-
2-nitrophenol	mg/kg	0.5	-	-	-	-
Phenol	mg/kg	0.5	-	-	-	-
2,4,6-trichlorophenol	mg/kg	0.5	-	-	-	-
Pentachlorophenol	mg/kg	0.5	-	-	-	-
4-nitrophenol	mg/kg	1	-	-	-	-

Surrogates

d5-phenol (Surrogate)	%	-	-	-	-	-
d5-nitrobenzene (Surrogate)	%	-	-	-	-	-
2-fluorobiphenyl (Surrogate)	%	-	-	-	-	-
2,4,6-tribromophenol (Surrogate)	%	-	-	-	-	-
d14-p-terphenyl (Surrogate)	%	-	-	-	-	-

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES Method: AN040/AN320 Tested: 10/5/2023

Arsenic, As	mg/kg	1	3	2	5	2
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	9.2	3.3	6.6	8.9
Copper, Cu	mg/kg	0.5	15	1.8	28	<0.5
Nickel, Ni	mg/kg	0.5	19	1.1	14	0.5
Lead, Pb	mg/kg	1	10	9	13	5
Zinc, Zn	mg/kg	2	170	73	58	<2.0

Mercury in Soil Method: AN312 Tested: 10/5/2023

Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05

Moisture Content Method: AN002 Tested: 10/5/2023

% Moisture	%w/w	1	14.8	17.2	18.6	14.8



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE247181.013 Soil 04 May 2023 QA300	SE247181.014 Soil 04 May 2023 TP107_1	SE247181.015 Soil 04 May 2023 TP108_0.1	SE247181.016 Soil 04 May 2023 TP108_2

Fibre Identification in soil Method: AS4964/AN602 Tested: 16/5/2023

FibreID

Asbestos Detected	No unit	-	-	No	No	-

SemiQuant

Estimated Fibres*	%w/w	0.01	-	<0.01	<0.01	-

Fibre ID in bulk materials Method: AN602/AS4964 Tested: 16/5/2023

FibreID

Asbestos Detected	No unit	-	-	-	-	-

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples Method: MA-1523 Tested: 17/5/2023

Perfluorobutanoic acid (PFBA)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0008	<0.0008	-	<0.0008	-
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Sum PFOS and PFHXS	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluorononane sulfonate (PFNS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
(13C4-PFBA) Isotopically Labelled Internal Recovery	%	-	103	-	103	-
(13C5-PFPeA) Isotopically Labelled Internal Recovery	%	-	104	-	104	-
(13C5-PFHxA) Isotopically Labelled Internal Recovery	%	-	91	-	136	-
(13C4-PFHpA) Isotopically Labelled Internal Recovery	%	-	100	-	119	-
(13C4_PFOA) Isotopically Labelled Internal Recovery	%	-	100	-	113	-
(13C3-PFBS) Isotopically Labelled Internal Recovery	%	-	93	-	113	-
(13C3-PFHxS) Isotopically Labelled Internal Recovery	%	-	103	-	98	-
(13C8-PFOS) Isotopically Labelled Internal Recovery	%	-	106	-	97	-



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR	Sample Number	SE247181.017	SE247181.018	SE247181.019	SE247181.020
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	04 May 2023	04 May 2023	04 May 2023	04 May 2023
			Sample Name	TP115_0.1	TP115_0.5	TP118_0.1	TP118_1.2

VOC's in Soil Method: AN433 Tested: 10/5/2023

Fumigants

2,2-dichloropropane	mg/kg	0.1	<0.1	-	<0.1	-
1,2-dichloropropane	mg/kg	0.1	<0.1	-	<0.1	-
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	-	<0.1	-
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	-	<0.1	-
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	-	<0.1	-

Halogenated Aliphatics

Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	-	<1	-
Chloromethane	mg/kg	1	<1	-	<1	-
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	-	<0.1	-
Bromomethane	mg/kg	1	<1	-	<1	-
Chloroethane	mg/kg	1	<1	-	<1	-
Trichlorofluoromethane	mg/kg	1	<1	-	<1	-
1,1-dichloroethene	mg/kg	0.1	<0.1	-	<0.1	-
Iodomethane	mg/kg	5	<5	-	<5	-
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	-	<0.5	-
Allyl chloride	mg/kg	0.1	<0.1	-	<0.1	-
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	-	<0.1	-
1,1-dichloroethane	mg/kg	0.1	<0.1	-	<0.1	-
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	-	<0.1	-
Bromochloromethane	mg/kg	0.1	<0.1	-	<0.1	-
1,2-dichloroethane	mg/kg	0.1	<0.1	-	<0.1	-
1,1,1-trichloroethane	mg/kg	0.1	<0.1	-	<0.1	-
1,1-dichloropropene	mg/kg	0.1	<0.1	-	<0.1	-
Carbon tetrachloride	mg/kg	0.1	<0.1	-	<0.1	-
Dibromomethane	mg/kg	0.1	<0.1	-	<0.1	-
Trichloroethene (Trichloroethylene,TCE)	mg/kg	0.1	<0.1	-	<0.1	-
1,1,2-trichloroethane	mg/kg	0.1	<0.1	-	<0.1	-
1,3-dichloropropane	mg/kg	0.1	<0.1	-	<0.1	-
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	-	<0.1	-
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	-	<0.1	-
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	-	<0.1	-
1,2,3-trichloropropane	mg/kg	0.1	<0.1	-	<0.1	-
trans-1,4-dichloro-2-butene	mg/kg	1	<1	-	<1	-
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	-	<0.1	-
Hexachlorobutadiene	mg/kg	0.1	<0.1	-	<0.1	-

Halogenated Aromatics

Chlorobenzene	mg/kg	0.1	<0.1	-	<0.1	-
Bromobenzene	mg/kg	0.1	<0.1	-	<0.1	-
2-chlorotoluene	mg/kg	0.1	<0.1	-	<0.1	-
4-chlorotoluene	mg/kg	0.1	<0.1	-	<0.1	-
1,3-dichlorobenzene	mg/kg	0.1	<0.1	-	<0.1	-
1,4-dichlorobenzene	mg/kg	0.1	<0.1	-	<0.1	-
1,2-dichlorobenzene	mg/kg	0.1	<0.1	-	<0.1	-
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	-	<0.1	-
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	-	<0.1	-

Monocyclic Aromatic Hydrocarbons

Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	-	<0.1	-
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	-	<0.1	-
n-propylbenzene	mg/kg	0.1	<0.1	-	<0.1	-
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	-	<0.1	-



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR	Sample Number	SE247181.017	SE247181.018	SE247181.019	SE247181.020
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	04 May 2023	04 May 2023	04 May 2023	04 May 2023
			Sample Name	TP115_0.1	TP115_0.5	TP118_0.1	TP118_1.2

VOC's in Soil Method: AN433 Tested: 10/5/2023 (continued)

tert-butylbenzene	mg/kg	0.1	<0.1	-	<0.1	-
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	-	<0.1	-
sec-butylbenzene	mg/kg	0.1	<0.1	-	<0.1	-
p-isopropyltoluene	mg/kg	0.1	<0.1	-	<0.1	-
n-butylbenzene	mg/kg	0.1	<0.1	-	<0.1	-

Nitrogenous Compounds

Acrylonitrile	mg/kg	0.1	<0.1	-	<0.1	-
2-nitropropane	mg/kg	10	<10	-	<10	-

Oxygenated Compounds

Acetone (2-propanone)	mg/kg	10	<10	-	<10	-
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	-	<0.1	-
Vinyl acetate*	mg/kg	10	<10	-	<10	-
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	-	<1	-
2-hexanone (MBK)	mg/kg	5	<5	-	<5	-

Polycyclic VOCs

Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1

Sulphonated Compounds

Carbon disulfide	mg/kg	0.5	<0.5	-	<0.5	-

Surrogates

d4-1,2-dichloroethane (Surrogate)	%	-	90	119	99	84
d8-toluene (Surrogate)	%	-	80	103	94	89
Bromofluorobenzene (Surrogate)	%	-	89	134	96	82

Totals

Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	-	<1.8	-
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	-	<1.8	-
Total BTEX*	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	-	<3.0	-
Total VOC*	mg/kg	24	<24	-	<24	-
Total Xylenes*	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR	Sample Number	SE247181.017	SE247181.018	SE247181.019	SE247181.020
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	04 May 2023	04 May 2023	04 May 2023	04 May 2023
			Sample Name	TP115_0.1	TP115_0.5	TP118_0.1	TP118_1.2

VOC's in Soil Method: AN433 Tested: 10/5/2023 (continued)

Trihalomethanes

Chloroform (THM)	mg/kg	0.1	<0.1	-	<0.1	-
Bromodichloromethane (THM)	mg/kg	0.1	<0.1	-	<0.1	-
Dibromochloromethane (THM)	mg/kg	0.1	<0.1	-	<0.1	-
Bromoform (THM)	mg/kg	0.1	<0.1	-	<0.1	-

Volatile Petroleum Hydrocarbons in Soil Method: AN433 Tested: 10/5/2023

TRH C6-C10	mg/kg	25	<25	<25	<25	<25
TRH C6-C9	mg/kg	20	<20	<20	<20	<20

Surrogates

d4-1,2-dichloroethane (Surrogate)	%	-	90	119	99	84
d8-toluene (Surrogate)	%	-	80	103	94	89
Bromofluorobenzene (Surrogate)	%	-	89	134	96	82

VPH F Bands

Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25

TRH (Total Recoverable Hydrocarbons) in Soil Method: AN403 Tested: 10/5/2023

TRH C10-C14	mg/kg	20	<20	<20	40	<20
TRH C15-C28	mg/kg	45	56	58	190	<45
TRH C29-C36	mg/kg	45	120	48	81	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100
TRH C10-C36 Total	mg/kg	110	180	<110	310	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	270	<210	290	<210

TRH F Bands

TRH >C10-C16	mg/kg	25	<25	<25	55	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	55	<25
TRH >C16-C34 (F3)	mg/kg	90	130	<90	230	<90
TRH >C34-C40 (F4)	mg/kg	120	140	<120	<120	<120



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR	Sample Number	SE247181.017	SE247181.018	SE247181.019	SE247181.020
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	04 May 2023	04 May 2023	04 May 2023	04 May 2023
			Sample Name	TP115_0.1	TP115_0.5	TP118_0.1	TP118_1.2

PAH (Polynuclear Aromatic Hydrocarbons) in Soil Method: AN420 Tested: 10/5/2023

Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	0.5	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	0.2	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	1.0	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	0.9	<0.8

Surrogates

d5-nitrobenzene (Surrogate)	%	-	92	92	98	117
2-fluorobiphenyl (Surrogate)	%	-	90	89	95	87
d14-p-terphenyl (Surrogate)	%	-	96	97	101	102

OC Pesticides in Soil Method: AN420 Tested: 10/5/2023

Alpha BHC	mg/kg	0.1	<0.1	-	-	-
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	-	-	-
Beta BHC	mg/kg	0.1	<0.1	-	-	-
Lindane (gamma BHC)	mg/kg	0.1	<0.1	-	-	-
Delta BHC	mg/kg	0.1	<0.1	-	-	-
Heptachlor	mg/kg	0.1	<0.1	-	-	-
Aldrin	mg/kg	0.1	<0.1	-	-	-
Isodrin	mg/kg	0.1	<0.1	-	-	-
Heptachlor epoxide	mg/kg	0.1	<0.1	-	-	-
Gamma Chlordane	mg/kg	0.1	<0.1	-	-	-
Alpha Chlordane	mg/kg	0.1	<0.1	-	-	-
Alpha Endosulfan	mg/kg	0.2	<0.2	-	-	-
o,p'-DDE*	mg/kg	0.1	<0.1	-	-	-
p,p'-DDE	mg/kg	0.1	<0.1	-	-	-
Dieldrin	mg/kg	0.2	<0.2	-	-	-
Endrin	mg/kg	0.2	<0.2	-	-	-
Beta Endosulfan	mg/kg	0.2	<0.2	-	-	-
o,p'-DDD*	mg/kg	0.1	<0.1	-	-	-
p,p'-DDD	mg/kg	0.1	<0.1	-	-	-
Endrin aldehyde	mg/kg	0.1	<0.1	-	-	-
Endosulfan sulphate	mg/kg	0.1	<0.1	-	-	-
o,p'-DDT*	mg/kg	0.1	<0.1	-	-	-
p,p'-DDT	mg/kg	0.1	<0.1	-	-	-
Endrin ketone	mg/kg	0.1	<0.1	-	-	-
Methoxychlor	mg/kg	0.1	<0.1	-	-	-
Mirex	mg/kg	0.1	<0.1	-	-	-
trans-Nonachlor	mg/kg	0.1	<0.1	-	-	-
Total CLP OC Pesticides	mg/kg	1	<1	-	-	-
Total OC VIC EPA	mg/kg	1	<1	-	-	-



ANALYTICAL REPORT

SE247181 R0

Parameter	Sample Number				
	Sample Matrix				
	Sample Date				
	Sample Name				
	SE247181.017	SE247181.018	SE247181.019	SE247181.020	
	Soil	Soil	Soil	Soil	
	04 May 2023	04 May 2023	04 May 2023	04 May 2023	
	TP115_0.1	TP115_0.5	TP118_0.1	TP118_1.2	
Units	LOR				

OC Pesticides in Soil Method: AN420 Tested: 10/5/2023 (continued)

Surrogates

Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	91	-	-	-

OP Pesticides in Soil Method: AN420 Tested: 10/5/2023

Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	-	-	-
Bromophos Ethyl	mg/kg	0.2	<0.2	-	-	-
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	-	-	-
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	-	-	-
Dichlorvos	mg/kg	0.5	<0.5	-	-	-
Dimethoate	mg/kg	0.5	<0.5	-	-	-
Ethion	mg/kg	0.2	<0.2	-	-	-
Fenitrothion	mg/kg	0.2	<0.2	-	-	-
Malathion	mg/kg	0.2	<0.2	-	-	-
Methidathion	mg/kg	0.5	<0.5	-	-	-
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	-	-	-
Total OP Pesticides*	mg/kg	1.7	<1.7	-	-	-

Surrogates

2-fluorobiphenyl (Surrogate)	%	-	90	-	-	-
d14-p-terphenyl (Surrogate)	%	-	96	-	-	-

PCBs in Soil Method: AN420 Tested: 10/5/2023

Arochlor 1016	mg/kg	0.2	<0.2	-	<0.2	-
Arochlor 1221	mg/kg	0.2	<0.2	-	<0.2	-
Arochlor 1232	mg/kg	0.2	<0.2	-	<0.2	-
Arochlor 1242	mg/kg	0.2	<0.2	-	<0.2	-
Arochlor 1248	mg/kg	0.2	<0.2	-	<0.2	-
Arochlor 1254	mg/kg	0.2	<0.2	-	<0.2	-
Arochlor 1260	mg/kg	0.2	<0.2	-	<0.2	-
Arochlor 1262	mg/kg	0.2	<0.2	-	<0.2	-
Arochlor 1268	mg/kg	0.2	<0.2	-	<0.2	-
Total PCBs (Arochlors)	mg/kg	1	<1	-	<1	-

Surrogates

TCMX (Surrogate)	%	-	84	-	85	-



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR	Sample Number	SE247181.017	SE247181.018	SE247181.019	SE247181.020
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	04 May 2023	04 May 2023	04 May 2023	04 May 2023
			Sample Name	TP115_0.1	TP115_0.5	TP118_0.1	TP118_1.2

Full 8270 SVOC in Soil Method: AN420 Tested: 10/5/2023

PAHs

Acenaphthene	mg/kg	0.1	<0.1	-	<0.1	-
Acenaphthylene	mg/kg	0.1	<0.1	-	<0.1	-
Anthracene	mg/kg	0.1	<0.1	-	<0.1	-
Benzo(a)anthracene	mg/kg	0.1	<0.1	-	<0.1	-
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	-	<0.1	-
Benzo(b&j&k)fluoranthene	mg/kg	0.2	<0.2	-	<0.2	-
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	-	<0.1	-
Benzo(ghi)perylene	mg/kg	0.1	<0.1	-	<0.1	-
Benzo(a)pyrene	mg/kg	0.1	<0.1	-	<0.1	-
Chrysene	mg/kg	0.1	<0.1	-	<0.1	-
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	-	<0.1	-
Fluoranthene	mg/kg	0.1	0.1	-	<0.1	-
Fluorene	mg/kg	0.1	<0.1	-	<0.1	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	-	<0.1	-
1-methylnaphthalene	mg/kg	0.1	<0.1	-	<0.1	-
2-methylnaphthalene	mg/kg	0.1	<0.1	-	<0.1	-
Naphthalene	mg/kg	0.1	<0.1	-	<0.1	-
Phenanthrene	mg/kg	0.1	<0.1	-	0.1	-
Pyrene	mg/kg	0.1	0.1	-	<0.1	-
Carcinogenic PAHs, BaP TEQ, <LOR=LOR/2*	TEQ (mg/kg)	0.2	<0.2	-	<0.2	-
Carcinogenic PAHs, BaP TEQ, <LOR=LOR*	TEQ (mg/kg)	0.3	<0.3	-	<0.3	-
Carcinogenic PAHs, BaP TEQ, <LOR=0*	TEQ (mg/kg)	0.2	<0.2	-	<0.2	-
2-acetylaminofluorene	mg/kg	0.5	<0.5	-	<0.5	-
7,12-dimethyl-benz(a)anthracene	mg/kg	0.5	<0.5	-	<0.5	-
3-methylcholanthrene	mg/kg	0.5	<0.5	-	<0.5	-

OCs

Aldrin	mg/kg	0.1	<0.1	-	<0.1	-
Alpha-BHC	mg/kg	0.1	<0.1	-	<0.1	-
Beta-BHC	mg/kg	0.5	<0.5	-	<0.5	-
Delta-BHC	mg/kg	0.1	<0.1	-	<0.1	-
Gamma-BHC (Lindane)	mg/kg	0.1	<0.1	-	<0.1	-
p,p-DDD	mg/kg	0.1	<0.1	-	<0.1	-
p,p-DDE	mg/kg	0.1	<0.1	-	<0.1	-
p,p-DDT	mg/kg	0.1	<0.1	-	<0.1	-
Dieldrin	mg/kg	0.2	<0.2	-	<0.2	-
Alpha-endosulfan	mg/kg	0.2	<0.2	-	<0.2	-
Beta-endosulfan	mg/kg	0.2	<0.2	-	<0.2	-
Endosulfan sulphate	mg/kg	0.1	<0.1	-	<0.1	-
Endrin	mg/kg	0.2	<0.2	-	<0.2	-
Heptachlor	mg/kg	0.1	<0.1	-	<0.1	-
Heptachlor epoxide	mg/kg	0.1	<0.1	-	<0.1	-
Isodrin	mg/kg	0.1	<0.1	-	<0.1	-
Methoxychlor	mg/kg	0.1	<0.1	-	<0.1	-
Mirex	mg/kg	0.1	<0.1	-	<0.1	-
Alpha-chlordane	mg/kg	0.1	<0.1	-	<0.1	-
Gamma-chlordane	mg/kg	0.1	<0.1	-	<0.1	-
Endrin ketone	mg/kg	0.1	<0.1	-	<0.1	-
Total (Alpha+Beta+SO4) Endosulfan*	mg/kg	0.2	<0.2	-	<0.2	-

OPs

Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	-	<0.2	-
Bromophos ethyl	mg/kg	0.2	<0.2	-	<0.2	-
Carbophenothion	mg/kg	0.5	<0.5	-	<0.5	-
Chlorfenvinphos-cis	mg/kg	2	<2	-	<2	-
Chlorfenvinphos-trans	mg/kg	0.5	<0.5	-	<0.5	-
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	-	<0.2	-
Chlorpyrifos-methyl	mg/kg	0.5	<0.5	-	<0.5	-



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR	Sample Number	SE247181.017	SE247181.018	SE247181.019	SE247181.020
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	04 May 2023	04 May 2023	04 May 2023	04 May 2023
			Sample Name	TP115_0.1	TP115_0.5	TP118_0.1	TP118_1.2

Full 8270 SVOC in Soil Method: AN420 Tested: 16/5/2023 (continued)

Co-Ral (Coumaphos)	mg/kg	0.5	<0.5	-	<0.5	-
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	-	<0.5	-
Dichlorvos	mg/kg	0.5	<0.5	-	<0.5	-
Demeton-S-methyl	mg/kg	0.5	<0.5	-	<0.5	-
Dimethoate	mg/kg	0.5	<0.5	-	<0.5	-
Disulfoton (Di-syston)	mg/kg	0.5	<0.5	-	<0.5	-
EPN*	mg/kg	0.5	<0.5	-	<0.5	-
Ethion	mg/kg	0.2	<0.2	-	<0.2	-
Ethoprophos (ethoprop or prophos)	mg/kg	0.5	<0.5	-	<0.5	-
Famphur (Famophos)	mg/kg	0.5	<0.5	-	<0.5	-
Fenamiphos (Phenamiphos)	mg/kg	0.5	<0.5	-	<0.5	-
Fenchlorophos (Ronnel)	mg/kg	0.5	<0.5	-	<0.5	-
Fenitrothion	mg/kg	0.2	<0.2	-	<0.2	-
Fenthion	mg/kg	0.5	<0.5	-	<0.5	-
Malathion (Maldison)	mg/kg	0.2	<0.2	-	<0.2	-
Methidathion	mg/kg	0.5	<0.5	-	<0.5	-
Mevinphos-cis/trans	mg/kg	1	<1	-	<1	-
o,o,o-triethyl phosphorothioate	mg/kg	0.5	<0.5	-	<0.5	-
Parathion ethyl (Parathion)	mg/kg	0.2	<0.2	-	<0.2	-
Parathion methyl	mg/kg	0.5	<0.5	-	<0.5	-
Phorate	mg/kg	0.5	<0.5	-	<0.5	-
Pirimiphos-ethyl	mg/kg	0.5	<0.5	-	<0.5	-
Pirimiphos-methyl	mg/kg	0.5	<0.5	-	<0.5	-
Profenofos	mg/kg	0.5	<0.5	-	<0.5	-
Prothiophos (Tokuthion)*	mg/kg	0.5	<0.5	-	<0.5	-
Sulfotepp	mg/kg	0.5	<0.5	-	<0.5	-
Tetrachlorvinphos (Stirophos)*	mg/kg	0.5	<0.5	-	<0.5	-

PCB UPAC(7) Congeners

PCB Congener C28	mg/kg	0.1	<0.1	-	<0.1	-
PCB Congener C52	mg/kg	0.1	<0.1	-	<0.1	-
PCB Congener C101	mg/kg	0.1	<0.1	-	<0.1	-
PCB Congener C118	mg/kg	0.1	<0.1	-	<0.1	-
PCB Congener C138	mg/kg	0.1	<0.1	-	<0.1	-
PCB Congener C153	mg/kg	0.1	<0.1	-	<0.1	-
PCB Congener C180	mg/kg	0.1	<0.1	-	<0.1	-

SVCH (CI Benzenes, Hydrocarbons & VOCs)

Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	-	<0.1	-
1,2-dichlorobenzene	mg/kg	0.5	<0.5	-	<0.5	-
1,3-dichlorobenzene	mg/kg	0.5	<0.5	-	<0.5	-
1,4-dichlorobenzene	mg/kg	0.5	<0.5	-	<0.5	-
Hexachlorobutadiene	mg/kg	0.5	<0.5	-	<0.5	-
Hexachlorocyclopentadiene	mg/kg	1	<1	-	<1	-
Hexachloroethane	mg/kg	0.5	<0.5	-	<0.5	-
Hexachloropropene	mg/kg	0.5	<0.5	-	<0.5	-
Pentachlorobenzene	mg/kg	0.5	<0.5	-	<0.5	-
Pentachloroethane	mg/kg	0.5	<0.5	-	<0.5	-
1,2,3,5 and 1,2,4,5 -tetrachlorobenzene	mg/kg	1	<1	-	<1	-
1,2,3,4-tetrachlorobenzene	mg/kg	0.5	<0.5	-	<0.5	-
1/2-Chloronaphthalene	mg/kg	1	<1	-	<1	-
1,2,4-trichlorobenzene	mg/kg	0.5	<0.5	-	<0.5	-

Phthalates

Bis(2-ethylhexyl)phthalate	mg/kg	5	<5	-	<5	-
Bis(2-ethylhexyl)adipate	mg/kg	0.5	<0.5	-	<0.5	-
Butyl benzyl phthalate	mg/kg	0.5	<0.5	-	<0.5	-
Di-n-butyl phthalate	mg/kg	0.5	<0.5	-	<0.5	-
Diethyl phthalate	mg/kg	0.5	<0.5	-	<0.5	-



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR	Sample Number	SE247181.017	SE247181.018	SE247181.019	SE247181.020
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	04 May 2023	04 May 2023	04 May 2023	04 May 2023
			Sample Name	TP115_0.1	TP115_0.5	TP118_0.1	TP118_1.2

Full 8270 SVOC in Soil Method: AN420 Tested: 16/5/2023 (continued)

Dimethyl phthalate	mg/kg	0.5	<0.5	-	<0.5	-
Di-n-octyl phthalate	mg/kg	0.5	<0.5	-	<0.5	-

Carbamates

Carbofuran	mg/kg	0.5	<0.5	-	<0.5	-
Carbaryl	mg/kg	0.5	<0.5	-	<0.5	-

Herbicides (normal)

Trifluralin	mg/kg	0.5	<0.5	-	<0.5	-

Nitrosamines

N-nitroso-di-n-butylamine (NDBA)	mg/kg	0.5	<0.5	-	<0.5	-
N-nitroso-diethylamine (NDEA)	mg/kg	1	<1	-	<1	-
N-nitroso-di-n-propylamine (NDPA)	mg/kg	0.5	<0.5	-	<0.5	-
N-nitroso-morpholine (NMOR)	mg/kg	0.5	<0.5	-	<0.5	-
N-nitroso-piperidine (NPIP)	mg/kg	0.5	<0.5	-	<0.5	-
N-nitroso-pyrrolidine (NPYR)	mg/kg	1	<1	-	<1	-
4-amino biphenyl	mg/kg	1	<1	-	<1	-

Nitroaromatics and Ketones

Acetophenone	mg/kg	0.5	<0.5	-	<0.5	-
1,3-dinitrobenzene	mg/kg	1	<1	-	<1	-
2,4-dinitrotoluene	mg/kg	0.5	<0.5	-	<0.5	-
2,6-dinitrotoluene	mg/kg	0.5	<0.5	-	<0.5	-
Isophorone	mg/kg	0.5	<0.5	-	<0.5	-
Nitrobenzene	mg/kg	0.5	<0.5	-	<0.5	-
p-(dimethylamino) azobenzene	mg/kg	1	<1	-	<1	-
Phenacetin	mg/kg	1	<1	-	<1	-
Pentachloronitrobenzene (quintozene)	mg/kg	0.5	<0.5	-	<0.5	-

Anilines and Amines

Aniline	mg/kg	3	<3	-	<3	-
4-chloroaniline	mg/kg	1	<1	-	<1	-
2-nitroaniline	mg/kg	1	<1	-	<1	-
3-nitroaniline	mg/kg	1	<1	-	<1	-
4-nitroaniline	mg/kg	1	<1	-	<1	-
Diphenylamine	mg/kg	0.5	<0.5	-	<0.5	-
o-toluidine	mg/kg	1	<1	-	<1	-
5-nitro-o-toluidine	mg/kg	1	<1	-	<1	-
1-naphthylamine	mg/kg	1	<1	-	<1	-
2-naphthylamine	mg/kg	1	<1	-	<1	-

Haloethers

Bis(2-chloroethoxy) methane	mg/kg	0.5	<0.5	-	<0.5	-
Bis(2-chloroethyl) ether	mg/kg	0.5	<0.5	-	<0.5	-
Bis(2-chloroisopropyl) ether	mg/kg	0.5	<0.5	-	<0.5	-
4-chlorophenyl phenyl ether	mg/kg	0.5	<0.5	-	<0.5	-
4-bromophenyl phenyl ether	mg/kg	0.5	<0.5	-	<0.5	-



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE247181.017 Soil 04 May 2023 TP115_0.1	SE247181.018 Soil 04 May 2023 TP115_0.5	SE247181.019 Soil 04 May 2023 TP118_0.1	SE247181.020 Soil 04 May 2023 TP118_1.2

Full 8270 SVOC in Soil Method: AN420 Tested: 10/5/2023 (continued)

Other SVOCs

Methyl methanesulfonate	mg/kg	1	<1	-	<1	-
Ethyl methanesulfonate	mg/kg	1	<1	-	<1	-
Dibenzofuran	mg/kg	0.5	<0.5	-	<0.5	-
Benzyl alcohol	mg/kg	1	<1	-	<1	-
Safrole	mg/kg	0.5	<0.5	-	<0.5	-
Isosafrole Isomer 1	mg/kg	1	<1	-	<1	-
Isosafrole Isomer 2	mg/kg	1	<1	-	<1	-
1,4-naphthoquinone	mg/kg	0.5	<0.5	-	<0.5	-
Thionazin	mg/kg	1	<1	-	<1	-

Speciated Routine Phenols

3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	-	<1	-
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	-	<0.5	-
2,6-dichlorophenol	mg/kg	0.5	<0.5	-	<0.5	-
2,3,4,6-tetrachlorophenol	mg/kg	0.5	<0.5	-	<0.5	-
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	-	<0.5	-
4-chloro-3-methylphenol	mg/kg	2	<2	-	<2	-
2-chlorophenol	mg/kg	0.5	<0.5	-	<0.5	-
2,4-dichlorophenol	mg/kg	0.5	<0.5	-	<0.5	-
2,4-dimethylphenol	mg/kg	0.5	<0.5	-	<0.5	-
2-nitrophenol	mg/kg	0.5	<0.5	-	<0.5	-
Phenol	mg/kg	0.5	<0.5	-	<0.5	-
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	-	<0.5	-
Pentachlorophenol	mg/kg	0.5	<0.5	-	<0.5	-
4-nitrophenol	mg/kg	1	<1	-	<1	-

Surrogates

d5-phenol (Surrogate)	%	-	97	-	95	-
d5-nitrobenzene (Surrogate)	%	-	118	-	114	-
2-fluorobiphenyl (Surrogate)	%	-	112	-	110	-
2,4,6-tribromophenol (Surrogate)	%	-	122	-	113	-
d14-p-terphenyl (Surrogate)	%	-	92	-	88	-

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES Method: AN040/AN320 Tested: 10/5/2023

Arsenic, As	mg/kg	1	4	4	7	3
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	15	12	4.1	13
Copper, Cu	mg/kg	0.5	13	9.3	5.7	<0.5
Nickel, Ni	mg/kg	0.5	18	13	3.9	0.9
Lead, Pb	mg/kg	1	25	8	9	7
Zinc, Zn	mg/kg	2	100	27	29	3.0

Mercury in Soil Method: AN312 Tested: 10/5/2023

Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05

Moisture Content Method: AN002 Tested: 10/5/2023

% Moisture	%w/w	1	10.0	12.4	11.6	14.5



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE247181.017 Soil 04 May 2023 TP115_0.1	SE247181.018 Soil 04 May 2023 TP115_0.5	SE247181.019 Soil 04 May 2023 TP118_0.1	SE247181.020 Soil 04 May 2023 TP118_1.2

Fibre Identification in soil Method: AS4964/AN602 Tested: 15/5/2023

FibreID

Asbestos Detected	No unit	-	No	No	No	No	-

SemiQuant

Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	-

Fibre ID in bulk materials Method: AN602/AS4964 Tested: 16/5/2023

FibreID

Asbestos Detected	No unit	-	-	-	-	-	-

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples Method: MA-1523 Tested: 17/5/2023

Perfluorobutanoic acid (PFBA)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0008	<0.0008	-	<0.0008	-
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Sum PFOS and PFHXS	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluorononane sulfonate (PFNS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
(13C4-PFBA) Isotopically Labelled Internal Recovery	%	-	104	-	103	-
(13C5-PFPeA) Isotopically Labelled Internal Recovery	%	-	105	-	105	-
(13C5-PFHxA) Isotopically Labelled Internal Recovery	%	-	101	-	111	-
(13C4-PFHpA) Isotopically Labelled Internal Recovery	%	-	100	-	102	-
(13C4_PFOA) Isotopically Labelled Internal Recovery	%	-	107	-	109	-
(13C3-PFBS) Isotopically Labelled Internal Recovery	%	-	90	-	102	-
(13C3-PFHxS) Isotopically Labelled Internal Recovery	%	-	91	-	101	-
(13C8-PFOS) Isotopically Labelled Internal Recovery	%	-	119	-	120	-



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR	Sample Number	SE247181.021	SE247181.022	SE247181.023	SE247181.024
			Sample Matrix	Soil	Material	Soil	Soil
			Sample Date	04 May 2023	04 May 2023	04 May 2023	04 May 2023
			Sample Name	TP113_0.1	TP113_0.1_PACM	TP113_0.4	TP113_1

VOC's in Soil Method: AN433 Tested: 10/5/2023

Fumigants

2,2-dichloropropane	mg/kg	0.1	-	-	<0.1	-
1,2-dichloropropane	mg/kg	0.1	-	-	<0.1	-
cis-1,3-dichloropropene	mg/kg	0.1	-	-	<0.1	-
trans-1,3-dichloropropene	mg/kg	0.1	-	-	<0.1	-
1,2-dibromoethane (EDB)	mg/kg	0.1	-	-	<0.1	-

Halogenated Aliphatics

Dichlorodifluoromethane (CFC-12)	mg/kg	1	-	-	<1	-
Chloromethane	mg/kg	1	-	-	<1	-
Vinyl chloride (Chloroethene)	mg/kg	0.1	-	-	<0.1	-
Bromomethane	mg/kg	1	-	-	<1	-
Chloroethane	mg/kg	1	-	-	<1	-
Trichlorofluoromethane	mg/kg	1	-	-	<1	-
1,1-dichloroethene	mg/kg	0.1	-	-	<0.1	-
Iodomethane	mg/kg	5	-	-	<5	-
Dichloromethane (Methylene chloride)	mg/kg	0.5	-	-	<0.5	-
Allyl chloride	mg/kg	0.1	-	-	<0.1	-
trans-1,2-dichloroethene	mg/kg	0.1	-	-	<0.1	-
1,1-dichloroethane	mg/kg	0.1	-	-	<0.1	-
cis-1,2-dichloroethene	mg/kg	0.1	-	-	<0.1	-
Bromochloromethane	mg/kg	0.1	-	-	<0.1	-
1,2-dichloroethane	mg/kg	0.1	-	-	<0.1	-
1,1,1-trichloroethane	mg/kg	0.1	-	-	<0.1	-
1,1-dichloropropene	mg/kg	0.1	-	-	<0.1	-
Carbon tetrachloride	mg/kg	0.1	-	-	<0.1	-
Dibromomethane	mg/kg	0.1	-	-	<0.1	-
Trichloroethene (Trichloroethylene,TCE)	mg/kg	0.1	-	-	<0.1	-
1,1,2-trichloroethane	mg/kg	0.1	-	-	<0.1	-
1,3-dichloropropane	mg/kg	0.1	-	-	<0.1	-
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	-	-	<0.1	-
1,1,1,2-tetrachloroethane	mg/kg	0.1	-	-	<0.1	-
1,1,2,2-tetrachloroethane	mg/kg	0.1	-	-	<0.1	-
1,2,3-trichloropropane	mg/kg	0.1	-	-	<0.1	-
trans-1,4-dichloro-2-butene	mg/kg	1	-	-	<1	-
1,2-dibromo-3-chloropropane	mg/kg	0.1	-	-	<0.1	-
Hexachlorobutadiene	mg/kg	0.1	-	-	<0.1	-

Halogenated Aromatics

Chlorobenzene	mg/kg	0.1	-	-	<0.1	-
Bromobenzene	mg/kg	0.1	-	-	<0.1	-
2-chlorotoluene	mg/kg	0.1	-	-	<0.1	-
4-chlorotoluene	mg/kg	0.1	-	-	<0.1	-
1,3-dichlorobenzene	mg/kg	0.1	-	-	<0.1	-
1,4-dichlorobenzene	mg/kg	0.1	-	-	<0.1	-
1,2-dichlorobenzene	mg/kg	0.1	-	-	<0.1	-
1,2,4-trichlorobenzene	mg/kg	0.1	-	-	<0.1	-
1,2,3-trichlorobenzene	mg/kg	0.1	-	-	<0.1	-

Monocyclic Aromatic Hydrocarbons

Benzene	mg/kg	0.1	<0.1	-	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	-	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	-	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	-	<0.2	<0.2
Styrene (Vinyl benzene)	mg/kg	0.1	-	-	<0.1	-
o-xylene	mg/kg	0.1	<0.1	-	<0.1	<0.1
Isopropylbenzene (Cumene)	mg/kg	0.1	-	-	<0.1	-
n-propylbenzene	mg/kg	0.1	-	-	<0.1	-
1,3,5-trimethylbenzene	mg/kg	0.1	-	-	<0.1	-



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR	Sample Number	SE247181.021	SE247181.022	SE247181.023	SE247181.024
			Sample Matrix	Soil	Material	Soil	Soil
			Sample Date	04 May 2023	04 May 2023	04 May 2023	04 May 2023
			Sample Name	TP113_0.1	TP113_0.1_PACM	TP113_0.4	TP113_1

VOC's in Soil Method: AN433 Tested: 10/5/2023 (continued)

tert-butylbenzene	mg/kg	0.1	-	-	<0.1	-
1,2,4-trimethylbenzene	mg/kg	0.1	-	-	<0.1	-
sec-butylbenzene	mg/kg	0.1	-	-	<0.1	-
p-isopropyltoluene	mg/kg	0.1	-	-	<0.1	-
n-butylbenzene	mg/kg	0.1	-	-	<0.1	-

Nitrogenous Compounds

Acrylonitrile	mg/kg	0.1	-	-	<0.1	-
2-nitropropane	mg/kg	10	-	-	<10	-

Oxygenated Compounds

Acetone (2-propanone)	mg/kg	10	-	-	<10	-
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	-	-	<0.1	-
Vinyl acetate*	mg/kg	10	-	-	<10	-
MIBK (4-methyl-2-pentanone)	mg/kg	1	-	-	<1	-
2-hexanone (MBK)	mg/kg	5	-	-	<5	-

Polycyclic VOCs

Naphthalene (VOC)*	mg/kg	0.1	<0.1	-	<0.1	<0.1

Sulphonated Compounds

Carbon disulfide	mg/kg	0.5	-	-	<0.5	-

Surrogates

d4-1,2-dichloroethane (Surrogate)	%	-	81	-	81	77
d8-toluene (Surrogate)	%	-	87	-	87	83
Bromofluorobenzene (Surrogate)	%	-	80	-	93	83

Totals

Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	-	-	<1.8	-
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	-	-	<1.8	-
Total BTEX*	mg/kg	0.6	<0.6	-	<0.6	<0.6
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	-	-	<3.0	-
Total VOC*	mg/kg	24	-	-	<24	-
Total Xylenes*	mg/kg	0.3	<0.3	-	<0.3	<0.3



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR	Sample Number	SE247181.021	SE247181.022	SE247181.023	SE247181.024
			Sample Matrix	Soil	Material	Soil	Soil
			Sample Date	04 May 2023	04 May 2023	04 May 2023	04 May 2023
			Sample Name	TP113_0.1	TP113_0.1_PACM	TP113_0.4	TP113_1

VOC's in Soil Method: AN433 Tested: 10/5/2023 (continued)

Trihalomethanes

Chloroform (THM)	mg/kg	0.1	-	-	<0.1	-
Bromodichloromethane (THM)	mg/kg	0.1	-	-	<0.1	-
Dibromochloromethane (THM)	mg/kg	0.1	-	-	<0.1	-
Bromoform (THM)	mg/kg	0.1	-	-	<0.1	-

Volatile Petroleum Hydrocarbons in Soil Method: AN433 Tested: 10/5/2023

TRH C6-C10	mg/kg	25	<25	-	<25	<25
TRH C6-C9	mg/kg	20	<20	-	<20	<20

Surrogates

d4-1,2-dichloroethane (Surrogate)	%	-	81	-	81	77
d8-toluene (Surrogate)	%	-	87	-	87	83
Bromofluorobenzene (Surrogate)	%	-	80	-	93	83

VPH F Bands

Benzene (F0)	mg/kg	0.1	<0.1	-	<0.1	<0.1
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	-	<25	<25

TRH (Total Recoverable Hydrocarbons) in Soil Method: AN403 Tested: 10/5/2023

TRH C10-C14	mg/kg	20	<20	-	<20	<20
TRH C15-C28	mg/kg	45	60	-	<45	<45
TRH C29-C36	mg/kg	45	49	-	<45	<45
TRH C37-C40	mg/kg	100	<100	-	<100	<100
TRH C10-C36 Total	mg/kg	110	<110	-	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	-	<210	<210

TRH F Bands

TRH >C10-C16	mg/kg	25	<25	-	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	-	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	94	-	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	-	<120	<120



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR	Sample Number	SE247181.021	SE247181.022	SE247181.023	SE247181.024
			Sample Matrix	Soil	Material	Soil	Soil
			Sample Date	04 May 2023	04 May 2023	04 May 2023	04 May 2023
			Sample Name	TP113_0.1	TP113_0.1_PACM	TP113_0.4	TP113_1

PAH (Polynuclear Aromatic Hydrocarbons) in Soil Method: AN420 Tested: 10/5/2023

Naphthalene	mg/kg	0.1	<0.1	-	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	-	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	-	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	-	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	-	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	-	<0.1	<0.1
Phenanthrene	mg/kg	0.1	0.1	-	0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	-	<0.1	<0.1
Fluoranthene	mg/kg	0.1	0.1	-	0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	-	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	-	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	-	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	-	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	-	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	-	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	-	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	-	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	-	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	<0.2	-	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	<0.2	-	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	<0.3	-	<0.3	<0.3
Total PAH (18)	mg/kg	0.8	<0.8	-	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	-	<0.8	<0.8

Surrogates

d5-nitrobenzene (Surrogate)	%	-	116	-	119	116
2-fluorobiphenyl (Surrogate)	%	-	85	-	86	85
d14-p-terphenyl (Surrogate)	%	-	97	-	101	99

OC Pesticides in Soil Method: AN420 Tested: 10/5/2023

Alpha BHC	mg/kg	0.1	-	-	<0.1	-
Hexachlorobenzene (HCB)	mg/kg	0.1	-	-	<0.1	-
Beta BHC	mg/kg	0.1	-	-	<0.1	-
Lindane (gamma BHC)	mg/kg	0.1	-	-	<0.1	-
Delta BHC	mg/kg	0.1	-	-	<0.1	-
Heptachlor	mg/kg	0.1	-	-	<0.1	-
Aldrin	mg/kg	0.1	-	-	<0.1	-
Isodrin	mg/kg	0.1	-	-	<0.1	-
Heptachlor epoxide	mg/kg	0.1	-	-	<0.1	-
Gamma Chlordane	mg/kg	0.1	-	-	<0.1	-
Alpha Chlordane	mg/kg	0.1	-	-	<0.1	-
Alpha Endosulfan	mg/kg	0.2	-	-	<0.2	-
o,p'-DDE*	mg/kg	0.1	-	-	<0.1	-
p,p'-DDE	mg/kg	0.1	-	-	<0.1	-
Dieldrin	mg/kg	0.2	-	-	<0.2	-
Endrin	mg/kg	0.2	-	-	<0.2	-
Beta Endosulfan	mg/kg	0.2	-	-	<0.2	-
o,p'-DDD*	mg/kg	0.1	-	-	<0.1	-
p,p'-DDD	mg/kg	0.1	-	-	<0.1	-
Endrin aldehyde	mg/kg	0.1	-	-	<0.1	-
Endosulfan sulphate	mg/kg	0.1	-	-	<0.1	-
o,p'-DDT*	mg/kg	0.1	-	-	<0.1	-
p,p'-DDT	mg/kg	0.1	-	-	<0.1	-
Endrin ketone	mg/kg	0.1	-	-	<0.1	-
Methoxychlor	mg/kg	0.1	-	-	<0.1	-
Mirex	mg/kg	0.1	-	-	<0.1	-
trans-Nonachlor	mg/kg	0.1	-	-	<0.1	-
Total CLP OC Pesticides	mg/kg	1	-	-	<1	-
Total OC VIC EPA	mg/kg	1	-	-	<1	-



ANALYTICAL REPORT

SE247181 R0

Parameter	Sample Number		SE247181.021	SE247181.022	SE247181.023	SE247181.024
	Sample Matrix		Soil	Material	Soil	Soil
	Sample Date		04 May 2023	04 May 2023	04 May 2023	04 May 2023
	Sample Name		TP113_0.1	TP113_0.1_PACM	TP113_0.4	TP113_1
Units		LOR				

OC Pesticides in Soil Method: AN420 Tested: 10/5/2023 (continued)

Surrogates

Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	-	-	92	-

OP Pesticides in Soil Method: AN420 Tested: 10/5/2023

Azinphos-methyl (Guthion)	mg/kg	0.2	-	-	<0.2	-
Bromophos Ethyl	mg/kg	0.2	-	-	<0.2	-
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	-	-	<0.2	-
Diazinon (Dimpylate)	mg/kg	0.5	-	-	<0.5	-
Dichlorvos	mg/kg	0.5	-	-	<0.5	-
Dimethoate	mg/kg	0.5	-	-	<0.5	-
Ethion	mg/kg	0.2	-	-	<0.2	-
Fenitrothion	mg/kg	0.2	-	-	<0.2	-
Malathion	mg/kg	0.2	-	-	<0.2	-
Methidathion	mg/kg	0.5	-	-	<0.5	-
Parathion-ethyl (Parathion)	mg/kg	0.2	-	-	<0.2	-
Total OP Pesticides*	mg/kg	1.7	-	-	<1.7	-

Surrogates

2-fluorobiphenyl (Surrogate)	%	-	-	-	86	-
d14-p-terphenyl (Surrogate)	%	-	-	-	101	-

PCBs in Soil Method: AN420 Tested: 10/5/2023

Arochlor 1016	mg/kg	0.2	-	-	<0.2	-
Arochlor 1221	mg/kg	0.2	-	-	<0.2	-
Arochlor 1232	mg/kg	0.2	-	-	<0.2	-
Arochlor 1242	mg/kg	0.2	-	-	<0.2	-
Arochlor 1248	mg/kg	0.2	-	-	<0.2	-
Arochlor 1254	mg/kg	0.2	-	-	<0.2	-
Arochlor 1260	mg/kg	0.2	-	-	<0.2	-
Arochlor 1262	mg/kg	0.2	-	-	<0.2	-
Arochlor 1268	mg/kg	0.2	-	-	<0.2	-
Total PCBs (Arochlors)	mg/kg	1	-	-	<1	-

Surrogates

TCMX (Surrogate)	%	-	-	-	85	-



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR	Sample Number	SE247181.021	SE247181.022	SE247181.023	SE247181.024
			Sample Matrix	Soil	Material	Soil	Soil
			Sample Date	04 May 2023	04 May 2023	04 May 2023	04 May 2023
			Sample Name	TP113_0.1	TP113_0.1_PACM	TP113_0.4	TP113_1

Full 8270 SVOC in Soil Method: AN420 Tested: 16/5/2023

PAHs

Acenaphthene	mg/kg	0.1	-	-	<0.1	-
Acenaphthylene	mg/kg	0.1	-	-	<0.1	-
Anthracene	mg/kg	0.1	-	-	<0.1	-
Benzo(a)anthracene	mg/kg	0.1	-	-	<0.1	-
Benzo(b&j)fluoranthene	mg/kg	0.1	-	-	<0.1	-
Benzo(b&j&k)fluoranthene	mg/kg	0.2	-	-	<0.2	-
Benzo(k)fluoranthene	mg/kg	0.1	-	-	<0.1	-
Benzo(ghi)perylene	mg/kg	0.1	-	-	<0.1	-
Benzo(a)pyrene	mg/kg	0.1	-	-	<0.1	-
Chrysene	mg/kg	0.1	-	-	<0.1	-
Dibenzo(ah)anthracene	mg/kg	0.1	-	-	<0.1	-
Fluoranthene	mg/kg	0.1	-	-	<0.1	-
Fluorene	mg/kg	0.1	-	-	<0.1	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	-	-	<0.1	-
1-methylnaphthalene	mg/kg	0.1	-	-	<0.1	-
2-methylnaphthalene	mg/kg	0.1	-	-	<0.1	-
Naphthalene	mg/kg	0.1	-	-	<0.1	-
Phenanthrene	mg/kg	0.1	-	-	<0.1	-
Pyrene	mg/kg	0.1	-	-	<0.1	-
Carcinogenic PAHs, BaP TEQ, <LOR=LOR/2*	TEQ (mg/kg)	0.2	-	-	<0.2	-
Carcinogenic PAHs, BaP TEQ, <LOR=LOR*	TEQ (mg/kg)	0.3	-	-	<0.3	-
Carcinogenic PAHs, BaP TEQ, <LOR=0*	TEQ (mg/kg)	0.2	-	-	<0.2	-
2-acetylaminofluorene	mg/kg	0.5	-	-	<0.5	-
7,12-dimethyl-benz(a)anthracene	mg/kg	0.5	-	-	<0.5	-
3-methylcholanthrene	mg/kg	0.5	-	-	<0.5	-

OCs

Aldrin	mg/kg	0.1	-	-	<0.1	-
Alpha-BHC	mg/kg	0.1	-	-	<0.1	-
Beta-BHC	mg/kg	0.5	-	-	<0.5	-
Delta-BHC	mg/kg	0.1	-	-	<0.1	-
Gamma-BHC (Lindane)	mg/kg	0.1	-	-	<0.1	-
p,p-DDD	mg/kg	0.1	-	-	<0.1	-
p,p-DDE	mg/kg	0.1	-	-	<0.1	-
p,p-DDT	mg/kg	0.1	-	-	<0.1	-
Dieldrin	mg/kg	0.2	-	-	<0.2	-
Alpha-endosulfan	mg/kg	0.2	-	-	<0.2	-
Beta-endosulfan	mg/kg	0.2	-	-	<0.2	-
Endosulfan sulphate	mg/kg	0.1	-	-	<0.1	-
Endrin	mg/kg	0.2	-	-	<0.2	-
Heptachlor	mg/kg	0.1	-	-	<0.1	-
Heptachlor epoxide	mg/kg	0.1	-	-	<0.1	-
Isodrin	mg/kg	0.1	-	-	<0.1	-
Methoxychlor	mg/kg	0.1	-	-	<0.1	-
Mirex	mg/kg	0.1	-	-	<0.1	-
Alpha-chlordane	mg/kg	0.1	-	-	<0.1	-
Gamma-chlordane	mg/kg	0.1	-	-	<0.1	-
Endrin ketone	mg/kg	0.1	-	-	<0.1	-
Total (Alpha+Beta+SO4) Endosulfan*	mg/kg	0.2	-	-	<0.2	-

OPs

Azinphos-methyl (Guthion)	mg/kg	0.2	-	-	<0.2	-
Bromophos ethyl	mg/kg	0.2	-	-	<0.2	-
Carbophenothion	mg/kg	0.5	-	-	<0.5	-
Chlorfenvinphos-cis	mg/kg	2	-	-	<2	-
Chlorfenvinphos-trans	mg/kg	0.5	-	-	<0.5	-
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	-	-	<0.2	-
Chlorpyrifos-methyl	mg/kg	0.5	-	-	<0.5	-



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR	Sample Number	SE247181.021	SE247181.022	SE247181.023	SE247181.024
			Sample Matrix	Soil	Material	Soil	Soil
			Sample Date	04 May 2023	04 May 2023	04 May 2023	04 May 2023
			Sample Name	TP113_0.1	TP113_0.1_PACM	TP113_0.4	TP113_1

Full 8270 SVOC in Soil Method: AN420 Tested: 16/5/2023 (continued)

Co-Ral (Coumaphos)	mg/kg	0.5	-	-	<0.5	-
Diazinon (Dimpylate)	mg/kg	0.5	-	-	<0.5	-
Dichlorvos	mg/kg	0.5	-	-	<0.5	-
Demeton-S-methyl	mg/kg	0.5	-	-	<0.5	-
Dimethoate	mg/kg	0.5	-	-	<0.5	-
Disulfoton (Di-syston)	mg/kg	0.5	-	-	<0.5	-
EPN*	mg/kg	0.5	-	-	<0.5	-
Ethion	mg/kg	0.2	-	-	<0.2	-
Ethoprophos (ethoprop or prophos)	mg/kg	0.5	-	-	<0.5	-
Famphur (Famophos)	mg/kg	0.5	-	-	<0.5	-
Fenamiphos (Phenamiphos)	mg/kg	0.5	-	-	<0.5	-
Fenchlorophos (Ronnel)	mg/kg	0.5	-	-	<0.5	-
Fenitrothion	mg/kg	0.2	-	-	<0.2	-
Fenthion	mg/kg	0.5	-	-	<0.5	-
Malathion (Maldison)	mg/kg	0.2	-	-	<0.2	-
Methidathion	mg/kg	0.5	-	-	<0.5	-
Mevinphos-cis/trans	mg/kg	1	-	-	<1	-
o,o,o-triethyl phosphorothioate	mg/kg	0.5	-	-	<0.5	-
Parathion ethyl (Parathion)	mg/kg	0.2	-	-	<0.2	-
Parathion methyl	mg/kg	0.5	-	-	<0.5	-
Phorate	mg/kg	0.5	-	-	<0.5	-
Pirimiphos-ethyl	mg/kg	0.5	-	-	<0.5	-
Pirimiphos-methyl	mg/kg	0.5	-	-	<0.5	-
Profenofos	mg/kg	0.5	-	-	<0.5	-
Prothiophos (Tokuthion)*	mg/kg	0.5	-	-	<0.5	-
Sulfotepp	mg/kg	0.5	-	-	<0.5	-
Tetrachlorvinphos (Stirophos)*	mg/kg	0.5	-	-	<0.5	-

PCB UPAC(7) Congeners

PCB Congener C28	mg/kg	0.1	-	-	<0.1	-
PCB Congener C52	mg/kg	0.1	-	-	<0.1	-
PCB Congener C101	mg/kg	0.1	-	-	<0.1	-
PCB Congener C118	mg/kg	0.1	-	-	<0.1	-
PCB Congener C138	mg/kg	0.1	-	-	<0.1	-
PCB Congener C153	mg/kg	0.1	-	-	<0.1	-
PCB Congener C180	mg/kg	0.1	-	-	<0.1	-

SVCH (Cl Benzenes, Hydrocarbons & VOCs)

Hexachlorobenzene (HCB)	mg/kg	0.1	-	-	<0.1	-
1,2-dichlorobenzene	mg/kg	0.5	-	-	<0.5	-
1,3-dichlorobenzene	mg/kg	0.5	-	-	<0.5	-
1,4-dichlorobenzene	mg/kg	0.5	-	-	<0.5	-
Hexachlorobutadiene	mg/kg	0.5	-	-	<0.5	-
Hexachlorocyclopentadiene	mg/kg	1	-	-	<1	-
Hexachloroethane	mg/kg	0.5	-	-	<0.5	-
Hexachloropropene	mg/kg	0.5	-	-	<0.5	-
Pentachlorobenzene	mg/kg	0.5	-	-	<0.5	-
Pentachloroethane	mg/kg	0.5	-	-	<0.5	-
1,2,3,5 and 1,2,4,5 -tetrachlorobenzene	mg/kg	1	-	-	<1	-
1,2,3,4-tetrachlorobenzene	mg/kg	0.5	-	-	<0.5	-
1/2-Chloronaphthalene	mg/kg	1	-	-	<1	-
1,2,4-trichlorobenzene	mg/kg	0.5	-	-	<0.5	-

Phthalates

Bis(2-ethylhexyl)phthalate	mg/kg	5	-	-	<5	-
Bis(2-ethylhexyl)adipate	mg/kg	0.5	-	-	<0.5	-
Butyl benzyl phthalate	mg/kg	0.5	-	-	<0.5	-
Di-n-butyl phthalate	mg/kg	0.5	-	-	<0.5	-
Diethyl phthalate	mg/kg	0.5	-	-	<0.5	-



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR

Sample Number	SE247181.021	SE247181.022	SE247181.023	SE247181.024
Sample Matrix	Soil	Material	Soil	Soil
Sample Date	04 May 2023	04 May 2023	04 May 2023	04 May 2023
Sample Name	TP113_0.1	TP113_0.1_PACM	TP113_0.4	TP113_1

Full 8270 SVOC in Soil Method: AN420 Tested: 16/5/2023 (continued)

Dimethyl phthalate	mg/kg	0.5	-	-	<0.5	-
Di-n-octyl phthalate	mg/kg	0.5	-	-	<0.5	-

Carbamates

Carbofuran	mg/kg	0.5	-	-	<0.5	-
Carbaryl	mg/kg	0.5	-	-	<0.5	-

Herbicides (normal)

Trifluralin	mg/kg	0.5	-	-	<0.5	-

Nitrosamines

N-nitroso-di-n-butylamine (NDBA)	mg/kg	0.5	-	-	<0.5	-
N-nitroso-diethylamine (NDEA)	mg/kg	1	-	-	<1	-
N-nitroso-di-n-propylamine (NDPA)	mg/kg	0.5	-	-	<0.5	-
N-nitroso-morpholine (NMOR)	mg/kg	0.5	-	-	<0.5	-
N-nitroso-piperidine (NPIP)	mg/kg	0.5	-	-	<0.5	-
N-nitroso-pyrrolidine (NPYR)	mg/kg	1	-	-	<1	-
4-amino biphenyl	mg/kg	1	-	-	<1	-

Nitroaromatics and Ketones

Acetophenone	mg/kg	0.5	-	-	<0.5	-
1,3-dinitrobenzene	mg/kg	1	-	-	<1	-
2,4-dinitrotoluene	mg/kg	0.5	-	-	<0.5	-
2,6-dinitrotoluene	mg/kg	0.5	-	-	<0.5	-
Isophorone	mg/kg	0.5	-	-	<0.5	-
Nitrobenzene	mg/kg	0.5	-	-	<0.5	-
p-(dimethylamino) azobenzene	mg/kg	1	-	-	<1	-
Phenacetin	mg/kg	1	-	-	<1	-
Pentachloronitrobenzene (quintozene)	mg/kg	0.5	-	-	<0.5	-

Anilines and Amines

Aniline	mg/kg	3	-	-	<3	-
4-chloroaniline	mg/kg	1	-	-	<1	-
2-nitroaniline	mg/kg	1	-	-	<1	-
3-nitroaniline	mg/kg	1	-	-	<1	-
4-nitroaniline	mg/kg	1	-	-	<1	-
Diphenylamine	mg/kg	0.5	-	-	<0.5	-
o-toluidine	mg/kg	1	-	-	<1	-
5-nitro-o-toluidine	mg/kg	1	-	-	<1	-
1-naphthylamine	mg/kg	1	-	-	<1	-
2-naphthylamine	mg/kg	1	-	-	<1	-

Haloethers

Bis(2-chloroethoxy) methane	mg/kg	0.5	-	-	<0.5	-
Bis(2-chloroethyl) ether	mg/kg	0.5	-	-	<0.5	-
Bis(2-chloroisopropyl) ether	mg/kg	0.5	-	-	<0.5	-
4-chlorophenyl phenyl ether	mg/kg	0.5	-	-	<0.5	-
4-bromophenyl phenyl ether	mg/kg	0.5	-	-	<0.5	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE247181.021 Soil 04 May 2023 TP113_0.1	SE247181.022 Material 04 May 2023 TP113_0.1_PACM	SE247181.023 Soil 04 May 2023 TP113_0.4	SE247181.024 Soil 04 May 2023 TP113_1

Full 8270 SVOC in Soil Method: AN420 Tested: 16/5/2023 (continued)

Other SVOCs

Methyl methanesulfonate	mg/kg	1	-	-	<1	-
Ethyl methanesulfonate	mg/kg	1	-	-	<1	-
Dibenzofuran	mg/kg	0.5	-	-	<0.5	-
Benzyl alcohol	mg/kg	1	-	-	<1	-
Safrrole	mg/kg	0.5	-	-	<0.5	-
Isosafrole Isomer 1	mg/kg	1	-	-	<1	-
Isosafrole Isomer 2	mg/kg	1	-	-	<1	-
1,4-naphthoquinone	mg/kg	0.5	-	-	<0.5	-
Thionazin	mg/kg	1	-	-	<1	-

Speciated Routine Phenols

3/4-methyl phenol (m/p-cresol)	mg/kg	1	-	-	<1	-
2-methyl phenol (o-cresol)	mg/kg	0.5	-	-	<0.5	-
2,6-dichlorophenol	mg/kg	0.5	-	-	<0.5	-
2,3,4,6-tetrachlorophenol	mg/kg	0.5	-	-	<0.5	-
2,4,5-trichlorophenol	mg/kg	0.5	-	-	<0.5	-
4-chloro-3-methylphenol	mg/kg	2	-	-	<2	-
2-chlorophenol	mg/kg	0.5	-	-	<0.5	-
2,4-dichlorophenol	mg/kg	0.5	-	-	<0.5	-
2,4-dimethylphenol	mg/kg	0.5	-	-	<0.5	-
2-nitrophenol	mg/kg	0.5	-	-	<0.5	-
Phenol	mg/kg	0.5	-	-	<0.5	-
2,4,6-trichlorophenol	mg/kg	0.5	-	-	<0.5	-
Pentachlorophenol	mg/kg	0.5	-	-	<0.5	-
4-nitrophenol	mg/kg	1	-	-	<1	-

Surrogates

d5-phenol (Surrogate)	%	-	-	-	97	-
d5-nitrobenzene (Surrogate)	%	-	-	-	118	-
2-fluorobiphenyl (Surrogate)	%	-	-	-	114	-
2,4,6-tribromophenol (Surrogate)	%	-	-	-	119	-
d14-p-terphenyl (Surrogate)	%	-	-	-	90	-

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES Method: AN040/AN320 Tested: 10/5/2023

Arsenic, As	mg/kg	1	5	-	5	9
Cadmium, Cd	mg/kg	0.3	<0.3	-	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	18	-	2.3	7.8
Copper, Cu	mg/kg	0.5	17	-	3.1	1.5
Nickel, Ni	mg/kg	0.5	19	-	1.0	1.2
Lead, Pb	mg/kg	1	17	-	8	6
Zinc, Zn	mg/kg	2	100	-	36	25

Mercury in Soil Method: AN312 Tested: 10/5/2023

Mercury	mg/kg	0.05	<0.05	-	<0.05	<0.05

Moisture Content Method: AN002 Tested: 10/5/2023

% Moisture	%w/w	1	11.9	-	11.8	14.9



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR

Sample Number	SE247181.021	SE247181.022	SE247181.023	SE247181.024
Sample Matrix	Soil	Material	Soil	Soil
Sample Date	04 May 2023	04 May 2023	04 May 2023	04 May 2023
Sample Name	TP113_0.1	TP113_0.1_PACM	TP113_0.4	TP113_1

Fibre Identification in soil **Method: AS4964/AN602** **Tested: 15/5/2023**

FibreID

Asbestos Detected	No unit	-	No	-	No	No

SemiQuant

Estimated Fibres*	%w/w	0.01	<0.01	-	<0.01	<0.01

Fibre ID in bulk materials **Method: AN602/AS4964** **Tested: 16/5/2023**

FibreID

Asbestos Detected	No unit	-	-	Yes	-	-

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples **Method: MA-1523** **Tested: 17/5/2023**

Perfluorobutanoic acid (PFBA)	mg/kg	0.0016	<0.0016	-	-	-
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0016	<0.0016	-	-	-
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0016	<0.0016	-	-	-
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0016	<0.0016	-	-	-
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0008	<0.0008	-	-	-
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0016	<0.0016	-	-	-
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0016	<0.0016	-	-	-
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0016	<0.0016	-	-	-
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0016	<0.0016	-	-	-
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0016	<0.0016	-	-	-
Sum PFOS and PFHXS	mg/kg	0.0016	<0.0016	-	-	-
Perfluorononane sulfonate (PFNS)	mg/kg	0.0016	<0.0016	-	-	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.0016	<0.0016	-	-	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.0016	<0.0016	-	-	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.0016	<0.0016	-	-	-
(13C4-PFBA) Isotopically Labelled Internal Recovery	%	-	104	-	-	-
(13C5-PFPeA) Isotopically Labelled Internal Recovery	%	-	101	-	-	-
(13C5-PFHxA) Isotopically Labelled Internal Recovery	%	-	131	-	-	-
(13C4-PFHpA) Isotopically Labelled Internal Recovery	%	-	120	-	-	-
(13C4_PFOA) Isotopically Labelled Internal Recovery	%	-	105	-	-	-
(13C3-PFBS) Isotopically Labelled Internal Recovery	%	-	117	-	-	-
(13C3-PFHxS) Isotopically Labelled Internal Recovery	%	-	94	-	-	-
(13C8-PFOS) Isotopically Labelled Internal Recovery	%	-	95	-	-	-



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE247181.025 Soil 04 May 2023 TP113_2	SE247181.026 Soil 03 May 2023 TP105_0.5	SE247181.027 Soil 03 May 2023 QA100	SE247181.028 Soil 03 May 2023 TP105_3

VOC's in Soil Method: AN433 Tested: 10/5/2023

Fumigants

2,2-dichloropropane	mg/kg	0.1	<0.1	-	-	-
1,2-dichloropropane	mg/kg	0.1	<0.1	-	-	-
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	-	-	-
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	-	-	-
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	-	-	-

Halogenated Aliphatics

Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	-	-	-
Chloromethane	mg/kg	1	<1	-	-	-
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	-	-	-
Bromomethane	mg/kg	1	<1	-	-	-
Chloroethane	mg/kg	1	<1	-	-	-
Trichlorofluoromethane	mg/kg	1	<1	-	-	-
1,1-dichloroethene	mg/kg	0.1	<0.1	-	-	-
Iodomethane	mg/kg	5	<5	-	-	-
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	-	-	-
Allyl chloride	mg/kg	0.1	<0.1	-	-	-
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	-	-	-
1,1-dichloroethane	mg/kg	0.1	<0.1	-	-	-
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	-	-	-
Bromochloromethane	mg/kg	0.1	<0.1	-	-	-
1,2-dichloroethane	mg/kg	0.1	<0.1	-	-	-
1,1,1-trichloroethane	mg/kg	0.1	<0.1	-	-	-
1,1-dichloropropene	mg/kg	0.1	<0.1	-	-	-
Carbon tetrachloride	mg/kg	0.1	<0.1	-	-	-
Dibromomethane	mg/kg	0.1	<0.1	-	-	-
Trichloroethene (Trichloroethylene,TCE)	mg/kg	0.1	<0.1	-	-	-
1,1,2-trichloroethane	mg/kg	0.1	<0.1	-	-	-
1,3-dichloropropane	mg/kg	0.1	<0.1	-	-	-
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	-	-	-
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	-	-	-
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	-	-	-
1,2,3-trichloropropane	mg/kg	0.1	<0.1	-	-	-
trans-1,4-dichloro-2-butene	mg/kg	1	<1	-	-	-
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	-	-	-
Hexachlorobutadiene	mg/kg	0.1	<0.1	-	-	-

Halogenated Aromatics

Chlorobenzene	mg/kg	0.1	<0.1	-	-	-
Bromobenzene	mg/kg	0.1	<0.1	-	-	-
2-chlorotoluene	mg/kg	0.1	<0.1	-	-	-
4-chlorotoluene	mg/kg	0.1	<0.1	-	-	-
1,3-dichlorobenzene	mg/kg	0.1	<0.1	-	-	-
1,4-dichlorobenzene	mg/kg	0.1	<0.1	-	-	-
1,2-dichlorobenzene	mg/kg	0.1	<0.1	-	-	-
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	-	-	-
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	-	-	-

Monocyclic Aromatic Hydrocarbons

Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	-	-	-
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	-	-	-
n-propylbenzene	mg/kg	0.1	<0.1	-	-	-
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	-	-	-



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR	Sample Number	SE247181.025	SE247181.026	SE247181.027	SE247181.028
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	04 May 2023	03 May 2023	03 May 2023	03 May 2023
			Sample Name	TP113_2	TP105_0.5	QA100	TP105_3

VOC's in Soil Method: AN433 Tested: 10/5/2023 (continued)

tert-butylbenzene	mg/kg	0.1	<0.1	-	-	-
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	-	-	-
sec-butylbenzene	mg/kg	0.1	<0.1	-	-	-
p-isopropyltoluene	mg/kg	0.1	<0.1	-	-	-
n-butylbenzene	mg/kg	0.1	<0.1	-	-	-

Nitrogenous Compounds

Acrylonitrile	mg/kg	0.1	<0.1	-	-	-
2-nitropropane	mg/kg	10	<10	-	-	-

Oxygenated Compounds

Acetone (2-propanone)	mg/kg	10	<10	-	-	-
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	-	-	-
Vinyl acetate*	mg/kg	10	<10	-	-	-
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	-	-	-
2-hexanone (MBK)	mg/kg	5	<5	-	-	-

Polycyclic VOCs

Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1

Sulphonated Compounds

Carbon disulfide	mg/kg	0.5	<0.5	-	-	-

Surrogates

d4-1,2-dichloroethane (Surrogate)	%	-	85	86	79	85
d8-toluene (Surrogate)	%	-	89	90	76	77
Bromofluorobenzene (Surrogate)	%	-	87	70	75	82

Totals

Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	-	-	-
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	-	-	-
Total BTEX*	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	-	-	-
Total VOC*	mg/kg	24	<24	-	-	-
Total Xylenes*	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE247181.025 Soil 04 May 2023 TP113_2	SE247181.026 Soil 03 May 2023 TP105_0.5	SE247181.027 Soil 03 May 2023 QA100	SE247181.028 Soil 03 May 2023 TP105_3

VOC's in Soil Method: AN433 Tested: 10/5/2023 (continued)

Trihalomethanes

Chloroform (THM)	mg/kg	0.1	<0.1	-	-	-
Bromodichloromethane (THM)	mg/kg	0.1	<0.1	-	-	-
Dibromochloromethane (THM)	mg/kg	0.1	<0.1	-	-	-
Bromoform (THM)	mg/kg	0.1	<0.1	-	-	-

Volatile Petroleum Hydrocarbons in Soil Method: AN433 Tested: 10/5/2023

TRH C6-C10	mg/kg	25	<25	<25	<25	<25
TRH C6-C9	mg/kg	20	<20	<20	<20	<20

Surrogates

d4-1,2-dichloroethane (Surrogate)	%	-	85	86	79	85
d8-toluene (Surrogate)	%	-	89	90	76	77
Bromofluorobenzene (Surrogate)	%	-	87	70	75	82

VPH F Bands

Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25

TRH (Total Recoverable Hydrocarbons) in Soil Method: AN403 Tested: 10/5/2023

TRH C10-C14	mg/kg	20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	52	78	<45
TRH C29-C36	mg/kg	45	<45	95	120	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100
TRH C10-C36 Total	mg/kg	110	<110	150	190	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210

TRH F Bands

TRH >C10-C16	mg/kg	25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	120	160	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR

Sample Number	SE247181.025	SE247181.026	SE247181.027	SE247181.028
Sample Matrix	Soil	Soil	Soil	Soil
Sample Date	04 May 2023	03 May 2023	03 May 2023	03 May 2023
Sample Name	TP113_2	TP105_0.5	QA100	TP105_3

PAH (Polynuclear Aromatic Hydrocarbons) in Soil Method: AN420 Tested: 10/5/2023

Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8

Surrogates

d5-nitrobenzene (Surrogate)	%	-	117	120	94	120
2-fluorobiphenyl (Surrogate)	%	-	86	89	82	87
d14-p-terphenyl (Surrogate)	%	-	101	103	79	102

OC Pesticides in Soil Method: AN420 Tested: 10/5/2023

Alpha BHC	mg/kg	0.1	-	-	-	-
Hexachlorobenzene (HCB)	mg/kg	0.1	-	-	-	-
Beta BHC	mg/kg	0.1	-	-	-	-
Lindane (gamma BHC)	mg/kg	0.1	-	-	-	-
Delta BHC	mg/kg	0.1	-	-	-	-
Heptachlor	mg/kg	0.1	-	-	-	-
Aldrin	mg/kg	0.1	-	-	-	-
Isodrin	mg/kg	0.1	-	-	-	-
Heptachlor epoxide	mg/kg	0.1	-	-	-	-
Gamma Chlordane	mg/kg	0.1	-	-	-	-
Alpha Chlordane	mg/kg	0.1	-	-	-	-
Alpha Endosulfan	mg/kg	0.2	-	-	-	-
o,p'-DDE*	mg/kg	0.1	-	-	-	-
p,p'-DDE	mg/kg	0.1	-	-	-	-
Dieldrin	mg/kg	0.2	-	-	-	-
Endrin	mg/kg	0.2	-	-	-	-
Beta Endosulfan	mg/kg	0.2	-	-	-	-
o,p'-DDD*	mg/kg	0.1	-	-	-	-
p,p'-DDD	mg/kg	0.1	-	-	-	-
Endrin aldehyde	mg/kg	0.1	-	-	-	-
Endosulfan sulphate	mg/kg	0.1	-	-	-	-
o,p'-DDT*	mg/kg	0.1	-	-	-	-
p,p'-DDT	mg/kg	0.1	-	-	-	-
Endrin ketone	mg/kg	0.1	-	-	-	-
Methoxychlor	mg/kg	0.1	-	-	-	-
Mirex	mg/kg	0.1	-	-	-	-
trans-Nonachlor	mg/kg	0.1	-	-	-	-
Total CLP OC Pesticides	mg/kg	1	-	-	-	-
Total OC VIC EPA	mg/kg	1	-	-	-	-



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR	Sample Number	SE247181.025	SE247181.026	SE247181.027	SE247181.028
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	04 May 2023	03 May 2023	03 May 2023	03 May 2023
			Sample Name	TP113_2	TP105_0.5	QA100	TP105_3

OC Pesticides in Soil Method: AN420 Tested: 10/5/2023 (continued)

Surrogates

Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	-	-	-	-

OP Pesticides in Soil Method: AN420 Tested: 10/5/2023

Azinphos-methyl (Guthion)	mg/kg	0.2	-	-	-	-
Bromophos Ethyl	mg/kg	0.2	-	-	-	-
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	-	-	-	-
Diazinon (Dimpylate)	mg/kg	0.5	-	-	-	-
Dichlorvos	mg/kg	0.5	-	-	-	-
Dimethoate	mg/kg	0.5	-	-	-	-
Ethion	mg/kg	0.2	-	-	-	-
Fenitrothion	mg/kg	0.2	-	-	-	-
Malathion	mg/kg	0.2	-	-	-	-
Methidathion	mg/kg	0.5	-	-	-	-
Parathion-ethyl (Parathion)	mg/kg	0.2	-	-	-	-
Total OP Pesticides*	mg/kg	1.7	-	-	-	-

Surrogates

2-fluorobiphenyl (Surrogate)	%	-	-	-	-	-
d14-p-terphenyl (Surrogate)	%	-	-	-	-	-

PCBs in Soil Method: AN420 Tested: 10/5/2023

Arochlor 1016	mg/kg	0.2	-	-	-	-
Arochlor 1221	mg/kg	0.2	-	-	-	-
Arochlor 1232	mg/kg	0.2	-	-	-	-
Arochlor 1242	mg/kg	0.2	-	-	-	-
Arochlor 1248	mg/kg	0.2	-	-	-	-
Arochlor 1254	mg/kg	0.2	-	-	-	-
Arochlor 1260	mg/kg	0.2	-	-	-	-
Arochlor 1262	mg/kg	0.2	-	-	-	-
Arochlor 1268	mg/kg	0.2	-	-	-	-
Total PCBs (Arochlors)	mg/kg	1	-	-	-	-

Surrogates

TCMX (Surrogate)	%	-	-	-	-	-



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR	Sample Number	SE247181.025	SE247181.026	SE247181.027	SE247181.028
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	04 May 2023	03 May 2023	03 May 2023	03 May 2023
			Sample Name	TP113_2	TP105_0.5	QA100	TP105_3

Full 8270 SVOC in Soil Method: AN420 Tested: 10/5/2023

PAHs

Acenaphthene	mg/kg	0.1	<0.1	-	-	-
Acenaphthylene	mg/kg	0.1	<0.1	-	-	-
Anthracene	mg/kg	0.1	<0.1	-	-	-
Benzo(a)anthracene	mg/kg	0.1	<0.1	-	-	-
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	-	-	-
Benzo(b&j&k)fluoranthene	mg/kg	0.2	<0.2	-	-	-
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	-	-	-
Benzo(ghi)perylene	mg/kg	0.1	<0.1	-	-	-
Benzo(a)pyrene	mg/kg	0.1	<0.1	-	-	-
Chrysene	mg/kg	0.1	<0.1	-	-	-
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	-	-	-
Fluoranthene	mg/kg	0.1	<0.1	-	-	-
Fluorene	mg/kg	0.1	<0.1	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	-	-	-
1-methylnaphthalene	mg/kg	0.1	<0.1	-	-	-
2-methylnaphthalene	mg/kg	0.1	<0.1	-	-	-
Naphthalene	mg/kg	0.1	<0.1	-	-	-
Phenanthrene	mg/kg	0.1	<0.1	-	-	-
Pyrene	mg/kg	0.1	<0.1	-	-	-
Carcinogenic PAHs, BaP TEQ, <LOR=LOR/2*	TEQ (mg/kg)	0.2	<0.2	-	-	-
Carcinogenic PAHs, BaP TEQ, <LOR=LOR*	TEQ (mg/kg)	0.3	<0.3	-	-	-
Carcinogenic PAHs, BaP TEQ, <LOR=0*	TEQ (mg/kg)	0.2	<0.2	-	-	-
2-acetylaminofluorene	mg/kg	0.5	<0.5	-	-	-
7,12-dimethyl-benz(a)anthracene	mg/kg	0.5	<0.5	-	-	-
3-methylcholanthrene	mg/kg	0.5	<0.5	-	-	-

OCs

Aldrin	mg/kg	0.1	<0.1	-	-	-
Alpha-BHC	mg/kg	0.1	<0.1	-	-	-
Beta-BHC	mg/kg	0.5	<0.5	-	-	-
Delta-BHC	mg/kg	0.1	<0.1	-	-	-
Gamma-BHC (Lindane)	mg/kg	0.1	<0.1	-	-	-
p,p-DDD	mg/kg	0.1	<0.1	-	-	-
p,p-DDE	mg/kg	0.1	<0.1	-	-	-
p,p-DDT	mg/kg	0.1	<0.1	-	-	-
Dieldrin	mg/kg	0.2	<0.2	-	-	-
Alpha-endosulfan	mg/kg	0.2	<0.2	-	-	-
Beta-endosulfan	mg/kg	0.2	<0.2	-	-	-
Endosulfan sulphate	mg/kg	0.1	<0.1	-	-	-
Endrin	mg/kg	0.2	<0.2	-	-	-
Heptachlor	mg/kg	0.1	<0.1	-	-	-
Heptachlor epoxide	mg/kg	0.1	<0.1	-	-	-
Isodrin	mg/kg	0.1	<0.1	-	-	-
Methoxychlor	mg/kg	0.1	<0.1	-	-	-
Mirex	mg/kg	0.1	<0.1	-	-	-
Alpha-chlordane	mg/kg	0.1	<0.1	-	-	-
Gamma-chlordane	mg/kg	0.1	<0.1	-	-	-
Endrin ketone	mg/kg	0.1	<0.1	-	-	-
Total (Alpha+Beta+SO4) Endosulfan*	mg/kg	0.2	<0.2	-	-	-

OPs

Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	-	-	-
Bromophos ethyl	mg/kg	0.2	<0.2	-	-	-
Carbophenothion	mg/kg	0.5	<0.5	-	-	-
Chlorfenvinphos-cis	mg/kg	2	<2	-	-	-
Chlorfenvinphos-trans	mg/kg	0.5	<0.5	-	-	-
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	-	-	-
Chlorpyrifos-methyl	mg/kg	0.5	<0.5	-	-	-



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR

Sample Number	SE247181.025	SE247181.026	SE247181.027	SE247181.028
Sample Matrix	Soil	Soil	Soil	Soil
Sample Date	04 May 2023	03 May 2023	03 May 2023	03 May 2023
Sample Name	TP113_2	TP105_0.5	QA100	TP105_3

Full 8270 SVOC in Soil Method: AN420 Tested: 16/5/2023 (continued)

Co-Ral (Coumaphos)	mg/kg	0.5	<0.5	-	-	-
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	-	-	-
Dichlorvos	mg/kg	0.5	<0.5	-	-	-
Demeton-S-methyl	mg/kg	0.5	<0.5	-	-	-
Dimethoate	mg/kg	0.5	<0.5	-	-	-
Disulfoton (Di-syston)	mg/kg	0.5	<0.5	-	-	-
EPN*	mg/kg	0.5	<0.5	-	-	-
Ethion	mg/kg	0.2	<0.2	-	-	-
Ethoprophos (ethoprop or prophos)	mg/kg	0.5	<0.5	-	-	-
Famphur (Famophos)	mg/kg	0.5	<0.5	-	-	-
Fenamiphos (Phenamiphos)	mg/kg	0.5	<0.5	-	-	-
Fenchlorophos (Ronnel)	mg/kg	0.5	<0.5	-	-	-
Fenitrothion	mg/kg	0.2	<0.2	-	-	-
Fenthion	mg/kg	0.5	<0.5	-	-	-
Malathion (Maldison)	mg/kg	0.2	<0.2	-	-	-
Methidathion	mg/kg	0.5	<0.5	-	-	-
Mevinphos-cis/trans	mg/kg	1	<1	-	-	-
o,o,o-triethyl phosphorothioate	mg/kg	0.5	<0.5	-	-	-
Parathion ethyl (Parathion)	mg/kg	0.2	<0.2	-	-	-
Parathion methyl	mg/kg	0.5	<0.5	-	-	-
Phorate	mg/kg	0.5	<0.5	-	-	-
Pirimiphos-ethyl	mg/kg	0.5	<0.5	-	-	-
Pirimiphos-methyl	mg/kg	0.5	<0.5	-	-	-
Profenofos	mg/kg	0.5	<0.5	-	-	-
Prothiophos (Tokuthion)*	mg/kg	0.5	<0.5	-	-	-
Sulfotepp	mg/kg	0.5	<0.5	-	-	-
Tetrachlorvinphos (Stirophos)*	mg/kg	0.5	<0.5	-	-	-

PCB UPAC(7) Congeners

PCB Congener C28	mg/kg	0.1	<0.1	-	-	-
PCB Congener C52	mg/kg	0.1	<0.1	-	-	-
PCB Congener C101	mg/kg	0.1	<0.1	-	-	-
PCB Congener C118	mg/kg	0.1	<0.1	-	-	-
PCB Congener C138	mg/kg	0.1	<0.1	-	-	-
PCB Congener C153	mg/kg	0.1	<0.1	-	-	-
PCB Congener C180	mg/kg	0.1	<0.1	-	-	-

SVCH (CI Benzenes, Hydrocarbons & VOCs)

Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	-	-	-
1,2-dichlorobenzene	mg/kg	0.5	<0.5	-	-	-
1,3-dichlorobenzene	mg/kg	0.5	<0.5	-	-	-
1,4-dichlorobenzene	mg/kg	0.5	<0.5	-	-	-
Hexachlorobutadiene	mg/kg	0.5	<0.5	-	-	-
Hexachlorocyclopentadiene	mg/kg	1	<1	-	-	-
Hexachloroethane	mg/kg	0.5	<0.5	-	-	-
Hexachloropropene	mg/kg	0.5	<0.5	-	-	-
Pentachlorobenzene	mg/kg	0.5	<0.5	-	-	-
Pentachloroethane	mg/kg	0.5	<0.5	-	-	-
1,2,3,5 and 1,2,4,5 -tetrachlorobenzene	mg/kg	1	<1	-	-	-
1,2,3,4-tetrachlorobenzene	mg/kg	0.5	<0.5	-	-	-
1/2-Chloronaphthalene	mg/kg	1	<1	-	-	-
1,2,4-trichlorobenzene	mg/kg	0.5	<0.5	-	-	-

Phthalates

Bis(2-ethylhexyl)phthalate	mg/kg	5	<5	-	-	-
Bis(2-ethylhexyl)adipate	mg/kg	0.5	<0.5	-	-	-
Butyl benzyl phthalate	mg/kg	0.5	<0.5	-	-	-
Di-n-butyl phthalate	mg/kg	0.5	<0.5	-	-	-
Diethyl phthalate	mg/kg	0.5	<0.5	-	-	-



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR

Sample Number	SE247181.025	SE247181.026	SE247181.027	SE247181.028
Sample Matrix	Soil	Soil	Soil	Soil
Sample Date	04 May 2023	03 May 2023	03 May 2023	03 May 2023
Sample Name	TP113_2	TP105_0.5	QA100	TP105_3

Full 8270 SVOC in Soil Method: AN420 Tested: 16/5/2023 (continued)

Dimethyl phthalate	mg/kg	0.5	<0.5	-	-	-
Di-n-octyl phthalate	mg/kg	0.5	<0.5	-	-	-

Carbamates

Carbofuran	mg/kg	0.5	<0.5	-	-	-
Carbaryl	mg/kg	0.5	<0.5	-	-	-

Herbicides (normal)

Trifluralin	mg/kg	0.5	<0.5	-	-	-

Nitrosamines

N-nitroso-di-n-butylamine (NDBA)	mg/kg	0.5	<0.5	-	-	-
N-nitroso-diethylamine (NDEA)	mg/kg	1	<1	-	-	-
N-nitroso-di-n-propylamine (NDPA)	mg/kg	0.5	<0.5	-	-	-
N-nitroso-morpholine (NMOR)	mg/kg	0.5	<0.5	-	-	-
N-nitroso-piperidine (NPIP)	mg/kg	0.5	<0.5	-	-	-
N-nitroso-pyrrolidine (NPYR)	mg/kg	1	<1	-	-	-
4-amino biphenyl	mg/kg	1	<1	-	-	-

Nitroaromatics and Ketones

Acetophenone	mg/kg	0.5	<0.5	-	-	-
1,3-dinitrobenzene	mg/kg	1	<1	-	-	-
2,4-dinitrotoluene	mg/kg	0.5	<0.5	-	-	-
2,6-dinitrotoluene	mg/kg	0.5	<0.5	-	-	-
Isophorone	mg/kg	0.5	<0.5	-	-	-
Nitrobenzene	mg/kg	0.5	<0.5	-	-	-
p-(dimethylamino) azobenzene	mg/kg	1	<1	-	-	-
Phenacetin	mg/kg	1	<1	-	-	-
Pentachloronitrobenzene (quintozene)	mg/kg	0.5	<0.5	-	-	-

Anilines and Amines

Aniline	mg/kg	3	<3	-	-	-
4-chloroaniline	mg/kg	1	<1	-	-	-
2-nitroaniline	mg/kg	1	<1	-	-	-
3-nitroaniline	mg/kg	1	<1	-	-	-
4-nitroaniline	mg/kg	1	<1	-	-	-
Diphenylamine	mg/kg	0.5	<0.5	-	-	-
o-toluidine	mg/kg	1	<1	-	-	-
5-nitro-o-toluidine	mg/kg	1	<1	-	-	-
1-naphthylamine	mg/kg	1	<1	-	-	-
2-naphthylamine	mg/kg	1	<1	-	-	-

Haloethers

Bis(2-chloroethoxy) methane	mg/kg	0.5	<0.5	-	-	-
Bis(2-chloroethyl) ether	mg/kg	0.5	<0.5	-	-	-
Bis(2-chloroisopropyl) ether	mg/kg	0.5	<0.5	-	-	-
4-chlorophenyl phenyl ether	mg/kg	0.5	<0.5	-	-	-
4-bromophenyl phenyl ether	mg/kg	0.5	<0.5	-	-	-



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR

Sample Number	SE247181.025	SE247181.026	SE247181.027	SE247181.028
Sample Matrix	Soil	Soil	Soil	Soil
Sample Date	04 May 2023	03 May 2023	03 May 2023	03 May 2023
Sample Name	TP113_2	TP105_0.5	QA100	TP105_3

Full 8270 SVOC in Soil Method: AN420 Tested: 10/5/2023 (continued)

Other SVOCs

Methyl methanesulfonate	mg/kg	1	<1	-	-	-
Ethyl methanesulfonate	mg/kg	1	<1	-	-	-
Dibenzofuran	mg/kg	0.5	<0.5	-	-	-
Benzyl alcohol	mg/kg	1	<1	-	-	-
Safrole	mg/kg	0.5	<0.5	-	-	-
Isosafrole Isomer 1	mg/kg	1	<1	-	-	-
Isosafrole Isomer 2	mg/kg	1	<1	-	-	-
1,4-naphthoquinone	mg/kg	0.5	<0.5	-	-	-
Thionazin	mg/kg	1	<1	-	-	-

Speciated Routine Phenols

3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	-	-	-
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	-	-	-
2,6-dichlorophenol	mg/kg	0.5	<0.5	-	-	-
2,3,4,6-tetrachlorophenol	mg/kg	0.5	<0.5	-	-	-
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	-	-	-
4-chloro-3-methylphenol	mg/kg	2	<2	-	-	-
2-chlorophenol	mg/kg	0.5	<0.5	-	-	-
2,4-dichlorophenol	mg/kg	0.5	<0.5	-	-	-
2,4-dimethylphenol	mg/kg	0.5	<0.5	-	-	-
2-nitrophenol	mg/kg	0.5	<0.5	-	-	-
Phenol	mg/kg	0.5	<0.5	-	-	-
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	-	-	-
Pentachlorophenol	mg/kg	0.5	<0.5	-	-	-
4-nitrophenol	mg/kg	1	<1	-	-	-

Surrogates

d5-phenol (Surrogate)	%	-	94	-	-	-
d5-nitrobenzene (Surrogate)	%	-	110	-	-	-
2-fluorobiphenyl (Surrogate)	%	-	106	-	-	-
2,4,6-tribromophenol (Surrogate)	%	-	113	-	-	-
d14-p-terphenyl (Surrogate)	%	-	82	-	-	-

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES Method: AN040/AN320 Tested: 10/5/2023

Arsenic, As	mg/kg	1	2	2	2	1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	6.1	6.8	6.9	5.4
Copper, Cu	mg/kg	0.5	<0.5	13	44	<0.5
Nickel, Ni	mg/kg	0.5	<0.5	18	16	0.6
Lead, Pb	mg/kg	1	3	4	6	7
Zinc, Zn	mg/kg	2	5.6	53	31	2.4

Mercury in Soil Method: AN312 Tested: 10/5/2023

Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05

Moisture Content Method: AN002 Tested: 10/5/2023

% Moisture	%w/w	1	15.9	14.6	16.3	13.7



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE247181.025 Soil 04 May 2023 TP113_2	SE247181.026 Soil 03 May 2023 TP105_0.5	SE247181.027 Soil 03 May 2023 QA100	SE247181.028 Soil 03 May 2023 TP105_3

Fibre Identification in soil Method: AS4964/AN602 Tested: 16/5/2023

FibreID

Asbestos Detected	No unit	-	-	No	-	-

SemiQuant

Estimated Fibres*	%w/w	0.01	-	<0.01	-	-

Fibre ID in bulk materials Method: AN602/AS4964 Tested: 16/5/2023

FibreID

Asbestos Detected	No unit	-	-	-	-	-

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples Method: MA-1523 Tested: 17/5/2023

Perfluorobutanoic acid (PFBA)	mg/kg	0.0016	-	<0.0016	-	-
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0016	-	<0.0016	-	-
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0016	-	<0.0016	-	-
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0016	-	<0.0016	-	-
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0008	-	<0.0008	-	-
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0016	-	<0.0016	-	-
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0016	-	<0.0016	-	-
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0016	-	<0.0016	-	-
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0016	-	<0.0016	-	-
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0016	-	<0.0016	-	-
Sum PFOS and PFHXS	mg/kg	0.0016	-	<0.0016	-	-
Perfluorononane sulfonate (PFNS)	mg/kg	0.0016	-	<0.0016	-	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.0016	-	<0.0016	-	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.0016	-	<0.0016	-	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.0016	-	<0.0016	-	-
(13C4-PFBA) Isotopically Labelled Internal Recovery	%	-	-	103	-	-
(13C5-PFPeA) Isotopically Labelled Internal Recovery	%	-	-	105	-	-
(13C5-PFHxA) Isotopically Labelled Internal Recovery	%	-	-	104	-	-
(13C4-PFHpA) Isotopically Labelled Internal Recovery	%	-	-	104	-	-
(13C4_PFOA) Isotopically Labelled Internal Recovery	%	-	-	103	-	-
(13C3-PFBS) Isotopically Labelled Internal Recovery	%	-	-	101	-	-
(13C3-PFHxS) Isotopically Labelled Internal Recovery	%	-	-	102	-	-
(13C8-PFOS) Isotopically Labelled Internal Recovery	%	-	-	120	-	-



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR	Sample Number	SE247181.029	SE247181.030	SE247181.031	SE247181.032
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	03 May 2023	03 May 2023	03 May 2023	03 May 2023
			Sample Name	TP101_0.5	TP101_1.8	TP104_0.5	TP104_1

VOC's in Soil Method: AN433 Tested: 10/5/2023

Fumigants

2,2-dichloropropane	mg/kg	0.1	<0.1	-	-	-
1,2-dichloropropane	mg/kg	0.1	<0.1	-	-	-
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	-	-	-
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	-	-	-
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	-	-	-

Halogenated Aliphatics

Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	-	-	-
Chloromethane	mg/kg	1	<1	-	-	-
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	-	-	-
Bromomethane	mg/kg	1	<1	-	-	-
Chloroethane	mg/kg	1	<1	-	-	-
Trichlorofluoromethane	mg/kg	1	<1	-	-	-
1,1-dichloroethene	mg/kg	0.1	<0.1	-	-	-
Iodomethane	mg/kg	5	<5	-	-	-
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	-	-	-
Allyl chloride	mg/kg	0.1	<0.1	-	-	-
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	-	-	-
1,1-dichloroethane	mg/kg	0.1	<0.1	-	-	-
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	-	-	-
Bromochloromethane	mg/kg	0.1	<0.1	-	-	-
1,2-dichloroethane	mg/kg	0.1	<0.1	-	-	-
1,1,1-trichloroethane	mg/kg	0.1	<0.1	-	-	-
1,1-dichloropropene	mg/kg	0.1	<0.1	-	-	-
Carbon tetrachloride	mg/kg	0.1	<0.1	-	-	-
Dibromomethane	mg/kg	0.1	<0.1	-	-	-
Trichloroethene (Trichloroethylene,TCE)	mg/kg	0.1	<0.1	-	-	-
1,1,2-trichloroethane	mg/kg	0.1	<0.1	-	-	-
1,3-dichloropropane	mg/kg	0.1	<0.1	-	-	-
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	-	-	-
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	-	-	-
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	-	-	-
1,2,3-trichloropropane	mg/kg	0.1	<0.1	-	-	-
trans-1,4-dichloro-2-butene	mg/kg	1	<1	-	-	-
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	-	-	-
Hexachlorobutadiene	mg/kg	0.1	<0.1	-	-	-

Halogenated Aromatics

Chlorobenzene	mg/kg	0.1	<0.1	-	-	-
Bromobenzene	mg/kg	0.1	<0.1	-	-	-
2-chlorotoluene	mg/kg	0.1	<0.1	-	-	-
4-chlorotoluene	mg/kg	0.1	<0.1	-	-	-
1,3-dichlorobenzene	mg/kg	0.1	<0.1	-	-	-
1,4-dichlorobenzene	mg/kg	0.1	<0.1	-	-	-
1,2-dichlorobenzene	mg/kg	0.1	<0.1	-	-	-
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	-	-	-
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	-	-	-

Monocyclic Aromatic Hydrocarbons

Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	-	-	-
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	-	-	-
n-propylbenzene	mg/kg	0.1	<0.1	-	-	-
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	-	-	-

Parameter	Units	LOR	Sample Number	SE247181.029	SE247181.030	SE247181.031	SE247181.032
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	03 May 2023	03 May 2023	03 May 2023	03 May 2023
			Sample Name	TP101_0.5	TP101_1.8	TP104_0.5	TP104_1

VOC's in Soil Method: AN433 Tested: 10/5/2023 (continued)

tert-butylbenzene	mg/kg	0.1	<0.1	-	-	-
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	-	-	-
sec-butylbenzene	mg/kg	0.1	<0.1	-	-	-
p-isopropyltoluene	mg/kg	0.1	<0.1	-	-	-
n-butylbenzene	mg/kg	0.1	<0.1	-	-	-

Nitrogenous Compounds

Acrylonitrile	mg/kg	0.1	<0.1	-	-	-
2-nitropropane	mg/kg	10	<10	-	-	-

Oxygenated Compounds

Acetone (2-propanone)	mg/kg	10	<10	-	-	-
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	-	-	-
Vinyl acetate*	mg/kg	10	<10	-	-	-
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	-	-	-
2-hexanone (MBK)	mg/kg	5	<5	-	-	-

Polycyclic VOCs

Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1

Sulphonated Compounds

Carbon disulfide	mg/kg	0.5	<0.5	-	-	-

Surrogates

d4-1,2-dichloroethane (Surrogate)	%	-	86	78	86	84
d8-toluene (Surrogate)	%	-	74	87	83	74
Bromofluorobenzene (Surrogate)	%	-	75	71	68	69

Totals

Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	-	-	-
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	-	-	-
Total BTEX*	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	-	-	-
Total VOC*	mg/kg	24	<24	-	-	-
Total Xylenes*	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE247181.029 Soil 03 May 2023 TP101_0.5	SE247181.030 Soil 03 May 2023 TP101_1.8	SE247181.031 Soil 03 May 2023 TP104_0.5	SE247181.032 Soil 03 May 2023 TP104_1

VOC's in Soil Method: AN433 Tested: 10/5/2023 (continued)

Trihalomethanes

Chloroform (THM)	mg/kg	0.1	<0.1	-	-	-
Bromodichloromethane (THM)	mg/kg	0.1	<0.1	-	-	-
Dibromochloromethane (THM)	mg/kg	0.1	<0.1	-	-	-
Bromoform (THM)	mg/kg	0.1	<0.1	-	-	-

Volatile Petroleum Hydrocarbons in Soil Method: AN433 Tested: 10/5/2023

TRH C6-C10	mg/kg	25	<25	<25	<25	<25
TRH C6-C9	mg/kg	20	<20	<20	<20	<20

Surrogates

d4-1,2-dichloroethane (Surrogate)	%	-	86	78	86	84
d8-toluene (Surrogate)	%	-	74	87	83	74
Bromofluorobenzene (Surrogate)	%	-	75	71	68	69

VPH F Bands

Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25

TRH (Total Recoverable Hydrocarbons) in Soil Method: AN403 Tested: 10/5/2023

TRH C10-C14	mg/kg	20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	77	<45	47	55
TRH C29-C36	mg/kg	45	50	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100
TRH C10-C36 Total	mg/kg	110	130	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210

TRH F Bands

TRH >C10-C16	mg/kg	25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	110	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR	Sample Number	SE247181.029	SE247181.030	SE247181.031	SE247181.032
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	03 May 2023	03 May 2023	03 May 2023	03 May 2023
			Sample Name	TP101_0.5	TP101_1.8	TP104_0.5	TP104_1

PAH (Polynuclear Aromatic Hydrocarbons) in Soil Method: AN420 Tested: 10/5/2023

Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	0.2	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	0.2	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8

Surrogates

d5-nitrobenzene (Surrogate)	%	-	119	120	120	118
2-fluorobiphenyl (Surrogate)	%	-	87	87	88	87
d14-p-terphenyl (Surrogate)	%	-	100	103	104	102

OC Pesticides in Soil Method: AN420 Tested: 10/5/2023

Alpha BHC	mg/kg	0.1	<0.1	-	-	-
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	-	-	-
Beta BHC	mg/kg	0.1	<0.1	-	-	-
Lindane (gamma BHC)	mg/kg	0.1	<0.1	-	-	-
Delta BHC	mg/kg	0.1	<0.1	-	-	-
Heptachlor	mg/kg	0.1	<0.1	-	-	-
Aldrin	mg/kg	0.1	<0.1	-	-	-
Isodrin	mg/kg	0.1	<0.1	-	-	-
Heptachlor epoxide	mg/kg	0.1	<0.1	-	-	-
Gamma Chlordane	mg/kg	0.1	<0.1	-	-	-
Alpha Chlordane	mg/kg	0.1	<0.1	-	-	-
Alpha Endosulfan	mg/kg	0.2	<0.2	-	-	-
o,p'-DDE*	mg/kg	0.1	<0.1	-	-	-
p,p'-DDE	mg/kg	0.1	<0.1	-	-	-
Dieldrin	mg/kg	0.2	<0.2	-	-	-
Endrin	mg/kg	0.2	<0.2	-	-	-
Beta Endosulfan	mg/kg	0.2	<0.2	-	-	-
o,p'-DDD*	mg/kg	0.1	<0.1	-	-	-
p,p'-DDD	mg/kg	0.1	<0.1	-	-	-
Endrin aldehyde	mg/kg	0.1	<0.1	-	-	-
Endosulfan sulphate	mg/kg	0.1	<0.1	-	-	-
o,p'-DDT*	mg/kg	0.1	<0.1	-	-	-
p,p'-DDT	mg/kg	0.1	<0.1	-	-	-
Endrin ketone	mg/kg	0.1	<0.1	-	-	-
Methoxychlor	mg/kg	0.1	<0.1	-	-	-
Mirex	mg/kg	0.1	<0.1	-	-	-
trans-Nonachlor	mg/kg	0.1	<0.1	-	-	-
Total CLP OC Pesticides	mg/kg	1	<1	-	-	-
Total OC VIC EPA	mg/kg	1	<1	-	-	-



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR	Sample Number	SE247181.029	SE247181.030	SE247181.031	SE247181.032
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	03 May 2023	03 May 2023	03 May 2023	03 May 2023
			Sample Name	TP101_0.5	TP101_1.8	TP104_0.5	TP104_1

OC Pesticides in Soil Method: AN420 Tested: 10/5/2023 (continued)

Surrogates

Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	94	-	-	-

OP Pesticides in Soil Method: AN420 Tested: 10/5/2023

Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	-	-	-
Bromophos Ethyl	mg/kg	0.2	<0.2	-	-	-
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	-	-	-
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	-	-	-
Dichlorvos	mg/kg	0.5	<0.5	-	-	-
Dimethoate	mg/kg	0.5	<0.5	-	-	-
Ethion	mg/kg	0.2	<0.2	-	-	-
Fenitrothion	mg/kg	0.2	<0.2	-	-	-
Malathion	mg/kg	0.2	<0.2	-	-	-
Methidathion	mg/kg	0.5	<0.5	-	-	-
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	-	-	-
Total OP Pesticides*	mg/kg	1.7	<1.7	-	-	-

Surrogates

2-fluorobiphenyl (Surrogate)	%	-	87	-	-	-
d14-p-terphenyl (Surrogate)	%	-	100	-	-	-

PCBs in Soil Method: AN420 Tested: 10/5/2023

Arochlor 1016	mg/kg	0.2	<0.2	-	-	-
Arochlor 1221	mg/kg	0.2	<0.2	-	-	-
Arochlor 1232	mg/kg	0.2	<0.2	-	-	-
Arochlor 1242	mg/kg	0.2	<0.2	-	-	-
Arochlor 1248	mg/kg	0.2	<0.2	-	-	-
Arochlor 1254	mg/kg	0.2	<0.2	-	-	-
Arochlor 1260	mg/kg	0.2	<0.2	-	-	-
Arochlor 1262	mg/kg	0.2	<0.2	-	-	-
Arochlor 1268	mg/kg	0.2	<0.2	-	-	-
Total PCBs (Arochlors)	mg/kg	1	<1	-	-	-

Surrogates

TCMX (Surrogate)	%	-	87	-	-	-



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR	Sample Number	SE247181.029	SE247181.030	SE247181.031	SE247181.032
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	03 May 2023	03 May 2023	03 May 2023	03 May 2023
			Sample Name	TP101_0.5	TP101_1.8	TP104_0.5	TP104_1

Full 8270 SVOC in Soil Method: AN420 Tested: 10/5/2023

PAHs

Acenaphthene	mg/kg	0.1	<0.1	-	-	-
Acenaphthylene	mg/kg	0.1	<0.1	-	-	-
Anthracene	mg/kg	0.1	<0.1	-	-	-
Benzo(a)anthracene	mg/kg	0.1	<0.1	-	-	-
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	-	-	-
Benzo(b&j&k)fluoranthene	mg/kg	0.2	<0.2	-	-	-
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	-	-	-
Benzo(ghi)perylene	mg/kg	0.1	<0.1	-	-	-
Benzo(a)pyrene	mg/kg	0.1	<0.1	-	-	-
Chrysene	mg/kg	0.1	<0.1	-	-	-
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	-	-	-
Fluoranthene	mg/kg	0.1	<0.1	-	-	-
Fluorene	mg/kg	0.1	<0.1	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	-	-	-
1-methylnaphthalene	mg/kg	0.1	<0.1	-	-	-
2-methylnaphthalene	mg/kg	0.1	<0.1	-	-	-
Naphthalene	mg/kg	0.1	<0.1	-	-	-
Phenanthrene	mg/kg	0.1	0.2	-	-	-
Pyrene	mg/kg	0.1	<0.1	-	-	-
Carcinogenic PAHs, BaP TEQ, <LOR=LOR/2*	TEQ (mg/kg)	0.2	<0.2	-	-	-
Carcinogenic PAHs, BaP TEQ, <LOR=LOR*	TEQ (mg/kg)	0.3	<0.3	-	-	-
Carcinogenic PAHs, BaP TEQ, <LOR=0*	TEQ (mg/kg)	0.2	<0.2	-	-	-
2-acetylaminofluorene	mg/kg	0.5	<0.5	-	-	-
7,12-dimethyl-benz(a)anthracene	mg/kg	0.5	<0.5	-	-	-
3-methylcholanthrene	mg/kg	0.5	<0.5	-	-	-

OCs

Aldrin	mg/kg	0.1	<0.1	-	-	-
Alpha-BHC	mg/kg	0.1	<0.1	-	-	-
Beta-BHC	mg/kg	0.5	<0.5	-	-	-
Delta-BHC	mg/kg	0.1	<0.1	-	-	-
Gamma-BHC (Lindane)	mg/kg	0.1	<0.1	-	-	-
p,p-DDD	mg/kg	0.1	<0.1	-	-	-
p,p-DDE	mg/kg	0.1	<0.1	-	-	-
p,p-DDT	mg/kg	0.1	<0.1	-	-	-
Dieldrin	mg/kg	0.2	<0.2	-	-	-
Alpha-endosulfan	mg/kg	0.2	<0.2	-	-	-
Beta-endosulfan	mg/kg	0.2	<0.2	-	-	-
Endosulfan sulphate	mg/kg	0.1	<0.1	-	-	-
Endrin	mg/kg	0.2	<0.2	-	-	-
Heptachlor	mg/kg	0.1	<0.1	-	-	-
Heptachlor epoxide	mg/kg	0.1	<0.1	-	-	-
Isodrin	mg/kg	0.1	<0.1	-	-	-
Methoxychlor	mg/kg	0.1	<0.1	-	-	-
Mirex	mg/kg	0.1	<0.1	-	-	-
Alpha-chlordane	mg/kg	0.1	<0.1	-	-	-
Gamma-chlordane	mg/kg	0.1	<0.1	-	-	-
Endrin ketone	mg/kg	0.1	<0.1	-	-	-
Total (Alpha+Beta+SO4) Endosulfan*	mg/kg	0.2	<0.2	-	-	-

OPs

Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	-	-	-
Bromophos ethyl	mg/kg	0.2	<0.2	-	-	-
Carbophenothion	mg/kg	0.5	<0.5	-	-	-
Chlorfenvinphos-cis	mg/kg	2	<2	-	-	-
Chlorfenvinphos-trans	mg/kg	0.5	<0.5	-	-	-
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	-	-	-
Chlorpyrifos-methyl	mg/kg	0.5	<0.5	-	-	-



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR	Sample Number	SE247181.029	SE247181.030	SE247181.031	SE247181.032
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	03 May 2023	03 May 2023	03 May 2023	03 May 2023
			Sample Name	TP101_0.5	TP101_1.8	TP104_0.5	TP104_1

Full 8270 SVOC in Soil Method: AN420 Tested: 16/5/2023 (continued)

Co-Ral (Coumaphos)	mg/kg	0.5	<0.5	-	-	-
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	-	-	-
Dichlorvos	mg/kg	0.5	<0.5	-	-	-
Demeton-S-methyl	mg/kg	0.5	<0.5	-	-	-
Dimethoate	mg/kg	0.5	<0.5	-	-	-
Disulfoton (Di-syston)	mg/kg	0.5	<0.5	-	-	-
EPN*	mg/kg	0.5	<0.5	-	-	-
Ethion	mg/kg	0.2	<0.2	-	-	-
Ethoprophos (ethoprop or prophos)	mg/kg	0.5	<0.5	-	-	-
Famphur (Famophos)	mg/kg	0.5	<0.5	-	-	-
Fenamiphos (Phenamiphos)	mg/kg	0.5	<0.5	-	-	-
Fenchlorophos (Ronnel)	mg/kg	0.5	<0.5	-	-	-
Fenitrothion	mg/kg	0.2	<0.2	-	-	-
Fenthion	mg/kg	0.5	<0.5	-	-	-
Malathion (Maldison)	mg/kg	0.2	<0.2	-	-	-
Methidathion	mg/kg	0.5	<0.5	-	-	-
Mevinphos-cis/trans	mg/kg	1	<1	-	-	-
o,o,o-triethyl phosphorothioate	mg/kg	0.5	<0.5	-	-	-
Parathion ethyl (Parathion)	mg/kg	0.2	<0.2	-	-	-
Parathion methyl	mg/kg	0.5	<0.5	-	-	-
Phorate	mg/kg	0.5	<0.5	-	-	-
Pirimiphos-ethyl	mg/kg	0.5	<0.5	-	-	-
Pirimiphos-methyl	mg/kg	0.5	<0.5	-	-	-
Profenofos	mg/kg	0.5	<0.5	-	-	-
Prothiophos (Tokuthion)*	mg/kg	0.5	<0.5	-	-	-
Sulfotepp	mg/kg	0.5	<0.5	-	-	-
Tetrachlorvinphos (Stirophos)*	mg/kg	0.5	<0.5	-	-	-

PCB UPAC(7) Congeners

PCB Congener C28	mg/kg	0.1	<0.1	-	-	-
PCB Congener C52	mg/kg	0.1	<0.1	-	-	-
PCB Congener C101	mg/kg	0.1	<0.1	-	-	-
PCB Congener C118	mg/kg	0.1	<0.1	-	-	-
PCB Congener C138	mg/kg	0.1	<0.1	-	-	-
PCB Congener C153	mg/kg	0.1	<0.1	-	-	-
PCB Congener C180	mg/kg	0.1	<0.1	-	-	-

SVCH (Cl Benzenes, Hydrocarbons & VOCs)

Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	-	-	-
1,2-dichlorobenzene	mg/kg	0.5	<0.5	-	-	-
1,3-dichlorobenzene	mg/kg	0.5	<0.5	-	-	-
1,4-dichlorobenzene	mg/kg	0.5	<0.5	-	-	-
Hexachlorobutadiene	mg/kg	0.5	<0.5	-	-	-
Hexachlorocyclopentadiene	mg/kg	1	<1	-	-	-
Hexachloroethane	mg/kg	0.5	<0.5	-	-	-
Hexachloropropene	mg/kg	0.5	<0.5	-	-	-
Pentachlorobenzene	mg/kg	0.5	<0.5	-	-	-
Pentachloroethane	mg/kg	0.5	<0.5	-	-	-
1,2,3,5 and 1,2,4,5 -tetrachlorobenzene	mg/kg	1	<1	-	-	-
1,2,3,4-tetrachlorobenzene	mg/kg	0.5	<0.5	-	-	-
1/2-Chloronaphthalene	mg/kg	1	<1	-	-	-
1,2,4-trichlorobenzene	mg/kg	0.5	<0.5	-	-	-

Phthalates

Bis(2-ethylhexyl)phthalate	mg/kg	5	<5	-	-	-
Bis(2-ethylhexyl)adipate	mg/kg	0.5	<0.5	-	-	-
Butyl benzyl phthalate	mg/kg	0.5	<0.5	-	-	-
Di-n-butyl phthalate	mg/kg	0.5	<0.5	-	-	-
Diethyl phthalate	mg/kg	0.5	<0.5	-	-	-



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR	Sample Number	SE247181.029	SE247181.030	SE247181.031	SE247181.032
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	03 May 2023	03 May 2023	03 May 2023	03 May 2023
			Sample Name	TP101_0.5	TP101_1.8	TP104_0.5	TP104_1

Full 8270 SVOC in Soil Method: AN420 Tested: 16/5/2023 (continued)

Dimethyl phthalate	mg/kg	0.5	<0.5	-	-	-
Di-n-octyl phthalate	mg/kg	0.5	<0.5	-	-	-

Carbamates

Carbofuran	mg/kg	0.5	<0.5	-	-	-
Carbaryl	mg/kg	0.5	<0.5	-	-	-

Herbicides (normal)

Trifluralin	mg/kg	0.5	<0.5	-	-	-

Nitrosamines

N-nitroso-di-n-butylamine (NDBA)	mg/kg	0.5	<0.5	-	-	-
N-nitroso-diethylamine (NDEA)	mg/kg	1	<1	-	-	-
N-nitroso-di-n-propylamine (NDPA)	mg/kg	0.5	<0.5	-	-	-
N-nitroso-morpholine (NMOR)	mg/kg	0.5	<0.5	-	-	-
N-nitroso-piperidine (NPIP)	mg/kg	0.5	<0.5	-	-	-
N-nitroso-pyrrolidine (NPYR)	mg/kg	1	<1	-	-	-
4-amino biphenyl	mg/kg	1	<1	-	-	-

Nitroaromatics and Ketones

Acetophenone	mg/kg	0.5	<0.5	-	-	-
1,3-dinitrobenzene	mg/kg	1	<1	-	-	-
2,4-dinitrotoluene	mg/kg	0.5	<0.5	-	-	-
2,6-dinitrotoluene	mg/kg	0.5	<0.5	-	-	-
Isophorone	mg/kg	0.5	<0.5	-	-	-
Nitrobenzene	mg/kg	0.5	<0.5	-	-	-
p-(dimethylamino) azobenzene	mg/kg	1	<1	-	-	-
Phenacetin	mg/kg	1	<1	-	-	-
Pentachloronitrobenzene (quintozene)	mg/kg	0.5	<0.5	-	-	-

Anilines and Amines

Aniline	mg/kg	3	<3	-	-	-
4-chloroaniline	mg/kg	1	<1	-	-	-
2-nitroaniline	mg/kg	1	<1	-	-	-
3-nitroaniline	mg/kg	1	<1	-	-	-
4-nitroaniline	mg/kg	1	<1	-	-	-
Diphenylamine	mg/kg	0.5	<0.5	-	-	-
o-toluidine	mg/kg	1	<1	-	-	-
5-nitro-o-toluidine	mg/kg	1	<1	-	-	-
1-naphthylamine	mg/kg	1	<1	-	-	-
2-naphthylamine	mg/kg	1	<1	-	-	-

Haloethers

Bis(2-chloroethoxy) methane	mg/kg	0.5	<0.5	-	-	-
Bis(2-chloroethyl) ether	mg/kg	0.5	<0.5	-	-	-
Bis(2-chloroisopropyl) ether	mg/kg	0.5	<0.5	-	-	-
4-chlorophenyl phenyl ether	mg/kg	0.5	<0.5	-	-	-
4-bromophenyl phenyl ether	mg/kg	0.5	<0.5	-	-	-



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE247181.029 Soil 03 May 2023 TP101_0.5	SE247181.030 Soil 03 May 2023 TP101_1.8	SE247181.031 Soil 03 May 2023 TP104_0.5	SE247181.032 Soil 03 May 2023 TP104_1

Full 8270 SVOC in Soil Method: AN420 Tested: 10/5/2023 (continued)

Other SVOCs

Methyl methanesulfonate	mg/kg	1	<1	-	-	-
Ethyl methanesulfonate	mg/kg	1	<1	-	-	-
Dibenzofuran	mg/kg	0.5	<0.5	-	-	-
Benzyl alcohol	mg/kg	1	<1	-	-	-
Safrole	mg/kg	0.5	<0.5	-	-	-
Isosafrole Isomer 1	mg/kg	1	<1	-	-	-
Isosafrole Isomer 2	mg/kg	1	<1	-	-	-
1,4-naphthoquinone	mg/kg	0.5	<0.5	-	-	-
Thionazin	mg/kg	1	<1	-	-	-

Speciated Routine Phenols

3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	-	-	-
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	-	-	-
2,6-dichlorophenol	mg/kg	0.5	<0.5	-	-	-
2,3,4,6-tetrachlorophenol	mg/kg	0.5	<0.5	-	-	-
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	-	-	-
4-chloro-3-methylphenol	mg/kg	2	<2	-	-	-
2-chlorophenol	mg/kg	0.5	<0.5	-	-	-
2,4-dichlorophenol	mg/kg	0.5	<0.5	-	-	-
2,4-dimethylphenol	mg/kg	0.5	<0.5	-	-	-
2-nitrophenol	mg/kg	0.5	<0.5	-	-	-
Phenol	mg/kg	0.5	<0.5	-	-	-
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	-	-	-
Pentachlorophenol	mg/kg	0.5	<0.5	-	-	-
4-nitrophenol	mg/kg	1	<1	-	-	-

Surrogates

d5-phenol (Surrogate)	%	-	109	-	-	-
d5-nitrobenzene (Surrogate)	%	-	126	-	-	-
2-fluorobiphenyl (Surrogate)	%	-	114	-	-	-
2,4,6-tribromophenol (Surrogate)	%	-	125	-	-	-
d14-p-terphenyl (Surrogate)	%	-	1100	-	-	-

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES Method: AN040/AN320 Tested: 10/5/2023

Arsenic, As	mg/kg	1	6	3	8	12
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	9.6	7.2	2.6	4.8
Copper, Cu	mg/kg	0.5	14	<0.5	12	15
Nickel, Ni	mg/kg	0.5	11	<0.5	7.2	5.0
Lead, Pb	mg/kg	1	18	7	5	9
Zinc, Zn	mg/kg	2	280	3.2	45	150

Mercury in Soil Method: AN312 Tested: 10/5/2023

Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05

Moisture Content Method: AN002 Tested: 10/5/2023

% Moisture	%w/w	1	23.0	16.4	27.9	19.2



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR

Sample Number	SE247181.029	SE247181.030	SE247181.031	SE247181.032
Sample Matrix	Soil	Soil	Soil	Soil
Sample Date	03 May 2023	03 May 2023	03 May 2023	03 May 2023
Sample Name	TP101_0.5	TP101_1.8	TP104_0.5	TP104_1

Fibre Identification in soil Method: AS4964/AN602 Tested: 15/5/2023

FibreID

Asbestos Detected	No unit	-	No	-	No	No

SemiQuant

Estimated Fibres*	%w/w	0.01	<0.01	-	<0.01	<0.01

Fibre ID in bulk materials Method: AN602/AS4964 Tested: 16/5/2023

FibreID

Asbestos Detected	No unit	-	-	-	-	-

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples Method: MA-1523 Tested: 17/5/2023

Perfluorobutanoic acid (PFBA)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0008	<0.0008	-	<0.0008	-
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Sum PFOS and PFHXS	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluorononane sulfonate (PFNS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
(13C4-PFBA) Isotopically Labelled Internal Recovery	%	-	103	-	102	-
(13C5-PFPeA) Isotopically Labelled Internal Recovery	%	-	105	-	103	-
(13C5-PFHxA) Isotopically Labelled Internal Recovery	%	-	91	-	123	-
(13C4-PFHpA) Isotopically Labelled Internal Recovery	%	-	94	-	113	-
(13C4_PFOA) Isotopically Labelled Internal Recovery	%	-	103	-	101	-
(13C3-PFBS) Isotopically Labelled Internal Recovery	%	-	98	-	130	-
(13C3-PFHxS) Isotopically Labelled Internal Recovery	%	-	109	-	110	-
(13C8-PFOS) Isotopically Labelled Internal Recovery	%	-	101	-	102	-



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR	Sample Number	SE247181.033	SE247181.034	SE247181.035	SE247181.036
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	03 May 2023	03 May 2023	03 May 2023	03 May 2023
			Sample Name	TP103_0.5	TP103_2	TP102_0.1	TP102_2

VOC's in Soil Method: AN433 Tested: 10/5/2023

Fumigants

2,2-dichloropropane	mg/kg	0.1	<0.1	-	-	-
1,2-dichloropropane	mg/kg	0.1	<0.1	-	-	-
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	-	-	-
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	-	-	-
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	-	-	-

Halogenated Aliphatics

Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	-	-	-
Chloromethane	mg/kg	1	<1	-	-	-
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	-	-	-
Bromomethane	mg/kg	1	<1	-	-	-
Chloroethane	mg/kg	1	<1	-	-	-
Trichlorofluoromethane	mg/kg	1	<1	-	-	-
1,1-dichloroethene	mg/kg	0.1	<0.1	-	-	-
Iodomethane	mg/kg	5	<5	-	-	-
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	-	-	-
Allyl chloride	mg/kg	0.1	<0.1	-	-	-
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	-	-	-
1,1-dichloroethane	mg/kg	0.1	<0.1	-	-	-
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	-	-	-
Bromochloromethane	mg/kg	0.1	<0.1	-	-	-
1,2-dichloroethane	mg/kg	0.1	<0.1	-	-	-
1,1,1-trichloroethane	mg/kg	0.1	<0.1	-	-	-
1,1-dichloropropene	mg/kg	0.1	<0.1	-	-	-
Carbon tetrachloride	mg/kg	0.1	<0.1	-	-	-
Dibromomethane	mg/kg	0.1	<0.1	-	-	-
Trichloroethene (Trichloroethylene,TCE)	mg/kg	0.1	<0.1	-	-	-
1,1,2-trichloroethane	mg/kg	0.1	<0.1	-	-	-
1,3-dichloropropane	mg/kg	0.1	<0.1	-	-	-
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	-	-	-
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	-	-	-
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	-	-	-
1,2,3-trichloropropane	mg/kg	0.1	<0.1	-	-	-
trans-1,4-dichloro-2-butene	mg/kg	1	<1	-	-	-
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	-	-	-
Hexachlorobutadiene	mg/kg	0.1	<0.1	-	-	-

Halogenated Aromatics

Chlorobenzene	mg/kg	0.1	<0.1	-	-	-
Bromobenzene	mg/kg	0.1	<0.1	-	-	-
2-chlorotoluene	mg/kg	0.1	<0.1	-	-	-
4-chlorotoluene	mg/kg	0.1	<0.1	-	-	-
1,3-dichlorobenzene	mg/kg	0.1	<0.1	-	-	-
1,4-dichlorobenzene	mg/kg	0.1	<0.1	-	-	-
1,2-dichlorobenzene	mg/kg	0.1	<0.1	-	-	-
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	-	-	-
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	-	-	-

Monocyclic Aromatic Hydrocarbons

Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	-	-	-
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	-	-	-
n-propylbenzene	mg/kg	0.1	<0.1	-	-	-
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	-	-	-



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR	Sample Number	SE247181.033	SE247181.034	SE247181.035	SE247181.036
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	03 May 2023	03 May 2023	03 May 2023	03 May 2023
			Sample Name	TP103_0.5	TP103_2	TP102_0.1	TP102_2

VOC's in Soil Method: AN433 Tested: 10/5/2023 (continued)

tert-butylbenzene	mg/kg	0.1	<0.1	-	-	-
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	-	-	-
sec-butylbenzene	mg/kg	0.1	<0.1	-	-	-
p-isopropyltoluene	mg/kg	0.1	<0.1	-	-	-
n-butylbenzene	mg/kg	0.1	<0.1	-	-	-

Nitrogenous Compounds

Acrylonitrile	mg/kg	0.1	<0.1	-	-	-
2-nitropropane	mg/kg	10	<10	-	-	-

Oxygenated Compounds

Acetone (2-propanone)	mg/kg	10	<10	-	-	-
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	-	-	-
Vinyl acetate*	mg/kg	10	<10	-	-	-
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	-	-	-
2-hexanone (MBK)	mg/kg	5	<5	-	-	-

Polycyclic VOCs

Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1

Sulphonated Compounds

Carbon disulfide	mg/kg	0.5	<0.5	-	-	-

Surrogates

d4-1,2-dichloroethane (Surrogate)	%	-	75	82	84	76
d8-toluene (Surrogate)	%	-	81	81	89	81
Bromofluorobenzene (Surrogate)	%	-	83	79	72	70

Totals

Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	-	-	-
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	-	-	-
Total BTEX*	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	-	-	-
Total VOC*	mg/kg	24	<24	-	-	-
Total Xylenes*	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE247181.033 Soil 03 May 2023 TP103_0.5	SE247181.034 Soil 03 May 2023 TP103_2	SE247181.035 Soil 03 May 2023 TP102_0.1	SE247181.036 Soil 03 May 2023 TP102_2

VOC's in Soil Method: AN433 Tested: 10/5/2023 (continued)

Trihalomethanes

Chloroform (THM)	mg/kg	0.1	<0.1	-	-	-
Bromodichloromethane (THM)	mg/kg	0.1	<0.1	-	-	-
Dibromochloromethane (THM)	mg/kg	0.1	<0.1	-	-	-
Bromoform (THM)	mg/kg	0.1	<0.1	-	-	-

Volatile Petroleum Hydrocarbons in Soil Method: AN433 Tested: 10/5/2023

TRH C6-C10	mg/kg	25	<25	<25	<25	<25
TRH C6-C9	mg/kg	20	<20	<20	<20	<20

Surrogates

d4-1,2-dichloroethane (Surrogate)	%	-	75	82	84	76
d8-toluene (Surrogate)	%	-	81	81	89	81
Bromofluorobenzene (Surrogate)	%	-	83	79	72	70

VPH F Bands

Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25

TRH (Total Recoverable Hydrocarbons) in Soil Method: AN403 Tested: 10/5/2023

TRH C10-C14	mg/kg	20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	140	<45
TRH C29-C36	mg/kg	45	<45	<45	80	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100
TRH C10-C36 Total	mg/kg	110	<110	<110	220	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210

TRH F Bands

TRH >C10-C16	mg/kg	25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	190	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR

Sample Number	SE247181.033	SE247181.034	SE247181.035	SE247181.036
Sample Matrix	Soil	Soil	Soil	Soil
Sample Date	03 May 2023	03 May 2023	03 May 2023	03 May 2023
Sample Name	TP103_0.5	TP103_2	TP102_0.1	TP102_2

PAH (Polynuclear Aromatic Hydrocarbons) in Soil Method: AN420 Tested: 10/5/2023

Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8

Surrogates

d5-nitrobenzene (Surrogate)	%	-	120	119	120	117
2-fluorobiphenyl (Surrogate)	%	-	88	88	88	85
d14-p-terphenyl (Surrogate)	%	-	103	102	102	100

OC Pesticides in Soil Method: AN420 Tested: 10/5/2023

Alpha BHC	mg/kg	0.1	-	-	<0.1	-
Hexachlorobenzene (HCB)	mg/kg	0.1	-	-	<0.1	-
Beta BHC	mg/kg	0.1	-	-	<0.1	-
Lindane (gamma BHC)	mg/kg	0.1	-	-	<0.1	-
Delta BHC	mg/kg	0.1	-	-	<0.1	-
Heptachlor	mg/kg	0.1	-	-	<0.1	-
Aldrin	mg/kg	0.1	-	-	<0.1	-
Isodrin	mg/kg	0.1	-	-	<0.1	-
Heptachlor epoxide	mg/kg	0.1	-	-	<0.1	-
Gamma Chlordane	mg/kg	0.1	-	-	<0.1	-
Alpha Chlordane	mg/kg	0.1	-	-	<0.1	-
Alpha Endosulfan	mg/kg	0.2	-	-	<0.2	-
o,p'-DDE*	mg/kg	0.1	-	-	<0.1	-
p,p'-DDE	mg/kg	0.1	-	-	<0.1	-
Dieldrin	mg/kg	0.2	-	-	<0.2	-
Endrin	mg/kg	0.2	-	-	<0.2	-
Beta Endosulfan	mg/kg	0.2	-	-	<0.2	-
o,p'-DDD*	mg/kg	0.1	-	-	<0.1	-
p,p'-DDD	mg/kg	0.1	-	-	<0.1	-
Endrin aldehyde	mg/kg	0.1	-	-	<0.1	-
Endosulfan sulphate	mg/kg	0.1	-	-	<0.1	-
o,p'-DDT*	mg/kg	0.1	-	-	<0.1	-
p,p'-DDT	mg/kg	0.1	-	-	<0.1	-
Endrin ketone	mg/kg	0.1	-	-	<0.1	-
Methoxychlor	mg/kg	0.1	-	-	<0.1	-
Mirex	mg/kg	0.1	-	-	<0.1	-
trans-Nonachlor	mg/kg	0.1	-	-	<0.1	-
Total CLP OC Pesticides	mg/kg	1	-	-	<1	-
Total OC VIC EPA	mg/kg	1	-	-	<1	-



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR	Sample Number	SE247181.033	SE247181.034	SE247181.035	SE247181.036
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	03 May 2023	03 May 2023	03 May 2023	03 May 2023
			Sample Name	TP103_0.5	TP103_2	TP102_0.1	TP102_2

OC Pesticides in Soil Method: AN420 Tested: 10/5/2023 (continued)

Surrogates

Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	-	-	95	-

OP Pesticides in Soil Method: AN420 Tested: 10/5/2023

Azinphos-methyl (Guthion)	mg/kg	0.2	-	-	<0.2	-
Bromophos Ethyl	mg/kg	0.2	-	-	<0.2	-
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	-	-	<0.2	-
Diazinon (Dimpylate)	mg/kg	0.5	-	-	<0.5	-
Dichlorvos	mg/kg	0.5	-	-	<0.5	-
Dimethoate	mg/kg	0.5	-	-	<0.5	-
Ethion	mg/kg	0.2	-	-	0.2	-
Fenitrothion	mg/kg	0.2	-	-	<0.2	-
Malathion	mg/kg	0.2	-	-	<0.2	-
Methidathion	mg/kg	0.5	-	-	<0.5	-
Parathion-ethyl (Parathion)	mg/kg	0.2	-	-	<0.2	-
Total OP Pesticides*	mg/kg	1.7	-	-	<1.7	-

Surrogates

2-fluorobiphenyl (Surrogate)	%	-	-	-	88	-
d14-p-terphenyl (Surrogate)	%	-	-	-	102	-

PCBs in Soil Method: AN420 Tested: 10/5/2023

Arochlor 1016	mg/kg	0.2	<0.2	-	<0.2	-
Arochlor 1221	mg/kg	0.2	<0.2	-	<0.2	-
Arochlor 1232	mg/kg	0.2	<0.2	-	<0.2	-
Arochlor 1242	mg/kg	0.2	<0.2	-	<0.2	-
Arochlor 1248	mg/kg	0.2	<0.2	-	<0.2	-
Arochlor 1254	mg/kg	0.2	<0.2	-	<0.2	-
Arochlor 1260	mg/kg	0.2	<0.2	-	<0.2	-
Arochlor 1262	mg/kg	0.2	<0.2	-	<0.2	-
Arochlor 1268	mg/kg	0.2	<0.2	-	<0.2	-
Total PCBs (Arochlors)	mg/kg	1	<1	-	<1	-

Surrogates

TCMX (Surrogate)	%	-	86	-	88	-



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR	Sample Number	SE247181.033	SE247181.034	SE247181.035	SE247181.036
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	03 May 2023	03 May 2023	03 May 2023	03 May 2023
			Sample Name	TP103_0.5	TP103_2	TP102_0.1	TP102_2

Full 8270 SVOC in Soil Method: AN420 Tested: 10/5/2023

PAHs

Acenaphthene	mg/kg	0.1	<0.1	-	-	-
Acenaphthylene	mg/kg	0.1	<0.1	-	-	-
Anthracene	mg/kg	0.1	<0.1	-	-	-
Benzo(a)anthracene	mg/kg	0.1	<0.1	-	-	-
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	-	-	-
Benzo(b&j&k)fluoranthene	mg/kg	0.2	<0.2	-	-	-
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	-	-	-
Benzo(ghi)perylene	mg/kg	0.1	<0.1	-	-	-
Benzo(a)pyrene	mg/kg	0.1	<0.1	-	-	-
Chrysene	mg/kg	0.1	<0.1	-	-	-
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	-	-	-
Fluoranthene	mg/kg	0.1	<0.1	-	-	-
Fluorene	mg/kg	0.1	<0.1	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	-	-	-
1-methylnaphthalene	mg/kg	0.1	<0.1	-	-	-
2-methylnaphthalene	mg/kg	0.1	<0.1	-	-	-
Naphthalene	mg/kg	0.1	<0.1	-	-	-
Phenanthrene	mg/kg	0.1	<0.1	-	-	-
Pyrene	mg/kg	0.1	<0.1	-	-	-
Carcinogenic PAHs, BaP TEQ, <LOR=LOR/2*	TEQ (mg/kg)	0.2	<0.2	-	-	-
Carcinogenic PAHs, BaP TEQ, <LOR=LOR*	TEQ (mg/kg)	0.3	<0.3	-	-	-
Carcinogenic PAHs, BaP TEQ, <LOR=0*	TEQ (mg/kg)	0.2	<0.2	-	-	-
2-acetylaminofluorene	mg/kg	0.5	<0.5	-	-	-
7,12-dimethyl-benz(a)anthracene	mg/kg	0.5	<0.5	-	-	-
3-methylcholanthrene	mg/kg	0.5	<0.5	-	-	-

OCs

Aldrin	mg/kg	0.1	<0.1	-	-	-
Alpha-BHC	mg/kg	0.1	<0.1	-	-	-
Beta-BHC	mg/kg	0.5	<0.5	-	-	-
Delta-BHC	mg/kg	0.1	<0.1	-	-	-
Gamma-BHC (Lindane)	mg/kg	0.1	<0.1	-	-	-
p,p-DDD	mg/kg	0.1	<0.1	-	-	-
p,p-DDE	mg/kg	0.1	<0.1	-	-	-
p,p-DDT	mg/kg	0.1	<0.1	-	-	-
Dieldrin	mg/kg	0.2	<0.2	-	-	-
Alpha-endosulfan	mg/kg	0.2	<0.2	-	-	-
Beta-endosulfan	mg/kg	0.2	<0.2	-	-	-
Endosulfan sulphate	mg/kg	0.1	<0.1	-	-	-
Endrin	mg/kg	0.2	<0.2	-	-	-
Heptachlor	mg/kg	0.1	<0.1	-	-	-
Heptachlor epoxide	mg/kg	0.1	<0.1	-	-	-
Isodrin	mg/kg	0.1	<0.1	-	-	-
Methoxychlor	mg/kg	0.1	<0.1	-	-	-
Mirex	mg/kg	0.1	<0.1	-	-	-
Alpha-chlordane	mg/kg	0.1	<0.1	-	-	-
Gamma-chlordane	mg/kg	0.1	<0.1	-	-	-
Endrin ketone	mg/kg	0.1	<0.1	-	-	-
Total (Alpha+Beta+SO4) Endosulfan*	mg/kg	0.2	<0.2	-	-	-

OPs

Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	-	-	-
Bromophos ethyl	mg/kg	0.2	<0.2	-	-	-
Carbophenothion	mg/kg	0.5	<0.5	-	-	-
Chlorfenvinphos-cis	mg/kg	2	<2	-	-	-
Chlorfenvinphos-trans	mg/kg	0.5	<0.5	-	-	-
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	-	-	-
Chlorpyrifos-methyl	mg/kg	0.5	<0.5	-	-	-



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE247181.033 Soil 03 May 2023 TP103_0.5	SE247181.034 Soil 03 May 2023 TP103_2	SE247181.035 Soil 03 May 2023 TP102_0.1	SE247181.036 Soil 03 May 2023 TP102_2

Full 8270 SVOC in Soil Method: AN420 Tested: 16/5/2023 (continued)

Co-Ral (Coumaphos)	mg/kg	0.5	<0.5	-	-	-
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	-	-	-
Dichlorvos	mg/kg	0.5	<0.5	-	-	-
Demeton-S-methyl	mg/kg	0.5	<0.5	-	-	-
Dimethoate	mg/kg	0.5	<0.5	-	-	-
Disulfoton (Di-syston)	mg/kg	0.5	<0.5	-	-	-
EPN*	mg/kg	0.5	<0.5	-	-	-
Ethion	mg/kg	0.2	<0.2	-	-	-
Ethoprophos (ethoprop or prophos)	mg/kg	0.5	<0.5	-	-	-
Famphur (Famophos)	mg/kg	0.5	<0.5	-	-	-
Fenamiphos (Phenamiphos)	mg/kg	0.5	<0.5	-	-	-
Fenchlorophos (Ronnel)	mg/kg	0.5	<0.5	-	-	-
Fenitrothion	mg/kg	0.2	<0.2	-	-	-
Fenthion	mg/kg	0.5	<0.5	-	-	-
Malathion (Maldison)	mg/kg	0.2	<0.2	-	-	-
Methidathion	mg/kg	0.5	<0.5	-	-	-
Mevinphos-cis/trans	mg/kg	1	<1	-	-	-
o,o,o-triethyl phosphorothioate	mg/kg	0.5	<0.5	-	-	-
Parathion ethyl (Parathion)	mg/kg	0.2	<0.2	-	-	-
Parathion methyl	mg/kg	0.5	<0.5	-	-	-
Phorate	mg/kg	0.5	<0.5	-	-	-
Pirimiphos-ethyl	mg/kg	0.5	<0.5	-	-	-
Pirimiphos-methyl	mg/kg	0.5	<0.5	-	-	-
Profenofos	mg/kg	0.5	<0.5	-	-	-
Prothiophos (Tokuthion)*	mg/kg	0.5	<0.5	-	-	-
Sulfotepp	mg/kg	0.5	<0.5	-	-	-
Tetrachlorvinphos (Stirophos)*	mg/kg	0.5	<0.5	-	-	-

PCB UPAC(7) Congeners

PCB Congener C28	mg/kg	0.1	<0.1	-	-	-
PCB Congener C52	mg/kg	0.1	<0.1	-	-	-
PCB Congener C101	mg/kg	0.1	<0.1	-	-	-
PCB Congener C118	mg/kg	0.1	<0.1	-	-	-
PCB Congener C138	mg/kg	0.1	<0.1	-	-	-
PCB Congener C153	mg/kg	0.1	<0.1	-	-	-
PCB Congener C180	mg/kg	0.1	<0.1	-	-	-

SVCH (Cl Benzenes, Hydrocarbons & VOCs)

Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	-	-	-
1,2-dichlorobenzene	mg/kg	0.5	<0.5	-	-	-
1,3-dichlorobenzene	mg/kg	0.5	<0.5	-	-	-
1,4-dichlorobenzene	mg/kg	0.5	<0.5	-	-	-
Hexachlorobutadiene	mg/kg	0.5	<0.5	-	-	-
Hexachlorocyclopentadiene	mg/kg	1	<1	-	-	-
Hexachloroethane	mg/kg	0.5	<0.5	-	-	-
Hexachloropropene	mg/kg	0.5	<0.5	-	-	-
Pentachlorobenzene	mg/kg	0.5	<0.5	-	-	-
Pentachloroethane	mg/kg	0.5	<0.5	-	-	-
1,2,3,5 and 1,2,4,5 -tetrachlorobenzene	mg/kg	1	<1	-	-	-
1,2,3,4-tetrachlorobenzene	mg/kg	0.5	<0.5	-	-	-
1/2-Chloronaphthalene	mg/kg	1	<1	-	-	-
1,2,4-trichlorobenzene	mg/kg	0.5	<0.5	-	-	-

Phthalates

Bis(2-ethylhexyl)phthalate	mg/kg	5	<5	-	-	-
Bis(2-ethylhexyl)adipate	mg/kg	0.5	<0.5	-	-	-
Butyl benzyl phthalate	mg/kg	0.5	<0.5	-	-	-
Di-n-butyl phthalate	mg/kg	0.5	<0.5	-	-	-
Diethyl phthalate	mg/kg	0.5	<0.5	-	-	-



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR	Sample Number	SE247181.033	SE247181.034	SE247181.035	SE247181.036
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	03 May 2023	03 May 2023	03 May 2023	03 May 2023
			Sample Name	TP103_0.5	TP103_2	TP102_0.1	TP102_2

Full 8270 SVOC in Soil Method: AN420 Tested: 16/5/2023 (continued)

Dimethyl phthalate	mg/kg	0.5	<0.5	-	-	-
Di-n-octyl phthalate	mg/kg	0.5	<0.5	-	-	-

Carbamates

Carbofuran	mg/kg	0.5	<0.5	-	-	-
Carbaryl	mg/kg	0.5	<0.5	-	-	-

Herbicides (normal)

Trifluralin	mg/kg	0.5	<0.5	-	-	-

Nitrosamines

N-nitroso-di-n-butylamine (NDBA)	mg/kg	0.5	<0.5	-	-	-
N-nitroso-diethylamine (NDEA)	mg/kg	1	<1	-	-	-
N-nitroso-di-n-propylamine (NDPA)	mg/kg	0.5	<0.5	-	-	-
N-nitroso-morpholine (NMOR)	mg/kg	0.5	<0.5	-	-	-
N-nitroso-piperidine (NPIP)	mg/kg	0.5	<0.5	-	-	-
N-nitroso-pyrrolidine (NPYR)	mg/kg	1	<1	-	-	-
4-amino biphenyl	mg/kg	1	<1	-	-	-

Nitroaromatics and Ketones

Acetophenone	mg/kg	0.5	<0.5	-	-	-
1,3-dinitrobenzene	mg/kg	1	<1	-	-	-
2,4-dinitrotoluene	mg/kg	0.5	<0.5	-	-	-
2,6-dinitrotoluene	mg/kg	0.5	<0.5	-	-	-
Isophorone	mg/kg	0.5	<0.5	-	-	-
Nitrobenzene	mg/kg	0.5	<0.5	-	-	-
p-(dimethylamino) azobenzene	mg/kg	1	<1	-	-	-
Phenacetin	mg/kg	1	<1	-	-	-
Pentachloronitrobenzene (quintozene)	mg/kg	0.5	<0.5	-	-	-

Anilines and Amines

Aniline	mg/kg	3	<3	-	-	-
4-chloroaniline	mg/kg	1	<1	-	-	-
2-nitroaniline	mg/kg	1	<1	-	-	-
3-nitroaniline	mg/kg	1	<1	-	-	-
4-nitroaniline	mg/kg	1	<1	-	-	-
Diphenylamine	mg/kg	0.5	<0.5	-	-	-
o-toluidine	mg/kg	1	<1	-	-	-
5-nitro-o-toluidine	mg/kg	1	<1	-	-	-
1-naphthylamine	mg/kg	1	<1	-	-	-
2-naphthylamine	mg/kg	1	<1	-	-	-

Haloethers

Bis(2-chloroethoxy) methane	mg/kg	0.5	<0.5	-	-	-
Bis(2-chloroethyl) ether	mg/kg	0.5	<0.5	-	-	-
Bis(2-chloroisopropyl) ether	mg/kg	0.5	<0.5	-	-	-
4-chlorophenyl phenyl ether	mg/kg	0.5	<0.5	-	-	-
4-bromophenyl phenyl ether	mg/kg	0.5	<0.5	-	-	-



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE247181.033 Soil 03 May 2023 TP103_0.5	SE247181.034 Soil 03 May 2023 TP103_2	SE247181.035 Soil 03 May 2023 TP102_0.1	SE247181.036 Soil 03 May 2023 TP102_2

Full 8270 SVOC in Soil Method: AN420 Tested: 10/5/2023 (continued)

Other SVOCs

Methyl methanesulfonate	mg/kg	1	<1	-	-	-
Ethyl methanesulfonate	mg/kg	1	<1	-	-	-
Dibenzofuran	mg/kg	0.5	<0.5	-	-	-
Benzyl alcohol	mg/kg	1	<1	-	-	-
Safrole	mg/kg	0.5	<0.5	-	-	-
Isosafrole Isomer 1	mg/kg	1	<1	-	-	-
Isosafrole Isomer 2	mg/kg	1	<1	-	-	-
1,4-naphthoquinone	mg/kg	0.5	<0.5	-	-	-
Thionazin	mg/kg	1	<1	-	-	-

Speciated Routine Phenols

3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	-	-	-
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	-	-	-
2,6-dichlorophenol	mg/kg	0.5	<0.5	-	-	-
2,3,4,6-tetrachlorophenol	mg/kg	0.5	<0.5	-	-	-
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	-	-	-
4-chloro-3-methylphenol	mg/kg	2	<2	-	-	-
2-chlorophenol	mg/kg	0.5	<0.5	-	-	-
2,4-dichlorophenol	mg/kg	0.5	<0.5	-	-	-
2,4-dimethylphenol	mg/kg	0.5	<0.5	-	-	-
2-nitrophenol	mg/kg	0.5	<0.5	-	-	-
Phenol	mg/kg	0.5	<0.5	-	-	-
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	-	-	-
Pentachlorophenol	mg/kg	0.5	<0.5	-	-	-
4-nitrophenol	mg/kg	1	<1	-	-	-

Surrogates

d5-phenol (Surrogate)	%	-	106	-	-	-
d5-nitrobenzene (Surrogate)	%	-	126	-	-	-
2-fluorobiphenyl (Surrogate)	%	-	126	-	-	-
2,4,6-tribromophenol (Surrogate)	%	-	117	-	-	-
d14-p-terphenyl (Surrogate)	%	-	98	-	-	-

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES Method: AN040/AN320 Tested: 10/5/2023

Arsenic, As	mg/kg	1	4	2	6	2
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	8.5	5.4	8.4	9.2
Copper, Cu	mg/kg	0.5	11	1.2	14	<0.5
Nickel, Ni	mg/kg	0.5	6.7	0.6	7.1	0.8
Lead, Pb	mg/kg	1	24	6	30	6
Zinc, Zn	mg/kg	2	170	30	350	3.0

Mercury in Soil Method: AN312 Tested: 10/5/2023

Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05

Moisture Content Method: AN002 Tested: 10/5/2023

% Moisture	%w/w	1	18.2	15.5	30.8	14.0



ANALYTICAL REPORT

SE247181 R0

Parameter	Units	LOR

Fibre Identification in soil Method: AS4964/AN602 Tested: 15/5/2023

FibreID

Asbestos Detected	No unit	-	No	-	No	-

SemiQuant

Estimated Fibres*	%w/w	0.01	<0.01	-	<0.01	-

Fibre ID in bulk materials Method: AN602/AS4964 Tested: 16/5/2023

FibreID

Asbestos Detected	No unit	-	-	-	-	-

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples Method: MA-1523 Tested: 17/5/2023

Perfluorobutanoic acid (PFBA)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0008	<0.0008	-	<0.0008	-
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Sum PFOS and PFHXS	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluorononane sulfonate (PFNS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
(13C4-PFBA) Isotopically Labelled Internal Recovery	%	-	104	-	103	-
(13C5-PFPeA) Isotopically Labelled Internal Recovery	%	-	106	-	102	-
(13C5-PFHxA) Isotopically Labelled Internal Recovery	%	-	99	-	93	-
(13C4-PFHpA) Isotopically Labelled Internal Recovery	%	-	99	-	96	-
(13C4_PFOA) Isotopically Labelled Internal Recovery	%	-	95	-	103	-
(13C3-PFBS) Isotopically Labelled Internal Recovery	%	-	96	-	111	-
(13C3-PFHxS) Isotopically Labelled Internal Recovery	%	-	94	-	118	-
(13C8-PFOS) Isotopically Labelled Internal Recovery	%	-	103	-	104	-



ANALYTICAL REPORT

SE247181 R0

		Sample Number	SE247181.037	SE247181.038
		Sample Matrix	Soil	Soil
		Sample Date	04 May 2023	04 May 2023
		Sample Name	TP110_0.1	TP110_1
Parameter	Units	LOR		

VOC's in Soil Method: AN433 Tested: 10/5/2023

Fumigants

2,2-dichloropropane	mg/kg	0.1	<0.1	-
1,2-dichloropropane	mg/kg	0.1	<0.1	-
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	-
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	-
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	-

Halogenated Aliphatics

Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	-
Chloromethane	mg/kg	1	<1	-
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	-
Bromomethane	mg/kg	1	<1	-
Chloroethane	mg/kg	1	<1	-
Trichlorofluoromethane	mg/kg	1	<1	-
1,1-dichloroethene	mg/kg	0.1	<0.1	-
Iodomethane	mg/kg	5	<5	-
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	-
Allyl chloride	mg/kg	0.1	<0.1	-
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	-
1,1-dichloroethane	mg/kg	0.1	<0.1	-
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	-
Bromochloromethane	mg/kg	0.1	<0.1	-
1,2-dichloroethane	mg/kg	0.1	<0.1	-
1,1,1-trichloroethane	mg/kg	0.1	<0.1	-
1,1-dichloropropene	mg/kg	0.1	<0.1	-
Carbon tetrachloride	mg/kg	0.1	<0.1	-
Dibromomethane	mg/kg	0.1	<0.1	-
Trichloroethene (Trichloroethylene, TCE)	mg/kg	0.1	<0.1	-
1,1,2-trichloroethane	mg/kg	0.1	<0.1	-
1,3-dichloropropane	mg/kg	0.1	<0.1	-
Tetrachloroethene (Perchloroethylene, PCE)	mg/kg	0.1	<0.1	-
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	-
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	-
1,2,3-trichloropropane	mg/kg	0.1	<0.1	-
trans-1,4-dichloro-2-butene	mg/kg	1	<1	-
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	-
Hexachlorobutadiene	mg/kg	0.1	<0.1	-

Halogenated Aromatics

Chlorobenzene	mg/kg	0.1	<0.1	-
Bromobenzene	mg/kg	0.1	<0.1	-
2-chlorotoluene	mg/kg	0.1	<0.1	-
4-chlorotoluene	mg/kg	0.1	<0.1	-
1,3-dichlorobenzene	mg/kg	0.1	<0.1	-
1,4-dichlorobenzene	mg/kg	0.1	<0.1	-
1,2-dichlorobenzene	mg/kg	0.1	<0.1	-
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	-
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	-

Monocyclic Aromatic Hydrocarbons

Benzene	mg/kg	0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	-
o-xylene	mg/kg	0.1	<0.1	<0.1
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	-
n-propylbenzene	mg/kg	0.1	<0.1	-
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	-



ANALYTICAL REPORT

SE247181 R0

		Sample Number	SE247181.037	SE247181.038
		Sample Matrix	Soil	Soil
		Sample Date	04 May 2023	04 May 2023
		Sample Name	TP110_0.1	TP110_1
Parameter	Units	LOR		

VOC's in Soil Method: AN433 Tested: 10/5/2023 (continued)

tert-butylbenzene	mg/kg	0.1	<0.1	-
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	-
sec-butylbenzene	mg/kg	0.1	<0.1	-
p-isopropyltoluene	mg/kg	0.1	<0.1	-
n-butylbenzene	mg/kg	0.1	<0.1	-

Nitrogenous Compounds

Acrylonitrile	mg/kg	0.1	<0.1	-
2-nitropropane	mg/kg	10	<10	-

Oxygenated Compounds

Acetone (2-propanone)	mg/kg	10	<10	-
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	-
Vinyl acetate*	mg/kg	10	<10	-
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	-
2-hexanone (MBK)	mg/kg	5	<5	-

Polycyclic VOCs

Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1

Sulphonated Compounds

Carbon disulfide	mg/kg	0.5	<0.5	-

Surrogates

d4-1,2-dichloroethane (Surrogate)	%	-	84	73
d8-toluene (Surrogate)	%	-	82	72
Bromofluorobenzene (Surrogate)	%	-	79	70



ANALYTICAL REPORT

SE247181 R0

		Sample Number	SE247181.037	SE247181.038
		Sample Matrix	Soil	Soil
		Sample Date	04 May 2023	04 May 2023
		Sample Name	TP110_0.1	TP110_1
Parameter	Units	LOR		

VOC's in Soil Method: AN433 Tested: 10/5/2023 (continued)

Totals

Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	-
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	-
Total BTEX*	mg/kg	0.6	<0.6	<0.6
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	-
Total VOC*	mg/kg	24	<24	-
Total Xylenes*	mg/kg	0.3	<0.3	<0.3

Trihalomethanes

Chloroform (THM)	mg/kg	0.1	<0.1	-
Bromodichloromethane (THM)	mg/kg	0.1	<0.1	-
Dibromochloromethane (THM)	mg/kg	0.1	<0.1	-
Bromoform (THM)	mg/kg	0.1	<0.1	-

Volatile Petroleum Hydrocarbons in Soil Method: AN433 Tested: 10/5/2023

TRH C6-C10	mg/kg	25	<25	<25
TRH C6-C9	mg/kg	20	<20	<20

Surrogates

d4-1,2-dichloroethane (Surrogate)	%	-	84	73
d8-toluene (Surrogate)	%	-	82	72
Bromofluorobenzene (Surrogate)	%	-	79	70

VPH F Bands

Benzene (F0)	mg/kg	0.1	<0.1	<0.1
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25

TRH (Total Recoverable Hydrocarbons) in Soil Method: AN403 Tested: 10/5/2023

TRH C10-C14	mg/kg	20	<20	<20
TRH C15-C28	mg/kg	45	96	68
TRH C29-C36	mg/kg	45	68	<45
TRH C37-C40	mg/kg	100	<100	<100
TRH C10-C36 Total	mg/kg	110	160	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210



ANALYTICAL REPORT

SE247181 R0

		Sample Number	SE247181.037	SE247181.038
		Sample Matrix	Soil	Soil
		Sample Date	04 May 2023	04 May 2023
		Sample Name	TP110_0.1	TP110_1
Parameter	Units	LOR		

TRH (Total Recoverable Hydrocarbons) in Soil Method: AN403 Tested: 10/5/2023 (continued)

TRH F Bands

TRH >C10-C16	mg/kg	25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	140	91
TRH >C34-C40 (F4)	mg/kg	120	<120	<120

PAH (Polynuclear Aromatic Hydrocarbons) in Soil Method: AN420 Tested: 10/5/2023

Naphthalene	mg/kg	0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	<0.3	<0.3
Total PAH (18)	mg/kg	0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8

Surrogates

d5-nitrobenzene (Surrogate)	%	-	117	119
2-fluorobiphenyl (Surrogate)	%	-	86	86
d14-p-terphenyl (Surrogate)	%	-	99	101

OC Pesticides in Soil Method: AN420 Tested: 10/5/2023

Alpha BHC	mg/kg	0.1	<0.1	-
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	-
Beta BHC	mg/kg	0.1	<0.1	-
Lindane (gamma BHC)	mg/kg	0.1	<0.1	-
Delta BHC	mg/kg	0.1	<0.1	-
Heptachlor	mg/kg	0.1	<0.1	-
Aldrin	mg/kg	0.1	<0.1	-
Isodrin	mg/kg	0.1	<0.1	-
Heptachlor epoxide	mg/kg	0.1	<0.1	-
Gamma Chlordane	mg/kg	0.1	<0.1	-
Alpha Chlordane	mg/kg	0.1	<0.1	-
Alpha Endosulfan	mg/kg	0.2	<0.2	-
o,p'-DDE*	mg/kg	0.1	<0.1	-
p,p'-DDE	mg/kg	0.1	<0.1	-
Dieldrin	mg/kg	0.2	<0.2	-
Endrin	mg/kg	0.2	<0.2	-
Beta Endosulfan	mg/kg	0.2	<0.2	-
o,p'-DDD*	mg/kg	0.1	<0.1	-
p,p'-DDD	mg/kg	0.1	<0.1	-
Endrin aldehyde	mg/kg	0.1	<0.1	-
Endosulfan sulphate	mg/kg	0.1	<0.1	-



ANALYTICAL REPORT

SE247181 R0

		Sample Number	SE247181.037	SE247181.038
		Sample Matrix	Soil	Soil
		Sample Date	04 May 2023	04 May 2023
		Sample Name	TP110_0.1	TP110_1
Parameter	Units	LOR		

OC Pesticides in Soil **Method: AN420** **Tested: 10/5/2023** **(continued)**

o,p'-DDT*	mg/kg	0.1	<0.1	-
p,p'-DDT	mg/kg	0.1	<0.1	-
Endrin ketone	mg/kg	0.1	<0.1	-
Methoxychlor	mg/kg	0.1	<0.1	-
Mirex	mg/kg	0.1	<0.1	-
trans-Nonachlor	mg/kg	0.1	<0.1	-
Total CLP OC Pesticides	mg/kg	1	<1	-
Total OC VIC EPA	mg/kg	1	<1	-

Surrogates

Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	96	-

OP Pesticides in Soil **Method: AN420** **Tested: 10/5/2023**

Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	-
Bromophos Ethyl	mg/kg	0.2	<0.2	-
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	-
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	-
Dichlorvos	mg/kg	0.5	<0.5	-
Dimethoate	mg/kg	0.5	<0.5	-
Ethion	mg/kg	0.2	<0.2	-
Fenitrothion	mg/kg	0.2	<0.2	-
Malathion	mg/kg	0.2	<0.2	-
Methidathion	mg/kg	0.5	<0.5	-
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	-
Total OP Pesticides*	mg/kg	1.7	<1.7	-

Surrogates

2-fluorobiphenyl (Surrogate)	%	-	86	-
d14-p-terphenyl (Surrogate)	%	-	99	-



ANALYTICAL REPORT

SE247181 R0

		Sample Number	SE247181.037	SE247181.038
		Sample Matrix	Soil	Soil
		Sample Date	04 May 2023	04 May 2023
		Sample Name	TP110_0.1	TP110_1
Parameter	Units	LOR		

PCBs in Soil Method: AN420 Tested: 10/5/2023

Arochlor 1016	mg/kg	0.2	<0.2	-
Arochlor 1221	mg/kg	0.2	<0.2	-
Arochlor 1232	mg/kg	0.2	<0.2	-
Arochlor 1242	mg/kg	0.2	<0.2	-
Arochlor 1248	mg/kg	0.2	<0.2	-
Arochlor 1254	mg/kg	0.2	<0.2	-
Arochlor 1260	mg/kg	0.2	<0.2	-
Arochlor 1262	mg/kg	0.2	<0.2	-
Arochlor 1268	mg/kg	0.2	<0.2	-
Total PCBs (Arochlors)	mg/kg	1	<1	-

Surrogates

TCMX (Surrogate)	%	-	89	-

Full 8270 SVOC in Soil Method: AN420 Tested: 10/5/2023

PAHs

Acenaphthene	mg/kg	0.1	<0.1	-
Acenaphthylene	mg/kg	0.1	<0.1	-
Anthracene	mg/kg	0.1	<0.1	-
Benzo(a)anthracene	mg/kg	0.1	<0.1	-
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	-
Benzo(b&j&k)fluoranthene	mg/kg	0.2	<0.2	-
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	-
Benzo(ghi)perylene	mg/kg	0.1	<0.1	-
Benzo(a)pyrene	mg/kg	0.1	<0.1	-
Chrysene	mg/kg	0.1	<0.1	-
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	-
Fluoranthene	mg/kg	0.1	<0.1	-
Fluorene	mg/kg	0.1	<0.1	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	-
1-methylnaphthalene	mg/kg	0.1	<0.1	-
2-methylnaphthalene	mg/kg	0.1	<0.1	-
Naphthalene	mg/kg	0.1	<0.1	-
Phenanthrene	mg/kg	0.1	<0.1	-
Pyrene	mg/kg	0.1	<0.1	-
Carcinogenic PAHs, BaP TEQ, <LOR=LOR/2*	TEQ (mg/kg)	0.2	<0.2	-
Carcinogenic PAHs, BaP TEQ, <LOR=LOR*	TEQ (mg/kg)	0.3	<0.3	-
Carcinogenic PAHs, BaP TEQ, <LOR=0*	TEQ (mg/kg)	0.2	<0.2	-
2-acetylaminofluorene	mg/kg	0.5	<0.5	-
7,12-dimethyl-benz(a)anthracene	mg/kg	0.5	<0.5	-
3-methylcholanthrene	mg/kg	0.5	<0.5	-

OCs

Aldrin	mg/kg	0.1	<0.1	-
Alpha-BHC	mg/kg	0.1	<0.1	-
Beta-BHC	mg/kg	0.5	<0.5	-
Delta-BHC	mg/kg	0.1	<0.1	-
Gamma-BHC (Lindane)	mg/kg	0.1	<0.1	-
p,p-DDD	mg/kg	0.1	<0.1	-
p,p-DDE	mg/kg	0.1	<0.1	-
p,p-DDT	mg/kg	0.1	<0.1	-
Dieldrin	mg/kg	0.2	<0.2	-
Alpha-endosulfan	mg/kg	0.2	<0.2	-
Beta-endosulfan	mg/kg	0.2	<0.2	-
Endosulfan sulphate	mg/kg	0.1	<0.1	-
Endrin	mg/kg	0.2	<0.2	-
Heptachlor	mg/kg	0.1	<0.1	-
Heptachlor epoxide	mg/kg	0.1	<0.1	-



ANALYTICAL REPORT

SE247181 R0

		Sample Number	SE247181.037	SE247181.038
		Sample Matrix	Soil	Soil
		Sample Date	04 May 2023	04 May 2023
		Sample Name	TP110_0.1	TP110_1
Parameter	Units	LOR		

Full 8270 SVOC in Soil Method: AN420 Tested: 16/5/2023 (continued)

Isodrin	mg/kg	0.1	<0.1	-
Methoxychlor	mg/kg	0.1	<0.1	-
Mirex	mg/kg	0.1	<0.1	-
Alpha-chlordane	mg/kg	0.1	<0.1	-
Gamma-chlordane	mg/kg	0.1	<0.1	-
Endrin ketone	mg/kg	0.1	<0.1	-
Total (Alpha+Beta+SO4) Endosulfan*	mg/kg	0.2	<0.2	-

OPs

Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	-
Bromophos ethyl	mg/kg	0.2	<0.2	-
Carbophenothion	mg/kg	0.5	<0.5	-
Chlorfenvinphos-cis	mg/kg	2	<2	-
Chlorfenvinphos-trans	mg/kg	0.5	<0.5	-
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	-
Chlorpyrifos-methyl	mg/kg	0.5	<0.5	-
Co-Ral (Coumaphos)	mg/kg	0.5	<0.5	-
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	-
Dichlorvos	mg/kg	0.5	<0.5	-
Demeton-S-methyl	mg/kg	0.5	<0.5	-
Dimethoate	mg/kg	0.5	<0.5	-
Disulfoton (Di-syston)	mg/kg	0.5	<0.5	-
EPN*	mg/kg	0.5	<0.5	-
Ethion	mg/kg	0.2	<0.2	-
Ethoprophos (ethoprop or prophos)	mg/kg	0.5	<0.5	-
Famphur (Famophos)	mg/kg	0.5	<0.5	-
Fenamiphos (Phenamiphos)	mg/kg	0.5	<0.5	-
Fenchlorophos (Ronnel)	mg/kg	0.5	<0.5	-
Fenitrothion	mg/kg	0.2	<0.2	-
Fenthion	mg/kg	0.5	<0.5	-
Malathion (Maldison)	mg/kg	0.2	<0.2	-
Methidathion	mg/kg	0.5	<0.5	-
Mevinphos-cis/trans	mg/kg	1	<1	-
o,o,o-triethyl phosphorothioate	mg/kg	0.5	<0.5	-
Parathion ethyl (Parathion)	mg/kg	0.2	<0.2	-
Parathion methyl	mg/kg	0.5	<0.5	-
Phorate	mg/kg	0.5	<0.5	-
Pirimiphos-ethyl	mg/kg	0.5	<0.5	-
Pirimiphos-methyl	mg/kg	0.5	<0.5	-
Profenofos	mg/kg	0.5	<0.5	-
Prothiophos (Tokuthion)*	mg/kg	0.5	<0.5	-
Sulfotepp	mg/kg	0.5	<0.5	-
Tetrachlorvinphos (Stirophos)*	mg/kg	0.5	<0.5	-

PCB UPAC(7) Congeners

PCB Congener C28	mg/kg	0.1	<0.1	-
PCB Congener C52	mg/kg	0.1	<0.1	-
PCB Congener C101	mg/kg	0.1	<0.1	-
PCB Congener C118	mg/kg	0.1	<0.1	-
PCB Congener C138	mg/kg	0.1	<0.1	-
PCB Congener C153	mg/kg	0.1	<0.1	-
PCB Congener C180	mg/kg	0.1	<0.1	-



ANALYTICAL REPORT

SE247181 R0

		Sample Number	SE247181.037	SE247181.038
		Sample Matrix	Soil	Soil
		Sample Date	04 May 2023	04 May 2023
		Sample Name	TP110_0.1	TP110_1
Parameter	Units	LOR		

Full 8270 SVOC in Soil Method: AN420 Tested: 10/5/2023 (continued)

SVCH (CI Benzenes, Hydrocarbons & VOCs)

Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	-
1,2-dichlorobenzene	mg/kg	0.5	<0.5	-
1,3-dichlorobenzene	mg/kg	0.5	<0.5	-
1,4-dichlorobenzene	mg/kg	0.5	<0.5	-
Hexachlorobutadiene	mg/kg	0.5	<0.5	-
Hexachlorocyclopentadiene	mg/kg	1	<1	-
Hexachloroethane	mg/kg	0.5	<0.5	-
Hexachloropropene	mg/kg	0.5	<0.5	-
Pentachlorobenzene	mg/kg	0.5	<0.5	-
Pentachloroethane	mg/kg	0.5	<0.5	-
1,2,3,5 and 1,2,4,5 -tetrachlorobenzene	mg/kg	1	<1	-
1,2,3,4-tetrachlorobenzene	mg/kg	0.5	<0.5	-
1/2-Chloronaphthalene	mg/kg	1	<1	-
1,2,4-trichlorobenzene	mg/kg	0.5	<0.5	-

Phthalates

Bis(2-ethylhexyl)phthalate	mg/kg	5	<5	-
Bis(2-ethylhexyl)adipate	mg/kg	0.5	<0.5	-
Butyl benzyl phthalate	mg/kg	0.5	<0.5	-
Di-n-butyl phthalate	mg/kg	0.5	<0.5	-
Diethyl phthalate	mg/kg	0.5	<0.5	-
Dimethyl phthalate	mg/kg	0.5	<0.5	-
Di-n-octyl phthalate	mg/kg	0.5	<0.5	-

Carbamates

Carbofuran	mg/kg	0.5	<0.5	-
Carbaryl	mg/kg	0.5	<0.5	-

Herbicides (normal)

Trifluralin	mg/kg	0.5	<0.5	-

Nitrosamines

N-nitroso-di-n-butylamine (NDBA)	mg/kg	0.5	<0.5	-
N-nitroso-diethylamine (NDEA)	mg/kg	1	<1	-
N-nitroso-di-n-propylamine (NDPA)	mg/kg	0.5	<0.5	-
N-nitroso-morpholine (NMOR)	mg/kg	0.5	<0.5	-
N-nitroso-piperidine (NPIP)	mg/kg	0.5	<0.5	-
N-nitroso-pyrrolidine (NPYR)	mg/kg	1	<1	-
4-amino biphenyl	mg/kg	1	<1	-

Nitroaromatics and Ketones

Acetophenone	mg/kg	0.5	<0.5	-
1,3-dinitrobenzene	mg/kg	1	<1	-
2,4-dinitrotoluene	mg/kg	0.5	<0.5	-
2,6-dinitrotoluene	mg/kg	0.5	<0.5	-
Isophorone	mg/kg	0.5	<0.5	-
Nitrobenzene	mg/kg	0.5	<0.5	-
p-(dimethylamino) azobenzene	mg/kg	1	<1	-
Phenacetin	mg/kg	1	<1	-
Pentachloronitrobenzene (quintozene)	mg/kg	0.5	<0.5	-



ANALYTICAL REPORT

SE247181 R0

		Sample Number	SE247181.037	SE247181.038
		Sample Matrix	Soil	Soil
		Sample Date	04 May 2023	04 May 2023
		Sample Name	TP110_0.1	TP110_1
Parameter	Units	LOR		

Full 8270 SVOC in Soil Method: AN420 Tested: 10/5/2023 (continued)

Anilines and Amines

Aniline	mg/kg	3	<3	-
4-chloroaniline	mg/kg	1	<1	-
2-nitroaniline	mg/kg	1	<1	-
3-nitroaniline	mg/kg	1	<1	-
4-nitroaniline	mg/kg	1	<1	-
Diphenylamine	mg/kg	0.5	<0.5	-
o-toluidine	mg/kg	1	<1	-
5-nitro-o-toluidine	mg/kg	1	<1	-
1-naphthylamine	mg/kg	1	<1	-
2-naphthylamine	mg/kg	1	<1	-

Haloethers

Bis(2-chloroethoxy) methane	mg/kg	0.5	<0.5	-
Bis(2-chloroethyl) ether	mg/kg	0.5	<0.5	-
Bis(2-chloroisopropyl) ether	mg/kg	0.5	<0.5	-
4-chlorophenyl phenyl ether	mg/kg	0.5	<0.5	-
4-bromophenyl phenyl ether	mg/kg	0.5	<0.5	-

Other SVOCs

Methyl methanesulfonate	mg/kg	1	<1	-
Ethyl methanesulfonate	mg/kg	1	<1	-
Dibenzofuran	mg/kg	0.5	<0.5	-
Benzyl alcohol	mg/kg	1	<1	-
Safrrole	mg/kg	0.5	<0.5	-
Isosafrole Isomer 1	mg/kg	1	<1	-
Isosafrole Isomer 2	mg/kg	1	<1	-
1,4-naphthoquinone	mg/kg	0.5	<0.5	-
Thionazin	mg/kg	1	<1	-

Speciated Routine Phenols

3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	-
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	-
2,6-dichlorophenol	mg/kg	0.5	<0.5	-
2,3,4,6-tetrachlorophenol	mg/kg	0.5	<0.5	-
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	-
4-chloro-3-methylphenol	mg/kg	2	<2	-
2-chlorophenol	mg/kg	0.5	<0.5	-
2,4-dichlorophenol	mg/kg	0.5	<0.5	-
2,4-dimethylphenol	mg/kg	0.5	<0.5	-
2-nitrophenol	mg/kg	0.5	<0.5	-
Phenol	mg/kg	0.5	<0.5	-
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	-
Pentachlorophenol	mg/kg	0.5	<0.5	-
4-nitrophenol	mg/kg	1	<1	-

Surrogates

d5-phenol (Surrogate)	%	-	98	-
d5-nitrobenzene (Surrogate)	%	-	122	-
2-fluorobiphenyl (Surrogate)	%	-	116	-
2,4,6-tribromophenol (Surrogate)	%	-	127	-
d14-p-terphenyl (Surrogate)	%	-	90	-



ANALYTICAL REPORT

SE247181 R0

		Sample Number	SE247181.037	SE247181.038
		Sample Matrix	Soil	Soil
		Sample Date	04 May 2023	04 May 2023
		Sample Name	TP110_0.1	TP110_1
Parameter	Units	LOR		

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES Method: AN040/AN320 Tested: 10/5/2023

Arsenic, As	mg/kg	1	6	5
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	17	12
Copper, Cu	mg/kg	0.5	16	<0.5
Nickel, Ni	mg/kg	0.5	7.5	0.8
Lead, Pb	mg/kg	1	120	7
Zinc, Zn	mg/kg	2	620	19

Mercury in Soil Method: AN312 Tested: 10/5/2023

Mercury	mg/kg	0.05	<0.05	<0.05

Moisture Content Method: AN002 Tested: 10/5/2023

% Moisture	%w/w	1	16.4	18.3

Fibre Identification in soil Method: AS4964/AN602 Tested: 15/5/2023

FibreID

Asbestos Detected	No unit	-	No	No

SemiQuant

Estimated Fibres*	%w/w	0.01	<0.01	<0.01

Fibre ID in bulk materials Method: AN602/AS4964 Tested: 16/5/2023

FibreID

Asbestos Detected	No unit	-	-	-

		Sample Number	SE247181.037	SE247181.038
		Sample Matrix	Soil	Soil
		Sample Date	04 May 2023	04 May 2023
		Sample Name	TP110_0.1	TP110_1
Parameter	Units	LOR		

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples Method: MA-1523 Tested: 17/5/2023

Perfluorobutanoic acid (PFBA)	mg/kg	0.0016	<0.0016	-
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0016	<0.0016	-
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0016	<0.0016	-
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0016	<0.0016	-
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0008	<0.0008	-
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0016	<0.0016	-
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0016	<0.0016	-
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0016	<0.0016	-
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0016	<0.0016	-
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0016	<0.0016	-
Sum PFOS and PFHXS	mg/kg	0.0016	<0.0016	-
Perfluorononane sulfonate (PFNS)	mg/kg	0.0016	<0.0016	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.0016	<0.0016	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.0016	<0.0016	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.0016	<0.0016	-
(13C4-PFBA) Isotopically Labelled Internal Recovery	%	-	104	-
(13C5-PFPeA) Isotopically Labelled Internal Recovery	%	-	103	-
(13C5-PFHxA) Isotopically Labelled Internal Recovery	%	-	147	-
(13C4-PFHpA) Isotopically Labelled Internal Recovery	%	-	146	-
(13C4_PFOA) Isotopically Labelled Internal Recovery	%	-	133	-
(13C3-PFBS) Isotopically Labelled Internal Recovery	%	-	143	-
(13C3-PFHxS) Isotopically Labelled Internal Recovery	%	-	104	-
(13C8-PFOS) Isotopically Labelled Internal Recovery	%	-	112	-

MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Full 8270 SVOC in Soil Method: ME-(AU)-[ENV]AN420

PAHs

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Acenaphthene	LB279065	mg/kg	0.1	<0.1	0%	112%
Acenaphthylene	LB279065	mg/kg	0.1	<0.1	0%	109%
Anthracene	LB279065	mg/kg	0.1	<0.1	0%	118%
Benzo(a)anthracene	LB279065	mg/kg	0.1	<0.1	0%	NA
Benzo(b&j)fluoranthene	LB279065	mg/kg	0.1	<0.1	0%	NA
Benzo(b&k)fluoranthene	LB279065	mg/kg	0.2	<0.2	0%	NA
Benzo(k)fluoranthene	LB279065	mg/kg	0.1	<0.1	0%	NA
Benzo(ghi)perylene	LB279065	mg/kg	0.1	<0.1	0%	NA
Benzo(a)pyrene	LB279065	mg/kg	0.1	<0.1	0%	104%
Chrysene	LB279065	mg/kg	0.1	<0.1	0%	NA
Dibenzo(ah)anthracene	LB279065	mg/kg	0.1	<0.1	0%	NA
Fluoranthene	LB279065	mg/kg	0.1	<0.1	0%	114%
Fluorene	LB279065	mg/kg	0.1	<0.1	0%	NA
Indeno(1,2,3-cd)pyrene	LB279065	mg/kg	0.1	<0.1	0%	NA
1-methylnaphthalene	LB279065	mg/kg	0.1	<0.1	0%	NA
2-methylnaphthalene	LB279065	mg/kg	0.1	<0.1	0%	NA
Naphthalene	LB279065	mg/kg	0.1	<0.1	0%	118%
Phenanthrene	LB279065	mg/kg	0.1	<0.1	0%	119%
Pyrene	LB279065	mg/kg	0.1	<0.1	0%	111%
Carcinogenic PAHs, BaP TEQ, <LOR=LOR/2*	LB279065	TEQ (mg/kg)	0.2	<0.2	0%	NA
Carcinogenic PAHs, BaP TEQ, <LOR=LOR*	LB279065	TEQ (mg/kg)	0.3	<0.3	0%	NA
Carcinogenic PAHs, BaP TEQ, <LOR=0*	LB279065	TEQ (mg/kg)	0.2	<0.2	NA	NA
2-acetylaminofluorene	LB279065	mg/kg	0.5	<0.5	0%	NA
7,12-dimethyl-benz(a)anthracene	LB279065	mg/kg	0.5	<0.5	0%	NA
3-methylcholanthrene	LB279065	mg/kg	0.5	<0.5	0%	NA

OCs

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Aldrin	LB279065	mg/kg	0.1	<0.1	0%	99%
Alpha-BHC	LB279065	mg/kg	0.1	<0.1	0%	NA
Beta-BHC	LB279065	mg/kg	0.5	<0.5	0%	NA
Delta-BHC	LB279065	mg/kg	0.1	<0.1	0%	111%
Gamma-BHC (Lindane)	LB279065	mg/kg	0.1	<0.1	0%	NA
p,p-DDD	LB279065	mg/kg	0.1	<0.1	0%	NA
p,p-DDE	LB279065	mg/kg	0.1	<0.1	0 - 10%	NA
p,p-DDT	LB279065	mg/kg	0.1	<0.1	0%	81%
Dieldrin	LB279065	mg/kg	0.2	<0.2	0%	107%
Alpha-endosulfan	LB279065	mg/kg	0.2	<0.2	0%	NA
Beta-endosulfan	LB279065	mg/kg	0.2	<0.2	0%	NA
Endosulfan sulphate	LB279065	mg/kg	0.1	<0.1	0%	NA
Endrin	LB279065	mg/kg	0.2	<0.2	0%	79%
Heptachlor	LB279065	mg/kg	0.1	<0.1	0%	80%
Heptachlor epoxide	LB279065	mg/kg	0.1	<0.1	0%	NA
Isodrin	LB279065	mg/kg	0.1	<0.1	0%	NA
Methoxychlor	LB279065	mg/kg	0.1	<0.1	0%	NA
Mirex	LB279065	mg/kg	0.1	<0.1	0%	NA
Alpha-chlordane	LB279065	mg/kg	0.1	<0.1	0%	NA
Gamma-chlordane	LB279065	mg/kg	0.1	<0.1	0%	NA
Endrin ketone	LB279065	mg/kg	0.1	<0.1	0%	NA
Total (Alpha+Beta+SO4) Endosulfan*	LB279065	mg/kg	0.2	<0.2	0%	NA

OPs

MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Full 8270 SVOC in Soil Method: ME-(AU)-[ENV]AN420 (continued)

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Azinphos-methyl (Guthion)	LB279065	mg/kg	0.2	<0.2	0%	NA
Bromophos ethyl	LB279065	mg/kg	0.2	<0.2	0%	NA
Carbophenothion	LB279065	mg/kg	0.5	<0.5	0%	NA
Chlorfenvinphos-cis	LB279065	mg/kg	2	<2	0%	NA
Chlorfenvinphos-trans	LB279065	mg/kg	0.5	<0.5	0%	NA
Chlorpyrifos (Chlorpyrifos Ethyl)	LB279065	mg/kg	0.2	<0.2	0%	104%
Chlorpyrifos-methyl	LB279065	mg/kg	0.5	<0.5	0%	NA
Co-Ral (Coumaphos)	LB279065	mg/kg	0.5	<0.5	0%	NA
Diazinon (Dimpylate)	LB279065	mg/kg	0.5	<0.5	0%	107%
Dichlorvos	LB279065	mg/kg	0.5	<0.5	0%	76%
Demeton-S-methyl	LB279065	mg/kg	0.5	<0.5	0%	NA
Dimethoate	LB279065	mg/kg	0.5	<0.5	0%	NA
Disulfoton (Di-syston)	LB279065	mg/kg	0.5	<0.5	0%	NA
EPN*	LB279065	mg/kg	0.5	<0.5	0%	NA
Ethion	LB279065	mg/kg	0.2	<0.2	0%	72%
Ethoprophos (ethoprop or prophos)	LB279065	mg/kg	0.5	<0.5	0%	NA
Famphur (Famophos)	LB279065	mg/kg	0.5	<0.5	0%	NA
Fenamiphos (Phenamiphos)	LB279065	mg/kg	0.5	<0.5	0%	NA
Fenchlorophos (Rannel)	LB279065	mg/kg	0.5	<0.5	0%	NA
Fenitrothion	LB279065	mg/kg	0.2	<0.2	0%	NA
Fenthion	LB279065	mg/kg	0.5	<0.5	0%	NA
Malathion (Maldison)	LB279065	mg/kg	0.2	<0.2	0%	NA
Methidathion	LB279065	mg/kg	0.5	<0.5	0%	NA
Mevinphos-cis/trans	LB279065	mg/kg	1	<1	0%	NA
o,o,o-triethyl phosphorothioate	LB279065	mg/kg	0.5	<0.5	0%	NA
Parathion ethyl (Parathion)	LB279065	mg/kg	0.2	<0.2	0%	NA
Parathion methyl	LB279065	mg/kg	0.5	<0.5	0%	NA
Phorate	LB279065	mg/kg	0.5	<0.5	0%	NA
Pirimiphos-ethyl	LB279065	mg/kg	0.5	<0.5	0%	NA
Pirimiphos-methyl	LB279065	mg/kg	0.5	<0.5	0%	NA
Profenofos	LB279065	mg/kg	0.5	<0.5	0%	NA
Prothiophos (Tokuthion)*	LB279065	mg/kg	0.5	<0.5	0%	NA
Sulfotepp	LB279065	mg/kg	0.5	<0.5	0%	NA
Tetrachlorvinphos (Stiropfos)*	LB279065	mg/kg	0.5	<0.5	0%	NA

PCB UPAC(7) Congeners

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
PCB Congener C28	LB279065	mg/kg	0.1	<0.1	0%	NA
PCB Congener C52	LB279065	mg/kg	0.1	<0.1	0%	NA
PCB Congener C101	LB279065	mg/kg	0.1	<0.1	0%	NA
PCB Congener C118	LB279065	mg/kg	0.1	<0.1	0%	NA
PCB Congener C138	LB279065	mg/kg	0.1	<0.1	0%	NA
PCB Congener C153	LB279065	mg/kg	0.1	<0.1	0%	NA
PCB Congener C180	LB279065	mg/kg	0.1	<0.1	0%	NA

SVCH (Cl Benzenes, Hydrocarbons & VOCs)

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Hexachlorobenzene (HCB)	LB279065	mg/kg	0.1	<0.1	0%	95%
1,2-dichlorobenzene	LB279065	mg/kg	0.5	<0.5	0%	NA
1,3-dichlorobenzene	LB279065	mg/kg	0.5	<0.5	0%	NA
1,4-dichlorobenzene	LB279065	mg/kg	0.5	<0.5	0%	NA
Hexachlorobutadiene	LB279065	mg/kg	0.5	<0.5	0%	105%
Hexachlorocyclopentadiene	LB279065	mg/kg	1	<1	0%	NA
Hexachloroethane	LB279065	mg/kg	0.5	<0.5	0%	110%
Hexachloropropene	LB279065	mg/kg	0.5	<0.5	0%	NA

MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Full 8270 SVOC in Soil Method: ME-(AU)-[ENV]AN420 (continued)

				MB	DUP %RPD	LCS %Recovery
Pentachlorobenzene	LB279065	mg/kg	0.5	<0.5	0%	95%
Pentachloroethane	LB279065	mg/kg	0.5	<0.5	0%	NA
1,2,3,5 and 1,2,4,5 -tetrachlorobenzene	LB279065	mg/kg	1	<1	0%	NA
1,2,3,4-tetrachlorobenzene	LB279065	mg/kg	0.5	<0.5	0%	99%
1/2-Chloronaphthalene	LB279065	mg/kg	1	<1	0%	NA
1,2,4-trichlorobenzene	LB279065	mg/kg	0.5	<0.5	0%	NA

Phthalates

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Bis(2-ethylhexyl)phthalate	LB279065	mg/kg	5	<5	0%	109%
Bis(2-ethylhexyl)adipate	LB279065	mg/kg	0.5	<0.5	0%	NA
Butyl benzyl phthalate	LB279065	mg/kg	0.5	<0.5	0%	86%
Di-n-butyl phthalate	LB279065	mg/kg	0.5	<0.5	0%	104%
Diethyl phthalate	LB279065	mg/kg	0.5	<0.5	0%	125%
Dimethyl phthalate	LB279065	mg/kg	0.5	<0.5	0%	96%
Di-n-octyl phthalate	LB279065	mg/kg	0.5	<0.5	0%	82%

Carbamates

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Carbofuran	LB279065	mg/kg	0.5	<0.5	0%	70%
Carbaryl	LB279065	mg/kg	0.5	<0.5	0%	NA

Herbicides (normal)

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Trifluralin	LB279065	mg/kg	0.5	<0.5	0%	NA

Nitrosamines

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
N-nitroso-di-n-butylamine (NDBA)	LB279065	mg/kg	0.5	<0.5	0%	NA
N-nitroso-diethylamine (NDEA)	LB279065	mg/kg	1	<1	0%	NA
N-nitroso-di-n-propylamine (NDPA)	LB279065	mg/kg	0.5	<0.5	0%	99%
N-nitroso-morpholine (NMOR)	LB279065	mg/kg	0.5	<0.5	0%	NA
N-nitroso-piperidine (NPIP)	LB279065	mg/kg	0.5	<0.5	0%	NA
N-nitroso-pyrrolidine (NPYR)	LB279065	mg/kg	1	<1	0%	NA
4-amino biphenyl	LB279065	mg/kg	1	<1	0%	NA

Nitroaromatics and Ketones

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Acetophenone	LB279065	mg/kg	0.5	<0.5	0%	NA
1,3-dinitrobenzene	LB279065	mg/kg	1	<1	0%	NA
2,4-dinitrotoluene	LB279065	mg/kg	0.5	<0.5	0%	NA
2,6-dinitrotoluene	LB279065	mg/kg	0.5	<0.5	0%	NA
Isophorone	LB279065	mg/kg	0.5	<0.5	0%	NA
Nitrobenzene	LB279065	mg/kg	0.5	<0.5	0%	NA
p-(dimethylamino) azobenzene	LB279065	mg/kg	1	<1	0%	NA
Phenacetin	LB279065	mg/kg	1	<1	0%	NA
Pentachloronitrobenzene (quintozene)	LB279065	mg/kg	0.5	<0.5	0%	75%

Anilines and Amines

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Aniline	LB279065	mg/kg	3	<3	0%	NA
4-chloroaniline	LB279065	mg/kg	1	<1	0%	NA
2-nitroaniline	LB279065	mg/kg	1	<1	0%	NA

MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Full 8270 SVOC in Soil Method: ME-(AU)-[ENV]AN420 (continued)

				MB	DUP %RPD	LCS %Recovery
3-nitroaniline	LB279065	mg/kg	1	<1	0%	NA
4-nitroaniline	LB279065	mg/kg	1	<1	0%	NA
Diphenylamine	LB279065	mg/kg	0.5	<0.5	0%	NA
o-toluidine	LB279065	mg/kg	1	<1	0%	NA
5-nitro-o-toluidine	LB279065	mg/kg	1	<1	0%	NA
1-naphthylamine	LB279065	mg/kg	1	<1	0%	NA
2-naphthylamine	LB279065	mg/kg	1	<1	0%	NA

Haloethers

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Bis(2-chloroethoxy) methane	LB279065	mg/kg	0.5	<0.5	0%	NA
Bis(2-chloroethyl) ether	LB279065	mg/kg	0.5	<0.5	0%	NA
Bis(2-chloroisopropyl) ether	LB279065	mg/kg	0.5	<0.5	0%	NA
4-chlorophenyl phenyl ether	LB279065	mg/kg	0.5	<0.5	0%	NA
4-bromophenyl phenyl ether	LB279065	mg/kg	0.5	<0.5	0%	NA

Other SVOCs

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Methyl methanesulfonate	LB279065	mg/kg	1	<1	0%	NA
Ethyl methanesulfonate	LB279065	mg/kg	1	<1	0%	NA
Dibenzofuran	LB279065	mg/kg	0.5	<0.5	0%	NA
Benzyl alcohol	LB279065	mg/kg	1	<1	0%	NA
Safrole	LB279065	mg/kg	0.5	<0.5	0%	NA
Isosafrole Isomer 1	LB279065	mg/kg	1	<1	0%	NA
Isosafrole Isomer 2	LB279065	mg/kg	1	<1	0%	NA
1,4-naphthoquinone	LB279065	mg/kg	0.5	<0.5	0%	NA
Thionazin	LB279065	mg/kg	1	<1	0%	NA

Speciated Routine Phenols

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
3/4-methyl phenol (m/p-cresol)	LB279065	mg/kg	1	<1	0%	NA
2-methyl phenol (o-cresol)	LB279065	mg/kg	0.5	<0.5	0%	NA
2,6-dichlorophenol	LB279065	mg/kg	0.5	<0.5	0%	NA
2,3,4,6-tetrachlorophenol	LB279065	mg/kg	0.5	<0.5	0%	NA
2,4,5-trichlorophenol	LB279065	mg/kg	0.5	<0.5	0%	NA
4-chloro-3-methylphenol	LB279065	mg/kg	2	<2	0%	NA
2-chlorophenol	LB279065	mg/kg	0.5	<0.5	0%	NA
2,4-dichlorophenol	LB279065	mg/kg	0.5	<0.5	0%	85%
2,4-dimethylphenol	LB279065	mg/kg	0.5	<0.5	0%	NA
2-nitrophenol	LB279065	mg/kg	0.5	<0.5	0%	NA
Phenol	LB279065	mg/kg	0.5	<0.5	0%	103%
2,4,6-trichlorophenol	LB279065	mg/kg	0.5	<0.5	0%	100%
Pentachlorophenol	LB279065	mg/kg	0.5	<0.5	0%	71%
4-nitrophenol	LB279065	mg/kg	1	<1	0%	NA

Surrogates

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
d5-phenol (Surrogate)	LB279065	%	-	107%	4 - 22%	95%
d5-nitrobenzene (Surrogate)	LB279065	%	-	100%	2 - 12%	96%
2-fluorobiphenyl (Surrogate)	LB279065	%	-	102%	2 - 22%	98%
2,4,6-tribromophenol (Surrogate)	LB279065	%	-	109%	6 - 36%	82%
d14-p-terphenyl (Surrogate)	LB279065	%	-	106%	6 - 28%	92%

MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Mercury in Soil Method: ME-(AU)-[ENV]AN312

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Mercury	LB279092	mg/kg	0.05	<0.05	0%	103%	91%
	LB279093	mg/kg	0.05	<0.05	0%	113%	100%

Moisture Content Method: ME-(AU)-[ENV]AN002

Parameter	QC Reference	Units	LOR	DUP %RPD
% Moisture	LB279083	%w/w	1	2 - 3%
	LB279084	%w/w	1	4 - 6%

OC Pesticides in Soil Method: ME-(AU)-[ENV]AN420

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Alpha BHC	LB279055	mg/kg	0.1	<0.1	0%	NA
	LB279057	mg/kg	0.1	<0.1	0%	NA
Hexachlorobenzene (HCB)	LB279055	mg/kg	0.1	<0.1	0%	NA
	LB279057	mg/kg	0.1	<0.1	0%	NA
Beta BHC	LB279055	mg/kg	0.1	<0.1	0%	NA
	LB279057	mg/kg	0.1	<0.1	0%	NA
Lindane (gamma BHC)	LB279055	mg/kg	0.1	<0.1	0%	NA
	LB279057	mg/kg	0.1	<0.1	0%	NA
Delta BHC	LB279055	mg/kg	0.1	<0.1	0%	74%
	LB279057	mg/kg	0.1	<0.1	0%	67%
Heptachlor	LB279055	mg/kg	0.1	<0.1	0%	80%
	LB279057	mg/kg	0.1	<0.1	0%	70%
Aldrin	LB279055	mg/kg	0.1	<0.1	0%	76%
	LB279057	mg/kg	0.1	<0.1	0%	68%
Isodrin	LB279055	mg/kg	0.1	<0.1	0%	NA
	LB279057	mg/kg	0.1	<0.1	0%	NA
Heptachlor epoxide	LB279055	mg/kg	0.1	<0.1	0%	NA
	LB279057	mg/kg	0.1	<0.1	0%	NA
Gamma Chlordane	LB279055	mg/kg	0.1	<0.1	0%	NA
	LB279057	mg/kg	0.1	<0.1	0%	NA
Alpha Chlordane	LB279055	mg/kg	0.1	<0.1	0%	NA
	LB279057	mg/kg	0.1	<0.1	0%	NA
Alpha Endosulfan	LB279055	mg/kg	0.2	<0.2	0%	NA
	LB279057	mg/kg	0.2	<0.2	0%	NA
o,p'-DDE*	LB279055	mg/kg	0.1	<0.1	0%	NA
	LB279057	mg/kg	0.1	<0.1	0%	NA
p,p'-DDE	LB279055	mg/kg	0.1	<0.1	0%	NA
	LB279057	mg/kg	0.1	<0.1	0%	NA
Dieldrin	LB279055	mg/kg	0.2	<0.2	0%	77%
	LB279057	mg/kg	0.2	<0.2	0%	68%
Endrin	LB279055	mg/kg	0.2	<0.2	0%	86%
	LB279057	mg/kg	0.2	<0.2	0%	74%
Beta Endosulfan	LB279055	mg/kg	0.2	<0.2	0%	NA
	LB279057	mg/kg	0.2	<0.2	0%	NA
o,p'-DDD*	LB279055	mg/kg	0.1	<0.1	0%	NA
	LB279057	mg/kg	0.1	<0.1	0%	NA
p,p'-DDD	LB279055	mg/kg	0.1	<0.1	0%	NA
	LB279057	mg/kg	0.1	<0.1	0%	NA
Endrin aldehyde	LB279055	mg/kg	0.1	<0.1	0%	NA
	LB279057	mg/kg	0.1	<0.1	0%	NA
Endosulfan sulphate	LB279055	mg/kg	0.1	<0.1	0%	NA
	LB279057	mg/kg	0.1	<0.1	0%	NA
o,p'-DDT*	LB279055	mg/kg	0.1	<0.1	0%	NA
	LB279057	mg/kg	0.1	<0.1	0%	NA
p,p'-DDT	LB279055	mg/kg	0.1	<0.1	0%	95%
	LB279057	mg/kg	0.1	<0.1	0%	89%

MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

OC Pesticides in Soil Method: ME-(AU)-[ENV]AN420 (continued)

				MB	DUP %RPD	LCS %Recovery
Endrin ketone	LB279055	mg/kg	0.1	<0.1	0%	NA
	LB279057	mg/kg	0.1	<0.1	0%	NA
Methoxychlor	LB279055	mg/kg	0.1	<0.1	0%	NA
	LB279057	mg/kg	0.1	<0.1	0%	NA
Mirex	LB279055	mg/kg	0.1	<0.1	0%	NA
	LB279057	mg/kg	0.1	<0.1	0%	NA
trans-Nonachlor	LB279055	mg/kg	0.1	<0.1	0%	NA
	LB279057	mg/kg	0.1	<0.1	0%	NA
Total CLP OC Pesticides	LB279055	mg/kg	1	<1	0%	NA
	LB279057	mg/kg	1	<1	0%	NA
Total OC VIC EPA	LB279055	mg/kg	1	<1	0%	NA
	LB279057	mg/kg	1	<1	0%	NA

Surrogates

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Tetrachloro-m-xylene (TCMX) (Surrogate)	LB279055	%	-	82%	0%	87%
	LB279057	%	-	84%	3%	88%

MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

OP Pesticides in Soil Method: ME-(AU)-[ENV]AN420

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Azinphos-methyl (Guthion)	LB279055	mg/kg	0.2	<0.2	0%	NA	NA
	LB279057	mg/kg	0.2	<0.2	0%	NA	
Bromophos Ethyl	LB279055	mg/kg	0.2	<0.2	0%	NA	NA
	LB279057	mg/kg	0.2	<0.2	0%	NA	
Chlorpyrifos (Chlorpyrifos Ethyl)	LB279055	mg/kg	0.2	<0.2	0%	88%	97%
	LB279057	mg/kg	0.2	<0.2	0%	84%	
Diazinon (Dimpylate)	LB279055	mg/kg	0.5	<0.5	0%	92%	101%
	LB279057	mg/kg	0.5	<0.5	0%	92%	
Dichlorvos	LB279055	mg/kg	0.5	<0.5	0%	68%	76%
	LB279057	mg/kg	0.5	<0.5	0%	77%	
Dimethoate	LB279055	mg/kg	0.5	<0.5	0%	NA	NA
	LB279057	mg/kg	0.5	<0.5	0%	NA	
Ethion	LB279055	mg/kg	0.2	<0.2	0%	104%	118%
	LB279057	mg/kg	0.2	<0.2	0%	130%	
Fenitrothion	LB279055	mg/kg	0.2	<0.2	0%	NA	NA
	LB279057	mg/kg	0.2	<0.2	0%	NA	
Malathion	LB279055	mg/kg	0.2	<0.2	0%	NA	NA
	LB279057	mg/kg	0.2	<0.2	0%	NA	
Methidathion	LB279055	mg/kg	0.5	<0.5	0%	NA	NA
	LB279057	mg/kg	0.5	<0.5	0%	NA	
Parathion-ethyl (Parathion)	LB279055	mg/kg	0.2	<0.2	0%	NA	NA
	LB279057	mg/kg	0.2	<0.2	0%	NA	
Total OP Pesticides*	LB279055	mg/kg	1.7	<1.7	0%	NA	NA
	LB279057	mg/kg	1.7	<1.7	0%	NA	

Surrogates

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
2-fluorobiphenyl (Surrogate)	LB279055	%	-	87%	1%	89%	87%
	LB279057	%	-	91%	0 - 1%	89%	
d14-p-terphenyl (Surrogate)	LB279055	%	-	97%	1%	98%	98%
	LB279057	%	-	106%	0%	93%	

MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil Method: ME-(AU)-[ENV]AN420

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Naphthalene	LB279055	mg/kg	0.1	<0.1	0%	84%	83%
	LB279057	mg/kg	0.1	<0.1	0%	87%	86%
2-methylnaphthalene	LB279055	mg/kg	0.1	<0.1	0%	NA	NA
	LB279057	mg/kg	0.1	<0.1	0 - 18%	NA	NA
1-methylnaphthalene	LB279055	mg/kg	0.1	<0.1	0%	NA	NA
	LB279057	mg/kg	0.1	<0.1	0 - 5%	NA	NA
Acenaphthylene	LB279055	mg/kg	0.1	<0.1	0%	88%	87%
	LB279057	mg/kg	0.1	<0.1	0%	90%	88%
Acenaphthene	LB279055	mg/kg	0.1	<0.1	0%	89%	88%
	LB279057	mg/kg	0.1	<0.1	0%	92%	91%
Fluorene	LB279055	mg/kg	0.1	<0.1	0%	NA	NA
	LB279057	mg/kg	0.1	<0.1	0%	NA	NA
Phenanthrene	LB279055	mg/kg	0.1	<0.1	0%	89%	88%
	LB279057	mg/kg	0.1	<0.1	0%	91%	90%
Anthracene	LB279055	mg/kg	0.1	<0.1	0%	86%	85%
	LB279057	mg/kg	0.1	<0.1	0%	90%	88%
Fluoranthene	LB279055	mg/kg	0.1	<0.1	0%	85%	83%
	LB279057	mg/kg	0.1	<0.1	0 - 1%	89%	88%
Pyrene	LB279055	mg/kg	0.1	<0.1	0%	93%	93%
	LB279057	mg/kg	0.1	<0.1	0%	91%	89%
Benzo(a)anthracene	LB279055	mg/kg	0.1	<0.1	0%	NA	NA
	LB279057	mg/kg	0.1	<0.1	0%	NA	NA
Chrysene	LB279055	mg/kg	0.1	<0.1	0%	NA	NA
	LB279057	mg/kg	0.1	<0.1	0%	NA	NA
Benzo(b&j)fluoranthene	LB279055	mg/kg	0.1	<0.1	0%	NA	NA
	LB279057	mg/kg	0.1	<0.1	0%	NA	NA
Benzo(k)fluoranthene	LB279055	mg/kg	0.1	<0.1	0%	NA	NA
	LB279057	mg/kg	0.1	<0.1	0%	NA	NA
Benzo(a)pyrene	LB279055	mg/kg	0.1	<0.1	0%	85%	82%
	LB279057	mg/kg	0.1	<0.1	0%	87%	87%
Indeno(1,2,3-cd)pyrene	LB279055	mg/kg	0.1	<0.1	0%	NA	NA
	LB279057	mg/kg	0.1	<0.1	0%	NA	NA
Dibenzo(ah)anthracene	LB279055	mg/kg	0.1	<0.1	0%	NA	NA
	LB279057	mg/kg	0.1	<0.1	0%	NA	NA
Benzo(ghi)perylene	LB279055	mg/kg	0.1	<0.1	0%	NA	NA
	LB279057	mg/kg	0.1	<0.1	0%	NA	NA
Carcinogenic PAHs, BaP TEQ <LOR=0*	LB279055	TEQ (mg/kg)	0.2	<0.2	0%	NA	NA
	LB279057	TEQ (mg/kg)	0.2	<0.2	0%	NA	NA
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	LB279055	TEQ (mg/kg)	0.2	<0.2	0%	NA	NA
	LB279057	TEQ (mg/kg)	0.2	<0.2	0%	NA	NA
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	LB279055	TEQ (mg/kg)	0.3	<0.3	0%	NA	NA
	LB279057	TEQ (mg/kg)	0.3	<0.3	0%	NA	NA
Total PAH (18)	LB279055	mg/kg	0.8	<0.8	0%	NA	NA
	LB279057	mg/kg	0.8	<0.8	0 - 4%	NA	NA
Total PAH (NEPM/WHO 16)	LB279055	mg/kg	0.8	<0.8			
	LB279057	mg/kg	0.8	<0.8			

Surrogates

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
d5-nitrobenzene (Surrogate)	LB279055	%	-	91%	0 - 2%	93%	91%
	LB279057	%	-	123%	0 - 3%	116%	116%
2-fluorobiphenyl (Surrogate)	LB279055	%	-	87%	1 - 2%	89%	87%
	LB279057	%	-	91%	0 - 1%	89%	91%
d14-p-terphenyl (Surrogate)	LB279055	%	-	97%	1%	98%	98%
	LB279057	%	-	106%	0%	93%	94%

MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

PCBs in Soil Method: ME-(AU)-[ENV]AN420

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Arochlor 1016	LB279055	mg/kg	0.2	<0.2	0%	NA
	LB279057	mg/kg	0.2	<0.2	0%	NA
Arochlor 1221	LB279055	mg/kg	0.2	<0.2	0%	NA
	LB279057	mg/kg	0.2	<0.2	0%	NA
Arochlor 1232	LB279055	mg/kg	0.2	<0.2	0%	NA
	LB279057	mg/kg	0.2	<0.2	0%	NA
Arochlor 1242	LB279055	mg/kg	0.2	<0.2	0%	NA
	LB279057	mg/kg	0.2	<0.2	0%	NA
Arochlor 1248	LB279055	mg/kg	0.2	<0.2	0%	NA
	LB279057	mg/kg	0.2	<0.2	0%	NA
Arochlor 1254	LB279055	mg/kg	0.2	<0.2	0%	NA
	LB279057	mg/kg	0.2	<0.2	0%	NA
Arochlor 1260	LB279055	mg/kg	0.2	<0.2	0%	97%
	LB279057	mg/kg	0.2	<0.2	0%	89%
Arochlor 1262	LB279055	mg/kg	0.2	<0.2	0%	NA
	LB279057	mg/kg	0.2	<0.2	0%	NA
Arochlor 1268	LB279055	mg/kg	0.2	<0.2	0%	NA
	LB279057	mg/kg	0.2	<0.2	0%	NA
Total PCBs (Arochlors)	LB279055	mg/kg	1	<1	0%	NA
	LB279057	mg/kg	1	<1	0%	NA

Surrogates

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
TCMX (Surrogate)	LB279055	%	-	81%	0%	86%
	LB279057	%	-	76%	3%	81%

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES Method: ME-(AU)-[ENV]AN040/AN320

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Arsenic, As	LB279087	mg/kg	1	<1	56%	108%	99%
	LB279088	mg/kg	1	<1	6 - 22%	109%	88%
Cadmium, Cd	LB279087	mg/kg	0.3	<0.3	0%	98%	80%
	LB279088	mg/kg	0.3	<0.3	0%	96%	76%
Chromium, Cr	LB279087	mg/kg	0.5	<0.5	16%	110%	103%
	LB279088	mg/kg	0.5	<0.5	6 - 21%	107%	91%
Copper, Cu	LB279087	mg/kg	0.5	<0.5	0%	110%	122%
	LB279088	mg/kg	0.5	<0.5	0%	111%	94%
Nickel, Ni	LB279087	mg/kg	0.5	<0.5	11%	102%	107%
	LB279088	mg/kg	0.5	<0.5	7 - 18%	104%	93%
Lead, Pb	LB279087	mg/kg	1	<1	10%	101%	39%
	LB279088	mg/kg	1	<1	3%	102%	87%
Zinc, Zn	LB279087	mg/kg	2	<2.0	21%	102%	89%
	LB279088	mg/kg	2	<2.0	17 - 71%	103%	92%

MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

TRH (Total Recoverable Hydrocarbons) in Soil Method: ME-(AU)-[ENV]AN403

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
TRH C10-C14	LB279055	mg/kg	20	<20	0%	122%	111%
	LB279057	mg/kg	20	<20	0%	107%	96%
TRH C15-C28	LB279055	mg/kg	45	<45	0 - 6%	124%	103%
	LB279057	mg/kg	45	<45	12 - 22%	110%	92%
TRH C29-C36	LB279055	mg/kg	45	<45	0 - 68%	117%	80%
	LB279057	mg/kg	45	<45	11 - 26%	90%	86%
TRH C37-C40	LB279055	mg/kg	100	<100	0%	NA	NA
	LB279057	mg/kg	100	<100	0%	NA	NA
TRH C10-C36 Total	LB279055	mg/kg	110	<110	0 - 45%	NA	NA
	LB279057	mg/kg	110	<110	2 - 15%	NA	NA
TRH >C10-C40 Total (F bands)	LB279055	mg/kg	210	<210	26%	NA	NA
	LB279057	mg/kg	210	<210	0%	NA	NA

TRH F Bands

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
TRH >C10-C16	LB279055	mg/kg	25	<25	0%	127%	117%
	LB279057	mg/kg	25	<25	0%	110%	97%
TRH >C10-C16 - Naphthalene (F2)	LB279055	mg/kg	25	<25	0%	NA	NA
	LB279057	mg/kg	25	<25	0%	NA	NA
TRH >C16-C34 (F3)	LB279055	mg/kg	90	<90	0 - 35%	114%	78%
	LB279057	mg/kg	90	<90	2 - 17%	105%	89%
TRH >C34-C40 (F4)	LB279055	mg/kg	120	<120	0 - 18%	125%	NA
	LB279057	mg/kg	120	<120	0%	86%	NA

VOC's in Soil Method: ME-(AU)-[ENV]AN433

Fumigants

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
2,2-dichloropropane	LB279067	mg/kg	0.1	<0.1	0%	NA
	LB279071	mg/kg	0.1	<0.1		NA
1,2-dichloropropane	LB279067	mg/kg	0.1	<0.1	0%	NA
	LB279071	mg/kg	0.1	<0.1		NA
cis-1,3-dichloropropene	LB279067	mg/kg	0.1	<0.1	0%	NA
	LB279071	mg/kg	0.1	<0.1		NA
trans-1,3-dichloropropene	LB279067	mg/kg	0.1	<0.1	0%	NA
	LB279071	mg/kg	0.1	<0.1		NA
1,2-dibromoethane (EDB)	LB279067	mg/kg	0.1	<0.1	0%	NA
	LB279071	mg/kg	0.1	<0.1		NA

Halogenated Aliphatics

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Dichlorodifluoromethane (CFC-12)	LB279067	mg/kg	1	<1	0%	NA
	LB279071	mg/kg	1	<1		NA
Chloromethane	LB279067	mg/kg	1	<1	0%	NA
	LB279071	mg/kg	1	<1		NA
Vinyl chloride (Chloroethene)	LB279067	mg/kg	0.1	<0.1	0%	NA
	LB279071	mg/kg	0.1	<0.1		NA
Bromomethane	LB279067	mg/kg	1	<1	0%	NA
	LB279071	mg/kg	1	<1		NA
Chloroethane	LB279067	mg/kg	1	<1	0%	NA
	LB279071	mg/kg	1	<1		NA
Trichlorofluoromethane	LB279067	mg/kg	1	<1	0%	NA
	LB279071	mg/kg	1	<1		NA
1,1-dichloroethene	LB279067	mg/kg	0.1	<0.1	0%	80%
	LB279071	mg/kg	0.1	<0.1		77%
Iodomethane	LB279067	mg/kg	5	<5	0%	NA

MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

VOC's in Soil Method: ME-(AU)-[ENV]AN433 (continued)

				MB	DUP %RPD	LCS %Recovery
Iodomethane	LB279071	mg/kg	5	<5		NA
Dichloromethane (Methylene chloride)	LB279067	mg/kg	0.5	<0.5	0%	NA
	LB279071	mg/kg	0.5	<0.5		NA
Allyl chloride	LB279067	mg/kg	0.1	<0.1	0%	NA
	LB279071	mg/kg	0.1	<0.1		NA
trans-1,2-dichloroethene	LB279067	mg/kg	0.1	<0.1	0%	NA
	LB279071	mg/kg	0.1	<0.1		NA
1,1-dichloroethane	LB279067	mg/kg	0.1	<0.1	0%	NA
	LB279071	mg/kg	0.1	<0.1		NA
cis-1,2-dichloroethene	LB279067	mg/kg	0.1	<0.1	0%	NA
	LB279071	mg/kg	0.1	<0.1		NA
Bromochloromethane	LB279067	mg/kg	0.1	<0.1	0%	NA
	LB279071	mg/kg	0.1	<0.1		NA
1,2-dichloroethane	LB279067	mg/kg	0.1	<0.1	0%	97%
	LB279071	mg/kg	0.1	<0.1		98%
1,1,1-trichloroethane	LB279067	mg/kg	0.1	<0.1	0%	NA
	LB279071	mg/kg	0.1	<0.1		NA
1,1-dichloropropene	LB279067	mg/kg	0.1	<0.1	0%	NA
	LB279071	mg/kg	0.1	<0.1		NA
Carbon tetrachloride	LB279067	mg/kg	0.1	<0.1	0%	NA
	LB279071	mg/kg	0.1	<0.1		NA
Dibromomethane	LB279067	mg/kg	0.1	<0.1	0%	NA
	LB279071	mg/kg	0.1	<0.1		NA
Trichloroethene (Trichloroethylene,TCE)	LB279067	mg/kg	0.1	<0.1	0%	99%
	LB279071	mg/kg	0.1	<0.1		93%
1,1,2-trichloroethane	LB279067	mg/kg	0.1	<0.1	0%	NA
	LB279071	mg/kg	0.1	<0.1		NA
1,3-dichloropropane	LB279067	mg/kg	0.1	<0.1	0%	NA
	LB279071	mg/kg	0.1	<0.1		NA
Tetrachloroethene (Perchloroethylene,PCE)	LB279067	mg/kg	0.1	<0.1	0%	NA
	LB279071	mg/kg	0.1	<0.1		NA
1,1,1,2-tetrachloroethane	LB279067	mg/kg	0.1	<0.1	0%	NA
	LB279071	mg/kg	0.1	<0.1		NA
1,1,2,2-tetrachloroethane	LB279067	mg/kg	0.1	<0.1	0%	NA
	LB279071	mg/kg	0.1	<0.1		NA
1,2,3-trichloropropane	LB279067	mg/kg	0.1	<0.1	0%	NA
	LB279071	mg/kg	0.1	<0.1		NA
trans-1,4-dichloro-2-butene	LB279067	mg/kg	1	<1	0%	NA
	LB279071	mg/kg	1	<1		NA
1,2-dibromo-3-chloropropane	LB279067	mg/kg	0.1	<0.1	0%	NA
	LB279071	mg/kg	0.1	<0.1		NA
Hexachlorobutadiene	LB279067	mg/kg	0.1	<0.1	0%	NA
	LB279071	mg/kg	0.1	<0.1		NA

Halogenated Aromatics

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Chlorobenzene	LB279067	mg/kg	0.1	<0.1	0%	105%
	LB279071	mg/kg	0.1	<0.1		90%
Bromobenzene	LB279067	mg/kg	0.1	<0.1	0%	NA
	LB279071	mg/kg	0.1	<0.1		NA
2-chlorotoluene	LB279067	mg/kg	0.1	<0.1	0%	NA
	LB279071	mg/kg	0.1	<0.1		NA
4-chlorotoluene	LB279067	mg/kg	0.1	<0.1	0%	NA
	LB279071	mg/kg	0.1	<0.1		NA
1,3-dichlorobenzene	LB279067	mg/kg	0.1	<0.1	0%	NA
	LB279071	mg/kg	0.1	<0.1		NA

MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

VOC's in Soil Method: ME-(AU)-[ENV]AN433 (continued)

				MB	DUP %RPD	LCS %Recovery
1,4-dichlorobenzene	LB279067	mg/kg	0.1	<0.1	0%	NA
	LB279071	mg/kg	0.1	<0.1		NA
1,2-dichlorobenzene	LB279067	mg/kg	0.1	<0.1	0%	NA
	LB279071	mg/kg	0.1	<0.1		NA
1,2,4-trichlorobenzene	LB279067	mg/kg	0.1	<0.1	0%	NA
	LB279071	mg/kg	0.1	<0.1		NA
1,2,3-trichlorobenzene	LB279067	mg/kg	0.1	<0.1	0%	NA
	LB279071	mg/kg	0.1	<0.1		NA

Monocyclic Aromatic Hydrocarbons

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Benzene	LB279067	mg/kg	0.1	<0.1	0%	95%	91%
	LB279071	mg/kg	0.1	<0.1	0%	91%	88%
Toluene	LB279067	mg/kg	0.1	<0.1	0%	103%	94%
	LB279071	mg/kg	0.1	<0.1	0%	94%	92%
Ethylbenzene	LB279067	mg/kg	0.1	<0.1	0%	98%	101%
	LB279071	mg/kg	0.1	<0.1	0%	98%	91%
m/p-xylene	LB279067	mg/kg	0.2	<0.2	0%	97%	100%
	LB279071	mg/kg	0.2	<0.2	0%	98%	90%
Styrene (Vinyl benzene)	LB279067	mg/kg	0.1	<0.1	0%	NA	
	LB279071	mg/kg	0.1	<0.1		NA	
o-xylene	LB279067	mg/kg	0.1	<0.1	0%	101%	105%
	LB279071	mg/kg	0.1	<0.1	0%	100%	94%
Isopropylbenzene (Cumene)	LB279067	mg/kg	0.1	<0.1	0%	NA	
	LB279071	mg/kg	0.1	<0.1		NA	
n-propylbenzene	LB279067	mg/kg	0.1	<0.1	0%	NA	
	LB279071	mg/kg	0.1	<0.1		NA	
1,3,5-trimethylbenzene	LB279067	mg/kg	0.1	<0.1	0%	NA	
	LB279071	mg/kg	0.1	<0.1		NA	
tert-butylbenzene	LB279067	mg/kg	0.1	<0.1	0%	NA	
	LB279071	mg/kg	0.1	<0.1		NA	
1,2,4-trimethylbenzene	LB279067	mg/kg	0.1	<0.1	0%	NA	
	LB279071	mg/kg	0.1	<0.1		NA	
sec-butylbenzene	LB279067	mg/kg	0.1	<0.1	0%	NA	
	LB279071	mg/kg	0.1	<0.1		NA	
p-isopropyltoluene	LB279067	mg/kg	0.1	<0.1	0%	NA	
	LB279071	mg/kg	0.1	<0.1		NA	
n-butylbenzene	LB279067	mg/kg	0.1	<0.1	0%	NA	
	LB279071	mg/kg	0.1	<0.1		NA	

Nitrogenous Compounds

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Acrylonitrile	LB279067	mg/kg	0.1	<0.1	0%	NA
	LB279071	mg/kg	0.1	<0.1		NA
2-nitropropane	LB279067	mg/kg	10	<10	0%	NA
	LB279071	mg/kg	10	<10		NA

Oxygenated Compounds

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Acetone (2-propanone)	LB279067	mg/kg	10	<10	0%	NA
	LB279071	mg/kg	10	<10		NA
MtBE (Methyl-tert-butyl ether)	LB279067	mg/kg	0.1	<0.1	0%	NA
	LB279071	mg/kg	0.1	<0.1		NA
Vinyl acetate*	LB279067	mg/kg	10	<10	0%	NA
	LB279071	mg/kg	10	<10		NA
MIBK (4-methyl-2-pentanone)	LB279067	mg/kg	1	<1	0%	NA

MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

VOC's in Soil Method: ME-(AU)-(ENV)AN433 (continued)

				MB	DUP %RPD	LCS %Recovery
MIBK (4-methyl-2-pentanone)	LB279071	mg/kg	1	<1		NA
2-hexanone (MBK)	LB279067	mg/kg	5	<5	0%	NA
	LB279071	mg/kg	5	<5		NA

Polycyclic VOCs

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Naphthalene (VOC)*	LB279067	mg/kg	0.1	<0.1	0%	NA	NA
	LB279071	mg/kg	0.1	<0.1	0%	NA	NA

Sulphonated Compounds

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Carbon disulfide	LB279067	mg/kg	0.5	<0.5	0%	NA
	LB279071	mg/kg	0.5	<0.5		NA

Surrogates

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
d4-1,2-dichloroethane (Surrogate)	LB279067	%	-	82%	5 - 12%	103%	104%
	LB279071	%	-	85%	4%	101%	99%
d8-toluene (Surrogate)	LB279067	%	-	89%	6 - 7%	107%	108%
	LB279071	%	-	91%	1 - 19%	105%	101%
Bromofluorobenzene (Surrogate)	LB279067	%	-	99%	3 - 6%	98%	89%
	LB279071	%	-	74%	22 - 23%	94%	84%

Totals

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Total Other Chlorinated Hydrocarbons VIC EPA*	LB279067	mg/kg	1.8	<1.8	0%	NA	
	LB279071	mg/kg	1.8	<1.8		NA	
Total Chlorinated Hydrocarbons VIC EPA*	LB279067	mg/kg	1.8	<1.8	0%	NA	
	LB279071	mg/kg	1.8	<1.8		NA	
Total BTEX*	LB279067	mg/kg	0.6	<0.6	0%	NA	NA
	LB279071	mg/kg	0.6	<0.6	0%	NA	NA
Total Volatile Chlorinated Hydrocarbons*	LB279067	mg/kg	3	<3.0	0%	NA	
	LB279071	mg/kg	3	<3.0		NA	
Total VOC*	LB279067	mg/kg	24	<24	0%	NA	
	LB279071	mg/kg	24	<24		NA	
Total Xylenes*	LB279067	mg/kg	0.3	<0.3	0%	NA	NA
	LB279071	mg/kg	0.3	<0.3	0%	NA	NA

Trihalomethanes

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Chloroform (THM)	LB279067	mg/kg	0.1	<0.1	0%	104%
	LB279071	mg/kg	0.1	<0.1		104%
Bromodichloromethane (THM)	LB279067	mg/kg	0.1	<0.1	0%	NA
	LB279071	mg/kg	0.1	<0.1		NA
Dibromochloromethane (THM)	LB279067	mg/kg	0.1	<0.1	0%	NA
	LB279071	mg/kg	0.1	<0.1		NA
Bromoform (THM)	LB279067	mg/kg	0.1	<0.1	0%	NA
	LB279071	mg/kg	0.1	<0.1		NA

MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Volatile Petroleum Hydrocarbons in Soil Method: ME-(AU)-[ENV]AN433

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
TRH C6-C10	LB279067	mg/kg	25	<25	0%	92%	93%
	LB279071	mg/kg	25	<25	0%	101%	99%
TRH C6-C9	LB279067	mg/kg	20	<20	0%	92%	93%
	LB279071	mg/kg	20	<20	0%	102%	100%

Surrogates

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
d4-1,2-dichloroethane (Surrogate)	LB279067	%	-	82%	5 - 12%	103%	104%
	LB279071	%	-	85%	4%	101%	99%
d8-toluene (Surrogate)	LB279067	%	-	89%	6 - 7%	107%	108%
	LB279071	%	-	91%	1 - 19%	105%	101%
Bromofluorobenzene (Surrogate)	LB279067	%	-	99%	3 - 6%	98%	93%
	LB279071	%	-	74%	22 - 23%	94%	84%

VPF F Bands

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Benzene (F0)	LB279067	mg/kg	0.1	<0.1	0%	NA	NA
	LB279071	mg/kg	0.1	<0.1	0%	NA	NA
TRH C6-C10 minus BTEX (F1)	LB279067	mg/kg	25	<25	0%	88%	90%
	LB279071	mg/kg	25	<25	0%	111%	102%

METHOD

METHODOLOGY SUMMARY

AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by ASS or ICP as per USEPA Method 200.8.
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.
AN312	Mercury by Cold Vapour AAS in Soils: After digestion with nitric acid, hydrogen peroxide and hydrochloric acid, mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). F2 is reported directly and also corrected by subtracting Naphthalene (from VOC method AN433) where available.
AN403	Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Recoverable Hydrocarbons - Silica (TRH-Si) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents.
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D). Total PAH calculated from individual analyte detections at or above the limit of reporting.
AN420	SVOC Compounds: Semi-Volatile Organic Compounds (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC's are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.

METHOD

METHODOLOGY SUMMARY

AN602/AS4964

Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic 'clues', which provide a reasonable degree of certainty, dispersion staining is a mandatory 'clue' for positive identification. If sufficient 'clues' are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.

AN602/AS4964

Fibres/material that cannot be unequivocally identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf). The fibres detected may or may not be asbestos fibres.

AN602/AS4964

AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples, Section 8.4, Trace Analysis Criteria, Note 4 states: "Depending upon sample condition and fibre type, the detection/reporting limit (RL) of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."

AN602/AS4964

The sample can be reported "no asbestos found at the reporting limit (RL) of 0.1 g/kg" (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if-

- (a) no trace asbestos fibres have been detected (i.e. no 'respirable' fibres);
- (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg; and
- (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.

MA-1523

This method covers the analysis of per- and polyfluoroalkyl substances (PFAS) in aqueous, solid and biosolid samples and solvent extracts, determined as the total of linear and branched isomers. After spiking with isotopically labelled quantification surrogates and clean-up via SPE cartridges sample extracts are analysed by liquid chromatography/mass spectrometry (LC-MS/MS). PFAS concentrations are determined by isotope dilution quantification.

FOOTNOTES

IS	Insufficient sample for analysis.	LOR	Limit of Reporting
LNR	Sample listed, but not received.	↑↓	Raised or Lowered Limit of Reporting
*	NATA accreditation does not cover the performance of this service.	QFH	QC result is above the upper tolerance
**	Indicative data, theoretical holding time exceeded.	QFL	QC result is below the lower tolerance
***	Indicates that both * and ** apply.	-	The sample was not analysed for this analyte
		NVL	Not Validated

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.

Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be $1.6 / 2$ (0.8 mg/kg). Where only 2 analytes are being summed, the "Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the $\pm$ sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.

Note that in terms of units of radioactivity:

- 1 Bq is equivalent to 27 pCi
- 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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ANALYTICAL REPORT



Accreditation No. 2562

CLIENT DETAILS

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SGS Reference **SE247181 R0**
Date Received 05 May 2023
Date Reported 17 May 2023

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

No respirable fibres detected in all soil samples using trace analysis technique.

Sample #9: Chrysotile and Crocidolite asbestos found in approx 15x10x4mm cement sheet fragment.

Asbestos analysed by Approved Identifiers Ravee Sivasubramaniam and Yusuf Kuthpudin

PFAS subcontracted to SGS Melbourne, Unit 10/585 Blackburn Road Notting Hill VIC 3168, NATA Accreditation Number 2562, Site number 14420. Report NO. ME334055.

SIGNATORIES

Ravee SIVASUBRAMANIAM
Hygiene Team Leader

RESULTS

Fibre Identification in soil

Method AS4964/AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE247181.004	HA103_0.1-0.2	Soil	156g Sand, Soil, Rocks, Plant Matter	03 May 2023	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE247181.005	HA106_0.1-0.2	Soil	161g Clay, Sand, Soil, Rocks	03 May 2023	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE247181.006	HA106 0.3-0.6	Soil	164g Clay, Sand, Rocks	03 May 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE247181.007	HA109_0.1-0.3	Soil	150g Clay, Sand, Soil, Rocks	03 May 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE247181.008	HA109_0.5-0.7	Soil	121g Clay, Sand, Soil, Rocks	03 May 2023	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE247181.009	TP106_0.5	Soil	116g Clay, Sand, Soil, Rocks	04 May 2023	Chrysotile & Crocidolite Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	>0.01
SE247181.012	TP107_0.1	Soil	105g Clay, Sand, Rocks	04 May 2023	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE247181.014	TP107_1	Soil	181g Clay, Sand, Rocks	04 May 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE247181.015	TP108_0.1	Soil	99g Sand, Soil, Rocks	04 May 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE247181.017	TP115_0.1	Soil	179g Clay, Sand, Soil, Rocks	04 May 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE247181.018	TP115_0.5	Soil	174g Clay, Sand, Soil, Rocks	04 May 2023	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE247181.019	TP118_0.1	Soil	175g Clay, Sand, Soil, Rocks	04 May 2023	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE247181.021	TP113_0.1	Soil	163g Clay, Sand, Soil, Rocks	04 May 2023	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE247181.023	TP113_0.4	Soil	153g Clay, Sand, Rocks	04 May 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE247181.024	TP113_1	Soil	176g Clay, Sand, Rocks	04 May 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE247181.026	TP105_0.5	Soil	172g Clay, Sand, Rocks	03 May 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE247181.029	TP101_0.5	Soil	135g Sand, Soil, Rocks	03 May 2023	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE247181.031	TP104_0.5	Soil	93g Sand, Soil, Rocks	03 May 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE247181.032	TP104_1	Soil	167g Clay, Sand, Soil, Rocks	03 May 2023	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE247181.033	TP103_0.5	Soil	209g Clay, Sand, Soil, Rocks	03 May 2023	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE247181.035	TP102_0.1	Soil	180g Clay, Sand, Soil, Rocks	03 May 2023	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE247181.037	TP110_0.1	Soil	225g Clay, Sand, Rocks	04 May 2023	No Asbestos Found at RL of 0.1g/kg	<0.01



ANALYTICAL REPORT

SE247181 R0

RESULTS

Fibre Identification in soil

Method AS4964/AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE247181.038	TP110_1	Soil	186g Clay, Sand, Rocks	04 May 2023	No Asbestos Found at RL of 0.1g/kg	<0.01



ANALYTICAL REPORT

SE247181 R0

RESULTS

Fibre ID in bulk materials

Method AN602/AS4964

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE247181.022	TP113_0.1_PAC M	Other	50x45x4mm Cement Sheet Fragment	04 May 2023	Chrysotile Asbestos Detected	

METHOD

METHODOLOGY SUMMARY

AN602/AS4964	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic 'clues', which provide a reasonable degree of certainty, dispersion staining is a mandatory 'clue' for positive identification. If sufficient 'clues' are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602/AS4964	Fibres/material that cannot be unequivocally identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602/AS4964	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples, Section 8.4, Trace Analysis Criteria, Note 4 states: "Depending upon sample condition and fibre type, the detection/reporting limit (RL) of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602/AS4964	The sample can be reported "no asbestos found at the reporting limit (RL) of 0.1 g/kg" (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no 'respirable' fibres); (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg; and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.

FOOTNOTES

Amosite	-	Brown Asbestos	NA	-	Not Analysed
Chrysotile	-	White Asbestos	LNR	-	Listed, Not Required
Crocidolite	-	Blue Asbestos	*	-	NATA accreditation does not cover the performance of this service.
Amphiboles	-	Amosite and/or Crocidolite	**	-	Indicative data, theoretical holding time exceeded.
			***	-	Indicates that both * and ** apply.

(In reference to soil samples only) This report does not comply with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment and Remediation and Management of Asbestos Contaminated sites in Western Australia - May 2009.

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.

Where reported: 'Asbestos Detected': Asbestos detected by polarised light microscopy, including dispersion staining.

Where reported: 'No Asbestos Found': No Asbestos Found by polarised light microscopy, including dispersion staining.

Where reported: 'UMF Detected': Mineral fibres of unknown type detected by polarised light microscopy, including dispersion staining. Confirmation by another independent analytical technique may be necessary.

Even after disintegration it can be very difficult, or impossible, to detect the presence of asbestos in some asbestos-containing bulk materials using polarised light microscopy. This is due to the low grade or small length or diameter of asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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ANALYTICAL REPORT



Accreditation No. 2562

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Project **300304375 Racecourse Rd**
Order Number **SE247181**
Samples **38**

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SGS Reference **ME334055 R0**
Date Received **11 May 2023**
Date Reported **17 May 2023**

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(14420).

SIGNATORIES

Susan WAN
Senior Chemist



ANALYTICAL REPORT

ME334055 R0

Parameter	Units	LOR	Sample Number	ME334055.001	ME334055.002	ME334055.003	ME334055.004
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	05 Mar 2023	05 Mar 2023	05 Mar 2023	05 Mar 2023
			Sample Name	SE247181.001	SE247181.002	SE247181.003	SE247181.004

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples **Method: MA-1523** **Tested: 16/5/2023**

Perfluorobutanoic acid (PFBA)	mg/kg	0.0016	-	-	-	-
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0016	-	-	-	-
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0016	-	-	-	-
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0016	-	-	-	-
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0008	-	-	-	-
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0016	-	-	-	-
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0016	-	-	-	-
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0016	-	-	-	-
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0016	-	-	-	-
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0016	-	-	-	-
Sum PFOS and PFHXS	mg/kg	0.0016	-	-	-	-
Perfluorononane sulfonate (PFNS)	mg/kg	0.0016	-	-	-	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.0016	-	-	-	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.0016	-	-	-	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.0016	-	-	-	-
(13C4-PFBA) Isotopically Labelled Internal Recovery	%	-	-	-	-	-
(13C5-PFPeA) Isotopically Labelled Internal Recovery	%	-	-	-	-	-
(13C5-PFHxA) Isotopically Labelled Internal Recovery	%	-	-	-	-	-
(13C4-PFHpA) Isotopically Labelled Internal Recovery	%	-	-	-	-	-
(13C4_PFOA) Isotopically Labelled Internal Recovery	%	-	-	-	-	-
(13C3-PFBS) Isotopically Labelled Internal Recovery	%	-	-	-	-	-
(13C3-PFHxS) Isotopically Labelled Internal Recovery	%	-	-	-	-	-
(13C8-PFOS) Isotopically Labelled Internal Recovery	%	-	-	-	-	-



ANALYTICAL REPORT

ME334055 R0

			Sample Number	ME334055.005	ME334055.006	ME334055.007	ME334055.008
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	05 Mar 2023	05 Mar 2023	05 Mar 2023	05 Mar 2023
			Sample Name	SE247181.005	SE247181.006	SE247181.007	SE247181.008
Parameter	Units	LOR					

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples Method: MA-1523 Tested: 16/5/2023

Perfluorobutanoic acid (PFBA)	mg/kg	0.0016	-	-	-	-
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0016	-	-	-	-
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0016	-	-	-	-
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0016	-	-	-	-
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0008	-	-	-	-
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0016	-	-	-	-
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0016	-	-	-	-
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0016	-	-	-	-
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0016	-	-	-	-
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0016	-	-	-	-
Sum PFOS and PFHXS	mg/kg	0.0016	-	-	-	-
Perfluorononane sulfonate (PFNS)	mg/kg	0.0016	-	-	-	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.0016	-	-	-	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.0016	-	-	-	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.0016	-	-	-	-
(13C4-PFBA) Isotopically Labelled Internal Recovery	%	-	-	-	-	-
(13C5-PFPeA) Isotopically Labelled Internal Recovery	%	-	-	-	-	-
(13C5-PFHxA) Isotopically Labelled Internal Recovery	%	-	-	-	-	-
(13C4-PFHpA) Isotopically Labelled Internal Recovery	%	-	-	-	-	-
(13C4_PFOA) Isotopically Labelled Internal Recovery	%	-	-	-	-	-
(13C3-PFBS) Isotopically Labelled Internal Recovery	%	-	-	-	-	-
(13C3-PFHxS) Isotopically Labelled Internal Recovery	%	-	-	-	-	-
(13C8-PFOS) Isotopically Labelled Internal Recovery	%	-	-	-	-	-



ANALYTICAL REPORT

ME334055 R0

		Sample Number	ME334055.013	ME334055.014	ME334055.015	ME334055.016
		Sample Matrix	Soil	Soil	Soil	Soil
		Sample Date	04 May 2023	05 Apr 2023	04 May 2023	05 Apr 2023
		Sample Name	SE247181.013	SE247181.014	SE247181.015	SE247181.016
Parameter	Units	LOR				

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples Method: MA-1523 Tested: 15/5/2023

Perfluorobutanoic acid (PFBA)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0008	<0.0008	-	<0.0008	-
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Sum PFOS and PFHXS	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluorononane sulfonate (PFNS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
(13C4-PFBA) Isotopically Labelled Internal Recovery	%	-	103	-	103	-
(13C5-PFPeA) Isotopically Labelled Internal Recovery	%	-	104	-	104	-
(13C5-PFHxA) Isotopically Labelled Internal Recovery	%	-	91	-	136	-
(13C4-PFHpA) Isotopically Labelled Internal Recovery	%	-	100	-	119	-
(13C4_PFOA) Isotopically Labelled Internal Recovery	%	-	100	-	113	-
(13C3-PFBS) Isotopically Labelled Internal Recovery	%	-	93	-	113	-
(13C3-PFHxS) Isotopically Labelled Internal Recovery	%	-	103	-	98	-
(13C8-PFOS) Isotopically Labelled Internal Recovery	%	-	106	-	97	-



ANALYTICAL REPORT

ME334055 R0

		Sample Number	ME334055.021	ME334055.022	ME334055.023	ME334055.024
		Sample Matrix	Soil	Material	Soil	Soil
		Sample Date	04 May 2023	05 Apr 2023	05 Apr 2023	05 Apr 2023
		Sample Name	SE247181.021	SE247181.022	SE247181.023	SE247181.024
Parameter	Units	LOR				

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples Method: MA-1523 Tested: 15/5/2023

Perfluorobutanoic acid (PFBA)	mg/kg	0.0016	<0.0016	-	-	-
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0016	<0.0016	-	-	-
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0016	<0.0016	-	-	-
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0016	<0.0016	-	-	-
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0008	<0.0008	-	-	-
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0016	<0.0016	-	-	-
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0016	<0.0016	-	-	-
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0016	<0.0016	-	-	-
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0016	<0.0016	-	-	-
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0016	<0.0016	-	-	-
Sum PFOS and PFHXS	mg/kg	0.0016	<0.0016	-	-	-
Perfluorononane sulfonate (PFNS)	mg/kg	0.0016	<0.0016	-	-	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.0016	<0.0016	-	-	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.0016	<0.0016	-	-	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.0016	<0.0016	-	-	-
(13C4-PFBA) Isotopically Labelled Internal Recovery	%	-	104	-	-	-
(13C5-PFPeA) Isotopically Labelled Internal Recovery	%	-	101	-	-	-
(13C5-PFHxA) Isotopically Labelled Internal Recovery	%	-	131	-	-	-
(13C4-PFHpA) Isotopically Labelled Internal Recovery	%	-	120	-	-	-
(13C4_PFOA) Isotopically Labelled Internal Recovery	%	-	105	-	-	-
(13C3-PFBS) Isotopically Labelled Internal Recovery	%	-	117	-	-	-
(13C3-PFHxS) Isotopically Labelled Internal Recovery	%	-	94	-	-	-
(13C8-PFOS) Isotopically Labelled Internal Recovery	%	-	95	-	-	-



ANALYTICAL REPORT

ME334055 R0

			Sample Number	ME334055.025	ME334055.026	ME334055.027	ME334055.028
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	05 Apr 2023	03 May 2023	05 Mar 2023	05 Mar 2023
			Sample Name	SE247181.025	SE247181.026	SE247181.027	SE247181.028
Parameter	Units	LOR					

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples Method: MA-1523 Tested: 16/5/2023

Perfluorobutanoic acid (PFBA)	mg/kg	0.0016	-	<0.0016	-	-
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0016	-	<0.0016	-	-
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0016	-	<0.0016	-	-
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0016	-	<0.0016	-	-
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0008	-	<0.0008	-	-
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0016	-	<0.0016	-	-
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0016	-	<0.0016	-	-
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0016	-	<0.0016	-	-
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0016	-	<0.0016	-	-
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0016	-	<0.0016	-	-
Sum PFOS and PFHXS	mg/kg	0.0016	-	<0.0016	-	-
Perfluorononane sulfonate (PFNS)	mg/kg	0.0016	-	<0.0016	-	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.0016	-	<0.0016	-	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.0016	-	<0.0016	-	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.0016	-	<0.0016	-	-
(13C4-PFBA) Isotopically Labelled Internal Recovery	%	-	-	103	-	-
(13C5-PFPeA) Isotopically Labelled Internal Recovery	%	-	-	105	-	-
(13C5-PFHxA) Isotopically Labelled Internal Recovery	%	-	-	104	-	-
(13C4-PFHpA) Isotopically Labelled Internal Recovery	%	-	-	104	-	-
(13C4_PFOA) Isotopically Labelled Internal Recovery	%	-	-	103	-	-
(13C3-PFBS) Isotopically Labelled Internal Recovery	%	-	-	101	-	-
(13C3-PFHxS) Isotopically Labelled Internal Recovery	%	-	-	102	-	-
(13C8-PFOS) Isotopically Labelled Internal Recovery	%	-	-	120	-	-



ANALYTICAL REPORT

ME334055 R0

		Sample Number	ME334055.029	ME334055.030	ME334055.031	ME334055.032
		Sample Matrix	Soil	Soil	Soil	Soil
		Sample Date	03 May 2023	05 Mar 2023	03 May 2023	05 Mar 2023
		Sample Name	SE247181.029	SE247181.030	SE247181.031	SE247181.032
Parameter	Units	LOR				

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples Method: MA-1523 Tested: 15/5/2023

Perfluorobutanoic acid (PFBA)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0008	<0.0008	-	<0.0008	-
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Sum PFOS and PFHXS	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluorononane sulfonate (PFNS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
(13C4-PFBA) Isotopically Labelled Internal Recovery	%	-	103	-	102	-
(13C5-PFPeA) Isotopically Labelled Internal Recovery	%	-	105	-	103	-
(13C5-PFHxA) Isotopically Labelled Internal Recovery	%	-	91	-	123	-
(13C4-PFHpA) Isotopically Labelled Internal Recovery	%	-	94	-	113	-
(13C4_PFOA) Isotopically Labelled Internal Recovery	%	-	103	-	101	-
(13C3-PFBS) Isotopically Labelled Internal Recovery	%	-	98	-	130	-
(13C3-PFHxS) Isotopically Labelled Internal Recovery	%	-	109	-	110	-
(13C8-PFOS) Isotopically Labelled Internal Recovery	%	-	101	-	102	-

Parameter	Units	Sample Number	ME334055.033	ME334055.034	ME334055.035	ME334055.036
		Sample Matrix	Soil	Soil	Soil	Soil
		Sample Date	03 May 2023	05 Mar 2023	03 May 2023	05 Mar 2023
		Sample Name	SE247181.033	SE247181.034	SE247181.035	SE247181.036



ANALYTICAL REPORT

ME334055 R0

		Sample Number	ME334055.037	ME334055.038
		Sample Matrix	Soil	Soil
		Sample Date	04 May 2023	05 Apr 2023
		Sample Name	SE247181.037	SE247181.038
Parameter	Units	LOR		

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples Method: MA-1523 Tested: 15/5/2023

Perfluorobutanoic acid (PFBA)	mg/kg	0.0016	<0.0016	-
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0016	<0.0016	-
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0016	<0.0016	-
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0016	<0.0016	-
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0008	<0.0008	-
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0016	<0.0016	-
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0016	<0.0016	-
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0016	<0.0016	-
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0016	<0.0016	-
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0016	<0.0016	-
Sum PFOS and PFHXS	mg/kg	0.0016	<0.0016	-
Perfluorononane sulfonate (PFNS)	mg/kg	0.0016	<0.0016	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.0016	<0.0016	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.0016	<0.0016	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.0016	<0.0016	-
(13C4-PFBA) Isotopically Labelled Internal Recovery	%	-	104	-
(13C5-PFPeA) Isotopically Labelled Internal Recovery	%	-	103	-
(13C5-PFHxA) Isotopically Labelled Internal Recovery	%	-	147	-
(13C4-PFHpA) Isotopically Labelled Internal Recovery	%	-	146	-
(13C4_PFOA) Isotopically Labelled Internal Recovery	%	-	133	-
(13C3-PFBS) Isotopically Labelled Internal Recovery	%	-	143	-
(13C3-PFHxS) Isotopically Labelled Internal Recovery	%	-	104	-
(13C8-PFOS) Isotopically Labelled Internal Recovery	%	-	112	-

MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples Method: MA-1523

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Perfluorobutanoic acid (PFBA)	LB061788	mg/kg	0.0016	<0.0016	0%	NA
Perfluoropentanoic acid (PFPeA)	LB061788	mg/kg	0.0016	<0.0016	0%	NA
Perfluorohexanoic acid (PFHxA)	LB061788	mg/kg	0.0016	<0.0016	0%	NA
Perfluoroheptanoic acid (PFHpA)	LB061788	mg/kg	0.0016	<0.0016	0%	113%
Perfluorooctanoic Acid (PFOA)	LB061788	mg/kg	0.0008	<0.0008	0%	115%
Perfluorobutane sulfonate (PFBS)	LB061788	mg/kg	0.0016	<0.0016	0%	NA
Perfluoropentane sulfonate (PFPeS)	LB061788	mg/kg	0.0016	<0.0016	0%	NA
Perfluorohexane sulfonate (PFHxS)	LB061788	mg/kg	0.0016	<0.0016	0%	NA
Perfluoroheptane sulfonate (PFHpS)	LB061788	mg/kg	0.0016	<0.0016	0%	NA
Perfluorooctane sulfonate (PFOS)	LB061788	mg/kg	0.0016	<0.0016	0%	150%
Sum PFOS and PFHxS	LB061788	mg/kg	0.0016	<0.0016	0%	NA
Perfluorononane sulfonate (PFNS)	LB061788	mg/kg	0.0016	<0.0016	0%	NA
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	LB061788	mg/kg	0.0016	<0.0016	0%	NA
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	LB061788	mg/kg	0.0016	<0.0016	0%	NA
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	LB061788	mg/kg	0.0016	<0.0016	0%	NA
(13C4-PFBA) Isotopically Labelled Internal Recovery Standard	LB061788	%	-	104%	0 - 1%	102%
(13C5-PFPeA) Isotopically Labelled Internal Recovery Standard	LB061788	%	-	99%	1 - 2%	104%
(13C5-PFHxA) Isotopically Labelled Internal Recovery Standard	LB061788	%	-	120%	11 - 27%	98%
(13C4-PFHpA) Isotopically Labelled Internal Recovery Standard	LB061788	%	-	114%	4 - 22%	103%
(13C4_PFOA) Isotopically Labelled Internal Recovery Standard	LB061788	%	-	98%	8 - 18%	113%
(13C3-PFBS) Isotopically Labelled Internal Recovery Standard	LB061788	%	-	132%	4 - 10%	93%
(13C3-PFHxS) Isotopically Labelled Internal Recovery Standard	LB061788	%	-	104%	2 - 26%	99%
(13C8-PFOS) Isotopically Labelled Internal Recovery Standard	LB061788	%	-	93%	4 - 5%	120%



METHOD

METHODOLOGY SUMMARY

MA-1523

This method covers the analysis of per- and polyfluoroalkyl substances (PFAS) in aqueous, solid and biosolid samples and solvent extracts, determined as the total of linear and branched isomers. After spiking with isotopically labelled quantification surrogates and clean-up via SPE cartridges sample extracts are analysed by liquid chromatography/mass spectrometry (LC-MS/MS). PFAS concentrations are determined by isotope dilution quantification.

FOOTNOTES

IS	Insufficient sample for analysis.	LOR	Limit of Reporting
LNR	Sample listed, but not received.	↑↓	Raised or Lowered Limit of Reporting
*	NATA accreditation does not cover the performance of this service.	QFH	QC result is above the upper tolerance
**	Indicative data, theoretical holding time exceeded.	QFL	QC result is below the lower tolerance
***	Indicates that both * and ** apply.	-	The sample was not analysed for this analyte
		NVL	Not Validated

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.

Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the "Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.

Note that in terms of units of radioactivity:

- 1 Bq is equivalent to 27 pCi
- 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE247181 R0

CLIENT DETAILS

Contact Evelyn Dillon
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Facsimile (Not specified)
Email evelyn.dillon@cardno.com.au
Project **300304375 Racecourse Rd**
Order Number (Not specified)
Samples 38

LABORATORY DETAILS

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Laboratory SGS Alexandria Environmental
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Facsimile +61 2 8594 0499
Email au.environmental.sydney@sgs.com
SGS Reference **SE247181 R0**
Date Received 05 May 2023
Date Reported 17 May 2023

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.

This QA/QC Statement must be read in conjunction with the referenced Analytical Report.

The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Surrogate	Full 8270 SVOC in Soil	1 item
	VOC's in Soil	5 items
	Volatile Petroleum Hydrocarbons in Soil	5 items
Duplicate	Full 8270 SVOC in Soil	1 item
	Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES	1 item
Matrix Spike	Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES	1 item

SAMPLE SUMMARY

Sample counts by matrix	37 Soil, 1 Material	Type of documentation received	COC
Date documentation received	9/5/2023@11:11AM	Samples received in good order	Yes
Samples received without headspace	Yes	Sample temperature upon receipt	6.5°C
Sample container provider	SGS	Turnaround time requested	Standard
Samples received in correct containers	Yes	Sufficient sample for analysis	Yes
Sample cooling method	Ice	Samples clearly labelled	Yes
Complete documentation received	Yes		



HOLDING TIME SUMMARY

SE247181 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Fibre ID in bulk materials

Method: ME-(AU)-[ENV]AN602/AS4964

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP113_0.1_PACM	SE247181.022	LB279581	04 May 2023	05 May 2023	03 May 2024	16 May 2023	03 May 2024	16 May 2023

Fibre Identification in soil

Method: ME-(AU)-[ENV]AS4964/AN602

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
HA103_0.1-0.2	SE247181.004	LB279471	03 May 2023	05 May 2023	02 May 2024	15 May 2023	02 May 2024	16 May 2023
HA106_0.1-0.2	SE247181.005	LB279471	03 May 2023	05 May 2023	02 May 2024	15 May 2023	02 May 2024	16 May 2023
HA106_0.3-0.6	SE247181.006	LB279471	03 May 2023	05 May 2023	02 May 2024	15 May 2023	02 May 2024	16 May 2023
HA109_0.1-0.3	SE247181.007	LB279471	03 May 2023	05 May 2023	02 May 2024	15 May 2023	02 May 2024	16 May 2023
HA109_0.5-0.7	SE247181.008	LB279471	03 May 2023	05 May 2023	02 May 2024	15 May 2023	02 May 2024	16 May 2023
TP106_0.5	SE247181.009	LB279471	04 May 2023	05 May 2023	03 May 2024	15 May 2023	03 May 2024	16 May 2023
TP107_0.1	SE247181.012	LB279471	04 May 2023	05 May 2023	03 May 2024	15 May 2023	03 May 2024	16 May 2023
TP107_1	SE247181.014	LB279471	04 May 2023	05 May 2023	03 May 2024	15 May 2023	03 May 2024	16 May 2023
TP108_0.1	SE247181.015	LB279471	04 May 2023	05 May 2023	03 May 2024	15 May 2023	03 May 2024	16 May 2023
TP115_0.1	SE247181.017	LB279471	04 May 2023	05 May 2023	03 May 2024	15 May 2023	03 May 2024	16 May 2023
TP115_0.5	SE247181.018	LB279471	04 May 2023	05 May 2023	03 May 2024	15 May 2023	03 May 2024	16 May 2023
TP118_0.1	SE247181.019	LB279471	04 May 2023	05 May 2023	03 May 2024	15 May 2023	03 May 2024	16 May 2023
TP113_0.1	SE247181.021	LB279471	04 May 2023	05 May 2023	03 May 2024	15 May 2023	03 May 2024	16 May 2023
TP113_0.4	SE247181.023	LB279471	04 May 2023	05 May 2023	03 May 2024	15 May 2023	03 May 2024	16 May 2023
TP113_1	SE247181.024	LB279471	04 May 2023	05 May 2023	03 May 2024	15 May 2023	03 May 2024	16 May 2023
TP105_0.5	SE247181.026	LB279471	03 May 2023	05 May 2023	02 May 2024	15 May 2023	02 May 2024	16 May 2023
TP101_0.5	SE247181.029	LB279471	03 May 2023	05 May 2023	02 May 2024	15 May 2023	02 May 2024	16 May 2023
TP104_0.5	SE247181.031	LB279471	03 May 2023	05 May 2023	02 May 2024	15 May 2023	02 May 2024	16 May 2023
TP104_1	SE247181.032	LB279471	03 May 2023	05 May 2023	02 May 2024	15 May 2023	02 May 2024	16 May 2023
TP103_0.5	SE247181.033	LB279471	03 May 2023	05 May 2023	02 May 2024	15 May 2023	02 May 2024	16 May 2023
TP102_0.1	SE247181.035	LB279471	03 May 2023	05 May 2023	02 May 2024	15 May 2023	02 May 2024	16 May 2023
TP110_0.1	SE247181.037	LB279471	04 May 2023	05 May 2023	03 May 2024	15 May 2023	03 May 2024	16 May 2023
TP110_1	SE247181.038	LB279471	04 May 2023	05 May 2023	03 May 2024	15 May 2023	03 May 2024	16 May 2023

Full 8270 SVOC in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP106_0.5	SE247181.009	LB279065	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP107_0.1	SE247181.012	LB279065	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP115_0.1	SE247181.017	LB279065	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP118_0.1	SE247181.019	LB279065	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP113_0.4	SE247181.023	LB279065	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP113_2	SE247181.025	LB279065	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP101_0.5	SE247181.029	LB279065	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP103_0.5	SE247181.033	LB279065	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP110_0.1	SE247181.037	LB279065	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
HA101_0.1-0.2	SE247181.001	LB279092	03 May 2023	05 May 2023	31 May 2023	10 May 2023	31 May 2023	12 May 2023
HA101_0.5-0.7	SE247181.002	LB279092	03 May 2023	05 May 2023	31 May 2023	10 May 2023	31 May 2023	12 May 2023
HA102_0-0.1	SE247181.003	LB279092	03 May 2023	05 May 2023	31 May 2023	10 May 2023	31 May 2023	12 May 2023
HA103_0.1-0.2	SE247181.004	LB279092	03 May 2023	05 May 2023	31 May 2023	10 May 2023	31 May 2023	12 May 2023
HA106_0.1-0.2	SE247181.005	LB279092	03 May 2023	05 May 2023	31 May 2023	10 May 2023	31 May 2023	12 May 2023
HA106_0.3-0.6	SE247181.006	LB279092	03 May 2023	05 May 2023	31 May 2023	10 May 2023	31 May 2023	12 May 2023
HA109_0.1-0.3	SE247181.007	LB279092	03 May 2023	05 May 2023	31 May 2023	10 May 2023	31 May 2023	12 May 2023
HA109_0.5-0.7	SE247181.008	LB279092	03 May 2023	05 May 2023	31 May 2023	10 May 2023	31 May 2023	12 May 2023
TP106_0.5	SE247181.009	LB279092	04 May 2023	05 May 2023	01 Jun 2023	10 May 2023	01 Jun 2023	12 May 2023
TP106_2	SE247181.010	LB279092	04 May 2023	05 May 2023	01 Jun 2023	10 May 2023	01 Jun 2023	12 May 2023
QA200	SE247181.011	LB279092	04 May 2023	05 May 2023	01 Jun 2023	10 May 2023	01 Jun 2023	12 May 2023
TP107_0.1	SE247181.012	LB279092	04 May 2023	05 May 2023	01 Jun 2023	10 May 2023	01 Jun 2023	12 May 2023
QA300	SE247181.013	LB279092	04 May 2023	05 May 2023	01 Jun 2023	10 May 2023	01 Jun 2023	12 May 2023
TP107_1	SE247181.014	LB279092	04 May 2023	05 May 2023	01 Jun 2023	10 May 2023	01 Jun 2023	12 May 2023
TP108_0.1	SE247181.015	LB279092	04 May 2023	05 May 2023	01 Jun 2023	10 May 2023	01 Jun 2023	12 May 2023
TP108_2	SE247181.016	LB279092	04 May 2023	05 May 2023	01 Jun 2023	10 May 2023	01 Jun 2023	12 May 2023
TP115_0.1	SE247181.017	LB279092	04 May 2023	05 May 2023	01 Jun 2023	10 May 2023	01 Jun 2023	12 May 2023
TP115_0.5	SE247181.018	LB279092	04 May 2023	05 May 2023	01 Jun 2023	10 May 2023	01 Jun 2023	12 May 2023



HOLDING TIME SUMMARY

SE247181 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Mercury in Soil (continued)

Method: ME-(AU)-ENVJAN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP118_0.1	SE247181.019	LB279092	04 May 2023	05 May 2023	01 Jun 2023	10 May 2023	01 Jun 2023	12 May 2023
TP118_1.2	SE247181.020	LB279093	04 May 2023	05 May 2023	01 Jun 2023	10 May 2023	01 Jun 2023	12 May 2023
TP113_0.1	SE247181.021	LB279093	04 May 2023	05 May 2023	01 Jun 2023	10 May 2023	01 Jun 2023	12 May 2023
TP113_0.4	SE247181.023	LB279093	04 May 2023	05 May 2023	01 Jun 2023	10 May 2023	01 Jun 2023	12 May 2023
TP113_1	SE247181.024	LB279093	04 May 2023	05 May 2023	01 Jun 2023	10 May 2023	01 Jun 2023	12 May 2023
TP113_2	SE247181.025	LB279093	04 May 2023	05 May 2023	01 Jun 2023	10 May 2023	01 Jun 2023	12 May 2023
TP105_0.5	SE247181.026	LB279093	03 May 2023	05 May 2023	31 May 2023	10 May 2023	31 May 2023	12 May 2023
QA100	SE247181.027	LB279093	03 May 2023	05 May 2023	31 May 2023	10 May 2023	31 May 2023	12 May 2023
TP105_3	SE247181.028	LB279093	03 May 2023	05 May 2023	31 May 2023	10 May 2023	31 May 2023	12 May 2023
TP101_0.5	SE247181.029	LB279093	03 May 2023	05 May 2023	31 May 2023	10 May 2023	31 May 2023	12 May 2023
TP101_1.8	SE247181.030	LB279093	03 May 2023	05 May 2023	31 May 2023	10 May 2023	31 May 2023	12 May 2023
TP104_0.5	SE247181.031	LB279093	03 May 2023	05 May 2023	31 May 2023	10 May 2023	31 May 2023	12 May 2023
TP104_1	SE247181.032	LB279093	03 May 2023	05 May 2023	31 May 2023	10 May 2023	31 May 2023	12 May 2023
TP103_0.5	SE247181.033	LB279093	03 May 2023	05 May 2023	31 May 2023	10 May 2023	31 May 2023	12 May 2023
TP103_2	SE247181.034	LB279093	03 May 2023	05 May 2023	31 May 2023	10 May 2023	31 May 2023	12 May 2023
TP102_0.1	SE247181.035	LB279093	03 May 2023	05 May 2023	31 May 2023	10 May 2023	31 May 2023	12 May 2023
TP102_2	SE247181.036	LB279093	03 May 2023	05 May 2023	31 May 2023	10 May 2023	31 May 2023	12 May 2023
TP110_0.1	SE247181.037	LB279093	04 May 2023	05 May 2023	01 Jun 2023	10 May 2023	01 Jun 2023	12 May 2023
TP110_1	SE247181.038	LB279093	04 May 2023	05 May 2023	01 Jun 2023	10 May 2023	01 Jun 2023	12 May 2023

Moisture Content

Method: ME-(AU)-ENVJAN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
HA101_0.1-0.2	SE247181.001	LB279083	03 May 2023	05 May 2023	17 May 2023	10 May 2023	15 May 2023	12 May 2023
HA101_0.5-0.7	SE247181.002	LB279083	03 May 2023	05 May 2023	17 May 2023	10 May 2023	15 May 2023	12 May 2023
HA102_0.0-1	SE247181.003	LB279083	03 May 2023	05 May 2023	17 May 2023	10 May 2023	15 May 2023	12 May 2023
HA103_0.1-0.2	SE247181.004	LB279083	03 May 2023	05 May 2023	17 May 2023	10 May 2023	15 May 2023	12 May 2023
HA106_0.1-0.2	SE247181.005	LB279083	03 May 2023	05 May 2023	17 May 2023	10 May 2023	15 May 2023	12 May 2023
HA106_0.3-0.6	SE247181.006	LB279083	03 May 2023	05 May 2023	17 May 2023	10 May 2023	15 May 2023	12 May 2023
HA109_0.1-0.3	SE247181.007	LB279083	03 May 2023	05 May 2023	17 May 2023	10 May 2023	15 May 2023	12 May 2023
HA109_0.5-0.7	SE247181.008	LB279083	03 May 2023	05 May 2023	17 May 2023	10 May 2023	15 May 2023	12 May 2023
TP106_0.5	SE247181.009	LB279083	04 May 2023	05 May 2023	18 May 2023	10 May 2023	15 May 2023	12 May 2023
TP106_2	SE247181.010	LB279083	04 May 2023	05 May 2023	18 May 2023	10 May 2023	15 May 2023	12 May 2023
QA200	SE247181.011	LB279083	04 May 2023	05 May 2023	18 May 2023	10 May 2023	15 May 2023	12 May 2023
TP107_0.1	SE247181.012	LB279083	04 May 2023	05 May 2023	18 May 2023	10 May 2023	15 May 2023	12 May 2023
QA300	SE247181.013	LB279083	04 May 2023	05 May 2023	18 May 2023	10 May 2023	15 May 2023	12 May 2023
TP107_1	SE247181.014	LB279083	04 May 2023	05 May 2023	18 May 2023	10 May 2023	15 May 2023	12 May 2023
TP108_0.1	SE247181.015	LB279083	04 May 2023	05 May 2023	18 May 2023	10 May 2023	15 May 2023	12 May 2023
TP108_2	SE247181.016	LB279083	04 May 2023	05 May 2023	18 May 2023	10 May 2023	15 May 2023	12 May 2023
TP115_0.1	SE247181.017	LB279083	04 May 2023	05 May 2023	18 May 2023	10 May 2023	15 May 2023	12 May 2023
TP115_0.5	SE247181.018	LB279083	04 May 2023	05 May 2023	18 May 2023	10 May 2023	15 May 2023	12 May 2023
TP118_0.1	SE247181.019	LB279083	04 May 2023	05 May 2023	18 May 2023	10 May 2023	15 May 2023	12 May 2023
TP118_1.2	SE247181.020	LB279084	04 May 2023	05 May 2023	18 May 2023	10 May 2023	15 May 2023	12 May 2023
TP113_0.1	SE247181.021	LB279084	04 May 2023	05 May 2023	18 May 2023	10 May 2023	15 May 2023	12 May 2023
TP113_0.4	SE247181.023	LB279084	04 May 2023	05 May 2023	18 May 2023	10 May 2023	15 May 2023	12 May 2023
TP113_1	SE247181.024	LB279084	04 May 2023	05 May 2023	18 May 2023	10 May 2023	15 May 2023	12 May 2023
TP113_2	SE247181.025	LB279084	04 May 2023	05 May 2023	18 May 2023	10 May 2023	15 May 2023	12 May 2023
TP105_0.5	SE247181.026	LB279084	03 May 2023	05 May 2023	17 May 2023	10 May 2023	15 May 2023	12 May 2023
QA100	SE247181.027	LB279084	03 May 2023	05 May 2023	17 May 2023	10 May 2023	15 May 2023	12 May 2023
TP105_3	SE247181.028	LB279084	03 May 2023	05 May 2023	17 May 2023	10 May 2023	15 May 2023	12 May 2023
TP101_0.5	SE247181.029	LB279084	03 May 2023	05 May 2023	17 May 2023	10 May 2023	15 May 2023	12 May 2023
TP101_1.8	SE247181.030	LB279084	03 May 2023	05 May 2023	17 May 2023	10 May 2023	15 May 2023	12 May 2023
TP104_0.5	SE247181.031	LB279084	03 May 2023	05 May 2023	17 May 2023	10 May 2023	15 May 2023	12 May 2023
TP104_1	SE247181.032	LB279084	03 May 2023	05 May 2023	17 May 2023	10 May 2023	15 May 2023	12 May 2023
TP103_0.5	SE247181.033	LB279084	03 May 2023	05 May 2023	17 May 2023	10 May 2023	15 May 2023	12 May 2023
TP103_2	SE247181.034	LB279084	03 May 2023	05 May 2023	17 May 2023	10 May 2023	15 May 2023	12 May 2023
TP102_0.1	SE247181.035	LB279084	03 May 2023	05 May 2023	17 May 2023	10 May 2023	15 May 2023	12 May 2023
TP102_2	SE247181.036	LB279084	03 May 2023	05 May 2023	17 May 2023	10 May 2023	15 May 2023	12 May 2023
TP110_0.1	SE247181.037	LB279084	04 May 2023	05 May 2023	18 May 2023	10 May 2023	15 May 2023	12 May 2023
TP110_1	SE247181.038	LB279084	04 May 2023	05 May 2023	18 May 2023	10 May 2023	15 May 2023	12 May 2023



HOLDING TIME SUMMARY

SE247181 R0

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Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

OC Pesticides in Soil

Method: ME-(AU)-ENVJAN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
HA101_0.1-0.2	SE247181.001	LB279055	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	12 May 2023
HA101_0.5-0.7	SE247181.002	LB279055	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	16 May 2023
HA102_0-0.1	SE247181.003	LB279055	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	12 May 2023
HA103_0.1-0.2	SE247181.004	LB279055	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	12 May 2023
HA106_0.1-0.2	SE247181.005	LB279055	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	12 May 2023
HA106_0.3-0.6	SE247181.006	LB279055	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	15 May 2023
HA109_0.1-0.3	SE247181.007	LB279055	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	15 May 2023
HA109_0.5-0.7	SE247181.008	LB279055	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP106_0.5	SE247181.009	LB279055	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP106_2	SE247181.010	LB279055	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
QA200	SE247181.011	LB279055	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP107_0.1	SE247181.012	LB279055	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	15 May 2023
QA300	SE247181.013	LB279055	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP107_1	SE247181.014	LB279055	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP108_0.1	SE247181.015	LB279055	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP108_2	SE247181.016	LB279055	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP115_0.1	SE247181.017	LB279055	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP115_0.5	SE247181.018	LB279055	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP118_0.1	SE247181.019	LB279055	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP118_1.2	SE247181.020	LB279057	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP113_0.1	SE247181.021	LB279057	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP113_0.4	SE247181.023	LB279057	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP113_1	SE247181.024	LB279057	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP113_2	SE247181.025	LB279057	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP105_0.5	SE247181.026	LB279057	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	16 May 2023
QA100	SE247181.027	LB279057	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP105_3	SE247181.028	LB279057	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP101_0.5	SE247181.029	LB279057	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP101_1.8	SE247181.030	LB279057	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP104_0.5	SE247181.031	LB279057	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP104_1	SE247181.032	LB279057	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP103_0.5	SE247181.033	LB279057	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP103_2	SE247181.034	LB279057	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP102_0.1	SE247181.035	LB279057	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP102_2	SE247181.036	LB279057	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP110_0.1	SE247181.037	LB279057	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP110_1	SE247181.038	LB279057	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023

OP Pesticides in Soil

Method: ME-(AU)-ENVJAN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
HA101_0.1-0.2	SE247181.001	LB279055	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	12 May 2023
HA101_0.5-0.7	SE247181.002	LB279055	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	16 May 2023
HA102_0-0.1	SE247181.003	LB279055	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	12 May 2023
HA103_0.1-0.2	SE247181.004	LB279055	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	12 May 2023
HA106_0.1-0.2	SE247181.005	LB279055	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	12 May 2023
HA106_0.3-0.6	SE247181.006	LB279055	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	12 May 2023
HA109_0.1-0.3	SE247181.007	LB279055	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	15 May 2023
HA109_0.5-0.7	SE247181.008	LB279055	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP106_0.5	SE247181.009	LB279055	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP106_2	SE247181.010	LB279055	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
QA200	SE247181.011	LB279055	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP107_0.1	SE247181.012	LB279055	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	15 May 2023
QA300	SE247181.013	LB279055	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP107_1	SE247181.014	LB279055	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP108_0.1	SE247181.015	LB279055	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP108_2	SE247181.016	LB279055	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP115_0.1	SE247181.017	LB279055	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP115_0.5	SE247181.018	LB279055	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP118_0.1	SE247181.019	LB279055	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP118_1.2	SE247181.020	LB279057	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023



HOLDING TIME SUMMARY

SE247181 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

OP Pesticides in Soil (continued)

Method: ME-(AU)-ENVJAN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP113_0.1	SE247181.021	LB279057	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP113_0.4	SE247181.023	LB279057	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP113_1	SE247181.024	LB279057	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP113_2	SE247181.025	LB279057	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP105_0.5	SE247181.026	LB279057	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	16 May 2023
QA100	SE247181.027	LB279057	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP105_3	SE247181.028	LB279057	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP101_0.5	SE247181.029	LB279057	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP101_1.8	SE247181.030	LB279057	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP104_0.5	SE247181.031	LB279057	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP104_1	SE247181.032	LB279057	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP103_0.5	SE247181.033	LB279057	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP103_2	SE247181.034	LB279057	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP102_0.1	SE247181.035	LB279057	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP102_2	SE247181.036	LB279057	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP110_0.1	SE247181.037	LB279057	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP110_1	SE247181.038	LB279057	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-ENVJAN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
HA101_0.1-0.2	SE247181.001	LB279055	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	12 May 2023
HA101_0.5-0.7	SE247181.002	LB279055	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	12 May 2023
HA102_0-0.1	SE247181.003	LB279055	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	12 May 2023
HA103_0.1-0.2	SE247181.004	LB279055	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	12 May 2023
HA106_0.1-0.2	SE247181.005	LB279055	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	12 May 2023
HA106_0.3-0.6	SE247181.006	LB279055	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	12 May 2023
HA109_0.1-0.3	SE247181.007	LB279055	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	15 May 2023
HA109_0.5-0.7	SE247181.008	LB279055	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP106_0.5	SE247181.009	LB279055	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP106_2	SE247181.010	LB279055	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	15 May 2023
QA200	SE247181.011	LB279055	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP107_0.1	SE247181.012	LB279055	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	15 May 2023
QA300	SE247181.013	LB279055	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP107_1	SE247181.014	LB279055	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP108_0.1	SE247181.015	LB279055	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP108_2	SE247181.016	LB279055	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP115_0.1	SE247181.017	LB279055	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP115_0.5	SE247181.018	LB279055	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP118_0.1	SE247181.019	LB279055	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP118_1.2	SE247181.020	LB279057	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP113_0.1	SE247181.021	LB279057	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP113_0.4	SE247181.023	LB279057	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP113_1	SE247181.024	LB279057	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP113_2	SE247181.025	LB279057	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP105_0.5	SE247181.026	LB279057	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	15 May 2023
QA100	SE247181.027	LB279057	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP105_3	SE247181.028	LB279057	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP101_0.5	SE247181.029	LB279057	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP101_1.8	SE247181.030	LB279057	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP104_0.5	SE247181.031	LB279057	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP104_1	SE247181.032	LB279057	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP103_0.5	SE247181.033	LB279057	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP103_2	SE247181.034	LB279057	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP102_0.1	SE247181.035	LB279057	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP102_2	SE247181.036	LB279057	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP110_0.1	SE247181.037	LB279057	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP110_1	SE247181.038	LB279057	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	15 May 2023

PCBs in Soil

Method: ME-(AU)-ENVJAN420

Sample Name	Sample No.	QC Ref



HOLDING TIME SUMMARY

SE247181 R0

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Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

PCBs in Soil (continued)

Method: ME-(AU)-ENVJAN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
HA101_0.1-0.2	SE247181.001	LB279055	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	12 May 2023
HA101_0.5-0.7	SE247181.002	LB279055	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	16 May 2023
HA102 0-0.1	SE247181.003	LB279055	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	12 May 2023
HA103_0.1-0.2	SE247181.004	LB279055	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	12 May 2023
HA106_0.1-0.2	SE247181.005	LB279055	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	12 May 2023
HA106 0.3-0.6	SE247181.006	LB279055	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	15 May 2023
HA109_0.1-0.3	SE247181.007	LB279055	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	15 May 2023
HA109_0.5-0.7	SE247181.008	LB279055	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP106_0.5	SE247181.009	LB279055	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP106_2	SE247181.010	LB279055	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
QA200	SE247181.011	LB279055	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP107_0.1	SE247181.012	LB279055	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	15 May 2023
QA300	SE247181.013	LB279055	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP107_1	SE247181.014	LB279055	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP108_0.1	SE247181.015	LB279055	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP108_2	SE247181.016	LB279055	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP115_0.1	SE247181.017	LB279055	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP115_0.5	SE247181.018	LB279055	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP118_0.1	SE247181.019	LB279055	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP118_1.2	SE247181.020	LB279057	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP113_0.1	SE247181.021	LB279057	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP113_0.4	SE247181.023	LB279057	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP113_1	SE247181.024	LB279057	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP113_2	SE247181.025	LB279057	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP105_0.5	SE247181.026	LB279057	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	16 May 2023
QA100	SE247181.027	LB279057	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP105_3	SE247181.028	LB279057	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP101_0.5	SE247181.029	LB279057	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP101_1.8	SE247181.030	LB279057	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP104_0.5	SE247181.031	LB279057	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP104_1	SE247181.032	LB279057	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP103_0.5	SE247181.033	LB279057	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP103_2	SE247181.034	LB279057	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP102_0.1	SE247181.035	LB279057	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP102_2	SE247181.036	LB279057	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP110_0.1	SE247181.037	LB279057	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP110_1	SE247181.038	LB279057	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-ENVJAN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
HA101_0.1-0.2	SE247181.001	LB279087	03 May 2023	05 May 2023	30 Oct 2023	10 May 2023	30 Oct 2023	12 May 2023
HA101_0.5-0.7	SE247181.002	LB279087	03 May 2023	05 May 2023	30 Oct 2023	10 May 2023	30 Oct 2023	12 May 2023
HA102 0-0.1	SE247181.003	LB279087	03 May 2023	05 May 2023	30 Oct 2023	10 May 2023	30 Oct 2023	12 May 2023
HA103_0.1-0.2	SE247181.004	LB279087	03 May 2023	05 May 2023	30 Oct 2023	10 May 2023	30 Oct 2023	12 May 2023
HA106_0.1-0.2	SE247181.005	LB279087	03 May 2023	05 May 2023	30 Oct 2023	10 May 2023	30 Oct 2023	12 May 2023
HA106 0.3-0.6	SE247181.006	LB279087	03 May 2023	05 May 2023	30 Oct 2023	10 May 2023	30 Oct 2023	12 May 2023
HA109_0.1-0.3	SE247181.007	LB279087	03 May 2023	05 May 2023	30 Oct 2023	10 May 2023	30 Oct 2023	12 May 2023
HA109_0.5-0.7	SE247181.008	LB279087	03 May 2023	05 May 2023	30 Oct 2023	10 May 2023	30 Oct 2023	12 May 2023
TP106_0.5	SE247181.009	LB279087	04 May 2023	05 May 2023	31 Oct 2023	10 May 2023	31 Oct 2023	12 May 2023
TP106_2	SE247181.010	LB279087	04 May 2023	05 May 2023	31 Oct 2023	10 May 2023	31 Oct 2023	12 May 2023
QA200	SE247181.011	LB279087	04 May 2023	05 May 2023	31 Oct 2023	10 May 2023	31 Oct 2023	12 May 2023
TP107_0.1	SE247181.012	LB279087	04 May 2023	05 May 2023	31 Oct 2023	10 May 2023	31 Oct 2023	12 May 2023
QA300	SE247181.013	LB279087	04 May 2023	05 May 2023	31 Oct 2023	10 May 2023	31 Oct 2023	12 May 2023
TP107_1	SE247181.014	LB279087	04 May 2023	05 May 2023	31 Oct 2023	10 May 2023	31 Oct 2023	12 May 2023
TP108_0.1	SE247181.015	LB279087	04 May 2023	05 May 2023	31 Oct 2023	10 May 2023	31 Oct 2023	12 May 2023
TP108_2	SE247181.016	LB279087	04 May 2023	05 May 2023	31 Oct 2023	10 May 2023	31 Oct 2023	12 May 2023
TP115_0.1	SE247181.017	LB279087	04 May 2023	05 May 2023	31 Oct 2023	10 May 2023	31 Oct 2023	12 May 2023
TP115_0.5	SE247181.018	LB279087	04 May 2023	05 May 2023	31 Oct 2023	10 May 2023	31 Oct 2023	12 May 2023
TP118_0.1	SE247181.019	LB279087	04 May 2023	05 May 2023	31 Oct 2023	10 May 2023	31 Oct 2023	12 May 2023
TP118_1.2	SE247181.020	LB279088	04 May 2023	05 May 2023	31 Oct 2023	10 May 2023	31 Oct 2023	12 May 2023



HOLDING TIME SUMMARY

SE247181 R0

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Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP113_0.1	SE247181.021	LB279088	04 May 2023	05 May 2023	31 Oct 2023	10 May 2023	31 Oct 2023	12 May 2023
TP113_0.4	SE247181.023	LB279088	04 May 2023	05 May 2023	31 Oct 2023	10 May 2023	31 Oct 2023	12 May 2023
TP113_1	SE247181.024	LB279088	04 May 2023	05 May 2023	31 Oct 2023	10 May 2023	31 Oct 2023	12 May 2023
TP113_2	SE247181.025	LB279088	04 May 2023	05 May 2023	31 Oct 2023	10 May 2023	31 Oct 2023	12 May 2023
TP105_0.5	SE247181.026	LB279088	03 May 2023	05 May 2023	30 Oct 2023	10 May 2023	30 Oct 2023	12 May 2023
QA100	SE247181.027	LB279088	03 May 2023	05 May 2023	30 Oct 2023	10 May 2023	30 Oct 2023	12 May 2023
TP105_3	SE247181.028	LB279088	03 May 2023	05 May 2023	30 Oct 2023	10 May 2023	30 Oct 2023	12 May 2023
TP101_0.5	SE247181.029	LB279088	03 May 2023	05 May 2023	30 Oct 2023	10 May 2023	30 Oct 2023	12 May 2023
TP101_1.8	SE247181.030	LB279088	03 May 2023	05 May 2023	30 Oct 2023	10 May 2023	30 Oct 2023	12 May 2023
TP104_0.5	SE247181.031	LB279088	03 May 2023	05 May 2023	30 Oct 2023	10 May 2023	30 Oct 2023	12 May 2023
TP104_1	SE247181.032	LB279088	03 May 2023	05 May 2023	30 Oct 2023	10 May 2023	30 Oct 2023	12 May 2023
TP103_0.5	SE247181.033	LB279088	03 May 2023	05 May 2023	30 Oct 2023	10 May 2023	30 Oct 2023	12 May 2023
TP103_2	SE247181.034	LB279088	03 May 2023	05 May 2023	30 Oct 2023	10 May 2023	30 Oct 2023	12 May 2023
TP102_0.1	SE247181.035	LB279088	03 May 2023	05 May 2023	30 Oct 2023	10 May 2023	30 Oct 2023	12 May 2023
TP102_2	SE247181.036	LB279088	03 May 2023	05 May 2023	30 Oct 2023	10 May 2023	30 Oct 2023	12 May 2023
TP110_0.1	SE247181.037	LB279088	04 May 2023	05 May 2023	31 Oct 2023	10 May 2023	31 Oct 2023	12 May 2023
TP110_1	SE247181.038	LB279088	04 May 2023	05 May 2023	31 Oct 2023	10 May 2023	31 Oct 2023	12 May 2023

TRH (Total Recoverable Hydrocarbons) In Soil

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
HA101_0.1-0.2	SE247181.001	LB279055	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	15 May 2023
HA101_0.5-0.7	SE247181.002	LB279055	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	15 May 2023
HA102_0-0.1	SE247181.003	LB279055	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	15 May 2023
HA103_0.1-0.2	SE247181.004	LB279055	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	15 May 2023
HA106_0.1-0.2	SE247181.005	LB279055	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	15 May 2023
HA106_0.3-0.6	SE247181.006	LB279055	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	15 May 2023
HA109_0.1-0.3	SE247181.007	LB279055	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	15 May 2023
HA109_0.5-0.7	SE247181.008	LB279055	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP106_0.5	SE247181.009	LB279055	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP106_2	SE247181.010	LB279055	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	15 May 2023
QA200	SE247181.011	LB279055	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP107_0.1	SE247181.012	LB279055	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	15 May 2023
QA300	SE247181.013	LB279055	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP107_1	SE247181.014	LB279055	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP108_0.1	SE247181.015	LB279055	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP108_2	SE247181.016	LB279055	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP115_0.1	SE247181.017	LB279055	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP115_0.5	SE247181.018	LB279055	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP118_0.1	SE247181.019	LB279055	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP118_1.2	SE247181.020	LB279057	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	12 May 2023
TP113_0.1	SE247181.021	LB279057	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	12 May 2023
TP113_0.4	SE247181.023	LB279057	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	12 May 2023
TP113_1	SE247181.024	LB279057	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	12 May 2023
TP113_2	SE247181.025	LB279057	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	12 May 2023
TP105_0.5	SE247181.026	LB279057	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	12 May 2023
QA100	SE247181.027	LB279057	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP105_3	SE247181.028	LB279057	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP101_0.5	SE247181.029	LB279057	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP101_1.8	SE247181.030	LB279057	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP104_0.5	SE247181.031	LB279057	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP104_1	SE247181.032	LB279057	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP103_0.5	SE247181.033	LB279057	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP103_2	SE247181.034	LB279057	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP102_0.1	SE247181.035	LB279057	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP102_2	SE247181.036	LB279057	03 May 2023	05 May 2023	17 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP110_0.1	SE247181.037	LB279057	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP110_1	SE247181.038	LB279057	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	15 May 2023

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref



HOLDING TIME SUMMARY

SE247181 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

VOC's in Soil (continued)

Method: ME-(AU)-ENVJAN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
HA101_0.1-0.2	SE247181.001	LB279067	03 May 2023	05 May 2023	17 May 2023	10 May 2023	17 May 2023	12 May 2023
HA101_0.5-0.7	SE247181.002	LB279067	03 May 2023	05 May 2023	17 May 2023	10 May 2023	17 May 2023	12 May 2023
HA102_0-0.1	SE247181.003	LB279067	03 May 2023	05 May 2023	17 May 2023	10 May 2023	17 May 2023	12 May 2023
HA103_0.1-0.2	SE247181.004	LB279067	03 May 2023	05 May 2023	17 May 2023	10 May 2023	17 May 2023	12 May 2023
HA106_0.1-0.2	SE247181.005	LB279067	03 May 2023	05 May 2023	17 May 2023	10 May 2023	17 May 2023	12 May 2023
HA106_0.3-0.6	SE247181.006	LB279067	03 May 2023	05 May 2023	17 May 2023	10 May 2023	17 May 2023	12 May 2023
HA109_0.1-0.3	SE247181.007	LB279067	03 May 2023	05 May 2023	17 May 2023	10 May 2023	17 May 2023	12 May 2023
HA109_0.5-0.7	SE247181.008	LB279067	03 May 2023	05 May 2023	17 May 2023	10 May 2023	17 May 2023	12 May 2023
TP106_0.5	SE247181.009	LB279067	04 May 2023	05 May 2023	18 May 2023	10 May 2023	18 May 2023	12 May 2023
TP106_2	SE247181.010	LB279067	04 May 2023	05 May 2023	18 May 2023	10 May 2023	18 May 2023	12 May 2023
QA200	SE247181.011	LB279067	04 May 2023	05 May 2023	18 May 2023	10 May 2023	18 May 2023	12 May 2023
TP107_0.1	SE247181.012	LB279067	04 May 2023	05 May 2023	18 May 2023	10 May 2023	18 May 2023	12 May 2023
QA300	SE247181.013	LB279067	04 May 2023	05 May 2023	18 May 2023	10 May 2023	18 May 2023	12 May 2023
TP107_1	SE247181.014	LB279067	04 May 2023	05 May 2023	18 May 2023	10 May 2023	18 May 2023	12 May 2023
TP108_0.1	SE247181.015	LB279067	04 May 2023	05 May 2023	18 May 2023	10 May 2023	18 May 2023	12 May 2023
TP108_2	SE247181.016	LB279067	04 May 2023	05 May 2023	18 May 2023	10 May 2023	18 May 2023	12 May 2023
TP115_0.1	SE247181.017	LB279067	04 May 2023	05 May 2023	18 May 2023	10 May 2023	18 May 2023	12 May 2023
TP115_0.5	SE247181.018	LB279067	04 May 2023	05 May 2023	18 May 2023	10 May 2023	18 May 2023	12 May 2023
TP118_0.1	SE247181.019	LB279067	04 May 2023	05 May 2023	18 May 2023	10 May 2023	18 May 2023	12 May 2023
TP118_1.2	SE247181.020	LB279071	04 May 2023	05 May 2023	18 May 2023	10 May 2023	18 May 2023	15 May 2023
TP113_0.1	SE247181.021	LB279071	04 May 2023	05 May 2023	18 May 2023	10 May 2023	18 May 2023	15 May 2023
TP113_0.4	SE247181.023	LB279071	04 May 2023	05 May 2023	18 May 2023	10 May 2023	18 May 2023	15 May 2023
TP113_1	SE247181.024	LB279071	04 May 2023	05 May 2023	18 May 2023	10 May 2023	18 May 2023	15 May 2023
TP113_2	SE247181.025	LB279071	04 May 2023	05 May 2023	18 May 2023	10 May 2023	18 May 2023	15 May 2023
TP105_0.5	SE247181.026	LB279071	03 May 2023	05 May 2023	17 May 2023	10 May 2023	17 May 2023	15 May 2023
QA100	SE247181.027	LB279071	03 May 2023	05 May 2023	17 May 2023	10 May 2023	17 May 2023	15 May 2023
TP105_3	SE247181.028	LB279071	03 May 2023	05 May 2023	17 May 2023	10 May 2023	17 May 2023	15 May 2023
TP101_0.5	SE247181.029	LB279071	03 May 2023	05 May 2023	17 May 2023	10 May 2023	17 May 2023	15 May 2023
TP101_1.8	SE247181.030	LB279071	03 May 2023	05 May 2023	17 May 2023	10 May 2023	17 May 2023	15 May 2023
TP104_0.5	SE247181.031	LB279071	03 May 2023	05 May 2023	17 May 2023	10 May 2023	17 May 2023	15 May 2023
TP104_1	SE247181.032	LB279071	03 May 2023	05 May 2023	17 May 2023	10 May 2023	17 May 2023	15 May 2023
TP103_0.5	SE247181.033	LB279071	03 May 2023	05 May 2023	17 May 2023	10 May 2023	17 May 2023	15 May 2023
TP103_2	SE247181.034	LB279071	03 May 2023	05 May 2023	17 May 2023	10 May 2023	17 May 2023	15 May 2023
TP102_0.1	SE247181.035	LB279071	03 May 2023	05 May 2023	17 May 2023	10 May 2023	17 May 2023	15 May 2023
TP102_2	SE247181.036	LB279071	03 May 2023	05 May 2023	17 May 2023	10 May 2023	17 May 2023	15 May 2023
TP110_0.1	SE247181.037	LB279071	04 May 2023	05 May 2023	18 May 2023	10 May 2023	18 May 2023	15 May 2023
TP110_1	SE247181.038	LB279071	04 May 2023	05 May 2023	18 May 2023	10 May 2023	18 May 2023	15 May 2023

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-ENVJAN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
HA101_0.1-0.2	SE247181.001	LB279067	03 May 2023	05 May 2023	17 May 2023	10 May 2023	17 May 2023	12 May 2023
HA101_0.5-0.7	SE247181.002	LB279067	03 May 2023	05 May 2023	17 May 2023	10 May 2023	17 May 2023	12 May 2023
HA102_0-0.1	SE247181.003	LB279067	03 May 2023	05 May 2023	17 May 2023	10 May 2023	17 May 2023	12 May 2023
HA103_0.1-0.2	SE247181.004	LB279067	03 May 2023	05 May 2023	17 May 2023	10 May 2023	17 May 2023	12 May 2023
HA106_0.1-0.2	SE247181.005	LB279067	03 May 2023	05 May 2023	17 May 2023	10 May 2023	17 May 2023	12 May 2023
HA106_0.3-0.6	SE247181.006	LB279067	03 May 2023	05 May 2023	17 May 2023	10 May 2023	17 May 2023	12 May 2023
HA109_0.1-0.3	SE247181.007	LB279067	03 May 2023	05 May 2023	17 May 2023	10 May 2023	17 May 2023	12 May 2023
HA109_0.5-0.7	SE247181.008	LB279067	03 May 2023	05 May 2023	17 May 2023	10 May 2023	17 May 2023	12 May 2023
TP106_0.5	SE247181.009	LB279067	04 May 2023	05 May 2023	18 May 2023	10 May 2023	18 May 2023	12 May 2023
TP106_2	SE247181.010	LB279067	04 May 2023	05 May 2023	18 May 2023	10 May 2023	18 May 2023	12 May 2023
QA200	SE247181.011	LB279067	04 May 2023	05 May 2023	18 May 2023	10 May 2023	18 May 2023	12 May 2023
TP107_0.1	SE247181.012	LB279067	04 May 2023	05 May 2023	18 May 2023	10 May 2023	18 May 2023	12 May 2023
QA300	SE247181.013	LB279067	04 May 2023	05 May 2023	18 May 2023	10 May 2023	18 May 2023	12 May 2023
TP107_1	SE247181.014	LB279067	04 May 2023	05 May 2023	18 May 2023	10 May 2023	18 May 2023	12 May 2023
TP108_0.1	SE247181.015	LB279067	04 May 2023	05 May 2023	18 May 2023	10 May 2023	18 May 2023	12 May 2023
TP108_2	SE247181.016	LB279067	04 May 2023	05 May 2023	18 May 2023	10 May 2023	18 May 2023	12 May 2023
TP115_0.1	SE247181.017	LB279067	04 May 2023	05 May 2023	18 May 2023	10 May 2023	18 May 2023	12 May 2023
TP115_0.5	SE247181.018	LB279067	04 May 2023	05 May 2023	18 May 2023	10 May 2023	18 May 2023	12 May 2023
TP118_0.1	SE247181.019	LB279067	04 May 2023	05 May 2023	18 May 2023	10 May 2023	18 May 2023	12 May 2023
TP118_1.2	SE247181.020	LB279071	04 May 2023	05 May 2023	18 May 2023	10 May 2023	18 May 2023	15 May 2023



HOLDING TIME SUMMARY

SE247181 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Volatile Petroleum Hydrocarbons in Soil (continued)

Method: ME-(AU)-ENVJAN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP113_0.1	SE247181.021	LB279071	04 May 2023	05 May 2023	18 May 2023	10 May 2023	18 May 2023	15 May 2023
TP113_0.4	SE247181.023	LB279071	04 May 2023	05 May 2023	18 May 2023	10 May 2023	18 May 2023	15 May 2023
TP113_1	SE247181.024	LB279071	04 May 2023	05 May 2023	18 May 2023	10 May 2023	18 May 2023	15 May 2023
TP113_2	SE247181.025	LB279071	04 May 2023	05 May 2023	18 May 2023	10 May 2023	18 May 2023	15 May 2023
TP105_0.5	SE247181.026	LB279071	03 May 2023	05 May 2023	17 May 2023	10 May 2023	17 May 2023	15 May 2023
QA100	SE247181.027	LB279071	03 May 2023	05 May 2023	17 May 2023	10 May 2023	17 May 2023	15 May 2023
TP105_3	SE247181.028	LB279071	03 May 2023	05 May 2023	17 May 2023	10 May 2023	17 May 2023	15 May 2023
TP101_0.5	SE247181.029	LB279071	03 May 2023	05 May 2023	17 May 2023	10 May 2023	17 May 2023	15 May 2023
TP101_1.8	SE247181.030	LB279071	03 May 2023	05 May 2023	17 May 2023	10 May 2023	17 May 2023	15 May 2023
TP104_0.5	SE247181.031	LB279071	03 May 2023	05 May 2023	17 May 2023	10 May 2023	17 May 2023	15 May 2023
TP104_1	SE247181.032	LB279071	03 May 2023	05 May 2023	17 May 2023	10 May 2023	17 May 2023	15 May 2023
TP103_0.5	SE247181.033	LB279071	03 May 2023	05 May 2023	17 May 2023	10 May 2023	17 May 2023	15 May 2023
TP103_2	SE247181.034	LB279071	03 May 2023	05 May 2023	17 May 2023	10 May 2023	17 May 2023	15 May 2023
TP102_0.1	SE247181.035	LB279071	03 May 2023	05 May 2023	17 May 2023	10 May 2023	17 May 2023	15 May 2023
TP102_2	SE247181.036	LB279071	03 May 2023	05 May 2023	17 May 2023	10 May 2023	17 May 2023	15 May 2023
TP110_0.1	SE247181.037	LB279071	04 May 2023	05 May 2023	18 May 2023	10 May 2023	18 May 2023	15 May 2023
TP110_1	SE247181.038	LB279071	04 May 2023	05 May 2023	18 May 2023	10 May 2023	18 May 2023	15 May 2023



SURROGATES

SE247181 R0

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Full 8270 SVOC in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2,4,6-tribromophenol (Surrogate)	TP106_0.5	SE247181.009	%	70 - 130%	114
	TP107_0.1	SE247181.012	%	70 - 130%	119
	TP115_0.1	SE247181.017	%	70 - 130%	122
	TP118_0.1	SE247181.019	%	70 - 130%	113
	TP113_0.4	SE247181.023	%	70 - 130%	119
	TP113_2	SE247181.025	%	70 - 130%	113
	TP101_0.5	SE247181.029	%	70 - 130%	125
	TP103_0.5	SE247181.033	%	70 - 130%	117
	TP110_0.1	SE247181.037	%	70 - 130%	127
2-fluorobiphenyl (Surrogate)	TP106_0.5	SE247181.009	%	70 - 130%	116
	TP107_0.1	SE247181.012	%	70 - 130%	112
	TP115_0.1	SE247181.017	%	70 - 130%	112
	TP118_0.1	SE247181.019	%	70 - 130%	110
	TP113_0.4	SE247181.023	%	70 - 130%	114
	TP113_2	SE247181.025	%	70 - 130%	106
	TP101_0.5	SE247181.029	%	70 - 130%	114
	TP103_0.5	SE247181.033	%	70 - 130%	126
	TP110_0.1	SE247181.037	%	70 - 130%	116
d14-p-terphenyl (Surrogate)	TP106_0.5	SE247181.009	%	70 - 130%	106
	TP107_0.1	SE247181.012	%	70 - 130%	90
	TP115_0.1	SE247181.017	%	70 - 130%	92
	TP118_0.1	SE247181.019	%	70 - 130%	88
	TP113_0.4	SE247181.023	%	70 - 130%	90
	TP113_2	SE247181.025	%	70 - 130%	82
	TP101_0.5	SE247181.029	%	70 - 130%	1100 †
	TP103_0.5	SE247181.033	%	70 - 130%	98
	TP110_0.1	SE247181.037	%	70 - 130%	90
d5-nitrobenzene (Surrogate)	TP106_0.5	SE247181.009	%	70 - 130%	116
	TP107_0.1	SE247181.012	%	70 - 130%	120
	TP115_0.1	SE247181.017	%	70 - 130%	118
	TP118_0.1	SE247181.019	%	70 - 130%	114
	TP113_0.4	SE247181.023	%	70 - 130%	118
	TP113_2	SE247181.025	%	70 - 130%	110
	TP101_0.5	SE247181.029	%	70 - 130%	126
	TP103_0.5	SE247181.033	%	70 - 130%	126
	TP110_0.1	SE247181.037	%	70 - 130%	122
d5-phenol (Surrogate)	TP106_0.5	SE247181.009	%	70 - 130%	93
	TP107_0.1	SE247181.012	%	70 - 130%	98
	TP115_0.1	SE247181.017	%	70 - 130%	97
	TP118_0.1	SE247181.019	%	70 - 130%	95
	TP113_0.4	SE247181.023	%	70 - 130%	97
	TP113_2	SE247181.025	%	70 - 130%	94
	TP101_0.5	SE247181.029	%	70 - 130%	109
	TP103_0.5	SE247181.033	%	70 - 130%	106
	TP110_0.1	SE247181.037	%	70 - 130%	98

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	HA101_0.1-0.2	SE247181.001	%	60 - 130%	91
	HA102_0.0-1	SE247181.003	%	60 - 130%	88
	HA103_0.1-0.2	SE247181.004	%	60 - 130%	91
	HA106_0.1-0.2	SE247181.005	%	60 - 130%	90
	HA106_0.3-0.6	SE247181.006	%	60 - 130%	88
	HA109_0.1-0.3	SE247181.007	%	60 - 130%	91
	HA109_0.5-0.7	SE247181.008	%	60 - 130%	90
	TP107_0.1	SE247181.012	%	60 - 130%	93
	TP115_0.1	SE247181.017	%	60 - 130%	91
	TP113_0.4	SE247181.023	%	60 - 130%	92
	TP101_0.5	SE247181.029	%	60 - 130%	94
	TP102_0.1	SE247181.035	%	60 - 130%	95
	TP110_0.1	SE247181.037	%	60 - 130%	96

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	HA101_0.1-0.2	SE247181.001	%	60 - 130%	86
	HA102_0.0-1	SE247181.003	%	60 - 130%	97
	HA103_0.1-0.2	SE247181.004	%	60 - 130%	87
	HA106_0.1-0.2	SE247181.005	%	60 - 130%	88
	HA106_0.3-0.6	SE247181.006	%	60 - 130%	87
	HA109_0.1-0.3	SE247181.007	%	60 - 130%	88
	HA109_0.5-0.7	SE247181.008	%	60 - 130%	90
	TP107_0.1	SE247181.012	%	60 - 130%	91
	TP115_0.1	SE247181.017	%	60 - 130%	90
	TP113_0.4	SE247181.023	%	60 - 130%	86
	TP101_0.5	SE247181.029	%	60 - 130%	87
	TP102_0.1	SE247181.035	%	60 - 130%	88
	TP110_0.1	SE247181.037	%	60 - 130%	86
d14-p-terphenyl (Surrogate)	HA101_0.1-0.2	SE247181.001	%	60 - 130%	96
	HA102_0.0-1	SE247181.003	%	60 - 130%	106
	HA103_0.1-0.2	SE247181.004	%	60 - 130%	98
	HA106_0.1-0.2	SE247181.005	%	60 - 130%	99
	HA106_0.3-0.6	SE247181.006	%	60 - 130%	97
	HA109_0.1-0.3	SE247181.007	%	60 - 130%	94
	HA109_0.5-0.7	SE247181.008	%	60 - 130%	97
	TP107_0.1	SE247181.012	%	60 - 130%	99
	TP115_0.1	SE247181.017	%	60 - 130%	96
	TP113_0.4	SE247181.023	%	60 - 130%	101
	TP101_0.5	SE247181.029	%	60 - 130%	100
	TP102_0.1	SE247181.035	%	60 - 130%	102
	TP110_0.1	SE247181.037	%	60 - 130%	99

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	HA101_0.1-0.2	SE247181.001	%	70 - 130%	86
	HA101_0.5-0.7	SE247181.002	%	70 - 130%	87
	HA102_0.0-1	SE247181.003	%	70 - 130%	97
	HA103_0.1-0.2	SE247181.004	%	70 - 130%	87
	HA106_0.1-0.2	SE247181.005	%	70 - 130%	88
	HA106_0.3-0.6	SE247181.006	%	70 - 130%	87
	HA109_0.1-0.3	SE247181.007	%	70 - 130%	88
	HA109_0.5-0.7	SE247181.008	%	70 - 130%	90
	TP106_0.5	SE247181.009	%	70 - 130%	89
	TP106_2	SE247181.010	%	70 - 130%	88
	QA200	SE247181.011	%	70 - 130%	89
	TP107_0.1	SE247181.012	%	70 - 130%	91
	QA300	SE247181.013	%	70 - 130%	89
	TP107_1	SE247181.014	%	70 - 130%	89
	TP108_0.1	SE247181.015	%	70 - 130%	91
	TP108_2	SE247181.016	%	70 - 130%	88
	TP115_0.1	SE247181.017	%	70 - 130%	90
	TP115_0.5	SE247181.018	%	70 - 130%	89
	TP118_0.1	SE247181.019	%	70 - 130%	95
	TP118_1.2	SE247181.020	%	70 - 130%	87
	TP113_0.1	SE247181.021	%	70 - 130%	85
	TP113_0.4	SE247181.023	%	70 - 130%	86
	TP113_1	SE247181.024	%	70 - 130%	85
	TP113_2	SE247181.025	%	70 - 130%	86
	TP105_0.5	SE247181.026	%	70 - 130%	89
	QA100	SE247181.027	%	70 - 130%	82
	TP105_3	SE247181.028	%	70 - 130%	87
	TP101_0.5	SE247181.029	%	70 - 130%	87
	TP101_1.8	SE247181.030	%	70 - 130%	87
	TP104_0.5	SE247181.031	%	70 - 130%	88
	TP104_1	SE247181.032	%	70 - 130%	87
	TP103_0.5	SE247181.033	%	70 - 130%	88



SURROGATES

SE247181 R0

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	TP103_2	SE247181.034	%	70 - 130%	88
	TP102_0.1	SE247181.035	%	70 - 130%	88
	TP102_2	SE247181.036	%	70 - 130%	85
	TP110_0.1	SE247181.037	%	70 - 130%	86
	TP110_1	SE247181.038	%	70 - 130%	86
d14-p-terphenyl (Surrogate)	HA101_0.1-0.2	SE247181.001	%	70 - 130%	96
	HA101_0.5-0.7	SE247181.002	%	70 - 130%	97
	HA102_0-0.1	SE247181.003	%	70 - 130%	106
	HA103_0.1-0.2	SE247181.004	%	70 - 130%	98
	HA106_0.1-0.2	SE247181.005	%	70 - 130%	99
	HA106_0.3-0.6	SE247181.006	%	70 - 130%	97
	HA109_0.1-0.3	SE247181.007	%	70 - 130%	94
	HA109_0.5-0.7	SE247181.008	%	70 - 130%	97
	TP106_0.5	SE247181.009	%	70 - 130%	96
	TP106_2	SE247181.010	%	70 - 130%	96
	QA200	SE247181.011	%	70 - 130%	96
	TP107_0.1	SE247181.012	%	70 - 130%	99
	QA300	SE247181.013	%	70 - 130%	98
	TP107_1	SE247181.014	%	70 - 130%	96
	TP108_0.1	SE247181.015	%	70 - 130%	97
	TP108_2	SE247181.016	%	70 - 130%	94
	TP115_0.1	SE247181.017	%	70 - 130%	96
	TP115_0.5	SE247181.018	%	70 - 130%	97
	TP118_0.1	SE247181.019	%	70 - 130%	101
	TP118_1.2	SE247181.020	%	70 - 130%	102
	TP113_0.1	SE247181.021	%	70 - 130%	97
	TP113_0.4	SE247181.023	%	70 - 130%	101
	TP113_1	SE247181.024	%	70 - 130%	99
	TP113_2	SE247181.025	%	70 - 130%	101
	TP105_0.5	SE247181.026	%	70 - 130%	103
	QA100	SE247181.027	%	70 - 130%	79
	TP105_3	SE247181.028	%	70 - 130%	102
	TP101_0.5	SE247181.029	%	70 - 130%	100
	TP101_1.8	SE247181.030	%	70 - 130%	103
	TP104_0.5	SE247181.031	%	70 - 130%	104
	TP104_1	SE247181.032	%	70 - 130%	102
	TP103_0.5	SE247181.033	%	70 - 130%	103
	TP103_2	SE247181.034	%	70 - 130%	102
	TP102_0.1	SE247181.035	%	70 - 130%	102
	TP102_2	SE247181.036	%	70 - 130%	100
	TP110_0.1	SE247181.037	%	70 - 130%	99
	TP110_1	SE247181.038	%	70 - 130%	101
d5-nitrobenzene (Surrogate)	HA101_0.1-0.2	SE247181.001	%	70 - 130%	89
	HA101_0.5-0.7	SE247181.002	%	70 - 130%	92
	HA102_0-0.1	SE247181.003	%	70 - 130%	104
	HA103_0.1-0.2	SE247181.004	%	70 - 130%	92
	HA106_0.1-0.2	SE247181.005	%	70 - 130%	93
	HA106_0.3-0.6	SE247181.006	%	70 - 130%	92
	HA109_0.1-0.3	SE247181.007	%	70 - 130%	90
	HA109_0.5-0.7	SE247181.008	%	70 - 130%	91
	TP106_0.5	SE247181.009	%	70 - 130%	92
	TP106_2	SE247181.010	%	70 - 130%	91
	QA200	SE247181.011	%	70 - 130%	90
	TP107_0.1	SE247181.012	%	70 - 130%	93
	QA300	SE247181.013	%	70 - 130%	91
	TP107_1	SE247181.014	%	70 - 130%	91
	TP108_0.1	SE247181.015	%	70 - 130%	92
	TP108_2	SE247181.016	%	70 - 130%	92
	TP115_0.1	SE247181.017	%	70 - 130%	92
	TP115_0.5	SE247181.018	%	70 - 130%	92
	TP118_0.1	SE247181.019	%	70 - 130%	98

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d5-nitrobenzene (Surrogate)	TP118_1,2	SE247181.020	%	70 - 130%	117
	TP113_0,1	SE247181.021	%	70 - 130%	116
	TP113_0,4	SE247181.023	%	70 - 130%	119
	TP113_1	SE247181.024	%	70 - 130%	116
	TP113_2	SE247181.025	%	70 - 130%	117
	TP105_0,5	SE247181.026	%	70 - 130%	120
	QA100	SE247181.027	%	70 - 130%	94
	TP105_3	SE247181.028	%	70 - 130%	120
	TP101_0,5	SE247181.029	%	70 - 130%	119
	TP101_1,8	SE247181.030	%	70 - 130%	120
	TP104_0,5	SE247181.031	%	70 - 130%	120
	TP104_1	SE247181.032	%	70 - 130%	118
	TP103_0,5	SE247181.033	%	70 - 130%	120
	TP103_2	SE247181.034	%	70 - 130%	119
	TP102_0,1	SE247181.035	%	70 - 130%	120
	TP102_2	SE247181.036	%	70 - 130%	117
	TP110_0,1	SE247181.037	%	70 - 130%	117
	TP110_1	SE247181.038	%	70 - 130%	119

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
TCMX (Surrogate)	HA101_0,1-0,2	SE247181.001	%	60 - 130%	90
	HA102_0-0,1	SE247181.003	%	60 - 130%	87
	HA103_0,1-0,2	SE247181.004	%	60 - 130%	90
	HA106_0,1-0,2	SE247181.005	%	60 - 130%	89
	HA106_0,3-0,6	SE247181.006	%	60 - 130%	81
	HA109_0,1-0,3	SE247181.007	%	60 - 130%	84
	HA109_0,5-0,7	SE247181.008	%	60 - 130%	83
	TP107_0,1	SE247181.012	%	60 - 130%	86
	TP115_0,1	SE247181.017	%	60 - 130%	84
	TP118_0,1	SE247181.019	%	60 - 130%	85
	TP113_0,4	SE247181.023	%	60 - 130%	85
	TP101_0,5	SE247181.029	%	60 - 130%	87
	TP103_0,5	SE247181.033	%	60 - 130%	86
	TP102_0,1	SE247181.035	%	60 - 130%	88
	TP110_0,1	SE247181.037	%	60 - 130%	89

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples

Method: MA-1523

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C3-PFBS) Isotopically Labelled Internal Recovery Standard	TP106_0,5	SE247181.009	%	0 - 150%	97
	TP107_0,1	SE247181.012	%	0 - 150%	101
	QA300	SE247181.013	%	0 - 150%	93
	TP108_0,1	SE247181.015	%	0 - 150%	113
	TP115_0,1	SE247181.017	%	0 - 150%	90
	TP118_0,1	SE247181.019	%	0 - 150%	102
	TP113_0,1	SE247181.021	%	0 - 150%	117
	TP105_0,5	SE247181.026	%	0 - 150%	101
	TP101_0,5	SE247181.029	%	0 - 150%	98
	TP104_0,5	SE247181.031	%	0 - 150%	130
	TP103_0,5	SE247181.033	%	0 - 150%	96
	TP102_0,1	SE247181.035	%	0 - 150%	111
	TP110_0,1	SE247181.037	%	0 - 150%	143
(13C3-PFHxS) Isotopically Labelled Internal Recovery Standard	TP106_0,5	SE247181.009	%	0 - 150%	88
	TP107_0,1	SE247181.012	%	0 - 150%	108
	QA300	SE247181.013	%	0 - 150%	103
	TP108_0,1	SE247181.015	%	0 - 150%	98
	TP115_0,1	SE247181.017	%	0 - 150%	91
	TP118_0,1	SE247181.019	%	0 - 150%	101
	TP113_0,1	SE247181.021	%	0 - 150%	94
	TP105_0,5	SE247181.026	%	0 - 150%	102
	TP101_0,5	SE247181.029	%	0 - 150%	109
	TP104_0,5	SE247181.031	%	0 - 150%	110



SURROGATES

SE247181 R0

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples (continued)

Method: MA-1523

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C3-PFHxS) Isotopically Labelled Internal Recovery Standard	TP103_0.5	SE247181.033	%	0 - 150%	94
	TP102_0.1	SE247181.035	%	0 - 150%	118
	TP110_0.1	SE247181.037	%	0 - 150%	104
(13C4_PFOA) Isotopically Labelled Internal Recovery Standard	TP106_0.5	SE247181.009	%	0 - 150%	93
	TP107_0.1	SE247181.012	%	0 - 150%	97
	QA300	SE247181.013	%	0 - 150%	100
	TP108_0.1	SE247181.015	%	0 - 150%	113
	TP115_0.1	SE247181.017	%	0 - 150%	107
	TP118_0.1	SE247181.019	%	0 - 150%	109
	TP113_0.1	SE247181.021	%	0 - 150%	105
	TP105_0.5	SE247181.026	%	0 - 150%	103
	TP101_0.5	SE247181.029	%	0 - 150%	103
	TP104_0.5	SE247181.031	%	0 - 150%	101
	TP103_0.5	SE247181.033	%	0 - 150%	95
	TP102_0.1	SE247181.035	%	0 - 150%	103
	TP110_0.1	SE247181.037	%	0 - 150%	133
	TP106_0.5	SE247181.009	%	0 - 150%	104
	TP107_0.1	SE247181.012	%	0 - 150%	103
(13C4-PFBA) Isotopically Labelled Internal Recovery Standard	QA300	SE247181.013	%	0 - 150%	103
	TP108_0.1	SE247181.015	%	0 - 150%	103
	TP115_0.1	SE247181.017	%	0 - 150%	104
	TP118_0.1	SE247181.019	%	0 - 150%	103
	TP113_0.1	SE247181.021	%	0 - 150%	104
	TP105_0.5	SE247181.026	%	0 - 150%	103
	TP101_0.5	SE247181.029	%	0 - 150%	103
	TP104_0.5	SE247181.031	%	0 - 150%	102
	TP103_0.5	SE247181.033	%	0 - 150%	104
	TP102_0.1	SE247181.035	%	0 - 150%	103
	TP110_0.1	SE247181.037	%	0 - 150%	104
	TP106_0.5	SE247181.009	%	0 - 150%	100
	TP107_0.1	SE247181.012	%	0 - 150%	111
	QA300	SE247181.013	%	0 - 150%	100
	TP108_0.1	SE247181.015	%	0 - 150%	119
(13C4-PFHpA) Isotopically Labelled Internal Recovery Standard	TP115_0.1	SE247181.017	%	0 - 150%	100
	TP118_0.1	SE247181.019	%	0 - 150%	102
	TP113_0.1	SE247181.021	%	0 - 150%	120
	TP105_0.5	SE247181.026	%	0 - 150%	104
	TP101_0.5	SE247181.029	%	0 - 150%	94
	TP104_0.5	SE247181.031	%	0 - 150%	113
	TP103_0.5	SE247181.033	%	0 - 150%	99
	TP102_0.1	SE247181.035	%	0 - 150%	96
	TP110_0.1	SE247181.037	%	0 - 150%	146
	TP106_0.5	SE247181.009	%	0 - 150%	102
	TP107_0.1	SE247181.012	%	0 - 150%	111
	QA300	SE247181.013	%	0 - 150%	91
	TP108_0.1	SE247181.015	%	0 - 150%	136
	TP115_0.1	SE247181.017	%	0 - 150%	101
	TP118_0.1	SE247181.019	%	0 - 150%	111
(13C5-PFHxA) Isotopically Labelled Internal Recovery Standard	TP113_0.1	SE247181.021	%	0 - 150%	131
	TP105_0.5	SE247181.026	%	0 - 150%	104
	TP101_0.5	SE247181.029	%	0 - 150%	91
	TP104_0.5	SE247181.031	%	0 - 150%	123
	TP103_0.5	SE247181.033	%	0 - 150%	99
	TP102_0.1	SE247181.035	%	0 - 150%	93
	TP110_0.1	SE247181.037	%	0 - 150%	147
	TP106_0.5	SE247181.009	%	0 - 150%	106
	TP107_0.1	SE247181.012	%	0 - 150%	103
	QA300	SE247181.013	%	0 - 150%	104
	TP108_0.1	SE247181.015	%	0 - 150%	104
	TP115_0.1	SE247181.017	%	0 - 150%	105
	TP118_0.1	SE247181.019	%	0 - 150%	105
	TP106_0.5	SE247181.009	%	0 - 150%	106
	TP107_0.1	SE247181.012	%	0 - 150%	103
	QA300	SE247181.013	%	0 - 150%	104

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples (continued)

Method: MA-1523

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C5-PFPeA) Isotopically Labelled Internal Recovery Standard	TP113_0.1	SE247181.021	%	0 - 150%	101
	TP105_0.5	SE247181.026	%	0 - 150%	105
	TP101_0.5	SE247181.029	%	0 - 150%	105
	TP104_0.5	SE247181.031	%	0 - 150%	103
	TP103_0.5	SE247181.033	%	0 - 150%	106
	TP102_0.1	SE247181.035	%	0 - 150%	102
(13C8-PFOS) Isotopically Labelled Internal Recovery Standard	TP110_0.1	SE247181.037	%	0 - 150%	103
	TP106_0.5	SE247181.009	%	0 - 150%	104
	TP107_0.1	SE247181.012	%	0 - 150%	128
	QA300	SE247181.013	%	0 - 150%	106
	TP108_0.1	SE247181.015	%	0 - 150%	97
	TP115_0.1	SE247181.017	%	0 - 150%	119
	TP118_0.1	SE247181.019	%	0 - 150%	120
	TP113_0.1	SE247181.021	%	0 - 150%	95
	TP105_0.5	SE247181.026	%	0 - 150%	120
	TP101_0.5	SE247181.029	%	0 - 150%	101
	TP104_0.5	SE247181.031	%	0 - 150%	102
	TP103_0.5	SE247181.033	%	0 - 150%	103
	TP102_0.1	SE247181.035	%	0 - 150%	104
	TP110_0.1	SE247181.037	%	0 - 150%	112

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	HA101_0.1-0.2	SE247181.001	%	60 - 130%	95
	HA101_0.5-0.7	SE247181.002	%	60 - 130%	122
	HA102_0.1-0.2	SE247181.003	%	60 - 130%	128
	HA103_0.1-0.2	SE247181.004	%	60 - 130%	89
	HA106_0.1-0.2	SE247181.005	%	60 - 130%	84
	HA106_0.3-0.6	SE247181.006	%	60 - 130%	100
	HA109_0.1-0.3	SE247181.007	%	60 - 130%	119
	HA109_0.5-0.7	SE247181.008	%	60 - 130%	132
	TP106_0.5	SE247181.009	%	60 - 130%	87
	TP106_2	SE247181.010	%	60 - 130%	127
	QA200	SE247181.011	%	60 - 130%	126
	TP107_0.1	SE247181.012	%	60 - 130%	95
	QA300	SE247181.013	%	60 - 130%	131
	TP107_1	SE247181.014	%	60 - 130%	133
	TP108_0.1	SE247181.015	%	60 - 130%	120
	TP108_2	SE247181.016	%	60 - 130%	133
	TP115_0.1	SE247181.017	%	60 - 130%	89
	TP115_0.5	SE247181.018	%	60 - 130%	134
	TP118_0.1	SE247181.019	%	60 - 130%	96
	TP118_1.2	SE247181.020	%	60 - 130%	82
	TP113_0.1	SE247181.021	%	60 - 130%	80
	TP113_0.4	SE247181.023	%	60 - 130%	93
	TP113_1	SE247181.024	%	60 - 130%	83
	TP113_2	SE247181.025	%	60 - 130%	87
	TP105_0.5	SE247181.026	%	60 - 130%	70
	QA100	SE247181.027	%	60 - 130%	75
	TP105_3	SE247181.028	%	60 - 130%	82
	TP101_0.5	SE247181.029	%	60 - 130%	75
	TP101_1.8	SE247181.030	%	60 - 130%	71
	TP104_0.5	SE247181.031	%	60 - 130%	68
	TP104_1	SE247181.032	%	60 - 130%	69
	TP103_0.5	SE247181.033	%	60 - 130%	83
	TP103_2	SE247181.034	%	60 - 130%	79
	TP102_0.1	SE247181.035	%	60 - 130%	72
	TP102_2	SE247181.036	%	60 - 130%	70
	TP110_0.1	SE247181.037	%	60 - 130%	79
	TP110_1	SE247181.038	%	60 - 130%	70
d4-1,2-dichloroethane (Surrogate)	HA101_0.1-0.2	SE247181.001	%	60 - 130%	103



SURROGATES

SE247181 R0

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d4-1,2-dichloroethane (Surrogate)	HA101_0.5-0.7	SE247181.002	%	60 - 130%	113
	HA102_0.0-1	SE247181.003	%	60 - 130%	119
	HA103_0.1-0.2	SE247181.004	%	60 - 130%	94
	HA106_0.1-0.2	SE247181.005	%	60 - 130%	88
	HA106_0.3-0.6	SE247181.006	%	60 - 130%	101
	HA109_0.1-0.3	SE247181.007	%	60 - 130%	112
	HA109_0.5-0.7	SE247181.008	%	60 - 130%	125
	TP106_0.5	SE247181.009	%	60 - 130%	82
	TP106_2	SE247181.010	%	60 - 130%	122
	QA200	SE247181.011	%	60 - 130%	125
	TP107_0.1	SE247181.012	%	60 - 130%	83
	QA300	SE247181.013	%	60 - 130%	117
	TP107_1	SE247181.014	%	60 - 130%	122
	TP108_0.1	SE247181.015	%	60 - 130%	119
	TP108_2	SE247181.016	%	60 - 130%	127
	TP115_0.1	SE247181.017	%	60 - 130%	90
	TP115_0.5	SE247181.018	%	60 - 130%	119
	TP118_0.1	SE247181.019	%	60 - 130%	99
	TP118_1.2	SE247181.020	%	60 - 130%	84
	TP113_0.1	SE247181.021	%	60 - 130%	81
	TP113_0.4	SE247181.023	%	60 - 130%	81
	TP113_1	SE247181.024	%	60 - 130%	77
	TP113_2	SE247181.025	%	60 - 130%	85
	TP105_0.5	SE247181.026	%	60 - 130%	86
	QA100	SE247181.027	%	60 - 130%	79
	TP105_3	SE247181.028	%	60 - 130%	85
	TP101_0.5	SE247181.029	%	60 - 130%	86
	TP101_1.8	SE247181.030	%	60 - 130%	78
	TP104_0.5	SE247181.031	%	60 - 130%	86
	TP104_1	SE247181.032	%	60 - 130%	84
	TP103_0.5	SE247181.033	%	60 - 130%	75
	TP103_2	SE247181.034	%	60 - 130%	82
	TP102_0.1	SE247181.035	%	60 - 130%	84
	TP102_2	SE247181.036	%	60 - 130%	76
	TP110_0.1	SE247181.037	%	60 - 130%	84
	TP110_1	SE247181.038	%	60 - 130%	73
d8-toluene (Surrogate)	HA101_0.1-0.2	SE247181.001	%	60 - 130%	79
	HA101_0.5-0.7	SE247181.002	%	60 - 130%	94
	HA102_0.0-1	SE247181.003	%	60 - 130%	98
	HA103_0.1-0.2	SE247181.004	%	60 - 130%	93
	HA106_0.1-0.2	SE247181.005	%	60 - 130%	89
	HA106_0.3-0.6	SE247181.006	%	60 - 130%	100
	HA109_0.1-0.3	SE247181.007	%	60 - 130%	91
	HA109_0.5-0.7	SE247181.008	%	60 - 130%	101
	TP106_0.5	SE247181.009	%	60 - 130%	73
	TP106_2	SE247181.010	%	60 - 130%	96
	QA200	SE247181.011	%	60 - 130%	96
	TP107_0.1	SE247181.012	%	60 - 130%	88
	QA300	SE247181.013	%	60 - 130%	100
	TP107_1	SE247181.014	%	60 - 130%	100
	TP108_0.1	SE247181.015	%	60 - 130%	97
	TP108_2	SE247181.016	%	60 - 130%	104
	TP115_0.1	SE247181.017	%	60 - 130%	80
	TP115_0.5	SE247181.018	%	60 - 130%	103
	TP118_0.1	SE247181.019	%	60 - 130%	94
	TP118_1.2	SE247181.020	%	60 - 130%	89
	TP113_0.1	SE247181.021	%	60 - 130%	87
	TP113_0.4	SE247181.023	%	60 - 130%	87
	TP113_1	SE247181.024	%	60 - 130%	83
	TP113_2	SE247181.025	%	60 - 130%	89
	TP105_0.5	SE247181.026	%	60 - 130%	90

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d8-toluene (Surrogate)	QA100	SE247181.027	%	60 - 130%	76
	TP105_3	SE247181.028	%	60 - 130%	77
	TP101_0.5	SE247181.029	%	60 - 130%	74
	TP101_1.8	SE247181.030	%	60 - 130%	87
	TP104_0.5	SE247181.031	%	60 - 130%	83
	TP104_1	SE247181.032	%	60 - 130%	74
	TP103_0.5	SE247181.033	%	60 - 130%	81
	TP103_2	SE247181.034	%	60 - 130%	81
	TP102_0.1	SE247181.035	%	60 - 130%	89
	TP102_2	SE247181.036	%	60 - 130%	81
	TP110_0.1	SE247181.037	%	60 - 130%	82
	TP110_1	SE247181.038	%	60 - 130%	72

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	HA101_0.1-0.2	SE247181.001	%	60 - 130%	95
	HA101_0.5-0.7	SE247181.002	%	60 - 130%	122
	HA102_0-0.1	SE247181.003	%	60 - 130%	128
	HA103_0.1-0.2	SE247181.004	%	60 - 130%	89
	HA106_0.1-0.2	SE247181.005	%	60 - 130%	84
	HA106_0.3-0.6	SE247181.006	%	60 - 130%	100
	HA109_0.1-0.3	SE247181.007	%	60 - 130%	119
	HA109_0.5-0.7	SE247181.008	%	60 - 130%	132 Ⓢ
	TP106_0.5	SE247181.009	%	60 - 130%	87
	TP106_2	SE247181.010	%	60 - 130%	127
	QA200	SE247181.011	%	60 - 130%	126
	TP107_0.1	SE247181.012	%	60 - 130%	95
	QA300	SE247181.013	%	60 - 130%	131 Ⓢ
	TP107_1	SE247181.014	%	60 - 130%	133 Ⓢ
	TP108_0.1	SE247181.015	%	60 - 130%	120
	TP108_2	SE247181.016	%	60 - 130%	133 Ⓢ
	TP115_0.1	SE247181.017	%	60 - 130%	89
	TP115_0.5	SE247181.018	%	60 - 130%	134 Ⓢ
	TP118_0.1	SE247181.019	%	60 - 130%	96
	TP118_1.2	SE247181.020	%	60 - 130%	82
	TP113_0.1	SE247181.021	%	60 - 130%	80
	TP113_0.4	SE247181.023	%	60 - 130%	93
	TP113_1	SE247181.024	%	60 - 130%	83
	TP113_2	SE247181.025	%	60 - 130%	87
	TP105_0.5	SE247181.026	%	60 - 130%	70
	QA100	SE247181.027	%	60 - 130%	75
	TP105_3	SE247181.028	%	60 - 130%	82
	TP101_0.5	SE247181.029	%	60 - 130%	75
	TP101_1.8	SE247181.030	%	60 - 130%	71
	TP104_0.5	SE247181.031	%	60 - 130%	68
	TP104_1	SE247181.032	%	60 - 130%	69
	TP103_0.5	SE247181.033	%	60 - 130%	83
	TP103_2	SE247181.034	%	60 - 130%	79
	TP102_0.1	SE247181.035	%	60 - 130%	72
	TP102_2	SE247181.036	%	60 - 130%	70
	TP110_0.1	SE247181.037	%	60 - 130%	79
	TP110_1	SE247181.038	%	60 - 130%	70
d4-1,2-dichloroethane (Surrogate)	HA101_0.1-0.2	SE247181.001	%	60 - 130%	103
	HA101_0.5-0.7	SE247181.002	%	60 - 130%	113
	HA102_0-0.1	SE247181.003	%	60 - 130%	119
	HA103_0.1-0.2	SE247181.004	%	60 - 130%	94
	HA106_0.1-0.2	SE247181.005	%	60 - 130%	88
	HA106_0.3-0.6	SE247181.006	%	60 - 130%	101
	HA109_0.1-0.3	SE247181.007	%	60 - 130%	112
	HA109_0.5-0.7	SE247181.008	%	60 - 130%	125
	TP106_0.5	SE247181.009	%	60 - 130%	82

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

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Volatile Petroleum Hydrocarbons in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d4-1,2-dichloroethane (Surrogate)	TP106_2	SE247181.010	%	60 - 130%	122
	QA200	SE247181.011	%	60 - 130%	125
	TP107_0.1	SE247181.012	%	60 - 130%	83
	QA300	SE247181.013	%	60 - 130%	117
	TP107_1	SE247181.014	%	60 - 130%	122
	TP108_0.1	SE247181.015	%	60 - 130%	119
	TP108_2	SE247181.016	%	60 - 130%	127
	TP115_0.1	SE247181.017	%	60 - 130%	90
	TP115_0.5	SE247181.018	%	60 - 130%	119
	TP118_0.1	SE247181.019	%	60 - 130%	99
	TP118_1.2	SE247181.020	%	60 - 130%	84
	TP113_0.1	SE247181.021	%	60 - 130%	81
	TP113_0.4	SE247181.023	%	60 - 130%	81
	TP113_1	SE247181.024	%	60 - 130%	77
	TP113_2	SE247181.025	%	60 - 130%	85
	TP105_0.5	SE247181.026	%	60 - 130%	86
	QA100	SE247181.027	%	60 - 130%	79
	TP105_3	SE247181.028	%	60 - 130%	85
	TP101_0.5	SE247181.029	%	60 - 130%	86
	TP101_1.8	SE247181.030	%	60 - 130%	78
	TP104_0.5	SE247181.031	%	60 - 130%	86
	TP104_1	SE247181.032	%	60 - 130%	84
	TP103_0.5	SE247181.033	%	60 - 130%	75
	TP103_2	SE247181.034	%	60 - 130%	82
	TP102_0.1	SE247181.035	%	60 - 130%	84
	TP102_2	SE247181.036	%	60 - 130%	76
	TP110_0.1	SE247181.037	%	60 - 130%	84
	TP110_1	SE247181.038	%	60 - 130%	73
d8-toluene (Surrogate)	HA101_0.1-0.2	SE247181.001	%	60 - 130%	79
	HA101_0.5-0.7	SE247181.002	%	60 - 130%	94
	HA102_0-0.1	SE247181.003	%	60 - 130%	98
	HA103_0.1-0.2	SE247181.004	%	60 - 130%	93
	HA106_0.1-0.2	SE247181.005	%	60 - 130%	89
	HA106_0.3-0.6	SE247181.006	%	60 - 130%	100
	HA109_0.1-0.3	SE247181.007	%	60 - 130%	91
	HA109_0.5-0.7	SE247181.008	%	60 - 130%	101
	TP106_0.5	SE247181.009	%	60 - 130%	73
	TP106_2	SE247181.010	%	60 - 130%	96
	QA200	SE247181.011	%	60 - 130%	96
	TP107_0.1	SE247181.012	%	60 - 130%	88
	QA300	SE247181.013	%	60 - 130%	100
	TP107_1	SE247181.014	%	60 - 130%	100
	TP108_0.1	SE247181.015	%	60 - 130%	97
	TP108_2	SE247181.016	%	60 - 130%	104
	TP115_0.1	SE247181.017	%	60 - 130%	80
	TP115_0.5	SE247181.018	%	60 - 130%	103
	TP118_0.1	SE247181.019	%	60 - 130%	94
	TP118_1.2	SE247181.020	%	60 - 130%	89
	TP113_0.1	SE247181.021	%	60 - 130%	87
	TP113_0.4	SE247181.023	%	60 - 130%	87
	TP113_1	SE247181.024	%	60 - 130%	83
	TP113_2	SE247181.025	%	60 - 130%	89
	TP105_0.5	SE247181.026	%	60 - 130%	90
	QA100	SE247181.027	%	60 - 130%	76
	TP105_3	SE247181.028	%	60 - 130%	77
	TP101_0.5	SE247181.029	%	60 - 130%	74
	TP101_1.8	SE247181.030	%	60 - 130%	87
	TP104_0.5	SE247181.031	%	60 - 130%	83
	TP104_1	SE247181.032	%	60 - 130%	74
	TP103_0.5	SE247181.033	%	60 - 130%	81
	TP103_2	SE247181.034	%	60 - 130%	81



SURROGATES

SE247181 R0

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d8-toluene (Surrogate)	TP102_0.1	SE247181.035	%	60 - 130%	89
	TP102_2	SE247181.036	%	60 - 130%	81
	TP110_0.1	SE247181.037	%	60 - 130%	82
	TP110_1	SE247181.038	%	60 - 130%	72



METHOD BLANKS

SE247181 R0

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Full 8270 SVOC in Soil

Method: ME-(AU)-ENVJAN420

Sample Number		Parameter	Units	LOR	Result
LB279065.023	01-PAHs	Acenaphthene	mg/kg	0.1	<0.1
		Acenaphthylene	mg/kg	0.1	<0.1
		Anthracene	mg/kg	0.1	<0.1
		Benzo(a)anthracene	mg/kg	0.1	<0.1
		Benzo(b&j&k)fluoranthene	mg/kg	0.2	<0.2
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Benzo(a)pyrene	mg/kg	0.1	<0.1
		Chrysene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Fluoranthene	mg/kg	0.1	<0.1
		Fluorene	mg/kg	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		1-methylnaphthalene	mg/kg	0.1	<0.1
		2-methylnaphthalene	mg/kg	0.1	<0.1
		Naphthalene	mg/kg	0.1	<0.1
		Phenanthrene	mg/kg	0.1	<0.1
		Pyrene	mg/kg	0.1	<0.1
		2-acetylaminofluorene	mg/kg	0.5	<0.5
		7,12-dimethyl-benz(a)anthracene	mg/kg	0.5	<0.5
		3-methylcholanthrene	mg/kg	0.5	<0.5
	02-OCs	Aldrin	mg/kg	0.1	<0.1
		Alpha-BHC	mg/kg	0.1	<0.1
		Beta-BHC	mg/kg	0.5	<0.5
		Delta-BHC	mg/kg	0.1	<0.1
		Gamma-BHC (Lindane)	mg/kg	0.1	<0.1
		p,p-DDD	mg/kg	0.1	<0.1
		p,p-DDE	mg/kg	0.1	<0.1
		p,p-DDT	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Alpha-endosulfan	mg/kg	0.2	<0.2
		Beta-endosulfan	mg/kg	0.2	<0.2
		Endosulfan sulphate	mg/kg	0.1	<0.1
		Endrin	mg/kg	0.2	<0.2
		Heptachlor	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
		Alpha-chlordane	mg/kg	0.1	<0.1
	03-OPs	Gamma-chlordane	mg/kg	0.1	<0.1
		Endrin ketone	mg/kg	0.1	<0.1
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
		Bromophos ethyl	mg/kg	0.2	<0.2
		Carbophenothion	mg/kg	0.5	<0.5
		Chlorfenvinphos-cis	mg/kg	2	<2
		Chlorfenvinphos-trans	mg/kg	0.5	<0.5
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Chlorpyrifos-methyl	mg/kg	0.5	<0.5
		Co-Ral (Coumaphos)	mg/kg	0.5	<0.5
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5
		Dichlorvos	mg/kg	0.5	<0.5
		Demeton-S-methyl	mg/kg	0.5	<0.5
		Dimethoate	mg/kg	0.5	<0.5
		Disulfoton (Di-syston)	mg/kg	0.5	<0.5
		EPN*	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Ethoprophos (ethoprop or prophos)	mg/kg	0.5	<0.5
		Famphur (Famophos)	mg/kg	0.5	<0.5
		Fenamiphos (Phenamiphos)	mg/kg	0.5	<0.5
		Fenchlorophos (Ronnel)	mg/kg	0.5	<0.5
		Fenitrothion	mg/kg	0.2	<0.2



METHOD BLANKS

SE247181 R0

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Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Full 8270 SVOC in Soil (continued)

Method: ME-(AU)-ENVJAN420

Sample Number		Parameter	Units	LOR	Result
LB279065.023	03-OPs	Fenthion	mg/kg	0.5	<0.5
		Malathion (Maldison)	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Mevinphos-cis/trans	mg/kg	1	<1
		o,o,o-triethyl phosphorothioate	mg/kg	0.5	<0.5
		Parathion ethyl (Parathion)	mg/kg	0.2	<0.2
		Parathion methyl	mg/kg	0.5	<0.5
		Phorate	mg/kg	0.5	<0.5
		Pirimiphos-ethyl	mg/kg	0.5	<0.5
		Pirimiphos-methyl	mg/kg	0.5	<0.5
		Profenofos	mg/kg	0.5	<0.5
		Prothiophos (Tokuthion)*	mg/kg	0.5	<0.5
		Sulfotepp	mg/kg	0.5	<0.5
		Tetrachlorvinphos (Stirophos)*	mg/kg	0.5	<0.5
		04-PCB UPAC(7)			
	Congeners	PCB Congener C28	mg/kg	0.1	<0.1
		PCB Congener C52	mg/kg	0.1	<0.1
		PCB Congener C101	mg/kg	0.1	<0.1
		PCB Congener C118	mg/kg	0.1	<0.1
		PCB Congener C138	mg/kg	0.1	<0.1
		PCB Congener C153	mg/kg	0.1	<0.1
		PCB Congener C180	mg/kg	0.1	<0.1
	05-SVCH (CI Benzenes, Hydrocarbons & VOCs)	Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.5	<0.5
		1,3-dichlorobenzene	mg/kg	0.5	<0.5
		1,4-dichlorobenzene	mg/kg	0.5	<0.5
		Hexachlorobutadiene	mg/kg	0.5	<0.5
		Hexachlorocyclopentadiene	mg/kg	1	<1
		Hexachloroethane	mg/kg	0.5	<0.5
		Hexachloropropene	mg/kg	0.5	<0.5
		Pentachlorobenzene	mg/kg	0.5	<0.5
		Pentachloroethane	mg/kg	0.5	<0.5
		1,2,3,5 and 1,2,4,5 -tetrachlorobenzene	mg/kg	1	<1
		1,2,3,4-tetrachlorobenzene	mg/kg	0.5	<0.5
		1/2-Chloronaphthalene	mg/kg	1	<1
		1,2,4-trichlorobenzene	mg/kg	0.5	<0.5
	06-Phthalates	Bis(2-ethylhexyl)phthalate	mg/kg	5	<5
		Bis(2-ethylhexyl)adipate	mg/kg	0.5	<0.5
		Butyl benzyl phthalate	mg/kg	0.5	<0.5
		Di-n-butyl phthalate	mg/kg	0.5	<0.5
		Diethyl phthalate	mg/kg	0.5	<0.5
		Dimethyl phthalate	mg/kg	0.5	<0.5
		Di-n-octyl phthalate	mg/kg	0.5	<0.5
	07-Carbamates	Carbofuran	mg/kg	0.5	<0.5
		Carbaryl	mg/kg	0.5	<0.5
08-Herbicides (normal)		Trifluralin	mg/kg	0.5	<0.5
09-Nitrosamines		N-nitroso-di-n-butylamine (NDBA)	mg/kg	0.5	<0.5
		N-nitroso-diethylamine (NDEA)	mg/kg	1	<1
		N-nitroso-di-n-propylamine (NDPA)	mg/kg	0.5	<0.5
		N-nitroso-morpholine (NMOR)	mg/kg	0.5	<0.5
		N-nitroso-piperidine (NPIP)	mg/kg	0.5	<0.5
		N-nitroso-pyrrolidine (NPYR)	mg/kg	1	<1
		4-amino biphenyl	mg/kg	1	<1
10-Nitroaromatics and Ketones		Acetophenone	mg/kg	0.5	<0.5
		1,3-dinitrobenzene	mg/kg	1	<1
		2,4-dinitrotoluene	mg/kg	0.5	<0.5
		2,6-dinitrotoluene	mg/kg	0.5	<0.5
		Isophorone	mg/kg	0.5	<0.5
		Nitrobenzene	mg/kg	0.5	<0.5
		p-(dimethylamino) azobenzene	mg/kg	1	<1
		Phenacetin	mg/kg	1	<1
		Pentachloronitrobenzene (quintozene)	mg/kg	0.5	<0.5

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Full 8270 SVOC in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB279065.023	11-Anilines and Amines	Aniline	mg/kg	3
		4-chloroaniline	mg/kg	1
		2-nitroaniline	mg/kg	1
		3-nitroaniline	mg/kg	1
		4-nitroaniline	mg/kg	1
		Diphenylamine	mg/kg	0.5
		o-toluidine	mg/kg	1
		5-nitro-o-toluidine	mg/kg	1
		1-naphthylamine	mg/kg	1
		2-naphthylamine	mg/kg	1
	12-Haloethers	Bis(2-chloroethoxy) methane	mg/kg	0.5
		Bis(2-chloroethyl) ether	mg/kg	0.5
		Bis(2-chloroisopropyl) ether	mg/kg	0.5
		4-chlorophenyl phenyl ether	mg/kg	0.5
		4-bromophenyl phenyl ether	mg/kg	0.5
	13-Other SVOCs	Methyl methanesulfonate	mg/kg	1
		Ethyl methanesulfonate	mg/kg	1
		Dibenzofuran	mg/kg	0.5
		Benzyl alcohol	mg/kg	1
		Safrole	mg/kg	0.5
		Isosafrole Isomer 1	mg/kg	1
		Isosafrole Isomer 2	mg/kg	1
		1,4-naphthoquinone	mg/kg	0.5
		Thionazin	mg/kg	1
	14-Speciatiated Routine Phenols	3/4-methyl phenol (m/p-cresol)	mg/kg	1
		2-methyl phenol (o-cresol)	mg/kg	0.5
		2,6-dichlorophenol	mg/kg	0.5
		2,4,5-trichlorophenol	mg/kg	0.5
		4-chloro-3-methylphenol	mg/kg	2
		2-chlorophenol	mg/kg	0.5
		2,4-dichlorophenol	mg/kg	0.5
		2,4-dimethylphenol	mg/kg	0.5
		2-nitrophenol	mg/kg	0.5
		Phenol	mg/kg	0.5
		2,4,6-trichlorophenol	mg/kg	0.5
		Pentachlorophenol	mg/kg	0.5
		4-nitrophenol	mg/kg	1
	Surrogates	d5-phenol (Surrogate)	%	-
		d5-nitrobenzene (Surrogate)	%	-
		2-fluorobiphenyl (Surrogate)	%	-
		2,4,6-tribromophenol (Surrogate)	%	-
		d14-p-terphenyl (Surrogate)	%	-

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result
LB279092.001	Mercury	mg/kg	0.05	<0.05
LB279093.001	Mercury	mg/kg	0.05	<0.05

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB279055.001	Alpha BHC	mg/kg	0.1	<0.1
	Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
	Beta BHC	mg/kg	0.1	<0.1
	Lindane (gamma BHC)	mg/kg	0.1	<0.1
	Delta BHC	mg/kg	0.1	<0.1
	Heptachlor	mg/kg	0.1	<0.1
	Aldrin	mg/kg	0.1	<0.1
	Isodrin	mg/kg	0.1	<0.1
	Heptachlor epoxide	mg/kg	0.1	<0.1
	Gamma Chlordane	mg/kg	0.1	<0.1
	Alpha Chlordane	mg/kg	0.1	<0.1



METHOD BLANKS

SE247181 R0

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OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB279055.001	Alpha Endosulfan	mg/kg	0.2	<0.2
	p,p'-DDE	mg/kg	0.1	<0.1
	Dieldrin	mg/kg	0.2	<0.2
	Endrin	mg/kg	0.2	<0.2
	Beta Endosulfan	mg/kg	0.2	<0.2
	p,p'-DDD	mg/kg	0.1	<0.1
	Endrin aldehyde	mg/kg	0.1	<0.1
	Endosulfan sulphate	mg/kg	0.1	<0.1
	p,p'-DDT	mg/kg	0.1	<0.1
	Endrin ketone	mg/kg	0.1	<0.1
	Methoxychlor	mg/kg	0.1	<0.1
	Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-
LB279057.001	Alpha BHC	mg/kg	0.1	<0.1
	Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
	Beta BHC	mg/kg	0.1	<0.1
	Lindane (gamma BHC)	mg/kg	0.1	<0.1
	Delta BHC	mg/kg	0.1	<0.1
	Heptachlor	mg/kg	0.1	<0.1
	Aldrin	mg/kg	0.1	<0.1
	Isodrin	mg/kg	0.1	<0.1
	Heptachlor epoxide	mg/kg	0.1	<0.1
	Gamma Chlordane	mg/kg	0.1	<0.1
	Alpha Chlordane	mg/kg	0.1	<0.1
	Alpha Endosulfan	mg/kg	0.2	<0.2
	p,p'-DDE	mg/kg	0.1	<0.1
	Dieldrin	mg/kg	0.2	<0.2
	Endrin	mg/kg	0.2	<0.2
	Beta Endosulfan	mg/kg	0.2	<0.2
	p,p'-DDD	mg/kg	0.1	<0.1
	Endrin aldehyde	mg/kg	0.1	<0.1
	Endosulfan sulphate	mg/kg	0.1	<0.1
	p,p'-DDT	mg/kg	0.1	<0.1
	Endrin ketone	mg/kg	0.1	<0.1
	Methoxychlor	mg/kg	0.1	<0.1
	Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB279055.001	Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Bromophos Ethyl	mg/kg	0.2	<0.2
	Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
	Diazinon (Dimpylate)	mg/kg	0.5	<0.5
	Dichlorvos	mg/kg	0.5	<0.5
	Dimethoate	mg/kg	0.5	<0.5
	Ethion	mg/kg	0.2	<0.2
	Fenitrothion	mg/kg	0.2	<0.2
	Malathion	mg/kg	0.2	<0.2
	Methodathion	mg/kg	0.5	<0.5
	Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-
		d14-p-terphenyl (Surrogate)	%	-
LB279057.001	Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Bromophos Ethyl	mg/kg	0.2	<0.2
	Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
	Diazinon (Dimpylate)	mg/kg	0.5	<0.5
	Dichlorvos	mg/kg	0.5	<0.5
	Dimethoate	mg/kg	0.5	<0.5
	Ethion	mg/kg	0.2	<0.2
	Fenitrothion	mg/kg	0.2	<0.2



METHOD BLANKS

SE247181 R0

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OP Pesticides in Soil (continued)

Method: ME-(AU)-ENVJAN420

Sample Number	Parameter	Units	LOR	Result
LB279057.001	Malathion	mg/kg	0.2	<0.2
	Methodathion	mg/kg	0.5	<0.5
	Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
	2-fluorobiphenyl (Surrogate)	%	-	91
	d14-p-terphenyl (Surrogate)	%	-	106

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-ENVJAN420

Sample Number	Parameter	Units	LOR	Result
LB279055.001	Naphthalene	mg/kg	0.1	<0.1
	2-methylnaphthalene	mg/kg	0.1	<0.1
	1-methylnaphthalene	mg/kg	0.1	<0.1
	Acenaphthylene	mg/kg	0.1	<0.1
	Acenaphthene	mg/kg	0.1	<0.1
	Fluorene	mg/kg	0.1	<0.1
	Phenanthrene	mg/kg	0.1	<0.1
	Anthracene	mg/kg	0.1	<0.1
	Fluoranthene	mg/kg	0.1	<0.1
	Pyrene	mg/kg	0.1	<0.1
	Benzo(a)anthracene	mg/kg	0.1	<0.1
	Chrysene	mg/kg	0.1	<0.1
	Benzo(a)pyrene	mg/kg	0.1	<0.1
	Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
	Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
	Benzo(ghi)perylene	mg/kg	0.1	<0.1
	Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates			
LB279057.001	d5-nitrobenzene (Surrogate)	%	-	91
	2-fluorobiphenyl (Surrogate)	%	-	87
	d14-p-terphenyl (Surrogate)	%	-	97
	Naphthalene	mg/kg	0.1	<0.1
	2-methylnaphthalene	mg/kg	0.1	<0.1
	1-methylnaphthalene	mg/kg	0.1	<0.1
	Acenaphthylene	mg/kg	0.1	<0.1
	Acenaphthene	mg/kg	0.1	<0.1
	Fluorene	mg/kg	0.1	<0.1
	Phenanthrene	mg/kg	0.1	<0.1
	Anthracene	mg/kg	0.1	<0.1
	Fluoranthene	mg/kg	0.1	<0.1
	Pyrene	mg/kg	0.1	<0.1
	Benzo(a)anthracene	mg/kg	0.1	<0.1
	Chrysene	mg/kg	0.1	<0.1
	Benzo(a)pyrene	mg/kg	0.1	<0.1
	Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
	Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
	Benzo(ghi)perylene	mg/kg	0.1	<0.1
	Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates			
	d5-nitrobenzene (Surrogate)	%	-	123
	2-fluorobiphenyl (Surrogate)	%	-	91
	d14-p-terphenyl (Surrogate)	%	-	106

PCBs in Soil

Method: ME-(AU)-ENVJAN420

Sample Number	Parameter	Units	LOR	Result
LB279055.001	Arochlor 1016	mg/kg	0.2	<0.2
	Arochlor 1221	mg/kg	0.2	<0.2
	Arochlor 1232	mg/kg	0.2	<0.2
	Arochlor 1242	mg/kg	0.2	<0.2
	Arochlor 1248	mg/kg	0.2	<0.2
	Arochlor 1254	mg/kg	0.2	<0.2
	Arochlor 1260	mg/kg	0.2	<0.2
	Arochlor 1262	mg/kg	0.2	<0.2
	Arochlor 1268	mg/kg	0.2	<0.2
	Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates			
	TCMX (Surrogate)	%	-	81



METHOD BLANKS

SE247181 R0

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PCBs in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB279057.001	Arochlor 1016	mg/kg	0.2	<0.2
	Arochlor 1221	mg/kg	0.2	<0.2
	Arochlor 1232	mg/kg	0.2	<0.2
	Arochlor 1242	mg/kg	0.2	<0.2
	Arochlor 1248	mg/kg	0.2	<0.2
	Arochlor 1254	mg/kg	0.2	<0.2
	Arochlor 1260	mg/kg	0.2	<0.2
	Arochlor 1262	mg/kg	0.2	<0.2
	Arochlor 1268	mg/kg	0.2	<0.2
	Total PCBs (Arochlors)	mg/kg	1	<1
Surrogates	TCMX (Surrogate)	%	-	76

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result
LB279087.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0
LB279088.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB279055.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110
LB279057.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB279067.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1
		cis-1,3-dichloropropene	mg/kg	0.1	<0.1
		trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
		Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1
		Chloroethane	mg/kg	1	<1
		Trichlorofluoromethane	mg/kg	1	<1
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Iodomethane	mg/kg	5	<5
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1
		1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1



METHOD BLANKS

SE247181 R0

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VOC's in Soil (continued)

Method: ME-(AU)-ENVJAN433

Sample Number		Parameter	Units	LOR	Result
LB279067.001	Halogenated Aliphatics	Bromochloromethane	mg/kg	0.1	<0.1
		1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1
		Carbon tetrachloride	mg/kg	0.1	<0.1
		Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene,TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1
		1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
		1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,2,3-trichloropropane	mg/kg	0.1	<0.1
		trans-1,4-dichloro-2-butene	mg/kg	1	<1
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
	Halogenated Aromatics	Hexachlorobutadiene	mg/kg	0.1	<0.1
		Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1
		2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.1	<0.1
		1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
		1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		o-xylene	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1
		1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
		tert-butylbenzene	mg/kg	0.1	<0.1
		1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
		n-butylbenzene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1
		2-nitropropane	mg/kg	10	<10
	Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10
		MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate*	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
		2-hexanone (MBK)	mg/kg	5	<5
	Polycyclic VOCs	Naphthalene (VOC)*	mg/kg	0.1	<0.1
	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	82
		d8-toluene (Surrogate)	%	-	89
		Bromofluorobenzene (Surrogate)	%	-	99
	Totals	Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total BTEX*	mg/kg	0.6	<0.6
	Trihalomethanes	Chloroform (THM)	mg/kg	0.1	<0.1
		Bromodichloromethane (THM)	mg/kg	0.1	<0.1
		Dibromochloromethane (THM)	mg/kg	0.1	<0.1
		Bromoform (THM)	mg/kg	0.1	<0.1
LB279071.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1
		cis-1,3-dichloropropene	mg/kg	0.1	<0.1



METHOD BLANKS

SE247181 R0

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VOC's in Soil (continued)

Method: ME-(AU)-ENVJAN433

Sample Number		Parameter	Units	LOR	Result
LB279071.001	Fumigants	trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
		Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1
		Chloroethane	mg/kg	1	<1
		Trichlorofluoromethane	mg/kg	1	<1
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Iodomethane	mg/kg	5	<5
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1
		1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1
		Bromochloromethane	mg/kg	0.1	<0.1
		1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1
		Carbon tetrachloride	mg/kg	0.1	<0.1
		Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene,TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1
		1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
		1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,2,3-trichloropropane	mg/kg	0.1	<0.1
		trans-1,4-dichloro-2-butene	mg/kg	1	<1
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
		Hexachlorobutadiene	mg/kg	0.1	<0.1
	Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1
		2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.1	<0.1
		1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
	Monocyclic Aromatic Hydrocarbons	1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
		Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		o-xylene	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1
		1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
		tert-butylbenzene	mg/kg	0.1	<0.1
		1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	n-butylbenzene	mg/kg	0.1	<0.1
		Acrylonitrile	mg/kg	0.1	<0.1
	Oxygenated Compounds	2-nitropropane	mg/kg	10	<10
		Acetone (2-propanone)	mg/kg	10	<10
		MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate*	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
		2-hexanone (MBK)	mg/kg	5	<5



METHOD BLANKS

SE247181 R0

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-ENVJAN433

Sample Number		Parameter	Units	LOR	Result
LB279071.001	Polycyclic VOCs	Naphthalene (VOC)*	mg/kg	0.1	<0.1
	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	85
		d8-toluene (Surrogate)	%	-	91
		Bromofluorobenzene (Surrogate)	%	-	74
	Totals	Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total BTEX*	mg/kg	0.6	<0.6
	Trihalomethanes	Chloroform (THM)	mg/kg	0.1	<0.1
		Bromodichloromethane (THM)	mg/kg	0.1	<0.1
		Dibromochloromethane (THM)	mg/kg	0.1	<0.1
		Bromoform (THM)	mg/kg	0.1	<0.1

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-ENVJAN433

Sample Number		Parameter	Units	LOR	Result
LB279067.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	82
LB279071.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	85

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: $RPD = | \text{OriginalResult} - \text{ReplicateResult} | \times 100 / \text{Mean}$

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: $MAD = 100 \times \text{SDL} / \text{Mean} + \text{LR}$

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may give a different calculated RPD.

Full 8270 SVOC in Soil

Method: ME-(AU)-ENVJAN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %	
SE247182.002	LB279065.025	01-PAHs	Acenaphthene	mg/kg	0.1	0	0	200	0	
			Acenaphthylene	mg/kg	0.1	0	0	200	0	
			Anthracene	mg/kg	0.1	0	0	200	0	
			Benzo(a)anthracene	mg/kg	0.1	0.01	0.01	200	0	
			Benzo(b&j)fluoranthene	mg/kg	0.1	0	0	200	0	
			Benzo(b&j&k)fluoranthene	mg/kg	0.2	0	0	200	0	
			Benzo(k)fluoranthene	mg/kg	0.1	0	0	200	0	
			Benzo(ghi)perylene	mg/kg	0.1	0	0	200	0	
			Benzo(a)pyrene	mg/kg	0.1	0	0	200	0	
			Chrysene	mg/kg	0.1	0.01	0.01	200	0	
			Dibenzo(ah)anthracene	mg/kg	0.1	0	0	200	0	
			Fluoranthene	mg/kg	0.1	0	0	200	0	
			Fluorene	mg/kg	0.1	0	0	200	0	
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	0	0	200	0	
			1-methylnaphthalene	mg/kg	0.1	0	0	200	0	
			2-methylnaphthalene	mg/kg	0.1	0	0	200	0	
			Naphthalene	mg/kg	0.1	0	0	200	0	
			Phenanthrene	mg/kg	0.1	0	0	200	0	
			Pyrene	mg/kg	0.1	0	0	200	0	
			Carcinogenic PAHs, BaP TEQ, <LOR=LOR/2*	mg/kg	0.2	0.121	0.121	175	0	
			Carcinogenic PAHs, BaP TEQ, <LOR=LOR*	mg/kg	0.3	0.242	0.242	134	0	
			Carcinogenic PAHs, BaP TEQ, <LOR=0*	mg/kg	0.2	0	0	200	NA	
			2-acetylaminofluorene	mg/kg	0.5	0	0	200	0	
			7,12-dimethyl-benz(a)anthracene	mg/kg	0.5	0	0	200	0	
			3-methylcholanthrene	mg/kg	0.5	0	0	200	0	
			02-OCs	Aldrin	mg/kg	0.1	0	0	200	0
				Alpha-BHC	mg/kg	0.1	0	0	200	0
				Beta-BHC	mg/kg	0.5	0	0	200	0
				Delta-BHC	mg/kg	0.1	0	0	200	0
				Gamma-BHC (Lindane)	mg/kg	0.1	0	0	200	0
				p,p-DDD	mg/kg	0.1	0	0	200	0
				p,p-DDE	mg/kg	0.1	0.11	0.1	125	10
				p,p-DDT	mg/kg	0.1	0	0	200	0
		Dieldrin		mg/kg	0.2	0.04	0.04	200	0	
		Alpha-endosulfan		mg/kg	0.2	0	0	200	0	
		Beta-endosulfan		mg/kg	0.2	0.01	0	200	0	
		Endosulfan sulphate		mg/kg	0.1	0	0	200	0	
		Endrin		mg/kg	0.2	0	0	200	0	
		Heptachlor		mg/kg	0.1	0	0	200	0	
		Heptachlor epoxide		mg/kg	0.1	0	0	200	0	
		Isodrin		mg/kg	0.1	0	0	200	0	
		Methoxychlor		mg/kg	0.1	0	0	200	0	
		Mirex		mg/kg	0.1	0	0	200	0	
		Alpha-chlordane		mg/kg	0.1	0	0	200	0	
		Gamma-chlordane		mg/kg	0.1	0	0	200	0	
		Endrin ketone		mg/kg	0.1	0	0	200	0	
		Total (Alpha+Beta+SO4) Endosulfan*		mg/kg	0.2	0.01	0	200	0	
		03-OPs		Azinphos-methyl (Guthion)	mg/kg	0.2	0	0	200	0
				Bromophos ethyl	mg/kg	0.2	0	0	200	0
				Carbophenothion	mg/kg	0.5	0	0	200	0
				Chlorfenvinphos-cis	mg/kg	2	0	0	200	0
				Chlorfenvinphos-trans	mg/kg	0.5	0	0	200	0
				Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	0	0	200	0
				Chlorpyrifos-methyl	mg/kg	0.5	0	0	200	0
				Co-Ral (Coumaphos)	mg/kg	0.5	0	0	200	0
				Diazinon (Dimpylate)	mg/kg	0.5	0.01	0.01	200	0
				Dichlorvos	mg/kg	0.5	0	0	200	0
				Demeton-S-methyl	mg/kg	0.5	0	0	200	0
			Dimethoate	mg/kg	0.5	0	0	200	0	
			Disulfoton (Di-syston)	mg/kg	0.5	0	0.04	200	0	
			EPN*	mg/kg	0.5	0.01	0.01	200	0	



DUPLICATES

SE247181 R0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: $RPD = | \text{OriginalResult} - \text{ReplicateResult} | \times 100 / \text{Mean}$

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: $MAD = 100 \times \text{SDL} / \text{Mean} + \text{LR}$

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may give a different calculated RPD.

Full 8270 SVOC in Soil (continued)

Method: ME-(AU)-ENVJAN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE247182.002	LB279065.025	03-OPs	Ethion	mg/kg	0.2	0	0	200	0
			Ethoprophos (ethoprop or prophos)	mg/kg	0.5	0.02	0.02	200	0
			Famphur (Famophos)	mg/kg	0.5	0	0	200	0
			Fenamiphos (Phenamiphos)	mg/kg	0.5	0	0	200	0
			Fenchlorophos (Ronnel)	mg/kg	0.5	0	0	200	0
			Fenitrothion	mg/kg	0.2	0	0	200	0
			Fenthion	mg/kg	0.5	0	0	200	0
			Malathion (Maldison)	mg/kg	0.2	0	0	200	0
			Methidathion	mg/kg	0.5	0	0	200	0
			Mevinphos-cis/trans	mg/kg	1	0	0	200	0
			o,o,o-triethyl phosphorothioate	mg/kg	0.5	0	0	200	0
			Parathion ethyl (Parathion)	mg/kg	0.2	0	0.01	200	0
			Parathion methyl	mg/kg	0.5	0	0	200	0
			Phorate	mg/kg	0.5	0	0	200	0
			Pirimiphos-ethyl	mg/kg	0.5	0.01	0.01	200	0
			Pirimiphos-methyl	mg/kg	0.5	0	0	200	0
			Profenofos	mg/kg	0.5	0	0	200	0
			Prothiophos (Tokuthion)*	mg/kg	0.5	0	0	200	0
			Sulfotepp	mg/kg	0.5	0	0	200	0
			Tetrachlorvinphos (Stirophos)*	mg/kg	0.5	0	0	200	0
		04-PCB	PCB Congener C28	mg/kg	0.1	0	0	200	0
		UPAC(7)	PCB Congener C52	mg/kg	0.1	0	0	200	0
			PCB Congener C101	mg/kg	0.1	0.01	0	200	0
			PCB Congener C118	mg/kg	0.1	0	0	200	0
			PCB Congener C138	mg/kg	0.1	0	0	200	0
			PCB Congener C153	mg/kg	0.1	0	0	200	0
			PCB Congener C180	mg/kg	0.1	0	0	200	0
		05-SVCH (CI	Hexachlorobenzene (HCB)	mg/kg	0.1	0	0	200	0
		Benzenes,	1,2-dichlorobenzene	mg/kg	0.5	0	0	200	0
			1,3-dichlorobenzene	mg/kg	0.5	0	0	200	0
			1,4-dichlorobenzene	mg/kg	0.5	0	0	200	0
			Hexachlorobutadiene	mg/kg	0.5	0	0	200	0
			Hexachlorocyclopentadiene	mg/kg	1	0	0	200	0
			Hexachloroethane	mg/kg	0.5	0	0	200	0
			Hexachloropropene	mg/kg	0.5	0	0	200	0
			Pentachlorobenzene	mg/kg	0.5	0	0	200	0
			Pentachloroethane	mg/kg	0.5	0	0	200	0
			1,2,3,5 and 1,2,4,5 -tetrachlorobenzene	mg/kg	1	0	0	200	0
			1,2,3,4-tetrachlorobenzene	mg/kg	0.5	0	0	200	0
			1/2-Chloronaphthalene	mg/kg	1	0	0	200	0
			1,2,4-trichlorobenzene	mg/kg	0.5	0	0	200	0
		06-Phthalates	Bis(2-ethylhexyl)phthalate	mg/kg	5	0	0	200	0
			Bis(2-ethylhexyl)adipate	mg/kg	0.5	0.01	0.01	200	0
			Butyl benzyl phthalate	mg/kg	0.5	0	0	200	0
			Di-n-butyl phthalate	mg/kg	0.5	0	0	200	0
			Diethyl phthalate	mg/kg	0.5	0	0	200	0
			Dimethyl phthalate	mg/kg	0.5	0	0	200	0
			Di-n-octyl phthalate	mg/kg	0.5	0	0	200	0
		07-Carbamate	Carbofuran	mg/kg	0.5	0	0	200	0
		s	Carbaryl	mg/kg	0.5	0	0	200	0
		08-Herbicides	Trifluralin	mg/kg	0.5	0	0	200	0
		09-Nitrosamine	N-nitroso-di-n-butylamine (NDBA)	mg/kg	0.5	0	0	200	0
		s	N-nitroso-diethylamine (NDEA)	mg/kg	1	0	0	200	0
			N-nitroso-di-n-propylamine (NDPA)	mg/kg	0.5	0	0	200	0
			N-nitroso-morpholine (NMOR)	mg/kg	0.5	0	0	200	0
			N-nitroso-piperidine (NPIP)	mg/kg	0.5	0	0	200	0
			N-nitroso-pyrrolidine (NPYR)	mg/kg	1	0	0	200	0
			4-amino biphenyl	mg/kg	1	0	0	200	0
		10-Nitroaromat	Acetophenone	mg/kg	0.5	0	0	200	0
		ics and	1,3-dinitrobenzene	mg/kg	1	0	0	200	0
			2,4-dinitrotoluene	mg/kg	0.5	0	0	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: $RPD = | \text{OriginalResult} - \text{ReplicateResult} | \times 100 / \text{Mean}$
The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: $MAD = 100 \times \text{SDL} / \text{Mean} + \text{LR}$
Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may give a different calculated RPD.

Full 8270 SVOC in Soil (continued)

Method: ME-(AU)-ENVJAN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %	
SE247182.002	LB279065.025	10-Nitroaromatics and	2,6-dinitrotoluene	mg/kg	0.5	0	0	200	0	
			Isophorone	mg/kg	0.5	0	0	200	0	
			Nitrobenzene	mg/kg	0.5	0	0	200	0	
			p-(dimethylamino) azobenzene	mg/kg	1	0	0	200	0	
			Phenacetin	mg/kg	1	0	0	200	0	
		11-Anilines and Amines	Pentachloronitrobenzene (quintozene)	mg/kg	0.5	0	0	200	0	
			Aniline	mg/kg	3	0	0	200	0	
			4-chloroaniline	mg/kg	1	0	0	200	0	
			2-nitroaniline	mg/kg	1	0	0	200	0	
			3-nitroaniline	mg/kg	1	0	0	200	0	
			4-nitroaniline	mg/kg	1	0	0	200	0	
			Diphenylamine	mg/kg	0.5	0	0	200	0	
			o-toluidine	mg/kg	1	0	0	200	0	
			5-nitro-o-toluidine	mg/kg	1	0	0	200	0	
			1-naphthylamine	mg/kg	1	0	0	200	0	
		12-Haloethers	2-naphthylamine	mg/kg	1	0	0	200	0	
			Bis(2-chloroethoxy) methane	mg/kg	0.5	0	0	200	0	
			Bis(2-chloroethyl) ether	mg/kg	0.5	0	0	200	0	
			Bis(2-chloroisopropyl) ether	mg/kg	0.5	0.01	0.01	200	0	
			4-chlorophenyl phenyl ether	mg/kg	0.5	0	0	200	0	
		13-Other SVOCs	4-bromophenyl phenyl ether	mg/kg	0.5	0.01	0.01	200	0	
			Methyl methanesulfonate	mg/kg	1	0	0	200	0	
			Ethyl methanesulfonate	mg/kg	1	0	0	200	0	
			Dibenzofuran	mg/kg	0.5	0	0	200	0	
			Benzyl alcohol	mg/kg	1	0	0	200	0	
			Safrole	mg/kg	0.5	0.02	0	200	0	
			Isosafrole Isomer 1	mg/kg	1	0	0	200	0	
			Isosafrole Isomer 2	mg/kg	1	0	0	200	0	
			1,4-naphthoquinone	mg/kg	0.5	0	0	200	0	
		14-Speciated Routine	Thionazin	mg/kg	1	0	0	200	0	
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	0	0	200	0	
			2-methyl phenol (o-cresol)	mg/kg	0.5	0	0	200	0	
			2,6-dichlorophenol	mg/kg	0.5	0	0	200	0	
			2,3,4,6-tetrachlorophenol	mg/kg	0.5	0	0	200	0	
			2,4,5-trichlorophenol	mg/kg	0.5	0	0	200	0	
			4-chloro-3-methylphenol	mg/kg	2	0	0	200	0	
			2-chlorophenol	mg/kg	0.5	0	0	200	0	
			2,4-dichlorophenol	mg/kg	0.5	0	0	200	0	
			2,4-dimethylphenol	mg/kg	0.5	0	0	200	0	
			2-nitrophenol	mg/kg	0.5	0	0	200	0	
			Phenol	mg/kg	0.5	0	0	200	0	
			2,4,6-trichlorophenol	mg/kg	0.5	0	0	200	0	
			Pentachlorophenol	mg/kg	0.5	0	0	200	0	
			4-nitrophenol	mg/kg	1	0	0	200	0	
			Surrogates	d5-phenol (Surrogate)	mg/kg	-	2.3	2.22	30	4
				d5-nitrobenzene (Surrogate)	mg/kg	-	0.64	0.63	30	2
				2-fluorobiphenyl (Surrogate)	mg/kg	-	0.64	0.63	30	2
				2,4,6-tribromophenol (Surrogate)	mg/kg	-	5.38	5.05	30	6
		d14-p-terphenyl (Surrogate)		mg/kg	-	0.52	0.49	30	6	
		SE247182.040	LB279065.026	01-PAHs	Acenaphthene	mg/kg	0.1	0	0	200
Acenaphthylene	mg/kg				0.1	0	0	200	0	
Anthracene	mg/kg				0.1	0	0	200	0	
Benzo(a)anthracene	mg/kg				0.1	0.01	0.01	200	0	
Benzo(b&j)fluoranthene	mg/kg				0.1	0	0	200	0	
Benzo(b&j&k)fluoranthene	mg/kg				0.2	0	0	200	0	
Benzo(k)fluoranthene	mg/kg				0.1	0	0	200	0	
Benzo(ghi)perylene	mg/kg				0.1	0	0	200	0	
Benzo(a)pyrene	mg/kg				0.1	0	0	200	0	
Chrysene	mg/kg				0.1	0.01	0.01	200	0	
Dibenzo(ah)anthracene	mg/kg				0.1	0	0	200	0	
Fluoranthene	mg/kg				0.1	0	0	200	0	

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: $RPD = \frac{|OriginalResult - ReplicateResult|}{Mean} \times 100$

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: $MAD = 100 \times \frac{SDL}{Mean} + LR$

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may give a different calculated RPD.

Full 8270 SVOC in Soil (continued)

Method: ME-(AU)-ENVJAN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE247182.040	LB279065.026	01-PAHs	Fluorene	mg/kg	0.1	0	0	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	0	0	200	0
			1-methylnaphthalene	mg/kg	0.1	0	0	200	0
			2-methylnaphthalene	mg/kg	0.1	0	0	200	0
			Naphthalene	mg/kg	0.1	0	0	200	0
			Phenanthrene	mg/kg	0.1	0	0	200	0
			Pyrene	mg/kg	0.1	0	0	200	0
			Carcinogenic PAHs, BaP TEQ, <LOR=LOR/2*	mg/kg	0.2	0.121	0.121	175	0
			Carcinogenic PAHs, BaP TEQ, <LOR=LOR*	mg/kg	0.3	0.242	0.242	134	0
			Carcinogenic PAHs, BaP TEQ, <LOR=0*	mg/kg	0.2	0	0	200	NA
			2-acetylaminofluorene	mg/kg	0.5	0	0	200	0
			7,12-dimethyl-benz(a)anthracene	mg/kg	0.5	0	0	200	0
	3-methylcholanthrene	mg/kg	0.5	0	0	200	0		
	02-OCs	Aldrin	mg/kg	0.1	0	0	200	0	
		Alpha-BHC	mg/kg	0.1	0	0	200	0	
		Beta-BHC	mg/kg	0.5	0	0	200	0	
		Delta-BHC	mg/kg	0.1	0	0	200	0	
		Gamma-BHC (Lindane)	mg/kg	0.1	0	0	200	0	
		p,p-DDD	mg/kg	0.1	0	0	200	0	
		p,p-DDE	mg/kg	0.1	0.04	0.03	200	0	
		p,p-DDT	mg/kg	0.1	0	0	200	0	
		Dieldrin	mg/kg	0.2	0.01	0.01	200	0	
		Alpha-endosulfan	mg/kg	0.2	0	0	200	0	
		Beta-endosulfan	mg/kg	0.2	0.01	0	200	0	
		Endosulfan sulphate	mg/kg	0.1	0	0	200	0	
		Endrin	mg/kg	0.2	0	0	200	0	
		Heptachlor	mg/kg	0.1	0	0	200	0	
		Heptachlor epoxide	mg/kg	0.1	0	0	200	0	
		Isodrin	mg/kg	0.1	0	0	200	0	
		Methoxychlor	mg/kg	0.1	0	0	200	0	
		Mirex	mg/kg	0.1	0	0	200	0	
		Alpha-chlordane	mg/kg	0.1	0	0	200	0	
		Gamma-chlordane	mg/kg	0.1	0	0	200	0	
	Endrin ketone	mg/kg	0.1	0	0	200	0		
	Total (Alpha+Beta+SO4) Endosulfan*	mg/kg	0.2	0.01	0	200	0		
	03-OPs	Azinphos-methyl (Guthion)	mg/kg	0.2	0	0	200	0	
		Bromophos ethyl	mg/kg	0.2	0	0.01	200	0	
		Carbophenothion	mg/kg	0.5	0	0	200	0	
		Chlorfenvinphos-cis	mg/kg	2	0	0	200	0	
		Chlorfenvinphos-trans	mg/kg	0.5	0	0	200	0	
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	0	0	200	0	
		Chlorpyrifos-methyl	mg/kg	0.5	0	0	200	0	
Co-Ral (Coumaphos)		mg/kg	0.5	0	0	200	0		
Diazinon (Dimpylate)		mg/kg	0.5	0.01	0.01	200	0		
Dichlorvos		mg/kg	0.5	0	0	200	0		
Demeton-S-methyl		mg/kg	0.5	0	0	200	0		
Dimethoate		mg/kg	0.5	0	0	200	0		
Disulfoton (Di-syston)		mg/kg	0.5	0.04	0	200	0		
EPN*		mg/kg	0.5	0.01	0.01	200	0		
Ethion		mg/kg	0.2	0	0	200	0		
Ethoprophos (ethoprop or prophos)		mg/kg	0.5	0.01	0.01	200	0		
Famphur (Famophos)		mg/kg	0.5	0	0	200	0		
Fenamiphos (Phenamiphos)		mg/kg	0.5	0	0	200	0		
Fenchlorophos (Ronne)		mg/kg	0.5	0	0	200	0		
Fenitrothion		mg/kg	0.2	0	0	200	0		
Fenthion		mg/kg	0.5	0	0	200	0		
Malathion (Maldison)		mg/kg	0.2	0	0	200	0		
Methidathion		mg/kg	0.5	0	0	200	0		
Mevinphos-cis/trans		mg/kg	1	0	0	200	0		
o,o,o-triethyl phosphorothioate		mg/kg	0.5	0	0	200	0		
Parathion ethyl (Parathion)		mg/kg	0.2	0.01	0	200	0		



DUPLICATES

SE247181 R0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: $RPD = | \text{OriginalResult} - \text{ReplicateResult} | \times 100 / \text{Mean}$

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: $MAD = 100 \times \text{SDL} / \text{Mean} + \text{LR}$

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may give a different calculated RPD.

Full 8270 SVOC in Soil (continued)

Method: ME-(AU)-ENVJAN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE247182.040	LB279065.026	03-OPs	Parathion methyl	mg/kg	0.5	0	0	200	0
			Phorate	mg/kg	0.5	0	0	200	0
			Pirimiphos-ethyl	mg/kg	0.5	0.01	0	200	0
			Pirimiphos-methyl	mg/kg	0.5	0	0	200	0
			Profenofos	mg/kg	0.5	0	0	200	0
			Prothiophos (Tokuthion)*	mg/kg	0.5	0	0	200	0
			Sulfotepp	mg/kg	0.5	0	0	200	0
			Tetrachlorvinphos (Stirophos)*	mg/kg	0.5	0	0	200	0
		04-PCB	PCB Congener C28	mg/kg	0.1	0	0	200	0
		UPAC(7)	PCB Congener C52	mg/kg	0.1	0	0	200	0
			PCB Congener C101	mg/kg	0.1	0	0	200	0
			PCB Congener C118	mg/kg	0.1	0	0	200	0
			PCB Congener C138	mg/kg	0.1	0	0	200	0
			PCB Congener C153	mg/kg	0.1	0	0	200	0
			PCB Congener C180	mg/kg	0.1	0.01	0	200	0
		05-SVCH (CI	Hexachlorobenzene (HCB)	mg/kg	0.1	0	0	200	0
		Benzenes,	1,2-dichlorobenzene	mg/kg	0.5	0	0	200	0
			1,3-dichlorobenzene	mg/kg	0.5	0	0	200	0
			1,4-dichlorobenzene	mg/kg	0.5	0	0	200	0
			Hexachlorobutadiene	mg/kg	0.5	0	0	200	0
			Hexachlorocyclopentadiene	mg/kg	1	0	0	200	0
			Hexachloroethane	mg/kg	0.5	0	0	200	0
			Hexachloropropene	mg/kg	0.5	0	0	200	0
			Pentachlorobenzene	mg/kg	0.5	0	0	200	0
			Pentachloroethane	mg/kg	0.5	0	0	200	0
			1,2,3,5 and 1,2,4,5 -tetrachlorobenzene	mg/kg	1	0	0	200	0
			1,2,3,4-tetrachlorobenzene	mg/kg	0.5	0	0	200	0
			1/2-Chloronaphthalene	mg/kg	1	0	0	200	0
			1,2,4-trichlorobenzene	mg/kg	0.5	0	0	200	0
		06-Phthalates	Bis(2-ethylhexyl)phthalate	mg/kg	5	0	0	200	0
			Bis(2-ethylhexyl)adipate	mg/kg	0.5	0.01	0	200	0
			Butyl benzyl phthalate	mg/kg	0.5	0	0	200	0
			Di-n-butyl phthalate	mg/kg	0.5	0	0	200	0
			Diethyl phthalate	mg/kg	0.5	0	0	200	0
			Dimethyl phthalate	mg/kg	0.5	0	0	200	0
			Di-n-octyl phthalate	mg/kg	0.5	0	0	200	0
		07-Carbamate	Carbofuran	mg/kg	0.5	0	0	200	0
		s	Carbaryl	mg/kg	0.5	0	0	200	0
		08-Herbicides	Trifluralin	mg/kg	0.5	0	0	200	0
		09-Nitrosamine	N-nitroso-di-n-butylamine (NDBA)	mg/kg	0.5	0	0	200	0
		s	N-nitroso-diethylamine (NDEA)	mg/kg	1	0	0	200	0
			N-nitroso-di-n-propylamine (NDPA)	mg/kg	0.5	0	0	200	0
			N-nitroso-morpholine (NMOR)	mg/kg	0.5	0	0	200	0
			N-nitroso-piperidine (NPIP)	mg/kg	0.5	0	0	200	0
			N-nitroso-pyrrolidine (NPYR)	mg/kg	1	0	0	200	0
			4-amino biphenyl	mg/kg	1	0	0	200	0
		10-Nitroaromat	Acetophenone	mg/kg	0.5	0	0	200	0
		ics and	1,3-dinitrobenzene	mg/kg	1	0	0	200	0
			2,4-dinitrotoluene	mg/kg	0.5	0	0	200	0
			2,6-dinitrotoluene	mg/kg	0.5	0	0	200	0
			Isophorone	mg/kg	0.5	0	0	200	0
			Nitrobenzene	mg/kg	0.5	0	0	200	0
			p-(dimethylamino) azobenzene	mg/kg	1	0	0	200	0
			Phenacetin	mg/kg	1	0	0	200	0
			Pentachloronitrobenzene (quintozene)	mg/kg	0.5	0	0	200	0
		11-Anilines and	Aniline	mg/kg	3	0	0	200	0
		Amines	4-chloroaniline	mg/kg	1	0	0	200	0
			2-nitroaniline	mg/kg	1	0	0.01	200	0
			3-nitroaniline	mg/kg	1	0	0	200	0
			4-nitroaniline	mg/kg	1	0	0	200	0
			Diphenylamine	mg/kg	0.5	0.04	0.03	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: $RPD = | \text{OriginalResult} - \text{ReplicateResult} | \times 100 / \text{Mean}$
The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: $MAD = 100 \times \text{SDL} / \text{Mean} + \text{LR}$
Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may give a different calculated RPD.

Full 8270 SVOC in Soil (continued)

Method: ME-(AU)-ENVJAN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE247182.040	LB279065.026	11-Anilines and Amines	o-toluidine	mg/kg	1	0	0	200	0
			5-nitro-o-toluidine	mg/kg	1	0	0	200	0
			1-naphthylamine	mg/kg	1	0	0	200	0
			2-naphthylamine	mg/kg	1	0	0	200	0
		12-Haloethers	Bis(2-chloroethoxy) methane	mg/kg	0.5	0	0	200	0
			Bis(2-chloroethyl) ether	mg/kg	0.5	0	0	200	0
			Bis(2-chloroisopropyl) ether	mg/kg	0.5	0	0.01	200	0
			4-chlorophenyl phenyl ether	mg/kg	0.5	0	0	200	0
			4-bromophenyl phenyl ether	mg/kg	0.5	0	0	200	0
		13-Other SVOCs	Methyl methanesulfonate	mg/kg	1	0	0	200	0
			Ethyl methanesulfonate	mg/kg	1	0	0	200	0
			Dibenzofuran	mg/kg	0.5	0	0	200	0
			Benzyl alcohol	mg/kg	1	0	0	200	0
			Safrole	mg/kg	0.5	0.01	0.01	200	0
			Isosafrole Isomer 1	mg/kg	1	0	0	200	0
			Isosafrole Isomer 2	mg/kg	1	0	0	200	0
			1,4-naphthoquinone	mg/kg	0.5	0	0	200	0
			Thionazin	mg/kg	1	0	0	200	0
		14-Speciati ed Routine	3/4-methyl phenol (m/p-cresol)	mg/kg	1	0	0	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	0	0	200	0
			2,6-dichlorophenol	mg/kg	0.5	0	0	200	0
			2,3,4,6-tetrachlorophenol	mg/kg	0.5	0	0	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	0	0	200	0
			4-chloro-3-methylphenol	mg/kg	2	0	0	200	0
			2-chlorophenol	mg/kg	0.5	0	0	200	0
			2,4-dichlorophenol	mg/kg	0.5	0	0	200	0
			2,4-dimethylphenol	mg/kg	0.5	0	0	200	0
			2-nitrophenol	mg/kg	0.5	0	0	200	0
			Phenol	mg/kg	0.5	0	0	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	0	0	200	0
			Pentachlorophenol	mg/kg	0.5	0	0	200	0
			4-nitrophenol	mg/kg	1	0	0	200	0
		Surrogates	d5-phenol (Surrogate)	mg/kg	-	1.86	1.49	30	22
			d5-nitrobenzene (Surrogate)	mg/kg	-	0.53	0.47	30	12
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.55	0.44	30	22
			2,4,6-tribromophenol (Surrogate)	mg/kg	-	5.96	4.15	30	36 Ⓢ
			d14-p-terphenyl (Surrogate)	mg/kq	-	0.41	0.31	30	28

Mercury in Soil

Method: ME-(AU)-ENVJAN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE247181.010	LB279092.014	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE247181.019	LB279092.024	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE247181.030	LB279093.014	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE247181.038	LB279093.023	Mercury	mg/kg	0.05	<0.05	<0.05	200	0

Moisture Content

Method: ME-(AU)-ENVJAN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE247181.010	LB279083.011	% Moisture	%w/w	1	14.9	15.3	37	3
SE247181.019	LB279083.021	% Moisture	%w/w	1	11.6	11.4	39	2
SE247181.030	LB279084.011	% Moisture	%w/w	1	16.4	17.0	36	4
SE247181.038	LB279084.020	% Moisture	%w/w	1	18.3	17.1	36	6

OC Pesticides in Soil

Method: ME-(AU)-ENVJAN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE247181.017	LB279055.026	Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
		Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
		Lindane (gamma BHC)	mg/kg	0.1	<0.1	<0.1	200	0
		Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
		Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
		Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
		Isodrin	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: $RPD = |OriginalResult - ReplicateResult| \times 100 / Mean$
The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: $MAD = 100 \times SDL / Mean + LR$
Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may give a different calculated RPD.

OC Pesticides in Soil (continued)

Method: ME-(AU)-ENVJAN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE247181.017	LB279055.026	Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
		Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
		Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
		Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
		o,p'-DDE*	mg/kg	0.1	<0.1	<0.1	200	0
		p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
		Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
		Endrin	mg/kg	0.2	<0.2	<0.2	200	0
		Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
		o,p'-DDD*	mg/kg	0.1	<0.1	<0.1	200	0
		p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
		Endrin aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
		Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
		o,p'-DDT*	mg/kg	0.1	<0.1	<0.1	200	0
		p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
		Endrin ketone	mg/kg	0.1	<0.1	<0.1	200	0
		Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
		Mirex	mg/kg	0.1	<0.1	<0.1	200	0
		trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
		Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
		Total OC VIC EPA	mg/kg	1	<1	<1	200	0
SE247181.037	LB279057.025	Surrogates						
		Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.14	0.14	30	0
		Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
		Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
		Lindane (gamma BHC)	mg/kg	0.1	<0.1	<0.1	200	0
		Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
		Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
		Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
		Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
		Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
		Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
		Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
		Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
		o,p'-DDE*	mg/kg	0.1	<0.1	<0.1	200	0
		p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
		Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
		Endrin	mg/kg	0.2	<0.2	<0.2	200	0
		Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
		o,p'-DDD*	mg/kg	0.1	<0.1	<0.1	200	0
		p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
		Endrin aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
		Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
		o,p'-DDT*	mg/kg	0.1	<0.1	<0.1	200	0
		p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
		Endrin ketone	mg/kg	0.1	<0.1	<0.1	200	0
		Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
		Mirex	mg/kg	0.1	<0.1	<0.1	200	0
		trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
		Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
		Total OC VIC EPA	mg/kg	1	<1	<1	200	0
		Surrogates						
		Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.14	0.14	30	3

OP Pesticides in Soil

Method: ME-(AU)-ENVJAN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE247181.017	LB279055.026	Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
		Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
		Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
		Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: $RPD = | \text{OriginalResult} - \text{ReplicateResult} | \times 100 / \text{Mean}$

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: $MAD = 100 \times \text{SDL} / \text{Mean} + \text{LR}$

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may give a different calculated RPD.

OP Pesticides in Soil (continued)

Method: ME-(AU)-ENVJAN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE247181.017	LB279055.026	Ethion	mg/kg	0.2	<0.2	<0.2	200	0
		Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
		Malathion	mg/kg	0.2	<0.2	<0.2	200	0
		Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
		Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.4	30	1
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	1
SE247181.029	LB279057.025	Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
		Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
		Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
		Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
		Ethion	mg/kg	0.2	<0.2	<0.2	200	0
		Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
		Malathion	mg/kg	0.2	<0.2	<0.2	200	0
		Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
		Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	1
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	0
SE247181.037	LB279057.026	Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
		Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
		Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
		Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
		Ethion	mg/kg	0.2	<0.2	<0.2	200	0
		Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
		Malathion	mg/kg	0.2	<0.2	<0.2	200	0
		Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
		Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	0
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	0

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-ENVJAN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE247181.010	LB279055.014	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
		Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
		Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
		Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
		Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
		Carcinogenic PAHs, BaP TEQ <LOR=0*	mg/kg	0.2	<0.2	<0.2	200	0
		Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	mg/kg	0.2	<0.2	<0.2	175	0
		Carcinogenic PAHs, BaP TEQ <LOR=LOR*	mg/kg	0.3	<0.3	<0.3	134	0
		Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: $RPD = \frac{|OriginalResult - ReplicateResult|}{Mean} \times 100$

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: $MAD = 100 \times \frac{SDL}{Mean} + LR$

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may give a different calculated RPD.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-ENVJAN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE247181.010	LB279055.014	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	30
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30
SE247181.017	LB279055.026		Naphthalene	mg/kg	0.1	<0.1	<0.1	200
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200
			Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200
			Acenaphthene	mg/kg	0.1	<0.1	<0.1	200
			Fluorene	mg/kg	0.1	<0.1	<0.1	200
			Phenanthrene	mg/kg	0.1	<0.1	<0.1	200
			Anthracene	mg/kg	0.1	<0.1	<0.1	200
			Fluoranthene	mg/kg	0.1	<0.1	<0.1	158
			Pyrene	mg/kg	0.1	<0.1	<0.1	156
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200
			Chrysene	mg/kg	0.1	<0.1	<0.1	200
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200
			Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200
			Carcinogenic PAHs, BaP TEQ <LOR=0*	mg/kg	0.2	<0.2	<0.2	200
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	mg/kg	0.2	<0.2	<0.2	175
			Carcinogenic PAHs, BaP TEQ <LOR=LOR*	mg/kg	0.3	<0.3	<0.3	134
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	30
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.4	30
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30
SE247181.029	LB279057.025		Naphthalene	mg/kg	0.1	<0.1	<0.1	200
			2-methylnaphthalene	mg/kg	0.1	0.1	0.2	97
			1-methylnaphthalene	mg/kg	0.1	0.2	0.2	84
			Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200
			Acenaphthene	mg/kg	0.1	<0.1	<0.1	200
			Fluorene	mg/kg	0.1	<0.1	<0.1	200
			Phenanthrene	mg/kg	0.1	<0.1	<0.1	200
			Anthracene	mg/kg	0.1	<0.1	<0.1	200
			Fluoranthene	mg/kg	0.1	0.2	0.2	91
			Pyrene	mg/kg	0.1	<0.1	<0.1	132
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	167
			Chrysene	mg/kg	0.1	<0.1	<0.1	169
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200
			Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200
			Carcinogenic PAHs, BaP TEQ <LOR=0*	mg/kg	0.2	<0.2	<0.2	200
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	mg/kg	0.2	<0.2	<0.2	175
			Carcinogenic PAHs, BaP TEQ <LOR=LOR*	mg/kg	0.3	<0.3	<0.3	134
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	50
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.6	0.6	30
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30
SE247181.037	LB279057.026		Naphthalene	mg/kg	0.1	<0.1	<0.1	200
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200
			Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200
			Acenaphthene	mg/kg	0.1	<0.1	<0.1	200
			Fluorene	mg/kg	0.1	<0.1	<0.1	200
			Phenanthrene	mg/kg	0.1	<0.1	<0.1	200
			Anthracene	mg/kg	0.1	<0.1	<0.1	200

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: $RPD = | \text{OriginalResult} - \text{ReplicateResult} | \times 100 / \text{Mean}$

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: $MAD = 100 \times \text{SDL} / \text{Mean} + \text{LR}$

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may give a different calculated RPD.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE247181.037	LB279057.026	Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
		Carcinogenic PAHs, BaP TEQ <LOR=0*	mg/kg	0.2	<0.2	<0.2	200	0
		Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	mg/kg	0.2	<0.2	<0.2	175	0
		Carcinogenic PAHs, BaP TEQ <LOR=LOR*	mg/kg	0.3	<0.3	<0.3	134	0
		Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		Surrogates						
		d5-nitrobenzene (Surrogate)	mg/kg	-	0.6	0.6	30	3
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	0
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	0

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE247181.017	LB279055.026	Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
		Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
	Surrogates	TCMX (Surrogate)	mg/kg	-	0	0	30	0
SE247181.037	LB279057.025	Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
		Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
	Surrogates	TCMX (Surrogate)	mg/kg	-	0	0	30	3

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE247181.010	LB279087.014	Arsenic, As	mg/kg	1	3	2	78	56
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	7.9	6.7	37	16
		Copper, Cu	mg/kg	0.5	<0.5	<0.5	200	0
		Nickel, Ni	mg/kg	0.5	0.7	0.6	108	11
		Lead, Pb	mg/kg	1	6	5	47	10
		Zinc, Zn	mg/kg	2	4.6	3.8	78	21
SE247181.030	LB279088.014	Arsenic, As	mg/kg	1	3	3	63	22
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	7.2	8.9	36	21
		Copper, Cu	mg/kg	0.5	<0.5	<0.5	200	0
		Nickel, Ni	mg/kg	0.5	<0.5	0.6	125	18
		Lead, Pb	mg/kg	1	7	7	44	3
		Zinc, Zn	mg/kg	2	3.2	3.8	87	17
SE247181.038	LB279088.023	Arsenic, As	mg/kg	1	5	5	51	6
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	12	13	34	6

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: $RPD = | \text{OriginalResult} - \text{ReplicateResult} | \times 100 / \text{Mean}$

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: $MAD = 100 \times \text{SDL} / \text{Mean} + \text{LR}$

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may give a different calculated RPD.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE247181.038	LB279088.023	Copper, Cu	mg/kg	0.5	<0.5	<0.5	144	0
		Nickel, Ni	mg/kg	0.5	0.8	0.8	93	7
		Lead, Pb	mg/kg	1	7	7	44	3
		Zinc, Zn	mg/kg	2	19	39	37	71 @

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE247181.010	LB279055.014	TRH C10-C14	mg/kg	20	<20	<20	200	0
		TRH C15-C28	mg/kg	45	<45	<45	178	0
		TRH C29-C36	mg/kg	45	<45	<45	200	0
		TRH C37-C40	mg/kg	100	<100	<100	200	0
		TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
		TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands						
		TRH >C10-C16	mg/kg	25	<25	<25	200	0
		TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
		TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
		TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE247181.017	LB279055.026	TRH C10-C14	mg/kg	20	<20	<20	200	0
		TRH C15-C28	mg/kg	45	56	52	113	6
		TRH C29-C36	mg/kg	45	120	61	78	68
		TRH C37-C40	mg/kg	100	<100	<100	188	0
		TRH C10-C36 Total	mg/kg	110	180	110	105	45
		TRH >C10-C40 Total (F bands)	mg/kg	210	270	<210	184	26
		TRH F Bands						
		TRH >C10-C16	mg/kg	25	<25	<25	200	0
		TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
		TRH >C16-C34 (F3)	mg/kg	90	130	<90	113	35
		TRH >C34-C40 (F4)	mg/kg	120	140	<120	151	18
SE247181.029	LB279057.025	TRH C10-C14	mg/kg	20	<20	<20	200	0
		TRH C15-C28	mg/kg	45	77	62	95	22
		TRH C29-C36	mg/kg	45	50	<45	126	11
		TRH C37-C40	mg/kg	100	<100	<100	200	0
		TRH C10-C36 Total	mg/kg	110	130	<110	146	15
		TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands						
		TRH >C10-C16	mg/kg	25	<25	<25	193	0
		TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
		TRH >C16-C34 (F3)	mg/kg	90	110	<90	122	17
		TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE247181.037	LB279057.026	TRH C10-C14	mg/kg	20	<20	<20	200	0
		TRH C15-C28	mg/kg	45	96	110	74	12
		TRH C29-C36	mg/kg	45	68	52	105	26
		TRH C37-C40	mg/kg	100	<100	<100	200	0
		TRH C10-C36 Total	mg/kg	110	160	160	98	2
		TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	181	0
		TRH F Bands						
		TRH >C10-C16	mg/kg	25	<25	<25	172	0
		TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
		TRH >C16-C34 (F3)	mg/kg	90	140	140	95	2
		TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %	
SE247181.010	LB279067.014	Monocyclic Aromatic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0	
			Toluene	mg/kg	0.1	<0.1	<0.1	200	0	
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0	
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0	
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0	
			Polycyclic	Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	200	0
			Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	12.2	12.9	50	5
		d8-toluene (Surrogate)		mg/kg	-	9.6	10.3	50	6	
		Bromofluorobenzene (Surrogate)		mg/kg	-	12.7	13.1	50	3	
		Totals	Total BTEX*	mg/kg	0.6	<0.6	<0.6	200	0	
			Total Xylenes*	mg/kg	0.3	<0.3	<0.3	200	0	
SE247181.019	LB279067.024	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0	



DUPLICATES

SE247181 R0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: $RPD = | \text{OriginalResult} - \text{ReplicateResult} | \times 100 / \text{Mean}$

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: $MAD = 100 \times \text{SDL} / \text{Mean} + \text{LR}$

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may give a different calculated RPD.

VOC's in Soil (continued)

Method: ME-(AU)-ENVJAN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE247181.019	LB279067.024	Fumigants	1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene,TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	176	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate*	mg/kg	10	<10	<10	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: $RPD = | \text{OriginalResult} - \text{ReplicateResult} | \times 100 / \text{Mean}$
The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: $MAD = 100 \times \text{SDL} / \text{Mean} + \text{LR}$
Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may give a different calculated RPD.

VOC's in Soil (continued)

Method: ME-(AU)-ENVJAN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE247181.019	LB279067.024	Oxygenated	MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
		Compounds	2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.9	8.7	50	12
			d8-toluene (Surrogate)	mg/kg	-	9.4	8.8	50	7
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.6	9.1	50	6
		Totals	Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total BTEX*	mg/kg	0.6	<0.6	<0.6	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
		Trihalomethanes	Total Xylenes*	mg/kg	0.3	<0.3	<0.3	200	0
			Chloroform (THM)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromodichloromethane (THM)	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromochloromethane (THM)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform (THM)	mg/kg	0.1	<0.1	<0.1	200	0
SE247181.030	LB279071.014	Monocyclic Aromatic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
			Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
		Polycyclic	Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	7.8	8.1	50	4
			d8-toluene (Surrogate)	mg/kg	-	8.7	8.7	50	1
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.1	8.9	50	23
		Totals	Total BTEX*	mg/kg	0.6	<0.6	<0.6	200	0
Total Xylenes*	mg/kg	0.3	<0.3	<0.3	200	0			
SE247181.038	LB279071.023	Monocyclic Aromatic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
			Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
		Polycyclic	Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	7.3	7.7	50	4
			d8-toluene (Surrogate)	mg/kg	-	7.2	8.6	50	19
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.0	8.7	50	22
		Totals	Total BTEX*	mg/kg	0.6	<0.6	<0.6	200	0
Total Xylenes*	mg/kg	0.3	<0.3	<0.3	200	0			

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-ENVJAN433

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %	
SE247181.010	LB279067.014	TRH C6-C10	mg/kg	25	<25	<25	200	0	
		TRH C6-C9	mg/kg	20	<20	<20	200	0	
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	12.2	12.9	50	5
			d8-toluene (Surrogate)	mg/kg	-	9.6	10.3	50	6
		VPH F Bands	Bromofluorobenzene (Surrogate)	mg/kg	-	12.7	13.1	50	3
			Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
SE247181.019	LB279067.024	TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0	
		TRH C6-C10	mg/kg	25	<25	<25	200	0	
		TRH C6-C9	mg/kg	20	<20	<20	200	0	
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.9	8.7	50	12
			d8-toluene (Surrogate)	mg/kg	-	9.4	8.8	50	7
		VPH F Bands	Bromofluorobenzene (Surrogate)	mg/kg	-	9.6	9.1	50	6
Benzene (F0)	mg/kg		0.1	<0.1	<0.1	200	0		
SE247181.030	LB279071.014	TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0	
		TRH C6-C10	mg/kg	25	<25	<25	200	0	
		TRH C6-C9	mg/kg	20	<20	<20	200	0	
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	7.8	8.1	50	4
			d8-toluene (Surrogate)	mg/kg	-	8.7	8.7	50	1
		Bromofluorobenzene (Surrogate)	mg/kg	-	7.1	8.9	50	23	



DUPLICATES

SE247181 R0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: $RPD = | \text{OriginalResult} - \text{ReplicateResult} | \times 100 / \text{Mean}$

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: $MAD = 100 \times \text{SDL} / \text{Mean} + \text{LR}$

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may give a different calculated RPD.

Volatile Petroleum Hydrocarbons in Soil (continued)

Method: ME-(AU)-ENVJAN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %	
SE247181.030	LB279071.014	VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0	
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0	
SE247181.038	LB279071.023		TRH C6-C10	mg/kg	25	<25	<25	200	0	
			TRH C6-C9	mg/kg	20	<20	<20	200	0	
			Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	7.3	7.7	50	4
		Surrogates	d8-toluene (Surrogate)	mg/kg	-	7.2	8.6	50	19	
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.0	8.7	50	22	
			VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
				TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Full 8270 SVOC in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB279065.024	01-PAHs	Acenaphthene	mg/kg	0.1	4.5	4	70 - 130
		Acenaphthylene	mg/kg	0.1	4.4	4	70 - 130
		Anthracene	mg/kg	0.1	4.7	4	70 - 130
		Benzo(a)pyrene	mg/kg	0.1	4.2	4	70 - 130
		Fluoranthene	mg/kg	0.1	4.6	4	70 - 130
		Naphthalene	mg/kg	0.1	4.7	4	70 - 130
		Phenanthrene	mg/kg	0.1	4.7	4	70 - 130
	02-OCs	Pyrene	mg/kg	0.1	4.4	4	70 - 130
		Aldrin	mg/kg	0.1	1.0	1	70 - 130
		Delta-BHC	mg/kg	0.1	1.1	1	70 - 130
		p,p-DDT	mg/kg	0.1	0.8	1	70 - 130
		Dieldrin	mg/kg	0.2	1.1	1	70 - 130
		Endrin	mg/kg	0.2	0.8	1	70 - 130
	03-OPs	Heptachlor	mg/kg	0.1	0.8	1	70 - 130
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	2.1	2	70 - 130
		Diazinon (Dimpylate)	mg/kg	0.5	2.1	2	70 - 130
		Dichlorvos	mg/kg	0.5	1.5	2	70 - 130
	05-SVCH (CI Benzenes,	Ethion	mg/kg	0.2	1.4	2	70 - 130
		Hexachlorobenzene (HCB)	mg/kg	0.1	1.0	1	70 - 130
		Hexachlorobutadiene	mg/kg	0.5	1.1	1	70 - 130
		Hexachloroethane	mg/kg	0.5	1.1	1	70 - 130
		Pentachlorobenzene	mg/kg	0.5	1.0	1	70 - 130
	06-Phthalates	1,2,3,4-tetrachlorobenzene	mg/kg	0.5	1.0	1	70 - 130
		Bis(2-ethylhexyl)phthalate	mg/kg	5	<5	4	70 - 130
		Butyl benzyl phthalate	mg/kg	0.5	3.4	4	70 - 130
		Di-n-butyl phthalate	mg/kg	0.5	4.2	4	70 - 130
		Diethyl phthalate	mg/kg	0.5	5.0	4	70 - 130
		Dimethyl phthalate	mg/kg	0.5	3.8	4	70 - 130
	07-Carbamate	Di-n-octyl phthalate	mg/kg	0.5	3.3	4	70 - 130
		Carbofuran	mg/kg	0.5	0.7	1	70 - 130
	09-Nitrosamine	N-nitroso-di-n-propylamine (NDPA)	mg/kg	0.5	2.0	2	70 - 130
	10-Nitroaromat	Pentachloronitrobenzene (quintozone)	mg/kg	0.5	0.8	1	70 - 130
	14-Speciated Routine	2,4-dichlorophenol	mg/kg	0.5	0.9	1	70 - 130
		Phenol	mg/kg	0.5	1.0	1	70 - 130
		2,4,6-trichlorophenol	mg/kg	0.5	1.0	1	70 - 130
	Surrogates	Pentachlorophenol	mg/kg	0.5	0.7	1	70 - 130
		d5-phenol (Surrogate)	mg/kg	-	1.9	2	40 - 130
		d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	40 - 130
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130
		2,4,6-tribromophenol (Surrogate)	mg/kg	-	4.1	5	40 - 130
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB279092.002	Mercury	mg/kg	0.05	0.21	0.2	80 - 120	103
LB279093.002	Mercury	mg/kg	0.05	0.23	0.2	80 - 120	113

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB279055.002	Delta BHC	mg/kg	0.1	0.1	0.2	60 - 140	74
	Heptachlor	mg/kg	0.1	0.2	0.2	60 - 140	80
	Aldrin	mg/kg	0.1	0.2	0.2	60 - 140	76
	Dieldrin	mg/kg	0.2	<0.2	0.2	60 - 140	77
	Endrin	mg/kg	0.2	<0.2	0.2	60 - 140	86
	p,p'-DDT	mg/kg	0.1	0.2	0.2	60 - 140	95
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.13	0.15	40 - 130
LB279057.002	Delta BHC	mg/kg	0.1	0.1	0.2	60 - 140	67
	Heptachlor	mg/kg	0.1	0.1	0.2	60 - 140	70
	Aldrin	mg/kg	0.1	0.1	0.2	60 - 140	68
	Dieldrin	mg/kg	0.2	<0.2	0.2	60 - 140	68
	Endrin	mg/kg	0.2	<0.2	0.2	60 - 140	74

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB279057.002	p,p'-DDT	mg/kg	0.1	0.2	0.2	60 - 140	89
Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.13	0.15	40 - 130	88

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB279055.002	Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	1.8	2	60 - 140	88
	Diazinon (Dimpylate)	mg/kg	0.5	1.8	2	60 - 140	92
	Dichlorvos	mg/kg	0.5	1.4	2	60 - 140	68
	Ethion	mg/kg	0.2	2.1	2	60 - 140	104
	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	89
	d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	98
LB279057.002	Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	1.7	2	60 - 140	84
	Diazinon (Dimpylate)	mg/kg	0.5	1.8	2	60 - 140	92
	Dichlorvos	mg/kg	0.5	1.5	2	60 - 140	77
	Ethion	mg/kg	0.2	2.6	2	60 - 140	130
	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	89
	d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	93

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB279055.002	Naphthalene	mg/kg	0.1	3.3	4	60 - 140	84
	Acenaphthylene	mg/kg	0.1	3.5	4	60 - 140	88
	Acenaphthene	mg/kg	0.1	3.6	4	60 - 140	89
	Phenanthrene	mg/kg	0.1	3.6	4	60 - 140	89
	Anthracene	mg/kg	0.1	3.5	4	60 - 140	86
	Fluoranthene	mg/kg	0.1	3.4	4	60 - 140	85
	Pyrene	mg/kg	0.1	3.7	4	60 - 140	93
	Benzo(a)pyrene	mg/kg	0.1	3.4	4	60 - 140	85
	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	93
	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	89
	d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	98
LB279057.002	Naphthalene	mg/kg	0.1	3.5	4	60 - 140	87
	Acenaphthylene	mg/kg	0.1	3.6	4	60 - 140	90
	Acenaphthene	mg/kg	0.1	3.7	4	60 - 140	92
	Phenanthrene	mg/kg	0.1	3.7	4	60 - 140	91
	Anthracene	mg/kg	0.1	3.6	4	60 - 140	90
	Fluoranthene	mg/kg	0.1	3.5	4	60 - 140	89
	Pyrene	mg/kg	0.1	3.6	4	60 - 140	91
	Benzo(a)pyrene	mg/kg	0.1	3.5	4	60 - 140	87
	d5-nitrobenzene (Surrogate)	mg/kg	-	0.6	0.5	40 - 130	116
	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	89
	d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	93

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB279055.002	Arochlor 1260	mg/kg	0.2	0.4	0.4	60 - 140	97
LB279057.002	Arochlor 1260	mg/kg	0.2	0.4	0.4	60 - 140	89

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB279087.002	Arsenic, As	mg/kg	1	340	318.22	80 - 120	108
	Cadmium, Cd	mg/kg	0.3	4.7	4.81	70 - 130	98
	Chromium, Cr	mg/kg	0.5	42	38.31	80 - 120	110
	Copper, Cu	mg/kg	0.5	320	290	80 - 120	110
	Nickel, Ni	mg/kg	0.5	190	187	80 - 120	102
	Lead, Pb	mg/kg	1	90	89.9	80 - 120	101
	Zinc, Zn	mg/kg	2	280	273	80 - 120	102
LB279088.002	Arsenic, As	mg/kg	1	350	318.22	80 - 120	109
	Cadmium, Cd	mg/kg	0.3	4.6	4.81	70 - 130	96
	Chromium, Cr	mg/kg	0.5	41	38.31	80 - 120	107
	Copper, Cu	mg/kg	0.5	320	290	80 - 120	111
	Nickel, Ni	mg/kg	0.5	190	187	80 - 120	104

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB279088.002	Lead, Pb	mg/kg	1	92	89.9	80 - 120	102
	Zinc, Zn	mg/kg	2	280	273	80 - 120	103

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB279055.002	TRH C10-C14	mg/kg	20	49	40	60 - 140	122
	TRH C15-C28	mg/kg	45	49	40	60 - 140	124
	TRH C29-C36	mg/kg	45	47	40	60 - 140	117
	TRH F Bands						
	TRH >C10-C16	mg/kg	25	51	40	60 - 140	127
	TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	114
LB279057.002	TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	125
	TRH C10-C14	mg/kg	20	43	40	60 - 140	107
	TRH C15-C28	mg/kg	45	<45	40	60 - 140	110
	TRH C29-C36	mg/kg	45	<45	40	60 - 140	90
	TRH F Bands						
	TRH >C10-C16	mg/kg	25	44	40	60 - 140	110
	TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	105
	TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	86

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %	
LB279067.002	Halogenated	1,1-dichloroethene	mg/kg	0.1	4.0	5	60 - 140	80	
	Aliphatics	1,2-dichloroethane	mg/kg	0.1	4.8	5	60 - 140	97	
		Trichloroethene (Trichloroethylene,TCE)		mg/kg	0.1	4.9	5	60 - 140	99
	Halogenated	Chlorobenzene	mg/kg	0.1	5.2	5	60 - 140	105	
	Monocyclic	Benzene	mg/kg	0.1	4.8	5	60 - 140	95	
	Aromatic	Toluene	mg/kg	0.1	5.2	5	60 - 140	103	
		Ethylbenzene	mg/kg	0.1	4.9	5	60 - 140	98	
		m/p-xylene	mg/kg	0.2	9.7	10	60 - 140	97	
		o-xylene	mg/kg	0.1	5.0	5	60 - 140	101	
	Surrogates	d4-1,2-dichloroethane (Surrogate)		mg/kg	-	10.3	10	70 - 130	103
		d8-toluene (Surrogate)		mg/kg	-	10.7	10	70 - 130	107
		Bromofluorobenzene (Surrogate)		mg/kg	-	9.8	10	70 - 130	98
	Trihalomethan	Chloroform (THM)	mg/kg	0.1	5.2	5	60 - 140	104	
LB279071.002	Halogenated	1,1-dichloroethene	mg/kg	0.1	3.8	5	60 - 140	77	
	Aliphatics	1,2-dichloroethane	mg/kg	0.1	4.9	5	60 - 140	98	
		Trichloroethene (Trichloroethylene,TCE)		mg/kg	0.1	4.7	5	60 - 140	93
	Halogenated	Chlorobenzene	mg/kg	0.1	4.5	5	60 - 140	90	
	Monocyclic	Benzene	mg/kg	0.1	4.6	5	60 - 140	91	
	Aromatic	Toluene	mg/kg	0.1	4.7	5	60 - 140	94	
		Ethylbenzene	mg/kg	0.1	4.9	5	60 - 140	98	
		m/p-xylene	mg/kg	0.2	9.8	10	60 - 140	98	
		o-xylene	mg/kg	0.1	5.0	5	60 - 140	100	
	Surrogates	d4-1,2-dichloroethane (Surrogate)		mg/kg	-	10.1	10	70 - 130	101
		d8-toluene (Surrogate)		mg/kg	-	10.5	10	70 - 130	105
		Bromofluorobenzene (Surrogate)		mg/kg	-	9.4	10	70 - 130	94
	Trihalomethan	Chloroform (THM)	mg/ka	0.1	5.2	5	60 - 140	104	

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %	
LB279067.002	TRH C6-C10	mg/kg	25	85	92.5	60 - 140	92	
	TRH C6-C9	mg/kg	20	74	80	60 - 140	92	
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.3	10	70 - 130	103
		Bromofluorobenzene (Surrogate)	mg/kg	-	9.8	10	70 - 130	98
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	55	62.5	60 - 140	88
LB279071.002	TRH C6-C10	mg/kg	25	93	92.5	60 - 140	101	
	TRH C6-C9	mg/kg	20	82	80	60 - 140	102	
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.1	10	70 - 130	101
		Bromofluorobenzene (Surrogate)	mg/kg	-	9.4	10	70 - 130	94
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	69	62.5	60 - 140	111

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub-sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE247181.001	LB279092.004	Mercury	mg/kg	0.05	0.21	<0.05	0.2	91
SE247181.020	LB279093.004	Mercury	mg/kg	0.05	0.21	<0.05	0.2	100

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE247181.001	LB279055.004	Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	-	-
		Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	-	-
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	1.9	<0.2	2	97
		Diazinon (Dimpylate)	mg/kg	0.5	2.0	<0.5	2	101
		Dichlorvos	mg/kg	0.5	1.5	<0.5	2	76
		Dimethoate	mg/kg	0.5	<0.5	<0.5	-	-
		Ethion	mg/kg	0.2	2.4	<0.2	2	118
		Fenitrothion	mg/kg	0.2	<0.2	<0.2	-	-
		Malathion	mg/kg	0.2	<0.2	<0.2	-	-
		Methidathion	mg/kg	0.5	<0.5	<0.5	-	-
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	-	-
		Total OP Pesticides*	mg/kg	1.7	7.8	<1.7	-	-
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	87
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	98

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE247181.001	LB279055.004	Naphthalene	mg/kg	0.1	3.3	<0.1	4	83
		2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		Acenaphthylene	mg/kg	0.1	3.5	<0.1	4	87
		Acenaphthene	mg/kg	0.1	3.5	<0.1	4	88
		Fluorene	mg/kg	0.1	<0.1	<0.1	-	-
		Phenanthrene	mg/kg	0.1	3.5	<0.1	4	88
		Anthracene	mg/kg	0.1	3.4	<0.1	4	85
		Fluoranthene	mg/kg	0.1	3.4	<0.1	4	83
		Pyrene	mg/kg	0.1	3.7	<0.1	4	93
		Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
		Chrysene	mg/kg	0.1	<0.1	<0.1	-	-
		Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-
		Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-
		Benzo(a)pyrene	mg/kg	0.1	3.3	<0.1	4	82
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	-	-
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
		Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	-	-
		Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	3.3	<0.2	-	-
		Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	3.4	<0.2	-	-
		Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	3.5	<0.3	-	-
		Total PAH (18)	mg/kg	0.8	28	<0.8	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.4	91
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	87
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	98
SE247181.020	LB279057.004	Naphthalene	mg/kg	0.1	3.5	<0.1	4	86
		2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		Acenaphthylene	mg/kg	0.1	3.5	<0.1	4	88
		Acenaphthene	mg/kg	0.1	3.6	<0.1	4	91
		Fluorene	mg/kg	0.1	<0.1	<0.1	-	-
		Phenanthrene	mg/kg	0.1	3.6	<0.1	4	90
		Anthracene	mg/kg	0.1	3.5	<0.1	4	88
		Fluoranthene	mg/kg	0.1	3.5	<0.1	4	88
		Pyrene	mg/kg	0.1	3.5	<0.1	4	89
		Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
		Chrysene	mg/kg	0.1	<0.1	<0.1	-	-
		Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub-sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE247181.020	LB279057.004	Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-
		Benzo(a)pyrene	mg/kg	0.1	3.5	<0.1	4	87
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	-	-
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
		Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	-	-
		Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	3.5	<0.2	-	-
		Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	3.5	<0.2	-	-
		Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	3.6	<0.3	-	-
		Total PAH (18)	mg/kg	0.8	28	<0.8	-	-
		Surrogates						
		d5-nitrobenzene (Surrogate)	mg/kg	-	0.6	0.6	-	116
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.4	-	91
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	-	94

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE247181.001	LB279087.004	Arsenic, As	mg/kg	1	53	3	50	99
		Cadmium, Cd	mg/kg	0.3	40	<0.3	50	80
		Chromium, Cr	mg/kg	0.5	58	6.4	50	103
		Copper, Cu	mg/kg	0.5	65	3.8	50	122
		Nickel, Ni	mg/kg	0.5	55	1.3	50	107
		Lead, Pb	mg/kg	1	63	43	50	39 ④
		Zinc, Zn	mg/kg	2	69	25	50	89
SE247181.020	LB279088.004	Arsenic, As	mg/kg	1	47	3	50	88
		Cadmium, Cd	mg/kg	0.3	38	<0.3	50	76
		Chromium, Cr	mg/kg	0.5	58	13	50	91
		Copper, Cu	mg/kg	0.5	47	<0.5	50	94
		Nickel, Ni	mg/kg	0.5	48	0.9	50	93
		Lead, Pb	mg/kg	1	50	7	50	87
		Zinc, Zn	mg/kg	2	49	3.0	50	92

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE247181.001	LB279055.004	TRH C10-C14	mg/kg	20	51	<20	40	111
		TRH C15-C28	mg/kg	45	54	<45	40	103
		TRH C29-C36	mg/kg	45	48	<45	40	80
		TRH C37-C40	mg/kg	100	<100	<100	-	-
		TRH C10-C36 Total	mg/kg	110	150	<110	-	-
		TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	-	-
		TRH F Bands						
		TRH >C10-C16	mg/kg	25	54	<25	40	117
		TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	52	<25	-	-
		TRH >C16-C34 (F3)	mg/kg	90	<90	<90	40	78
SE247181.020	LB279057.004	TRH >C34-C40 (F4)	mg/kg	120	<120	<120	-	-
		TRH C10-C14	mg/kg	20	41	<20	40	96
		TRH C15-C28	mg/kg	45	<45	<45	40	92
		TRH C29-C36	mg/kg	45	<45	<45	40	86
		TRH C37-C40	mg/kg	100	<100	<100	-	-
		TRH C10-C36 Total	mg/kg	110	<110	<110	-	-
		TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	-	-
		TRH F Bands						
		TRH >C10-C16	mg/kg	25	42	<25	40	97
		TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	42	<25	-	-
		TRH >C16-C34 (F3)	mg/kg	90	<90	<90	40	89
		TRH >C34-C40 (F4)	mg/kg	120	<120	<120	-	-

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE247181.001	LB279067.004	Monocyclic						
		Aromatic						
		Benzene	mg/kg	0.1	4.6	<0.1	5	91
		Toluene	mg/kg	0.1	4.7	<0.1	5	94
		Ethylbenzene	mg/kg	0.1	5.1	<0.1	5	101
		m/p-xylene	mg/kg	0.2	10	<0.2	10	100
		o-xylene	mg/kg	0.1	5.3	<0.1	5	105
		Polycyclic						
		Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	-	-
		Surrogates						
		d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.4	10.3	10	104

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub-sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE247181.001	LB279067.004	Surrogates	d8-toluene (Surrogate)	mg/kg	-	10.8	7.9	10
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.9	9.5	10
		Totals	Total BTEX*	mg/kg	0.6	30	<0.6	-
			Total Xylenes*	mg/kg	0.3	15	<0.3	-
SE247181.020	LB279071.004	Monocyclic Aromatic	Benzene	mg/kg	0.1	4.4	<0.1	5
			Toluene	mg/kg	0.1	4.6	<0.1	5
			Ethylbenzene	mg/kg	0.1	4.6	<0.1	5
			m/p-xylene	mg/kg	0.2	9.0	<0.2	10
			o-xylene	mg/kg	0.1	4.7	<0.1	5
		Polycyclic	Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.9	8.4	10
			d8-toluene (Surrogate)	mg/kg	-	10.1	8.9	10
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.4	8.2	10
			Total BTEX*	mg/kg	0.6	27	<0.6	-
			Total Xylenes*	mg/kg	0.3	14	<0.3	-

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE247181.001	LB279067.004	Surrogates	TRH C6-C10	mg/kg	25	<25	92.5	93
			TRH C6-C9	mg/kg	20	<20	80	93
			d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.4	10.3	10
			d8-toluene (Surrogate)	mg/kg	-	10.8	7.9	10
		VPH F Bands	Bromofluorobenzene (Surrogate)	mg/kg	-	9.3	9.5	-
			Benzene (F0)	mg/kg	0.1	4.6	<0.1	-
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	57	<25	62.5
SE247181.020	LB279071.004	Surrogates	TRH C6-C10	mg/kg	25	92	<25	92.5
			TRH C6-C9	mg/kg	20	80	<20	80
			d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.9	8.4	10
			d8-toluene (Surrogate)	mg/kg	-	10.1	8.9	10
		VPH F Bands	Bromofluorobenzene (Surrogate)	mg/kg	-	8.4	8.2	-
			Benzene (F0)	mg/kg	0.1	4.4	<0.1	-
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	64	<25	62.5



Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: $RPD = |OriginalResult - ReplicateResult| \times 100 / Mean$

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: $MAD = 100 \times SDL / Mean + LR$

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.



Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here : https://www.sgs.com.au/~media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022_QA_QC_Plan.pdf

- * NATA accreditation does not cover the performance of this service.
- ** Indicative data, theoretical holding time exceeded.
- *** Indicates that both * and ** apply.
- Sample not analysed for this analyte.
- IS Insufficient sample for analysis.
- LNR Sample listed, but not received.
- LOR Limit of reporting.
- QFH QC result is above the upper tolerance.
- QFL QC result is below the lower tolerance.
- ① At least 2 of 3 surrogates are within acceptance criteria.
- ② RPD failed acceptance criteria due to sample heterogeneity.
- ③ Results less than 5 times LOR preclude acceptance criteria for RPD.
- ④ Recovery failed acceptance criteria due to matrix interference.
- ⑤ Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
- ⑥ LOR was raised due to sample matrix interference.
- ⑦ LOR was raised due to dilution of significantly high concentration of analyte in sample.
- ⑧ Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
- ⑨ Recovery failed acceptance criteria due to sample heterogeneity.
- ⑩ LOR was raised due to high conductivity of the sample (required dilution).
- † Refer to relevant report comments for further information.

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SGS Reference **SE247181A R0**
Date Received 14 Jun 2023
Date Reported 21 Jun 2023

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

Clay Content subcontracted to SGS Cairns, 2/58 Comport St, Portsmith QLD 4870, NATA Accreditation Number: 2562, Site Number: 3146. Report No CE167550

SIGNATORIES



Huong CRAWFORD
Production Manager



Shane MCDERMOTT
Inorganic/Metals Chemist

Parameter	Units	LOR	Sample Number	SE247181A.001	SE247181A.002	SE247181A.003	SE247181A.004
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	03 May 2023	03 May 2023	03 May 2023	03 May 2023
			Sample Name	HA101_0.1-0.2	HA101_0.5-0.7	HA102 0-0.1	HA103_0.1-0.2

pH in soil (1:5) Method: AN101 Tested: 16/6/2023

pH	pH Units	0.1	-	-	-	-

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR) Method: AN122 Tested: 16/6/2023

Exchangeable Sodium, Na	mg/kg	2	-	-	-	-
Exchangeable Sodium, Na	meq/100g	0.01	-	-	-	-
Exchangeable Sodium Percentage*	%	0.1	-	-	-	-
Exchangeable Potassium, K	mg/kg	2	-	-	-	-
Exchangeable Potassium, K	meq/100g	0.01	-	-	-	-
Exchangeable Potassium Percentage*	%	0.1	-	-	-	-
Exchangeable Calcium, Ca	mg/kg	2	-	-	-	-
Exchangeable Calcium, Ca	meq/100g	0.01	-	-	-	-
Exchangeable Calcium Percentage*	%	0.1	-	-	-	-
Exchangeable Magnesium, Mg	mg/kg	2	-	-	-	-
Exchangeable Magnesium, Mg	meq/100g	0.02	-	-	-	-
Exchangeable Magnesium Percentage*	%	0.1	-	-	-	-
Cation Exchange Capacity	meq/100g	0.02	-	-	-	-

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES Method: AN040/AN320 Tested: 16/6/2023

Iron, Fe	mg/kg	50	-	-	-	-

TOC in Soil Method: AN188 Tested: 16/6/2023

Total Organic Carbon	%w/w	0.05	-	-	-	-
Organic Matter (calc)*	%w/w	0.1	-	-	-	-

Particle sizing of soils by sieving Method: AN005 Tested: 21/6/2023

Passing 75µm*	%w/w	1	-	-	-	-
Retained 75µm*	%w/w	1	-	-	-	-

Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 21/6/2023

Clay (<0.002mm)*	%w/w	0.1	-	-	-	-



ANALYTICAL REPORT

SE247181A R0

Parameter	Units	LOR	Sample Number	SE247181A.005	SE247181A.006	SE247181A.007	SE247181A.008
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	03 May 2023	03 May 2023	03 May 2023	03 May 2023
			Sample Name	HA106_0.1-0.2	HA106_0.3-0.6	HA109_0.1-0.3	HA109_0.5-0.7

pH in soil (1:5) Method: AN101 Tested: 16/6/2023

pH	pH Units	0.1	-	-	-	-

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR) Method: AN122 Tested: 16/6/2023

Exchangeable Sodium, Na	mg/kg	2	-	-	-	-
Exchangeable Sodium, Na	meq/100g	0.01	-	-	-	-
Exchangeable Sodium Percentage*	%	0.1	-	-	-	-
Exchangeable Potassium, K	mg/kg	2	-	-	-	-
Exchangeable Potassium, K	meq/100g	0.01	-	-	-	-
Exchangeable Potassium Percentage*	%	0.1	-	-	-	-
Exchangeable Calcium, Ca	mg/kg	2	-	-	-	-
Exchangeable Calcium, Ca	meq/100g	0.01	-	-	-	-
Exchangeable Calcium Percentage*	%	0.1	-	-	-	-
Exchangeable Magnesium, Mg	mg/kg	2	-	-	-	-
Exchangeable Magnesium, Mg	meq/100g	0.02	-	-	-	-
Exchangeable Magnesium Percentage*	%	0.1	-	-	-	-
Cation Exchange Capacity	meq/100g	0.02	-	-	-	-

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES Method: AN040/AN320 Tested: 16/6/2023

Iron, Fe	mg/kg	50	-	-	-	-

TOC in Soil Method: AN188 Tested: 16/6/2023

Total Organic Carbon	%w/w	0.05	-	-	-	-
Organic Matter (calc)*	%w/w	0.1	-	-	-	-

Particle sizing of soils by sieving Method: AN005 Tested: 21/6/2023

Passing 75µm*	%w/w	1	-	-	-	-
Retained 75µm*	%w/w	1	-	-	-	-

Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 21/6/2023

Clay (<0.002mm)*	%w/w	0.1	-	-	-	-

Parameter	Units	LOR	Sample Number	SE247181A.009	SE247181A.010	SE247181A.011	SE247181A.012
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	04 May 2023	04 May 2023	04 May 2023	04 May 2023
			Sample Name	TP106_0.5	TP106_2	QA200	TP107_0.1

pH in soil (1:5) Method: AN101 Tested: 16/6/2023

pH	pH Units	0.1	-	-	-	-

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR) Method: AN122 Tested: 16/6/2023

Exchangeable Sodium, Na	mg/kg	2	-	-	-	-
Exchangeable Sodium, Na	meq/100g	0.01	-	-	-	-
Exchangeable Sodium Percentage*	%	0.1	-	-	-	-
Exchangeable Potassium, K	mg/kg	2	-	-	-	-
Exchangeable Potassium, K	meq/100g	0.01	-	-	-	-
Exchangeable Potassium Percentage*	%	0.1	-	-	-	-
Exchangeable Calcium, Ca	mg/kg	2	-	-	-	-
Exchangeable Calcium, Ca	meq/100g	0.01	-	-	-	-
Exchangeable Calcium Percentage*	%	0.1	-	-	-	-
Exchangeable Magnesium, Mg	mg/kg	2	-	-	-	-
Exchangeable Magnesium, Mg	meq/100g	0.02	-	-	-	-
Exchangeable Magnesium Percentage*	%	0.1	-	-	-	-
Cation Exchange Capacity	meq/100g	0.02	-	-	-	-

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES Method: AN040/AN320 Tested: 16/6/2023

Iron, Fe	mg/kg	50	-	-	-	-

TOC in Soil Method: AN188 Tested: 16/6/2023

Total Organic Carbon	%w/w	0.05	-	-	-	-
Organic Matter (calc)*	%w/w	0.1	-	-	-	-

Particle sizing of soils by sieving Method: AN005 Tested: 21/6/2023

Passing 75µm*	%w/w	1	-	-	-	-
Retained 75µm*	%w/w	1	-	-	-	-

Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 21/6/2023

Clay (<0.002mm)*	%w/w	0.1	-	-	-	-

Parameter	Units	LOR	Sample Number	SE247181A.013	SE247181A.014	SE247181A.015	SE247181A.016
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	04 May 2023	04 May 2023	04 May 2023	04 May 2023
			Sample Name	QA300	TP107_1	TP108_0.1	TP108_2

pH in soil (1:5) Method: AN101 Tested: 16/6/2023

pH	pH Units	0.1	-	-	-	-

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR) Method: AN122 Tested: 16/6/2023

Exchangeable Sodium, Na	mg/kg	2	-	-	-	-
Exchangeable Sodium, Na	meq/100g	0.01	-	-	-	-
Exchangeable Sodium Percentage*	%	0.1	-	-	-	-
Exchangeable Potassium, K	mg/kg	2	-	-	-	-
Exchangeable Potassium, K	meq/100g	0.01	-	-	-	-
Exchangeable Potassium Percentage*	%	0.1	-	-	-	-
Exchangeable Calcium, Ca	mg/kg	2	-	-	-	-
Exchangeable Calcium, Ca	meq/100g	0.01	-	-	-	-
Exchangeable Calcium Percentage*	%	0.1	-	-	-	-
Exchangeable Magnesium, Mg	mg/kg	2	-	-	-	-
Exchangeable Magnesium, Mg	meq/100g	0.02	-	-	-	-
Exchangeable Magnesium Percentage*	%	0.1	-	-	-	-
Cation Exchange Capacity	meq/100g	0.02	-	-	-	-

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES Method: AN040/AN320 Tested: 16/6/2023

Iron, Fe	mg/kg	50	-	-	-	-

TOC in Soil Method: AN188 Tested: 16/6/2023

Total Organic Carbon	%w/w	0.05	-	-	-	-
Organic Matter (calc)*	%w/w	0.1	-	-	-	-

Particle sizing of soils by sieving Method: AN005 Tested: 21/6/2023

Passing 75µm*	%w/w	1	-	-	-	-
Retained 75µm*	%w/w	1	-	-	-	-

Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 21/6/2023

Clay (<0.002mm)*	%w/w	0.1	-	-	-	-

Parameter	Units	LOR	Sample Number	SE247181A.017	SE247181A.018	SE247181A.019	SE247181A.020
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	04 May 2023	04 May 2023	04 May 2023	04 May 2023
			Sample Name	TP115_0.1	TP115_0.5	TP118_0.1	TP118_1.2

pH in soil (1:5) Method: AN101 Tested: 16/6/2023

pH	pH Units	0.1	-	-	-	-

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR) Method: AN122 Tested: 16/6/2023

Exchangeable Sodium, Na	mg/kg	2	-	-	-	-
Exchangeable Sodium, Na	meq/100g	0.01	-	-	-	-
Exchangeable Sodium Percentage*	%	0.1	-	-	-	-
Exchangeable Potassium, K	mg/kg	2	-	-	-	-
Exchangeable Potassium, K	meq/100g	0.01	-	-	-	-
Exchangeable Potassium Percentage*	%	0.1	-	-	-	-
Exchangeable Calcium, Ca	mg/kg	2	-	-	-	-
Exchangeable Calcium, Ca	meq/100g	0.01	-	-	-	-
Exchangeable Calcium Percentage*	%	0.1	-	-	-	-
Exchangeable Magnesium, Mg	mg/kg	2	-	-	-	-
Exchangeable Magnesium, Mg	meq/100g	0.02	-	-	-	-
Exchangeable Magnesium Percentage*	%	0.1	-	-	-	-
Cation Exchange Capacity	meq/100g	0.02	-	-	-	-

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES Method: AN040/AN320 Tested: 16/6/2023

Iron, Fe	mg/kg	50	-	-	-	-

TOC in Soil Method: AN188 Tested: 16/6/2023

Total Organic Carbon	%w/w	0.05	-	-	-	-
Organic Matter (calc)*	%w/w	0.1	-	-	-	-

Particle sizing of soils by sieving Method: AN005 Tested: 21/6/2023

Passing 75µm*	%w/w	1	-	-	-	-
Retained 75µm*	%w/w	1	-	-	-	-

Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 21/6/2023

Clay (<0.002mm)*	%w/w	0.1	-	-	-	-

Parameter	Units	LOR	Sample Number	SE247181A.021	SE247181A.022	SE247181A.023	SE247181A.024
			Sample Matrix	Soil	Material	Soil	Soil
			Sample Date	04 May 2023	04 May 2023	04 May 2023	04 May 2023
			Sample Name	TP113_0.1	TP113_0.1_PACM	TP113_0.4	TP113_1

pH in soil (1:5) Method: AN101 Tested: 16/6/2023

pH	pH Units	0.1	-	-	-	-

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR) Method: AN122 Tested: 16/6/2023

Exchangeable Sodium, Na	mg/kg	2	-	-	-	-
Exchangeable Sodium, Na	meq/100g	0.01	-	-	-	-
Exchangeable Sodium Percentage*	%	0.1	-	-	-	-
Exchangeable Potassium, K	mg/kg	2	-	-	-	-
Exchangeable Potassium, K	meq/100g	0.01	-	-	-	-
Exchangeable Potassium Percentage*	%	0.1	-	-	-	-
Exchangeable Calcium, Ca	mg/kg	2	-	-	-	-
Exchangeable Calcium, Ca	meq/100g	0.01	-	-	-	-
Exchangeable Calcium Percentage*	%	0.1	-	-	-	-
Exchangeable Magnesium, Mg	mg/kg	2	-	-	-	-
Exchangeable Magnesium, Mg	meq/100g	0.02	-	-	-	-
Exchangeable Magnesium Percentage*	%	0.1	-	-	-	-
Cation Exchange Capacity	meq/100g	0.02	-	-	-	-

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES Method: AN040/AN320 Tested: 16/6/2023

Iron, Fe	mg/kg	50	-	-	-	-

TOC in Soil Method: AN188 Tested: 16/6/2023

Total Organic Carbon	%w/w	0.05	-	-	-	-
Organic Matter (calc)*	%w/w	0.1	-	-	-	-

Particle sizing of soils by sieving Method: AN005 Tested: 21/6/2023

Passing 75µm*	%w/w	1	-	-	-	-
Retained 75µm*	%w/w	1	-	-	-	-

Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 21/6/2023

Clay (<0.002mm)*	%w/w	0.1	-	-	-	-

Parameter	Units	LOR	Sample Number	SE247181A.025	SE247181A.026	SE247181A.027	SE247181A.028
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	04 May 2023	03 May 2023	03 May 2023	03 May 2023
			Sample Name	TP113_2	TP105_0.5	QA100	TP105_3

pH in soil (1:5) Method: AN101 Tested: 16/6/2023

pH	pH Units	0.1	-	-	-	-

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR) Method: AN122 Tested: 16/6/2023

Exchangeable Sodium, Na	mg/kg	2	-	-	-	-
Exchangeable Sodium, Na	meq/100g	0.01	-	-	-	-
Exchangeable Sodium Percentage*	%	0.1	-	-	-	-
Exchangeable Potassium, K	mg/kg	2	-	-	-	-
Exchangeable Potassium, K	meq/100g	0.01	-	-	-	-
Exchangeable Potassium Percentage*	%	0.1	-	-	-	-
Exchangeable Calcium, Ca	mg/kg	2	-	-	-	-
Exchangeable Calcium, Ca	meq/100g	0.01	-	-	-	-
Exchangeable Calcium Percentage*	%	0.1	-	-	-	-
Exchangeable Magnesium, Mg	mg/kg	2	-	-	-	-
Exchangeable Magnesium, Mg	meq/100g	0.02	-	-	-	-
Exchangeable Magnesium Percentage*	%	0.1	-	-	-	-
Cation Exchange Capacity	meq/100g	0.02	-	-	-	-

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES Method: AN040/AN320 Tested: 16/6/2023

Iron, Fe	mg/kg	50	-	-	-	-

TOC in Soil Method: AN188 Tested: 16/6/2023

Total Organic Carbon	%w/w	0.05	-	-	-	-
Organic Matter (calc)*	%w/w	0.1	-	-	-	-

Particle sizing of soils by sieving Method: AN005 Tested: 21/6/2023

Passing 75µm*	%w/w	1	-	-	-	-
Retained 75µm*	%w/w	1	-	-	-	-

Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 21/6/2023

Clay (<0.002mm)*	%w/w	0.1	-	-	-	-

Parameter	Units	LOR	Sample Number	SE247181A.029	SE247181A.030	SE247181A.031	SE247181A.032
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	03 May 2023	03 May 2023	03 May 2023	03 May 2023
			Sample Name	TP101_0.5	TP101_1.8	TP104_0.5	TP104_1

pH in soil (1:5) Method: AN101 Tested: 16/6/2023

pH	pH Units	0.1	-	-	-	-

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR) Method: AN122 Tested: 16/6/2023

Exchangeable Sodium, Na	mg/kg	2	-	-	-	-
Exchangeable Sodium, Na	meq/100g	0.01	-	-	-	-
Exchangeable Sodium Percentage*	%	0.1	-	-	-	-
Exchangeable Potassium, K	mg/kg	2	-	-	-	-
Exchangeable Potassium, K	meq/100g	0.01	-	-	-	-
Exchangeable Potassium Percentage*	%	0.1	-	-	-	-
Exchangeable Calcium, Ca	mg/kg	2	-	-	-	-
Exchangeable Calcium, Ca	meq/100g	0.01	-	-	-	-
Exchangeable Calcium Percentage*	%	0.1	-	-	-	-
Exchangeable Magnesium, Mg	mg/kg	2	-	-	-	-
Exchangeable Magnesium, Mg	meq/100g	0.02	-	-	-	-
Exchangeable Magnesium Percentage*	%	0.1	-	-	-	-
Cation Exchange Capacity	meq/100g	0.02	-	-	-	-

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES Method: AN040/AN320 Tested: 16/6/2023

Iron, Fe	mg/kg	50	-	-	-	-

TOC in Soil Method: AN188 Tested: 16/6/2023

Total Organic Carbon	%w/w	0.05	-	-	-	-
Organic Matter (calc)*	%w/w	0.1	-	-	-	-

Particle sizing of soils by sieving Method: AN005 Tested: 21/6/2023

Passing 75µm*	%w/w	1	-	-	-	-
Retained 75µm*	%w/w	1	-	-	-	-

Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 21/6/2023

Clay (<0.002mm)*	%w/w	0.1	-	-	-	-

Parameter	Units	LOR	Sample Number	SE247181A.033	SE247181A.034	SE247181A.035	SE247181A.036
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	03 May 2023	03 May 2023	03 May 2023	03 May 2023
			Sample Name	TP103_0.5	TP103_2	TP102_0.1	TP102_2

pH in soil (1:5) Method: AN101 Tested: 16/6/2023

pH	pH Units	0.1	6.3	-	-	-

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR) Method: AN122 Tested: 16/6/2023

Exchangeable Sodium, Na	mg/kg	2	32	-	-	-
Exchangeable Sodium, Na	meq/100g	0.01	0.14	-	-	-
Exchangeable Sodium Percentage*	%	0.1	2.1	-	-	-
Exchangeable Potassium, K	mg/kg	2	78	-	-	-
Exchangeable Potassium, K	meq/100g	0.01	0.20	-	-	-
Exchangeable Potassium Percentage*	%	0.1	3.0	-	-	-
Exchangeable Calcium, Ca	mg/kg	2	1200	-	-	-
Exchangeable Calcium, Ca	meq/100g	0.01	5.9	-	-	-
Exchangeable Calcium Percentage*	%	0.1	88.1	-	-	-
Exchangeable Magnesium, Mg	mg/kg	2	56	-	-	-
Exchangeable Magnesium, Mg	meq/100g	0.02	0.46	-	-	-
Exchangeable Magnesium Percentage*	%	0.1	6.8	-	-	-
Cation Exchange Capacity	meq/100g	0.02	6.7	-	-	-

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES Method: AN040/AN320 Tested: 14/6/2023

Iron, Fe	mg/kg	50	9700	-	-	-

TOC in Soil Method: AN188 Tested: 16/6/2023

Total Organic Carbon	%w/w	0.05	0.83	-	-	-
Organic Matter (calc)*	%w/w	0.1	1.4	-	-	-

Particle sizing of soils by sieving Method: AN005 Tested: 21/6/2023

Passing 75µm*	%w/w	1	37	-	-	-
Retained 75µm*	%w/w	1	63	-	-	-

Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 21/6/2023

Clay (<0.002mm)*	%w/w	0.1	8.0	-	-	-

		Sample Number	SE247181A.037	SE247181A.038
		Sample Matrix	Soil	Soil
		Sample Date	04 May 2023	04 May 2023
		Sample Name	TP110_0.1	TP110_1
Parameter	Units	LOR		

pH in soil (1:5) Method: AN101 Tested: 16/6/2023

pH	pH Units	0.1	-	-

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR) Method: AN122 Tested: 16/6/2023

Exchangeable Sodium, Na	mg/kg	2	-	-
Exchangeable Sodium, Na	meq/100g	0.01	-	-
Exchangeable Sodium Percentage*	%	0.1	-	-
Exchangeable Potassium, K	mg/kg	2	-	-
Exchangeable Potassium, K	meq/100g	0.01	-	-
Exchangeable Potassium Percentage*	%	0.1	-	-
Exchangeable Calcium, Ca	mg/kg	2	-	-
Exchangeable Calcium, Ca	meq/100g	0.01	-	-
Exchangeable Calcium Percentage*	%	0.1	-	-
Exchangeable Magnesium, Mg	mg/kg	2	-	-
Exchangeable Magnesium, Mg	meq/100g	0.02	-	-
Exchangeable Magnesium Percentage*	%	0.1	-	-
Cation Exchange Capacity	meq/100g	0.02	-	-

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES Method: AN040/AN320 Tested: 16/6/2023

Iron, Fe	mg/kg	50	-	-

TOC in Soil Method: AN188 Tested: 16/6/2023

Total Organic Carbon	%w/w	0.05	-	-
Organic Matter (calc)*	%w/w	0.1	-	-

Particle sizing of soils by sieving Method: AN005 Tested: 21/6/2023

Passing 75µm*	%w/w	1	-	-
Retained 75µm*	%w/w	1	-	-

Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 21/6/2023

Clay (<0.002mm)*	%w/w	0.1	-	-

MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR) Method: ME-(AU)-[ENV]AN122

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Exchangeable Sodium, Na	LB282572	mg/kg	2		NA
Exchangeable Sodium, Na	LB282572	meq/100g	0.01	<0.01	98%
Exchangeable Sodium Percentage*	LB282572	%	0.1	<0.1	NA
Exchangeable Potassium, K	LB282572	mg/kg	2		NA
Exchangeable Potassium, K	LB282572	meq/100g	0.01	<0.01	97%
Exchangeable Potassium Percentage*	LB282572	%	0.1	<0.1	NA
Exchangeable Calcium, Ca	LB282572	mg/kg	2		NA
Exchangeable Calcium, Ca	LB282572	meq/100g	0.01	<0.01	107%
Exchangeable Calcium Percentage*	LB282572	%	0.1	570.2	NA
Exchangeable Magnesium, Mg	LB282572	mg/kg	2		NA
Exchangeable Magnesium, Mg	LB282572	meq/100g	0.02	<0.02	83%
Exchangeable Magnesium Percentage*	LB282572	%	0.1	<0.1	NA
Cation Exchange Capacity	LB282572	meq/100g	0.02	<0.02	NA

pH in soil (1:5) Method: ME-(AU)-[ENV]AN101

Parameter	QC Reference	Units	LOR	DUP %RPD	LCS %Recovery
pH	LB282576	pH Units	0.1	1 - 3%	99%

TOC in Soil Method: ME-(AU)-[ENV]AN188

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Total Organic Carbon	LB282574	%w/w	0.05	<0.05	10%	82%	NA
Organic Matter (calc)*	LB282574	%w/w	0.1	<0.1			

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES Method: ME-(AU)-[ENV]AN040/AN320

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Iron, Fe	LB282379	mg/kg	50	<50	102%

METHOD

METHODOLOGY SUMMARY

AN005	The particle size distribution of a soil is determined by wet sieving, using a maximum of 900 mL of deionised water to sieve all fractions down to 75 µm. Referenced to AS1289.3.6.1 and AS1141.11.						
AN005	Following wet sieving of the sample,(particles smaller than 75 µm) a dispersing solution is added and a hydrometer is used to measure sedimentation. Soil density is determined and the percentage of each size fraction calculated. Referenced to AS1289.3.6.3.						
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by AAS or ICP as per USEPA Method 200.8.						
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.						
AN101	pH in Soil Sludge Sediment and Water: pH is measured electrometrically using a combination electrode and is calibrated against 3 buffers purchased commercially. For soils, sediments and sludges, an extract with water (or 0.01M CaCl ₂) is made at a ratio of 1:5 and the pH determined and reported on the extract. Reference APHA 4500-H+.						
AN122	Exchangeable Cations, CEC and ESP: Soil sample is extracted in 1 M Ammonium Acetate at pH=7 (or 1M Ammonium Chloride at pH=7) with cations (Na, K, Ca & Mg) then determined by ICP OES/ICP MS and reported as Exchangeable Cations. For saline soils, these results can be corrected for water soluble cations and reported as Exchangeable cations in meq/100g or soil can be pre-treated (aqueous ethanol/aqueous glycerol) prior to extraction. Cation Exchange Capacity (CEC) is the sum of the exchangeable cations in meq/100g.						
AN122	The Exchangeable Sodium Percentage (ESP) is calculated as the exchangeable sodium divided by the CEC (all in meq/100g) times 100. ESP can be used to categorise the sodicity of the soil as below : <table> <tr> <td>ESP < 6%</td><td>non-sodic</td></tr> <tr> <td>ESP 6-15%</td><td>sodic</td></tr> <tr> <td>ESP >15%</td><td>strongly sodic</td></tr> </table> Method is referenced to Rayment and Lyons, 2011, sections 15D3 and 15N1.-	ESP < 6%	non-sodic	ESP 6-15%	sodic	ESP >15%	strongly sodic
ESP < 6%	non-sodic						
ESP 6-15%	sodic						
ESP >15%	strongly sodic						
AN188	The organic material in the soil sample is oxidised with chromic acid in the presence of excess sulfuric acid, without external heat being applied. The excess dichromate ion is determined by titration with standard ammonium iron (II) sulfate solution and the amount of oxidised material is calculated from the quantity of dichromate reduced. Referenced to NEPM 105 and AS1289.1.1.1.						

FOOTNOTES

IS	Insufficient sample for analysis.	LOR	Limit of Reporting
LNR	Sample listed, but not received.	↑↓	Raised or Lowered Limit of Reporting
*	NATA accreditation does not cover the performance of this service.	QFH	QC result is above the upper tolerance
**	Indicative data, theoretical holding time exceeded.	QFL	QC result is below the lower tolerance
***	Indicates that both * and ** apply.	-	The sample was not analysed for this analyte
		NVL	Not Validated

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.

Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the "Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.

Note that in terms of units of radioactivity:

- 1 Bq is equivalent to 27 pCi
- 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE247181A R0

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Order Number **300304375**
Samples 38

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SGS Reference **SE247181A R0**
Date Received 14 Jun 2023
Date Reported 21 Jun 2023

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.

This QA/QC Statement must be read in conjunction with the referenced Analytical Report.

The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Extraction Date	Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)	1 item
	pH in soil (1:5)	1 item
	TOC in Soil	1 item
Analysis Date	Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)	1 item
	TOC in Soil	1 item

SAMPLE SUMMARY

Sample counts by matrix	1 Soil	Type of documentation received	Email
Date documentation received	16/5/2023@11:58an	Samples received in good order	Yes
Samples received without headspace	Yes	Sample temperature upon receipt	6.5°C
Sample container provider	SGS	Turnaround time requested	Three Days
Samples received in correct containers	Yes	Sufficient sample for analysis	Yes
Sample cooling method	Ice	Samples clearly labelled	Yes
Complete documentation received	Yes		



HOLDING TIME SUMMARY

SE247181A R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)

Method: ME-(AU)-[ENV]AN122

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP103_0.5	SE247181A.033	LB282572	03 May 2023	14 Jun 2023	31 May 2023	16 Jun 2023†	31 May 2023	16 Jun 2023†

pH in soil (1:5)

Method: ME-(AU)-[ENV]AN101

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP103_0.5	SE247181A.033	LB282576	03 May 2023	14 Jun 2023	10 May 2023	16 Jun 2023†	17 Jun 2023	16 Jun 2023

TOC in Soil

Method: ME-(AU)-[ENV]AN188

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP103_0.5	SE247181A.033	LB282574	03 May 2023	14 Jun 2023	31 May 2023	16 Jun 2023†	31 May 2023	16 Jun 2023†

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP103_0.5	SE247181A.033	LB282379	03 May 2023	14 Jun 2023	30 Oct 2023	14 Jun 2023	30 Oct 2023	16 Jun 2023



Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No surrogates were required for this job.



METHOD BLANKS

SE247181A R0

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)

Method: ME-(AU)-[ENV]AN122

Sample Number	Parameter	Units	LOR	Result
LB282572.001	Exchangeable Sodium, Na	mg/kg	2	-0.3548
	Exchangeable Potassium, K	mg/kg	2	-0.0908
	Exchangeable Calcium, Ca	mg/kg	2	0.4722
	Exchangeable Magnesium, Mg	mg/kg	2	-0.021

TOC in Soil

Method: ME-(AU)-[ENV]AN188

Sample Number	Parameter	Units	LOR	Result
LB282574.001	Total Organic Carbon	%w/w	0.05	<0.05

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result
LB282379.001	Iron, Fe	mg/kg	50	<50



DUPLICATES

SE247181A R0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: $RPD = | \text{OriginalResult} - \text{ReplicateResult} | \times 100 / \text{Mean}$

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: $MAD = 100 \times \text{SDL} / \text{Mean} + \text{LR}$

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may give a different calculated RPD.

pH in soil (1:5)

Method: ME-(AU)-ENVJAN101

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE248958.032	LB282576.024	pH	pH Units	0.1	5.7	5.8	32	1
SE249119.003	LB282576.023	pH	pH Units	0.1	8.6	8.8	31	3

TOC in Soil

Method: ME-(AU)-ENVJAN188

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE249016.010	LB282574.004	Total Organic Carbon	%w/w	0.05	0.27	0.30	48	10



LABORATORY CONTROL SAMPLES

SE247181A R0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)

Method: ME-(AU)-[ENV]AN122

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB282572.002	Exchangeable Sodium, Na	meq/100g	0.01	0.19	0.194	80 - 120	98
	Exchangeable Potassium, K	meq/100g	0.01	0.61	0.63	80 - 120	97
	Exchangeable Calcium, Ca	meq/100g	0.01	6.8	6.3	80 - 120	107
	Exchangeable Magnesium, Mg	meq/100g	0.02	0.93	1.11	80 - 120	83

pH in soil (1:5)

Method: ME-(AU)-[ENV]AN101

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB282576.003	pH	pH Units	0.1	7.4	7.415	98 - 102	99

TOC in Soil

Method: ME-(AU)-[ENV]AN188

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB282574.002	Total Organic Carbon	%w/w	0.05	0.27	0.325	80 - 120	82

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB282379.002	Iron, Fe	mg/kg	50	41000	39905	80 - 120	102



MATRIX SPIKES

SE247181A R0

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub-sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

TOC in Soil			Method: ME-(AU)-[ENV]AN188					
QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE248958.032	LB282574.014	Total Organic Carbon	%w/w	0.05	3.2	3.22833523203	-	-



MATRIX SPIKE DUPLICATES

SE247181A R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: $RPD = | \text{OriginalResult} - \text{ReplicateResult} | \times 100 / \text{Mean}$

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: $MAD = 100 \times \text{SDL} / \text{Mean} + \text{LR}$

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here : https://www.sgs.com.au/~media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022_QA_QC_Plan.pdf

- * NATA accreditation does not cover the performance of this service.
- ** Indicative data, theoretical holding time exceeded.
- *** Indicates that both * and ** apply.
- Sample not analysed for this analyte.
- IS Insufficient sample for analysis.
- LNR Sample listed, but not received.
- LOR Limit of reporting.
- QFH QC result is above the upper tolerance.
- QFL QC result is below the lower tolerance.
- ① At least 2 of 3 surrogates are within acceptance criteria.
- ② RPD failed acceptance criteria due to sample heterogeneity.
- ③ Results less than 5 times LOR preclude acceptance criteria for RPD.
- ④ Recovery failed acceptance criteria due to matrix interference.
- ⑤ Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
- ⑥ LOR was raised due to sample matrix interference.
- ⑦ LOR was raised due to dilution of significantly high concentration of analyte in sample.
- ⑧ Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
- ⑨ Recovery failed acceptance criteria due to sample heterogeneity.
- ⑩ LOR was raised due to high conductivity of the sample (required dilution).
- † Refer to relevant report comments for further information.

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 Project **300304375 Racecourse Rd**
 Order Number (Not specified)
 Samples 42

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 SGS Reference **SE247182 R0**
 Date Received 5/5/2023
 Date Reported 18/5/2023

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

No respirable fibres detected in all soil samples using trace analysis technique.

Sample #30: Chrysotile asbestos found in approx 40x30x6mm cement sheet fragment.

Sample #31: Asbestos Found only in Cement Sheet Fragments

Asbestos analysed by Approved Identifiers Ravee Sivasubramaniam and Yusuf Kuthpudin

PFAS subcontracted to SGS Melbourne, Unit 10/585 Blackburn Road Notting Hill VIC 3168, NATA Accreditation Number 2562, Site number 14420. Report R0. ME334059.

SIGNATORIES



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 Chemist



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 Senior Chemist



Dong LIANG
 Metals/Inorganics Team Leader



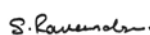
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Ravee SIVASUBRAMANIAM
 Hygiene Team Leader



Shane MCDERMOTT
 Inorganic/Metals Chemist



ANALYTICAL RESULTS

SE247182 R0

VOC's in Soil [AN433] Tested: 10/5/2023

PARAMETER	UOM	LOR	TP114_0.5	TP114_1	TP109_0.1	TP109_1.2	TP112_0.1
			SOIL - 4/5/2023 SE247182.001	SOIL - 4/5/2023 SE247182.002	SOIL - 4/5/2023 SE247182.003	SOIL - 4/5/2023 SE247182.004	SOIL - 4/5/2023 SE247182.005
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes*	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX*	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichlorodifluoromethane (CFC-12)	mg/kg	1	-	<1	-	-	<1
Chloromethane	mg/kg	1	-	<1	-	-	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	-	<0.1	-	-	<0.1
Bromomethane	mg/kg	1	-	<1	-	-	<1
Chloroethane	mg/kg	1	-	<1	-	-	<1
Trichlorofluoromethane	mg/kg	1	-	<1	-	-	<1
Acetone (2-propanone)	mg/kg	10	-	<10	-	-	<10
Iodomethane	mg/kg	5	-	<5	-	-	<5
1,1-dichloroethene	mg/kg	0.1	-	<0.1	-	-	<0.1
Acrylonitrile	mg/kg	0.1	-	<0.1	-	-	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	-	<0.5	-	-	<0.5
Allyl chloride	mg/kg	0.1	-	<0.1	-	-	<0.1
Carbon disulfide	mg/kg	0.5	-	<0.5	-	-	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	-	<0.1	-	-	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	-	<0.1	-	-	<0.1
1,1-dichloroethane	mg/kg	0.1	-	<0.1	-	-	<0.1
Vinyl acetate*	mg/kg	10	-	<10	-	-	<10
cis-1,2-dichloroethene	mg/kg	0.1	-	<0.1	-	-	<0.1
Bromochloromethane	mg/kg	0.1	-	<0.1	-	-	<0.1
Chloroform (THM)	mg/kg	0.1	-	<0.1	-	-	<0.1
2,2-dichloropropane	mg/kg	0.1	-	<0.1	-	-	<0.1
1,2-dichloroethane	mg/kg	0.1	-	<0.1	-	-	<0.1
1,1,1-trichloroethane	mg/kg	0.1	-	<0.1	-	-	<0.1
1,1-dichloropropene	mg/kg	0.1	-	<0.1	-	-	<0.1
Carbon tetrachloride	mg/kg	0.1	-	<0.1	-	-	<0.1
Dibromomethane	mg/kg	0.1	-	<0.1	-	-	<0.1
1,2-dichloropropane	mg/kg	0.1	-	<0.1	-	-	<0.1
Trichloroethene (Trichloroethylene,TCE)	mg/kg	0.1	-	<0.1	-	-	<0.1
2-nitropropane	mg/kg	10	-	<10	-	-	<10
Bromodichloromethane (THM)	mg/kg	0.1	-	<0.1	-	-	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	-	<1	-	-	<1
cis-1,3-dichloropropene	mg/kg	0.1	-	<0.1	-	-	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	-	<0.1	-	-	<0.1
1,1,2-trichloroethane	mg/kg	0.1	-	<0.1	-	-	<0.1
1,3-dichloropropane	mg/kg	0.1	-	<0.1	-	-	<0.1
Dibromochloromethane (THM)	mg/kg	0.1	-	<0.1	-	-	<0.1
2-hexanone (MBK)	mg/kg	5	-	<5	-	-	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	-	<0.1	-	-	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	-	<0.1	-	-	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	-	<0.1	-	-	<0.1
Chlorobenzene	mg/kg	0.1	-	<0.1	-	-	<0.1
Bromoform (THM)	mg/kg	0.1	-	<0.1	-	-	<0.1
Styrene (Vinyl benzene)	mg/kg	0.1	-	<0.1	-	-	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	-	<0.1	-	-	<0.1
1,2,3-trichloropropane	mg/kg	0.1	-	<0.1	-	-	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	-	<1	-	-	<1
Isopropylbenzene (Cumene)	mg/kg	0.1	-	<0.1	-	-	<0.1
Bromobenzene	mg/kg	0.1	-	<0.1	-	-	<0.1



ANALYTICAL RESULTS

SE247182 R0

VOC's in Soil [AN433] Tested: 10/5/2023 (continued)

			TP114_0.5	TP114_1	TP109_0.1	TP109_1.2	TP112_0.1
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			4/5/2023	4/5/2023	4/5/2023	4/5/2023	4/5/2023
PARAMETER	UOM	LOR	SE247182.001	SE247182.002	SE247182.003	SE247182.004	SE247182.005
n-propylbenzene	mg/kg	0.1	-	<0.1	-	-	<0.1
2-chlorotoluene	mg/kg	0.1	-	<0.1	-	-	<0.1
4-chlorotoluene	mg/kg	0.1	-	<0.1	-	-	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	-	<0.1	-	-	<0.1
tert-butylbenzene	mg/kg	0.1	-	<0.1	-	-	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	-	<0.1	-	-	<0.1
sec-butylbenzene	mg/kg	0.1	-	<0.1	-	-	<0.1
1,3-dichlorobenzene	mg/kg	0.1	-	<0.1	-	-	<0.1
1,4-dichlorobenzene	mg/kg	0.1	-	<0.1	-	-	<0.1
p-isopropyltoluene	mg/kg	0.1	-	<0.1	-	-	<0.1
1,2-dichlorobenzene	mg/kg	0.1	-	<0.1	-	-	<0.1
n-butylbenzene	mg/kg	0.1	-	<0.1	-	-	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	-	<0.1	-	-	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	-	<0.1	-	-	<0.1
Hexachlorobutadiene	mg/kg	0.1	-	<0.1	-	-	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	-	<0.1	-	-	<0.1
Total VOC*	mg/kg	24	-	<24	-	-	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	-	<3.0	-	-	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	-	<1.8	-	-	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	-	<1.8	-	-	<1.8



ANALYTICAL RESULTS

SE247182 R0

VOC's in Soil [AN433] Tested: 10/5/2023 (continued)

PARAMETER	UOM	LOR	TP112_1	TP136_0.1	TP136_0.5	TP111_0.5	TP111_2.5
			SOIL - 4/5/2023 SE247182.006	SOIL - 4/5/2023 SE247182.007	SOIL - 4/5/2023 SE247182.008	SOIL - 4/5/2023 SE247182.009	SOIL - 4/5/2023 SE247182.010
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes*	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX*	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichlorodifluoromethane (CFC-12)	mg/kg	1	-	<1	-	<1	<1
Chloromethane	mg/kg	1	-	<1	-	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	-	<0.1	-	<0.1	<0.1
Bromomethane	mg/kg	1	-	<1	-	<1	<1
Chloroethane	mg/kg	1	-	<1	-	<1	<1
Trichlorofluoromethane	mg/kg	1	-	<1	-	<1	<1
Acetone (2-propanone)	mg/kg	10	-	<10	-	<10	<10
Iodomethane	mg/kg	5	-	<5	-	<5	<5
1,1-dichloroethene	mg/kg	0.1	-	<0.1	-	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	-	<0.1	-	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	-	<0.5	-	<0.5	<0.5
Allyl chloride	mg/kg	0.1	-	<0.1	-	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	-	<0.5	-	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	-	<0.1	-	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	-	<0.1	-	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	-	<0.1	-	<0.1	<0.1
Vinyl acetate*	mg/kg	10	-	<10	-	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	-	<0.1	-	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	-	<0.1	-	<0.1	<0.1
Chloroform (THM)	mg/kg	0.1	-	<0.1	-	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	-	<0.1	-	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	-	<0.1	-	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	-	<0.1	-	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	-	<0.1	-	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	-	<0.1	-	<0.1	<0.1
Dibromomethane	mg/kg	0.1	-	<0.1	-	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	-	<0.1	-	<0.1	<0.1
Trichloroethene (Trichloroethylene, TCE)	mg/kg	0.1	-	<0.1	-	<0.1	<0.1
2-nitropropane	mg/kg	10	-	<10	-	<10	<10
Bromodichloromethane (THM)	mg/kg	0.1	-	<0.1	-	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	-	<1	-	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	-	<0.1	-	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	-	<0.1	-	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	-	<0.1	-	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	-	<0.1	-	<0.1	<0.1
Dibromochloromethane (THM)	mg/kg	0.1	-	<0.1	-	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	-	<5	-	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	-	<0.1	-	<0.1	<0.1
Tetrachloroethene (Perchloroethylene, PCE)	mg/kg	0.1	-	<0.1	-	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	-	<0.1	-	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	-	<0.1	-	<0.1	<0.1
Bromoform (THM)	mg/kg	0.1	-	<0.1	-	<0.1	<0.1
Styrene (Vinyl benzene)	mg/kg	0.1	-	<0.1	-	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	-	<0.1	-	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	-	<0.1	-	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	-	<1	-	<1	<1
Isopropylbenzene (Cumene)	mg/kg	0.1	-	<0.1	-	<0.1	<0.1
Bromobenzene	mg/kg	0.1	-	<0.1	-	<0.1	<0.1



ANALYTICAL RESULTS

SE247182 R0

VOC's in Soil [AN433] Tested: 10/5/2023 (continued)

PARAMETER	UOM	LOR	TP112_1	TP136_0.1	TP136_0.5	TP111_0.5	TP111_2.5
			SOIL	SOIL	SOIL	SOIL	SOIL
			4/5/2023 SE247182.006	4/5/2023 SE247182.007	4/5/2023 SE247182.008	4/5/2023 SE247182.009	4/5/2023 SE247182.010
n-propylbenzene	mg/kg	0.1	-	<0.1	-	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	-	<0.1	-	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	-	<0.1	-	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	-	<0.1	-	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	-	<0.1	-	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	-	<0.1	-	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	-	<0.1	-	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	-	<0.1	-	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	-	<0.1	-	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	-	<0.1	-	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	-	<0.1	-	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	-	<0.1	-	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	-	<0.1	-	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	-	<0.1	-	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	-	<0.1	-	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	-	<0.1	-	<0.1	<0.1
Total VOC*	mg/kg	24	-	<24	-	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	-	<3.0	-	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	-	<1.8	-	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	-	<1.8	-	<1.8	<1.8



ANALYTICAL RESULTS

SE247182 R0

VOC's in Soil [AN433] Tested: 10/5/2023 (continued)

PARAMETER	UOM	LOR	TP116_0.1	QA400	TP116_2	TP117_0.1	TP117_1
			SOIL - 5/5/2023 SE247182.011	SOIL - 5/5/2023 SE247182.012	SOIL - 5/5/2023 SE247182.013	SOIL - 5/5/2023 SE247182.014	SOIL - 5/5/2023 SE247182.015
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes*	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX*	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichlorodifluoromethane (CFC-12)	mg/kg	1	-	-	-	-	-
Chloromethane	mg/kg	1	-	-	-	-	-
Vinyl chloride (Chloroethene)	mg/kg	0.1	-	-	-	-	-
Bromomethane	mg/kg	1	-	-	-	-	-
Chloroethane	mg/kg	1	-	-	-	-	-
Trichlorofluoromethane	mg/kg	1	-	-	-	-	-
Acetone (2-propanone)	mg/kg	10	-	-	-	-	-
Iodomethane	mg/kg	5	-	-	-	-	-
1,1-dichloroethene	mg/kg	0.1	-	-	-	-	-
Acrylonitrile	mg/kg	0.1	-	-	-	-	-
Dichloromethane (Methylene chloride)	mg/kg	0.5	-	-	-	-	-
Allyl chloride	mg/kg	0.1	-	-	-	-	-
Carbon disulfide	mg/kg	0.5	-	-	-	-	-
trans-1,2-dichloroethene	mg/kg	0.1	-	-	-	-	-
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	-	-	-	-	-
1,1-dichloroethane	mg/kg	0.1	-	-	-	-	-
Vinyl acetate*	mg/kg	10	-	-	-	-	-
cis-1,2-dichloroethene	mg/kg	0.1	-	-	-	-	-
Bromochloromethane	mg/kg	0.1	-	-	-	-	-
Chloroform (THM)	mg/kg	0.1	-	-	-	-	-
2,2-dichloropropane	mg/kg	0.1	-	-	-	-	-
1,2-dichloroethane	mg/kg	0.1	-	-	-	-	-
1,1,1-trichloroethane	mg/kg	0.1	-	-	-	-	-
1,1-dichloropropene	mg/kg	0.1	-	-	-	-	-
Carbon tetrachloride	mg/kg	0.1	-	-	-	-	-
Dibromomethane	mg/kg	0.1	-	-	-	-	-
1,2-dichloropropane	mg/kg	0.1	-	-	-	-	-
Trichloroethene (Trichloroethylene,TCE)	mg/kg	0.1	-	-	-	-	-
2-nitropropane	mg/kg	10	-	-	-	-	-
Bromodichloromethane (THM)	mg/kg	0.1	-	-	-	-	-
MIBK (4-methyl-2-pentanone)	mg/kg	1	-	-	-	-	-
cis-1,3-dichloropropene	mg/kg	0.1	-	-	-	-	-
trans-1,3-dichloropropene	mg/kg	0.1	-	-	-	-	-
1,1,2-trichloroethane	mg/kg	0.1	-	-	-	-	-
1,3-dichloropropane	mg/kg	0.1	-	-	-	-	-
Dibromochloromethane (THM)	mg/kg	0.1	-	-	-	-	-
2-hexanone (MBK)	mg/kg	5	-	-	-	-	-
1,2-dibromoethane (EDB)	mg/kg	0.1	-	-	-	-	-
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	-	-	-	-	-
1,1,1,2-tetrachloroethane	mg/kg	0.1	-	-	-	-	-
Chlorobenzene	mg/kg	0.1	-	-	-	-	-
Bromoform (THM)	mg/kg	0.1	-	-	-	-	-
Styrene (Vinyl benzene)	mg/kg	0.1	-	-	-	-	-
1,1,2,2-tetrachloroethane	mg/kg	0.1	-	-	-	-	-
1,2,3-trichloropropane	mg/kg	0.1	-	-	-	-	-
trans-1,4-dichloro-2-butene	mg/kg	1	-	-	-	-	-
Isopropylbenzene (Cumene)	mg/kg	0.1	-	-	-	-	-
Bromobenzene	mg/kg	0.1	-	-	-	-	-



ANALYTICAL RESULTS

SE247182 R0

VOC's in Soil [AN433] Tested: 10/5/2023 (continued)

			TP116_0.1	QA400	TP116_2	TP117_0.1	TP117_1
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			5/5/2023	5/5/2023	5/5/2023	5/5/2023	5/5/2023
PARAMETER	UOM	LOR	SE247182.011	SE247182.012	SE247182.013	SE247182.014	SE247182.015
n-propylbenzene	mg/kg	0.1	-	-	-	-	-
2-chlorotoluene	mg/kg	0.1	-	-	-	-	-
4-chlorotoluene	mg/kg	0.1	-	-	-	-	-
1,3,5-trimethylbenzene	mg/kg	0.1	-	-	-	-	-
tert-butylbenzene	mg/kg	0.1	-	-	-	-	-
1,2,4-trimethylbenzene	mg/kg	0.1	-	-	-	-	-
sec-butylbenzene	mg/kg	0.1	-	-	-	-	-
1,3-dichlorobenzene	mg/kg	0.1	-	-	-	-	-
1,4-dichlorobenzene	mg/kg	0.1	-	-	-	-	-
p-isopropyltoluene	mg/kg	0.1	-	-	-	-	-
1,2-dichlorobenzene	mg/kg	0.1	-	-	-	-	-
n-butylbenzene	mg/kg	0.1	-	-	-	-	-
1,2-dibromo-3-chloropropane	mg/kg	0.1	-	-	-	-	-
1,2,4-trichlorobenzene	mg/kg	0.1	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	-	-	-	-	-
1,2,3-trichlorobenzene	mg/kg	0.1	-	-	-	-	-
Total VOC*	mg/kg	24	-	-	-	-	-
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	-	-	-	-	-
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	-	-	-	-	-
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	-	-	-	-	-



ANALYTICAL RESULTS

SE247182 R0

VOC's in Soil [AN433] Tested: 10/5/2023 (continued)

PARAMETER	UOM	LOR	TP119_0.1	TP119_0.5	TP120_0.1	TP120_0.5	QA500
			SOIL - 5/5/2023 SE247182.016	SOIL - 5/5/2023 SE247182.017	SOIL - 5/5/2023 SE247182.018	SOIL - 5/5/2023 SE247182.019	SOIL - 5/5/2023 SE247182.020
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes*	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX*	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	-	-	-	-
Chloromethane	mg/kg	1	<1	-	-	-	-
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	-	-	-	-
Bromomethane	mg/kg	1	<1	-	-	-	-
Chloroethane	mg/kg	1	<1	-	-	-	-
Trichlorofluoromethane	mg/kg	1	<1	-	-	-	-
Acetone (2-propanone)	mg/kg	10	<10	-	-	-	-
Iodomethane	mg/kg	5	<5	-	-	-	-
1,1-dichloroethene	mg/kg	0.1	<0.1	-	-	-	-
Acrylonitrile	mg/kg	0.1	<0.1	-	-	-	-
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	-	-	-	-
Allyl chloride	mg/kg	0.1	<0.1	-	-	-	-
Carbon disulfide	mg/kg	0.5	<0.5	-	-	-	-
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	-	-	-	-
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	-	-	-	-
1,1-dichloroethane	mg/kg	0.1	<0.1	-	-	-	-
Vinyl acetate*	mg/kg	10	<10	-	-	-	-
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	-	-	-	-
Bromochloromethane	mg/kg	0.1	<0.1	-	-	-	-
Chloroform (THM)	mg/kg	0.1	<0.1	-	-	-	-
2,2-dichloropropane	mg/kg	0.1	<0.1	-	-	-	-
1,2-dichloroethane	mg/kg	0.1	<0.1	-	-	-	-
1,1,1-trichloroethane	mg/kg	0.1	<0.1	-	-	-	-
1,1-dichloropropene	mg/kg	0.1	<0.1	-	-	-	-
Carbon tetrachloride	mg/kg	0.1	<0.1	-	-	-	-
Dibromomethane	mg/kg	0.1	<0.1	-	-	-	-
1,2-dichloropropane	mg/kg	0.1	<0.1	-	-	-	-
Trichloroethene (Trichloroethylene, TCE)	mg/kg	0.1	<0.1	-	-	-	-
2-nitropropane	mg/kg	10	<10	-	-	-	-
Bromodichloromethane (THM)	mg/kg	0.1	<0.1	-	-	-	-
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	-	-	-	-
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	-	-	-	-
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	-	-	-	-
1,1,2-trichloroethane	mg/kg	0.1	<0.1	-	-	-	-
1,3-dichloropropane	mg/kg	0.1	<0.1	-	-	-	-
Dibromochloromethane (THM)	mg/kg	0.1	<0.1	-	-	-	-
2-hexanone (MBK)	mg/kg	5	<5	-	-	-	-
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	-	-	-	-
Tetrachloroethene (Perchloroethylene, PCE)	mg/kg	0.1	<0.1	-	-	-	-
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	-	-	-	-
Chlorobenzene	mg/kg	0.1	<0.1	-	-	-	-
Bromoform (THM)	mg/kg	0.1	<0.1	-	-	-	-
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	-	-	-	-
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	-	-	-	-
1,2,3-trichloropropane	mg/kg	0.1	<0.1	-	-	-	-
trans-1,4-dichloro-2-butene	mg/kg	1	<1	-	-	-	-
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	-	-	-	-
Bromobenzene	mg/kg	0.1	<0.1	-	-	-	-



ANALYTICAL RESULTS

SE247182 R0

VOC's in Soil [AN433] Tested: 10/5/2023 (continued)

			TP119_0.1	TP119_0.5	TP120_0.1	TP120_0.5	QA500
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			5/5/2023	5/5/2023	5/5/2023	5/5/2023	5/5/2023
PARAMETER	UOM	LOR	SE247182.016	SE247182.017	SE247182.018	SE247182.019	SE247182.020
n-propylbenzene	mg/kg	0.1	<0.1	-	-	-	-
2-chlorotoluene	mg/kg	0.1	<0.1	-	-	-	-
4-chlorotoluene	mg/kg	0.1	<0.1	-	-	-	-
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	-	-	-	-
tert-butylbenzene	mg/kg	0.1	<0.1	-	-	-	-
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	-	-	-	-
sec-butylbenzene	mg/kg	0.1	<0.1	-	-	-	-
1,3-dichlorobenzene	mg/kg	0.1	<0.1	-	-	-	-
1,4-dichlorobenzene	mg/kg	0.1	<0.1	-	-	-	-
p-isopropyltoluene	mg/kg	0.1	<0.1	-	-	-	-
1,2-dichlorobenzene	mg/kg	0.1	<0.1	-	-	-	-
n-butylbenzene	mg/kg	0.1	<0.1	-	-	-	-
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	-	-	-	-
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	<0.1	-	-	-	-
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	-	-	-	-
Total VOC*	mg/kg	24	<24	-	-	-	-
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	-	-	-	-
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	-	-	-	-
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	-	-	-	-



ANALYTICAL RESULTS

SE247182 R0

VOC's in Soil [AN433] Tested: 10/5/2023 (continued)

PARAMETER	UOM	LOR	TP121_0.3	TP121_0.7	TP122_0.1	TP122_1	TP123_0.1
			SOIL - 5/5/2023 SE247182.021	SOIL - 5/5/2023 SE247182.022	SOIL - 5/5/2023 SE247182.023	SOIL - 5/5/2023 SE247182.024	SOIL - 5/5/2023 SE247182.025
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes*	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX*	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	-	-	-	<1
Chloromethane	mg/kg	1	<1	-	-	-	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	-	-	-	<0.1
Bromomethane	mg/kg	1	<1	-	-	-	<1
Chloroethane	mg/kg	1	<1	-	-	-	<1
Trichlorofluoromethane	mg/kg	1	<1	-	-	-	<1
Acetone (2-propanone)	mg/kg	10	<10	-	-	-	<10
Iodomethane	mg/kg	5	<5	-	-	-	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	-	-	-	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	-	-	-	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	-	-	-	<0.5
Allyl chloride	mg/kg	0.1	<0.1	-	-	-	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	-	-	-	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	-	-	-	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	-	-	-	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	-	-	-	<0.1
Vinyl acetate*	mg/kg	10	<10	-	-	-	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	-	-	-	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	-	-	-	<0.1
Chloroform (THM)	mg/kg	0.1	<0.1	-	-	-	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	-	-	-	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	-	-	-	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	-	-	-	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	-	-	-	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	-	-	-	<0.1
Dibromomethane	mg/kg	0.1	<0.1	-	-	-	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	-	-	-	<0.1
Trichloroethene (Trichloroethylene,TCE)	mg/kg	0.1	<0.1	-	-	-	<0.1
2-nitropropane	mg/kg	10	<10	-	-	-	<10
Bromodichloromethane (THM)	mg/kg	0.1	<0.1	-	-	-	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	-	-	-	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	-	-	-	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	-	-	-	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	-	-	-	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	-	-	-	<0.1
Dibromochloromethane (THM)	mg/kg	0.1	<0.1	-	-	-	<0.1
2-hexanone (MBK)	mg/kg	5	<5	-	-	-	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	-	-	-	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	-	-	-	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	-	-	-	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	-	-	-	<0.1
Bromoform (THM)	mg/kg	0.1	<0.1	-	-	-	<0.1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	-	-	-	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	-	-	-	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	-	-	-	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	-	-	-	<1
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	-	-	-	<0.1
Bromobenzene	mg/kg	0.1	<0.1	-	-	-	<0.1



ANALYTICAL RESULTS

SE247182 R0

VOC's in Soil [AN433] Tested: 10/5/2023 (continued)

PARAMETER	UOM	LOR	TP121_0.3	TP121_0.7	TP122_0.1	TP122_1	TP123_0.1
			SOIL	SOIL	SOIL	SOIL	SOIL
			5/5/2023 SE247182.021	5/5/2023 SE247182.022	5/5/2023 SE247182.023	5/5/2023 SE247182.024	5/5/2023 SE247182.025
n-propylbenzene	mg/kg	0.1	<0.1	-	-	-	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	-	-	-	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	-	-	-	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	-	-	-	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	-	-	-	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	-	-	-	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	-	-	-	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	-	-	-	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	-	-	-	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	-	-	-	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	-	-	-	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	-	-	-	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	-	-	-	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	-	-	-	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	-	-	-	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	-	-	-	<0.1
Total VOC*	mg/kg	24	<24	-	-	-	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	-	-	-	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	-	-	-	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	-	-	-	<1.8



ANALYTICAL RESULTS

SE247182 R0

VOC's in Soil [AN433] Tested: 10/5/2023 (continued)

PARAMETER	UOM	LOR	QA700	TP123_1	TP124_0.1	TP124_1	TP125_0.1
			SOIL - 5/5/2023 SE247182.026	SOIL - 5/5/2023 SE247182.027	SOIL - 5/5/2023 SE247182.028	SOIL - 5/5/2023 SE247182.029	SOIL - 5/5/2023 SE247182.030
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes*	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX*	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichlorodifluoromethane (CFC-12)	mg/kg	1	-	-	-	-	<1
Chloromethane	mg/kg	1	-	-	-	-	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	-	-	-	-	<0.1
Bromomethane	mg/kg	1	-	-	-	-	<1
Chloroethane	mg/kg	1	-	-	-	-	<1
Trichlorofluoromethane	mg/kg	1	-	-	-	-	<1
Acetone (2-propanone)	mg/kg	10	-	-	-	-	<10
Iodomethane	mg/kg	5	-	-	-	-	<5
1,1-dichloroethene	mg/kg	0.1	-	-	-	-	<0.1
Acrylonitrile	mg/kg	0.1	-	-	-	-	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	-	-	-	-	<0.5
Allyl chloride	mg/kg	0.1	-	-	-	-	<0.1
Carbon disulfide	mg/kg	0.5	-	-	-	-	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	-	-	-	-	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	-	-	-	-	<0.1
1,1-dichloroethane	mg/kg	0.1	-	-	-	-	<0.1
Vinyl acetate*	mg/kg	10	-	-	-	-	<10
cis-1,2-dichloroethene	mg/kg	0.1	-	-	-	-	<0.1
Bromochloromethane	mg/kg	0.1	-	-	-	-	<0.1
Chloroform (THM)	mg/kg	0.1	-	-	-	-	<0.1
2,2-dichloropropane	mg/kg	0.1	-	-	-	-	<0.1
1,2-dichloroethane	mg/kg	0.1	-	-	-	-	<0.1
1,1,1-trichloroethane	mg/kg	0.1	-	-	-	-	<0.1
1,1-dichloropropene	mg/kg	0.1	-	-	-	-	<0.1
Carbon tetrachloride	mg/kg	0.1	-	-	-	-	<0.1
Dibromomethane	mg/kg	0.1	-	-	-	-	<0.1
1,2-dichloropropane	mg/kg	0.1	-	-	-	-	<0.1
Trichloroethene (Trichloroethylene, TCE)	mg/kg	0.1	-	-	-	-	<0.1
2-nitropropane	mg/kg	10	-	-	-	-	<10
Bromodichloromethane (THM)	mg/kg	0.1	-	-	-	-	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	-	-	-	-	<1
cis-1,3-dichloropropene	mg/kg	0.1	-	-	-	-	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	-	-	-	-	<0.1
1,1,2-trichloroethane	mg/kg	0.1	-	-	-	-	<0.1
1,3-dichloropropane	mg/kg	0.1	-	-	-	-	<0.1
Dibromochloromethane (THM)	mg/kg	0.1	-	-	-	-	<0.1
2-hexanone (MBK)	mg/kg	5	-	-	-	-	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	-	-	-	-	<0.1
Tetrachloroethene (Perchloroethylene, PCE)	mg/kg	0.1	-	-	-	-	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	-	-	-	-	<0.1
Chlorobenzene	mg/kg	0.1	-	-	-	-	<0.1
Bromoform (THM)	mg/kg	0.1	-	-	-	-	<0.1
Styrene (Vinyl benzene)	mg/kg	0.1	-	-	-	-	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	-	-	-	-	<0.1
1,2,3-trichloropropane	mg/kg	0.1	-	-	-	-	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	-	-	-	-	<1
Isopropylbenzene (Cumene)	mg/kg	0.1	-	-	-	-	<0.1
Bromobenzene	mg/kg	0.1	-	-	-	-	<0.1



ANALYTICAL RESULTS

SE247182 R0

VOC's in Soil [AN433] Tested: 10/5/2023 (continued)

PARAMETER	UOM	LOR	QA700	TP123_1	TP124_0.1	TP124_1	TP125_0.1
			SOIL - 5/5/2023 SE247182.026	SOIL - 5/5/2023 SE247182.027	SOIL - 5/5/2023 SE247182.028	SOIL - 5/5/2023 SE247182.029	SOIL - 5/5/2023 SE247182.030
n-propylbenzene	mg/kg	0.1	-	-	-	-	<0.1
2-chlorotoluene	mg/kg	0.1	-	-	-	-	<0.1
4-chlorotoluene	mg/kg	0.1	-	-	-	-	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	-	-	-	-	<0.1
tert-butylbenzene	mg/kg	0.1	-	-	-	-	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	-	-	-	-	<0.1
sec-butylbenzene	mg/kg	0.1	-	-	-	-	<0.1
1,3-dichlorobenzene	mg/kg	0.1	-	-	-	-	<0.1
1,4-dichlorobenzene	mg/kg	0.1	-	-	-	-	<0.1
p-isopropyltoluene	mg/kg	0.1	-	-	-	-	<0.1
1,2-dichlorobenzene	mg/kg	0.1	-	-	-	-	<0.1
n-butylbenzene	mg/kg	0.1	-	-	-	-	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	-	-	-	-	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	-	-	-	-	<0.1
Hexachlorobutadiene	mg/kg	0.1	-	-	-	-	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	-	-	-	-	<0.1
Total VOC*	mg/kg	24	-	-	-	-	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	-	-	-	-	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	-	-	-	-	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	-	-	-	-	<1.8



ANALYTICAL RESULTS

SE247182 R0

VOC's in Soil [AN433] Tested: 10/5/2023 (continued)

PARAMETER	UOM	LOR	TP125_1.2	TP125_1.8	TP126_0.2	TP126_0.6	TP127_0.2
			SOIL - 5/5/2023 SE247182.032	SOIL - 5/5/2023 SE247182.033	SOIL - 5/5/2023 SE247182.034	SOIL - 5/5/2023 SE247182.035	SOIL - 5/5/2023 SE247182.036
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes*	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX*	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	-	<1	-	-
Chloromethane	mg/kg	1	<1	-	<1	-	-
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	-	<0.1	-	-
Bromomethane	mg/kg	1	<1	-	<1	-	-
Chloroethane	mg/kg	1	<1	-	<1	-	-
Trichlorofluoromethane	mg/kg	1	<1	-	<1	-	-
Acetone (2-propanone)	mg/kg	10	<10	-	<10	-	-
Iodomethane	mg/kg	5	<5	-	<5	-	-
1,1-dichloroethene	mg/kg	0.1	<0.1	-	<0.1	-	-
Acrylonitrile	mg/kg	0.1	<0.1	-	<0.1	-	-
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	-	<0.5	-	-
Allyl chloride	mg/kg	0.1	<0.1	-	<0.1	-	-
Carbon disulfide	mg/kg	0.5	<0.5	-	<0.5	-	-
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	-	<0.1	-	-
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	-	<0.1	-	-
1,1-dichloroethane	mg/kg	0.1	<0.1	-	<0.1	-	-
Vinyl acetate*	mg/kg	10	<10	-	<10	-	-
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	-	<0.1	-	-
Bromochloromethane	mg/kg	0.1	<0.1	-	<0.1	-	-
Chloroform (THM)	mg/kg	0.1	<0.1	-	<0.1	-	-
2,2-dichloropropane	mg/kg	0.1	<0.1	-	<0.1	-	-
1,2-dichloroethane	mg/kg	0.1	<0.1	-	<0.1	-	-
1,1,1-trichloroethane	mg/kg	0.1	<0.1	-	<0.1	-	-
1,1-dichloropropene	mg/kg	0.1	<0.1	-	<0.1	-	-
Carbon tetrachloride	mg/kg	0.1	<0.1	-	<0.1	-	-
Dibromomethane	mg/kg	0.1	<0.1	-	<0.1	-	-
1,2-dichloropropane	mg/kg	0.1	<0.1	-	<0.1	-	-
Trichloroethene (Trichloroethylene, TCE)	mg/kg	0.1	<0.1	-	<0.1	-	-
2-nitropropane	mg/kg	10	<10	-	<10	-	-
Bromodichloromethane (THM)	mg/kg	0.1	<0.1	-	<0.1	-	-
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	-	<1	-	-
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	-	<0.1	-	-
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	-	<0.1	-	-
1,1,2-trichloroethane	mg/kg	0.1	<0.1	-	<0.1	-	-
1,3-dichloropropane	mg/kg	0.1	<0.1	-	<0.1	-	-
Dibromochloromethane (THM)	mg/kg	0.1	<0.1	-	<0.1	-	-
2-hexanone (MBK)	mg/kg	5	<5	-	<5	-	-
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	-	<0.1	-	-
Tetrachloroethene (Perchloroethylene, PCE)	mg/kg	0.1	<0.1	-	<0.1	-	-
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	-	<0.1	-	-
Chlorobenzene	mg/kg	0.1	<0.1	-	<0.1	-	-
Bromoform (THM)	mg/kg	0.1	<0.1	-	<0.1	-	-
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	-	<0.1	-	-
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	-	<0.1	-	-
1,2,3-trichloropropane	mg/kg	0.1	<0.1	-	<0.1	-	-
trans-1,4-dichloro-2-butene	mg/kg	1	<1	-	<1	-	-
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	-	<0.1	-	-
Bromobenzene	mg/kg	0.1	<0.1	-	<0.1	-	-



ANALYTICAL RESULTS

SE247182 R0

VOC's in Soil [AN433] Tested: 10/5/2023 (continued)

PARAMETER	UOM	LOR	TP125_1.2	TP125_1.8	TP126_0.2	TP126_0.6	TP127_0.2
			SOIL	SOIL	SOIL	SOIL	SOIL
			5/5/2023 SE247182.032	5/5/2023 SE247182.033	5/5/2023 SE247182.034	5/5/2023 SE247182.035	5/5/2023 SE247182.036
n-propylbenzene	mg/kg	0.1	<0.1	-	<0.1	-	-
2-chlorotoluene	mg/kg	0.1	<0.1	-	<0.1	-	-
4-chlorotoluene	mg/kg	0.1	<0.1	-	<0.1	-	-
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	-	<0.1	-	-
tert-butylbenzene	mg/kg	0.1	<0.1	-	<0.1	-	-
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	-	<0.1	-	-
sec-butylbenzene	mg/kg	0.1	<0.1	-	<0.1	-	-
1,3-dichlorobenzene	mg/kg	0.1	<0.1	-	<0.1	-	-
1,4-dichlorobenzene	mg/kg	0.1	<0.1	-	<0.1	-	-
p-isopropyltoluene	mg/kg	0.1	<0.1	-	<0.1	-	-
1,2-dichlorobenzene	mg/kg	0.1	<0.1	-	<0.1	-	-
n-butylbenzene	mg/kg	0.1	<0.1	-	<0.1	-	-
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	-	<0.1	-	-
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	-	<0.1	-	-
Hexachlorobutadiene	mg/kg	0.1	<0.1	-	<0.1	-	-
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	-	<0.1	-	-
Total VOC*	mg/kg	24	<24	-	<24	-	-
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	-	<3.0	-	-
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	-	<1.8	-	-
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	-	<1.8	-	-



ANALYTICAL RESULTS

SE247182 R0

VOC's in Soil [AN433] Tested: 10/5/2023 (continued)

PARAMETER	UOM	LOR	TP127_1	TP128_0.1	TP128_0.5	TP132_0.1	TP132_1
			SOIL - 5/5/2023 SE247182.037	SOIL - 5/5/2023 SE247182.038	SOIL - 5/5/2023 SE247182.039	SOIL - 5/5/2023 SE247182.040	SOIL - 5/5/2023 SE247182.041
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes*	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX*	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichlorodifluoromethane (CFC-12)	mg/kg	1	-	<1	-	<1	-
Chloromethane	mg/kg	1	-	<1	-	<1	-
Vinyl chloride (Chloroethene)	mg/kg	0.1	-	<0.1	-	<0.1	-
Bromomethane	mg/kg	1	-	<1	-	<1	-
Chloroethane	mg/kg	1	-	<1	-	<1	-
Trichlorofluoromethane	mg/kg	1	-	<1	-	<1	-
Acetone (2-propanone)	mg/kg	10	-	<10	-	<10	-
Iodomethane	mg/kg	5	-	<5	-	<5	-
1,1-dichloroethene	mg/kg	0.1	-	<0.1	-	<0.1	-
Acrylonitrile	mg/kg	0.1	-	<0.1	-	<0.1	-
Dichloromethane (Methylene chloride)	mg/kg	0.5	-	<0.5	-	<0.5	-
Allyl chloride	mg/kg	0.1	-	<0.1	-	<0.1	-
Carbon disulfide	mg/kg	0.5	-	<0.5	-	<0.5	-
trans-1,2-dichloroethene	mg/kg	0.1	-	<0.1	-	<0.1	-
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	-	<0.1	-	<0.1	-
1,1-dichloroethane	mg/kg	0.1	-	<0.1	-	<0.1	-
Vinyl acetate*	mg/kg	10	-	<10	-	<10	-
cis-1,2-dichloroethene	mg/kg	0.1	-	<0.1	-	<0.1	-
Bromochloromethane	mg/kg	0.1	-	<0.1	-	<0.1	-
Chloroform (THM)	mg/kg	0.1	-	<0.1	-	<0.1	-
2,2-dichloropropane	mg/kg	0.1	-	<0.1	-	<0.1	-
1,2-dichloroethane	mg/kg	0.1	-	<0.1	-	<0.1	-
1,1,1-trichloroethane	mg/kg	0.1	-	<0.1	-	<0.1	-
1,1-dichloropropene	mg/kg	0.1	-	<0.1	-	<0.1	-
Carbon tetrachloride	mg/kg	0.1	-	<0.1	-	<0.1	-
Dibromomethane	mg/kg	0.1	-	<0.1	-	<0.1	-
1,2-dichloropropane	mg/kg	0.1	-	<0.1	-	<0.1	-
Trichloroethene (Trichloroethylene, TCE)	mg/kg	0.1	-	<0.1	-	<0.1	-
2-nitropropane	mg/kg	10	-	<10	-	<10	-
Bromodichloromethane (THM)	mg/kg	0.1	-	<0.1	-	<0.1	-
MIBK (4-methyl-2-pentanone)	mg/kg	1	-	<1	-	<1	-
cis-1,3-dichloropropene	mg/kg	0.1	-	<0.1	-	<0.1	-
trans-1,3-dichloropropene	mg/kg	0.1	-	<0.1	-	<0.1	-
1,1,2-trichloroethane	mg/kg	0.1	-	<0.1	-	<0.1	-
1,3-dichloropropane	mg/kg	0.1	-	<0.1	-	<0.1	-
Dibromochloromethane (THM)	mg/kg	0.1	-	<0.1	-	<0.1	-
2-hexanone (MBK)	mg/kg	5	-	<5	-	<5	-
1,2-dibromoethane (EDB)	mg/kg	0.1	-	<0.1	-	<0.1	-
Tetrachloroethene (Perchloroethylene, PCE)	mg/kg	0.1	-	<0.1	-	<0.1	-
1,1,1,2-tetrachloroethane	mg/kg	0.1	-	<0.1	-	<0.1	-
Chlorobenzene	mg/kg	0.1	-	<0.1	-	<0.1	-
Bromoform (THM)	mg/kg	0.1	-	<0.1	-	<0.1	-
Styrene (Vinyl benzene)	mg/kg	0.1	-	<0.1	-	<0.1	-
1,1,2,2-tetrachloroethane	mg/kg	0.1	-	<0.1	-	<0.1	-
1,2,3-trichloropropane	mg/kg	0.1	-	<0.1	-	<0.1	-
trans-1,4-dichloro-2-butene	mg/kg	1	-	<1	-	<1	-
Isopropylbenzene (Cumene)	mg/kg	0.1	-	<0.1	-	<0.1	-
Bromobenzene	mg/kg	0.1	-	<0.1	-	<0.1	-



ANALYTICAL RESULTS

SE247182 R0

VOC's in Soil [AN433] Tested: 10/5/2023 (continued)

			TP127_1	TP128_0.1	TP128_0.5	TP132_0.1	TP132_1
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			5/5/2023	5/5/2023	5/5/2023	5/5/2023	5/5/2023
PARAMETER	UOM	LOR	SE247182.037	SE247182.038	SE247182.039	SE247182.040	SE247182.041
n-propylbenzene	mg/kg	0.1	-	<0.1	-	<0.1	-
2-chlorotoluene	mg/kg	0.1	-	<0.1	-	<0.1	-
4-chlorotoluene	mg/kg	0.1	-	<0.1	-	<0.1	-
1,3,5-trimethylbenzene	mg/kg	0.1	-	<0.1	-	<0.1	-
tert-butylbenzene	mg/kg	0.1	-	<0.1	-	<0.1	-
1,2,4-trimethylbenzene	mg/kg	0.1	-	<0.1	-	<0.1	-
sec-butylbenzene	mg/kg	0.1	-	<0.1	-	<0.1	-
1,3-dichlorobenzene	mg/kg	0.1	-	<0.1	-	<0.1	-
1,4-dichlorobenzene	mg/kg	0.1	-	<0.1	-	<0.1	-
p-isopropyltoluene	mg/kg	0.1	-	<0.1	-	<0.1	-
1,2-dichlorobenzene	mg/kg	0.1	-	<0.1	-	<0.1	-
n-butylbenzene	mg/kg	0.1	-	<0.1	-	<0.1	-
1,2-dibromo-3-chloropropane	mg/kg	0.1	-	<0.1	-	<0.1	-
1,2,4-trichlorobenzene	mg/kg	0.1	-	<0.1	-	<0.1	-
Hexachlorobutadiene	mg/kg	0.1	-	<0.1	-	<0.1	-
1,2,3-trichlorobenzene	mg/kg	0.1	-	<0.1	-	<0.1	-
Total VOC*	mg/kg	24	-	<24	-	<24	-
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	-	<3.0	-	<3.0	-
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	-	<1.8	-	<1.8	-
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	-	<1.8	-	<1.8	-



ANALYTICAL RESULTS

SE247182 R0

VOC's in Soil [AN433] Tested: 10/5/2023 (continued)

			TP132_2
			SOIL
			-
			5/5/2023
PARAMETER	UOM	LOR	SE247182.042
Benzene	mg/kg	0.1	<0.1
Toluene	mg/kg	0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2
o-xylene	mg/kg	0.1	<0.1
Total Xylenes*	mg/kg	0.3	<0.3
Total BTEX*	mg/kg	0.6	<0.6
Naphthalene (VOC)*	mg/kg	0.1	<0.1
Dichlorodifluoromethane (CFC-12)	mg/kg	1	-
Chloromethane	mg/kg	1	-
Vinyl chloride (Chloroethene)	mg/kg	0.1	-
Bromomethane	mg/kg	1	-
Chloroethane	mg/kg	1	-
Trichlorofluoromethane	mg/kg	1	-
Acetone (2-propanone)	mg/kg	10	-
Iodomethane	mg/kg	5	-
1,1-dichloroethene	mg/kg	0.1	-
Acrylonitrile	mg/kg	0.1	-
Dichloromethane (Methylene chloride)	mg/kg	0.5	-
Allyl chloride	mg/kg	0.1	-
Carbon disulfide	mg/kg	0.5	-
trans-1,2-dichloroethene	mg/kg	0.1	-
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	-
1,1-dichloroethane	mg/kg	0.1	-
Vinyl acetate*	mg/kg	10	-
cis-1,2-dichloroethene	mg/kg	0.1	-
Bromochloromethane	mg/kg	0.1	-
Chloroform (THM)	mg/kg	0.1	-
2,2-dichloropropane	mg/kg	0.1	-
1,2-dichloroethane	mg/kg	0.1	-
1,1,1-trichloroethane	mg/kg	0.1	-
1,1-dichloropropene	mg/kg	0.1	-
Carbon tetrachloride	mg/kg	0.1	-
Dibromomethane	mg/kg	0.1	-
1,2-dichloropropane	mg/kg	0.1	-
Trichloroethene (Trichloroethylene, TCE)	mg/kg	0.1	-
2-nitropropane	mg/kg	10	-
Bromodichloromethane (THM)	mg/kg	0.1	-
MIBK (4-methyl-2-pentanone)	mg/kg	1	-
cis-1,3-dichloropropene	mg/kg	0.1	-
trans-1,3-dichloropropene	mg/kg	0.1	-
1,1,2-trichloroethane	mg/kg	0.1	-
1,3-dichloropropane	mg/kg	0.1	-
Dibromochloromethane (THM)	mg/kg	0.1	-
2-hexanone (MBK)	mg/kg	5	-
1,2-dibromoethane (EDB)	mg/kg	0.1	-
Tetrachloroethene (Perchloroethylene, PCE)	mg/kg	0.1	-
1,1,1,2-tetrachloroethane	mg/kg	0.1	-
Chlorobenzene	mg/kg	0.1	-
Bromoform (THM)	mg/kg	0.1	-
Styrene (Vinyl benzene)	mg/kg	0.1	-
1,1,2,2-tetrachloroethane	mg/kg	0.1	-
1,2,3-trichloropropane	mg/kg	0.1	-
trans-1,4-dichloro-2-butene	mg/kg	1	-
Isopropylbenzene (Cumene)	mg/kg	0.1	-
Bromobenzene	mg/kg	0.1	-



ANALYTICAL RESULTS

SE247182 R0

VOC's in Soil [AN433] Tested: 10/5/2023 (continued)

			TP132_2
			SOIL
			-
			5/5/2023
PARAMETER	UOM	LOR	SE247182.042
n-propylbenzene	mg/kg	0.1	-
2-chlorotoluene	mg/kg	0.1	-
4-chlorotoluene	mg/kg	0.1	-
1,3,5-trimethylbenzene	mg/kg	0.1	-
tert-butylbenzene	mg/kg	0.1	-
1,2,4-trimethylbenzene	mg/kg	0.1	-
sec-butylbenzene	mg/kg	0.1	-
1,3-dichlorobenzene	mg/kg	0.1	-
1,4-dichlorobenzene	mg/kg	0.1	-
p-isopropyltoluene	mg/kg	0.1	-
1,2-dichlorobenzene	mg/kg	0.1	-
n-butylbenzene	mg/kg	0.1	-
1,2-dibromo-3-chloropropane	mg/kg	0.1	-
1,2,4-trichlorobenzene	mg/kg	0.1	-
Hexachlorobutadiene	mg/kg	0.1	-
1,2,3-trichlorobenzene	mg/kg	0.1	-
Total VOC*	mg/kg	24	-
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	-
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	-
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	-



ANALYTICAL RESULTS

SE247182 R0

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 10/5/2023

PARAMETER	UOM	LOR	TP114_0.5	TP114_1	TP109_0.1	TP109_1.2	TP112_0.1
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			4/5/2023 SE247182.001	4/5/2023 SE247182.002	4/5/2023 SE247182.003	4/5/2023 SE247182.004	4/5/2023 SE247182.005
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	TP112_1	TP136_0.1	TP136_0.5	TP111_0.5	TP111_2.5
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			4/5/2023 SE247182.006	4/5/2023 SE247182.007	4/5/2023 SE247182.008	4/5/2023 SE247182.009	4/5/2023 SE247182.010
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	TP116_0.1	QA400	TP116_2	TP117_0.1	TP117_1
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			5/5/2023 SE247182.011	5/5/2023 SE247182.012	5/5/2023 SE247182.013	5/5/2023 SE247182.014	5/5/2023 SE247182.015
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	TP119_0.1	TP119_0.5	TP120_0.1	TP120_0.5	QA500
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			5/5/2023 SE247182.016	5/5/2023 SE247182.017	5/5/2023 SE247182.018	5/5/2023 SE247182.019	5/5/2023 SE247182.020
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	TP121_0.3	TP121_0.7	TP122_0.1	TP122_1	TP123_0.1
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			5/5/2023 SE247182.021	5/5/2023 SE247182.022	5/5/2023 SE247182.023	5/5/2023 SE247182.024	5/5/2023 SE247182.025
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	QA700	TP123_1	TP124_0.1	TP124_1	TP125_0.1
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			5/5/2023 SE247182.026	5/5/2023 SE247182.027	5/5/2023 SE247182.028	5/5/2023 SE247182.029	5/5/2023 SE247182.030
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25



ANALYTICAL RESULTS

SE247182 R0

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 10/5/2023 (continued)

			TP125_1.2	TP125_1.8	TP126_0.2	TP126_0.6	TP127_0.2
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			5/5/2023	5/5/2023	5/5/2023	5/5/2023	5/5/2023
PARAMETER	UOM	LOR	SE247182.032	SE247182.033	SE247182.034	SE247182.035	SE247182.036
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

			TP127_1	TP128_0.1	TP128_0.5	TP132_0.1	TP132_1
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			5/5/2023	5/5/2023	5/5/2023	5/5/2023	5/5/2023
PARAMETER	UOM	LOR	SE247182.037	SE247182.038	SE247182.039	SE247182.040	SE247182.041
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

			TP132_2
			SOIL
			-
			5/5/2023
PARAMETER	UOM	LOR	SE247182.042
TRH C6-C9	mg/kg	20	<20
Benzene (F0)	mg/kg	0.1	<0.1
TRH C6-C10	mg/kg	25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25



ANALYTICAL RESULTS

SE247182 R0

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 10/5/2023

PARAMETER	UOM	LOR	TP114_0.5	TP114_1	TP109_0.1	TP109_1.2	TP112_0.1
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			4/5/2023 SE247182.001	4/5/2023 SE247182.002	4/5/2023 SE247182.003	4/5/2023 SE247182.004	4/5/2023 SE247182.005
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	TP112_1	TP136_0.1	TP136_0.5	TP111_0.5	TP111_2.5
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			4/5/2023 SE247182.006	4/5/2023 SE247182.007	4/5/2023 SE247182.008	4/5/2023 SE247182.009	4/5/2023 SE247182.010
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	TP116_0.1	QA400	TP116_2	TP117_0.1	TP117_1
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			5/5/2023 SE247182.011	5/5/2023 SE247182.012	5/5/2023 SE247182.013	5/5/2023 SE247182.014	5/5/2023 SE247182.015
TRH C10-C14	mg/kg	20	<20	23	<20	<20	<20
TRH C15-C28	mg/kg	45	170	220	<45	65	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	27	48	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	27	48	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	200	230	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	170	240	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	220	280	<210	<210	<210



ANALYTICAL RESULTS

SE247182 R0

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 10/5/2023 (continued)

PARAMETER	UOM	LOR	TP119_0.1	TP119_0.5	TP120_0.1	TP120_0.5	QA500
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			5/5/2023 SE247182.016	5/5/2023 SE247182.017	5/5/2023 SE247182.018	5/5/2023 SE247182.019	5/5/2023 SE247182.020
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	TP121_0.3	TP121_0.7	TP122_0.1	TP122_1	TP123_0.1
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			5/5/2023 SE247182.021	5/5/2023 SE247182.022	5/5/2023 SE247182.023	5/5/2023 SE247182.024	5/5/2023 SE247182.025
TRH C10-C14	mg/kg	20	120	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	800	<45	49	49	54
TRH C29-C36	mg/kg	45	330	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	180	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	180	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	1000	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	170	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	1300	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	1300	<210	<210	<210	<210

PARAMETER	UOM	LOR	QA700	TP123_1	TP124_0.1	TP124_1	TP125_0.1
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			5/5/2023 SE247182.026	5/5/2023 SE247182.027	5/5/2023 SE247182.028	5/5/2023 SE247182.029	5/5/2023 SE247182.030
TRH C10-C14	mg/kg	20	<20	35	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	56	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	42	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	42	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210



ANALYTICAL RESULTS

SE247182 R0

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 10/5/2023 (continued)

			TP125_1.2	TP125_1.8	TP126_0.2	TP126_0.6	TP127_0.2
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			5/5/2023	5/5/2023	5/5/2023	5/5/2023	5/5/2023
PARAMETER	UOM	LOR	SE247182.032	SE247182.033	SE247182.034	SE247182.035	SE247182.036
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

			TP127_1	TP128_0.1	TP128_0.5	TP132_0.1	TP132_1
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			5/5/2023	5/5/2023	5/5/2023	5/5/2023	5/5/2023
PARAMETER	UOM	LOR	SE247182.037	SE247182.038	SE247182.039	SE247182.040	SE247182.041
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

			TP132_2
			SOIL
			-
			5/5/2023
PARAMETER	UOM	LOR	SE247182.042
TRH C10-C14	mg/kg	20	<20
TRH C15-C28	mg/kg	45	<45
TRH C29-C36	mg/kg	45	<45
TRH C37-C40	mg/kg	100	<100
TRH >C10-C16	mg/kg	25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120
TRH C10-C36 Total	mg/kg	110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210



ANALYTICAL RESULTS

SE247182 R0

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 10/5/2023

PARAMETER	UOM	LOR	TP114_0.5	TP114_1	TP109_0.1	TP109_1.2	TP112_0.1
			SOIL	SOIL	SOIL	SOIL	SOIL
			4/5/2023 SE247182.001	4/5/2023 SE247182.002	4/5/2023 SE247182.003	4/5/2023 SE247182.004	4/5/2023 SE247182.005
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PARAMETER	UOM	LOR	TP112_1	TP136_0.1	TP136_0.5	TP111_0.5	TP111_2.5
			SOIL	SOIL	SOIL	SOIL	SOIL
			4/5/2023 SE247182.006	4/5/2023 SE247182.007	4/5/2023 SE247182.008	4/5/2023 SE247182.009	4/5/2023 SE247182.010
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8



ANALYTICAL RESULTS

SE247182 R0

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 10/5/2023 (continued)

PARAMETER	UOM	LOR	TP116_0.1	QA400	TP116_2	TP117_0.1	TP117_1
			SOIL - 5/5/2023 SE247182.011	SOIL - 5/5/2023 SE247182.012	SOIL - 5/5/2023 SE247182.013	SOIL - 5/5/2023 SE247182.014	SOIL - 5/5/2023 SE247182.015
Naphthalene	mg/kg	0.1	0.1	0.2	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	0.3	0.5	<0.1	0.2	<0.1
1-methylnaphthalene	mg/kg	0.1	0.3	0.6	<0.1	0.2	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	0.6	1.2	<0.1	0.5	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	0.3	0.5	<0.1	0.3	<0.1
Pyrene	mg/kg	0.1	0.2	0.3	<0.1	0.3	<0.1
Benzo(a)anthracene	mg/kg	0.1	0.1	0.2	<0.1	0.2	<0.1
Chrysene	mg/kg	0.1	0.1	0.2	<0.1	0.2	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	0.2	<0.1	0.2	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	1.9	3.6	<0.8	2.0	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	1.4	2.6	<0.8	1.7	<0.8

PARAMETER	UOM	LOR	TP119_0.1	TP119_0.5	TP120_0.1	TP120_0.5	QA500
			SOIL - 5/5/2023 SE247182.016	SOIL - 5/5/2023 SE247182.017	SOIL - 5/5/2023 SE247182.018	SOIL - 5/5/2023 SE247182.019	SOIL - 5/5/2023 SE247182.020
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	0.2	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	0.3	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	0.6	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	0.3	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	1.9	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	1.3	<0.8	<0.8



ANALYTICAL RESULTS

SE247182 R0

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 10/5/2023 (continued)

PARAMETER	UOM	LOR	TP121_0.3	TP121_0.7	TP122_0.1	TP122_1	TP123_0.1
			SOIL	SOIL	SOIL	SOIL	SOIL
			5/5/2023 SE247182.021	5/5/2023 SE247182.022	5/5/2023 SE247182.023	5/5/2023 SE247182.024	5/5/2023 SE247182.025
Naphthalene	mg/kg	0.1	0.3	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	0.8	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	0.9	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	2.0	<0.1	0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	0.2	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	1.0	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	0.8	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	0.5	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	0.5	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	0.3	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	0.3	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	7.5	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	5.9	<0.8	<0.8	<0.8	<0.8

PARAMETER	UOM	LOR	QA700	TP123_1	TP124_0.1	TP124_1	TP125_0.1
			SOIL	SOIL	SOIL	SOIL	SOIL
			5/5/2023 SE247182.026	5/5/2023 SE247182.027	5/5/2023 SE247182.028	5/5/2023 SE247182.029	5/5/2023 SE247182.030
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8



ANALYTICAL RESULTS

SE247182 R0

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 10/5/2023 (continued)

PARAMETER	UOM	LOR	TP125_1.2	TP125_1.8	TP126_0.2	TP126_0.6	TP127_0.2
			SOIL	SOIL	SOIL	SOIL	SOIL
			5/5/2023 SE247182.032	5/5/2023 SE247182.033	5/5/2023 SE247182.034	5/5/2023 SE247182.035	5/5/2023 SE247182.036
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PARAMETER	UOM	LOR	TP127_1	TP128_0.1	TP128_0.5	TP132_0.1	TP132_1
			SOIL	SOIL	SOIL	SOIL	SOIL
			5/5/2023 SE247182.037	5/5/2023 SE247182.038	5/5/2023 SE247182.039	5/5/2023 SE247182.040	5/5/2023 SE247182.041
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8



ANALYTICAL RESULTS

SE247182 R0

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 10/5/2023 (continued)

			TP132_2
			SOIL
			-
			5/5/2023
PARAMETER	UOM	LOR	SE247182.042
Naphthalene	mg/kg	0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1
Fluorene	mg/kg	0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1
Anthracene	mg/kg	0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1
Pyrene	mg/kg	0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1
Chrysene	mg/kg	0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8



ANALYTICAL RESULTS

SE247182 R0

OC Pesticides in Soil [AN420] Tested: 10/5/2023

PARAMETER	UOM	LOR	TP112_0.1	TP136_0.1	TP123_0.1	TP125_0.1	TP132_0.1
			SOIL - 4/5/2023 SE247182.005	SOIL - 4/5/2023 SE247182.007	SOIL - 5/5/2023 SE247182.025	SOIL - 5/5/2023 SE247182.030	SOIL - 5/5/2023 SE247182.040
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane (gamma BHC)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE*	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD*	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT*	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1
Total OC VIC EPA	mg/kg	1	<1	<1	<1	<1	<1



ANALYTICAL RESULTS

SE247182 R0

OP Pesticides in Soil [AN420] Tested: 10/5/2023

			TP112_0.1	TP136_0.1	TP123_0.1	TP125_0.1	TP132_0.1
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			4/5/2023	4/5/2023	5/5/2023	5/5/2023	5/5/2023
PARAMETER	UOM	LOR	SE247182.005	SE247182.007	SE247182.025	SE247182.030	SE247182.040
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

			TP132_1	TP132_2
			SOIL	SOIL
			-	-
			5/5/2023	5/5/2023
PARAMETER	UOM	LOR	SE247182.041	SE247182.042
Dichlorvos	mg/kg	0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7



ANALYTICAL RESULTS

SE247182 R0

PCBs in Soil [AN420] Tested: 10/5/2023

			TP112_0.1	TP136_0.1	TP111_0.5	TP111_2.5	TP119_0.1
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			4/5/2023	4/5/2023	4/5/2023	4/5/2023	5/5/2023
PARAMETER	UOM	LOR	SE247182.005	SE247182.007	SE247182.009	SE247182.010	SE247182.016
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

			TP121_0.3	TP123_0.1	TP125_0.1	TP125_1.2	TP126_0.2
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			5/5/2023	5/5/2023	5/5/2023	5/5/2023	5/5/2023
PARAMETER	UOM	LOR	SE247182.021	SE247182.025	SE247182.030	SE247182.032	SE247182.034
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

			TP128_0.1	TP132_0.1
			SOIL	SOIL
			-	-
			5/5/2023	5/5/2023
PARAMETER	UOM	LOR	SE247182.038	SE247182.040
Arochlor 1016	mg/kg	0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1



ANALYTICAL RESULTS

SE247182 R0

Full 8270 SVOC in Soil [AN420] Tested: 10/5/2023

PARAMETER	UOM	LOR	TP114_1	TP112_0.1	TP136_0.1	TP111_0.5	TP111_2.5
			SOIL - 4/5/2023 SE247182.002	SOIL - 4/5/2023 SE247182.005	SOIL - 4/5/2023 SE247182.007	SOIL - 4/5/2023 SE247182.009	SOIL - 4/5/2023 SE247182.010
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j&k)fluoranthene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ, <LOR=0*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
2-acetylaminofluorene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
7,12-dimethyl-benz(a)anthracene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3-methylcholanthrene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha-BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta-BHC	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Delta-BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Gamma-BHC (Lindane)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p-DDE	mg/kg	0.1	0.1	<0.1	<0.1	<0.1	<0.1
p,p-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Alpha-endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Beta-endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha-chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Gamma-chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carbophenothion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chlorfenvinphos-cis	mg/kg	2	<2	<2	<2	<2	<2
Chlorfenvinphos-trans	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos-methyl	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Co-Ral (Coumaphos)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Demeton-S-methyl	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5



ANALYTICAL RESULTS

SE247182 R0

Full 8270 SVOC in Soil [AN420] Tested: 10/5/2023 (continued)

PARAMETER	UOM	LOR	TP114_1	TP112_0.1	TP136_0.1	TP111_0.5	TP111_2.5
			SOIL - 4/5/2023 SE247182.002	SOIL - 4/5/2023 SE247182.005	SOIL - 4/5/2023 SE247182.007	SOIL - 4/5/2023 SE247182.009	SOIL - 4/5/2023 SE247182.010
Disulfoton (Di-syston)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
EPN*	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Ethoprophos (ethoprop or prophos)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Famphur (Famophos)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenamiphos (Phenamiphos)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenchlorophos (Ronneil)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Fenthion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Malathion (Maldison)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Mevinphos-cis/trans	mg/kg	1	<1	<1	<1	<1	<1
o,o,o-triethyl phosphorothioate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Parathion ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion methyl	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Phorate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Pirimiphos-ethyl	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Pirimiphos-methyl	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Profenofos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Prothiophos (Tokuthion)*	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Sulfotepp	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Tetrachlorvinphos (Stiropfos)*	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PCB Congener C28	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB Congener C52	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB Congener C101	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB Congener C118	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB Congener C138	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB Congener C153	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB Congener C180	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,3-dichlorobenzene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,4-dichlorobenzene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Hexachlorobutadiene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Hexachlorocyclopentadiene	mg/kg	1	<1	<1	<1	<1	<1
Hexachloroethane	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Hexachloropropene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Pentachlorobenzene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Pentachloroethane	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2,3,5 and 1,2,4,5 -tetrachlorobenzene	mg/kg	1	<1	<1	<1	<1	<1
1,2,3,4-tetrachlorobenzene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1/2-Chloronaphthalene	mg/kg	1	<1	<1	<1	<1	<1
1,2,4-trichlorobenzene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bis(2-ethylhexyl)phthalate	mg/kg	5	<5	<5	<5	<5	<5
Bis(2-ethylhexyl)adipate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Butyl benzyl phthalate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Di-n-butyl phthalate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diethyl phthalate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethyl phthalate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Di-n-octyl phthalate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Carbofuran	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Carbaryl	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Trifluralin	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
N-nitroso-di-n-butylamine (NDBA)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
N-nitroso-diethylamine (NDEA)	mg/kg	1	<1	<1	<1	<1	<1
N-nitroso-di-n-propylamine (NDPA)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5



ANALYTICAL RESULTS

SE247182 R0

Full 8270 SVOC in Soil [AN420] Tested: 10/5/2023 (continued)

PARAMETER	UOM	LOR	TP114_1	TP112_0.1	TP136_0.1	TP111_0.5	TP111_2.5
			SOIL - 4/5/2023 SE247182.002	SOIL - 4/5/2023 SE247182.005	SOIL - 4/5/2023 SE247182.007	SOIL - 4/5/2023 SE247182.009	SOIL - 4/5/2023 SE247182.010
N-nitroso-morpholine (NMOR)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
N-nitroso-piperidine (NPIP)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
N-nitroso-pyrrolidine (NPYR)	mg/kg	1	<1	<1	<1	<1	<1
4-amino biphenyl	mg/kg	1	<1	<1	<1	<1	<1
Acetophenone	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,3-dinitrobenzene	mg/kg	1	<1	<1	<1	<1	<1
2,4-dinitrotoluene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dinitrotoluene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Isophorone	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Nitrobenzene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
p-(dimethylamino) azobenzene	mg/kg	1	<1	<1	<1	<1	<1
Phenacetin	mg/kg	1	<1	<1	<1	<1	<1
Pentachloronitrobenzene (quintozene)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Aniline	mg/kg	3	<3	<3	<3	<3	<3
4-chloroaniline	mg/kg	1	<1	<1	<1	<1	<1
2-nitroaniline	mg/kg	1	<1	<1	<1	<1	<1
3-nitroaniline	mg/kg	1	<1	<1	<1	<1	<1
4-nitroaniline	mg/kg	1	<1	<1	<1	<1	<1
Diphenylamine	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
o-toluidine	mg/kg	1	<1	<1	<1	<1	<1
5-nitro-o-toluidine	mg/kg	1	<1	<1	<1	<1	<1
1-naphthylamine	mg/kg	1	<1	<1	<1	<1	<1
2-naphthylamine	mg/kg	1	<1	<1	<1	<1	<1
Bis(2-chloroethoxy) methane	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bis(2-chloroethyl) ether	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bis(2-chloroisopropyl) ether	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-chlorophenyl phenyl ether	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-bromophenyl phenyl ether	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Methyl methanesulfonate	mg/kg	1	<1	<1	<1	<1	<1
Ethyl methanesulfonate	mg/kg	1	<1	<1	<1	<1	<1
Dibenzofuran	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Benzyl alcohol	mg/kg	1	<1	<1	<1	<1	<1
Safrole	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Isosafrole Isomer 1	mg/kg	1	<1	<1	<1	<1	<1
Isosafrole Isomer 2	mg/kg	1	<1	<1	<1	<1	<1
1,4-naphthoquinone	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Thionazin	mg/kg	1	<1	<1	<1	<1	<1
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
Carcinogenic PAHs, BaP TEQ, <LOR=LOR*	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ, <LOR=LOR/2*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
2,3,4,6-tetrachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Total (Alpha+Beta+SO4) Endosulfan*	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2



ANALYTICAL RESULTS

SE247182 R0

Full 8270 SVOC in Soil [AN420] Tested: 10/5/2023 (continued)

PARAMETER	UOM	LOR	TP119_0.1	TP121_0.3	TP123_0.1	TP125_0.1	TP125_1.2
			SOIL - 5/5/2023 SE247182.016	SOIL - 5/5/2023 SE247182.021	SOIL - 5/5/2023 SE247182.025	SOIL - 5/5/2023 SE247182.030	SOIL - 5/5/2023 SE247182.032
Acenaphthene	mg/kg	0.1	<0.1	0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	0.3	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	0.6	<0.1	<0.1	<0.1
Benzo(b&j&k)fluoranthene	mg/kg	0.2	<0.2	0.3	<0.2	<0.2	<0.2
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	0.3	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	0.7	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	1.4	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	1.2	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	0.9	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	0.4	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	2.8	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	1.0	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ, <LOR=0*	TEQ (mg/kg)	0.2	<0.2	0.2	<0.2	<0.2	<0.2
2-acetylaminofluorene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
7,12-dimethyl-benz(a)anthracene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3-methylcholanthrene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha-BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta-BHC	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Delta-BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Gamma-BHC (Lindane)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Alpha-endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Beta-endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha-chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Gamma-chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carbophenothion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chlorfenvinphos-cis	mg/kg	2	<2	<2	<2	<2	<2
Chlorfenvinphos-trans	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos-methyl	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Co-Ral (Coumaphos)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Demeton-S-methyl	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5



ANALYTICAL RESULTS

SE247182 R0

Full 8270 SVOC in Soil [AN420] Tested: 10/5/2023 (continued)

PARAMETER	UOM	LOR	TP119_0.1	TP121_0.3	TP123_0.1	TP125_0.1	TP125_1.2
			SOIL - 5/5/2023 SE247182.016	SOIL - 5/5/2023 SE247182.021	SOIL - 5/5/2023 SE247182.025	SOIL - 5/5/2023 SE247182.030	SOIL - 5/5/2023 SE247182.032
Disulfoton (Di-syston)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
EPN*	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Ethoprophos (ethoprop or prophos)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Famphur (Famophos)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenamiphos (Phenamiphos)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenchlorophos (Ronneil)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Fenthion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Malathion (Maldison)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Mevinphos-cis/trans	mg/kg	1	<1	<1	<1	<1	<1
o,o,o-triethyl phosphorothioate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Parathion ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion methyl	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Phorate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Pirimiphos-ethyl	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Pirimiphos-methyl	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Profenofos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Prothiophos (Tokuthion)*	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Sulfotepp	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Tetrachlorvinphos (Stiropfos)*	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PCB Congener C28	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB Congener C52	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB Congener C101	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB Congener C118	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB Congener C138	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB Congener C153	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB Congener C180	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,3-dichlorobenzene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,4-dichlorobenzene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Hexachlorobutadiene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Hexachlorocyclopentadiene	mg/kg	1	<1	<1	<1	<1	<1
Hexachloroethane	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Hexachloropropene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Pentachlorobenzene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Pentachloroethane	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2,3,5 and 1,2,4,5 -tetrachlorobenzene	mg/kg	1	<1	<1	<1	<1	<1
1,2,3,4-tetrachlorobenzene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1/2-Chloronaphthalene	mg/kg	1	<1	<1	<1	<1	<1
1,2,4-trichlorobenzene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bis(2-ethylhexyl)phthalate	mg/kg	5	<5	<5	<5	<5	<5
Bis(2-ethylhexyl)adipate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Butyl benzyl phthalate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Di-n-butyl phthalate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diethyl phthalate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethyl phthalate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Di-n-octyl phthalate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Carbofuran	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Carbaryl	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Trifluralin	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
N-nitroso-di-n-butylamine (NDBA)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
N-nitroso-diethylamine (NDEA)	mg/kg	1	<1	<1	<1	<1	<1
N-nitroso-di-n-propylamine (NDPA)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5



ANALYTICAL RESULTS

SE247182 R0

Full 8270 SVOC in Soil [AN420] Tested: 10/5/2023 (continued)

PARAMETER	UOM	LOR	TP119_0.1	TP121_0.3	TP123_0.1	TP125_0.1	TP125_1.2
			SOIL - 5/5/2023 SE247182.016	SOIL - 5/5/2023 SE247182.021	SOIL - 5/5/2023 SE247182.025	SOIL - 5/5/2023 SE247182.030	SOIL - 5/5/2023 SE247182.032
N-nitroso-morpholine (NMOR)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
N-nitroso-piperidine (NPIP)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
N-nitroso-pyrrolidine (NPYR)	mg/kg	1	<1	<1	<1	<1	<1
4-amino biphenyl	mg/kg	1	<1	<1	<1	<1	<1
Acetophenone	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,3-dinitrobenzene	mg/kg	1	<1	<1	<1	<1	<1
2,4-dinitrotoluene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dinitrotoluene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Isophorone	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Nitrobenzene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
p-(dimethylamino) azobenzene	mg/kg	1	<1	<1	<1	<1	<1
Phenacetin	mg/kg	1	<1	<1	<1	<1	<1
Pentachloronitrobenzene (quintozene)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Aniline	mg/kg	3	<3	<3	<3	<3	<3
4-chloroaniline	mg/kg	1	<1	<1	<1	<1	<1
2-nitroaniline	mg/kg	1	<1	<1	<1	<1	<1
3-nitroaniline	mg/kg	1	<1	<1	<1	<1	<1
4-nitroaniline	mg/kg	1	<1	<1	<1	<1	<1
Diphenylamine	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
o-toluidine	mg/kg	1	<1	<1	<1	<1	<1
5-nitro-o-toluidine	mg/kg	1	<1	<1	<1	<1	<1
1-naphthylamine	mg/kg	1	<1	<1	<1	<1	<1
2-naphthylamine	mg/kg	1	<1	<1	<1	<1	<1
Bis(2-chloroethoxy) methane	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bis(2-chloroethyl) ether	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bis(2-chloroisopropyl) ether	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-chlorophenyl phenyl ether	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-bromophenyl phenyl ether	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Methyl methanesulfonate	mg/kg	1	<1	<1	<1	<1	<1
Ethyl methanesulfonate	mg/kg	1	<1	<1	<1	<1	<1
Dibenzofuran	mg/kg	0.5	<0.5	0.7	<0.5	<0.5	<0.5
Benzyl alcohol	mg/kg	1	<1	<1	<1	<1	<1
Safrole	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Isosafrole Isomer 1	mg/kg	1	<1	<1	<1	<1	<1
Isosafrole Isomer 2	mg/kg	1	<1	<1	<1	<1	<1
1,4-naphthoquinone	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Thionazin	mg/kg	1	<1	<1	<1	<1	<1
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
Carcinogenic PAHs, BaP TEQ, <LOR=LOR*	TEQ (mg/kg)	0.3	<0.3	0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ, <LOR=LOR/2*	TEQ (mg/kg)	0.2	<0.2	0.3	<0.2	<0.2	<0.2
2,3,4,6-tetrachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Total (Alpha+Beta+SO4) Endosulfan*	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2



ANALYTICAL RESULTS

SE247182 R0

Full 8270 SVOC in Soil [AN420] Tested: 10/5/2023 (continued)

PARAMETER	UOM	LOR	TP126_0.2	TP128_0.1	TP132_0.1
			SOIL - 5/5/2023 SE247182.034	SOIL - 5/5/2023 SE247182.038	SOIL - 5/5/2023 SE247182.040
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1
Benzo(b&j&k)fluoranthene	mg/kg	0.2	<0.2	<0.2	<0.2
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ, <LOR=0*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2
2-acetylaminofluorene	mg/kg	0.5	<0.5	<0.5	<0.5
7,12-dimethyl-benz(a)anthracene	mg/kg	0.5	<0.5	<0.5	<0.5
3-methylcholanthrene	mg/kg	0.5	<0.5	<0.5	<0.5
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1
Alpha-BHC	mg/kg	0.1	<0.1	<0.1	<0.1
Beta-BHC	mg/kg	0.5	<0.5	<0.5	<0.5
Delta-BHC	mg/kg	0.1	<0.1	<0.1	<0.1
Gamma-BHC (Lindane)	mg/kg	0.1	<0.1	<0.1	<0.1
p,p-DDD	mg/kg	0.1	<0.1	<0.1	<0.1
p,p-DDE	mg/kg	0.1	<0.1	<0.1	<0.1
p,p-DDT	mg/kg	0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2
Alpha-endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2
Beta-endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1
Alpha-chlordane	mg/kg	0.1	<0.1	<0.1	<0.1
Gamma-chlordane	mg/kg	0.1	<0.1	<0.1	<0.1
Endrin ketone	mg/kg	0.1	<0.1	<0.1	<0.1
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2
Bromophos ethyl	mg/kg	0.2	<0.2	<0.2	<0.2
Carbophenothion	mg/kg	0.5	<0.5	<0.5	<0.5
Chlorfenvinphos-cis	mg/kg	2	<2	<2	<2
Chlorfenvinphos-trans	mg/kg	0.5	<0.5	<0.5	<0.5
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2
Chlorpyrifos-methyl	mg/kg	0.5	<0.5	<0.5	<0.5
Co-Ral (Coumaphos)	mg/kg	0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5
Demeton-S-methyl	mg/kg	0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5



ANALYTICAL RESULTS

SE247182 R0

Full 8270 SVOC in Soil [AN420] Tested: 10/5/2023 (continued)

PARAMETER	UOM	LOR	TP126_0.2	TP128_0.1	TP132_0.1
			SOIL - 5/5/2023 SE247182.034	SOIL - 5/5/2023 SE247182.038	SOIL - 5/5/2023 SE247182.040
Disulfoton (Di-syston)	mg/kg	0.5	<0.5	<0.5	<0.5
EPN*	mg/kg	0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2
Ethoprophos (ethoprop or prophos)	mg/kg	0.5	<0.5	<0.5	<0.5
Famphur (Famophos)	mg/kg	0.5	<0.5	<0.5	<0.5
Fenamiphos (Phenamiphos)	mg/kg	0.5	<0.5	<0.5	<0.5
Fenchlorophos (Ronnell)	mg/kg	0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2
Fenthion	mg/kg	0.5	<0.5	<0.5	<0.5
Malathion (Maldison)	mg/kg	0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5
Mevinphos-cis/trans	mg/kg	1	<1	<1	<1
o,o,o-triethyl phosphorothioate	mg/kg	0.5	<0.5	<0.5	<0.5
Parathion ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2
Parathion methyl	mg/kg	0.5	<0.5	<0.5	<0.5
Phorate	mg/kg	0.5	<0.5	<0.5	<0.5
Pirimiphos-ethyl	mg/kg	0.5	<0.5	<0.5	<0.5
Pirimiphos-methyl	mg/kg	0.5	<0.5	<0.5	<0.5
Profenofos	mg/kg	0.5	<0.5	<0.5	<0.5
Prothiophos (Tokuthion)*	mg/kg	0.5	<0.5	<0.5	<0.5
Sulfotepp	mg/kg	0.5	<0.5	<0.5	<0.5
Tetrachlorvinphos (Stiropfos)*	mg/kg	0.5	<0.5	<0.5	<0.5
PCB Congener C28	mg/kg	0.1	<0.1	<0.1	<0.1
PCB Congener C52	mg/kg	0.1	<0.1	<0.1	<0.1
PCB Congener C101	mg/kg	0.1	<0.1	<0.1	<0.1
PCB Congener C118	mg/kg	0.1	<0.1	<0.1	<0.1
PCB Congener C138	mg/kg	0.1	<0.1	<0.1	<0.1
PCB Congener C153	mg/kg	0.1	<0.1	<0.1	<0.1
PCB Congener C180	mg/kg	0.1	<0.1	<0.1	<0.1
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.5	<0.5	<0.5	<0.5
1,3-dichlorobenzene	mg/kg	0.5	<0.5	<0.5	<0.5
1,4-dichlorobenzene	mg/kg	0.5	<0.5	<0.5	<0.5
Hexachlorobutadiene	mg/kg	0.5	<0.5	<0.5	<0.5
Hexachlorocyclopentadiene	mg/kg	1	<1	<1	<1
Hexachloroethane	mg/kg	0.5	<0.5	<0.5	<0.5
Hexachloropropene	mg/kg	0.5	<0.5	<0.5	<0.5
Pentachlorobenzene	mg/kg	0.5	<0.5	<0.5	<0.5
Pentachloroethane	mg/kg	0.5	<0.5	<0.5	<0.5
1,2,3,5 and 1,2,4,5 -tetrachlorobenzene	mg/kg	1	<1	<1	<1
1,2,3,4-tetrachlorobenzene	mg/kg	0.5	<0.5	<0.5	<0.5
1/2-Chloronaphthalene	mg/kg	1	<1	<1	<1
1,2,4-trichlorobenzene	mg/kg	0.5	<0.5	<0.5	<0.5
Bis(2-ethylhexyl)phthalate	mg/kg	5	<5	<5	<5
Bis(2-ethylhexyl)adipate	mg/kg	0.5	<0.5	<0.5	<0.5
Butyl benzyl phthalate	mg/kg	0.5	<0.5	<0.5	<0.5
Di-n-butyl phthalate	mg/kg	0.5	<0.5	<0.5	<0.5
Diethyl phthalate	mg/kg	0.5	<0.5	<0.5	<0.5
Dimethyl phthalate	mg/kg	0.5	<0.5	<0.5	<0.5
Di-n-octyl phthalate	mg/kg	0.5	<0.5	<0.5	<0.5
Carbofuran	mg/kg	0.5	<0.5	<0.5	<0.5
Carbaryl	mg/kg	0.5	<0.5	<0.5	<0.5
Trifluralin	mg/kg	0.5	<0.5	<0.5	<0.5
N-nitroso-di-n-butylamine (NDBA)	mg/kg	0.5	<0.5	<0.5	<0.5
N-nitroso-diethylamine (NDEA)	mg/kg	1	<1	<1	<1
N-nitroso-di-n-propylamine (NDPA)	mg/kg	0.5	<0.5	<0.5	<0.5



ANALYTICAL RESULTS

SE247182 R0

Full 8270 SVOC in Soil [AN420] Tested: 10/5/2023 (continued)

PARAMETER	UOM	LOR	TP126_0.2	TP128_0.1	TP132_0.1
			SOIL - 5/5/2023 SE247182.034	SOIL - 5/5/2023 SE247182.038	SOIL - 5/5/2023 SE247182.040
N-nitroso-morpholine (NMOR)	mg/kg	0.5	<0.5	<0.5	<0.5
N-nitroso-piperidine (NPIP)	mg/kg	0.5	<0.5	<0.5	<0.5
N-nitroso-pyrrolidine (NPYR)	mg/kg	1	<1	<1	<1
4-amino biphenyl	mg/kg	1	<1	<1	<1
Acetophenone	mg/kg	0.5	<0.5	<0.5	<0.5
1,3-dinitrobenzene	mg/kg	1	<1	<1	<1
2,4-dinitrotoluene	mg/kg	0.5	<0.5	<0.5	<0.5
2,6-dinitrotoluene	mg/kg	0.5	<0.5	<0.5	<0.5
Isophorone	mg/kg	0.5	<0.5	<0.5	<0.5
Nitrobenzene	mg/kg	0.5	<0.5	<0.5	<0.5
p-(dimethylamino) azobenzene	mg/kg	1	<1	<1	<1
Phenacetin	mg/kg	1	<1	<1	<1
Pentachloronitrobenzene (quintozene)	mg/kg	0.5	<0.5	<0.5	<0.5
Aniline	mg/kg	3	<3	<3	<3
4-chloroaniline	mg/kg	1	<1	<1	<1
2-nitroaniline	mg/kg	1	<1	<1	<1
3-nitroaniline	mg/kg	1	<1	<1	<1
4-nitroaniline	mg/kg	1	<1	<1	<1
Diphenylamine	mg/kg	0.5	<0.5	<0.5	<0.5
o-toluidine	mg/kg	1	<1	<1	<1
5-nitro-o-toluidine	mg/kg	1	<1	<1	<1
1-naphthylamine	mg/kg	1	<1	<1	<1
2-naphthylamine	mg/kg	1	<1	<1	<1
Bis(2-chloroethoxy) methane	mg/kg	0.5	<0.5	<0.5	<0.5
Bis(2-chloroethyl) ether	mg/kg	0.5	<0.5	<0.5	<0.5
Bis(2-chloroisopropyl) ether	mg/kg	0.5	<0.5	<0.5	<0.5
4-chlorophenyl phenyl ether	mg/kg	0.5	<0.5	<0.5	<0.5
4-bromophenyl phenyl ether	mg/kg	0.5	<0.5	<0.5	<0.5
Methyl methanesulfonate	mg/kg	1	<1	<1	<1
Ethyl methanesulfonate	mg/kg	1	<1	<1	<1
Dibenzofuran	mg/kg	0.5	<0.5	<0.5	<0.5
Benzyl alcohol	mg/kg	1	<1	<1	<1
Safrole	mg/kg	0.5	<0.5	<0.5	<0.5
Isosafrole Isomer 1	mg/kg	1	<1	<1	<1
Isosafrole Isomer 2	mg/kg	1	<1	<1	<1
1,4-naphthoquinone	mg/kg	0.5	<0.5	<0.5	<0.5
Thionazin	mg/kg	1	<1	<1	<1
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1
Carcinogenic PAHs, BaP TEQ, <LOR=LOR*	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ, <LOR=LOR/2*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2
2,3,4,6-tetrachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
Total (Alpha+Beta+SO4) Endosulfan*	mg/kg	0.2	<0.2	<0.2	<0.2



ANALYTICAL RESULTS

SE247182 R0

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 10/5/2023

PARAMETER	UOM	LOR	TP114_0.5	TP114_1	TP109_0.1	TP109_1.2	TP112_0.1
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			4/5/2023 SE247182.001	4/5/2023 SE247182.002	4/5/2023 SE247182.003	4/5/2023 SE247182.004	4/5/2023 SE247182.005
Arsenic, As	mg/kg	1	3	4	43	2	18
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	0.4	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	5.3	16	5.3	9.6	14
Copper, Cu	mg/kg	0.5	4.8	<0.5	9.0	<0.5	12
Lead, Pb	mg/kg	1	7	9	8	7	12
Nickel, Ni	mg/kg	0.5	1.5	1.1	5.1	0.8	11
Zinc, Zn	mg/kg	2	22	3.8	37	3.8	270
Selenium, Se	mg/kg	2	-	-	-	-	-

PARAMETER	UOM	LOR	TP112_1	TP136_0.1	TP136_0.5	TP111_0.5	TP111_2.5
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			4/5/2023 SE247182.006	4/5/2023 SE247182.007	4/5/2023 SE247182.008	4/5/2023 SE247182.009	4/5/2023 SE247182.010
Arsenic, As	mg/kg	1	9	5	55	2	5
Cadmium, Cd	mg/kg	0.3	0.4	<0.3	0.5	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	7.4	10	8.8	5.1	16
Copper, Cu	mg/kg	0.5	12	11	1.9	3.1	<0.5
Lead, Pb	mg/kg	1	28	17	20	10	7
Nickel, Ni	mg/kg	0.5	6.4	11	1.3	1.7	0.8
Zinc, Zn	mg/kg	2	460	85	15	43	24
Selenium, Se	mg/kg	2	-	-	-	-	-

PARAMETER	UOM	LOR	TP116_0.1	QA400	TP116_2	TP117_0.1	TP117_1
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			5/5/2023 SE247182.011	5/5/2023 SE247182.012	5/5/2023 SE247182.013	5/5/2023 SE247182.014	5/5/2023 SE247182.015
Arsenic, As	mg/kg	1	5	4	2	6	2
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	9.6	9.2	6.3	10	11
Copper, Cu	mg/kg	0.5	10	7.8	<0.5	8.2	<0.5
Lead, Pb	mg/kg	1	14	15	5	14	4
Nickel, Ni	mg/kg	0.5	4.7	5.0	<0.5	5.8	<0.5
Zinc, Zn	mg/kg	2	130	260	2.7	410	32
Selenium, Se	mg/kg	2	-	-	-	-	-

PARAMETER	UOM	LOR	TP119_0.1	TP119_0.5	TP120_0.1	TP120_0.5	QA500
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			5/5/2023 SE247182.016	5/5/2023 SE247182.017	5/5/2023 SE247182.018	5/5/2023 SE247182.019	5/5/2023 SE247182.020
Arsenic, As	mg/kg	1	4	2	3	<1	5
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	28	12	5.6	7.5	21
Copper, Cu	mg/kg	0.5	<0.5	<0.5	25	<0.5	<0.5
Lead, Pb	mg/kg	1	10	7	7	5	7
Nickel, Ni	mg/kg	0.5	0.9	0.6	3.1	0.7	0.7
Zinc, Zn	mg/kg	2	4.5	2.5	37	<2.0	4.2
Selenium, Se	mg/kg	2	-	-	-	-	-



ANALYTICAL RESULTS

SE247182 R0

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 10/5/2023

PARAMETER	UOM	LOR	TP121_0.3	TP121_0.7	TP122_0.1	TP122_1	TP123_0.1
			SOIL	SOIL	SOIL	SOIL	SOIL
			5/5/2023 SE247182.021	5/5/2023 SE247182.022	5/5/2023 SE247182.023	5/5/2023 SE247182.024	5/5/2023 SE247182.025
Arsenic, As	mg/kg	1	7	<1	7	3	2
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	7.5	9.6	15	14	5.9
Copper, Cu	mg/kg	0.5	11	<0.5	3.3	<0.5	1.0
Lead, Pb	mg/kg	1	11	7	12	7	6
Nickel, Ni	mg/kg	0.5	8.4	0.9	6.6	0.5	1.4
Zinc, Zn	mg/kg	2	19	<2.0	41	5.6	9.2
Selenium, Se	mg/kg	2	<2	-	-	-	-

PARAMETER	UOM	LOR	QA700	TP123_1	TP124_0.1	TP124_1	TP125_0.1
			SOIL	SOIL	SOIL	SOIL	SOIL
			5/5/2023 SE247182.026	5/5/2023 SE247182.027	5/5/2023 SE247182.028	5/5/2023 SE247182.029	5/5/2023 SE247182.030
Arsenic, As	mg/kg	1	2	2	1	2	3
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	7.6	5.0	8.5	14	6.3
Copper, Cu	mg/kg	0.5	1.5	<0.5	35	<0.5	7.8
Lead, Pb	mg/kg	1	6	5	2	7	71
Nickel, Ni	mg/kg	0.5	1.1	<0.5	64	<0.5	5.1
Zinc, Zn	mg/kg	2	8.0	<2.0	34	<2.0	49
Selenium, Se	mg/kg	2	-	-	-	-	-

PARAMETER	UOM	LOR	TP125_1.2	TP125_1.8	TP126_0.2	TP126_0.6	TP127_0.2
			SOIL	SOIL	SOIL	SOIL	SOIL
			5/5/2023 SE247182.032	5/5/2023 SE247182.033	5/5/2023 SE247182.034	5/5/2023 SE247182.035	5/5/2023 SE247182.036
Arsenic, As	mg/kg	1	2	<1	4	1	4
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	6.4	2.5	13	3.7	18
Copper, Cu	mg/kg	0.5	9.0	<0.5	<0.5	<0.5	<0.5
Lead, Pb	mg/kg	1	32	7	9	9	9
Nickel, Ni	mg/kg	0.5	9.8	<0.5	0.6	<0.5	1.0
Zinc, Zn	mg/kg	2	43	<2.0	3.5	<2.0	3.6
Selenium, Se	mg/kg	2	-	-	-	-	-

PARAMETER	UOM	LOR	TP127_1	TP128_0.1	TP128_0.5	TP132_0.1	TP132_1
			SOIL	SOIL	SOIL	SOIL	SOIL
			5/5/2023 SE247182.037	5/5/2023 SE247182.038	5/5/2023 SE247182.039	5/5/2023 SE247182.040	5/5/2023 SE247182.041
Arsenic, As	mg/kg	1	4	6	2	2	2
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	19	19	3.5	29	7.5
Copper, Cu	mg/kg	0.5	<0.5	<0.5	<0.5	35	3.5
Lead, Pb	mg/kg	1	9	9	11	1	7
Nickel, Ni	mg/kg	0.5	0.6	<0.5	<0.5	77	5.7
Zinc, Zn	mg/kg	2	<2.0	2.9	<2.0	31	11
Selenium, Se	mg/kg	2	-	-	-	-	-



ANALYTICAL RESULTS

SE247182 R0

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 10/5/2023

			TP132_2
			SOIL
			-
			5/5/2023
			SE247182.042
PARAMETER	UOM	LOR	
Arsenic, As	mg/kg	1	3
Cadmium, Cd	mg/kg	0.3	<0.3
Chromium, Cr	mg/kg	0.5	6.7
Copper, Cu	mg/kg	0.5	1.1
Lead, Pb	mg/kg	1	8
Nickel, Ni	mg/kg	0.5	0.7
Zinc, Zn	mg/kg	2	2.8
Selenium, Se	mg/kg	2	-



ANALYTICAL RESULTS

SE247182 R0

Mercury in Soil [AN312] Tested: 10/5/2023

PARAMETER	UOM	LOR	TP114_0.5	TP114_1	TP109_0.1	TP109_1.2	TP112_0.1
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			4/5/2023 SE247182.001	4/5/2023 SE247182.002	4/5/2023 SE247182.003	4/5/2023 SE247182.004	4/5/2023 SE247182.005
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	TP112_1	TP136_0.1	TP136_0.5	TP111_0.5	TP111_2.5
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			4/5/2023 SE247182.006	4/5/2023 SE247182.007	4/5/2023 SE247182.008	4/5/2023 SE247182.009	4/5/2023 SE247182.010
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	TP116_0.1	QA400	TP116_2	TP117_0.1	TP117_1
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			5/5/2023 SE247182.011	5/5/2023 SE247182.012	5/5/2023 SE247182.013	5/5/2023 SE247182.014	5/5/2023 SE247182.015
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	0.06	<0.05

PARAMETER	UOM	LOR	TP119_0.1	TP119_0.5	TP120_0.1	TP120_0.5	QA500
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			5/5/2023 SE247182.016	5/5/2023 SE247182.017	5/5/2023 SE247182.018	5/5/2023 SE247182.019	5/5/2023 SE247182.020
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	TP121_0.3	TP121_0.7	TP122_0.1	TP122_1	TP123_0.1
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			5/5/2023 SE247182.021	5/5/2023 SE247182.022	5/5/2023 SE247182.023	5/5/2023 SE247182.024	5/5/2023 SE247182.025
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	0.08

PARAMETER	UOM	LOR	QA700	TP123_1	TP124_0.1	TP124_1	TP125_0.1
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			5/5/2023 SE247182.026	5/5/2023 SE247182.027	5/5/2023 SE247182.028	5/5/2023 SE247182.029	5/5/2023 SE247182.030
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	TP125_1.2	TP125_1.8	TP126_0.2	TP126_0.6	TP127_0.2
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			5/5/2023 SE247182.032	5/5/2023 SE247182.033	5/5/2023 SE247182.034	5/5/2023 SE247182.035	5/5/2023 SE247182.036
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05



ANALYTICAL RESULTS

SE247182 R0

Mercury in Soil [AN312] Tested: 10/5/2023 (continued)

			TP127_1	TP128_0.1	TP128_0.5	TP132_0.1	TP132_1
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			5/5/2023	5/5/2023	5/5/2023	5/5/2023	5/5/2023
PARAMETER	UOM	LOR	SE247182.037	SE247182.038	SE247182.039	SE247182.040	SE247182.041
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

			TP132_2
			SOIL
			-
			5/5/2023
PARAMETER	UOM	LOR	SE247182.042
Mercury	mg/kg	0.05	<0.05



ANALYTICAL RESULTS

SE247182 R0

Moisture Content [AN002] Tested: 10/5/2023

PARAMETER	UOM	LOR	TP114_0.5	TP114_1	TP109_0.1	TP109_1.2	TP112_0.1
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			4/5/2023 SE247182.001	4/5/2023 SE247182.002	4/5/2023 SE247182.003	4/5/2023 SE247182.004	4/5/2023 SE247182.005
% Moisture	%w/w	1	11.8	12.7	12.5	16.3	10.2

PARAMETER	UOM	LOR	TP112_1	TP136_0.1	TP136_0.5	TP111_0.5	TP111_2.5
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			4/5/2023 SE247182.006	4/5/2023 SE247182.007	4/5/2023 SE247182.008	4/5/2023 SE247182.009	4/5/2023 SE247182.010
% Moisture	%w/w	1	20.4	14.6	12.2	10.4	16.5

PARAMETER	UOM	LOR	TP116_0.1	QA400	TP116_2	TP117_0.1	TP117_1
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			5/5/2023 SE247182.011	5/5/2023 SE247182.012	5/5/2023 SE247182.013	5/5/2023 SE247182.014	5/5/2023 SE247182.015
% Moisture	%w/w	1	17.1	14.0	10.1	12.6	15.3

PARAMETER	UOM	LOR	TP119_0.1	TP119_0.5	TP120_0.1	TP120_0.5	QA500
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			5/5/2023 SE247182.016	5/5/2023 SE247182.017	5/5/2023 SE247182.018	5/5/2023 SE247182.019	5/5/2023 SE247182.020
% Moisture	%w/w	1	15.7	13.5	17.0	14.1	13.6

PARAMETER	UOM	LOR	TP121_0.3	TP121_0.7	TP122_0.1	TP122_1	TP123_0.1
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			5/5/2023 SE247182.021	5/5/2023 SE247182.022	5/5/2023 SE247182.023	5/5/2023 SE247182.024	5/5/2023 SE247182.025
% Moisture	%w/w	1	13.6	14.9	13.9	12.3	12.8

PARAMETER	UOM	LOR	QA700	TP123_1	TP124_0.1	TP124_1	TP125_0.1
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			5/5/2023 SE247182.026	5/5/2023 SE247182.027	5/5/2023 SE247182.028	5/5/2023 SE247182.029	5/5/2023 SE247182.030
% Moisture	%w/w	1	10.8	13.5	7.6	15.5	10.1

PARAMETER	UOM	LOR	TP125_1.2	TP125_1.8	TP126_0.2	TP126_0.6	TP127_0.2
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			5/5/2023 SE247182.032	5/5/2023 SE247182.033	5/5/2023 SE247182.034	5/5/2023 SE247182.035	5/5/2023 SE247182.036
% Moisture	%w/w	1	10.1	17.0	17.3	14.9	20.5



ANALYTICAL RESULTS

SE247182 R0

Moisture Content [AN002] Tested: 10/5/2023 (continued)

			TP127_1	TP128_0.1	TP128_0.5	TP132_0.1	TP132_1
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			5/5/2023	5/5/2023	5/5/2023	5/5/2023	5/5/2023
PARAMETER	UOM	LOR	SE247182.037	SE247182.038	SE247182.039	SE247182.040	SE247182.041
% Moisture	%w/w	1	17.3	16.2	9.3	7.4	11.4

			TP132_2
			SOIL
			-
			5/5/2023
PARAMETER	UOM	LOR	SE247182.042
% Moisture	%w/w	1	17.1



ANALYTICAL RESULTS

SE247182 R0

Fibre Identification in soil [AS4964/AN602] Tested: 15/5/2023

PARAMETER	UOM	LOR	TP114_0.5	TP114_1	TP109_0.1	TP112_0.1	TP112_1
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			4/5/2023 SE247182.001	4/5/2023 SE247182.002	4/5/2023 SE247182.003	4/5/2023 SE247182.005	4/5/2023 SE247182.006
Asbestos Detected	No unit	-	No	No	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

PARAMETER	UOM	LOR	TP136_0.1	TP136_0.5	TP111_0.5	TP116_0.1	TP117_0.1
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			4/5/2023 SE247182.007	4/5/2023 SE247182.008	4/5/2023 SE247182.009	5/5/2023 SE247182.011	5/5/2023 SE247182.014
Asbestos Detected	No unit	-	No	No	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

PARAMETER	UOM	LOR	TP119_0.1	TP119_0.5	TP120_0.1	TP120_0.5	TP121_0.3
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			5/5/2023 SE247182.016	5/5/2023 SE247182.017	5/5/2023 SE247182.018	5/5/2023 SE247182.019	5/5/2023 SE247182.021
Asbestos Detected	No unit	-	No	No	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

PARAMETER	UOM	LOR	TP121_0.7	TP122_0.1	TP123_0.1	TP124_0.1	TP124_1
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			5/5/2023 SE247182.022	5/5/2023 SE247182.023	5/5/2023 SE247182.025	5/5/2023 SE247182.028	5/5/2023 SE247182.029
Asbestos Detected	No unit	-	No	No	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

PARAMETER	UOM	LOR	TP125_0.1	TP125_1.2	TP126_0.2	TP126_0.6	TP127_0.2
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			5/5/2023 SE247182.030	5/5/2023 SE247182.032	5/5/2023 SE247182.034	5/5/2023 SE247182.035	5/5/2023 SE247182.036
Asbestos Detected	No unit	-	Yes	No	No	No	No
Estimated Fibres*	%w/w	0.01	>0.01	<0.01	<0.01	<0.01	<0.01

PARAMETER	UOM	LOR	TP128_0.1	TP128_0.5	TP132_0.1	TP132_1
			SOIL	SOIL	SOIL	SOIL
			-	-	-	-
			5/5/2023 SE247182.038	5/5/2023 SE247182.039	5/5/2023 SE247182.040	5/5/2023 SE247182.041
Asbestos Detected	No unit	-	No	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01



ANALYTICAL RESULTS

SE247182 R0

Fibre ID in bulk materials [AN602/AS4964] Tested: 16/5/2023

			TP125_0.1_PACM
			MATERIAL
			-
			5/5/2023
PARAMETER	UOM	LOR	SE247182.031
Asbestos Detected	No unit	-	Yes



ANALYTICAL RESULTS

SE247182 R0

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples [MA-1523] Tested: 18/5/2023

			TP114_0.5	TP109_0.1	TP112_0.1	TP136_0.1	TP111_0.5
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			4/5/2023	4/5/2023	4/5/2023	4/5/2023	4/5/2023
PARAMETER	UOM	LOR	SE247182.001	SE247182.003	SE247182.005	SE247182.007	SE247182.009
Perfluorobutanoic acid (PFBA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Sum PFOS and PFHXS	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorononane sulfonate (PFNS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016

			TP116_0.1	TP117_0.1	TP119_0.1	TP120_0.1	TP121_0.3
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			5/5/2023	5/5/2023	5/5/2023	5/5/2023	5/5/2023
PARAMETER	UOM	LOR	SE247182.011	SE247182.014	SE247182.016	SE247182.018	SE247182.021
Perfluorobutanoic acid (PFBA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Sum PFOS and PFHXS	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorononane sulfonate (PFNS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016



ANALYTICAL RESULTS

SE247182 R0

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples [MA-1523] Tested: 18/5/2023 (continued)

			TP122_0.1	TP123_0.1	TP124_0.1	TP125_0.1	TP126_0.2
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			5/5/2023	5/5/2023	5/5/2023	5/5/2023	5/5/2023
PARAMETER	UOM	LOR	SE247182.023	SE247182.025	SE247182.028	SE247182.030	SE247182.034
Perfluorobutanoic acid (PFBA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Sum PFOS and PFHXS	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorononane sulfonate (PFNS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016

			TP127_0.2	TP128_0.1	TP132_0.1
			SOIL	SOIL	SOIL
			-	-	-
			5/5/2023	5/5/2023	5/5/2023
PARAMETER	UOM	LOR	SE247182.036	SE247182.038	SE247182.040
Perfluorobutanoic acid (PFBA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0008	<0.0008	<0.0008	<0.0008
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
Sum PFOS and PFHXS	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
Perfluorononane sulfonate (PFNS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016

METHOD

METHODOLOGY SUMMARY

AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by ASS or ICP as per USEPA Method 200.8.
AN312	Mercury by Cold Vapour AAS in Soils: After digestion with nitric acid, hydrogen peroxide and hydrochloric acid, mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). F2 is reported directly and also corrected by subtracting Naphthalene (from VOC method AN433) where available.
AN403	Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Recoverable Hydrocarbons - Silica (TRH-Si) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents.
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D). Total PAH calculated from individual analyte detections at or above the limit of reporting.
AN420	SVOC Compounds: Semi-Volatile Organic Compounds (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC's are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.
AN602/AS4964	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic 'clues', which provide a reasonable degree of certainty, dispersion staining is a mandatory 'clue' for positive identification. If sufficient 'clues' are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602/AS4964	Fibres/material that cannot be unequivocally identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602/AS4964	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples, Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection/reporting limit (RL) of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602/AS4964	The sample can be reported "no asbestos found at the reporting limit (RL) of 0.1 g/kg" (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no 'respirable' fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg; and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.

MA-1523

This method covers the analysis of per- and polyfluoroalkyl substances (PFAS) in aqueous, solid and biosolid samples and solvent extracts, determined as the total of linear and branched isomers. After spiking with isotopically labelled quantification surrogates and clean-up via SPE cartridges sample extracts are analysed by liquid chromatography/mass spectrometry (LC-MS/MS). PFAS concentrations are determined by isotope dilution quantification.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
**	Indicative data, theoretical holding time exceeded.	NVL	Not validated.	LOR	Limit of Reporting.
***	Indicates that both * and ** apply.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be $1.6 / 2$ (0.8 mg/kg). Where only 2 analytes are being summed, the "Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the $\pm$ sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.

Note that in terms of units of radioactivity:

- 1 Bq is equivalent to 27 pCi
- 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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ANALYTICAL REPORT



Accreditation No. 2562

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SGS Reference **SE247182 R0**
Date Received 05 May 2023
Date Reported 18 May 2023

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

No respirable fibres detected in all soil samples using trace analysis technique.

Sample #30: Chrysotile asbestos found in approx 40x30x6mm cement sheet fragment.

Sample #31: Asbestos Found only in Cement Sheet Fragments

Asbestos analysed by Approved Identifiers Ravee Sivasubramaniam and Yusuf Kuthpudin

PFAS subcontracted to SGS Melbourne, Unit 10/585 Blackburn Road Notting Hill VIC 3168, NATA Accreditation Number 2562, Site number 14420. Report R0. ME334059.

SIGNATORIES

Ravee SIVASUBRAMANIAM
Hygiene Team Leader

RESULTS

Fibre Identification in soil

Method AS4964/AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE247182.001	TP114_0.5	Soil	149g Clay, Sand, Rocks	04 May 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE247182.002	TP114_1	Soil	185g Clay, Sand, Rocks	04 May 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE247182.003	TP109_0.1	Soil	176g Clay, Sand, Soil, Rocks	04 May 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE247182.005	TP112_0.1	Soil	174g Clay, Sand, Rocks	04 May 2023	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE247182.006	TP112_1	Soil	185g Clay, Sand, Rocks	04 May 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE247182.007	TP136_0.1	Soil	193g Sand, Soil, Rocks	04 May 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE247182.008	TP136_0.5	Soil	198g Sand, Soil, Rocks	04 May 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE247182.009	TP111_0.5	Soil	159g Clay, Sand, Soil	04 May 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE247182.011	TP116_0.1	Soil	156g Clay, Sand, Soil, Rocks	05 May 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE247182.014	TP117_0.1	Soil	158g Clay, Sand, Soil, Rocks	05 May 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE247182.016	TP119_0.1	Soil	196g Clay, Sand, Rocks	05 May 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE247182.017	TP119_0.5	Soil	179g Clay, Sand	05 May 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE247182.018	TP120_0.1	Soil	160g Clay, Sand, Soil, Rocks	05 May 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE247182.019	TP120_0.5	Soil	205g Clay, Sand	05 May 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE247182.021	TP121_0.3	Soil	170g Sand, Soil, Rocks	05 May 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE247182.022	TP121_0.7	Soil	194g Clay, Sand	05 May 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE247182.023	TP122_0.1	Soil	204g Clay, Sand, Rocks	05 May 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE247182.025	TP123_0.1	Soil	215g Clay, Sand, Rocks	05 May 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE247182.028	TP124_0.1	Soil	193g Clay, Sand, Rocks	05 May 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE247182.029	TP124_1	Soil	164g Clay, Sand	05 May 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE247182.030	TP125_0.1	Soil	184g Clay, Sand, Rocks	05 May 2023	Chrysotile Asbestos Found at RL of 0.1g/kg	>0.01
SE247182.032	TP125_1.2	Soil	143g Clay, Sand, Rocks	05 May 2023	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE247182.034	TP126_0.2	Soil	167g Clay, Sand	05 May 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE247182.035	TP126_0.6	Soil	191g Clay, Sand	05 May 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE247182.036	TP127_0.2	Soil	180g Clay, Sand	05 May 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE247182.038	TP128_0.1	Soil	228g Clay, Sand	05 May 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE247182.039	TP128_0.5	Soil	176g Clay, Sand	05 May 2023	No Asbestos Found at RL of 0.1g/kg	<0.01



ANALYTICAL REPORT

SE247182 R0

RESULTS

Fibre Identification in soil

Method AS4964/AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE247182.040	TP132_0.1	Soil	195g Sand, Soil, Rocks	05 May 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE247182.041	TP132_1	Soil	194g Clay, Sand, Soil, Rocks	05 May 2023	No Asbestos Found at RL of 0.1g/kg	<0.01



ANALYTICAL REPORT

SE247182 R0

RESULTS

Fibre ID in bulk materials

Method AN602/AS4964

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE247182.031	TP125_0.1_PAC M	Other	50x20x5mm Cement Sheet Fragments x2 and 40x15x5mm Sandy Cement Fragments x2	05 May 2023	Chrysotile Asbestos Detected	

METHOD

METHODOLOGY SUMMARY

AN602/AS4964	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic 'clues', which provide a reasonable degree of certainty, dispersion staining is a mandatory 'clue' for positive identification. If sufficient 'clues' are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602/AS4964	Fibres/material that cannot be unequivocally identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602/AS4964	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples, Section 8.4, Trace Analysis Criteria, Note 4 states: "Depending upon sample condition and fibre type, the detection/reporting limit (RL) of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602/AS4964	The sample can be reported "no asbestos found at the reporting limit (RL) of 0.1 g/kg" (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no 'respirable' fibres); (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg; and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.

FOOTNOTES

Amosite	-	Brown Asbestos	NA	-	Not Analysed
Chrysotile	-	White Asbestos	LNR	-	Listed, Not Required
Crocidolite	-	Blue Asbestos	*	-	NATA accreditation does not cover the performance of this service.
Amphiboles	-	Amosite and/or Crocidolite	**	-	Indicative data, theoretical holding time exceeded.
			***	-	Indicates that both * and ** apply.

(In reference to soil samples only) This report does not comply with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment and Remediation and Management of Asbestos Contaminated sites in Western Australia - May 2009.

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.

Where reported: 'Asbestos Detected': Asbestos detected by polarised light microscopy, including dispersion staining.

Where reported: 'No Asbestos Found': No Asbestos Found by polarised light microscopy, including dispersion staining.

Where reported: 'UMF Detected': Mineral fibres of unknown type detected by polarised light microscopy, including dispersion staining. Confirmation by another independent analytical technique may be necessary.

Even after disintegration it can be very difficult, or impossible, to detect the presence of asbestos in some asbestos-containing bulk materials using polarised light microscopy. This is due to the low grade or small length or diameter of asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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ANALYTICAL REPORT



Accreditation No. 2562

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Project **300304375 Racecourse Rd**
Order Number **SE247182**
Samples **42**

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SGS Reference **ME334059 R0**
Date Received **11 May 2023**
Date Reported **17 May 2023**

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(14420).

SIGNATORIES

Susan WAN
Senior Chemist



ANALYTICAL REPORT

ME334059 R0

Parameter	Units	LOR	Sample Number	ME334059.001	ME334059.002	ME334059.003	ME334059.004
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	04 May 2023	04 May 2023	04 May 2023	04 May 2023
			Sample Name	SE247182.001	SE247182.002	SE247182.003	SE247182.004

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples Method: MA-1523 Tested: 15/5/2023

Perfluorobutanoic acid (PFBA)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0008	<0.0008	-	<0.0008	-
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Sum PFOS and PFHXS	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluorononane sulfonate (PFNS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
(13C4-PFBA) Isotopically Labelled Internal Recovery	%	-	103	-	103	-
(13C5-PFPeA) Isotopically Labelled Internal Recovery	%	-	105	-	103	-
(13C5-PFHxA) Isotopically Labelled Internal Recovery	%	-	89	-	95	-
(13C4-PFHpA) Isotopically Labelled Internal Recovery	%	-	95	-	96	-
(13C4_PFOA) Isotopically Labelled Internal Recovery	%	-	97	-	101	-
(13C3-PFBS) Isotopically Labelled Internal Recovery	%	-	93	-	90	-
(13C3-PFHxS) Isotopically Labelled Internal Recovery	%	-	100	-	87	-
(13C8-PFOS) Isotopically Labelled Internal Recovery	%	-	109	-	106	-



ANALYTICAL REPORT

ME334059 R0

		Sample Number	ME334059.005	ME334059.006	ME334059.007	ME334059.008
		Sample Matrix	Soil	Soil	Soil	Soil
		Sample Date	04 May 2023	04 May 2023	04 May 2023	04 May 2023
		Sample Name	SE247182.005	SE247182.006	SE247182.007	SE247182.008
Parameter	Units	LOR				

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples Method: MA-1523 Tested: 15/5/2023

Perfluorobutanoic acid (PFBA)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0008	<0.0008	-	<0.0008	-
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Sum PFOS and PFHXS	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluorononane sulfonate (PFNS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
(13C4-PFBA) Isotopically Labelled Internal Recovery	%	-	105	-	103	-
(13C5-PFPeA) Isotopically Labelled Internal Recovery	%	-	108	-	104	-
(13C5-PFHxA) Isotopically Labelled Internal Recovery	%	-	103	-	98	-
(13C4-PFHpA) Isotopically Labelled Internal Recovery	%	-	108	-	109	-
(13C4_PFOA) Isotopically Labelled Internal Recovery	%	-	106	-	112	-
(13C3-PFBS) Isotopically Labelled Internal Recovery	%	-	105	-	95	-
(13C3-PFHxS) Isotopically Labelled Internal Recovery	%	-	105	-	102	-
(13C8-PFOS) Isotopically Labelled Internal Recovery	%	-	95	-	100	-



ANALYTICAL REPORT

ME334059 R0

Parameter	Units	LOR	Sample Number	ME334059.009	ME334059.010	ME334059.011	ME334059.012
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	04 May 2023	04 May 2023	04 May 2023	04 May 2023
			Sample Name	SE247182.009	SE247182.010	SE247182.011	SE247182.012

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples Method: MA-1523 Tested: 15/5/2023

Perfluorobutanoic acid (PFBA)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0008	<0.0008	-	<0.0008	-
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Sum PFOS and PFHXS	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluorononane sulfonate (PFNS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
(13C4-PFBA) Isotopically Labelled Internal Recovery	%	-	102	-	104	-
(13C5-PFPeA) Isotopically Labelled Internal Recovery	%	-	106	-	107	-
(13C5-PFHxA) Isotopically Labelled Internal Recovery	%	-	113	-	104	-
(13C4-PFHpA) Isotopically Labelled Internal Recovery	%	-	103	-	102	-
(13C4_PFOA) Isotopically Labelled Internal Recovery	%	-	107	-	120	-
(13C3-PFBS) Isotopically Labelled Internal Recovery	%	-	99	-	92	-
(13C3-PFHxS) Isotopically Labelled Internal Recovery	%	-	105	-	89	-
(13C8-PFOS) Isotopically Labelled Internal Recovery	%	-	119	-	103	-



ANALYTICAL REPORT

ME334059 R0

			Sample Number	ME334059.013	ME334059.014	ME334059.015	ME334059.016
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	04 May 2023	04 May 2023	04 May 2023	04 May 2023
			Sample Name	SE247182.013	SE247182.014	SE247182.015	SE247182.016
Parameter	Units	LOR					

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples Method: MA-1523 Tested: 17/5/2023

Perfluorobutanoic acid (PFBA)	mg/kg	0.0016	-	<0.0016	-	<0.0016
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0016	-	<0.0016	-	<0.0016
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0016	-	<0.0016	-	<0.0016
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0016	-	<0.0016	-	<0.0016
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0008	-	<0.0008	-	<0.0008
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0016	-	<0.0016	-	<0.0016
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0016	-	<0.0016	-	<0.0016
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0016	-	<0.0016	-	<0.0016
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0016	-	<0.0016	-	<0.0016
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0016	-	<0.0016	-	<0.0016
Sum PFOS and PFHXS	mg/kg	0.0016	-	<0.0016	-	<0.0016
Perfluorononane sulfonate (PFNS)	mg/kg	0.0016	-	<0.0016	-	<0.0016
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.0016	-	<0.0016	-	<0.0016
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.0016	-	<0.0016	-	<0.0016
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.0016	-	<0.0016	-	<0.0016
(13C4-PFBA) Isotopically Labelled Internal Recovery	%	-	-	103	-	105
(13C5-PFPeA) Isotopically Labelled Internal Recovery	%	-	-	107	-	108
(13C5-PFHxA) Isotopically Labelled Internal Recovery	%	-	-	102	-	97
(13C4-PFHpA) Isotopically Labelled Internal Recovery	%	-	-	107	-	101
(13C4_PFOA) Isotopically Labelled Internal Recovery	%	-	-	97	-	104
(13C3-PFBS) Isotopically Labelled Internal Recovery	%	-	-	109	-	93
(13C3-PFHxS) Isotopically Labelled Internal Recovery	%	-	-	109	-	105
(13C8-PFOS) Isotopically Labelled Internal Recovery	%	-	-	88	-	101



ANALYTICAL REPORT

ME334059 R0

		Sample Number	ME334059.017	ME334059.018	ME334059.019	ME334059.020
		Sample Matrix	Soil	Soil	Soil	Soil
		Sample Date	04 May 2023	04 May 2023	04 May 2023	04 May 2023
		Sample Name	SE247182.017	SE247182.018	SE247182.019	SE247182.020
Parameter	Units	LOR				

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples Method: MA-1523 Tested: 17/5/2023

Perfluorobutanoic acid (PFBA)	mg/kg	0.0016	-	<0.0016	-	-
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0016	-	<0.0016	-	-
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0016	-	<0.0016	-	-
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0016	-	<0.0016	-	-
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0008	-	<0.0008	-	-
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0016	-	<0.0016	-	-
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0016	-	<0.0016	-	-
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0016	-	<0.0016	-	-
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0016	-	<0.0016	-	-
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0016	-	<0.0016	-	-
Sum PFOS and PFHXS	mg/kg	0.0016	-	<0.0016	-	-
Perfluorononane sulfonate (PFNS)	mg/kg	0.0016	-	<0.0016	-	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.0016	-	<0.0016	-	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.0016	-	<0.0016	-	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.0016	-	<0.0016	-	-
(13C4-PFBA) Isotopically Labelled Internal Recovery	%	-	-	106	-	-
(13C5-PFPeA) Isotopically Labelled Internal Recovery	%	-	-	108	-	-
(13C5-PFHxA) Isotopically Labelled Internal Recovery	%	-	-	112	-	-
(13C4-PFHpA) Isotopically Labelled Internal Recovery	%	-	-	109	-	-
(13C4_PFOA) Isotopically Labelled Internal Recovery	%	-	-	95	-	-
(13C3-PFBS) Isotopically Labelled Internal Recovery	%	-	-	109	-	-
(13C3-PFHxS) Isotopically Labelled Internal Recovery	%	-	-	107	-	-
(13C8-PFOS) Isotopically Labelled Internal Recovery	%	-	-	112	-	-



ANALYTICAL REPORT

ME334059 R0

Parameter	Units	LOR	Sample Number	ME334059.021	ME334059.022	ME334059.023	ME334059.024
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	04 May 2023	04 May 2023	04 May 2023	04 May 2023
			Sample Name	SE247182.021	SE247182.022	SE247182.023	SE247182.024

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples Method: MA-1523 Tested: 15/5/2023

Perfluorobutanoic acid (PFBA)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0008	<0.0008	-	<0.0008	-
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
Sum PFOS and PFHXS	mg/kg	0.0016	<0.0016	-	<0.0016	-
Perfluorononane sulfonate (PFNS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.0016	<0.0016	-	<0.0016	-
(13C4-PFBA) Isotopically Labelled Internal Recovery	%	-	103	-	102	-
(13C5-PFPeA) Isotopically Labelled Internal Recovery	%	-	106	-	108	-
(13C5-PFHxA) Isotopically Labelled Internal Recovery	%	-	104	-	97	-
(13C4-PFHpA) Isotopically Labelled Internal Recovery	%	-	113	-	92	-
(13C4_PFOA) Isotopically Labelled Internal Recovery	%	-	113	-	97	-
(13C3-PFBS) Isotopically Labelled Internal Recovery	%	-	99	-	112	-
(13C3-PFHxS) Isotopically Labelled Internal Recovery	%	-	108	-	111	-
(13C8-PFOS) Isotopically Labelled Internal Recovery	%	-	99	-	111	-



ANALYTICAL REPORT

ME334059 R0

Parameter	Units	LOR	Sample Number	ME334059.025	ME334059.026	ME334059.027	ME334059.028
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	04 May 2023	04 May 2023	04 May 2023	04 May 2023
			Sample Name	SE247182.025	SE247182.026	SE247182.027	SE247182.028

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples Method: MA-1523 Tested: 15/5/2023

Perfluorobutanoic acid (PFBA)	mg/kg	0.0016	<0.0016	-	-	<0.0016
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0016	<0.0016	-	-	<0.0016
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0016	<0.0016	-	-	<0.0016
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0016	<0.0016	-	-	<0.0016
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0008	<0.0008	-	-	<0.0008
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0016	<0.0016	-	-	<0.0016
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0016	<0.0016	-	-	<0.0016
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0016	<0.0016	-	-	<0.0016
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0016	<0.0016	-	-	<0.0016
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0016	<0.0016	-	-	<0.0016
Sum PFOS and PFHXS	mg/kg	0.0016	<0.0016	-	-	<0.0016
Perfluorononane sulfonate (PFNS)	mg/kg	0.0016	<0.0016	-	-	<0.0016
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.0016	<0.0016	-	-	<0.0016
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.0016	<0.0016	-	-	<0.0016
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.0016	<0.0016	-	-	<0.0016
(13C4-PFBA) Isotopically Labelled Internal Recovery	%	-	103	-	-	104
(13C5-PFPeA) Isotopically Labelled Internal Recovery	%	-	104	-	-	106
(13C5-PFHxA) Isotopically Labelled Internal Recovery	%	-	103	-	-	97
(13C4-PFHpA) Isotopically Labelled Internal Recovery	%	-	104	-	-	102
(13C4_PFOA) Isotopically Labelled Internal Recovery	%	-	107	-	-	104
(13C3-PFBS) Isotopically Labelled Internal Recovery	%	-	96	-	-	103
(13C3-PFHxS) Isotopically Labelled Internal Recovery	%	-	92	-	-	115
(13C8-PFOS) Isotopically Labelled Internal Recovery	%	-	93	-	-	90



ANALYTICAL REPORT

ME334059 R0

			Sample Number	ME334059.029	ME334059.030	ME334059.031	ME334059.032
			Sample Matrix	Soil	Soil	Material	Soil
			Sample Date	04 May 2023	04 May 2023	04 May 2023	04 May 2023
			Sample Name	SE247182.029	SE247182.030	SE247182.031	SE247182.032
Parameter	Units	LOR					

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples Method: MA-1523 Tested: 17/5/2023

Perfluorobutanoic acid (PFBA)	mg/kg	0.0016	-	<0.0016	-	-
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0016	-	<0.0016	-	-
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0016	-	<0.0016	-	-
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0016	-	<0.0016	-	-
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0008	-	<0.0008	-	-
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0016	-	<0.0016	-	-
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0016	-	<0.0016	-	-
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0016	-	<0.0016	-	-
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0016	-	<0.0016	-	-
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0016	-	<0.0016	-	-
Sum PFOS and PFHXS	mg/kg	0.0016	-	<0.0016	-	-
Perfluorononane sulfonate (PFNS)	mg/kg	0.0016	-	<0.0016	-	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.0016	-	<0.0016	-	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.0016	-	<0.0016	-	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.0016	-	<0.0016	-	-
(13C4-PFBA) Isotopically Labelled Internal Recovery	%	-	-	103	-	-
(13C5-PFPeA) Isotopically Labelled Internal Recovery	%	-	-	107	-	-
(13C5-PFHxA) Isotopically Labelled Internal Recovery	%	-	-	95	-	-
(13C4-PFHpA) Isotopically Labelled Internal Recovery	%	-	-	101	-	-
(13C4_PFOA) Isotopically Labelled Internal Recovery	%	-	-	92	-	-
(13C3-PFBS) Isotopically Labelled Internal Recovery	%	-	-	98	-	-
(13C3-PFHxS) Isotopically Labelled Internal Recovery	%	-	-	102	-	-
(13C8-PFOS) Isotopically Labelled Internal Recovery	%	-	-	80	-	-



ANALYTICAL REPORT

ME334059 R0

		Sample Number	ME334059.033	ME334059.034	ME334059.035	ME334059.036
		Sample Matrix	Soil	Soil	Soil	Soil
		Sample Date	04 May 2023	04 May 2023	04 May 2023	04 May 2023
		Sample Name	SE247182.033	SE247182.034	SE247182.035	SE247182.036
Parameter	Units	LOR				

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples Method: MA-1523 Tested: 17/5/2023

Perfluorobutanoic acid (PFBA)	mg/kg	0.0016	-	<0.0016	-	<0.0016
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0016	-	<0.0016	-	<0.0016
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0016	-	<0.0016	-	<0.0016
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0016	-	<0.0016	-	<0.0016
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0008	-	<0.0008	-	<0.0008
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0016	-	<0.0016	-	<0.0016
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0016	-	<0.0016	-	<0.0016
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0016	-	<0.0016	-	<0.0016
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0016	-	<0.0016	-	<0.0016
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0016	-	<0.0016	-	<0.0016
Sum PFOS and PFHXS	mg/kg	0.0016	-	<0.0016	-	<0.0016
Perfluorononane sulfonate (PFNS)	mg/kg	0.0016	-	<0.0016	-	<0.0016
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.0016	-	<0.0016	-	<0.0016
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.0016	-	<0.0016	-	<0.0016
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.0016	-	<0.0016	-	<0.0016
(13C4-PFBA) Isotopically Labelled Internal Recovery	%	-	-	101	-	107
(13C5-PFPeA) Isotopically Labelled Internal Recovery	%	-	-	104	-	110
(13C5-PFHxA) Isotopically Labelled Internal Recovery	%	-	-	95	-	100
(13C4-PFHpA) Isotopically Labelled Internal Recovery	%	-	-	100	-	104
(13C4_PFOA) Isotopically Labelled Internal Recovery	%	-	-	95	-	93
(13C3-PFBS) Isotopically Labelled Internal Recovery	%	-	-	102	-	112
(13C3-PFHxS) Isotopically Labelled Internal Recovery	%	-	-	117	-	109
(13C8-PFOS) Isotopically Labelled Internal Recovery	%	-	-	94	-	92



ANALYTICAL REPORT

ME334059 R0

Parameter	Units	LOR	Sample Number	ME334059.037	ME334059.038	ME334059.039	ME334059.040
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	04 May 2023	04 May 2023	04 May 2023	04 May 2023
			Sample Name	SE247182.037	SE247182.038	SE247182.039	SE247182.040

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples Method: MA-1523 Tested: 17/5/2023

Perfluorobutanoic acid (PFBA)	mg/kg	0.0016	-	<0.0016	-	<0.0016
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0016	-	<0.0016	-	<0.0016
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0016	-	<0.0016	-	<0.0016
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0016	-	<0.0016	-	<0.0016
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0008	-	<0.0008	-	<0.0008
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0016	-	<0.0016	-	<0.0016
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0016	-	<0.0016	-	<0.0016
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0016	-	<0.0016	-	<0.0016
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0016	-	<0.0016	-	<0.0016
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0016	-	<0.0016	-	<0.0016
Sum PFOS and PFHXS	mg/kg	0.0016	-	<0.0016	-	<0.0016
Perfluorononane sulfonate (PFNS)	mg/kg	0.0016	-	<0.0016	-	<0.0016
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.0016	-	<0.0016	-	<0.0016
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.0016	-	<0.0016	-	<0.0016
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.0016	-	<0.0016	-	<0.0016
(13C4-PFBA) Isotopically Labelled Internal Recovery	%	-	-	104	-	103
(13C5-PFPeA) Isotopically Labelled Internal Recovery	%	-	-	106	-	106
(13C5-PFHxA) Isotopically Labelled Internal Recovery	%	-	-	92	-	113
(13C4-PFHpA) Isotopically Labelled Internal Recovery	%	-	-	96	-	113
(13C4_PFOA) Isotopically Labelled Internal Recovery	%	-	-	101	-	119
(13C3-PFBS) Isotopically Labelled Internal Recovery	%	-	-	106	-	98
(13C3-PFHxS) Isotopically Labelled Internal Recovery	%	-	-	116	-	108
(13C8-PFOS) Isotopically Labelled Internal Recovery	%	-	-	128	-	115



ANALYTICAL REPORT

ME334059 R0

		Sample Number	ME334059.041	ME334059.042
		Sample Matrix	Soil	Soil
		Sample Date	04 May 2023	04 May 2023
		Sample Name	SE247182.041	SE247182.042
Parameter	Units	LOR		

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples Method: MA-1523 Tested: 17/5/2023

Perfluorobutanoic acid (PFBA)	mg/kg	0.0016	-	-
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0016	-	-
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0016	-	-
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0016	-	-
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0008	-	-
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0016	-	-
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0016	-	-
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0016	-	-
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0016	-	-
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0016	-	-
Sum PFOS and PFHXS	mg/kg	0.0016	-	-
Perfluorononane sulfonate (PFNS)	mg/kg	0.0016	-	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.0016	-	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.0016	-	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.0016	-	-
(13C4-PFBA) Isotopically Labelled Internal Recovery	%	-	-	-
(13C5-PFPeA) Isotopically Labelled Internal Recovery	%	-	-	-
(13C5-PFHxA) Isotopically Labelled Internal Recovery	%	-	-	-
(13C4-PFHpA) Isotopically Labelled Internal Recovery	%	-	-	-
(13C4_PFOA) Isotopically Labelled Internal Recovery	%	-	-	-
(13C3-PFBS) Isotopically Labelled Internal Recovery	%	-	-	-
(13C3-PFHxS) Isotopically Labelled Internal Recovery	%	-	-	-
(13C8-PFOS) Isotopically Labelled Internal Recovery	%	-	-	-

MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples Method: MA-1523

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Perfluorobutanoic acid (PFBA)	LB061749	mg/kg	0.0016	<0.0016	0%	NA
Perfluoropentanoic acid (PFPeA)	LB061749	mg/kg	0.0016	<0.0016	0%	NA
Perfluorohexanoic acid (PFHxA)	LB061749	mg/kg	0.0016	<0.0016	0%	NA
Perfluoroheptanoic acid (PFHpA)	LB061749	mg/kg	0.0016	<0.0016	0%	114%
Perfluorooctanoic Acid (PFOA)	LB061749	mg/kg	0.0008	<0.0008	0%	127%
Perfluorobutane sulfonate (PFBS)	LB061749	mg/kg	0.0016	<0.0016	0%	NA
Perfluoropentane sulfonate (PFPeS)	LB061749	mg/kg	0.0016	<0.0016	0%	NA
Perfluorohexane sulfonate (PFHxS)	LB061749	mg/kg	0.0016	<0.0016	0%	NA
Perfluoroheptane sulfonate (PFHpS)	LB061749	mg/kg	0.0016	<0.0016	0%	NA
Perfluorooctane sulfonate (PFOS)	LB061749	mg/kg	0.0016	<0.0016	0%	118%
Sum PFOS and PFHxS	LB061749	mg/kg	0.0016	<0.0016	0%	NA
Perfluorononane sulfonate (PFNS)	LB061749	mg/kg	0.0016	<0.0016	0%	NA
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	LB061749	mg/kg	0.0016	<0.0016	0%	NA
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	LB061749	mg/kg	0.0016	<0.0016	0%	NA
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	LB061749	mg/kg	0.0016	<0.0016	0%	NA
(13C4-PFBA) Isotopically Labelled Internal Recovery Standard	LB061749	%	-	105%	1%	105%
(13C5-PFPeA) Isotopically Labelled Internal Recovery Standard	LB061749	%	-	105%	0 - 3%	104%
(13C5-PFHxA) Isotopically Labelled Internal Recovery Standard	LB061749	%	-	103%	8 - 20%	97%
(13C4-PFHpA) Isotopically Labelled Internal Recovery Standard	LB061749	%	-	103%	15%	99%
(13C4_PFOA) Isotopically Labelled Internal Recovery Standard	LB061749	%	-	102%	16 - 19%	103%
(13C3-PFBS) Isotopically Labelled Internal Recovery Standard	LB061749	%	-	96%	1 - 20%	81%
(13C3-PFHxS) Isotopically Labelled Internal Recovery Standard	LB061749	%	-	100%	8 - 9%	101%
(13C8-PFOS) Isotopically Labelled Internal Recovery Standard	LB061749	%	-	103%	7 - 14%	102%



METHOD

MA-1523

METHODOLOGY SUMMARY

This method covers the analysis of per- and polyfluoroalkyl substances (PFAS) in aqueous, solid and biosolid samples and solvent extracts, determined as the total of linear and branched isomers. After spiking with isotopically labelled quantification surrogates and clean-up via SPE cartridges sample extracts are analysed by liquid chromatography/mass spectrometry (LC-MS/MS). PFAS concentrations are determined by isotope dilution quantification.

FOOTNOTES

IS	Insufficient sample for analysis.	LOR	Limit of Reporting
LNR	Sample listed, but not received.	↑↓	Raised or Lowered Limit of Reporting
*	NATA accreditation does not cover the performance of this service.	QFH	QC result is above the upper tolerance
**	Indicative data, theoretical holding time exceeded.	QFL	QC result is below the lower tolerance
***	Indicates that both * and ** apply.	-	The sample was not analysed for this analyte
		NVL	Not Validated

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.

Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the "Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.

Note that in terms of units of radioactivity:

- 1 Bq is equivalent to 27 pCi
- 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE247182 R0

CLIENT DETAILS

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Order Number (Not specified)
Samples 42

LABORATORY DETAILS

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Email au.environmental.sydney@sgs.com
SGS Reference **SE247182 R0**
Date Received 05 May 2023
Date Reported 18 May 2023

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.

This QA/QC Statement must be read in conjunction with the referenced Analytical Report.

The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Duplicate	Full 8270 SVOC in Soil	1 item
Matrix Spike	VOC's in Soil	1 item
	Volatile Petroleum Hydrocarbons in Soil	1 item

SAMPLE SUMMARY

Sample counts by matrix	41 Soil, 1 Material	Type of documentation received	COC
Date documentation received	9/5/2023@11:11am	Samples received in good order	Yes
Samples received without headspace	Yes	Sample temperature upon receipt	6.5C
Sample container provider	SGS	Turnaround time requested	Standard
Samples received in correct containers	Yes	Sufficient sample for analysis	Yes
Sample cooling method	Ice	Samples clearly labelled	Yes
Complete documentation received	Yes		



HOLDING TIME SUMMARY

SE247182 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Fibre ID in bulk materials

Method: ME-(AU)-JENVJAN602/AS4964

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP125_0.1_PACM	SE247182.031	LB279581	05 May 2023	05 May 2023	04 May 2024	16 May 2023	04 May 2024	16 May 2023

Fibre Identification in soil

Method: ME-(AU)-JENVJAS4964/AN602

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP114_0.5	SE247182.001	LB279471	04 May 2023	05 May 2023	03 May 2024	15 May 2023	03 May 2024	16 May 2023
TP114_1	SE247182.002	LB279471	04 May 2023	05 May 2023	03 May 2024	15 May 2023	03 May 2024	16 May 2023
TP109_0.1	SE247182.003	LB279471	04 May 2023	05 May 2023	03 May 2024	15 May 2023	03 May 2024	16 May 2023
TP112_0.1	SE247182.005	LB279471	04 May 2023	05 May 2023	03 May 2024	15 May 2023	03 May 2024	16 May 2023
TP112_1	SE247182.006	LB279471	04 May 2023	05 May 2023	03 May 2024	15 May 2023	03 May 2024	16 May 2023
TP136_0.1	SE247182.007	LB279471	04 May 2023	05 May 2023	03 May 2024	15 May 2023	03 May 2024	16 May 2023
TP136_0.5	SE247182.008	LB279471	04 May 2023	05 May 2023	03 May 2024	15 May 2023	03 May 2024	16 May 2023
TP111_0.5	SE247182.009	LB279471	04 May 2023	05 May 2023	03 May 2024	15 May 2023	03 May 2024	16 May 2023
TP116_0.1	SE247182.011	LB279471	05 May 2023	05 May 2023	04 May 2024	15 May 2023	04 May 2024	16 May 2023
TP117_0.1	SE247182.014	LB279471	05 May 2023	05 May 2023	04 May 2024	15 May 2023	04 May 2024	16 May 2023
TP119_0.1	SE247182.016	LB279471	05 May 2023	05 May 2023	04 May 2024	15 May 2023	04 May 2024	16 May 2023
TP119_0.5	SE247182.017	LB279471	05 May 2023	05 May 2023	04 May 2024	15 May 2023	04 May 2024	16 May 2023
TP120_0.1	SE247182.018	LB279471	05 May 2023	05 May 2023	04 May 2024	15 May 2023	04 May 2024	16 May 2023
TP120_0.5	SE247182.019	LB279471	05 May 2023	05 May 2023	04 May 2024	15 May 2023	04 May 2024	16 May 2023
TP121_0.3	SE247182.021	LB279471	05 May 2023	05 May 2023	04 May 2024	15 May 2023	04 May 2024	16 May 2023
TP121_0.7	SE247182.022	LB279471	05 May 2023	05 May 2023	04 May 2024	15 May 2023	04 May 2024	16 May 2023
TP122_0.1	SE247182.023	LB279471	05 May 2023	05 May 2023	04 May 2024	15 May 2023	04 May 2024	16 May 2023
TP123_0.1	SE247182.025	LB279471	05 May 2023	05 May 2023	04 May 2024	15 May 2023	04 May 2024	16 May 2023
TP124_0.1	SE247182.028	LB279471	05 May 2023	05 May 2023	04 May 2024	15 May 2023	04 May 2024	16 May 2023
TP124_1	SE247182.029	LB279471	05 May 2023	05 May 2023	04 May 2024	15 May 2023	04 May 2024	16 May 2023
TP125_0.1	SE247182.030	LB279471	05 May 2023	05 May 2023	04 May 2024	15 May 2023	04 May 2024	16 May 2023
TP125_1.2	SE247182.032	LB279471	05 May 2023	05 May 2023	04 May 2024	15 May 2023	04 May 2024	16 May 2023
TP126_0.2	SE247182.034	LB279471	05 May 2023	05 May 2023	04 May 2024	15 May 2023	04 May 2024	16 May 2023
TP126_0.6	SE247182.035	LB279471	05 May 2023	05 May 2023	04 May 2024	15 May 2023	04 May 2024	16 May 2023
TP127_0.2	SE247182.036	LB279471	05 May 2023	05 May 2023	04 May 2024	15 May 2023	04 May 2024	16 May 2023
TP128_0.1	SE247182.038	LB279471	05 May 2023	05 May 2023	04 May 2024	15 May 2023	04 May 2024	16 May 2023
TP128_0.5	SE247182.039	LB279471	05 May 2023	05 May 2023	04 May 2024	15 May 2023	04 May 2024	16 May 2023
TP132_0.1	SE247182.040	LB279471	05 May 2023	05 May 2023	04 May 2024	15 May 2023	04 May 2024	16 May 2023
TP132_1	SE247182.041	LB279471	05 May 2023	05 May 2023	04 May 2024	15 May 2023	04 May 2024	16 May 2023

Full 8270 SVOC in Soil

Method: ME-(AU)-JENVJAN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP114_1	SE247182.002	LB279065	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP112_0.1	SE247182.005	LB279065	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP136_0.1	SE247182.007	LB279065	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP111_0.5	SE247182.009	LB279065	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP111_2.5	SE247182.010	LB279065	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP119_0.1	SE247182.016	LB279065	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP121_0.3	SE247182.021	LB279065	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP123_0.1	SE247182.025	LB279065	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP125_0.1	SE247182.030	LB279065	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP125_1.2	SE247182.032	LB279065	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP126_0.2	SE247182.034	LB279065	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP128_0.1	SE247182.038	LB279065	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP132_0.1	SE247182.040	LB279065	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023

Mercury in Soil

Method: ME-(AU)-JENVJAN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP114_0.5	SE247182.001	LB279094	04 May 2023	05 May 2023	01 Jun 2023	10 May 2023	01 Jun 2023	12 May 2023
TP114_1	SE247182.002	LB279094	04 May 2023	05 May 2023	01 Jun 2023	10 May 2023	01 Jun 2023	12 May 2023
TP109_0.1	SE247182.003	LB279094	04 May 2023	05 May 2023	01 Jun 2023	10 May 2023	01 Jun 2023	12 May 2023
TP109_1.2	SE247182.004	LB279094	04 May 2023	05 May 2023	01 Jun 2023	10 May 2023	01 Jun 2023	12 May 2023
TP112_0.1	SE247182.005	LB279094	04 May 2023	05 May 2023	01 Jun 2023	10 May 2023	01 Jun 2023	12 May 2023
TP112_1	SE247182.006	LB279094	04 May 2023	05 May 2023	01 Jun 2023	10 May 2023	01 Jun 2023	12 May 2023
TP136_0.1	SE247182.007	LB279094	04 May 2023	05 May 2023	01 Jun 2023	10 May 2023	01 Jun 2023	12 May 2023
TP136_0.5	SE247182.008	LB279094	04 May 2023	05 May 2023	01 Jun 2023	10 May 2023	01 Jun 2023	12 May 2023



HOLDING TIME SUMMARY

SE247182 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Mercury in Soil (continued)

Method: ME-(AU)-ENVJAN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP111_0.5	SE247182.009	LB279094	04 May 2023	05 May 2023	01 Jun 2023	10 May 2023	01 Jun 2023	12 May 2023
TP111_2.5	SE247182.010	LB279094	04 May 2023	05 May 2023	01 Jun 2023	10 May 2023	01 Jun 2023	12 May 2023
TP116_0.1	SE247182.011	LB279094	05 May 2023	05 May 2023	02 Jun 2023	10 May 2023	02 Jun 2023	12 May 2023
QA400	SE247182.012	LB279094	05 May 2023	05 May 2023	02 Jun 2023	10 May 2023	02 Jun 2023	12 May 2023
TP116_2	SE247182.013	LB279094	05 May 2023	05 May 2023	02 Jun 2023	10 May 2023	02 Jun 2023	12 May 2023
TP117_0.1	SE247182.014	LB279094	05 May 2023	05 May 2023	02 Jun 2023	10 May 2023	02 Jun 2023	12 May 2023
TP117_1	SE247182.015	LB279094	05 May 2023	05 May 2023	02 Jun 2023	10 May 2023	02 Jun 2023	12 May 2023
TP119_0.1	SE247182.016	LB279094	05 May 2023	05 May 2023	02 Jun 2023	10 May 2023	02 Jun 2023	12 May 2023
TP119_0.5	SE247182.017	LB279094	05 May 2023	05 May 2023	02 Jun 2023	10 May 2023	02 Jun 2023	12 May 2023
TP120_0.1	SE247182.018	LB279094	05 May 2023	05 May 2023	02 Jun 2023	10 May 2023	02 Jun 2023	12 May 2023
TP120_0.5	SE247182.019	LB279094	05 May 2023	05 May 2023	02 Jun 2023	10 May 2023	02 Jun 2023	12 May 2023
QA500	SE247182.020	LB279095	05 May 2023	05 May 2023	02 Jun 2023	10 May 2023	02 Jun 2023	12 May 2023
TP121_0.3	SE247182.021	LB279095	05 May 2023	05 May 2023	02 Jun 2023	10 May 2023	02 Jun 2023	12 May 2023
TP121_0.7	SE247182.022	LB279095	05 May 2023	05 May 2023	02 Jun 2023	10 May 2023	02 Jun 2023	12 May 2023
TP122_0.1	SE247182.023	LB279095	05 May 2023	05 May 2023	02 Jun 2023	10 May 2023	02 Jun 2023	12 May 2023
TP122_1	SE247182.024	LB279095	05 May 2023	05 May 2023	02 Jun 2023	10 May 2023	02 Jun 2023	12 May 2023
TP123_0.1	SE247182.025	LB279095	05 May 2023	05 May 2023	02 Jun 2023	10 May 2023	02 Jun 2023	12 May 2023
QA700	SE247182.026	LB279095	05 May 2023	05 May 2023	02 Jun 2023	10 May 2023	02 Jun 2023	12 May 2023
TP123_1	SE247182.027	LB279095	05 May 2023	05 May 2023	02 Jun 2023	10 May 2023	02 Jun 2023	12 May 2023
TP124_0.1	SE247182.028	LB279095	05 May 2023	05 May 2023	02 Jun 2023	10 May 2023	02 Jun 2023	12 May 2023
TP124_1	SE247182.029	LB279095	05 May 2023	05 May 2023	02 Jun 2023	10 May 2023	02 Jun 2023	12 May 2023
TP125_0.1	SE247182.030	LB279095	05 May 2023	05 May 2023	02 Jun 2023	10 May 2023	02 Jun 2023	12 May 2023
TP125_1.2	SE247182.032	LB279095	05 May 2023	05 May 2023	02 Jun 2023	10 May 2023	02 Jun 2023	12 May 2023
TP125_1.8	SE247182.033	LB279095	05 May 2023	05 May 2023	02 Jun 2023	10 May 2023	02 Jun 2023	12 May 2023
TP126_0.2	SE247182.034	LB279095	05 May 2023	05 May 2023	02 Jun 2023	10 May 2023	02 Jun 2023	12 May 2023
TP126_0.6	SE247182.035	LB279095	05 May 2023	05 May 2023	02 Jun 2023	10 May 2023	02 Jun 2023	12 May 2023
TP127_0.2	SE247182.036	LB279095	05 May 2023	05 May 2023	02 Jun 2023	10 May 2023	02 Jun 2023	12 May 2023
TP127_1	SE247182.037	LB279095	05 May 2023	05 May 2023	02 Jun 2023	10 May 2023	02 Jun 2023	12 May 2023
TP128_0.1	SE247182.038	LB279095	05 May 2023	05 May 2023	02 Jun 2023	10 May 2023	02 Jun 2023	12 May 2023
TP128_0.5	SE247182.039	LB279095	05 May 2023	05 May 2023	02 Jun 2023	10 May 2023	02 Jun 2023	12 May 2023
TP132_0.1	SE247182.040	LB279095	05 May 2023	05 May 2023	02 Jun 2023	10 May 2023	02 Jun 2023	12 May 2023
TP132_1	SE247182.041	LB279180	05 May 2023	05 May 2023	02 Jun 2023	11 May 2023	02 Jun 2023	12 May 2023
TP132_2	SE247182.042	LB279180	05 May 2023	05 May 2023	02 Jun 2023	11 May 2023	02 Jun 2023	12 May 2023

Moisture Content

Method: ME-(AU)-ENVJAN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP114_0.5	SE247182.001	LB279085	04 May 2023	05 May 2023	18 May 2023	10 May 2023	15 May 2023	12 May 2023
TP114_1	SE247182.002	LB279085	04 May 2023	05 May 2023	18 May 2023	10 May 2023	15 May 2023	12 May 2023
TP109_0.1	SE247182.003	LB279085	04 May 2023	05 May 2023	18 May 2023	10 May 2023	15 May 2023	12 May 2023
TP109_1.2	SE247182.004	LB279085	04 May 2023	05 May 2023	18 May 2023	10 May 2023	15 May 2023	12 May 2023
TP112_0.1	SE247182.005	LB279085	04 May 2023	05 May 2023	18 May 2023	10 May 2023	15 May 2023	12 May 2023
TP112_1	SE247182.006	LB279085	04 May 2023	05 May 2023	18 May 2023	10 May 2023	15 May 2023	12 May 2023
TP136_0.1	SE247182.007	LB279085	04 May 2023	05 May 2023	18 May 2023	10 May 2023	15 May 2023	12 May 2023
TP136_0.5	SE247182.008	LB279085	04 May 2023	05 May 2023	18 May 2023	10 May 2023	15 May 2023	12 May 2023
TP111_0.5	SE247182.009	LB279085	04 May 2023	05 May 2023	18 May 2023	10 May 2023	15 May 2023	12 May 2023
TP111_2.5	SE247182.010	LB279085	04 May 2023	05 May 2023	18 May 2023	10 May 2023	15 May 2023	12 May 2023
TP116_0.1	SE247182.011	LB279085	05 May 2023	05 May 2023	19 May 2023	10 May 2023	15 May 2023	12 May 2023
QA400	SE247182.012	LB279085	05 May 2023	05 May 2023	19 May 2023	10 May 2023	15 May 2023	12 May 2023
TP116_2	SE247182.013	LB279085	05 May 2023	05 May 2023	19 May 2023	10 May 2023	15 May 2023	12 May 2023
TP117_0.1	SE247182.014	LB279085	05 May 2023	05 May 2023	19 May 2023	10 May 2023	15 May 2023	12 May 2023
TP117_1	SE247182.015	LB279085	05 May 2023	05 May 2023	19 May 2023	10 May 2023	15 May 2023	12 May 2023
TP119_0.1	SE247182.016	LB279085	05 May 2023	05 May 2023	19 May 2023	10 May 2023	15 May 2023	12 May 2023
TP119_0.5	SE247182.017	LB279085	05 May 2023	05 May 2023	19 May 2023	10 May 2023	15 May 2023	12 May 2023
TP120_0.1	SE247182.018	LB279085	05 May 2023	05 May 2023	19 May 2023	10 May 2023	15 May 2023	12 May 2023
TP120_0.5	SE247182.019	LB279085	05 May 2023	05 May 2023	19 May 2023	10 May 2023	15 May 2023	12 May 2023
QA500	SE247182.020	LB279153	05 May 2023	05 May 2023	19 May 2023	10 May 2023	15 May 2023	12 May 2023
TP121_0.3	SE247182.021	LB279153	05 May 2023	05 May 2023	19 May 2023	10 May 2023	15 May 2023	12 May 2023
TP121_0.7	SE247182.022	LB279153	05 May 2023	05 May 2023	19 May 2023	10 May 2023	15 May 2023	12 May 2023
TP122_0.1	SE247182.023	LB279153	05 May 2023	05 May 2023	19 May 2023	10 May 2023	15 May 2023	12 May 2023
TP122_1	SE247182.024	LB279153	05 May 2023	05 May 2023	19 May 2023	10 May 2023	15 May 2023	12 May 2023



HOLDING TIME SUMMARY

SE247182 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Moisture Content (continued)

Method: ME-(AU)-ENVJAN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP123_0.1	SE247182.025	LB279153	05 May 2023	05 May 2023	19 May 2023	10 May 2023	15 May 2023	12 May 2023
QA700	SE247182.026	LB279153	05 May 2023	05 May 2023	19 May 2023	10 May 2023	15 May 2023	12 May 2023
TP123_1	SE247182.027	LB279153	05 May 2023	05 May 2023	19 May 2023	10 May 2023	15 May 2023	12 May 2023
TP124_0.1	SE247182.028	LB279153	05 May 2023	05 May 2023	19 May 2023	10 May 2023	15 May 2023	12 May 2023
TP124_1	SE247182.029	LB279153	05 May 2023	05 May 2023	19 May 2023	10 May 2023	15 May 2023	12 May 2023
TP125_0.1	SE247182.030	LB279153	05 May 2023	05 May 2023	19 May 2023	10 May 2023	15 May 2023	12 May 2023
TP125_1.2	SE247182.032	LB279153	05 May 2023	05 May 2023	19 May 2023	10 May 2023	15 May 2023	12 May 2023
TP125_1.8	SE247182.033	LB279153	05 May 2023	05 May 2023	19 May 2023	10 May 2023	15 May 2023	12 May 2023
TP126_0.2	SE247182.034	LB279153	05 May 2023	05 May 2023	19 May 2023	10 May 2023	15 May 2023	12 May 2023
TP126_0.6	SE247182.035	LB279153	05 May 2023	05 May 2023	19 May 2023	10 May 2023	15 May 2023	12 May 2023
TP127_0.2	SE247182.036	LB279153	05 May 2023	05 May 2023	19 May 2023	10 May 2023	15 May 2023	12 May 2023
TP127_1	SE247182.037	LB279153	05 May 2023	05 May 2023	19 May 2023	10 May 2023	15 May 2023	12 May 2023
TP128_0.1	SE247182.038	LB279153	05 May 2023	05 May 2023	19 May 2023	10 May 2023	15 May 2023	12 May 2023
TP128_0.5	SE247182.039	LB279153	05 May 2023	05 May 2023	19 May 2023	10 May 2023	15 May 2023	12 May 2023
TP132_0.1	SE247182.040	LB279153	05 May 2023	05 May 2023	19 May 2023	10 May 2023	15 May 2023	12 May 2023
TP132_1	SE247182.041	LB279149	05 May 2023	05 May 2023	19 May 2023	10 May 2023	15 May 2023	12 May 2023
TP132_2	SE247182.042	LB279149	05 May 2023	05 May 2023	19 May 2023	10 May 2023	15 May 2023	12 May 2023

OC Pesticides in Soil

Method: ME-(AU)-ENVJAN020

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP114_0.5	SE247182.001	LB279059	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP114_1	SE247182.002	LB279059	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP109_0.1	SE247182.003	LB279059	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP109_1.2	SE247182.004	LB279059	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP112_0.1	SE247182.005	LB279059	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	12 May 2023
TP112_1	SE247182.006	LB279059	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP136_0.1	SE247182.007	LB279059	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	12 May 2023
TP136_0.5	SE247182.008	LB279059	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP111_0.5	SE247182.009	LB279059	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP111_2.5	SE247182.010	LB279059	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP116_0.1	SE247182.011	LB279059	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
QA400	SE247182.012	LB279059	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP116_2	SE247182.013	LB279059	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP117_0.1	SE247182.014	LB279059	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP117_1	SE247182.015	LB279059	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP119_0.1	SE247182.016	LB279059	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP119_0.5	SE247182.017	LB279059	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP120_0.1	SE247182.018	LB279059	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP120_0.5	SE247182.019	LB279059	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
QA500	SE247182.020	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP121_0.3	SE247182.021	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP121_0.7	SE247182.022	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP122_0.1	SE247182.023	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP122_1	SE247182.024	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP123_0.1	SE247182.025	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	15 May 2023
QA700	SE247182.026	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP123_1	SE247182.027	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP124_0.1	SE247182.028	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP124_1	SE247182.029	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP125_0.1	SE247182.030	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP125_1.2	SE247182.032	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP125_1.8	SE247182.033	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP126_0.2	SE247182.034	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP126_0.6	SE247182.035	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP127_0.2	SE247182.036	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP127_1	SE247182.037	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP128_0.1	SE247182.038	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP128_0.5	SE247182.039	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP132_0.1	SE247182.040	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP132_1	SE247182.041	LB279145	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023



HOLDING TIME SUMMARY

SE247182 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

OC Pesticides in Soil (continued)

Method: ME-(AU)-ENVJAN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP132_2	SE247182.042	LB279145	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023

OP Pesticides in Soil

Method: ME-(AU)-ENVJAN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP114_0.5	SE247182.001	LB279059	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP114_1	SE247182.002	LB279059	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP109_0.1	SE247182.003	LB279059	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP109_1.2	SE247182.004	LB279059	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP112_0.1	SE247182.005	LB279059	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP112_1	SE247182.006	LB279059	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP136_0.1	SE247182.007	LB279059	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP136_0.5	SE247182.008	LB279059	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP111_0.5	SE247182.009	LB279059	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP111_2.5	SE247182.010	LB279059	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP116_0.1	SE247182.011	LB279059	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
QA400	SE247182.012	LB279059	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP116_2	SE247182.013	LB279059	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP117_0.1	SE247182.014	LB279059	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP117_1	SE247182.015	LB279059	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP119_0.1	SE247182.016	LB279059	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP119_0.5	SE247182.017	LB279059	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP120_0.1	SE247182.018	LB279059	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP120_0.5	SE247182.019	LB279059	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
QA500	SE247182.020	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP121_0.3	SE247182.021	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP121_0.7	SE247182.022	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP122_0.1	SE247182.023	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP122_1	SE247182.024	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP123_0.1	SE247182.025	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	15 May 2023
QA700	SE247182.026	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP123_1	SE247182.027	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP124_0.1	SE247182.028	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP124_1	SE247182.029	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP125_0.1	SE247182.030	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP125_1.2	SE247182.032	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP125_1.8	SE247182.033	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP126_0.2	SE247182.034	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP126_0.6	SE247182.035	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP127_0.2	SE247182.036	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP127_1	SE247182.037	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP128_0.1	SE247182.038	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP128_0.5	SE247182.039	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP132_0.1	SE247182.040	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP132_1	SE247182.041	LB279145	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP132_2	SE247182.042	LB279145	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	15 May 2023

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-ENVJAN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP114_0.5	SE247182.001	LB279059	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP114_1	SE247182.002	LB279059	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP109_0.1	SE247182.003	LB279059	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP109_1.2	SE247182.004	LB279059	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP112_0.1	SE247182.005	LB279059	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP112_1	SE247182.006	LB279059	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP136_0.1	SE247182.007	LB279059	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP136_0.5	SE247182.008	LB279059	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP111_0.5	SE247182.009	LB279059	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP111_2.5	SE247182.010	LB279059	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP116_0.1	SE247182.011	LB279059	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	15 May 2023
QA400	SE247182.012	LB279059	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP116_2	SE247182.013	LB279059	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	15 May 2023



HOLDING TIME SUMMARY

SE247182 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-ENVJAN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP117_0.1	SE247182.014	LB279059	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP117_1	SE247182.015	LB279059	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP119_0.1	SE247182.016	LB279059	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP119_0.5	SE247182.017	LB279059	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP120_0.1	SE247182.018	LB279059	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP120_0.5	SE247182.019	LB279059	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	15 May 2023
QA500	SE247182.020	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP121_0.3	SE247182.021	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP121_0.7	SE247182.022	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP122_0.1	SE247182.023	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP122_1	SE247182.024	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP123_0.1	SE247182.025	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	15 May 2023
QA700	SE247182.026	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP123_1	SE247182.027	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP124_0.1	SE247182.028	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP124_1	SE247182.029	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP125_0.1	SE247182.030	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP125_1.2	SE247182.032	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP125_1.8	SE247182.033	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP126_0.2	SE247182.034	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP126_0.6	SE247182.035	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP127_0.2	SE247182.036	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP127_1	SE247182.037	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP128_0.1	SE247182.038	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP128_0.5	SE247182.039	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP132_0.1	SE247182.040	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP132_1	SE247182.041	LB279145	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP132_2	SE247182.042	LB279145	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	15 May 2023

PCBs in Soil

Method: ME-(AU)-ENVJAN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP114_0.5	SE247182.001	LB279059	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP114_1	SE247182.002	LB279059	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP109_0.1	SE247182.003	LB279059	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP109_1.2	SE247182.004	LB279059	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP112_0.1	SE247182.005	LB279059	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	12 May 2023
TP112_1	SE247182.006	LB279059	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP136_0.1	SE247182.007	LB279059	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	12 May 2023
TP136_0.5	SE247182.008	LB279059	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP111_0.5	SE247182.009	LB279059	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP111_2.5	SE247182.010	LB279059	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP116_0.1	SE247182.011	LB279059	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
QA400	SE247182.012	LB279059	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP116_2	SE247182.013	LB279059	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP117_0.1	SE247182.014	LB279059	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP117_1	SE247182.015	LB279059	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP119_0.1	SE247182.016	LB279059	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP119_0.5	SE247182.017	LB279059	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP120_0.1	SE247182.018	LB279059	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP120_0.5	SE247182.019	LB279059	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
QA500	SE247182.020	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP121_0.3	SE247182.021	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP121_0.7	SE247182.022	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP122_0.1	SE247182.023	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP122_1	SE247182.024	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP123_0.1	SE247182.025	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	15 May 2023
QA700	SE247182.026	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP123_1	SE247182.027	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP124_0.1	SE247182.028	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP124_1	SE247182.029	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023



HOLDING TIME SUMMARY

SE247182 R0

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Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

PCBs in Soil (continued)

Method: ME-(AU)-ENVJAN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP125_0.1	SE247182.030	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP125_1.2	SE247182.032	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP125_1.8	SE247182.033	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP126_0.2	SE247182.034	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP126_0.6	SE247182.035	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP127_0.2	SE247182.036	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP127_1	SE247182.037	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP128_0.1	SE247182.038	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP128_0.5	SE247182.039	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP132_0.1	SE247182.040	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP132_1	SE247182.041	LB279145	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP132_2	SE247182.042	LB279145	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-ENVJAN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP114_0.5	SE247182.001	LB279089	04 May 2023	05 May 2023	31 Oct 2023	10 May 2023	31 Oct 2023	12 May 2023
TP114_1	SE247182.002	LB279089	04 May 2023	05 May 2023	31 Oct 2023	10 May 2023	31 Oct 2023	12 May 2023
TP109_0.1	SE247182.003	LB279089	04 May 2023	05 May 2023	31 Oct 2023	10 May 2023	31 Oct 2023	12 May 2023
TP109_1.2	SE247182.004	LB279089	04 May 2023	05 May 2023	31 Oct 2023	10 May 2023	31 Oct 2023	12 May 2023
TP112_0.1	SE247182.005	LB279089	04 May 2023	05 May 2023	31 Oct 2023	10 May 2023	31 Oct 2023	12 May 2023
TP112_1	SE247182.006	LB279089	04 May 2023	05 May 2023	31 Oct 2023	10 May 2023	31 Oct 2023	12 May 2023
TP136_0.1	SE247182.007	LB279089	04 May 2023	05 May 2023	31 Oct 2023	10 May 2023	31 Oct 2023	12 May 2023
TP136_0.5	SE247182.008	LB279089	04 May 2023	05 May 2023	31 Oct 2023	10 May 2023	31 Oct 2023	12 May 2023
TP111_0.5	SE247182.009	LB279089	04 May 2023	05 May 2023	31 Oct 2023	10 May 2023	31 Oct 2023	12 May 2023
TP111_2.5	SE247182.010	LB279089	04 May 2023	05 May 2023	31 Oct 2023	10 May 2023	31 Oct 2023	12 May 2023
TP116_0.1	SE247182.011	LB279089	05 May 2023	05 May 2023	01 Nov 2023	10 May 2023	01 Nov 2023	12 May 2023
QA400	SE247182.012	LB279089	05 May 2023	05 May 2023	01 Nov 2023	10 May 2023	01 Nov 2023	12 May 2023
TP116_2	SE247182.013	LB279089	05 May 2023	05 May 2023	01 Nov 2023	10 May 2023	01 Nov 2023	12 May 2023
TP117_0.1	SE247182.014	LB279089	05 May 2023	05 May 2023	01 Nov 2023	10 May 2023	01 Nov 2023	12 May 2023
TP117_1	SE247182.015	LB279089	05 May 2023	05 May 2023	01 Nov 2023	10 May 2023	01 Nov 2023	12 May 2023
TP119_0.1	SE247182.016	LB279089	05 May 2023	05 May 2023	01 Nov 2023	10 May 2023	01 Nov 2023	12 May 2023
TP119_0.5	SE247182.017	LB279089	05 May 2023	05 May 2023	01 Nov 2023	10 May 2023	01 Nov 2023	12 May 2023
TP120_0.1	SE247182.018	LB279089	05 May 2023	05 May 2023	01 Nov 2023	10 May 2023	01 Nov 2023	12 May 2023
TP120_0.5	SE247182.019	LB279089	05 May 2023	05 May 2023	01 Nov 2023	10 May 2023	01 Nov 2023	12 May 2023
QA500	SE247182.020	LB279091	05 May 2023	05 May 2023	01 Nov 2023	10 May 2023	01 Nov 2023	12 May 2023
TP121_0.3	SE247182.021	LB279091	05 May 2023	05 May 2023	01 Nov 2023	10 May 2023	01 Nov 2023	12 May 2023
TP121_0.7	SE247182.022	LB279091	05 May 2023	05 May 2023	01 Nov 2023	10 May 2023	01 Nov 2023	12 May 2023
TP122_0.1	SE247182.023	LB279091	05 May 2023	05 May 2023	01 Nov 2023	10 May 2023	01 Nov 2023	12 May 2023
TP122_1	SE247182.024	LB279091	05 May 2023	05 May 2023	01 Nov 2023	10 May 2023	01 Nov 2023	12 May 2023
TP123_0.1	SE247182.025	LB279091	05 May 2023	05 May 2023	01 Nov 2023	10 May 2023	01 Nov 2023	12 May 2023
QA700	SE247182.026	LB279091	05 May 2023	05 May 2023	01 Nov 2023	10 May 2023	01 Nov 2023	12 May 2023
TP123_1	SE247182.027	LB279091	05 May 2023	05 May 2023	01 Nov 2023	10 May 2023	01 Nov 2023	12 May 2023
TP124_0.1	SE247182.028	LB279091	05 May 2023	05 May 2023	01 Nov 2023	10 May 2023	01 Nov 2023	12 May 2023
TP124_1	SE247182.029	LB279091	05 May 2023	05 May 2023	01 Nov 2023	10 May 2023	01 Nov 2023	12 May 2023
TP125_0.1	SE247182.030	LB279091	05 May 2023	05 May 2023	01 Nov 2023	10 May 2023	01 Nov 2023	12 May 2023
TP125_1.2	SE247182.032	LB279091	05 May 2023	05 May 2023	01 Nov 2023	10 May 2023	01 Nov 2023	12 May 2023
TP125_1.8	SE247182.033	LB279091	05 May 2023	05 May 2023	01 Nov 2023	10 May 2023	01 Nov 2023	12 May 2023
TP126_0.2	SE247182.034	LB279091	05 May 2023	05 May 2023	01 Nov 2023	10 May 2023	01 Nov 2023	12 May 2023
TP126_0.6	SE247182.035	LB279091	05 May 2023	05 May 2023	01 Nov 2023	10 May 2023	01 Nov 2023	12 May 2023
TP127_0.2	SE247182.036	LB279091	05 May 2023	05 May 2023	01 Nov 2023	10 May 2023	01 Nov 2023	12 May 2023
TP127_1	SE247182.037	LB279091	05 May 2023	05 May 2023	01 Nov 2023	10 May 2023	01 Nov 2023	12 May 2023
TP128_0.1	SE247182.038	LB279091	05 May 2023	05 May 2023	01 Nov 2023	10 May 2023	01 Nov 2023	12 May 2023
TP128_0.5	SE247182.039	LB279091	05 May 2023	05 May 2023	01 Nov 2023	10 May 2023	01 Nov 2023	12 May 2023
TP132_0.1	SE247182.040	LB279091	05 May 2023	05 May 2023	01 Nov 2023	10 May 2023	01 Nov 2023	12 May 2023
TP132_1	SE247182.041	LB279208	05 May 2023	05 May 2023	01 Nov 2023	11 May 2023	01 Nov 2023	12 May 2023
TP132_2	SE247182.042	LB279208	05 May 2023	05 May 2023	01 Nov 2023	11 May 2023	01 Nov 2023	12 May 2023

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-ENVJAN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP114_0.5	SE247182.001	LB279059	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	12 May 2023
TP114_1	SE247182.002	LB279059	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	12 May 2023



HOLDING TIME SUMMARY

SE247182 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-ENVJAN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP109_0.1	SE247182.003	LB279059	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	12 May 2023
TP109_1.2	SE247182.004	LB279059	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	12 May 2023
TP112_0.1	SE247182.005	LB279059	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	12 May 2023
TP112_1	SE247182.006	LB279059	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	12 May 2023
TP136_0.1	SE247182.007	LB279059	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	12 May 2023
TP136_0.5	SE247182.008	LB279059	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	12 May 2023
TP111_0.5	SE247182.009	LB279059	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	12 May 2023
TP111_2.5	SE247182.010	LB279059	04 May 2023	05 May 2023	18 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP116_0.1	SE247182.011	LB279059	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	12 May 2023
QA400	SE247182.012	LB279059	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	12 May 2023
TP116_2	SE247182.013	LB279059	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	12 May 2023
TP117_0.1	SE247182.014	LB279059	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP117_1	SE247182.015	LB279059	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP119_0.1	SE247182.016	LB279059	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP119_0.5	SE247182.017	LB279059	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP120_0.1	SE247182.018	LB279059	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP120_0.5	SE247182.019	LB279059	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	15 May 2023
QA500	SE247182.020	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP121_0.3	SE247182.021	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP121_0.7	SE247182.022	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP122_0.1	SE247182.023	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP122_1	SE247182.024	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP123_0.1	SE247182.025	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	15 May 2023
QA700	SE247182.026	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP123_1	SE247182.027	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP124_0.1	SE247182.028	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP124_1	SE247182.029	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP125_0.1	SE247182.030	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	15 May 2023
TP125_1.2	SE247182.032	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP125_1.8	SE247182.033	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP126_0.2	SE247182.034	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP126_0.6	SE247182.035	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP127_0.2	SE247182.036	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP127_1	SE247182.037	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP128_0.1	SE247182.038	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP128_0.5	SE247182.039	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP132_0.1	SE247182.040	LB279068	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP132_1	SE247182.041	LB279145	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	16 May 2023
TP132_2	SE247182.042	LB279145	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 Jun 2023	15 May 2023

VOC's in Soil

Method: ME-(AU)-ENVJAN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP114_0.5	SE247182.001	LB279072	04 May 2023	05 May 2023	18 May 2023	10 May 2023	18 May 2023	12 May 2023
TP114_1	SE247182.002	LB279072	04 May 2023	05 May 2023	18 May 2023	10 May 2023	18 May 2023	12 May 2023
TP109_0.1	SE247182.003	LB279072	04 May 2023	05 May 2023	18 May 2023	10 May 2023	18 May 2023	12 May 2023
TP109_1.2	SE247182.004	LB279072	04 May 2023	05 May 2023	18 May 2023	10 May 2023	18 May 2023	12 May 2023
TP112_0.1	SE247182.005	LB279072	04 May 2023	05 May 2023	18 May 2023	10 May 2023	18 May 2023	12 May 2023
TP112_1	SE247182.006	LB279072	04 May 2023	05 May 2023	18 May 2023	10 May 2023	18 May 2023	12 May 2023
TP136_0.1	SE247182.007	LB279072	04 May 2023	05 May 2023	18 May 2023	10 May 2023	18 May 2023	12 May 2023
TP136_0.5	SE247182.008	LB279072	04 May 2023	05 May 2023	18 May 2023	10 May 2023	18 May 2023	12 May 2023
TP111_0.5	SE247182.009	LB279072	04 May 2023	05 May 2023	18 May 2023	10 May 2023	18 May 2023	12 May 2023
TP111_2.5	SE247182.010	LB279072	04 May 2023	05 May 2023	18 May 2023	10 May 2023	18 May 2023	12 May 2023
TP116_0.1	SE247182.011	LB279072	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 May 2023	12 May 2023
QA400	SE247182.012	LB279072	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 May 2023	12 May 2023
TP116_2	SE247182.013	LB279072	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 May 2023	12 May 2023
TP117_0.1	SE247182.014	LB279072	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 May 2023	12 May 2023
TP117_1	SE247182.015	LB279072	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 May 2023	12 May 2023
TP119_0.1	SE247182.016	LB279072	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 May 2023	12 May 2023
TP119_0.5	SE247182.017	LB279072	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 May 2023	12 May 2023
TP120_0.1	SE247182.018	LB279072	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 May 2023	12 May 2023



HOLDING TIME SUMMARY

SE247182 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

VOC's in Soil (continued)

Method: ME-(AU)-ENVJAN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP120_0.5	SE247182.019	LB279072	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 May 2023	12 May 2023
QA500	SE247182.020	LB279074	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 May 2023	12 May 2023
TP121_0.3	SE247182.021	LB279074	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 May 2023	12 May 2023
TP121_0.7	SE247182.022	LB279074	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 May 2023	12 May 2023
TP122_0.1	SE247182.023	LB279074	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 May 2023	12 May 2023
TP122_1	SE247182.024	LB279074	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 May 2023	12 May 2023
TP123_0.1	SE247182.025	LB279074	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 May 2023	12 May 2023
QA700	SE247182.026	LB279074	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 May 2023	12 May 2023
TP123_1	SE247182.027	LB279074	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 May 2023	12 May 2023
TP124_0.1	SE247182.028	LB279074	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 May 2023	12 May 2023
TP124_1	SE247182.029	LB279074	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 May 2023	12 May 2023
TP125_0.1	SE247182.030	LB279074	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 May 2023	12 May 2023
TP125_1.2	SE247182.032	LB279074	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 May 2023	12 May 2023
TP125_1.8	SE247182.033	LB279074	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 May 2023	12 May 2023
TP126_0.2	SE247182.034	LB279074	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 May 2023	12 May 2023
TP126_0.6	SE247182.035	LB279074	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 May 2023	12 May 2023
TP127_0.2	SE247182.036	LB279074	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 May 2023	12 May 2023
TP127_1	SE247182.037	LB279074	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 May 2023	12 May 2023
TP128_0.1	SE247182.038	LB279074	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 May 2023	12 May 2023
TP128_0.5	SE247182.039	LB279074	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 May 2023	12 May 2023
TP132_0.1	SE247182.040	LB279074	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 May 2023	12 May 2023
TP132_1	SE247182.041	LB279146	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 May 2023	12 May 2023
TP132_2	SE247182.042	LB279146	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 May 2023	12 May 2023

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-ENVJAN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP114_0.5	SE247182.001	LB279072	04 May 2023	05 May 2023	18 May 2023	10 May 2023	18 May 2023	12 May 2023
TP114_1	SE247182.002	LB279072	04 May 2023	05 May 2023	18 May 2023	10 May 2023	18 May 2023	12 May 2023
TP109_0.1	SE247182.003	LB279072	04 May 2023	05 May 2023	18 May 2023	10 May 2023	18 May 2023	12 May 2023
TP109_1.2	SE247182.004	LB279072	04 May 2023	05 May 2023	18 May 2023	10 May 2023	18 May 2023	12 May 2023
TP112_0.1	SE247182.005	LB279072	04 May 2023	05 May 2023	18 May 2023	10 May 2023	18 May 2023	12 May 2023
TP112_1	SE247182.006	LB279072	04 May 2023	05 May 2023	18 May 2023	10 May 2023	18 May 2023	12 May 2023
TP136_0.1	SE247182.007	LB279072	04 May 2023	05 May 2023	18 May 2023	10 May 2023	18 May 2023	12 May 2023
TP136_0.5	SE247182.008	LB279072	04 May 2023	05 May 2023	18 May 2023	10 May 2023	18 May 2023	12 May 2023
TP111_0.5	SE247182.009	LB279072	04 May 2023	05 May 2023	18 May 2023	10 May 2023	18 May 2023	12 May 2023
TP111_2.5	SE247182.010	LB279072	04 May 2023	05 May 2023	18 May 2023	10 May 2023	18 May 2023	12 May 2023
TP116_0.1	SE247182.011	LB279072	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 May 2023	12 May 2023
QA400	SE247182.012	LB279072	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 May 2023	12 May 2023
TP116_2	SE247182.013	LB279072	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 May 2023	12 May 2023
TP117_0.1	SE247182.014	LB279072	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 May 2023	12 May 2023
TP117_1	SE247182.015	LB279072	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 May 2023	12 May 2023
TP119_0.1	SE247182.016	LB279072	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 May 2023	12 May 2023
TP119_0.5	SE247182.017	LB279072	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 May 2023	12 May 2023
TP120_0.1	SE247182.018	LB279072	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 May 2023	12 May 2023
TP120_0.5	SE247182.019	LB279072	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 May 2023	12 May 2023
QA500	SE247182.020	LB279074	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 May 2023	12 May 2023
TP121_0.3	SE247182.021	LB279074	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 May 2023	12 May 2023
TP121_0.7	SE247182.022	LB279074	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 May 2023	12 May 2023
TP122_0.1	SE247182.023	LB279074	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 May 2023	12 May 2023
TP122_1	SE247182.024	LB279074	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 May 2023	12 May 2023
TP123_0.1	SE247182.025	LB279074	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 May 2023	12 May 2023
QA700	SE247182.026	LB279074	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 May 2023	12 May 2023
TP123_1	SE247182.027	LB279074	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 May 2023	12 May 2023
TP124_0.1	SE247182.028	LB279074	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 May 2023	12 May 2023
TP124_1	SE247182.029	LB279074	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 May 2023	12 May 2023
TP125_0.1	SE247182.030	LB279074	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 May 2023	12 May 2023
TP125_1.2	SE247182.032	LB279074	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 May 2023	12 May 2023
TP125_1.8	SE247182.033	LB279074	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 May 2023	12 May 2023
TP126_0.2	SE247182.034	LB279074	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 May 2023	12 May 2023
TP126_0.6	SE247182.035	LB279074	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 May 2023	12 May 2023



HOLDING TIME SUMMARY

SE247182 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Volatile Petroleum Hydrocarbons in Soil (continued)

Method: ME-(AU)-ENVJAN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP127_0.2	SE247182.036	LB279074	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 May 2023	12 May 2023
TP127_1	SE247182.037	LB279074	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 May 2023	12 May 2023
TP128_0.1	SE247182.038	LB279074	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 May 2023	12 May 2023
TP128_0.5	SE247182.039	LB279074	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 May 2023	12 May 2023
TP132_0.1	SE247182.040	LB279074	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 May 2023	12 May 2023
TP132_1	SE247182.041	LB279146	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 May 2023	12 May 2023
TP132_2	SE247182.042	LB279146	05 May 2023	05 May 2023	19 May 2023	10 May 2023	19 May 2023	12 May 2023



SURROGATES

SE247182 R0

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Full 8270 SVOC in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2,4,6-tribromophenol (Surrogate)	TP114_1	SE247182.002	%	70 - 130%	108
	TP112_0.1	SE247182.005	%	70 - 130%	125
	TP136_0.1	SE247182.007	%	70 - 130%	121
	TP111_0.5	SE247182.009	%	70 - 130%	122
	TP111_2.5	SE247182.010	%	70 - 130%	115
	TP119_0.1	SE247182.016	%	70 - 130%	122
	TP121_0.3	SE247182.021	%	70 - 130%	110
	TP123_0.1	SE247182.025	%	70 - 130%	117
	TP125_0.1	SE247182.030	%	70 - 130%	124
	TP125_1.2	SE247182.032	%	70 - 130%	119
	TP126_0.2	SE247182.034	%	70 - 130%	118
	TP128_0.1	SE247182.038	%	70 - 130%	117
	TP132_0.1	SE247182.040	%	70 - 130%	119
2-fluorobiphenyl (Surrogate)	TP114_1	SE247182.002	%	70 - 130%	128
	TP112_0.1	SE247182.005	%	70 - 130%	118
	TP136_0.1	SE247182.007	%	70 - 130%	128
	TP111_0.5	SE247182.009	%	70 - 130%	114
	TP111_2.5	SE247182.010	%	70 - 130%	110
	TP119_0.1	SE247182.016	%	70 - 130%	110
	TP121_0.3	SE247182.021	%	70 - 130%	126
	TP123_0.1	SE247182.025	%	70 - 130%	106
	TP125_0.1	SE247182.030	%	70 - 130%	116
	TP125_1.2	SE247182.032	%	70 - 130%	110
	TP126_0.2	SE247182.034	%	70 - 130%	112
	TP128_0.1	SE247182.038	%	70 - 130%	108
	TP132_0.1	SE247182.040	%	70 - 130%	110
d14-p-terphenyl (Surrogate)	TP114_1	SE247182.002	%	70 - 130%	104
	TP112_0.1	SE247182.005	%	70 - 130%	94
	TP136_0.1	SE247182.007	%	70 - 130%	84
	TP111_0.5	SE247182.009	%	70 - 130%	86
	TP111_2.5	SE247182.010	%	70 - 130%	80
	TP119_0.1	SE247182.016	%	70 - 130%	80
	TP121_0.3	SE247182.021	%	70 - 130%	104
	TP123_0.1	SE247182.025	%	70 - 130%	84
	TP125_0.1	SE247182.030	%	70 - 130%	90
	TP125_1.2	SE247182.032	%	70 - 130%	86
	TP126_0.2	SE247182.034	%	70 - 130%	86
	TP128_0.1	SE247182.038	%	70 - 130%	78
	TP132_0.1	SE247182.040	%	70 - 130%	82
d5-nitrobenzene (Surrogate)	TP114_1	SE247182.002	%	70 - 130%	128
	TP112_0.1	SE247182.005	%	70 - 130%	114
	TP136_0.1	SE247182.007	%	70 - 130%	126
	TP111_0.5	SE247182.009	%	70 - 130%	110
	TP111_2.5	SE247182.010	%	70 - 130%	104
	TP119_0.1	SE247182.016	%	70 - 130%	104
	TP121_0.3	SE247182.021	%	70 - 130%	120
	TP123_0.1	SE247182.025	%	70 - 130%	116
	TP125_0.1	SE247182.030	%	70 - 130%	120
	TP125_1.2	SE247182.032	%	70 - 130%	112
	TP126_0.2	SE247182.034	%	70 - 130%	112
	TP128_0.1	SE247182.038	%	70 - 130%	108
	TP132_0.1	SE247182.040	%	70 - 130%	106
d5-phenol (Surrogate)	TP114_1	SE247182.002	%	70 - 130%	115
	TP112_0.1	SE247182.005	%	70 - 130%	95
	TP136_0.1	SE247182.007	%	70 - 130%	100
	TP111_0.5	SE247182.009	%	70 - 130%	95
	TP111_2.5	SE247182.010	%	70 - 130%	92
	TP119_0.1	SE247182.016	%	70 - 130%	92
	TP121_0.3	SE247182.021	%	70 - 130%	94
	TP123_0.1	SE247182.025	%	70 - 130%	95
	TP125_0.1	SE247182.030	%	70 - 130%	100



SURROGATES

SE247182 R0

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Full 8270 SVOC in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d5-phenol (Surrogate)	TP125_1.2	SE247182.032	%	70 - 130%	94
	TP126_0.2	SE247182.034	%	70 - 130%	97
	TP128_0.1	SE247182.038	%	70 - 130%	94
	TP132_0.1	SE247182.040	%	70 - 130%	93

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	TP112_0.1	SE247182.005	%	60 - 130%	86
	TP136_0.1	SE247182.007	%	60 - 130%	87
	TP123_0.1	SE247182.025	%	60 - 130%	95
	TP125_0.1	SE247182.030	%	60 - 130%	100
	TP132_0.1	SE247182.040	%	60 - 130%	94

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	TP112_0.1	SE247182.005	%	60 - 130%	88
	TP136_0.1	SE247182.007	%	60 - 130%	85
	TP123_0.1	SE247182.025	%	60 - 130%	85
	TP125_0.1	SE247182.030	%	60 - 130%	87
	TP132_0.1	SE247182.040	%	60 - 130%	89
	TP132_1	SE247182.041	%	60 - 130%	83
	TP132_2	SE247182.042	%	60 - 130%	91
d14-p-terphenyl (Surrogate)	TP112_0.1	SE247182.005	%	60 - 130%	98
	TP136_0.1	SE247182.007	%	60 - 130%	95
	TP123_0.1	SE247182.025	%	60 - 130%	91
	TP125_0.1	SE247182.030	%	60 - 130%	92
	TP132_0.1	SE247182.040	%	60 - 130%	95
	TP132_1	SE247182.041	%	60 - 130%	100
	TP132_2	SE247182.042	%	60 - 130%	108

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	TP114_0.5	SE247182.001	%	70 - 130%	90
	TP114_1	SE247182.002	%	70 - 130%	88
	TP109_0.1	SE247182.003	%	70 - 130%	89
	TP109_1.2	SE247182.004	%	70 - 130%	90
	TP112_0.1	SE247182.005	%	70 - 130%	88
	TP112_1	SE247182.006	%	70 - 130%	89
	TP136_0.1	SE247182.007	%	70 - 130%	85
	TP136_0.5	SE247182.008	%	70 - 130%	86
	TP111_0.5	SE247182.009	%	70 - 130%	88
	TP111_2.5	SE247182.010	%	70 - 130%	89
	TP116_0.1	SE247182.011	%	70 - 130%	88
	QA400	SE247182.012	%	70 - 130%	85
	TP116_2	SE247182.013	%	70 - 130%	86
	TP117_0.1	SE247182.014	%	70 - 130%	91
	TP117_1	SE247182.015	%	70 - 130%	88
	TP119_0.1	SE247182.016	%	70 - 130%	86
	TP119_0.5	SE247182.017	%	70 - 130%	92
	TP120_0.1	SE247182.018	%	70 - 130%	88
	TP120_0.5	SE247182.019	%	70 - 130%	87
	QA500	SE247182.020	%	70 - 130%	85
	TP121_0.3	SE247182.021	%	70 - 130%	90
	TP121_0.7	SE247182.022	%	70 - 130%	83
	TP122_0.1	SE247182.023	%	70 - 130%	87
	TP122_1	SE247182.024	%	70 - 130%	87
	TP123_0.1	SE247182.025	%	70 - 130%	85
	QA700	SE247182.026	%	70 - 130%	85
	TP123_1	SE247182.027	%	70 - 130%	91
	TP124_0.1	SE247182.028	%	70 - 130%	86
	TP124_1	SE247182.029	%	70 - 130%	84
	TP125_0.1	SE247182.030	%	70 - 130%	87



SURROGATES

SE247182 R0

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	TP125_1.2	SE247182.032	%	70 - 130%	91
	TP125_1.8	SE247182.033	%	70 - 130%	88
	TP126_0.2	SE247182.034	%	70 - 130%	105
	TP126_0.6	SE247182.035	%	70 - 130%	88
	TP127_0.2	SE247182.036	%	70 - 130%	87
	TP127_1	SE247182.037	%	70 - 130%	86
	TP128_0.1	SE247182.038	%	70 - 130%	86
	TP128_0.5	SE247182.039	%	70 - 130%	88
	TP132_0.1	SE247182.040	%	70 - 130%	89
	TP132_1	SE247182.041	%	70 - 130%	83
d14-p-terphenyl (Surrogate)	TP132_2	SE247182.042	%	70 - 130%	91
	TP114_0.5	SE247182.001	%	70 - 130%	96
	TP114_1	SE247182.002	%	70 - 130%	97
	TP109_0.1	SE247182.003	%	70 - 130%	95
	TP109_1.2	SE247182.004	%	70 - 130%	95
	TP112_0.1	SE247182.005	%	70 - 130%	98
	TP112_1	SE247182.006	%	70 - 130%	94
	TP136_0.1	SE247182.007	%	70 - 130%	95
	TP136_0.5	SE247182.008	%	70 - 130%	94
	TP111_0.5	SE247182.009	%	70 - 130%	96
	TP111_2.5	SE247182.010	%	70 - 130%	94
	TP116_0.1	SE247182.011	%	70 - 130%	90
	QA400	SE247182.012	%	70 - 130%	89
	TP116_2	SE247182.013	%	70 - 130%	94
	TP117_0.1	SE247182.014	%	70 - 130%	97
	TP117_1	SE247182.015	%	70 - 130%	94
	TP119_0.1	SE247182.016	%	70 - 130%	93
	TP119_0.5	SE247182.017	%	70 - 130%	101
	TP120_0.1	SE247182.018	%	70 - 130%	86
	TP120_0.5	SE247182.019	%	70 - 130%	95
	QA500	SE247182.020	%	70 - 130%	91
	TP121_0.3	SE247182.021	%	70 - 130%	95
	TP121_0.7	SE247182.022	%	70 - 130%	92
	TP122_0.1	SE247182.023	%	70 - 130%	95
	TP122_1	SE247182.024	%	70 - 130%	94
	TP123_0.1	SE247182.025	%	70 - 130%	91
	QA700	SE247182.026	%	70 - 130%	93
	TP123_1	SE247182.027	%	70 - 130%	99
	TP124_0.1	SE247182.028	%	70 - 130%	92
	TP124_1	SE247182.029	%	70 - 130%	91
	TP125_0.1	SE247182.030	%	70 - 130%	92
	TP125_1.2	SE247182.032	%	70 - 130%	97
	TP125_1.8	SE247182.033	%	70 - 130%	95
	TP126_0.2	SE247182.034	%	70 - 130%	114
	TP126_0.6	SE247182.035	%	70 - 130%	96
	TP127_0.2	SE247182.036	%	70 - 130%	95
	TP127_1	SE247182.037	%	70 - 130%	95
	TP128_0.1	SE247182.038	%	70 - 130%	94
	TP128_0.5	SE247182.039	%	70 - 130%	94
	TP132_0.1	SE247182.040	%	70 - 130%	95
	TP132_1	SE247182.041	%	70 - 130%	100
	TP132_2	SE247182.042	%	70 - 130%	108
d5-nitrobenzene (Surrogate)	TP114_0.5	SE247182.001	%	70 - 130%	90
	TP114_1	SE247182.002	%	70 - 130%	89
	TP109_0.1	SE247182.003	%	70 - 130%	88
	TP109_1.2	SE247182.004	%	70 - 130%	92
	TP112_0.1	SE247182.005	%	70 - 130%	90
	TP112_1	SE247182.006	%	70 - 130%	90
	TP136_0.1	SE247182.007	%	70 - 130%	87
	TP136_0.5	SE247182.008	%	70 - 130%	89
	TP111_0.5	SE247182.009	%	70 - 130%	91

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d5-nitrobenzene (Surrogate)	TP111_2.5	SE247182.010	%	70 - 130%	92
	TP116_0.1	SE247182.011	%	70 - 130%	87
	QA400	SE247182.012	%	70 - 130%	86
	TP116_2	SE247182.013	%	70 - 130%	89
	TP117_0.1	SE247182.014	%	70 - 130%	92
	TP117_1	SE247182.015	%	70 - 130%	89
	TP119_0.1	SE247182.016	%	70 - 130%	88
	TP119_0.5	SE247182.017	%	70 - 130%	95
	TP120_0.1	SE247182.018	%	70 - 130%	89
	TP120_0.5	SE247182.019	%	70 - 130%	90
	QA500	SE247182.020	%	70 - 130%	84
	TP121_0.3	SE247182.021	%	70 - 130%	96
	TP121_0.7	SE247182.022	%	70 - 130%	87
	TP122_0.1	SE247182.023	%	70 - 130%	90
	TP122_1	SE247182.024	%	70 - 130%	90
	TP123_0.1	SE247182.025	%	70 - 130%	86
	QA700	SE247182.026	%	70 - 130%	89
	TP123_1	SE247182.027	%	70 - 130%	91
	TP124_0.1	SE247182.028	%	70 - 130%	85
	TP124_1	SE247182.029	%	70 - 130%	85
	TP125_0.1	SE247182.030	%	70 - 130%	87
	TP125_1.2	SE247182.032	%	70 - 130%	93
	TP125_1.8	SE247182.033	%	70 - 130%	88
	TP126_0.2	SE247182.034	%	70 - 130%	106
	TP126_0.6	SE247182.035	%	70 - 130%	88
	TP127_0.2	SE247182.036	%	70 - 130%	87
	TP127_1	SE247182.037	%	70 - 130%	82
	TP128_0.1	SE247182.038	%	70 - 130%	86
	TP128_0.5	SE247182.039	%	70 - 130%	86
	TP132_0.1	SE247182.040	%	70 - 130%	87
	TP132_1	SE247182.041	%	70 - 130%	114
	TP132_2	SE247182.042	%	70 - 130%	123

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
TCMX (Surrogate)	TP112_0.1	SE247182.005	%	60 - 130%	84
	TP136_0.1	SE247182.007	%	60 - 130%	85
	TP111_0.5	SE247182.009	%	60 - 130%	90
	TP111_2.5	SE247182.010	%	60 - 130%	82
	TP119_0.1	SE247182.016	%	60 - 130%	82
	TP121_0.3	SE247182.021	%	60 - 130%	92
	TP123_0.1	SE247182.025	%	60 - 130%	88
	TP125_0.1	SE247182.030	%	60 - 130%	93
	TP125_1.2	SE247182.032	%	60 - 130%	86
	TP126_0.2	SE247182.034	%	60 - 130%	89
	TP128_0.1	SE247182.038	%	60 - 130%	87
	TP132_0.1	SE247182.040	%	60 - 130%	87

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples

Method: MA-1523

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C3-PFBS) Isotopically Labelled Internal Recovery Standard	TP114_0.5	SE247182.001	%	0 - 150%	93
	TP109_0.1	SE247182.003	%	0 - 150%	90
	TP112_0.1	SE247182.005	%	0 - 150%	105
	TP136_0.1	SE247182.007	%	0 - 150%	95
	TP111_0.5	SE247182.009	%	0 - 150%	99
	TP116_0.1	SE247182.011	%	0 - 150%	92
	TP117_0.1	SE247182.014	%	0 - 150%	109
	TP119_0.1	SE247182.016	%	0 - 150%	93
	TP120_0.1	SE247182.018	%	0 - 150%	109
	TP121_0.3	SE247182.021	%	0 - 150%	99
	TP122_0.1	SE247182.023	%	0 - 150%	112
	TP123_0.1	SE247182.025	%	0 - 150%	96

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples (continued)

Method: MA-1523

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C3-PFBS) Isotopically Labelled Internal Recovery Standard	TP124_0.1	SE247182.028	%	0 - 150%	103
	TP125_0.1	SE247182.030	%	0 - 150%	98
	TP126_0.2	SE247182.034	%	0 - 150%	102
	TP127_0.2	SE247182.036	%	0 - 150%	112
	TP128_0.1	SE247182.038	%	0 - 150%	106
	TP132_0.1	SE247182.040	%	0 - 150%	98
(13C3-PFHxS) Isotopically Labelled Internal Recovery Standard	TP114_0.5	SE247182.001	%	0 - 150%	100
	TP109_0.1	SE247182.003	%	0 - 150%	87
	TP112_0.1	SE247182.005	%	0 - 150%	105
	TP136_0.1	SE247182.007	%	0 - 150%	102
	TP111_0.5	SE247182.009	%	0 - 150%	105
	TP116_0.1	SE247182.011	%	0 - 150%	89
	TP117_0.1	SE247182.014	%	0 - 150%	109
	TP119_0.1	SE247182.016	%	0 - 150%	105
	TP120_0.1	SE247182.018	%	0 - 150%	107
	TP121_0.3	SE247182.021	%	0 - 150%	108
	TP122_0.1	SE247182.023	%	0 - 150%	111
	TP123_0.1	SE247182.025	%	0 - 150%	92
	TP124_0.1	SE247182.028	%	0 - 150%	115
	TP125_0.1	SE247182.030	%	0 - 150%	102
	TP126_0.2	SE247182.034	%	0 - 150%	117
	TP127_0.2	SE247182.036	%	0 - 150%	109
	TP128_0.1	SE247182.038	%	0 - 150%	116
	TP132_0.1	SE247182.040	%	0 - 150%	108
(13C4_PFOA) Isotopically Labelled Internal Recovery Standard	TP114_0.5	SE247182.001	%	0 - 150%	97
	TP109_0.1	SE247182.003	%	0 - 150%	101
	TP112_0.1	SE247182.005	%	0 - 150%	106
	TP136_0.1	SE247182.007	%	0 - 150%	112
	TP111_0.5	SE247182.009	%	0 - 150%	107
	TP116_0.1	SE247182.011	%	0 - 150%	120
	TP117_0.1	SE247182.014	%	0 - 150%	97
	TP119_0.1	SE247182.016	%	0 - 150%	104
	TP120_0.1	SE247182.018	%	0 - 150%	95
	TP121_0.3	SE247182.021	%	0 - 150%	113
	TP122_0.1	SE247182.023	%	0 - 150%	97
	TP123_0.1	SE247182.025	%	0 - 150%	107
	TP124_0.1	SE247182.028	%	0 - 150%	104
	TP125_0.1	SE247182.030	%	0 - 150%	92
	TP126_0.2	SE247182.034	%	0 - 150%	95
	TP127_0.2	SE247182.036	%	0 - 150%	93
	TP128_0.1	SE247182.038	%	0 - 150%	101
	TP132_0.1	SE247182.040	%	0 - 150%	119
(13C4-PFBA) Isotopically Labelled Internal Recovery Standard	TP114_0.5	SE247182.001	%	0 - 150%	103
	TP109_0.1	SE247182.003	%	0 - 150%	103
	TP112_0.1	SE247182.005	%	0 - 150%	105
	TP136_0.1	SE247182.007	%	0 - 150%	103
	TP111_0.5	SE247182.009	%	0 - 150%	102
	TP116_0.1	SE247182.011	%	0 - 150%	104
	TP117_0.1	SE247182.014	%	0 - 150%	103
	TP119_0.1	SE247182.016	%	0 - 150%	105
	TP120_0.1	SE247182.018	%	0 - 150%	106
	TP121_0.3	SE247182.021	%	0 - 150%	103
	TP122_0.1	SE247182.023	%	0 - 150%	102
	TP123_0.1	SE247182.025	%	0 - 150%	103
	TP124_0.1	SE247182.028	%	0 - 150%	104
	TP125_0.1	SE247182.030	%	0 - 150%	103
	TP126_0.2	SE247182.034	%	0 - 150%	101
	TP127_0.2	SE247182.036	%	0 - 150%	107
	TP128_0.1	SE247182.038	%	0 - 150%	104
	TP132_0.1	SE247182.040	%	0 - 150%	103
(13C4-PFHpA) Isotopically Labelled Internal Recovery Standard	TP114_0.5	SE247182.001	%	0 - 150%	95



SURROGATES

SE247182 R0

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples (continued)

Method: MA-1523

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C4-PFHxA) Isotopically Labelled Internal Recovery Standard	TP109_0.1	SE247182.003	%	0 - 150%	96
	TP112_0.1	SE247182.005	%	0 - 150%	108
	TP136_0.1	SE247182.007	%	0 - 150%	109
	TP111_0.5	SE247182.009	%	0 - 150%	103
	TP116_0.1	SE247182.011	%	0 - 150%	102
	TP117_0.1	SE247182.014	%	0 - 150%	107
	TP119_0.1	SE247182.016	%	0 - 150%	101
	TP120_0.1	SE247182.018	%	0 - 150%	109
	TP121_0.3	SE247182.021	%	0 - 150%	113
	TP122_0.1	SE247182.023	%	0 - 150%	92
	TP123_0.1	SE247182.025	%	0 - 150%	104
	TP124_0.1	SE247182.028	%	0 - 150%	102
	TP125_0.1	SE247182.030	%	0 - 150%	101
	TP126_0.2	SE247182.034	%	0 - 150%	100
	TP127_0.2	SE247182.036	%	0 - 150%	104
	TP128_0.1	SE247182.038	%	0 - 150%	96
	TP132_0.1	SE247182.040	%	0 - 150%	113
(13C5-PFHxA) Isotopically Labelled Internal Recovery Standard	TP114_0.5	SE247182.001	%	0 - 150%	89
	TP109_0.1	SE247182.003	%	0 - 150%	95
	TP112_0.1	SE247182.005	%	0 - 150%	103
	TP136_0.1	SE247182.007	%	0 - 150%	98
	TP111_0.5	SE247182.009	%	0 - 150%	113
	TP116_0.1	SE247182.011	%	0 - 150%	104
	TP117_0.1	SE247182.014	%	0 - 150%	102
	TP119_0.1	SE247182.016	%	0 - 150%	97
	TP120_0.1	SE247182.018	%	0 - 150%	112
	TP121_0.3	SE247182.021	%	0 - 150%	104
	TP122_0.1	SE247182.023	%	0 - 150%	97
	TP123_0.1	SE247182.025	%	0 - 150%	103
	TP124_0.1	SE247182.028	%	0 - 150%	97
	TP125_0.1	SE247182.030	%	0 - 150%	95
	TP126_0.2	SE247182.034	%	0 - 150%	95
	TP127_0.2	SE247182.036	%	0 - 150%	100
	TP128_0.1	SE247182.038	%	0 - 150%	92
	TP132_0.1	SE247182.040	%	0 - 150%	113
(13C5-PFPeA) Isotopically Labelled Internal Recovery Standard	TP114_0.5	SE247182.001	%	0 - 150%	105
	TP109_0.1	SE247182.003	%	0 - 150%	103
	TP112_0.1	SE247182.005	%	0 - 150%	108
	TP136_0.1	SE247182.007	%	0 - 150%	104
	TP111_0.5	SE247182.009	%	0 - 150%	106
	TP116_0.1	SE247182.011	%	0 - 150%	107
	TP117_0.1	SE247182.014	%	0 - 150%	107
	TP119_0.1	SE247182.016	%	0 - 150%	108
	TP120_0.1	SE247182.018	%	0 - 150%	108
	TP121_0.3	SE247182.021	%	0 - 150%	106
	TP122_0.1	SE247182.023	%	0 - 150%	108
	TP123_0.1	SE247182.025	%	0 - 150%	104
	TP124_0.1	SE247182.028	%	0 - 150%	106
	TP125_0.1	SE247182.030	%	0 - 150%	107
	TP126_0.2	SE247182.034	%	0 - 150%	104
	TP127_0.2	SE247182.036	%	0 - 150%	110
	TP128_0.1	SE247182.038	%	0 - 150%	106
	TP132_0.1	SE247182.040	%	0 - 150%	106
(13C8-PFOS) Isotopically Labelled Internal Recovery Standard	TP114_0.5	SE247182.001	%	0 - 150%	109
	TP109_0.1	SE247182.003	%	0 - 150%	106
	TP112_0.1	SE247182.005	%	0 - 150%	95
	TP136_0.1	SE247182.007	%	0 - 150%	100
	TP111_0.5	SE247182.009	%	0 - 150%	119
	TP116_0.1	SE247182.011	%	0 - 150%	103
	TP117_0.1	SE247182.014	%	0 - 150%	88
	TP119_0.1	SE247182.016	%	0 - 150%	101



SURROGATES

SE247182 R0

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples (continued)

Method: MA-1523

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C8-PFOS) Isotopically Labelled Internal Recovery Standard	TP120_0.1	SE247182.018	%	0 - 150%	112
	TP121_0.3	SE247182.021	%	0 - 150%	99
	TP122_0.1	SE247182.023	%	0 - 150%	111
	TP123_0.1	SE247182.025	%	0 - 150%	93
	TP124_0.1	SE247182.028	%	0 - 150%	90
	TP125_0.1	SE247182.030	%	0 - 150%	80
	TP126_0.2	SE247182.034	%	0 - 150%	94
	TP127_0.2	SE247182.036	%	0 - 150%	92
	TP128_0.1	SE247182.038	%	0 - 150%	128
	TP132_0.1	SE247182.040	%	0 - 150%	115

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	TP114_0.5	SE247182.001	%	60 - 130%	81
	TP114_1	SE247182.002	%	60 - 130%	73
	TP109_0.1	SE247182.003	%	60 - 130%	84
	TP109_1.2	SE247182.004	%	60 - 130%	89
	TP112_0.1	SE247182.005	%	60 - 130%	75
	TP112_1	SE247182.006	%	60 - 130%	91
	TP136_0.1	SE247182.007	%	60 - 130%	71
	TP136_0.5	SE247182.008	%	60 - 130%	87
	TP111_0.5	SE247182.009	%	60 - 130%	82
	TP111_2.5	SE247182.010	%	60 - 130%	96
	TP116_0.1	SE247182.011	%	60 - 130%	81
	QA400	SE247182.012	%	60 - 130%	85
	TP116_2	SE247182.013	%	60 - 130%	88
	TP117_0.1	SE247182.014	%	60 - 130%	88
	TP117_1	SE247182.015	%	60 - 130%	89
	TP119_0.1	SE247182.016	%	60 - 130%	91
	TP119_0.5	SE247182.017	%	60 - 130%	91
	TP120_0.1	SE247182.018	%	60 - 130%	84
	TP120_0.5	SE247182.019	%	60 - 130%	90
	QA500	SE247182.020	%	60 - 130%	83
	TP121_0.3	SE247182.021	%	60 - 130%	82
	TP121_0.7	SE247182.022	%	60 - 130%	86
	TP122_0.1	SE247182.023	%	60 - 130%	90
	TP122_1	SE247182.024	%	60 - 130%	92
	TP123_0.1	SE247182.025	%	60 - 130%	81
	QA700	SE247182.026	%	60 - 130%	87
	TP123_1	SE247182.027	%	60 - 130%	89
	TP124_0.1	SE247182.028	%	60 - 130%	90
	TP124_1	SE247182.029	%	60 - 130%	80
	TP125_0.1	SE247182.030	%	60 - 130%	91
	TP125_1.2	SE247182.032	%	60 - 130%	75
	TP125_1.8	SE247182.033	%	60 - 130%	90
	TP126_0.2	SE247182.034	%	60 - 130%	72
	TP126_0.6	SE247182.035	%	60 - 130%	93
	TP127_0.2	SE247182.036	%	60 - 130%	88
	TP127_1	SE247182.037	%	60 - 130%	92
	TP128_0.1	SE247182.038	%	60 - 130%	83
	TP128_0.5	SE247182.039	%	60 - 130%	89
	TP132_0.1	SE247182.040	%	60 - 130%	94
	TP132_1	SE247182.041	%	60 - 130%	87
	TP132_2	SE247182.042	%	60 - 130%	83
d4-1,2-dichloroethane (Surrogate)	TP114_0.5	SE247182.001	%	60 - 130%	76
	TP114_1	SE247182.002	%	60 - 130%	82
	TP109_0.1	SE247182.003	%	60 - 130%	81
	TP109_1.2	SE247182.004	%	60 - 130%	83
	TP112_0.1	SE247182.005	%	60 - 130%	86
	TP112_1	SE247182.006	%	60 - 130%	85
	TP136_0.1	SE247182.007	%	60 - 130%	85



SURROGATES

SE247182 R0

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d4-1,2-dichloroethane (Surrogate)	TP136_0.5	SE247182.008	%	60 - 130%	81
	TP111_0.5	SE247182.009	%	60 - 130%	87
	TP111_2.5	SE247182.010	%	60 - 130%	89
	TP116_0.1	SE247182.011	%	60 - 130%	81
	QA400	SE247182.012	%	60 - 130%	83
	TP116_2	SE247182.013	%	60 - 130%	80
	TP117_0.1	SE247182.014	%	60 - 130%	81
	TP117_1	SE247182.015	%	60 - 130%	83
	TP119_0.1	SE247182.016	%	60 - 130%	83
	TP119_0.5	SE247182.017	%	60 - 130%	84
	TP120_0.1	SE247182.018	%	60 - 130%	84
	TP120_0.5	SE247182.019	%	60 - 130%	84
	QA500	SE247182.020	%	60 - 130%	88
	TP121_0.3	SE247182.021	%	60 - 130%	83
	TP121_0.7	SE247182.022	%	60 - 130%	93
	TP122_0.1	SE247182.023	%	60 - 130%	99
	TP122_1	SE247182.024	%	60 - 130%	102
	TP123_0.1	SE247182.025	%	60 - 130%	90
	QA700	SE247182.026	%	60 - 130%	94
	TP123_1	SE247182.027	%	60 - 130%	95
	TP124_0.1	SE247182.028	%	60 - 130%	99
	TP124_1	SE247182.029	%	60 - 130%	92
	TP125_0.1	SE247182.030	%	60 - 130%	86
	TP125_1.2	SE247182.032	%	60 - 130%	89
	TP125_1.8	SE247182.033	%	60 - 130%	98
	TP126_0.2	SE247182.034	%	60 - 130%	87
	TP126_0.6	SE247182.035	%	60 - 130%	103
	TP127_0.2	SE247182.036	%	60 - 130%	95
	TP127_1	SE247182.037	%	60 - 130%	102
	TP128_0.1	SE247182.038	%	60 - 130%	84
	TP128_0.5	SE247182.039	%	60 - 130%	99
	TP132_0.1	SE247182.040	%	60 - 130%	90
	TP132_1	SE247182.041	%	60 - 130%	80
	TP132_2	SE247182.042	%	60 - 130%	75
d8-toluene (Surrogate)	TP114_0.5	SE247182.001	%	60 - 130%	77
	TP114_1	SE247182.002	%	60 - 130%	77
	TP109_0.1	SE247182.003	%	60 - 130%	82
	TP109_1.2	SE247182.004	%	60 - 130%	85
	TP112_0.1	SE247182.005	%	60 - 130%	88
	TP112_1	SE247182.006	%	60 - 130%	86
	TP136_0.1	SE247182.007	%	60 - 130%	85
	TP136_0.5	SE247182.008	%	60 - 130%	83
	TP111_0.5	SE247182.009	%	60 - 130%	84
	TP111_2.5	SE247182.010	%	60 - 130%	88
	TP116_0.1	SE247182.011	%	60 - 130%	81
	QA400	SE247182.012	%	60 - 130%	84
	TP116_2	SE247182.013	%	60 - 130%	83
	TP117_0.1	SE247182.014	%	60 - 130%	83
	TP117_1	SE247182.015	%	60 - 130%	85
	TP119_0.1	SE247182.016	%	60 - 130%	86
	TP119_0.5	SE247182.017	%	60 - 130%	87
	TP120_0.1	SE247182.018	%	60 - 130%	84
	TP120_0.5	SE247182.019	%	60 - 130%	86
	QA500	SE247182.020	%	60 - 130%	83
	TP121_0.3	SE247182.021	%	60 - 130%	84
	TP121_0.7	SE247182.022	%	60 - 130%	86
	TP122_0.1	SE247182.023	%	60 - 130%	94
	TP122_1	SE247182.024	%	60 - 130%	95
	TP123_0.1	SE247182.025	%	60 - 130%	88
	QA700	SE247182.026	%	60 - 130%	88
	TP123_1	SE247182.027	%	60 - 130%	89

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d8-toluene (Surrogate)	TP124_0.1	SE247182.028	%	60 - 130%	92
	TP124_1	SE247182.029	%	60 - 130%	83
	TP125_0.1	SE247182.030	%	60 - 130%	87
	TP125_1.2	SE247182.032	%	60 - 130%	88
	TP125_1.8	SE247182.033	%	60 - 130%	92
	TP126_0.2	SE247182.034	%	60 - 130%	90
	TP126_0.6	SE247182.035	%	60 - 130%	97
	TP127_0.2	SE247182.036	%	60 - 130%	90
	TP127_1	SE247182.037	%	60 - 130%	94
	TP128_0.1	SE247182.038	%	60 - 130%	74
	TP128_0.5	SE247182.039	%	60 - 130%	91
	TP132_0.1	SE247182.040	%	60 - 130%	88
	TP132_1	SE247182.041	%	60 - 130%	83
	TP132_2	SE247182.042	%	60 - 130%	76

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	TP114_0.5	SE247182.001	%	60 - 130%	81
	TP114_1	SE247182.002	%	60 - 130%	73
	TP109_0.1	SE247182.003	%	60 - 130%	84
	TP109_1.2	SE247182.004	%	60 - 130%	89
	TP112_0.1	SE247182.005	%	60 - 130%	75
	TP112_1	SE247182.006	%	60 - 130%	91
	TP136_0.1	SE247182.007	%	60 - 130%	71
	TP136_0.5	SE247182.008	%	60 - 130%	87
	TP111_0.5	SE247182.009	%	60 - 130%	82
	TP111_2.5	SE247182.010	%	60 - 130%	96
	TP116_0.1	SE247182.011	%	60 - 130%	81
	QA400	SE247182.012	%	60 - 130%	85
	TP116_2	SE247182.013	%	60 - 130%	88
	TP117_0.1	SE247182.014	%	60 - 130%	88
	TP117_1	SE247182.015	%	60 - 130%	89
	TP119_0.1	SE247182.016	%	60 - 130%	91
	TP119_0.5	SE247182.017	%	60 - 130%	91
	TP120_0.1	SE247182.018	%	60 - 130%	84
	TP120_0.5	SE247182.019	%	60 - 130%	90
	QA500	SE247182.020	%	60 - 130%	83
	TP121_0.3	SE247182.021	%	60 - 130%	82
	TP121_0.7	SE247182.022	%	60 - 130%	86
	TP122_0.1	SE247182.023	%	60 - 130%	90
	TP122_1	SE247182.024	%	60 - 130%	92
	TP123_0.1	SE247182.025	%	60 - 130%	81
	QA700	SE247182.026	%	60 - 130%	87
	TP123_1	SE247182.027	%	60 - 130%	89
	TP124_0.1	SE247182.028	%	60 - 130%	90
	TP124_1	SE247182.029	%	60 - 130%	80
	TP125_0.1	SE247182.030	%	60 - 130%	91
	TP125_1.2	SE247182.032	%	60 - 130%	75
	TP125_1.8	SE247182.033	%	60 - 130%	90
	TP126_0.2	SE247182.034	%	60 - 130%	72
	TP126_0.6	SE247182.035	%	60 - 130%	93
	TP127_0.2	SE247182.036	%	60 - 130%	88
	TP127_1	SE247182.037	%	60 - 130%	92
	TP128_0.1	SE247182.038	%	60 - 130%	83
	TP128_0.5	SE247182.039	%	60 - 130%	89
	TP132_0.1	SE247182.040	%	60 - 130%	94
	TP132_1	SE247182.041	%	60 - 130%	87
	TP132_2	SE247182.042	%	60 - 130%	83
d4-1,2-dichloroethane (Surrogate)	TP114_0.5	SE247182.001	%	60 - 130%	76
	TP114_1	SE247182.002	%	60 - 130%	82
	TP109_0.1	SE247182.003	%	60 - 130%	81



SURROGATES

SE247182 R0

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d4-1,2-dichloroethane (Surrogate)	TP109_1.2	SE247182.004	%	60 - 130%	83
	TP112_0.1	SE247182.005	%	60 - 130%	86
	TP112_1	SE247182.006	%	60 - 130%	85
	TP136_0.1	SE247182.007	%	60 - 130%	85
	TP136_0.5	SE247182.008	%	60 - 130%	81
	TP111_0.5	SE247182.009	%	60 - 130%	87
	TP111_2.5	SE247182.010	%	60 - 130%	89
	TP116_0.1	SE247182.011	%	60 - 130%	81
	QA400	SE247182.012	%	60 - 130%	83
	TP116_2	SE247182.013	%	60 - 130%	80
	TP117_0.1	SE247182.014	%	60 - 130%	81
	TP117_1	SE247182.015	%	60 - 130%	83
	TP119_0.1	SE247182.016	%	60 - 130%	83
	TP119_0.5	SE247182.017	%	60 - 130%	84
	TP120_0.1	SE247182.018	%	60 - 130%	84
	TP120_0.5	SE247182.019	%	60 - 130%	84
	QA500	SE247182.020	%	60 - 130%	88
	TP121_0.3	SE247182.021	%	60 - 130%	83
	TP121_0.7	SE247182.022	%	60 - 130%	93
	TP122_0.1	SE247182.023	%	60 - 130%	99
	TP122_1	SE247182.024	%	60 - 130%	102
	TP123_0.1	SE247182.025	%	60 - 130%	90
	QA700	SE247182.026	%	60 - 130%	94
	TP123_1	SE247182.027	%	60 - 130%	95
	TP124_0.1	SE247182.028	%	60 - 130%	99
	TP124_1	SE247182.029	%	60 - 130%	92
	TP125_0.1	SE247182.030	%	60 - 130%	86
	TP125_1.2	SE247182.032	%	60 - 130%	89
	TP125_1.8	SE247182.033	%	60 - 130%	98
	TP126_0.2	SE247182.034	%	60 - 130%	87
	TP126_0.6	SE247182.035	%	60 - 130%	103
	TP127_0.2	SE247182.036	%	60 - 130%	95
	TP127_1	SE247182.037	%	60 - 130%	102
	TP128_0.1	SE247182.038	%	60 - 130%	84
	TP128_0.5	SE247182.039	%	60 - 130%	99
	TP132_0.1	SE247182.040	%	60 - 130%	90
	TP132_1	SE247182.041	%	60 - 130%	80
	TP132_2	SE247182.042	%	60 - 130%	75
d8-toluene (Surrogate)	TP114_0.5	SE247182.001	%	60 - 130%	77
	TP114_1	SE247182.002	%	60 - 130%	77
	TP109_0.1	SE247182.003	%	60 - 130%	82
	TP109_1.2	SE247182.004	%	60 - 130%	85
	TP112_0.1	SE247182.005	%	60 - 130%	88
	TP112_1	SE247182.006	%	60 - 130%	86
	TP136_0.1	SE247182.007	%	60 - 130%	85
	TP136_0.5	SE247182.008	%	60 - 130%	83
	TP111_0.5	SE247182.009	%	60 - 130%	84
	TP111_2.5	SE247182.010	%	60 - 130%	88
	TP116_0.1	SE247182.011	%	60 - 130%	81
	QA400	SE247182.012	%	60 - 130%	84
	TP116_2	SE247182.013	%	60 - 130%	83
	TP117_0.1	SE247182.014	%	60 - 130%	83
	TP117_1	SE247182.015	%	60 - 130%	85
	TP119_0.1	SE247182.016	%	60 - 130%	86
	TP119_0.5	SE247182.017	%	60 - 130%	87
	TP120_0.1	SE247182.018	%	60 - 130%	84
	TP120_0.5	SE247182.019	%	60 - 130%	86
	QA500	SE247182.020	%	60 - 130%	83
	TP121_0.3	SE247182.021	%	60 - 130%	84
	TP121_0.7	SE247182.022	%	60 - 130%	86
	TP122_0.1	SE247182.023	%	60 - 130%	94



SURROGATES

SE247182 R0

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d8-toluene (Surrogate)	TP122_1	SE247182.024	%	60 - 130%	95
	TP123_0.1	SE247182.025	%	60 - 130%	88
	QA700	SE247182.026	%	60 - 130%	88
	TP123_1	SE247182.027	%	60 - 130%	89
	TP124_0.1	SE247182.028	%	60 - 130%	92
	TP124_1	SE247182.029	%	60 - 130%	83
	TP125_0.1	SE247182.030	%	60 - 130%	87
	TP125_1.2	SE247182.032	%	60 - 130%	88
	TP125_1.8	SE247182.033	%	60 - 130%	92
	TP126_0.2	SE247182.034	%	60 - 130%	90
	TP126_0.6	SE247182.035	%	60 - 130%	97
	TP127_0.2	SE247182.036	%	60 - 130%	90
	TP127_1	SE247182.037	%	60 - 130%	94
	TP128_0.1	SE247182.038	%	60 - 130%	74
	TP128_0.5	SE247182.039	%	60 - 130%	91
	TP132_0.1	SE247182.040	%	60 - 130%	88
	TP132_1	SE247182.041	%	60 - 130%	83
	TP132_2	SE247182.042	%	60 - 130%	76



METHOD BLANKS

SE247182 R0

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Full 8270 SVOC in Soil

Method: ME-(AU)-ENVJAN420

Sample Number		Parameter	Units	LOR	Result
LB279065.023	01-PAHs	Acenaphthene	mg/kg	0.1	<0.1
		Acenaphthylene	mg/kg	0.1	<0.1
		Anthracene	mg/kg	0.1	<0.1
		Benzo(a)anthracene	mg/kg	0.1	<0.1
		Benzo(b&j&k)fluoranthene	mg/kg	0.2	<0.2
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Benzo(a)pyrene	mg/kg	0.1	<0.1
		Chrysene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Fluoranthene	mg/kg	0.1	<0.1
		Fluorene	mg/kg	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		1-methylnaphthalene	mg/kg	0.1	<0.1
		2-methylnaphthalene	mg/kg	0.1	<0.1
		Naphthalene	mg/kg	0.1	<0.1
		Phenanthrene	mg/kg	0.1	<0.1
		Pyrene	mg/kg	0.1	<0.1
		2-acetylaminofluorene	mg/kg	0.5	<0.5
		7,12-dimethyl-benz(a)anthracene	mg/kg	0.5	<0.5
		3-methylcholanthrene	mg/kg	0.5	<0.5
	02-OCs	Aldrin	mg/kg	0.1	<0.1
		Alpha-BHC	mg/kg	0.1	<0.1
		Beta-BHC	mg/kg	0.5	<0.5
		Delta-BHC	mg/kg	0.1	<0.1
		Gamma-BHC (Lindane)	mg/kg	0.1	<0.1
		p,p-DDD	mg/kg	0.1	<0.1
		p,p-DDE	mg/kg	0.1	<0.1
		p,p-DDT	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Alpha-endosulfan	mg/kg	0.2	<0.2
		Beta-endosulfan	mg/kg	0.2	<0.2
		Endosulfan sulphate	mg/kg	0.1	<0.1
		Endrin	mg/kg	0.2	<0.2
		Heptachlor	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
		Alpha-chlordane	mg/kg	0.1	<0.1
	03-OPs	Gamma-chlordane	mg/kg	0.1	<0.1
		Endrin ketone	mg/kg	0.1	<0.1
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
		Bromophos ethyl	mg/kg	0.2	<0.2
		Carbophenothion	mg/kg	0.5	<0.5
		Chlorfenvinphos-cis	mg/kg	2	<2
		Chlorfenvinphos-trans	mg/kg	0.5	<0.5
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Chlorpyrifos-methyl	mg/kg	0.5	<0.5
		Co-Ral (Coumaphos)	mg/kg	0.5	<0.5
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5
		Dichlorvos	mg/kg	0.5	<0.5
		Demeton-S-methyl	mg/kg	0.5	<0.5
		Dimethoate	mg/kg	0.5	<0.5
		Disulfoton (Di-syston)	mg/kg	0.5	<0.5
		EPN*	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Ethoprophos (ethoprop or prophos)	mg/kg	0.5	<0.5
		Famphur (Famophos)	mg/kg	0.5	<0.5
		Fenamiphos (Phenamiphos)	mg/kg	0.5	<0.5
		Fenchlorophos (Ronnel)	mg/kg	0.5	<0.5
		Fenitrothion	mg/kg	0.2	<0.2



METHOD BLANKS

SE247182 R0

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Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Full 8270 SVOC in Soil (continued)

Method: ME-(AU)-ENVJAN420

Sample Number		Parameter	Units	LOR	Result
LB279065.023	03-OPs	Fenthion	mg/kg	0.5	<0.5
		Malathion (Maldison)	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Mevinphos-cis/trans	mg/kg	1	<1
		o,o,o-triethyl phosphorothioate	mg/kg	0.5	<0.5
		Parathion ethyl (Parathion)	mg/kg	0.2	<0.2
		Parathion methyl	mg/kg	0.5	<0.5
		Phorate	mg/kg	0.5	<0.5
		Pirimiphos-ethyl	mg/kg	0.5	<0.5
		Pirimiphos-methyl	mg/kg	0.5	<0.5
		Profenofos	mg/kg	0.5	<0.5
		Prothiophos (Tokuthion)*	mg/kg	0.5	<0.5
		Sulfotepp	mg/kg	0.5	<0.5
		Tetrachlorvinphos (Stirophos)*	mg/kg	0.5	<0.5
		04-PCB UPAC(7)			
	Congeners	PCB Congener C28	mg/kg	0.1	<0.1
		PCB Congener C52	mg/kg	0.1	<0.1
		PCB Congener C101	mg/kg	0.1	<0.1
		PCB Congener C118	mg/kg	0.1	<0.1
		PCB Congener C138	mg/kg	0.1	<0.1
		PCB Congener C153	mg/kg	0.1	<0.1
		PCB Congener C180	mg/kg	0.1	<0.1
	05-SVCH (CI Benzenes, Hydrocarbons & VOCs)	Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.5	<0.5
		1,3-dichlorobenzene	mg/kg	0.5	<0.5
		1,4-dichlorobenzene	mg/kg	0.5	<0.5
		Hexachlorobutadiene	mg/kg	0.5	<0.5
		Hexachlorocyclopentadiene	mg/kg	1	<1
		Hexachloroethane	mg/kg	0.5	<0.5
		Hexachloropropene	mg/kg	0.5	<0.5
		Pentachlorobenzene	mg/kg	0.5	<0.5
		Pentachloroethane	mg/kg	0.5	<0.5
		1,2,3,5 and 1,2,4,5 -tetrachlorobenzene	mg/kg	1	<1
		1,2,3,4-tetrachlorobenzene	mg/kg	0.5	<0.5
		1/2-Chloronaphthalene	mg/kg	1	<1
		1,2,4-trichlorobenzene	mg/kg	0.5	<0.5
	06-Phthalates	Bis(2-ethylhexyl)phthalate	mg/kg	5	<5
		Bis(2-ethylhexyl)adipate	mg/kg	0.5	<0.5
		Butyl benzyl phthalate	mg/kg	0.5	<0.5
		Di-n-butyl phthalate	mg/kg	0.5	<0.5
		Diethyl phthalate	mg/kg	0.5	<0.5
		Dimethyl phthalate	mg/kg	0.5	<0.5
		Di-n-octyl phthalate	mg/kg	0.5	<0.5
	07-Carbamates	Carbofuran	mg/kg	0.5	<0.5
		Carbaryl	mg/kg	0.5	<0.5
08-Herbicides (normal)		Trifluralin	mg/kg	0.5	<0.5
09-Nitrosamines		N-nitroso-di-n-butylamine (NDBA)	mg/kg	0.5	<0.5
		N-nitroso-diethylamine (NDEA)	mg/kg	1	<1
		N-nitroso-di-n-propylamine (NDPA)	mg/kg	0.5	<0.5
		N-nitroso-morpholine (NMOR)	mg/kg	0.5	<0.5
		N-nitroso-piperidine (NPIP)	mg/kg	0.5	<0.5
		N-nitroso-pyrrolidine (NPYR)	mg/kg	1	<1
		4-amino biphenyl	mg/kg	1	<1
10-Nitroaromatics and Ketones		Acetophenone	mg/kg	0.5	<0.5
		1,3-dinitrobenzene	mg/kg	1	<1
		2,4-dinitrotoluene	mg/kg	0.5	<0.5
		2,6-dinitrotoluene	mg/kg	0.5	<0.5
		Isophorone	mg/kg	0.5	<0.5
		Nitrobenzene	mg/kg	0.5	<0.5
		p-(dimethylamino) azobenzene	mg/kg	1	<1
		Phenacetin	mg/kg	1	<1
		Pentachloronitrobenzene (quintozene)	mg/kg	0.5	<0.5



METHOD BLANKS

SE247182 R0

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Full 8270 SVOC in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB279065.023	11-Anilines and Amines	Aniline	mg/kg	3	<3
		4-chloroaniline	mg/kg	1	<1
		2-nitroaniline	mg/kg	1	<1
		3-nitroaniline	mg/kg	1	<1
		4-nitroaniline	mg/kg	1	<1
		Diphenylamine	mg/kg	0.5	<0.5
		o-toluidine	mg/kg	1	<1
		5-nitro-o-toluidine	mg/kg	1	<1
		1-naphthylamine	mg/kg	1	<1
		2-naphthylamine	mg/kg	1	<1
	12-Haloethers	Bis(2-chloroethoxy) methane	mg/kg	0.5	<0.5
		Bis(2-chloroethyl) ether	mg/kg	0.5	<0.5
		Bis(2-chloroisopropyl) ether	mg/kg	0.5	<0.5
		4-chlorophenyl phenyl ether	mg/kg	0.5	<0.5
		4-bromophenyl phenyl ether	mg/kg	0.5	<0.5
	13-Other SVOCs	Methyl methanesulfonate	mg/kg	1	<1
		Ethyl methanesulfonate	mg/kg	1	<1
		Dibenzofuran	mg/kg	0.5	<0.5
		Benzyl alcohol	mg/kg	1	<1
		Safrole	mg/kg	0.5	<0.5
		Isosafrole Isomer 1	mg/kg	1	<1
		Isosafrole Isomer 2	mg/kg	1	<1
		1,4-naphthoquinone	mg/kg	0.5	<0.5
		Thionazin	mg/kg	1	<1
	14-Speciatic Routine Phenols	3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
		2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5
		2,6-dichlorophenol	mg/kg	0.5	<0.5
		2,4,5-trichlorophenol	mg/kg	0.5	<0.5
		4-chloro-3-methylphenol	mg/kg	2	<2
		2-chlorophenol	mg/kg	0.5	<0.5
		2,4-dichlorophenol	mg/kg	0.5	<0.5
		2,4-dimethylphenol	mg/kg	0.5	<0.5
		2-nitrophenol	mg/kg	0.5	<0.5
		Phenol	mg/kg	0.5	<0.5
	Surrogates	2,4,6-trichlorophenol	mg/kg	0.5	<0.5
		Pentachlorophenol	mg/kg	0.5	<0.5
		4-nitrophenol	mg/kg	1	<1
		d5-phenol (Surrogate)	%	-	107
		d5-nitrobenzene (Surrogate)	%	-	100
LB279094.001	Mercury	Mercury	mg/kg	0.05	<0.05
		Mercury	mg/kg	0.05	<0.05
		Mercury	mg/kg	0.05	<0.05
LB279095.001	Mercury	Mercury	mg/kg	0.05	<0.05
		Mercury	mg/kg	0.05	<0.05
		Mercury	mg/kg	0.05	<0.05
LB279180.001	Mercury	Mercury	mg/kg	0.05	<0.05
		Mercury	mg/kg	0.05	<0.05
		Mercury	mg/kg	0.05	<0.05

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result
LB279094.001	Mercury	mg/kg	0.05	<0.05
LB279095.001	Mercury	mg/kg	0.05	<0.05
LB279180.001	Mercury	mg/kg	0.05	<0.05

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB279059.001	Alpha BHC	mg/kg	0.1	<0.1
	Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
	Beta BHC	mg/kg	0.1	<0.1
	Lindane (gamma BHC)	mg/kg	0.1	<0.1
	Delta BHC	mg/kg	0.1	<0.1
	Heptachlor	mg/kg	0.1	<0.1
	Aldrin	mg/kg	0.1	<0.1
	Isodrin	mg/kg	0.1	<0.1
	Heptachlor epoxide	mg/kg	0.1	<0.1
	Gamma Chlordane	mg/kg	0.1	<0.1
	Alpha Chlordane	mg/kg	0.1	<0.1



METHOD BLANKS

SE247182 R0

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OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB279059.001	Alpha Endosulfan	mg/kg	0.2	<0.2
	p,p'-DDE	mg/kg	0.1	<0.1
	Dieldrin	mg/kg	0.2	<0.2
	Endrin	mg/kg	0.2	<0.2
	Beta Endosulfan	mg/kg	0.2	<0.2
	p,p'-DDD	mg/kg	0.1	<0.1
	Endrin aldehyde	mg/kg	0.1	<0.1
	Endosulfan sulphate	mg/kg	0.1	<0.1
	p,p'-DDT	mg/kg	0.1	<0.1
	Endrin ketone	mg/kg	0.1	<0.1
	Methoxychlor	mg/kg	0.1	<0.1
	Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-
LB279068.001	Alpha BHC	mg/kg	0.1	<0.1
	Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
	Beta BHC	mg/kg	0.1	<0.1
	Lindane (gamma BHC)	mg/kg	0.1	<0.1
	Delta BHC	mg/kg	0.1	<0.1
	Heptachlor	mg/kg	0.1	<0.1
	Aldrin	mg/kg	0.1	<0.1
	Isodrin	mg/kg	0.1	<0.1
	Heptachlor epoxide	mg/kg	0.1	<0.1
	Gamma Chlordane	mg/kg	0.1	<0.1
	Alpha Chlordane	mg/kg	0.1	<0.1
	Alpha Endosulfan	mg/kg	0.2	<0.2
	p,p'-DDE	mg/kg	0.1	<0.1
	Dieldrin	mg/kg	0.2	<0.2
	Endrin	mg/kg	0.2	<0.2
	Beta Endosulfan	mg/kg	0.2	<0.2
	p,p'-DDD	mg/kg	0.1	<0.1
	Endrin aldehyde	mg/kg	0.1	<0.1
	Endosulfan sulphate	mg/kg	0.1	<0.1
	p,p'-DDT	mg/kg	0.1	<0.1
	Endrin ketone	mg/kg	0.1	<0.1
	Methoxychlor	mg/kg	0.1	<0.1
	Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB279059.001	Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Bromophos Ethyl	mg/kg	0.2	<0.2
	Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
	Diazinon (Dimpylate)	mg/kg	0.5	<0.5
	Dichlorvos	mg/kg	0.5	<0.5
	Dimethoate	mg/kg	0.5	<0.5
	Ethion	mg/kg	0.2	<0.2
	Fenitrothion	mg/kg	0.2	<0.2
	Malathion	mg/kg	0.2	<0.2
	Methodathion	mg/kg	0.5	<0.5
	Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-
		d14-p-terphenyl (Surrogate)	%	-
LB279068.001	Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Bromophos Ethyl	mg/kg	0.2	<0.2
	Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
	Diazinon (Dimpylate)	mg/kg	0.5	<0.5
	Dichlorvos	mg/kg	0.5	<0.5
	Dimethoate	mg/kg	0.5	<0.5
	Ethion	mg/kg	0.2	<0.2
	Fenitrothion	mg/kg	0.2	<0.2



METHOD BLANKS

SE247182 R0

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OP Pesticides in Soil (continued)

Method: ME-(AU)-ENVJAN420

Sample Number	Parameter	Units	LOR	Result
LB279068.001	Malathion	mg/kg	0.2	<0.2
	Methodathion	mg/kg	0.5	<0.5
	Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
	2-fluorobiphenyl (Surrogate)	%	-	87
	d14-p-terphenyl (Surrogate)	%	-	93
LB279145.001	Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Bromophos Ethyl	mg/kg	0.2	<0.2
	Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
	Diazinon (Dimpylate)	mg/kg	0.5	<0.5
	Dichlorvos	mg/kg	0.5	<0.5
	Dimethoate	mg/kg	0.5	<0.5
	Ethion	mg/kg	0.2	<0.2
	Fenitrothion	mg/kg	0.2	<0.2
	Malathion	mg/kg	0.2	<0.2
	Methodathion	mg/kg	0.5	<0.5
	Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
	2-fluorobiphenyl (Surrogate)	%	-	86
	d14-p-terphenyl (Surrogate)	%	-	100

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-ENVJAN420

Sample Number	Parameter	Units	LOR	Result
LB279059.001	Naphthalene	mg/kg	0.1	<0.1
	2-methylnaphthalene	mg/kg	0.1	<0.1
	1-methylnaphthalene	mg/kg	0.1	<0.1
	Acenaphthylene	mg/kg	0.1	<0.1
	Acenaphthene	mg/kg	0.1	<0.1
	Fluorene	mg/kg	0.1	<0.1
	Phenanthrene	mg/kg	0.1	<0.1
	Anthracene	mg/kg	0.1	<0.1
	Fluoranthene	mg/kg	0.1	<0.1
	Pyrene	mg/kg	0.1	<0.1
	Benzo(a)anthracene	mg/kg	0.1	<0.1
	Chrysene	mg/kg	0.1	<0.1
	Benzo(a)pyrene	mg/kg	0.1	<0.1
	Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
	Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
	Benzo(ghi)perylene	mg/kg	0.1	<0.1
	Total PAH (18)	mg/kg	0.8	<0.8
	d5-nitrobenzene (Surrogate)	%	-	85
	2-fluorobiphenyl (Surrogate)	%	-	85
	d14-p-terphenyl (Surrogate)	%	-	90
LB279068.001	Naphthalene	mg/kg	0.1	<0.1
	2-methylnaphthalene	mg/kg	0.1	<0.1
	1-methylnaphthalene	mg/kg	0.1	<0.1
	Acenaphthylene	mg/kg	0.1	<0.1
	Acenaphthene	mg/kg	0.1	<0.1
	Fluorene	mg/kg	0.1	<0.1
	Phenanthrene	mg/kg	0.1	<0.1
	Anthracene	mg/kg	0.1	<0.1
	Fluoranthene	mg/kg	0.1	<0.1
	Pyrene	mg/kg	0.1	<0.1
	Benzo(a)anthracene	mg/kg	0.1	<0.1
	Chrysene	mg/kg	0.1	<0.1
	Benzo(a)pyrene	mg/kg	0.1	<0.1
	Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
	Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
	Benzo(ghi)perylene	mg/kg	0.1	<0.1
	Total PAH (18)	mg/kg	0.8	<0.8
	d5-nitrobenzene (Surrogate)	%	-	88
	2-fluorobiphenyl (Surrogate)	%	-	87
	d14-p-terphenyl (Surrogate)	%	-	93



METHOD BLANKS

SE247182 R0

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PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB279145.001	Naphthalene	mg/kg	0.1	<0.1
	2-methylnaphthalene	mg/kg	0.1	<0.1
	1-methylnaphthalene	mg/kg	0.1	<0.1
	Acenaphthylene	mg/kg	0.1	<0.1
	Acenaphthene	mg/kg	0.1	<0.1
	Fluorene	mg/kg	0.1	<0.1
	Phenanthrene	mg/kg	0.1	<0.1
	Anthracene	mg/kg	0.1	<0.1
	Fluoranthene	mg/kg	0.1	<0.1
	Pyrene	mg/kg	0.1	<0.1
	Benzo(a)anthracene	mg/kg	0.1	<0.1
	Chrysene	mg/kg	0.1	<0.1
	Benzo(a)pyrene	mg/kg	0.1	<0.1
	Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
	Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
	Benzo(ghi)perylene	mg/kg	0.1	<0.1
	Total PAH (18)	mg/kg	0.8	<0.8
Surrogates	d5-nitrobenzene (Surrogate)	%	-	118
	2-fluorobiphenyl (Surrogate)	%	-	86
	d14-p-terphenyl (Surrogate)	%	-	100

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB279059.001	Arochlor 1016	mg/kg	0.2	<0.2
	Arochlor 1221	mg/kg	0.2	<0.2
	Arochlor 1232	mg/kg	0.2	<0.2
	Arochlor 1242	mg/kg	0.2	<0.2
	Arochlor 1248	mg/kg	0.2	<0.2
	Arochlor 1254	mg/kg	0.2	<0.2
	Arochlor 1260	mg/kg	0.2	<0.2
	Arochlor 1262	mg/kg	0.2	<0.2
	Arochlor 1268	mg/kg	0.2	<0.2
	Total PCBs (Arochlors)	mg/kg	1	<1
Surrogates	TCMX (Surrogate)	%	-	80
LB279068.001	Arochlor 1016	mg/kg	0.2	<0.2
	Arochlor 1221	mg/kg	0.2	<0.2
	Arochlor 1232	mg/kg	0.2	<0.2
	Arochlor 1242	mg/kg	0.2	<0.2
	Arochlor 1248	mg/kg	0.2	<0.2
	Arochlor 1254	mg/kg	0.2	<0.2
	Arochlor 1260	mg/kg	0.2	<0.2
	Arochlor 1262	mg/kg	0.2	<0.2
	Arochlor 1268	mg/kg	0.2	<0.2
	Total PCBs (Arochlors)	mg/kg	1	<1
Surrogates	TCMX (Surrogate)	%	-	86

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result
LB279089.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0
LB279091.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Selenium, Se	mg/kg	2	<2



METHOD BLANKS

SE247182 R0

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Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result
LB279091.001	Zinc, Zn	mg/kg	2	<2.0
LB279208.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB279059.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110
LB279068.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110
LB279145.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number	Parameter	Units	LOR	Result	
LB279072.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1
		cis-1,3-dichloropropene	mg/kg	0.1	<0.1
		trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
		Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1
		Chloroethane	mg/kg	1	<1
		Trichlorofluoromethane	mg/kg	1	<1
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Iodomethane	mg/kg	5	<5
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1
		1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1
		Bromochloromethane	mg/kg	0.1	<0.1
		1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1
		Carbon tetrachloride	mg/kg	0.1	<0.1
		Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene,TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1
		1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
		1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,2,3-trichloropropane	mg/kg	0.1	<0.1
		trans-1,4-dichloro-2-butene	mg/kg	1	<1
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1



METHOD BLANKS

SE247182 R0

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-ENVJAN433

Sample Number		Parameter	Units	LOR	Result
LB279072.001	Halogenated Aliphatics	Hexachlorobutadiene	mg/kg	0.1	<0.1
	Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1
		2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.1	<0.1
		1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
		1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		o-xylene	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1
		1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
		tert-butylbenzene	mg/kg	0.1	<0.1
		1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
		n-butylbenzene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1
		2-nitropropane	mg/kg	10	<10
	Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10
		MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate*	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
		2-hexanone (MBK)	mg/kg	5	<5
	Polycyclic VOCs	Naphthalene (VOC)*	mg/kg	0.1	<0.1
	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	92
		d8-toluene (Surrogate)	%	-	85
		Bromofluorobenzene (Surrogate)	%	-	76
	Totals	Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total BTEX*	mg/kg	0.6	<0.6
	Trihalomethanes	Chloroform (THM)	mg/kg	0.1	<0.1
		Bromodichloromethane (THM)	mg/kg	0.1	<0.1
		Dibromochloromethane (THM)	mg/kg	0.1	<0.1
		Bromoform (THM)	mg/kg	0.1	<0.1
LB279074.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1
		cis-1,3-dichloropropene	mg/kg	0.1	<0.1
		trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
		Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1
		Chloroethane	mg/kg	1	<1
		Trichlorofluoromethane	mg/kg	1	<1
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Iodomethane	mg/kg	5	<5
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1
		1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1



METHOD BLANKS

SE247182 R0

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Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-ENVJAN433

Sample Number		Parameter	Units	LOR	Result
LB279074.001	Halogenated Aliphatics	Bromochloromethane	mg/kg	0.1	<0.1
		1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1
		Carbon tetrachloride	mg/kg	0.1	<0.1
		Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene,TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1
		1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
		1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,2,3-trichloropropane	mg/kg	0.1	<0.1
		trans-1,4-dichloro-2-butene	mg/kg	1	<1
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
	Halogenated Aromatics	Hexachlorobutadiene	mg/kg	0.1	<0.1
		Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1
		2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.1	<0.1
		1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
		1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		o-xylene	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1
		1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
		tert-butylbenzene	mg/kg	0.1	<0.1
		1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
		n-butylbenzene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1
		2-nitropropane	mg/kg	10	<10
	Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10
		MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate*	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
		2-hexanone (MBK)	mg/kg	5	<5
	Polycyclic VOCs	Naphthalene (VOC)*	mg/kg	0.1	<0.1
	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	87
		d8-toluene (Surrogate)	%	-	91
		Bromofluorobenzene (Surrogate)	%	-	95
	Totals	Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total BTEX*	mg/kg	0.6	<0.6
	Trihalomethanes	Chloroform (THM)	mg/kg	0.1	<0.1
		Bromodichloromethane (THM)	mg/kg	0.1	<0.1
		Dibromochloromethane (THM)	mg/kg	0.1	<0.1
		Bromoform (THM)	mg/kg	0.1	<0.1
LB279146.001	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1



METHOD BLANKS

SE247182 R0

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-ENVJAN433

Sample Number		Parameter	Units	LOR	Result
LB279146.001	Monocyclic Aromatic	m/p-xylene	mg/kg	0.2	<0.2
	Hydrocarbons	o-xylene	mg/kg	0.1	<0.1
	Polycyclic VOCs	Naphthalene (VOC)*	mg/kg	0.1	<0.1
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	87
		d8-toluene (Surrogate)	%	-	88
		Bromofluorobenzene (Surrogate)	%	-	94
	Totals	Total BTEX*	mg/kg	0.6	<0.6

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-ENVJAN433

Sample Number		Parameter	Units	LOR	Result
LB279072.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	92
LB279074.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	87
LB279146.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	87

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: $RPD = | \text{OriginalResult} - \text{ReplicateResult} | \times 100 / \text{Mean}$

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: $MAD = 100 \times \text{SDL} / \text{Mean} + \text{LR}$

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may give a different calculated RPD.

Full 8270 SVOC in Soil

Method: ME-(AU)-ENVJAN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %	
SE247182.002	LB279065.025	01-PAHs	Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0	
			Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0	
			Anthracene	mg/kg	0.1	<0.1	<0.1	200	0	
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0	
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0	
			Benzo(b&j&k)fluoranthene	mg/kg	0.2	<0.2	<0.2	200	0	
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0	
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0	
			Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0	
			Chrysene	mg/kg	0.1	<0.1	<0.1	200	0	
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0	
			Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0	
			Fluorene	mg/kg	0.1	<0.1	<0.1	200	0	
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0	
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0	
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0	
			Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0	
			Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0	
			Pyrene	mg/kg	0.1	<0.1	<0.1	200	0	
			Carcinogenic PAHs, BaP TEQ, <LOR=LOR/2*	mg/kg	0.2	<0.2	<0.2	175	0	
			Carcinogenic PAHs, BaP TEQ, <LOR=LOR*	mg/kg	0.3	<0.3	<0.3	134	0	
			Carcinogenic PAHs, BaP TEQ, <LOR=0*	mg/kg	0.2	<0.2	<0.2	200	NA	
			2-acetylaminofluorene	mg/kg	0.5	<0.5	<0.5	200	0	
			7,12-dimethyl-benz(a)anthracene	mg/kg	0.5	<0.5	<0.5	200	0	
			3-methylcholanthrene	mg/kg	0.5	<0.5	<0.5	200	0	
			02-OCs	Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
				Alpha-BHC	mg/kg	0.1	<0.1	<0.1	200	0
				Beta-BHC	mg/kg	0.5	<0.5	<0.5	200	0
				Delta-BHC	mg/kg	0.1	<0.1	<0.1	200	0
				Gamma-BHC (Lindane)	mg/kg	0.1	<0.1	<0.1	200	0
				p,p-DDD	mg/kg	0.1	<0.1	<0.1	200	0
				p,p-DDE	mg/kg	0.1	0.1	0.1	125	10
				p,p-DDT	mg/kg	0.1	<0.1	<0.1	200	0
		Dieldrin		mg/kg	0.2	<0.2	<0.2	200	0	
		Alpha-endosulfan		mg/kg	0.2	<0.2	<0.2	200	0	
		Beta-endosulfan		mg/kg	0.2	<0.2	<0.2	200	0	
		Endosulfan sulphate		mg/kg	0.1	<0.1	<0.1	200	0	
		Endrin		mg/kg	0.2	<0.2	<0.2	200	0	
		Heptachlor		mg/kg	0.1	<0.1	<0.1	200	0	
		Heptachlor epoxide		mg/kg	0.1	<0.1	<0.1	200	0	
		Isodrin		mg/kg	0.1	<0.1	<0.1	200	0	
		Methoxychlor		mg/kg	0.1	<0.1	<0.1	200	0	
		Mirex		mg/kg	0.1	<0.1	<0.1	200	0	
		Alpha-chlordane		mg/kg	0.1	<0.1	<0.1	200	0	
		Gamma-chlordane		mg/kg	0.1	<0.1	<0.1	200	0	
		Endrin ketone		mg/kg	0.1	<0.1	<0.1	200	0	
		Total (Alpha+Beta+SO4) Endosulfan*		mg/kg	0.2	<0.2	<0.2	200	0	
		03-OPs		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
				Bromophos ethyl	mg/kg	0.2	<0.2	<0.2	200	0
				Carbophenothion	mg/kg	0.5	<0.5	<0.5	200	0
				Chlorfenvinphos-cis	mg/kg	2	<2	<2	200	0
				Chlorfenvinphos-trans	mg/kg	0.5	<0.5	<0.5	200	0
				Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
Chlorpyrifos-methyl	mg/kg			0.5	<0.5	<0.5	200	0		
Co-Ral (Coumaphos)	mg/kg			0.5	<0.5	<0.5	200	0		
Diazinon (Dimpylate)	mg/kg		0.5	<0.5	<0.5	200	0			
Dichlorvos	mg/kg		0.5	<0.5	<0.5	200	0			
Demeton-S-methyl	mg/kg		0.5	<0.5	<0.5	200	0			
Dimethoate	mg/kg		0.5	<0.5	<0.5	200	0			
Disulfoton (Di-syston)	mg/kg		0.5	<0.5	<0.5	200	0			
EPN*	mg/kg		0.5	<0.5	<0.5	200	0			



DUPLICATES

SE247182 R0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: $RPD = | \text{OriginalResult} - \text{ReplicateResult} | \times 100 / \text{Mean}$

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: $MAD = 100 \times \text{SDL} / \text{Mean} + \text{LR}$

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may give a different calculated RPD.

Full 8270 SVOC in Soil (continued)

Method: ME-(AU)-ENVJAN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE247182.002	LB279065.025	03-OPs	Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Ethoprophos (ethoprop or prophos)	mg/kg	0.5	<0.5	<0.5	200	0
			Famphur (Famophos)	mg/kg	0.5	<0.5	<0.5	200	0
			Fenamiphos (Phenamiphos)	mg/kg	0.5	<0.5	<0.5	200	0
			Fenchlorophos (Ronnel)	mg/kg	0.5	<0.5	<0.5	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Fenthion	mg/kg	0.5	<0.5	<0.5	200	0
			Malathion (Maldison)	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Mevinphos-cis/trans	mg/kg	1	<1	<1	200	0
			o,o,o-triethyl phosphorothioate	mg/kg	0.5	<0.5	<0.5	200	0
			Parathion ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Parathion methyl	mg/kg	0.5	<0.5	<0.5	200	0
			Phorate	mg/kg	0.5	<0.5	<0.5	200	0
			Pirimiphos-ethyl	mg/kg	0.5	<0.5	<0.5	200	0
			Pirimiphos-methyl	mg/kg	0.5	<0.5	<0.5	200	0
			Profenofos	mg/kg	0.5	<0.5	<0.5	200	0
			Prothiophos (Tokuthion)*	mg/kg	0.5	<0.5	<0.5	200	0
			Sulfotepp	mg/kg	0.5	<0.5	<0.5	200	0
			Tetrachlorvinphos (Stirophos)*	mg/kg	0.5	<0.5	<0.5	200	0
		04-PCB	PCB Congener C28	mg/kg	0.1	<0.1	<0.1	200	0
		UPAC(7)	PCB Congener C52	mg/kg	0.1	<0.1	<0.1	200	0
			PCB Congener C101	mg/kg	0.1	<0.1	<0.1	200	0
			PCB Congener C118	mg/kg	0.1	<0.1	<0.1	200	0
			PCB Congener C138	mg/kg	0.1	<0.1	<0.1	200	0
			PCB Congener C153	mg/kg	0.1	<0.1	<0.1	200	0
			PCB Congener C180	mg/kg	0.1	<0.1	<0.1	200	0
		05-SVCH (CI	Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
		Benzenes,	1,2-dichlorobenzene	mg/kg	0.5	<0.5	<0.5	200	0
			1,3-dichlorobenzene	mg/kg	0.5	<0.5	<0.5	200	0
			1,4-dichlorobenzene	mg/kg	0.5	<0.5	<0.5	200	0
			Hexachlorobutadiene	mg/kg	0.5	<0.5	<0.5	200	0
			Hexachlorocyclopentadiene	mg/kg	1	<1	<1	200	0
			Hexachloroethane	mg/kg	0.5	<0.5	<0.5	200	0
			Hexachloropropene	mg/kg	0.5	<0.5	<0.5	200	0
			Pentachlorobenzene	mg/kg	0.5	<0.5	<0.5	200	0
			Pentachloroethane	mg/kg	0.5	<0.5	<0.5	200	0
			1,2,3,5 and 1,2,4,5 -tetrachlorobenzene	mg/kg	1	<1	<1	200	0
			1,2,3,4-tetrachlorobenzene	mg/kg	0.5	<0.5	<0.5	200	0
			1/2-Chloronaphthalene	mg/kg	1	<1	<1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.5	<0.5	<0.5	200	0
		06-Phthalates	Bis(2-ethylhexyl)phthalate	mg/kg	5	<5	<5	200	0
			Bis(2-ethylhexyl)adipate	mg/kg	0.5	<0.5	<0.5	200	0
			Butyl benzyl phthalate	mg/kg	0.5	<0.5	<0.5	200	0
			Di-n-butyl phthalate	mg/kg	0.5	<0.5	<0.5	200	0
			Diethyl phthalate	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethyl phthalate	mg/kg	0.5	<0.5	<0.5	200	0
			Di-n-octyl phthalate	mg/kg	0.5	<0.5	<0.5	200	0
		07-Carbamate	Carbofuran	mg/kg	0.5	<0.5	<0.5	200	0
		s	Carbaryl	mg/kg	0.5	<0.5	<0.5	200	0
		08-Herbicides	Trifluralin	mg/kg	0.5	<0.5	<0.5	200	0
		09-Nitrosamine	N-nitroso-di-n-butylamine (NDBA)	mg/kg	0.5	<0.5	<0.5	200	0
		s	N-nitroso-diethylamine (NDEA)	mg/kg	1	<1	<1	200	0
			N-nitroso-di-n-propylamine (NDPA)	mg/kg	0.5	<0.5	<0.5	200	0
			N-nitroso-morpholine (NMOR)	mg/kg	0.5	<0.5	<0.5	200	0
			N-nitroso-piperidine (NPIP)	mg/kg	0.5	<0.5	<0.5	200	0
			N-nitroso-pyrrolidine (NPYR)	mg/kg	1	<1	<1	200	0
			4-amino biphenyl	mg/kg	1	<1	<1	200	0
		10-Nitroaromat	Acetophenone	mg/kg	0.5	<0.5	<0.5	200	0
		ics and	1,3-dinitrobenzene	mg/kg	1	<1	<1	200	0
			2,4-dinitrotoluene	mg/kg	0.5	<0.5	<0.5	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: $RPD = \frac{|OriginalResult - ReplicateResult|}{Mean} \times 100$

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: $MAD = 100 \times \frac{SDL}{Mean} + LR$

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may give a different calculated RPD.

Full 8270 SVOC in Soil (continued)

Method: ME-(AU)-ENVJAN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %	
SE247182.002	LB279065.025	10-Nitroaromat ics and	2,6-dinitrotoluene	mg/kg	0.5	<0.5	<0.5	200	0	
			Isophorone	mg/kg	0.5	<0.5	<0.5	200	0	
			Nitrobenzene	mg/kg	0.5	<0.5	<0.5	200	0	
			p-(dimethylamino) azobenzene	mg/kg	1	<1	<1	200	0	
			Phenacetin	mg/kg	1	<1	<1	200	0	
		11-Anilines and Amines	Pentachloronitrobenzene (quintozene)	mg/kg	0.5	<0.5	<0.5	200	0	
			Aniline	mg/kg	3	<3	<3	200	0	
			4-chloroaniline	mg/kg	1	<1	<1	200	0	
			2-nitroaniline	mg/kg	1	<1	<1	200	0	
			3-nitroaniline	mg/kg	1	<1	<1	200	0	
			4-nitroaniline	mg/kg	1	<1	<1	200	0	
			Diphenylamine	mg/kg	0.5	<0.5	<0.5	200	0	
			o-toluidine	mg/kg	1	<1	<1	200	0	
			5-nitro-o-toluidine	mg/kg	1	<1	<1	200	0	
			1-naphthylamine	mg/kg	1	<1	<1	200	0	
			2-naphthylamine	mg/kg	1	<1	<1	200	0	
		12-Haloethers	Bis(2-chloroethoxy) methane	mg/kg	0.5	<0.5	<0.5	200	0	
			Bis(2-chloroethyl) ether	mg/kg	0.5	<0.5	<0.5	200	0	
			Bis(2-chloroisopropyl) ether	mg/kg	0.5	<0.5	<0.5	200	0	
			4-chlorophenyl phenyl ether	mg/kg	0.5	<0.5	<0.5	200	0	
			4-bromophenyl phenyl ether	mg/kg	0.5	<0.5	<0.5	200	0	
		13-Other SVOCs	Methyl methanesulfonate	mg/kg	1	<1	<1	200	0	
			Ethyl methanesulfonate	mg/kg	1	<1	<1	200	0	
			Dibenzofuran	mg/kg	0.5	<0.5	<0.5	200	0	
			Benzyl alcohol	mg/kg	1	<1	<1	200	0	
			Safrole	mg/kg	0.5	<0.5	<0.5	200	0	
			Isosafrole Isomer 1	mg/kg	1	<1	<1	200	0	
			Isosafrole Isomer 2	mg/kg	1	<1	<1	200	0	
			1,4-naphthoquinone	mg/kg	0.5	<0.5	<0.5	200	0	
			Thionazin	mg/kg	1	<1	<1	200	0	
		14-Speciater Routine	3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	200	0	
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	200	0	
			2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0	
			2,3,4,6-tetrachlorophenol	mg/kg	0.5	<0.5	<0.5	200	0	
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0	
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	200	0	
			2-chlorophenol	mg/kg	0.5	<0.5	<0.5	200	0	
			2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0	
			2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	200	0	
			2-nitrophenol	mg/kg	0.5	<0.5	<0.5	200	0	
			Phenol	mg/kg	0.5	<0.5	<0.5	200	0	
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0	
			Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	200	0	
			4-nitrophenol	mg/kg	1	<1	<1	200	0	
			Surrogates	d5-phenol (Surrogate)	mg/kg	-	2.3	2.2	30	4
				d5-nitrobenzene (Surrogate)	mg/kg	-	0.6	0.6	30	2
				2-fluorobiphenyl (Surrogate)	mg/kg	-	0.6	0.6	30	2
		2,4,6-tribromophenol (Surrogate)		mg/kg	-	5.4	5.1	30	6	
		d14-p-terphenyl (Surrogate)		mg/kg	-	0.5	0.5	30	6	
SE247182.040	LB279065.026	01-PAHs	Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0	
			Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0	
			Anthracene	mg/kg	0.1	<0.1	<0.1	200	0	
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0	
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0	
			Benzo(b&j&k)fluoranthene	mg/kg	0.2	<0.2	<0.2	200	0	
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0	
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0	
			Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0	
			Chrysene	mg/kg	0.1	<0.1	<0.1	200	0	
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0	
			Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0	

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: $RPD = | \text{OriginalResult} - \text{ReplicateResult} | \times 100 / \text{Mean}$

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: $MAD = 100 \times \text{SDL} / \text{Mean} + \text{LR}$

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may give a different calculated RPD.

Full 8270 SVOC in Soil (continued)

Method: ME-(AU)-ENVJAN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %	
SE247182.040	LB279065.026	01-PAHs	Fluorene	mg/kg	0.1	<0.1	<0.1	200	0	
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0	
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0	
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0	
			Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0	
			Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0	
			Pyrene	mg/kg	0.1	<0.1	<0.1	200	0	
			Carcinogenic PAHs, BaP TEQ, <LOR=LOR/2*	mg/kg	0.2	<0.2	<0.2	175	0	
			Carcinogenic PAHs, BaP TEQ, <LOR=LOR*	mg/kg	0.3	<0.3	<0.3	134	0	
			Carcinogenic PAHs, BaP TEQ, <LOR=0*	mg/kg	0.2	<0.2	<0.2	200	NA	
			2-acetylaminofluorene	mg/kg	0.5	<0.5	<0.5	200	0	
			7,12-dimethyl-benz(a)anthracene	mg/kg	0.5	<0.5	<0.5	200	0	
			3-methylcholanthrene	mg/kg	0.5	<0.5	<0.5	200	0	
		02-OCs	Aldrin	mg/kg	0.1	<0.1	<0.1	200	0	
			Alpha-BHC	mg/kg	0.1	<0.1	<0.1	200	0	
			Beta-BHC	mg/kg	0.5	<0.5	<0.5	200	0	
			Delta-BHC	mg/kg	0.1	<0.1	<0.1	200	0	
			Gamma-BHC (Lindane)	mg/kg	0.1	<0.1	<0.1	200	0	
			p,p-DDD	mg/kg	0.1	<0.1	<0.1	200	0	
			p,p-DDE	mg/kg	0.1	<0.1	<0.1	200	0	
			p,p-DDT	mg/kg	0.1	<0.1	<0.1	200	0	
			Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0	
			Alpha-endosulfan	mg/kg	0.2	<0.2	<0.2	200	0	
			Beta-endosulfan	mg/kg	0.2	<0.2	<0.2	200	0	
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0	
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0	
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0	
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0	
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0	
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0	
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0	
			Alpha-chlordane	mg/kg	0.1	<0.1	<0.1	200	0	
			Gamma-chlordane	mg/kg	0.1	<0.1	<0.1	200	0	
			Endrin ketone	mg/kg	0.1	<0.1	<0.1	200	0	
			Total (Alpha+Beta+SO4) Endosulfan*	mg/kg	0.2	<0.2	<0.2	200	0	
			03-OPs	Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
				Bromophos ethyl	mg/kg	0.2	<0.2	<0.2	200	0
				Carbophenothion	mg/kg	0.5	<0.5	<0.5	200	0
				Chlorfenvinphos-cis	mg/kg	2	<2	<2	200	0
				Chlorfenvinphos-trans	mg/kg	0.5	<0.5	<0.5	200	0
		Chlorpyrifos (Chlorpyrifos Ethyl)		mg/kg	0.2	<0.2	<0.2	200	0	
		Chlorpyrifos-methyl		mg/kg	0.5	<0.5	<0.5	200	0	
		Co-Ral (Coumaphos)		mg/kg	0.5	<0.5	<0.5	200	0	
		Diazinon (Dimpylate)		mg/kg	0.5	<0.5	<0.5	200	0	
		Dichlorvos		mg/kg	0.5	<0.5	<0.5	200	0	
		Demeton-S-methyl		mg/kg	0.5	<0.5	<0.5	200	0	
		Dimethoate		mg/kg	0.5	<0.5	<0.5	200	0	
		Disulfoton (Di-syston)		mg/kg	0.5	<0.5	<0.5	200	0	
		EPN*		mg/kg	0.5	<0.5	<0.5	200	0	
		Ethion		mg/kg	0.2	<0.2	<0.2	200	0	
Ethoprophos (ethoprop or prophos)	mg/kg	0.5		<0.5	<0.5	200	0			
Famphur (Famophos)	mg/kg	0.5		<0.5	<0.5	200	0			
Fenamiphos (Phenamiphos)	mg/kg	0.5		<0.5	<0.5	200	0			
Fenchlorophos (Ronne)	mg/kg	0.5		<0.5	<0.5	200	0			
Fenitrothion	mg/kg	0.2		<0.2	<0.2	200	0			
Fenthion	mg/kg	0.5		<0.5	<0.5	200	0			
Malathion (Maldison)	mg/kg	0.2		<0.2	<0.2	200	0			
Methidathion	mg/kg	0.5		<0.5	<0.5	200	0			
Mevinphos-cis/trans	mg/kg	1		<1	<1	200	0			
o,o,o-triethyl phosphorothioate	mg/kg	0.5		<0.5	<0.5	200	0			
Parathion ethyl (Parathion)	mg/kg	0.2		<0.2	<0.2	200	0			

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: $RPD = \frac{|OriginalResult - ReplicateResult|}{Mean} \times 100$

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: $MAD = 100 \times \frac{SDL}{Mean} + LR$

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may give a different calculated RPD.

Full 8270 SVOC in Soil (continued)

Method: ME-(AU)-ENVJAN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE247182.040	LB279065.026	03-OPs	Parathion methyl	mg/kg	0.5	<0.5	<0.5	200	0
			Phorate	mg/kg	0.5	<0.5	<0.5	200	0
			Pirimiphos-ethyl	mg/kg	0.5	<0.5	<0.5	200	0
			Pirimiphos-methyl	mg/kg	0.5	<0.5	<0.5	200	0
			Profenofos	mg/kg	0.5	<0.5	<0.5	200	0
			Prothiophos (Tokuthion)*	mg/kg	0.5	<0.5	<0.5	200	0
			Sulfotepp	mg/kg	0.5	<0.5	<0.5	200	0
		04-PCB UPAC(7)	Tetrachlorvinphos (Stirophos)*	mg/kg	0.5	<0.5	<0.5	200	0
			PCB Congener C28	mg/kg	0.1	<0.1	<0.1	200	0
			PCB Congener C52	mg/kg	0.1	<0.1	<0.1	200	0
			PCB Congener C101	mg/kg	0.1	<0.1	<0.1	200	0
			PCB Congener C118	mg/kg	0.1	<0.1	<0.1	200	0
			PCB Congener C138	mg/kg	0.1	<0.1	<0.1	200	0
			PCB Congener C153	mg/kg	0.1	<0.1	<0.1	200	0
		05-SVCH (CI Benzenes,	PCB Congener C180	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.5	<0.5	<0.5	200	0
			1,3-dichlorobenzene	mg/kg	0.5	<0.5	<0.5	200	0
			1,4-dichlorobenzene	mg/kg	0.5	<0.5	<0.5	200	0
			Hexachlorobutadiene	mg/kg	0.5	<0.5	<0.5	200	0
			Hexachlorocyclopentadiene	mg/kg	1	<1	<1	200	0
			Hexachloroethane	mg/kg	0.5	<0.5	<0.5	200	0
			Hexachloropropene	mg/kg	0.5	<0.5	<0.5	200	0
			Pentachlorobenzene	mg/kg	0.5	<0.5	<0.5	200	0
			Pentachloroethane	mg/kg	0.5	<0.5	<0.5	200	0
			1,2,3,5 and 1,2,4,5 -tetrachlorobenzene	mg/kg	1	<1	<1	200	0
			1,2,3,4-tetrachlorobenzene	mg/kg	0.5	<0.5	<0.5	200	0
			1/2-Chloronaphthalene	mg/kg	1	<1	<1	200	0
			06-Phthalates	1,2,4-trichlorobenzene	mg/kg	0.5	<0.5	<0.5	200
		Bis(2-ethylhexyl)phthalate		mg/kg	5	<5	<5	200	0
		Bis(2-ethylhexyl)adipate		mg/kg	0.5	<0.5	<0.5	200	0
		Butyl benzyl phthalate		mg/kg	0.5	<0.5	<0.5	200	0
		Di-n-butyl phthalate		mg/kg	0.5	<0.5	<0.5	200	0
		Diethyl phthalate		mg/kg	0.5	<0.5	<0.5	200	0
		Dimethyl phthalate		mg/kg	0.5	<0.5	<0.5	200	0
		07-Carbamate	Di-n-octyl phthalate	mg/kg	0.5	<0.5	<0.5	200	0
			Carbofuran	mg/kg	0.5	<0.5	<0.5	200	0
		s	Carbaryl	mg/kg	0.5	<0.5	<0.5	200	0
		08-Herbicides	Trifluralin	mg/kg	0.5	<0.5	<0.5	200	0
		09-Nitrosamine s	N-nitroso-di-n-butylamine (NDBA)	mg/kg	0.5	<0.5	<0.5	200	0
			N-nitroso-diethylamine (NDEA)	mg/kg	1	<1	<1	200	0
			N-nitroso-di-n-propylamine (NDPA)	mg/kg	0.5	<0.5	<0.5	200	0
			N-nitroso-morpholine (NMOR)	mg/kg	0.5	<0.5	<0.5	200	0
			N-nitroso-piperidine (NPIP)	mg/kg	0.5	<0.5	<0.5	200	0
			N-nitroso-pyrrolidine (NPYR)	mg/kg	1	<1	<1	200	0
		10-Nitroaromat ics and	4-amino biphenyl	mg/kg	1	<1	<1	200	0
			Acetophenone	mg/kg	0.5	<0.5	<0.5	200	0
			1,3-dinitrobenzene	mg/kg	1	<1	<1	200	0
			2,4-dinitrotoluene	mg/kg	0.5	<0.5	<0.5	200	0
			2,6-dinitrotoluene	mg/kg	0.5	<0.5	<0.5	200	0
Isophorone	mg/kg		0.5	<0.5	<0.5	200	0		
Nitrobenzene	mg/kg		0.5	<0.5	<0.5	200	0		
p-(dimethylamino) azobenzene	mg/kg		1	<1	<1	200	0		
Phenacetin	mg/kg		1	<1	<1	200	0		
Pentachloronitrobenzene (quintozene)	mg/kg		0.5	<0.5	<0.5	200	0		
11-Anilines and Amines	Aniline	mg/kg	3	<3	<3	200	0		
	4-chloroaniline	mg/kg	1	<1	<1	200	0		
	2-nitroaniline	mg/kg	1	<1	<1	200	0		
	3-nitroaniline	mg/kg	1	<1	<1	200	0		
	4-nitroaniline	mg/kg	1	<1	<1	200	0		
	Diphenylamine	mg/ka	0.5	<0.5	<0.5	200	0		

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: $RPD = | \text{OriginalResult} - \text{ReplicateResult} | \times 100 / \text{Mean}$

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: $MAD = 100 \times \text{SDL} / \text{Mean} + \text{LR}$

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may give a different calculated RPD.

Full 8270 SVOC in Soil (continued)

Method: ME-(AU)-[ENV]JAN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %	
SE247182.040	LB279065.026	11-Anilines and Amines	o-toluidine	mg/kg	1	<1	<1	200	0	
			5-nitro-o-toluidine	mg/kg	1	<1	<1	200	0	
			1-naphthylamine	mg/kg	1	<1	<1	200	0	
			2-naphthylamine	mg/kg	1	<1	<1	200	0	
		12-Haloethers	Bis(2-chloroethoxy) methane	mg/kg	0.5	<0.5	<0.5	200	0	
			Bis(2-chloroethyl) ether	mg/kg	0.5	<0.5	<0.5	200	0	
			Bis(2-chloroisopropyl) ether	mg/kg	0.5	<0.5	<0.5	200	0	
			4-chlorophenyl phenyl ether	mg/kg	0.5	<0.5	<0.5	200	0	
			4-bromophenyl phenyl ether	mg/kg	0.5	<0.5	<0.5	200	0	
		13-Other SVOCs	Methyl methanesulfonate	mg/kg	1	<1	<1	200	0	
			Ethyl methanesulfonate	mg/kg	1	<1	<1	200	0	
			Dibenzofuran	mg/kg	0.5	<0.5	<0.5	200	0	
			Benzyl alcohol	mg/kg	1	<1	<1	200	0	
			Safrole	mg/kg	0.5	<0.5	<0.5	200	0	
			Isosafrole Isomer 1	mg/kg	1	<1	<1	200	0	
			Isosafrole Isomer 2	mg/kg	1	<1	<1	200	0	
			1,4-naphthoquinone	mg/kg	0.5	<0.5	<0.5	200	0	
			Thionazin	mg/kg	1	<1	<1	200	0	
		14-Speciated Routine	3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	200	0	
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	200	0	
			2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0	
			2,3,4,6-tetrachlorophenol	mg/kg	0.5	<0.5	<0.5	200	0	
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0	
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	200	0	
			2-chlorophenol	mg/kg	0.5	<0.5	<0.5	200	0	
			2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0	
			2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	200	0	
			2-nitrophenol	mg/kg	0.5	<0.5	<0.5	200	0	
			Phenol	mg/kg	0.5	<0.5	<0.5	200	0	
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0	
			Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	200	0	
			4-nitrophenol	mg/kg	1	<1	<1	200	0	
			Surrogates	d5-phenol (Surrogate)	mg/kg	-	1.9	1.5	30	22
				d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	30	12
		2-fluorobiphenyl (Surrogate)		mg/kg	-	0.6	0.4	30	22	
		2,4,6-tribromophenol (Surrogate)		mg/kg	-	6.0	4.2	30	36 ①	
		d14-p-terphenyl (Surrogate)		mg/kg	-	0.4	0.3	30	28	

Mercury in Soil

Method: ME-(AU)-[ENV]JAN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE247182.010	LB279094.014	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE247182.019	LB279094.024	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE247182.029	LB279095.014	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE247182.042	LB279180.018	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE247189.009	LB279180.014	Mercury	mg/kg	0.05	<0.05	<0.05	200	0

Moisture Content

Method: ME-(AU)-[ENV]JAN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE247182.010	LB279085.011	% Moisture	%w/w	1	16.5	16.0	36	3
SE247182.019	LB279085.021	% Moisture	%w/w	1	14.1	13.8	37	2
SE247182.029	LB279153.011	% Moisture	%w/w	1	15.5	14.4	37	8
SE247182.040	LB279153.022	% Moisture	%w/w	1	7.4	6.0	45	21
SE247182.042	LB279149.019	% Moisture	%w/w	1	17.1	17.0	36	1
SE247189.005	LB279149.011	% Moisture	%w/w	1	10.3	10.8	40	5

OC Pesticides in Soil

Method: ME-(AU)-[ENV]JAN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE247182.007	LB279059.026	Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
		Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
		Lindane (gamma BHC)	mg/kg	0.1	<0.1	<0.1	200	0
		Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: $RPD = \frac{|OriginalResult - ReplicateResult|}{Mean} \times 100$

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: $MAD = 100 \times \frac{SDL}{Mean} + LR$

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may give a different calculated RPD.

OC Pesticides in Soil (continued)

Method: ME-(AU)-ENVJAN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE247182.007	LB279059.026	Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
		Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
		Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
		Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
		Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
		Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
		Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
		o,p'-DDE*	mg/kg	0.1	<0.1	<0.1	200	0
		p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
		Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
		Endrin	mg/kg	0.2	<0.2	<0.2	200	0
		Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
		o,p'-DDD*	mg/kg	0.1	<0.1	<0.1	200	0
		p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
		Endrin aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
		Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
		o,p'-DDT*	mg/kg	0.1	<0.1	<0.1	200	0
		p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
		Endrin ketone	mg/kg	0.1	<0.1	<0.1	200	0
		Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
		Mirex	mg/kg	0.1	<0.1	<0.1	200	0
		trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
		Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
		Total OC VIC EPA	mg/kg	1	<1	<1	200	0
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.13	0.14	30	4
SE247182.040	LB279068.025	Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
		Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
		Lindane (gamma BHC)	mg/kg	0.1	<0.1	<0.1	200	0
		Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
		Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
		Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
		Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
		Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
		Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
		Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
		Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
		o,p'-DDE*	mg/kg	0.1	<0.1	<0.1	200	0
		p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
		Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
		Endrin	mg/kg	0.2	<0.2	<0.2	200	0
		Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
		o,p'-DDD*	mg/kg	0.1	<0.1	<0.1	200	0
		p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
		Endrin aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
		Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
		o,p'-DDT*	mg/kg	0.1	<0.1	<0.1	200	0
		p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
		Endrin ketone	mg/kg	0.1	<0.1	<0.1	200	0
		Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
		Mirex	mg/kg	0.1	<0.1	<0.1	200	0
		trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
		Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
		Total OC VIC EPA	mg/kg	1	<1	<1	200	0
			Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.14	0.13

OP Pesticides in Soil

Method: ME-(AU)-ENVJAN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE247182.007	LB279059.026	Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
		Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: $RPD = | \text{OriginalResult} - \text{ReplicateResult} | \times 100 / \text{Mean}$

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: $MAD = 100 \times \text{SDL} / \text{Mean} + \text{LR}$

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may give a different calculated RPD.

OP Pesticides in Soil (continued)

Method: ME-(AU)-ENVJAN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE247182.007	LB279059.026	Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
		Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
		Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
		Ethion	mg/kg	0.2	<0.2	<0.2	200	0
		Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
		Malathion	mg/kg	0.2	<0.2	<0.2	200	0
		Methodathion	mg/kg	0.5	<0.5	<0.5	200	0
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
		Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates						
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	3
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	1
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
		Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
SE247182.040	LB279068.025	Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
		Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
		Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
		Ethion	mg/kg	0.2	<0.2	<0.2	200	0
		Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
		Malathion	mg/kg	0.2	<0.2	<0.2	200	0
		Methodathion	mg/kg	0.5	<0.5	<0.5	200	0
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
		Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates						
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	30	1
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	1
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
SE247182.042	LB279145.022	Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
		Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
		Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
		Ethion	mg/kg	0.2	<0.2	<0.2	200	0
		Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
		Malathion	mg/kg	0.2	<0.2	<0.2	200	0
		Methodathion	mg/kg	0.5	<0.5	<0.5	200	0
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
		Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates						
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	7
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.6	30	5

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-ENVJAN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE247182.007	LB279059.026	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
		Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
		Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
		Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
		Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
		Carcinogenic PAHs, BaP TEQ <LOR=0*	mg/kg	0.2	<0.2	<0.2	200	0



DUPLICATES

SE247182 R0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: $RPD = | \text{OriginalResult} - \text{ReplicateResult} | \times 100 / \text{Mean}$

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: $MAD = 100 \times \text{SDL} / \text{Mean} + \text{LR}$

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may give a different calculated RPD.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-ENVJAN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE247182.007	LB279059.026	Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	mg/kg	0.2	<0.2	<0.2	175	0
		Carcinogenic PAHs, BaP TEQ <LOR=LOR*	mg/kg	0.3	<0.3	<0.3	134	0
		Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	30	1
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	3
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	1
SE247182.019	LB279059.024	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
		Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
		Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
		Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
		Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
		Carcinogenic PAHs, BaP TEQ <LOR=0*	mg/kg	0.2	<0.2	<0.2	200	0
		Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	mg/kg	0.2	<0.2	<0.2	175	0
		Carcinogenic PAHs, BaP TEQ <LOR=LOR*	mg/kg	0.3	<0.3	<0.3	134	0
		Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	30	1
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	3
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	1
SE247182.029	LB279068.014	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
		Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
		Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
		Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
		Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
		Carcinogenic PAHs, BaP TEQ <LOR=0*	mg/kg	0.2	<0.2	<0.2	200	0
		Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	mg/kg	0.2	<0.2	<0.2	175	0
		Carcinogenic PAHs, BaP TEQ <LOR=LOR*	mg/kg	0.3	<0.3	<0.3	134	0
		Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	30	3
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	3
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	4
SE247182.040	LB279068.025	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
		Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: $RPD = | \text{OriginalResult} - \text{ReplicateResult} | \times 100 / \text{Mean}$
The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: $MAD = 100 \times \text{SDL} / \text{Mean} + \text{LR}$
Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may give a different calculated RPD.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-ENVJAN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE247182.040	LB279068.025	Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
		Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
		Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(b,j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
		Carcinogenic PAHs, BaP TEQ <LOR=0*	mg/kg	0.2	<0.2	<0.2	200	0
		Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	mg/kg	0.2	<0.2	<0.2	175	0
		Carcinogenic PAHs, BaP TEQ <LOR=LOR*	mg/kg	0.3	<0.3	<0.3	134	0
		Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		Surrogates						
		d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	30	2
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	30	1
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	1
SE247182.042	LB279145.022	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
		Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
		Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
		Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
		Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(b,j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
		Carcinogenic PAHs, BaP TEQ <LOR=0*	mg/kg	0.2	<0.2	<0.2	200	0
		Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	mg/kg	0.2	<0.2	<0.2	175	0
		Carcinogenic PAHs, BaP TEQ <LOR=LOR*	mg/kg	0.3	<0.3	<0.3	134	0
		Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		Surrogates						
		d5-nitrobenzene (Surrogate)	mg/kg	-	0.6	0.6	30	5
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	7
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.6	30	5
SE247189.006	LB279145.014	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
		Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
		Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
		Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
		Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(b,j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: $RPD = | \text{OriginalResult} - \text{ReplicateResult} | \times 100 / \text{Mean}$

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: $MAD = 100 \times \text{SDL} / \text{Mean} + \text{LR}$

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may give a different calculated RPD.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE247189.006	LB279145.014	Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
		Carcinogenic PAHs, BaP TEQ <LOR=0*	mg/kg	0.2	<0.2	<0.2	200	0
		Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	mg/kg	0.2	<0.2	<0.2	175	0
		Carcinogenic PAHs, BaP TEQ <LOR=LOR*	mg/kg	0.3	<0.3	<0.3	134	0
		Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		Surrogates						
		d5-nitrobenzene (Surrogate)	mg/kg	-	0.6	0.6	30	5
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	4
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	3

PCBs In Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE247182.007	LB279059.026	Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
		Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
SE247182.040	LB279068.025	Surrogates						
		TCMX (Surrogate)	mg/kg	-	0	0	30	4
		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
SE247182.029	LB279091.014	Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
		Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates						
		TCMX (Surrogate)	mg/kg	-	0	0	30	6

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE247182.010	LB279089.014	Arsenic, As	mg/kg	1	5	5	50	2
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	16	20	33	17
		Copper, Cu	mg/kg	0.5	<0.5	<0.5	181	0
		Nickel, Ni	mg/kg	0.5	0.8	0.7	95	9
		Lead, Pb	mg/kg	1	7	7	44	1
		Zinc, Zn	mg/kg	2	24	23	38	6
SE247182.019	LB279089.024	Arsenic, As	mg/kg	1	<1	<1	168	0
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	7.5	6.8	37	10
		Copper, Cu	mg/kg	0.5	<0.5	<0.5	200	0
		Nickel, Ni	mg/kg	0.5	0.7	0.6	107	6
		Lead, Pb	mg/kg	1	5	5	50	3
		Zinc, Zn	mg/kg	2	<2.0	<2.0	197	0
SE247182.029	LB279091.014	Arsenic, As	mg/kg	1	2	2	73	12
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	14	14	34	1
		Copper, Cu	mg/kg	0.5	<0.5	<0.5	143	0
		Nickel, Ni	mg/kg	0.5	<0.5	<0.5	200	0
		Lead, Pb	mg/kg	1	7	7	44	3
		Zinc, Zn	mg/kg	2	<2.0	<2.0	157	0
SE247182.042	LB279208.018	Arsenic, As	mg/kg	1	3	3	65	24
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	6.7	6.3	38	7
		Copper, Cu	mg/kg	0.5	1.1	1.1	75	3

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: $RPD = \frac{|OriginalResult - ReplicateResult|}{Mean} \times 100$

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: $MAD = 100 \times \frac{SDL}{Mean} + LR$

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may give a different calculated RPD.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]JAN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE247182.042	LB279208.018	Nickel, Ni	mg/kg	0.5	0.7	0.9	94	21
		Lead, Pb	mg/kg	1	8	6	44	34
		Zinc, Zn	mg/kg	2	2.8	2.0	113	33
SE247189.009	LB279208.014	Arsenic, As	mg/kg	1	4	4	58	0
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	5.7	6.1	39	7
		Copper, Cu	mg/kg	0.5	3.6	3.7	44	4
		Nickel, Ni	mg/kg	0.5	5.7	6.3	38	11
		Lead, Pb	mg/kg	1	5	5	49	2
		Zinc, Zn	mg/kg	2	12	12	47	7

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]JAN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE247182.007	LB279059.026	TRH C10-C14	mg/kg	20	<20	<20	200	0
		TRH C15-C28	mg/kg	45	<45	<45	200	0
		TRH C29-C36	mg/kg	45	<45	<45	200	0
		TRH C37-C40	mg/kg	100	<100	<100	200	0
		TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
		TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	mg/kg	25	<25	<25	200	0
		TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
		TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
		TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
		TRH C10-C14	mg/kg	20	<20	<20	200	0
SE247182.019	LB279059.024	TRH C15-C28	mg/kg	45	<45	<45	200	0
		TRH C29-C36	mg/kg	45	<45	<45	200	0
		TRH C37-C40	mg/kg	100	<100	<100	200	0
		TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
		TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	mg/kg	25	<25	<25	200	0
		TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
		TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
		TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
		TRH C10-C14	mg/kg	20	<20	<20	200	0
		TRH C15-C28	mg/kg	45	<45	<45	200	0
SE247182.030	LB279068.027	TRH C29-C36	mg/kg	45	<45	<45	200	0
		TRH C37-C40	mg/kg	100	<100	<100	200	0
		TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
		TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	mg/kg	25	<25	<25	200	0
		TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
		TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
		TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
		TRH C10-C14	mg/kg	20	<20	<20	200	0
		TRH C15-C28	mg/kg	45	<45	<45	200	0
		TRH C29-C36	mg/kg	45	<45	<45	200	0
SE247182.040	LB279068.025	TRH C37-C40	mg/kg	100	<100	<100	200	0
		TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
		TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	mg/kg	25	<25	<25	200	0
		TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
		TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
		TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
		TRH C10-C14	mg/kg	20	<20	<20	200	0
		TRH C15-C28	mg/kg	45	<45	<45	200	0
		TRH C29-C36	mg/kg	45	<45	<45	200	0
		TRH C37-C40	mg/kg	100	<100	<100	200	0
SE247182.042	LB279145.022	TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
		TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	mg/kg	25	<25	<25	200	0
		TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
		TRH C10-C14	mg/kg	20	<20	<20	200	0
		TRH C15-C28	mg/kg	45	<45	<45	200	0
		TRH C29-C36	mg/kg	45	<45	<45	200	0
		TRH C37-C40	mg/kg	100	<100	<100	200	0
		TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
		TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	mg/kg	25	<25	<25	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: $RPD = | \text{OriginalResult} - \text{ReplicateResult} | \times 100 / \text{Mean}$

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: $MAD = 100 \times \text{SDL} / \text{Mean} + \text{LR}$

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may give a different calculated RPD.

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]JAN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE247182.042	LB279145.022	TRH F Bands	TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE247189.006	LB279145.014		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	53	<45	127	16
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0

VOC's in Soil

Method: ME-(AU)-[ENV]JAN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE247182.010	LB279072.014	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene,TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0



DUPLICATES

SE247182 R0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: $RPD = | \text{OriginalResult} - \text{ReplicateResult} | \times 100 / \text{Mean}$

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: $MAD = 100 \times \text{SDL} / \text{Mean} + \text{LR}$

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may give a different calculated RPD.

VOC's in Soil (continued)

Method: ME-(AU)-ENVJAN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE247182.010	LB279072.014	Monocyclic Aromatic	m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
			2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
			MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate*	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.9	8.3	50	7
			d8-toluene (Surrogate)	mg/kg	-	8.8	8.7	50	1
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.6	9.2	50	3
		Totals	Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total BTEX*	mg/kg	0.6	<0.6	<0.6	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Xylenes*	mg/kg	0.3	<0.3	<0.3	200	0
		Trihalomethanes	Chloroform (THM)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromodichloromethane (THM)	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromochloromethane (THM)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform (THM)	mg/kg	0.1	<0.1	<0.1	200	0
SE247182.019	LB279072.024	Monocyclic Aromatic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
			Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.4	8.4	50	0
			d8-toluene (Surrogate)	mg/kg	-	8.6	8.6	50	0
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.0	9.2	50	2
		Totals	Total BTEX*	mg/kg	0.6	<0.6	<0.6	200	0
SE247182.029	LB279074.014	Monocyclic Aromatic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
			Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.2	9.8	50	6
			d8-toluene (Surrogate)	mg/kg	-	8.3	9.2	50	11
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.0	9.1	50	13
		Totals	Total BTEX*	mg/kg	0.6	<0.6	<0.6	200	0
SE247182.040	LB279074.025	Monocyclic Aromatic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
			Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.2	9.8	50	6
			d8-toluene (Surrogate)	mg/kg	-	8.3	9.2	50	11
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.0	9.1	50	13
		Totals	Total BTEX*	mg/kg	0.6	<0.6	<0.6	200	0
SE247182.040	LB279074.025	Monocyclic Aromatic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
			Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.2	9.8	50	6
			d8-toluene (Surrogate)	mg/kg	-	8.3	9.2	50	11
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.0	9.1	50	13
		Totals	Total BTEX*	mg/kg	0.6	<0.6	<0.6	200	0
SE247182.040	LB279074.025	Monocyclic Aromatic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
			Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.2	9.8	50	6
			d8-toluene (Surrogate)	mg/kg	-	8.3	9.2	50	11
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.0	9.1	50	13
		Totals	Total BTEX*	mg/kg	0.6	<0.6	<0.6	200	0
SE247182.040	LB279074.025	Monocyclic Aromatic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
			Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.2	9.8	50	6
			d8-toluene (Surrogate)	mg/kg	-	8.3	9.2	50	11
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.0	9.1	50	13
		Totals	Total BTEX*	mg/kg	0.6	<0.6	<0.6	200	0
SE247182.040	LB279074.025	Monocyclic Aromatic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
			Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.2	9.8	50	6
			d8-toluene (Surrogate)	mg/kg	-	8.3	9.2	50	11
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.0	9.1	50	13
		Totals	Total BTEX*	mg/kg	0.6	<0.6	<0.6	200	0
SE247182.040	LB279074.025	Monocyclic Aromatic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
			Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.2	9.8	50	6
			d8-toluene (Surrogate)	mg/kg	-	8.3	9.2	50	11
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.0	9.1	50	13
		Totals	Total BTEX*	mg/kg	0.6	<0.6	<0.6	200	0
SE247182.040	LB279074.025	Monocyclic Aromatic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
			Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.2	9.8	50	6
			d8-toluene (Surrogate)	mg/kg	-	8.3	9.2	50	11
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.0	9.1	50	13
		Totals	Total BTEX*	mg/kg	0.6	<0.6	<0.6	200	0
SE247182.040	LB279074.025	Monocyclic Aromatic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
			Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: $RPD = | \text{OriginalResult} - \text{ReplicateResult} | \times 100 / \text{Mean}$
The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: $MAD = 100 \times \text{SDL} / \text{Mean} + \text{LR}$
Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may give a different calculated RPD.

VOC's in Soil (continued)

Method: ME-(AU)-ENVJAN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE247182.040	LB279074.025	Halogenated	Chloromethane	mg/kg	1	<1	<1	200	0
		Aliphatics	Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene,TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate*	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.0	8.5	50	5

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: $RPD = | \text{OriginalResult} - \text{ReplicateResult} | \times 100 / \text{Mean}$
The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: $MAD = 100 \times \text{SDL} / \text{Mean} + \text{LR}$
Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may give a different calculated RPD.

VOC's in Soil (continued)

Method: ME-(AU)-ENVJAN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE247182.040	LB279074.025	Surrogates	d8-toluene (Surrogate)	mg/kg	-	8.8	8.9	50	1
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.4	9.6	50	2
		Totals	Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total BTEX*	mg/kg	0.6	<0.6	<0.6	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Xylenes*	mg/kg	0.3	<0.3	<0.3	200	0
		Trihalomethanes	Chloroform (THM)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromodichloromethane (THM)	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromochloromethane (THM)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform (THM)	mg/kg	0.1	<0.1	<0.1	200	0
SE247182.042	LB279146.019	Monocyclic Aromatic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
			Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
		Polycyclic	Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	7.5	7.8	50	4
			d8-toluene (Surrogate)	mg/kg	-	7.6	8.1	50	6
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.3	8.4	50	2
			Total BTEX*	mg/kg	0.6	<0.6	<0.6	200	0
			Total Xylenes*	mg/kg	0.3	<0.3	<0.3	200	0
		SE247189.008	LB279146.014	Monocyclic Aromatic	Benzene	mg/kg	0.1	<0.1	<0.1
Toluene	mg/kg				0.1	<0.1	<0.1	200	0
Ethylbenzene	mg/kg				0.1	<0.1	<0.1	200	0
m/p-xylene	mg/kg				0.2	<0.2	<0.2	200	0
o-xylene	mg/kg				0.1	<0.1	<0.1	200	0
Polycyclic	Naphthalene (VOC)*			mg/kg	0.1	<0.1	<0.1	200	0
Surrogates	d4-1,2-dichloroethane (Surrogate)			mg/kg	-	8.2	8.3	50	1
	d8-toluene (Surrogate)			mg/kg	-	8.6	8.5	50	0
	Bromofluorobenzene (Surrogate)			mg/kg	-	8.8	9.0	50	3
Totals	Total BTEX*			mg/kg	0.6	<0.6	<0.6	200	0
	Total Xylenes*			mg/kg	0.3	<0.3	<0.3	200	0

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-ENVJAN433

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %	
SE247182.010	LB279072.014	TRH C6-C10	mg/kg	25	<25	<25	200	0	
		TRH C6-C9	mg/kg	20	<20	<20	200	0	
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.9	8.3	50	7	
		d8-toluene (Surrogate)	mg/kg	-	8.8	8.7	50	1	
	VPH F Bands	Bromofluorobenzene (Surrogate)	mg/kg	-	9.6	9.2	50	3	
		Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0	
		TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0	
		TRH C6-C10	mg/kg	25	<25	<25	200	0	
SE247182.019	LB279072.024	TRH C6-C9	mg/kg	20	<20	<20	200	0	
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.4	8.4	50	0
	d8-toluene (Surrogate)		mg/kg	-	8.6	8.6	50	0	
	VPH F Bands	Bromofluorobenzene (Surrogate)	mg/kg	-	9.0	9.2	50	2	
		Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0	
		TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0	
		TRH C6-C10	mg/kg	25	<25	<25	200	0	
	SE247182.029	LB279074.014	TRH C6-C9	mg/kg	20	<20	<20	200	0
Surrogates			d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.2	9.8	50	6
		d8-toluene (Surrogate)	mg/kg	-	8.3	9.2	50	11	
VPH F Bands		Bromofluorobenzene (Surrogate)	mg/kg	-	8.0	9.1	50	13	
		Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0	
		TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0	
		TRH C6-C10	mg/kg	25	<25	<25	200	0	
SE247182.040		LB279074.025	TRH C6-C9	mg/kg	20	<20	<20	200	0
	Surrogates		d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.0	8.5	50	5

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: $RPD = | \text{OriginalResult} - \text{ReplicateResult} | \times 100 / \text{Mean}$
The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: $MAD = 100 \times \text{SDL} / \text{Mean} + \text{LR}$
Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may give a different calculated RPD.

Volatile Petroleum Hydrocarbons in Soil (continued)

Method: ME-(AU)-ENVJAN433

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE247182.040	LB279074.025	Surrogates	d8-toluene (Surrogate)	mg/kg	-	8.8	8.9	50
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.4	9.6	50
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200
SE247182.042	LB279146.019	Surrogates	TRH C6-C10	mg/kg	25	<25	<25	200
			TRH C6-C9	mg/kg	20	<20	<20	200
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	7.5	7.8	50
			d8-toluene (Surrogate)	mg/kg	-	7.6	8.1	50
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.3	8.4	50
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200
SE247189.008	LB279146.014	Surrogates	TRH C6-C10	mg/kg	25	<25	<25	200
			TRH C6-C9	mg/kg	20	<20	<20	200
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.2	8.3	50
			d8-toluene (Surrogate)	mg/kg	-	8.6	8.5	50
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.8	9.0	50
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200



LABORATORY CONTROL SAMPLES

SE247182 R0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Full 8270 SVOC in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB279065.024	01-PAHs	Acenaphthene	mg/kg	0.1	4.5	4	70 - 130	112
		Acenaphthylene	mg/kg	0.1	4.4	4	70 - 130	109
		Anthracene	mg/kg	0.1	4.7	4	70 - 130	118
		Benzo(a)pyrene	mg/kg	0.1	4.2	4	70 - 130	104
		Fluoranthene	mg/kg	0.1	4.6	4	70 - 130	114
		Naphthalene	mg/kg	0.1	4.7	4	70 - 130	118
		Phenanthrene	mg/kg	0.1	4.7	4	70 - 130	119
	02-OCs	Pyrene	mg/kg	0.1	4.4	4	70 - 130	111
		Aldrin	mg/kg	0.1	1.0	1	70 - 130	99
		Delta-BHC	mg/kg	0.1	1.1	1	70 - 130	111
		p,p-DDT	mg/kg	0.1	0.8	1	70 - 130	81
		Dieldrin	mg/kg	0.2	1.1	1	70 - 130	107
		Endrin	mg/kg	0.2	0.8	1	70 - 130	79
		Heptachlor	mg/kg	0.1	0.8	1	70 - 130	80
	03-OPs	Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	2.1	2	70 - 130	104
		Diazinon (Dimpylate)	mg/kg	0.5	2.1	2	70 - 130	107
		Dichlorvos	mg/kg	0.5	1.5	2	70 - 130	76
		Ethion	mg/kg	0.2	1.4	2	70 - 130	72
	05-SVCH (CI Benzenes,	Hexachlorobenzene (HCB)	mg/kg	0.1	1.0	1	70 - 130	95
		Hexachlorobutadiene	mg/kg	0.5	1.1	1	70 - 130	105
		Hexachloroethane	mg/kg	0.5	1.1	1	70 - 130	110
		Pentachlorobenzene	mg/kg	0.5	1.0	1	70 - 130	95
		1,2,3,4-tetrachlorobenzene	mg/kg	0.5	1.0	1	70 - 130	99
	06-Phthalates	Bis(2-ethylhexyl)phthalate	mg/kg	5	<5	4	70 - 130	109
		Butyl benzyl phthalate	mg/kg	0.5	3.4	4	70 - 130	86
		Di-n-butyl phthalate	mg/kg	0.5	4.2	4	70 - 130	104
		Diethyl phthalate	mg/kg	0.5	5.0	4	70 - 130	125
		Dimethyl phthalate	mg/kg	0.5	3.8	4	70 - 130	96
		Di-n-octyl phthalate	mg/kg	0.5	3.3	4	70 - 130	82
	07-Carbamate	Carbofuran	mg/kg	0.5	0.7	1	70 - 130	70
	09-Nitrosamine	N-nitroso-di-n-propylamine (NDPA)	mg/kg	0.5	2.0	2	70 - 130	99
	10-Nitroaromat	Pentachloronitrobenzene (quintozone)	mg/kg	0.5	0.8	1	70 - 130	75
	14-Speciated Routine	2,4-dichlorophenol	mg/kg	0.5	0.9	1	70 - 130	85
Phenol		mg/kg	0.5	1.0	1	70 - 130	103	
2,4,6-trichlorophenol		mg/kg	0.5	1.0	1	70 - 130	100	
Pentachlorophenol		mg/kg	0.5	0.7	1	70 - 130	71	
Surrogates	d5-phenol (Surrogate)	mg/kg	-	1.9	2	40 - 130	95	
	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	96	
	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	98	
	2,4,6-tribromophenol (Surrogate)	mg/kg	-	4.1	5	40 - 130	82	
	d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	92	

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB279094.002	Mercury	mg/kg	0.05	0.22	0.2	80 - 120	111
LB279095.002	Mercury	mg/kg	0.05	0.21	0.2	80 - 120	105
LB279180.002	Mercury	mg/kg	0.05	0.20	0.2	80 - 120	101

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB279059.002	Delta BHC	mg/kg	0.1	0.2	0.2	60 - 140	99
	Heptachlor	mg/kg	0.1	0.2	0.2	60 - 140	110
	Aldrin	mg/kg	0.1	0.2	0.2	60 - 140	105
	Dieldrin	mg/kg	0.2	0.2	0.2	60 - 140	115
	Endrin	mg/kg	0.2	0.3	0.2	60 - 140	136
	p,p'-DDT	mg/kg	0.1	0.3	0.2	60 - 140	137
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.13	0.15	40 - 130
LB279068.002	Delta BHC	mg/kg	0.1	0.1	0.2	60 - 140	68
	Heptachlor	mg/kg	0.1	0.1	0.2	60 - 140	70
	Aldrin	mg/kg	0.1	0.1	0.2	60 - 140	68
	Dieldrin	mg/kg	0.2	<0.2	0.2	60 - 140	69
	Endrin	mg/kg	0.2	<0.2	0.2	60 - 140	75

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]JAN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB279068.002	p,p'-DDT	mg/kg	0.1	0.2	0.2	60 - 140	90
Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.13	0.15	40 - 130	87

OP Pesticides in Soil

Method: ME-(AU)-[ENV]JAN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %	
LB279059.002	Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	1.7	2	60 - 140	87	
	Diazinon (Dimpylate)	mg/kg	0.5	1.6	2	60 - 140	81	
	Dichlorvos	mg/kg	0.5	1.7	2	60 - 140	87	
	Ethion	mg/kg	0.2	1.7	2	60 - 140	85	
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	91
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	96
LB279068.002	Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	1.7	2	60 - 140	87	
	Diazinon (Dimpylate)	mg/kg	0.5	1.7	2	60 - 140	83	
	Dichlorvos	mg/kg	0.5	1.7	2	60 - 140	85	
	Ethion	mg/kg	0.2	1.5	2	60 - 140	76	
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	88
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	93
LB279145.002	Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	1.4	2	60 - 140	69	
	Diazinon (Dimpylate)	mg/kg	0.5	1.2	2	60 - 140	60	
	Dichlorvos	mg/kg	0.5	1.4	2	60 - 140	71	
	Ethion	mg/kg	0.2	1.4	2	60 - 140	72	
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	83
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	90

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]JAN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %	
LB279059.002	Naphthalene	mg/kg	0.1	3.3	4	60 - 140	83	
	Acenaphthylene	mg/kg	0.1	3.6	4	60 - 140	89	
	Acenaphthene	mg/kg	0.1	3.6	4	60 - 140	91	
	Phenanthrene	mg/kg	0.1	3.6	4	60 - 140	90	
	Anthracene	mg/kg	0.1	3.5	4	60 - 140	87	
	Fluoranthene	mg/kg	0.1	3.4	4	60 - 140	86	
	Pyrene	mg/kg	0.1	4.0	4	60 - 140	99	
	Benzo(a)pyrene	mg/kg	0.1	3.6	4	60 - 140	89	
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	91
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	91
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	96
LB279068.002	Naphthalene	mg/kg	0.1	3.3	4	60 - 140	82	
	Acenaphthylene	mg/kg	0.1	3.5	4	60 - 140	88	
	Acenaphthene	mg/kg	0.1	3.6	4	60 - 140	90	
	Phenanthrene	mg/kg	0.1	3.6	4	60 - 140	90	
	Anthracene	mg/kg	0.1	3.5	4	60 - 140	87	
	Fluoranthene	mg/kg	0.1	3.4	4	60 - 140	85	
	Pyrene	mg/kg	0.1	3.8	4	60 - 140	96	
	Benzo(a)pyrene	mg/kg	0.1	3.5	4	60 - 140	88	
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	88
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	88
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	93
LB279145.002	Naphthalene	mg/kg	0.1	3.4	4	60 - 140	85	
	Acenaphthylene	mg/kg	0.1	3.7	4	60 - 140	92	
	Acenaphthene	mg/kg	0.1	3.9	4	60 - 140	97	
	Phenanthrene	mg/kg	0.1	3.6	4	60 - 140	91	
	Anthracene	mg/kg	0.1	3.5	4	60 - 140	87	
	Fluoranthene	mg/kg	0.1	3.5	4	60 - 140	88	
	Pyrene	mg/kg	0.1	3.7	4	60 - 140	92	
	Benzo(a)pyrene	mg/kg	0.1	4.0	4	60 - 140	99	
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	95
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	83
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	90

PCBs in Soil

Method: ME-(AU)-[ENV]JAN420

Sample Number	Parameter	Units	LOR

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PCBs in Soil (continued)

Method: ME-(AU)-[ENV]JAN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB279059.002	Arochlor 1260	mg/kg	0.2	0.5	0.4	60 - 140	117
LB279068.002	Arochlor 1260	mg/kg	0.2	0.4	0.4	60 - 140	88

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]JAN040/AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB279089.002	Arsenic, As	mg/kg	1	340	318.22	80 - 120	108
	Cadmium, Cd	mg/kg	0.3	4.6	4.81	70 - 130	96
	Chromium, Cr	mg/kg	0.5	41	38.31	80 - 120	108
	Copper, Cu	mg/kg	0.5	320	290	80 - 120	109
	Nickel, Ni	mg/kg	0.5	190	187	80 - 120	102
	Lead, Pb	mg/kg	1	90	89.9	80 - 120	100
	Zinc, Zn	mg/kg	2	280	273	80 - 120	102
LB279091.002	Arsenic, As	mg/kg	1	360	318.22	80 - 120	115
	Cadmium, Cd	mg/kg	0.3	4.7	4.81	70 - 130	97
	Chromium, Cr	mg/kg	0.5	44	38.31	80 - 120	115
	Copper, Cu	mg/kg	0.5	280	290	80 - 120	98
	Nickel, Ni	mg/kg	0.5	200	187	80 - 120	106
	Lead, Pb	mg/kg	1	97	89.9	80 - 120	108
	Selenium, Se	mg/kg	2	41	41.7	80 - 120	99
LB279208.002	Zinc, Zn	mg/kg	2	290	273	80 - 120	107
	Arsenic, As	mg/kg	1	350	318.22	80 - 120	109
	Cadmium, Cd	mg/kg	0.3	4.6	4.81	70 - 130	96
	Chromium, Cr	mg/kg	0.5	40	38.31	80 - 120	105
	Copper, Cu	mg/kg	0.5	320	290	80 - 120	111
	Nickel, Ni	mg/kg	0.5	190	187	80 - 120	103
	Lead, Pb	mg/kg	1	92	89.9	80 - 120	102
	Zinc, Zn	mg/kg	2	280	273	80 - 120	104

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]JAN403

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB279059.002	TRH C10-C14	mg/kg	20	43	40	60 - 140	107
	TRH C15-C28	mg/kg	45	<45	40	60 - 140	106
	TRH C29-C36	mg/kg	45	<45	40	60 - 140	72
	TRH F Bands						
	TRH >C10-C16	mg/kg	25	43	40	60 - 140	107
	TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	94
LB279068.002	TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	67
	TRH C10-C14	mg/kg	20	52	40	60 - 140	130
	TRH C15-C28	mg/kg	45	52	40	60 - 140	131
	TRH C29-C36	mg/kg	45	<45	40	60 - 140	107
	TRH F Bands						
	TRH >C10-C16	mg/kg	25	54	40	60 - 140	136
LB279145.002	TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	121
	TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	111
	TRH C10-C14	mg/kg	20	47	40	60 - 140	117
	TRH C15-C28	mg/kg	45	<45	40	60 - 140	112
	TRH C29-C36	mg/kg	45	<45	40	60 - 140	73
	TRH F Bands						
	TRH >C10-C16	mg/kg	25	47	40	60 - 140	117
	TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	96
	TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	68

VOC's in Soil

Method: ME-(AU)-[ENV]JAN433

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB279072.002	Halogenated						
	Aliphatics						
	1,1-dichloroethene	mg/kg	0.1	4.6	5	60 - 140	92
	1,2-dichloroethane	mg/kg	0.1	4.7	5	60 - 140	94
	Trichloroethene (Trichloroethylene,TCE)	mg/kg	0.1	5.0	5	60 - 140	101
	Halogenated						
	Chlorobenzene	mg/kg	0.1	4.7	5	60 - 140	93
	Monocyclic						
	Benzene	mg/kg	0.1	4.6	5	60 - 140	91
	Aromatic						
	Toluene	mg/kg	0.1	4.9	5	60 - 140	97
	Ethylbenzene	mg/kg	0.1	4.8	5	60 - 140	96
	m/p-xylene	mg/kg	0.2	9.5	10	60 - 140	95
	o-xylene	mg/kg	0.1	4.9	5	60 - 140	97
	Surrogates						
	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.9	10	70 - 130	109

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB279072.002	Surrogates	d8-toluene (Surrogate)	mg/kg	-	10.4	10	70 - 130
		Bromofluorobenzene (Surrogate)	mg/kg	-	9.8	10	70 - 130
	Trihalomethan	Chloroform (THM)	mg/kg	0.1	5.0	5	60 - 140
LB279074.002	Halogenated	1,1-dichloroethene	mg/kg	0.1	4.4	5	60 - 140
	Aliphatics	1,2-dichloroethane	mg/kg	0.1	4.9	5	60 - 140
		Trichloroethene (Trichloroethylene,TCE)	mg/kg	0.1	5.2	5	60 - 140
	Halogenated	Chlorobenzene	mg/kg	0.1	4.9	5	60 - 140
	Monocyclic	Benzene	mg/kg	0.1	4.3	5	60 - 140
	Aromatic	Toluene	mg/kg	0.1	4.8	5	60 - 140
		Ethylbenzene	mg/kg	0.1	4.8	5	60 - 140
		m/p-xylene	mg/kg	0.2	9.4	10	60 - 140
		o-xylene	mg/kg	0.1	4.8	5	60 - 140
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.4	10	70 - 130
		d8-toluene (Surrogate)	mg/kg	-	10.1	10	70 - 130
		Bromofluorobenzene (Surrogate)	mg/kg	-	9.6	10	70 - 130
	Trihalomethan	Chloroform (THM)	mg/kg	0.1	5.1	5	60 - 140
	Monocyclic	Benzene	mg/kg	0.1	4.1	5	60 - 140
	Aromatic	Toluene	mg/kg	0.1	4.5	5	60 - 140
		Ethylbenzene	mg/kg	0.1	4.5	5	60 - 140
		m/p-xylene	mg/kg	0.2	8.8	10	60 - 140
		o-xylene	mg/kg	0.1	4.5	5	60 - 140
LB279146.002	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.5	10	70 - 130
		d8-toluene (Surrogate)	mg/kg	-	9.5	10	70 - 130
		Bromofluorobenzene (Surrogate)	mg/kg	-	8.9	10	70 - 130

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB279072.002		TRH C6-C10	mg/kg	25	77	92.5	60 - 140
		TRH C6-C9	mg/kg	20	67	80	60 - 140
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.9	10	70 - 130
		Bromofluorobenzene (Surrogate)	mg/kg	-	9.8	10	70 - 130
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	49	62.5	60 - 140
LB279074.002		TRH C6-C10	mg/kg	25	77	92.5	60 - 140
		TRH C6-C9	mg/kg	20	66	80	60 - 140
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.4	10	70 - 130
		Bromofluorobenzene (Surrogate)	mg/kg	-	9.6	10	70 - 130
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	49	62.5	60 - 140
LB279146.002		TRH C6-C10	mg/kg	25	74	92.5	60 - 140
		TRH C6-C9	mg/kg	20	65	80	60 - 140
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.5	10	70 - 130
		Bromofluorobenzene (Surrogate)	mg/kg	-	8.9	10	70 - 130
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	48	62.5	60 - 140

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub-sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE247182.001	LB279094.004	Mercury	mg/kg	0.05	0.21	<0.05	0.2	98
SE247182.020	LB279095.004	Mercury	mg/kg	0.05	0.19	<0.05	0.2	91
SE247265.001	LB279180.004	Mercury	mg/kg	0.05	0.19	<0.05	0.2	82

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE247182.001	LB279059.004	Naphthalene	mg/kg	0.1	3.4	<0.1	4	84
		2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		Acenaphthylene	mg/kg	0.1	3.5	<0.1	4	88
		Acenaphthene	mg/kg	0.1	3.6	<0.1	4	90
		Fluorene	mg/kg	0.1	<0.1	<0.1	-	-
		Phenanthrene	mg/kg	0.1	3.6	<0.1	4	90
		Anthracene	mg/kg	0.1	3.5	<0.1	4	87
		Fluoranthene	mg/kg	0.1	3.4	<0.1	4	85
		Pyrene	mg/kg	0.1	3.9	<0.1	4	98
		Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
		Chrysene	mg/kg	0.1	<0.1	<0.1	-	-
		Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-
		Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-
		Benzo(a)pyrene	mg/kg	0.1	3.5	<0.1	4	88
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	-	-
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
		Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	-	-
		Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	3.5	<0.2	-	-
		Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	3.6	<0.2	-	-
		Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	3.7	<0.3	-	-
		Total PAH (18)	mg/kg	0.8	28	<0.8	-	-
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	-	88
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	88
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	-	94
SE247182.020	LB279068.004	Naphthalene	mg/kg	0.1	3.2	<0.1	4	80
		2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		Acenaphthylene	mg/kg	0.1	3.4	<0.1	4	86
		Acenaphthene	mg/kg	0.1	3.5	<0.1	4	88
		Fluorene	mg/kg	0.1	<0.1	<0.1	-	-
		Phenanthrene	mg/kg	0.1	3.5	<0.1	4	87
		Anthracene	mg/kg	0.1	3.3	<0.1	4	83
		Fluoranthene	mg/kg	0.1	3.3	<0.1	4	83
		Pyrene	mg/kg	0.1	3.7	<0.1	4	93
		Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
		Chrysene	mg/kg	0.1	<0.1	<0.1	-	-
		Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-
		Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-
		Benzo(a)pyrene	mg/kg	0.1	3.4	<0.1	4	85
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	-	-
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
		Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	-	-
		Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	3.4	<0.2	-	-
		Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	3.5	<0.2	-	-
		Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	3.5	<0.3	-	-
		Total PAH (18)	mg/kg	0.8	27	<0.8	-	-
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	-	87
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	88
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	-	92

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number	Parameter	Units	LOR

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub-sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]JAN040/AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE247182.001	LB279089.004	Arsenic, As	mg/kg	1	51	3	50	96
		Cadmium, Cd	mg/kg	0.3	39	<0.3	50	78
		Chromium, Cr	mg/kg	0.5	54	5.3	50	97
		Copper, Cu	mg/kg	0.5	52	4.8	50	94
		Nickel, Ni	mg/kg	0.5	50	1.5	50	96
		Lead, Pb	mg/kg	1	53	7	50	92
SE247182.020	LB279091.004	Zinc, Zn	mg/kg	2	66	22	50	86
		Arsenic, As	mg/kg	1	55	5	50	101
		Cadmium, Cd	mg/kg	0.3	41	<0.3	50	82
		Chromium, Cr	mg/kg	0.5	73	21	50	103
		Copper, Cu	mg/kg	0.5	44	<0.5	50	90
		Nickel, Ni	mg/kg	0.5	51	0.7	50	100
		Lead, Pb	mg/kg	1	56	7	50	98
		Zinc, Zn	mg/kg	2	54	4.2	50	99

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]JAN403

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE247182.001	LB279059.004	TRH C10-C14	mg/kg	20	53	<20	40	125
		TRH C15-C28	mg/kg	45	51	<45	40	111
		TRH C29-C36	mg/kg	45	<45	<45	40	88
		TRH C37-C40	mg/kg	100	<100	<100	-	-
		TRH C10-C36 Total	mg/kg	110	<110	<110	-	-
		TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	-	-
		TRH F	mg/kg	25	51	<25	40	121
		TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	51	<25	-	-
		TRH >C16-C34 (F3)	mg/kg	90	<90	<90	40	95
		TRH >C34-C40 (F4)	mg/kg	120	<120	<120	-	-
SE247182.020	LB279068.004	TRH C10-C14	mg/kg	20	48	<20	40	108
		TRH C15-C28	mg/kg	45	53	<45	40	121
		TRH C29-C36	mg/kg	45	<45	<45	40	100
		TRH C37-C40	mg/kg	100	<100	<100	-	-
		TRH C10-C36 Total	mg/kg	110	<110	<110	-	-
		TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	-	-
		TRH F	mg/kg	25	50	<25	40	112
		TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	50	<25	-	-
		TRH >C16-C34 (F3)	mg/kg	90	<90	<90	40	110
		TRH >C34-C40 (F4)	mg/kg	120	<120	<120	-	-

VOC's in Soil

Method: ME-(AU)-[ENV]JAN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%	
SE247182.001	LB279072.004	Monocyclic	Benzene	mg/kg	0.1	4.6	<0.1	5	93	
			Aromatic	Toluene	mg/kg	0.1	4.8	<0.1	5	96
			Ethylbenzene	mg/kg	0.1	5.0	<0.1	5	100	
			m/p-xylene	mg/kg	0.2	10	<0.2	10	101	
			o-xylene	mg/kg	0.1	5.2	<0.1	5	104	
			Polycyclic	Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	-	-
			Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.3	7.6	10	93
		d8-toluene (Surrogate)		mg/kg	-	9.1	7.7	10	91	
		Bromofluorobenzene (Surrogate)		mg/kg	-	8.7	8.1	10	87	
		Totals	Total BTEX*	mg/kg	0.6	30	<0.6	-	-	
			Total Xylenes*	mg/kg	0.3	15	<0.3	-	-	
SE247182.020	LB279074.004	Monocyclic	Benzene	mg/kg	0.1	3.9	<0.1	5	78	
			Aromatic	Toluene	mg/kg	0.1	4.3	<0.1	5	87
			Ethylbenzene	mg/kg	0.1	4.5	<0.1	5	90	
			m/p-xylene	mg/kg	0.2	9.1	<0.2	10	91	
			o-xylene	mg/kg	0.1	4.7	<0.1	5	93	
			Polycyclic	Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	7.8	8.8	10	78	
			d8-toluene (Surrogate)	mg/kg	-	6.6	8.3	10	66 🔻	
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.8	8.3	10	78	
		Totals	Total BTEX*	mg/kg	0.6	27	<0.6	-	-	
			Total Xylenes*	mg/kg	0.3	14	<0.3	-	-	



MATRIX SPIKES

SE247182 R0

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub-sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE247189.001	LB279146.021	Monocyclic Aromatic	Benzene	mg/kg	0.1	5.5	<0.1	5	109
			Toluene	mg/kg	0.1	5.4	<0.1	5	108
			Ethylbenzene	mg/kg	0.1	5.7	<0.1	5	114
			m/p-xylene	mg/kg	0.2	11	<0.2	10	113
			o-xylene	mg/kg	0.1	5.8	<0.1	5	117
		Polycyclic	Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	12.5	8.2	10	125
			d8-toluene (Surrogate)	mg/kg	-	10.6	8.4	10	106
			Bromofluorobenzene (Surrogate)	mg/kg	-	10.5	8.8	10	105
		Totals	Total BTEX*	mg/kg	0.6	34	<0.6	-	-
			Total Xylenes*	mg/kg	0.3	17	<0.3	-	-

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE247182.001	LB279072.004		TRH C6-C10	mg/kg	25	110	<25	92.5	117
			TRH C6-C9	mg/kg	20	96	<20	80	120
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.3	7.6	10	93
			d8-toluene (Surrogate)	mg/kg	-	9.1	7.7	10	91
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.7	8.1	-	87
		VPH F	Benzene (F0)	mg/kg	0.1	4.6	<0.1	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	79	<25	62.5	126
SE247182.020	LB279074.004		TRH C6-C10	mg/kg	25	71	<25	92.5	77
			TRH C6-C9	mg/kg	20	54	<20	80	68
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	7.8	8.8	10	78
			d8-toluene (Surrogate)	mg/kg	-	6.6	8.3	10	66 ①
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.8	8.3	-	78
		VPH F	Benzene (F0)	mg/kg	0.1	3.9	<0.1	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	45	<25	62.5	72
SE247189.001	LB279146.021		TRH C6-C10	mg/kg	25	100	<25	92.5	109
			TRH C6-C9	mg/kg	20	87	<20	80	109
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	12.5	8.2	10	125
			d8-toluene (Surrogate)	mg/kg	-	10.6	8.4	10	106
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.4	8.8	-	94
		VPH F	Benzene (F0)	mg/kg	0.1	5.2	<0.1	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	69	<25	62.5	110



MATRIX SPIKE DUPLICATES

SE247182 R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: $RPD = |OriginalResult - ReplicateResult| \times 100 / Mean$

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: $MAD = 100 \times SDL / Mean + LR$

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.



ANALYTICAL REPORT



Accreditation No. 2562

CLIENT DETAILS

Contact Evelyn Dillon
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Wollongong
NSW 2500
Telephone 0467 639 062
Facsimile (Not specified)
Email evelyn.dillon@cardno.com.au
Project **300304375 Racecourse Rd - Additional**
Order Number **300304375**
Samples 42

LABORATORY DETAILS

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Laboratory SGS Alexandria Environmental
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Facsimile +61 2 8594 0499
Email au.environmental.sydney@sgs.com
SGS Reference **SE247182A R0**
Date Received 14/6/2023
Date Reported 21/6/2023

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

Clay Content subcontracted to SGS Cairns, 2/58 Comport St, Portsmith QLD 4870, NATA Accreditation Number: 2562, Site Number: 3146. Report No. CE167551.

SIGNATORIES

Huong CRAWFORD
Production Manager

Shane MCDERMOTT
Inorganic/Metals Chemist



ANALYTICAL RESULTS

SE247182A R0

pH in soil (1:5) [AN101] Tested: 16/6/2023

			TP116_0.1
			SOIL
			-
			5/5/2023
			SE247182A.011
PARAMETER	UOM	LOR	
pH (CaCl2)*	pH Units	0.1	5.2



ANALYTICAL RESULTS

SE247182A R0

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR) [AN122] Tested: 16/6/2023

			TP116_0.1
			SOIL
			-
			5/5/2023
			SE247182A.011
PARAMETER	UOM	LOR	
Exchangeable Calcium, Ca	mg/kg	2	2800
Exchangeable Calcium, Ca	meq/100g	0.01	14
Exchangeable Calcium Percentage*	%	0.1	88.8
Exchangeable Potassium, K	mg/kg	2	82
Exchangeable Potassium, K	meq/100g	0.01	0.21
Exchangeable Potassium Percentage*	%	0.1	1.3
Exchangeable Magnesium, Mg	mg/kg	2	130
Exchangeable Magnesium, Mg	meq/100g	0.02	1.1
Exchangeable Magnesium Percentage*	%	0.1	6.9
Exchangeable Sodium, Na	mg/kg	2	110
Exchangeable Sodium, Na	meq/100g	0.01	0.46
Exchangeable Sodium Percentage*	%	0.1	2.9
Cation Exchange Capacity	meq/100g	0.02	16



ANALYTICAL RESULTS

SE247182A R0

TOC in Soil [AN188] Tested: 16/6/2023

			TP116_0.1
			SOIL
			-
			5/5/2023
PARAMETER	UOM	LOR	SE247182A.011
Total Organic Carbon	%w/w	0.05	3.1
Organic Matter (calc)*	%w/w	0.1	5.3



ANALYTICAL RESULTS

SE247182A R0

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 14/6/2023

			TP116_0.1
			SOIL
			-
			5/5/2023
			SE247182A.011
PARAMETER	UOM	LOR	
Iron, Fe	mg/kg	50	17000



ANALYTICAL RESULTS

SE247182A R0

Particle sizing of soils by sieving [AN005] Tested: 21/6/2023

			TP116_0.1
			SOIL
			-
			5/5/2023
PARAMETER	UOM	LOR	SE247182A.011
Passing 75µm*	%w/w	1	28
Retained 75µm*	%w/w	1	72



ANALYTICAL RESULTS

SE247182A R0

Particle sizing of soils <75µm by hydrometer [AN005] Tested: 21/6/2023

			TP116_0.1
			SOIL
			-
			5/5/2023
			SE247182A.011
PARAMETER	UOM	LOR	
Clay (<0.002mm)*	%w/w	0.1	18

METHOD

METHODOLOGY SUMMARY

AN005

The particle size distribution of a soil is determined by wet sieving, using a maximum of 900 mL of deionised water to sieve all fractions down to 75 µm. Referenced to AS1289.3.6.1 and AS1141.11.

AN005

Following wet sieving of the sample,(particles smaller than 75 µm) a dispersing solution is added and a hydrometer is used to measure sedimentation. Soil density is determined and the percentage of each size fraction calculated. Referenced to AS1289.3.6.3.

AN040/AN320

A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.

AN040

A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by AAS or ICP as per USEPA Method 200.8.

AN101

pH in Soil Sludge Sediment and Water: pH is measured electrometrically using a combination electrode and is calibrated against 3 buffers purchased commercially. For soils, sediments and sludges, an extract with water (or 0.01M CaCl₂) is made at a ratio of 1:5 and the pH determined and reported on the extract. Reference APHA 4500-H⁺.

AN122

Exchangeable Cations, CEC and ESP: Soil sample is extracted in 1M Ammonium Acetate at pH=7 (or 1M Ammonium Chloride at pH=7) with cations (Na, K, Ca & Mg) then determined by ICP OES/ICP MS and reported as Exchangeable Cations. For saline soils, these results can be corrected for water soluble cations and reported as Exchangeable cations in meq/100g or soil can be pre-treated (aqueous ethanol/aqueous glycerol) prior to extraction. Cation Exchange Capacity (CEC) is the sum of the exchangeable cations in meq/100g.

AN122

The Exchangeable Sodium Percentage (ESP) is calculated as the exchangeable sodium divided by the CEC (all in meq/100g) times 100.

ESP can be used to categorise the sodicity of the soil as below :

ESP < 6%	non-sodic
ESP 6-15%	sodic
ESP >15%	strongly sodic

Method is referenced to Rayment and Lyons, 2011, sections 15D3 and 15N1.-

AN188

The organic material in the soil sample is oxidised with chromic acid in the presence of excess sulfuric acid , without external heat being applied. The excess dichromate ion is determined by titration with standard ammonium iron (II) sulfate solution and the amount of oxidised material is calculated from the quantity of dichromate reduced . Referenced to NEPM 105 and AS1289.1.1.1.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
**	Indicative data, theoretical holding time exceeded.	NVL	Not validated.	LOR	Limit of Reporting.
***	Indicates that both * and ** apply.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the "Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.

Note that in terms of units of radioactivity:

- 1 Bq is equivalent to 27 pCi
- 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here : https://www.sgs.com.au/~media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022_QA_QC_Plan.pdf

- * NATA accreditation does not cover the performance of this service.
- ** Indicative data, theoretical holding time exceeded.
- *** Indicates that both * and ** apply.
- Sample not analysed for this analyte.
- IS Insufficient sample for analysis.
- LNR Sample listed, but not received.
- LOR Limit of reporting.
- QFH QC result is above the upper tolerance.
- QFL QC result is below the lower tolerance.
- ① At least 2 of 3 surrogates are within acceptance criteria.
- ② RPD failed acceptance criteria due to sample heterogeneity.
- ③ Results less than 5 times LOR preclude acceptance criteria for RPD.
- ④ Recovery failed acceptance criteria due to matrix interference.
- ⑤ Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
- ⑥ LOR was raised due to sample matrix interference.
- ⑦ LOR was raised due to dilution of significantly high concentration of analyte in sample.
- ⑧ Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
- ⑨ Recovery failed acceptance criteria due to sample heterogeneity.
- ⑩ LOR was raised due to high conductivity of the sample (required dilution).
- † Refer to relevant report comments for further information.

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From: Stantec Wollongong
Address: Shop 1, Level 1
16 Burrelli St
Wollongong NSW 2500
Phone: (02) 4231 9600
Attention: **Evie Dillon**
Email: ContamNSW@cardno.com.au
Mobile: **0477 928 328**

Chain of Custody

To: SGS

Address: Unit 16
33 Maddox Street
Alexandria NSW 2015

Phone: (02) 8594 0400

Email: au.environmental.sydney@sgs.com
evelyn.dillon@cardno.com.au; christopher.cook@cardno.com.au

Attempt to chill evident: Y/N

Sample Temperature on Arrival:

Date: 9/05/2023
TAT: Standard TAT
Purchase Order: [REDACTED]
Laboratory Quote ID: 275935
Project number: 300304375
Project name: Racecourse Rd
Data output format: PDF, Esdat

65-2

[illegible]

**SGS EHS Sydney COC
SE247182**



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com.au; christopher.cook@cardno.coi

Date: 9/05/2023
TAT: Standard TAT
Purchase Order: XXXXXXXXXX
Laboratory Quote ID: 275935
Project number: 300304375
Project name: Racecourse Rd
Data output format: PDF, Estdat

Attempt to chill evident:

 $\textcircled{Y/N}$

Sample Temperature on Arrival:

65.6

[illegible]



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TAT: Standard TAT
Purchase Order: XXXXXXXXXX
Laboratory Quote ID: 275935
Project number: 300304375
Project name: Racecourse Rd
Data output format: PDF, Esdat

Attempt to chill evident: **Y/N**

Sample Temperature on Arrival:

6.5°C

Notes:						Analytes																								
Laboratory Sample Number	Cardno Sample Number	Sample Date	Matrix	Container Plastic Tube – PT Bag – B Petri Dish – PD Plastic Bottle – PB Plastic Jar – PJ Glass Jar – GJ Glass Bottle – GB Glass Vial – GV	Single Analytes																	Applicable Suites	Sample Comments							
					TRH	TRH w/ Silica Gel	BTEXN	PAHS	OCP	OPP	PCB	Lead	CL1 - 7 Metals	CL2 - 8 Metals	CL3 - 13 Metals	Phenols - Speciated	VOCs	SVOC	Asbestos in Soil (AS 4964)	Hold	Asbestos in Building Mat.				Dup to 2nd Lab	PFAS Short Suite - Std LOR	Selenium	Select Analyte or Delete to Clear	Select Analyte or Delete to Clear	
16	TP119_0.1	5/05/2023	Soil		1		1	1	1			1				1				1	1	1								
17	TP119_0.5	5/05/2023	Soil																											
18	TP120_0.1	5/05/2023	Soil																											
19	TP120_0.5	5/05/2023	Soil																											
20	QA500	5/05/2023	Soil																											
	QC500	5/05/2023	Soil																											
	TP120_1	5/05/2023	Soil																											
	TP121_0.1	5/05/2023	Soil																											
21	TP121_0.3	5/05/2023	Soil																											
22	TP121_0.7	5/05/2023	Soil																											
	TP121_1	5/05/2023	Soil																											
23	TP122_0.1	5/05/2023	Soil																											
	TP122_0.5	5/05/2023	Soil																											
	QA600	5/05/2023	Soil																											
	QC600	5/05/2023	Soil																											
Total					9	9	9	9				2				9			2	2	7	6		1	4					



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Data output format: PDF, Esdat

Attempt to chill evident: ☒ / N

Sample Temperature on Arrival:

6.5°C

Notes:								Analytes																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
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evelyn.dillon@cardno.com.au; christopher.cook@cardno.com.au

Date: 9/05/2023
TAT: Standard TAT

Purchase Order: XXXXXXXXXX
Laboratory Quote ID: 275935

Project number: 300304375

Project name: Racecourse Rd

Data output format: PDF, Esdat

Attempt to chill evident: γ/N

Sample Temperature on Arrival:

6.5°C

[illegible]

300304375 COC 3-5.5.23 ED.xlsx

Chain Of Custody Page 10 Of 14

CERTIFICATE OF ANALYSIS 322668

Client Details

Client	Cardno (NSW/ACT) Pty Ltd
Attention	Evelyn Dillon
Address	Level 1, 47 Burelli St, Wollongong, NSW, 2500

Sample Details

Your Reference	<u>300304375 Racecourse Rd</u>
Number of Samples	6 Soil
Date samples received	09/05/2023
Date completed instructions received	09/05/2023

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.
Samples were analysed as received from the client. Results relate specifically to the samples as received.
Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Report Details

Date results requested by	16/05/2023
Date of Issue	15/05/2023
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Results Approved By

Kyle Gavril, Senior Chemist
Liam Timmins, Organics Supervisor
Loren Bardwell, Development Chemist
Phalak Inthakesone, Organics Development Manager, Sydney

Authorised By



Nancy Zhang, Laboratory Manager

vTRH(C6-C10)/BTEXN in Soil

Our Reference		322668-1	322668-2	322668-3	322668-4	322668-5
Your Reference	UNITS	QC200	QC300	QC100	QC400	QC500
Date Sampled		04/05/2023	04/05/2023	03/05/2023	05/05/2023	05/05/2023
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	10/05/2023	10/05/2023	10/05/2023	10/05/2023	10/05/2023
Date analysed	-	11/05/2023	11/05/2023	11/05/2023	11/05/2023	11/05/2023
TRH C ₆ - C ₉	mg/kg	<25	<25	<25	<25	<25
TRH C ₆ - C ₁₀	mg/kg	<25	<25	<25	<25	<25
vTPH C ₆ - C ₁₀ less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
Naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<1	<1	<1	<1	<1
Surrogate aaa-Trifluorotoluene	%	104	105	93	96	92

vTRH(C6-C10)/BTEXN in Soil

Our Reference		322668-6
Your Reference	UNITS	QC700
Date Sampled		05/05/2023
Type of sample		Soil
Date extracted	-	10/05/2023
Date analysed	-	11/05/2023
TRH C ₆ - C ₉	mg/kg	<25
TRH C ₆ - C ₁₀	mg/kg	<25
vTPH C ₆ - C ₁₀ less BTEX (F1)	mg/kg	<25
Benzene	mg/kg	<0.2
Toluene	mg/kg	<0.5
Ethylbenzene	mg/kg	<1
m+p-xylene	mg/kg	<2
o-Xylene	mg/kg	<1
Naphthalene	mg/kg	<1
Total +ve Xylenes	mg/kg	<1
Surrogate aaa-Trifluorotoluene	%	102

svTRH (C10-C40) in Soil						
Our Reference		322668-1	322668-2	322668-3	322668-4	322668-5
Your Reference	UNITS	QC200	QC300	QC100	QC400	QC500
Date Sampled		04/05/2023	04/05/2023	03/05/2023	05/05/2023	05/05/2023
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	09/05/2023	09/05/2023	09/05/2023	09/05/2023	09/05/2023
Date analysed	-	11/05/2023	11/05/2023	11/05/2023	11/05/2023	11/05/2023
TRH C ₁₀ - C ₁₄	mg/kg	<50	<50	<50	<50	<50
TRH C ₁₅ - C ₂₈	mg/kg	<100	<100	<100	190	<100
TRH C ₂₉ - C ₃₆	mg/kg	<100	<100	110	100	<100
Total +ve TRH (C10-C36)	mg/kg	<50	<50	110	290	<50
TRH >C ₁₀ -C ₁₆	mg/kg	<50	<50	<50	53	<50
TRH >C ₁₀ - C ₁₆ less Naphthalene (F2)	mg/kg	<50	<50	<50	53	<50
TRH >C ₁₆ -C ₃₄	mg/kg	<100	<100	130	240	<100
TRH >C ₃₄ -C ₄₀	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	130	300	<50
Surrogate o-Terphenyl	%	78	77	77	96	80

svTRH (C10-C40) in Soil		
Our Reference		322668-6
Your Reference	UNITS	QC700
Date Sampled		05/05/2023
Type of sample		Soil
Date extracted	-	09/05/2023
Date analysed	-	11/05/2023
TRH C ₁₀ - C ₁₄	mg/kg	<50
TRH C ₁₅ - C ₂₈	mg/kg	<100
TRH C ₂₉ - C ₃₆	mg/kg	<100
Total +ve TRH (C10-C36)	mg/kg	<50
TRH >C ₁₀ -C ₁₆	mg/kg	<50
TRH >C ₁₀ - C ₁₆ less Naphthalene (F2)	mg/kg	<50
TRH >C ₁₆ -C ₃₄	mg/kg	<100
TRH >C ₃₄ -C ₄₀	mg/kg	<100
Total +ve TRH (>C10-C40)	mg/kg	<50
Surrogate o-Terphenyl	%	78

PAHs in Soil						
Our Reference	UNITS	322668-1	322668-2	322668-3	322668-4	322668-5
Your Reference		QC200	QC300	QC100	QC400	QC500
Date Sampled		04/05/2023	04/05/2023	03/05/2023	05/05/2023	05/05/2023
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	10/05/2023	10/05/2023	10/05/2023	10/05/2023	10/05/2023
Date analysed	-	10/05/2023	10/05/2023	10/05/2023	10/05/2023	10/05/2023
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	0.7	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	0.3	<0.1
Pyrene	mg/kg	<0.1	<0.1	<0.1	0.2	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	0.2	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	<0.05	<0.05	1.6	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	89	72	85	75	85

PAHs in Soil		
Our Reference		322668-6
Your Reference	UNITS	QC700
Date Sampled		05/05/2023
Type of sample		Soil
Date extracted	-	10/05/2023
Date analysed	-	10/05/2023
Naphthalene	mg/kg	<0.1
Acenaphthylene	mg/kg	<0.1
Acenaphthene	mg/kg	<0.1
Fluorene	mg/kg	<0.1
Phenanthrene	mg/kg	<0.1
Anthracene	mg/kg	<0.1
Fluoranthene	mg/kg	<0.1
Pyrene	mg/kg	<0.1
Benzo(a)anthracene	mg/kg	<0.1
Chrysene	mg/kg	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2
Benzo(a)pyrene	mg/kg	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1
Total +ve PAH's	mg/kg	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5
Surrogate <i>p</i> -Terphenyl-d14	%	86

Acid Extractable metals in soil

Our Reference		322668-1	322668-2	322668-3	322668-4	322668-5
Your Reference	UNITS	QC200	QC300	QC100	QC400	QC500
Date Sampled		04/05/2023	04/05/2023	03/05/2023	05/05/2023	05/05/2023
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	10/05/2023	10/05/2023	10/05/2023	10/05/2023	10/05/2023
Date analysed	-	11/05/2023	11/05/2023	11/05/2023	11/05/2023	11/05/2023
Arsenic	mg/kg	<4	<4	<4	<4	<4
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	10	10	13	8	9
Copper	mg/kg	<1	17	18	26	<1
Lead	mg/kg	6	7	6	13	6
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	1	18	23	4	<1
Zinc	mg/kg	8	110	55	110	2

Acid Extractable metals in soil

Our Reference		322668-6
Your Reference	UNITS	QC700
Date Sampled		05/05/2023
Type of sample		Soil
Date prepared	-	10/05/2023
Date analysed	-	11/05/2023
Arsenic	mg/kg	<4
Cadmium	mg/kg	<0.4
Chromium	mg/kg	7
Copper	mg/kg	1
Lead	mg/kg	6
Mercury	mg/kg	<0.1
Nickel	mg/kg	1
Zinc	mg/kg	10

Moisture						
Our Reference		322668-1	322668-2	322668-3	322668-4	322668-5
Your Reference	UNITS	QC200	QC300	QC100	QC400	QC500
Date Sampled		04/05/2023	04/05/2023	03/05/2023	05/05/2023	05/05/2023
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	9/05/2023	9/05/2023	9/05/2023	9/05/2023	9/05/2023
Date analysed	-	10/05/2023	10/05/2023	10/05/2023	10/05/2023	10/05/2023
Moisture	%	16	14	16	13	13

Moisture		
Our Reference		322668-6
Your Reference	UNITS	QC700
Date Sampled		05/05/2023
Type of sample		Soil
Date prepared	-	9/05/2023
Date analysed	-	10/05/2023
Moisture	%	11

PFAS in Soils Short		
Our Reference		322668-2
Your Reference	UNITS	QC300
Date Sampled		04/05/2023
Type of sample		Soil
Date prepared	-	11/05/2023
Date analysed	-	11/05/2023
Perfluorohexanesulfonic acid - PFHxS	µg/kg	<0.1
Perfluorooctanesulfonic acid PFOS	µg/kg	0.2
Perfluorooctanoic acid PFOA	µg/kg	<0.1
6:2 FTS	µg/kg	<0.1
8:2 FTS	µg/kg	<0.2
Surrogate ¹³ C ₈ PFOS	%	98
Surrogate ¹³ C ₂ PFOA	%	102
Extracted ISTD ¹⁸ O ₂ PFHxS	%	99
Extracted ISTD ¹³ C ₄ PFOS	%	91
Extracted ISTD ¹³ C ₄ PFOA	%	100
Extracted ISTD ¹³ C ₂ 6:2FTS	%	105
Extracted ISTD ¹³ C ₂ 8:2FTS	%	105
Total Positive PFHxS & PFOS	µg/kg	0.2
Total Positive PFOS & PFOA	µg/kg	0.2
Total Positive PFAS	µg/kg	0.2

Method ID	Methodology Summary
Inorg-008	Moisture content determined by heating at 105+/-5 °C for a minimum of 12 hours.
Metals-020	Determination of various metals by ICP-AES.
Metals-021	Determination of Mercury by Cold Vapour AAS.
Org-020	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis.
Org-020	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis. Note, the Total +ve TRH PQL is reflective of the lowest individual PQL and is therefore "Total +ve TRH" is simply a sum of the positive individual TRH fractions (>C10-C40).
Org-022/025	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS and/or GC-MS/MS. Benzo(a)pyrene TEQ as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater - 2013. For soil results:- 1. 'EQ PQL' values are assuming all contributing PAHs reported as <PQL are actually at the PQL. This is the most conservative approach and can give false positive TEQs given that PAHs that contribute to the TEQ calculation may not be present. 2. 'EQ zero' values are assuming all contributing PAHs reported as <PQL are zero. This is the least conservative approach and is more susceptible to false negative TEQs when PAHs that contribute to the TEQ calculation are present but below PQL. 3. 'EQ half PQL' values are assuming all contributing PAHs reported as <PQL are half the stipulated PQL. Hence a mid-point between the most and least conservative approaches above. Note, the Total +ve PAHs PQL is reflective of the lowest individual PQL and is therefore "Total +ve PAHs" is simply a sum of the positive individual PAHs.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater.

Method ID	Methodology Summary
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater. Note, the Total +ve Xylene PQL is reflective of the lowest individual PQL and is therefore "Total +ve Xylenes" is simply a sum of the positive individual Xylenes.
Org-029	Soil samples are extracted with basified Methanol. Waters and soil extracts are directly injected and/or concentrated/extracted using SPE. TCLPs/ASLP leachates are centrifuged, the supernatant is then analysed (including amendment with solvent) - as per the option in AS4439.3. Analysis is undertaken with LC-MS/MS. PFAS results include the sum of branched and linear isomers where applicable. Please note that PFAS results are corrected for Extracted Internal Standards (QSM 5.4 Table B-15 terminology), which are mass labelled analytes added prior to sample preparation to assess matrix effects and verify processing of the sample. PFAS analytes without a commercially available mass labelled analogue are corrected vs a closely eluting mass labelled PFAS compound. Surrogates are also reported, in this context they are mass labelled PFAS compounds added prior to extraction but are used as monitoring compounds only (not used for result correction). Envicarb (or similar) is used discretionally to remove interfering matrix components. Please contact the laboratory if estimates of Measurement Uncertainty are required as per WA DER.

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-2	[NT]
Date extracted	-			10/05/2023	[NT]	[NT]	[NT]	[NT]	10/05/2023	[NT]
Date analysed	-			11/05/2023	[NT]	[NT]	[NT]	[NT]	11/05/2023	[NT]
TRH C ₆ - C ₉	mg/kg	25	Org-023	<25	[NT]	[NT]	[NT]	[NT]	107	[NT]
TRH C ₆ - C ₁₀	mg/kg	25	Org-023	<25	[NT]	[NT]	[NT]	[NT]	107	[NT]
Benzene	mg/kg	0.2	Org-023	<0.2	[NT]	[NT]	[NT]	[NT]	110	[NT]
Toluene	mg/kg	0.5	Org-023	<0.5	[NT]	[NT]	[NT]	[NT]	107	[NT]
Ethylbenzene	mg/kg	1	Org-023	<1	[NT]	[NT]	[NT]	[NT]	105	[NT]
m+p-xylene	mg/kg	2	Org-023	<2	[NT]	[NT]	[NT]	[NT]	107	[NT]
o-Xylene	mg/kg	1	Org-023	<1	[NT]	[NT]	[NT]	[NT]	112	[NT]
Naphthalene	mg/kg	1	Org-023	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-023	88	[NT]	[NT]	[NT]	[NT]	99	[NT]

QUALITY CONTROL: svTRH (C10-C40) in Soil					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-2	[NT]
Date extracted	-			10/05/2023	[NT]	[NT]	[NT]	[NT]	10/05/2023	[NT]
Date analysed	-			11/05/2023	[NT]	[NT]	[NT]	[NT]	11/05/2023	[NT]
TRH C ₁₀ - C ₁₄	mg/kg	50	Org-020	<50	[NT]	[NT]	[NT]	[NT]	125	[NT]
TRH C ₁₅ - C ₂₈	mg/kg	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	127	[NT]
TRH C ₂₉ - C ₃₆	mg/kg	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	114	[NT]
TRH >C ₁₀ -C ₁₆	mg/kg	50	Org-020	<50	[NT]	[NT]	[NT]	[NT]	125	[NT]
TRH >C ₁₆ -C ₃₄	mg/kg	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	127	[NT]
TRH >C ₃₄ -C ₄₀	mg/kg	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	114	[NT]
Surrogate o-Terphenyl	%		Org-020	81	[NT]	[NT]	[NT]	[NT]	95	[NT]

QUALITY CONTROL: PAHs in Soil					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-2	[NT]
Date extracted	-			10/05/2023	[NT]	[NT]	[NT]	[NT]	10/05/2023	[NT]
Date analysed	-			10/05/2023	[NT]	[NT]	[NT]	[NT]	10/05/2023	[NT]
Naphthalene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	88	[NT]
Acenaphthylene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	87	[NT]
Fluorene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	82	[NT]
Phenanthrene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	86	[NT]
Anthracene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	94	[NT]
Pyrene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	95	[NT]
Benzo(a)anthracene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	93	[NT]
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-022/025	<0.2	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-022/025	<0.05	[NT]	[NT]	[NT]	[NT]	84	[NT]
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-022/025	80	[NT]	[NT]	[NT]	[NT]	89	[NT]

QUALITY CONTROL: Acid Extractable metals in soil					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date prepared	-			10/05/2023	[NT]	[NT]	[NT]	[NT]	10/05/2023	[NT]
Date analysed	-			11/05/2023	[NT]	[NT]	[NT]	[NT]	11/05/2023	[NT]
Arsenic	mg/kg	4	Metals-020	<4	[NT]	[NT]	[NT]	[NT]	99	[NT]
Cadmium	mg/kg	0.4	Metals-020	<0.4	[NT]	[NT]	[NT]	[NT]	95	[NT]
Chromium	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	96	[NT]
Copper	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	102	[NT]
Lead	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	98	[NT]
Mercury	mg/kg	0.1	Metals-021	<0.1	[NT]	[NT]	[NT]	[NT]	102	[NT]
Nickel	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	96	[NT]
Zinc	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	100	[NT]

QUALITY CONTROL: PFAS in Soils Short					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-2	[NT]
Date prepared	-			11/05/2023	[NT]	[NT]	[NT]	[NT]	11/05/2023	[NT]
Date analysed	-			11/05/2023	[NT]	[NT]	[NT]	[NT]	11/05/2023	[NT]
Perfluorohexanesulfonic acid - PFHxS	µg/kg	0.1	Org-029	<0.1	[NT]	[NT]	[NT]	[NT]	106	[NT]
Perfluorooctanesulfonic acid PFOS	µg/kg	0.1	Org-029	<0.1	[NT]	[NT]	[NT]	[NT]	100	[NT]
Perfluorooctanoic acid PFOA	µg/kg	0.1	Org-029	<0.1	[NT]	[NT]	[NT]	[NT]	99	[NT]
6:2 FTS	µg/kg	0.1	Org-029	<0.1	[NT]	[NT]	[NT]	[NT]	101	[NT]
8:2 FTS	µg/kg	0.2	Org-029	<0.2	[NT]	[NT]	[NT]	[NT]	111	[NT]
Surrogate ¹³ C ₈ PFOS	%		Org-029	97	[NT]	[NT]	[NT]	[NT]	96	[NT]
Surrogate ¹³ C ₂ PFOA	%		Org-029	102	[NT]	[NT]	[NT]	[NT]	107	[NT]
Extracted ISTD ¹⁸ O ₂ PFHxS	%		Org-029	106	[NT]	[NT]	[NT]	[NT]	114	[NT]
Extracted ISTD ¹³ C ₄ PFOS	%		Org-029	104	[NT]	[NT]	[NT]	[NT]	103	[NT]
Extracted ISTD ¹³ C ₄ PFOA	%		Org-029	115	[NT]	[NT]	[NT]	[NT]	112	[NT]
Extracted ISTD ¹³ C ₂ 6:2FTS	%		Org-029	122	[NT]	[NT]	[NT]	[NT]	135	[NT]
Extracted ISTD ¹³ C ₂ 8:2FTS	%		Org-029	116	[NT]	[NT]	[NT]	[NT]	134	[NT]

Result Definitions

NT	Not tested
NA	Test not required
INS	Insufficient sample for this test
PQL	Practical Quantitation Limit
<	Less than
>	Greater than
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
NS	Not specified
NEPM	National Environmental Protection Measure
NR	Not Reported

Quality Control Definitions

Blank	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
Duplicate	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
Matrix Spike	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample)	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
Surrogate Spike	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.
Australian Drinking Water Guidelines recommend that Thermotolerant Coliform, Faecal Enterococci, & E.Coli levels are less than 1cfu/100mL. The recommended maximums are taken from "Australian Drinking Water Guidelines", published by NHMRC & ARMC 2011.	
The recommended maximums for analytes in urine are taken from "2018 TLVs and BEIs", as published by ACGIH (where available). Limit provided for Nickel is a precautionary guideline as per Position Paper prepared by AIOH Exposure Standards Committee, 2016.	
Guideline limits for Rinse Water Quality reported as per analytical requirements and specifications of AS 4187, Amdt 2 2019, Table 7.2	

Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.

Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.

Spikes for Physical and Aggregate Tests are not applicable.

For VOCs in water samples, three vials are required for duplicate or spike analysis.

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% – see ELN-P05 QA/QC tables for details; <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals (not SPOCAS); 60-140% for organics/SPOCAS (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

In circumstances where no duplicate and/or sample spike has been reported at 1 in 10 and/or 1 in 20 samples respectively, the sample volume submitted was insufficient in order to satisfy laboratory QA/QC protocols.

When samples are received where certain analytes are outside of recommended technical holding times (THTs), the analysis has proceeded. Where analytes are on the verge of breaching THTs, every effort will be made to analyse within the THT or as soon as practicable.

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached.

Where matrix spike recoveries fall below the lower limit of the acceptance criteria (e.g. for non-labile or standard Organics <60%), positive result(s) in the parent sample will subsequently have a higher than typical estimated uncertainty (MU estimates supplied on request) and in these circumstances the sample result is likely biased significantly low.

Measurement Uncertainty estimates are available for most tests upon request.

Analysis of aqueous samples typically involves the extraction/digestion and/or analysis of the liquid phase only (i.e. NOT any settled sediment phase but inclusive of suspended particles if present), unless stipulated on the Envirolab COC and/or by correspondence. Notable exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, total recoverable metals and PFAS where solids are included by default.

Samples for Microbiological analysis (not Amoeba forms) received outside of the 2-8°C temperature range do not meet the ideal cooling conditions as stated in AS2031-2012.

SAMPLE RECEIPT ADVICE

Client Details

Client	Cardno (NSW/ACT) Pty Ltd
Attention	Evelyn Dillon

Sample Login Details

Your reference	300304375 Racecourse Rd
Envirolab Reference	322668
Date Sample Received	09/05/2023
Date Instructions Received	09/05/2023
Date Results Expected to be Reported	16/05/2023

Sample Condition

Samples received in appropriate condition for analysis	Yes
No. of Samples Provided	6 Soil
Turnaround Time Requested	Standard
Temperature on Receipt (°C)	12
Cooling Method	Ice Pack
Sampling Date Provided	YES

Comments

Nil

Please direct any queries to:

Aileen Hie

Phone: 02 9910 6200
Fax: 02 9910 6201
Email: ahie@envirolab.com.au

Jacinta Hurst

Phone: 02 9910 6200
Fax: 02 9910 6201
Email: jhurst@envirolab.com.au

Analysis Underway, details on the following page:

**Envirolab Services Pty Ltd**

ABN 37 112 535 645

12 Ashley St Chatswood NSW 2067

ph 02 9910 6200 fax 02 9910 6201

customerservice@envirolab.com.au

www.envirolab.com.au

Sample ID	VTRH(C6-C10)/BTXN in Soil	svTRH (C10-C40) in Soil	PAHs in Soil	Acid Extractable metals in soil	PFAS in Soils Short
QC200	✓	✓	✓	✓	
QC300	✓	✓	✓	✓	✓
QC100	✓	✓	✓	✓	
QC400	✓	✓	✓	✓	
QC500	✓	✓	✓	✓	
QC700	✓	✓	✓	✓	

The '✓' indicates the testing you have requested. **THIS IS NOT A REPORT OF THE RESULTS.**

Additional Info

Sample storage - Waters are routinely disposed of approximately 1 month and soils approximately 2 months from receipt.

Requests for longer term sample storage must be received in writing.

Please contact the laboratory immediately if observed settled sediment present in water samples is to be included in the extraction and/or analysis (exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, Total Recoverable metals and PFAS analysis where solids are included by default.

TAT for Micro is dependent on incubation. This varies from 3 to 6 days.

CLIENT DETAILS

Contact Katelyn.Elliot
Client STANTEC AUSTRALIA PTY LTD
Address LEVEL 22, 570 BOURKE STREET
MELBOURNE VIC 3000

Telephone 61 3 85547000
Facsimile (Not specified)
Email Katelyn.Elliot@stantec.com

Project 300304375 Racecourse Rd
Order Number 300304375
Samples 19

LABORATORY DETAILS

Manager Huong Crawford
Laboratory SGS Alexandria Environmental
Address Unit 16, 33 Maddox St
Alexandria NSW 2015

Telephone +61 2 8594 0400
Facsimile +61 2 8594 0499
Email au.environmental.sydney@sgs.com

SGS Reference SE247983 R1
Date Received 23 May 2023
Date Reported 01 Jun 2023

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

This report cancels and supersedes the report No. SE247983 R0 dated 31.05.2023 issued by SGS Environment, Health and Safety due to amended asbestos results.

PFAS subcontracted to SGS Melbourne, 10/585 Blackburn Road, Notting Hill, VIC, NATA Accreditation Number. 2562/14420. Report No ME334394

No respirable fibres detected in all soil samples using trace analysis technique.

Sample #16: Asbestos found as approx 7-8 x 2mm and loose fibre bundles x >10 and found as 8x4x2mm fibrous mass.

Sample #17: Asbestos found as approx 6-7 x 2mm loose fibre bundles x > 10.

Sample #18: Asbestos found as approx 6-7 x 2mm loose fibre bundles x > 10.

Sample #19: Asbestos found as approx 5-6 x 2mm loose fibre bundles x > 10.

Asbestos analysed by Approved Identifiers Ravee Sivasubramaniam and Yusuf Kuthupudin

SIGNATORIES



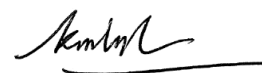
Akheeque BENIAMEEN
Chemist



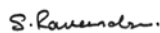
Bennet LO
Senior Chemist



Dong LIANG
Metals/Inorganics Team Leader



Ly Kim HA
Organic Section Head



Ravee SIVASUBRAMANIAM
Hygiene Team Leader



Shane MCDERMOTT
Inorganic/Metals Chemist



ANALYTICAL REPORT

SE247983 R1

Parameter	Units	LOR	Sample Number	SE247983.001	SE247983.002	SE247983.003	SE247983.004
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	23 May 2023	23 May 2023	23 May 2023	23 May 2023
			Sample Name	TP129_0.3	TP129_0.5	TP130_0.3	TP130_1.5

VOC's in Soil Method: AN433 Tested: 26/5/2023

Monocyclic Aromatic Hydrocarbons

Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1

Polycyclic VOCs

Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1

Surrogates

d4-1,2-dichloroethane (Surrogate)	%	-	96	95	93	87
d8-toluene (Surrogate)	%	-	96	97	96	91
Bromofluorobenzene (Surrogate)	%	-	96	98	96	91

Totals

Total BTEX*	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6
Total Xylenes*	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3

Volatile Petroleum Hydrocarbons in Soil Method: AN433 Tested: 26/5/2023

TRH C6-C10	mg/kg	25	<25	<25	<25	<25
TRH C6-C9	mg/kg	20	<20	<20	<20	<20

Surrogates

d4-1,2-dichloroethane (Surrogate)	%	-	96	95	93	87
d8-toluene (Surrogate)	%	-	96	97	96	91
Bromofluorobenzene (Surrogate)	%	-	96	98	96	91

VPH F Bands

Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25



ANALYTICAL REPORT

SE247983 R1

Parameter	Units	LOR
Sample Number	SE247983.001	SE247983.002
Sample Matrix	Soil	Soil
Sample Date	23 May 2023	23 May 2023
Sample Name	TP129_0.3	TP129_0.5
		TP130_0.3
		TP130_1.5

TRH (Total Recoverable Hydrocarbons) in Soil Method: AN403 Tested: 26/5/2023

TRH C10-C14	mg/kg	20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210

TRH F Bands

TRH >C10-C16	mg/kg	25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120

PAH (Polynuclear Aromatic Hydrocarbons) in Soil Method: AN420 Tested: 26/5/2023

Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8

Surrogates

d5-nitrobenzene (Surrogate)	%	-	83	84	86	84
2-fluorobiphenyl (Surrogate)	%	-	87	86	87	86
d14-p-terphenyl (Surrogate)	%	-	93	93	91	93

OC Pesticides in Soil Method: AN420 Tested: 26/5/2023

Alpha BHC	mg/kg	0.1	<0.1	-	<0.1	-
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	-	<0.1	-
Beta BHC	mg/kg	0.1	<0.1	-	<0.1	-
Lindane (gamma BHC)	mg/kg	0.1	<0.1	-	<0.1	-
Delta BHC	mg/kg	0.1	<0.1	-	<0.1	-
Heptachlor	mg/kg	0.1	<0.1	-	<0.1	-
Aldrin	mg/kg	0.1	<0.1	-	<0.1	-
Isodrin	mg/kg	0.1	<0.1	-	<0.1	-
Heptachlor epoxide	mg/kg	0.1	<0.1	-	<0.1	-
Gamma Chlordane	mg/kg	0.1	<0.1	-	<0.1	-
Alpha Chlordane	mg/kg	0.1	<0.1	-	<0.1	-
Alpha Endosulfan	mg/kg	0.2	<0.2	-	<0.2	-
o,p'-DDE*	mg/kg	0.1	<0.1	-	<0.1	-
p,p'-DDE	mg/kg	0.1	<0.1	-	<0.1	-
Dieldrin	mg/kg	0.2	<0.2	-	<0.2	-
Endrin	mg/kg	0.2	<0.2	-	<0.2	-



ANALYTICAL REPORT

SE247983 R1

Parameter	Sample Number					
	Sample Matrix					
	Sample Date					
	Sample Name					
	SE247983.001	SE247983.002	SE247983.003	SE247983.004		
	Soil	Soil	Soil	Soil		
	23 May 2023	23 May 2023	23 May 2023	23 May 2023		
	TP129_0.3	TP129_0.5	TP130_0.3	TP130_1.5		
Units	LOR					

OC Pesticides in Soil Method: AN420 Tested: 26/5/2023 (continued)

Beta Endosulfan	mg/kg	0.2	<0.2	-	<0.2	-
o,p'-DDD*	mg/kg	0.1	<0.1	-	<0.1	-
p,p'-DDD	mg/kg	0.1	<0.1	-	<0.1	-
Endrin aldehyde	mg/kg	0.1	<0.1	-	<0.1	-
Endosulfan sulphate	mg/kg	0.1	<0.1	-	<0.1	-
o,p'-DDT*	mg/kg	0.1	<0.1	-	<0.1	-
p,p'-DDT	mg/kg	0.1	<0.1	-	<0.1	-
Endrin ketone	mg/kg	0.1	<0.1	-	<0.1	-
Methoxychlor	mg/kg	0.1	<0.1	-	<0.1	-
Mirex	mg/kg	0.1	<0.1	-	<0.1	-
trans-Nonachlor	mg/kg	0.1	<0.1	-	<0.1	-
Total CLP OC Pesticides	mg/kg	1	<1	-	<1	-
Total OC VIC EPA	mg/kg	1	<1	-	<1	-

Surrogates

Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	98	-	93	-

OP Pesticides in Soil Method: AN420 Tested: 26/5/2023

Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	-	<0.2	-
Bromophos Ethyl	mg/kg	0.2	<0.2	-	<0.2	-
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	-	<0.2	-
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	-	<0.5	-
Dichlorvos	mg/kg	0.5	<0.5	-	<0.5	-
Dimethoate	mg/kg	0.5	<0.5	-	<0.5	-
Ethion	mg/kg	0.2	<0.2	-	<0.2	-
Fenitrothion	mg/kg	0.2	<0.2	-	<0.2	-
Malathion	mg/kg	0.2	<0.2	-	<0.2	-
Methidathion	mg/kg	0.5	<0.5	-	<0.5	-
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	-	<0.2	-
Total OP Pesticides*	mg/kg	1.7	<1.7	-	<1.7	-

Surrogates

2-fluorobiphenyl (Surrogate)	%	-	87	-	87	-
d14-p-terphenyl (Surrogate)	%	-	93	-	91	-

PCBs in Soil Method: AN420 Tested: 26/5/2023

Arochlor 1016	mg/kg	0.2	<0.2	-	<0.2	-
Arochlor 1221	mg/kg	0.2	<0.2	-	<0.2	-
Arochlor 1232	mg/kg	0.2	<0.2	-	<0.2	-
Arochlor 1242	mg/kg	0.2	<0.2	-	<0.2	-
Arochlor 1248	mg/kg	0.2	<0.2	-	<0.2	-
Arochlor 1254	mg/kg	0.2	<0.2	-	<0.2	-
Arochlor 1260	mg/kg	0.2	<0.2	-	<0.2	-
Arochlor 1262	mg/kg	0.2	<0.2	-	<0.2	-
Arochlor 1268	mg/kg	0.2	<0.2	-	<0.2	-
Total PCBs (Arochlors)	mg/kg	1	<1	-	<1	-

Surrogates

TCMX (Surrogate)	%	-	100	-	94	-

Parameter	Units	LOR	Sample Number	SE247983.001	SE247983.002	SE247983.003	SE247983.004
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	23 May 2023	23 May 2023	23 May 2023	23 May 2023
			Sample Name	TP129_0.3	TP129_0.5	TP130_0.3	TP130_1.5

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES Method: AN040/AN320 Tested: 26/5/2023

Arsenic, As	mg/kg	1	4	4	24	3
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	4.7	9.2	18	7.0
Copper, Cu	mg/kg	0.5	6.1	1.6	10	1.2
Nickel, Ni	mg/kg	0.5	4.2	0.8	17	0.6
Lead, Pb	mg/kg	1	18	9	10	7
Zinc, Zn	mg/kg	2	36	7.8	48	6.3

Mercury in Soil Method: AN312 Tested: 26/5/2023

Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05

Moisture Content Method: AN002 Tested: 26/5/2023

% Moisture	%w/w	1	9.3	14.2	7.4	15.3

Fibre Identification in soil Method: AS4964/AN602 Tested: 30/5/2023

FibreID

Asbestos Detected	No unit	-	No	-	No	-

SemiQuant

Estimated Fibres*	%w/w	0.01	<0.01	-	<0.01	-

Gravimetric Determination of Asbestos in Soil Method: AN605 Tested: 30/5/2023

Total Sample Weight*	g	1	572	-	606	-
Bonded ACM in >7mm Sample*	g	0.001	<0.001	-	<0.001	-
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	-	<0.00001	-
AF/FA in <2mm Sample*	g	0.00001	<0.00001	-	<0.00001	-
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	-	<0.01	-
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	-	<0.001	-
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	-	<0.001	-
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	-	<0.001	-
Fibre Type*	No unit	-	NAD	-	NAD	-



ANALYTICAL REPORT

SE247983 R1

Parameter	Units	LOR	Sample Number	SE247983.001	SE247983.002	SE247983.003	SE247983.004
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	23 May 2023	23 May 2023	23 May 2023	23 May 2023
			Sample Name	TP129_0.3	TP129_0.5	TP130_0.3	TP130_1.5

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples **Method: MA-1523** **Tested: 31/5/2023**

Perfluorobutanoic acid (PFBA)	mg/kg	0.0016	-	-	-	<0.0016
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0016	-	-	-	<0.0016
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0016	-	-	-	<0.0016
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0016	-	-	-	<0.0016
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0008	-	-	-	<0.0008
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0016	-	-	-	<0.0016
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0016	-	-	-	<0.0016
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0016	-	-	-	<0.0016
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0016	-	-	-	<0.0016
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0016	-	-	-	<0.0016
Sum PFOS and PFHXS	mg/kg	0.0016	-	-	-	<0.0016
Perfluorononane sulfonate (PFNS)	mg/kg	0.0016	-	-	-	<0.0016
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.0016	-	-	-	<0.0016
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.0016	-	-	-	<0.0016
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.0016	-	-	-	<0.0016
(13C4-PFBA) Isotopically Labelled Internal Recovery	%	-	-	-	-	111
(13C5-PFPeA) Isotopically Labelled Internal Recovery	%	-	-	-	-	113
(13C5-PFHxA) Isotopically Labelled Internal Recovery	%	-	-	-	-	111
(13C4-PFHpA) Isotopically Labelled Internal Recovery	%	-	-	-	-	119
(13C4_PFOA) Isotopically Labelled Internal Recovery	%	-	-	-	-	120
(13C3-PFBS) Isotopically Labelled Internal Recovery	%	-	-	-	-	104
(13C3-PFHxS) Isotopically Labelled Internal Recovery	%	-	-	-	-	111
(13C8-PFOS) Isotopically Labelled Internal Recovery	%	-	-	-	-	102



ANALYTICAL REPORT

SE247983 R1

Parameter	Units	LOR	Sample Number	SE247983.005	SE247983.006	SE247983.007	SE247983.008
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	23 May 2023	23 May 2023	23 May 2023	23 May 2023
			Sample Name	TP131_0.3	TP131_1	TP133_0.3	TP133_1

VOC's in Soil Method: AN433 Tested: 26/5/2023

Monocyclic Aromatic Hydrocarbons

Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1

Polycyclic VOCs

Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1

Surrogates

d4-1,2-dichloroethane (Surrogate)	%	-	90	87	91	92
d8-toluene (Surrogate)	%	-	92	92	96	94
Bromofluorobenzene (Surrogate)	%	-	93	91	97	94

Totals

Total BTEX*	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6
Total Xylenes*	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3

Volatile Petroleum Hydrocarbons in Soil Method: AN433 Tested: 26/5/2023

TRH C6-C10	mg/kg	25	<25	<25	<25	<25
TRH C6-C9	mg/kg	20	<20	<20	<20	<20

Surrogates

d4-1,2-dichloroethane (Surrogate)	%	-	90	87	91	92
d8-toluene (Surrogate)	%	-	92	92	96	94
Bromofluorobenzene (Surrogate)	%	-	93	91	97	94

VPH F Bands

Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25



ANALYTICAL REPORT

SE247983 R1

Parameter	Units	LOR	Sample Number	SE247983.005	SE247983.006	SE247983.007	SE247983.008
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	23 May 2023	23 May 2023	23 May 2023	23 May 2023
			Sample Name	TP131_0.3	TP131_1	TP133_0.3	TP133_1

TRH (Total Recoverable Hydrocarbons) in Soil Method: AN403 Tested: 26/5/2023

TRH C10-C14	mg/kg	20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210

TRH F Bands

TRH >C10-C16	mg/kg	25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120

PAH (Polynuclear Aromatic Hydrocarbons) in Soil Method: AN420 Tested: 26/5/2023

Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8

Surrogates

d5-nitrobenzene (Surrogate)	%	-	86	85	74	83
2-fluorobiphenyl (Surrogate)	%	-	87	86	76	85
d14-p-terphenyl (Surrogate)	%	-	96	94	83	94

OC Pesticides in Soil Method: AN420 Tested: 26/5/2023

Alpha BHC	mg/kg	0.1	<0.1	-	<0.1	-
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	-	<0.1	-
Beta BHC	mg/kg	0.1	<0.1	-	<0.1	-
Lindane (gamma BHC)	mg/kg	0.1	<0.1	-	<0.1	-
Delta BHC	mg/kg	0.1	<0.1	-	<0.1	-
Heptachlor	mg/kg	0.1	<0.1	-	<0.1	-
Aldrin	mg/kg	0.1	<0.1	-	<0.1	-
Isodrin	mg/kg	0.1	<0.1	-	<0.1	-
Heptachlor epoxide	mg/kg	0.1	<0.1	-	<0.1	-
Gamma Chlordane	mg/kg	0.1	<0.1	-	<0.1	-
Alpha Chlordane	mg/kg	0.1	<0.1	-	<0.1	-
Alpha Endosulfan	mg/kg	0.2	<0.2	-	<0.2	-
o,p'-DDE*	mg/kg	0.1	<0.1	-	<0.1	-
p,p'-DDE	mg/kg	0.1	<0.1	-	<0.1	-
Dieldrin	mg/kg	0.2	<0.2	-	<0.2	-
Endrin	mg/kg	0.2	<0.2	-	<0.2	-



ANALYTICAL REPORT

SE247983 R1

Parameter	Sample Number					
	Sample Matrix					
	Sample Date					
	Sample Name					
	SE247983.005	SE247983.006	SE247983.007	SE247983.008		
	Soil	Soil	Soil	Soil		
	23 May 2023	23 May 2023	23 May 2023	23 May 2023		
	TP131_0.3	TP131_1	TP133_0.3	TP133_1		
Units						
LOR						

OC Pesticides in Soil Method: AN420 Tested: 26/5/2023 (continued)

Beta Endosulfan	mg/kg	0.2	<0.2	-	<0.2	-
o,p'-DDD*	mg/kg	0.1	<0.1	-	<0.1	-
p,p'-DDD	mg/kg	0.1	<0.1	-	<0.1	-
Endrin aldehyde	mg/kg	0.1	<0.1	-	<0.1	-
Endosulfan sulphate	mg/kg	0.1	<0.1	-	<0.1	-
o,p'-DDT*	mg/kg	0.1	<0.1	-	<0.1	-
p,p'-DDT	mg/kg	0.1	<0.1	-	<0.1	-
Endrin ketone	mg/kg	0.1	<0.1	-	<0.1	-
Methoxychlor	mg/kg	0.1	<0.1	-	<0.1	-
Mirex	mg/kg	0.1	<0.1	-	<0.1	-
trans-Nonachlor	mg/kg	0.1	<0.1	-	<0.1	-
Total CLP OC Pesticides	mg/kg	1	<1	-	<1	-
Total OC VIC EPA	mg/kg	1	<1	-	<1	-

Surrogates

Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	96	-	108	-

OP Pesticides in Soil Method: AN420 Tested: 26/5/2023

Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	-	<0.2	-
Bromophos Ethyl	mg/kg	0.2	<0.2	-	<0.2	-
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	-	<0.2	-
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	-	<0.5	-
Dichlorvos	mg/kg	0.5	<0.5	-	<0.5	-
Dimethoate	mg/kg	0.5	<0.5	-	<0.5	-
Ethion	mg/kg	0.2	<0.2	-	<0.2	-
Fenitrothion	mg/kg	0.2	<0.2	-	<0.2	-
Malathion	mg/kg	0.2	<0.2	-	<0.2	-
Methidathion	mg/kg	0.5	<0.5	-	<0.5	-
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	-	<0.2	-
Total OP Pesticides*	mg/kg	1.7	<1.7	-	<1.7	-

Surrogates

2-fluorobiphenyl (Surrogate)	%	-	87	-	76	-
d14-p-terphenyl (Surrogate)	%	-	96	-	83	-

PCBs in Soil Method: AN420 Tested: 26/5/2023

Arochlor 1016	mg/kg	0.2	<0.2	-	<0.2	-
Arochlor 1221	mg/kg	0.2	<0.2	-	<0.2	-
Arochlor 1232	mg/kg	0.2	<0.2	-	<0.2	-
Arochlor 1242	mg/kg	0.2	<0.2	-	<0.2	-
Arochlor 1248	mg/kg	0.2	<0.2	-	<0.2	-
Arochlor 1254	mg/kg	0.2	<0.2	-	<0.2	-
Arochlor 1260	mg/kg	0.2	<0.2	-	<0.2	-
Arochlor 1262	mg/kg	0.2	<0.2	-	<0.2	-
Arochlor 1268	mg/kg	0.2	<0.2	-	<0.2	-
Total PCBs (Arochlors)	mg/kg	1	<1	-	<1	-

Surrogates

TCMX (Surrogate)	%	-	97	-	109	-

Parameter	Units	LOR	Sample Number	SE247983.005	SE247983.006	SE247983.007	SE247983.008
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	23 May 2023	23 May 2023	23 May 2023	23 May 2023
			Sample Name	TP131_0.3	TP131_1	TP133_0.3	TP133_1

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES Method: AN040/AN320 Tested: 26/5/2023

Arsenic, As	mg/kg	1	4	2	2	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	7.4	5.6	19	6.8
Copper, Cu	mg/kg	0.5	15	1.5	20	5.7
Nickel, Ni	mg/kg	0.5	21	1.5	41	11
Lead, Pb	mg/kg	1	7	5	3	3
Zinc, Zn	mg/kg	2	26	3.0	29	7.1

Mercury in Soil Method: AN312 Tested: 26/5/2023

Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05

Moisture Content Method: AN002 Tested: 26/5/2023

% Moisture	%w/w	1	14.1	13.9	7.8	11.1

Fibre Identification in soil Method: AS4964/AN602 Tested: 30/5/2023

FibreID

Asbestos Detected	No unit	-	No	-	No	-

SemiQuant

Estimated Fibres*	%w/w	0.01	<0.01	-	<0.01	-

Gravimetric Determination of Asbestos in Soil Method: AN605 Tested: 30/5/2023

Total Sample Weight*	g	1	587	-	789	-
Bonded ACM in >7mm Sample*	g	0.001	<0.001	-	<0.001	-
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	-	<0.00001	-
AF/FA in <2mm Sample*	g	0.00001	<0.00001	-	<0.00001	-
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	-	<0.01	-
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	-	<0.001	-
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	-	<0.001	-
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	-	<0.001	-
Fibre Type*	No unit	-	NAD	-	NAD	-



ANALYTICAL REPORT

SE247983 R1

			Sample Number	SE247983.005	SE247983.006	SE247983.007	SE247983.008
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	23 May 2023	23 May 2023	23 May 2023	23 May 2023
			Sample Name	TP131_0.3	TP131_1	TP133_0.3	TP133_1
Parameter	Units	LOR					

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples Method: MA-1523 Tested: 31/5/2023

Perfluorobutanoic acid (PFBA)	mg/kg	0.0016	-	-	-	-
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0016	-	-	-	-
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0016	-	-	-	-
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0016	-	-	-	-
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0008	-	-	-	-
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0016	-	-	-	-
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0016	-	-	-	-
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0016	-	-	-	-
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0016	-	-	-	-
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0016	-	-	-	-
Sum PFOS and PFHXS	mg/kg	0.0016	-	-	-	-
Perfluorononane sulfonate (PFNS)	mg/kg	0.0016	-	-	-	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.0016	-	-	-	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.0016	-	-	-	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.0016	-	-	-	-
(13C4-PFBA) Isotopically Labelled Internal Recovery	%	-	-	-	-	-
(13C5-PFPeA) Isotopically Labelled Internal Recovery	%	-	-	-	-	-
(13C5-PFHxA) Isotopically Labelled Internal Recovery	%	-	-	-	-	-
(13C4-PFHpA) Isotopically Labelled Internal Recovery	%	-	-	-	-	-
(13C4_PFOA) Isotopically Labelled Internal Recovery	%	-	-	-	-	-
(13C3-PFBS) Isotopically Labelled Internal Recovery	%	-	-	-	-	-
(13C3-PFHxS) Isotopically Labelled Internal Recovery	%	-	-	-	-	-
(13C8-PFOS) Isotopically Labelled Internal Recovery	%	-	-	-	-	-



ANALYTICAL REPORT

SE247983 R1

Parameter	Units	LOR	Sample Number	SE247983.009	SE247983.010	SE247983.011	SE247983.012
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	23 May 2023	23 May 2023	23 May 2023	23 May 2023
			Sample Name	TP134_0.3	TP134_0.5	TP135_0.3	TP135_1.5

VOC's in Soil Method: AN433 Tested: 26/5/2023

Monocyclic Aromatic Hydrocarbons

Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1

Polycyclic VOCs

Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1

Surrogates

d4-1,2-dichloroethane (Surrogate)	%	-	87	91	87	93
d8-toluene (Surrogate)	%	-	88	94	91	95
Bromofluorobenzene (Surrogate)	%	-	86	95	94	93

Totals

Total BTEX*	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6
Total Xylenes*	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3

Volatile Petroleum Hydrocarbons in Soil Method: AN433 Tested: 26/5/2023

TRH C6-C10	mg/kg	25	<25	<25	<25	<25
TRH C6-C9	mg/kg	20	<20	<20	<20	<20

Surrogates

d4-1,2-dichloroethane (Surrogate)	%	-	87	91	87	93
d8-toluene (Surrogate)	%	-	88	94	91	95
Bromofluorobenzene (Surrogate)	%	-	86	95	94	93

VPH F Bands

Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25



ANALYTICAL REPORT

SE247983 R1

Parameter	Units	LOR	Sample Number	SE247983.009	SE247983.010	SE247983.011	SE247983.012
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	23 May 2023	23 May 2023	23 May 2023	23 May 2023
			Sample Name	TP134_0.3	TP134_0.5	TP135_0.3	TP135_1.5

TRH (Total Recoverable Hydrocarbons) in Soil Method: AN403 Tested: 26/5/2023

TRH C10-C14	mg/kg	20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210

TRH F Bands

TRH >C10-C16	mg/kg	25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120

PAH (Polynuclear Aromatic Hydrocarbons) in Soil Method: AN420 Tested: 26/5/2023

Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8

Surrogates

d5-nitrobenzene (Surrogate)	%	-	83	83	84	84
2-fluorobiphenyl (Surrogate)	%	-	85	84	86	86
d14-p-terphenyl (Surrogate)	%	-	92	93	94	92

OC Pesticides in Soil Method: AN420 Tested: 26/5/2023

Alpha BHC	mg/kg	0.1	<0.1	-	<0.1	-
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	-	<0.1	-
Beta BHC	mg/kg	0.1	<0.1	-	<0.1	-
Lindane (gamma BHC)	mg/kg	0.1	<0.1	-	<0.1	-
Delta BHC	mg/kg	0.1	<0.1	-	<0.1	-
Heptachlor	mg/kg	0.1	<0.1	-	<0.1	-
Aldrin	mg/kg	0.1	<0.1	-	<0.1	-
Isodrin	mg/kg	0.1	<0.1	-	<0.1	-
Heptachlor epoxide	mg/kg	0.1	<0.1	-	<0.1	-
Gamma Chlordane	mg/kg	0.1	<0.1	-	<0.1	-
Alpha Chlordane	mg/kg	0.1	<0.1	-	<0.1	-
Alpha Endosulfan	mg/kg	0.2	<0.2	-	<0.2	-
o,p'-DDE*	mg/kg	0.1	<0.1	-	<0.1	-
p,p'-DDE	mg/kg	0.1	<0.1	-	<0.1	-
Dieldrin	mg/kg	0.2	<0.2	-	<0.2	-
Endrin	mg/kg	0.2	<0.2	-	<0.2	-



ANALYTICAL REPORT

SE247983 R1

Parameter	Units	LOR	Sample Number	SE247983.009	SE247983.010	SE247983.011	SE247983.012
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	23 May 2023	23 May 2023	23 May 2023	23 May 2023
			Sample Name	TP134_0.3	TP134_0.5	TP135_0.3	TP135_1.5

OC Pesticides in Soil Method: AN420 Tested: 26/5/2023 (continued)

Beta Endosulfan	mg/kg	0.2	<0.2	-	<0.2	-
o,p'-DDD*	mg/kg	0.1	<0.1	-	<0.1	-
p,p'-DDD	mg/kg	0.1	<0.1	-	<0.1	-
Endrin aldehyde	mg/kg	0.1	<0.1	-	<0.1	-
Endosulfan sulphate	mg/kg	0.1	<0.1	-	<0.1	-
o,p'-DDT*	mg/kg	0.1	<0.1	-	<0.1	-
p,p'-DDT	mg/kg	0.1	<0.1	-	<0.1	-
Endrin ketone	mg/kg	0.1	<0.1	-	<0.1	-
Methoxychlor	mg/kg	0.1	<0.1	-	<0.1	-
Mirex	mg/kg	0.1	<0.1	-	<0.1	-
trans-Nonachlor	mg/kg	0.1	<0.1	-	<0.1	-
Total CLP OC Pesticides	mg/kg	1	<1	-	<1	-
Total OC VIC EPA	mg/kg	1	<1	-	<1	-

Surrogates

Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	93	-	95	-

OP Pesticides in Soil Method: AN420 Tested: 26/5/2023

Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	-	<0.2	-
Bromophos Ethyl	mg/kg	0.2	<0.2	-	<0.2	-
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	-	<0.2	-
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	-	<0.5	-
Dichlorvos	mg/kg	0.5	<0.5	-	<0.5	-
Dimethoate	mg/kg	0.5	<0.5	-	<0.5	-
Ethion	mg/kg	0.2	<0.2	-	<0.2	-
Fenitrothion	mg/kg	0.2	<0.2	-	<0.2	-
Malathion	mg/kg	0.2	<0.2	-	<0.2	-
Methidathion	mg/kg	0.5	<0.5	-	<0.5	-
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	-	<0.2	-
Total OP Pesticides*	mg/kg	1.7	<1.7	-	<1.7	-

Surrogates

2-fluorobiphenyl (Surrogate)	%	-	85	-	86	-
d14-p-terphenyl (Surrogate)	%	-	92	-	94	-

PCBs in Soil Method: AN420 Tested: 26/5/2023

Arochlor 1016	mg/kg	0.2	<0.2	-	<0.2	-
Arochlor 1221	mg/kg	0.2	<0.2	-	<0.2	-
Arochlor 1232	mg/kg	0.2	<0.2	-	<0.2	-
Arochlor 1242	mg/kg	0.2	<0.2	-	<0.2	-
Arochlor 1248	mg/kg	0.2	<0.2	-	<0.2	-
Arochlor 1254	mg/kg	0.2	<0.2	-	<0.2	-
Arochlor 1260	mg/kg	0.2	<0.2	-	<0.2	-
Arochlor 1262	mg/kg	0.2	<0.2	-	<0.2	-
Arochlor 1268	mg/kg	0.2	<0.2	-	<0.2	-
Total PCBs (Arochlors)	mg/kg	1	<1	-	<1	-

Surrogates

TCMX (Surrogate)	%	-	95	-	96	-

Parameter	Units	LOR	Sample Number	SE247983.009	SE247983.010	SE247983.011	SE247983.012
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	23 May 2023	23 May 2023	23 May 2023	23 May 2023
			Sample Name	TP134_0.3	TP134_0.5	TP135_0.3	TP135_1.5

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES Method: AN040/AN320 Tested: 26/5/2023

Arsenic, As	mg/kg	1	3	3	44	3
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	0.4	<0.3
Chromium, Cr	mg/kg	0.5	28	13	6.1	6.3
Copper, Cu	mg/kg	0.5	35	<0.5	8.3	2.0
Nickel, Ni	mg/kg	0.5	67	<0.5	8.2	0.6
Lead, Pb	mg/kg	1	2	6	6	9
Zinc, Zn	mg/kg	2	32	2.1	17	17

Mercury in Soil Method: AN312 Tested: 26/5/2023

Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05

Moisture Content Method: AN002 Tested: 26/5/2023

% Moisture	%w/w	1	6.7	14.7	10.1	14.8

Fibre Identification in soil Method: AS4964/AN602 Tested: 30/5/2023

FibreID

Asbestos Detected	No unit	-	No	-	No	-

SemiQuant

Estimated Fibres*	%w/w	0.01	<0.01	-	<0.01	-

Gravimetric Determination of Asbestos in Soil Method: AN605 Tested: 30/5/2023

Total Sample Weight*	g	1	798	-	539	-
Bonded ACM in >7mm Sample*	g	0.001	<0.001	-	<0.001	-
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	-	<0.00001	-
AF/FA in <2mm Sample*	g	0.00001	<0.00001	-	<0.00001	-
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	-	<0.01	-
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	-	<0.001	-
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	-	<0.001	-
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	-	<0.001	-
Fibre Type*	No unit	-	NAD	-	NAD	-



ANALYTICAL REPORT

SE247983 R1

Parameter	Units	LOR	Sample Number	SE247983.009	SE247983.010	SE247983.011	SE247983.012
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	23 May 2023	23 May 2023	23 May 2023	23 May 2023
			Sample Name	TP134_0.3	TP134_0.5	TP135_0.3	TP135_1.5

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples Method: MA-1523 Tested: 31/5/2023

Perfluorobutanoic acid (PFBA)	mg/kg	0.0016	-	-	-	<0.0016
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0016	-	-	-	<0.0016
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0016	-	-	-	<0.0016
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0016	-	-	-	<0.0016
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0008	-	-	-	<0.0008
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0016	-	-	-	<0.0016
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0016	-	-	-	<0.0016
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0016	-	-	-	<0.0016
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0016	-	-	-	<0.0016
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0016	-	-	-	<0.0016
Sum PFOS and PFHXS	mg/kg	0.0016	-	-	-	<0.0016
Perfluorononane sulfonate (PFNS)	mg/kg	0.0016	-	-	-	<0.0016
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.0016	-	-	-	<0.0016
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.0016	-	-	-	<0.0016
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.0016	-	-	-	<0.0016
(13C4-PFBA) Isotopically Labelled Internal Recovery	%	-	-	-	-	111
(13C5-PFPeA) Isotopically Labelled Internal Recovery	%	-	-	-	-	113
(13C5-PFHxA) Isotopically Labelled Internal Recovery	%	-	-	-	-	105
(13C4-PFHpA) Isotopically Labelled Internal Recovery	%	-	-	-	-	111
(13C4_PFOA) Isotopically Labelled Internal Recovery	%	-	-	-	-	105
(13C3-PFBS) Isotopically Labelled Internal Recovery	%	-	-	-	-	105
(13C3-PFHxS) Isotopically Labelled Internal Recovery	%	-	-	-	-	114
(13C8-PFOS) Isotopically Labelled Internal Recovery	%	-	-	-	-	131



ANALYTICAL REPORT

SE247983 R1

Parameter	Units	LOR	Sample Number	SE247983.013	SE247983.014	SE247983.015	SE247983.016
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	23 May 2023	23 May 2023	23 May 2023	23 May 2023
			Sample Name	TP135_2	QA100	DRUM_1	GS1

VOC's in Soil Method: AN433 Tested: 26/5/2023

Monocyclic Aromatic Hydrocarbons

Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1

Polycyclic VOCs

Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1

Surrogates

d4-1,2-dichloroethane (Surrogate)	%	-	87	88	93	95
d8-toluene (Surrogate)	%	-	91	90	98	100
Bromofluorobenzene (Surrogate)	%	-	92	89	96	96

Totals

Total BTEX*	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6
Total Xylenes*	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3

Volatile Petroleum Hydrocarbons in Soil Method: AN433 Tested: 26/5/2023

TRH C6-C10	mg/kg	25	<25	<25	<25	<25
TRH C6-C9	mg/kg	20	<20	<20	<20	<20

Surrogates

d4-1,2-dichloroethane (Surrogate)	%	-	87	88	93	95
d8-toluene (Surrogate)	%	-	91	90	98	100
Bromofluorobenzene (Surrogate)	%	-	92	89	96	96

VPH F Bands

Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25



ANALYTICAL REPORT

SE247983 R1

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE247983.013 Soil 23 May 2023 TP135_2	SE247983.014 Soil 23 May 2023 QA100	SE247983.015 Soil 23 May 2023 DRUM_1	SE247983.016 Soil 23 May 2023 GS1

TRH (Total Recoverable Hydrocarbons) in Soil Method: AN403 Tested: 26/5/2023

TRH C10-C14	mg/kg	20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210

TRH F Bands

TRH >C10-C16	mg/kg	25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120

PAH (Polynuclear Aromatic Hydrocarbons) in Soil Method: AN420 Tested: 26/5/2023

Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8

Surrogates

d5-nitrobenzene (Surrogate)	%	-	86	94	85	86
2-fluorobiphenyl (Surrogate)	%	-	86	95	86	88
d14-p-terphenyl (Surrogate)	%	-	94	103	94	94

OC Pesticides in Soil Method: AN420 Tested: 26/5/2023

Alpha BHC	mg/kg	0.1	-	-	<0.1	<0.1
Hexachlorobenzene (HCB)	mg/kg	0.1	-	-	<0.1	<0.1
Beta BHC	mg/kg	0.1	-	-	<0.1	<0.1
Lindane (gamma BHC)	mg/kg	0.1	-	-	<0.1	<0.1
Delta BHC	mg/kg	0.1	-	-	<0.1	<0.1
Heptachlor	mg/kg	0.1	-	-	<0.1	<0.1
Aldrin	mg/kg	0.1	-	-	<0.1	<0.1
Isodrin	mg/kg	0.1	-	-	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	-	-	<0.1	<0.1
Gamma Chlordane	mg/kg	0.1	-	-	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	-	-	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	-	-	<0.2	<0.2
o,p'-DDE*	mg/kg	0.1	-	-	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	-	-	<0.1	<0.1
Dieldrin	mg/kg	0.2	-	-	<0.2	<0.2
Endrin	mg/kg	0.2	-	-	<0.2	<0.2



ANALYTICAL REPORT

SE247983 R1

Parameter	Sample Number					
	Sample Matrix					
	Sample Date					
	Sample Name					
	SE247983.013	SE247983.014	SE247983.015	SE247983.016		
	Soil	Soil	Soil	Soil		
	23 May 2023	23 May 2023	23 May 2023	23 May 2023		
	TP135_2	QA100	DRUM_1	GS1		
Units	LOR					

OC Pesticides in Soil Method: AN420 Tested: 26/5/2023 (continued)

Beta Endosulfan	mg/kg	0.2	-	-	<0.2	<0.2
o,p'-DDD*	mg/kg	0.1	-	-	<0.1	<0.1
p,p'-DDD	mg/kg	0.1	-	-	<0.1	<0.1
Endrin aldehyde	mg/kg	0.1	-	-	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	-	-	<0.1	<0.1
o,p'-DDT*	mg/kg	0.1	-	-	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	-	-	<0.1	<0.1
Endrin ketone	mg/kg	0.1	-	-	<0.1	<0.1
Methoxychlor	mg/kg	0.1	-	-	<0.1	<0.1
Mirex	mg/kg	0.1	-	-	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	-	-	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	-	-	<1	<1
Total OC VIC EPA	mg/kg	1	-	-	<1	<1

Surrogates

Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	-	-	98	96

OP Pesticides in Soil Method: AN420 Tested: 26/5/2023

Azinphos-methyl (Guthion)	mg/kg	0.2	-	-	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	-	-	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	-	-	<0.2	<0.2
Diazinon (Dimpylate)	mg/kg	0.5	-	-	<0.5	<0.5
Dichlorvos	mg/kg	0.5	-	-	<0.5	<0.5
Dimethoate	mg/kg	0.5	-	-	<0.5	<0.5
Ethion	mg/kg	0.2	-	-	<0.2	<0.2
Fenitrothion	mg/kg	0.2	-	-	<0.2	<0.2
Malathion	mg/kg	0.2	-	-	<0.2	<0.2
Methidathion	mg/kg	0.5	-	-	<0.5	<0.5
Parathion-ethyl (Parathion)	mg/kg	0.2	-	-	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	-	-	<1.7	<1.7

Surrogates

2-fluorobiphenyl (Surrogate)	%	-	-	-	86	88
d14-p-terphenyl (Surrogate)	%	-	-	-	94	94

PCBs in Soil Method: AN420 Tested: 26/5/2023

Arochlor 1016	mg/kg	0.2	-	-	<0.2	-
Arochlor 1221	mg/kg	0.2	-	-	<0.2	-
Arochlor 1232	mg/kg	0.2	-	-	<0.2	-
Arochlor 1242	mg/kg	0.2	-	-	<0.2	-
Arochlor 1248	mg/kg	0.2	-	-	<0.2	-
Arochlor 1254	mg/kg	0.2	-	-	<0.2	-
Arochlor 1260	mg/kg	0.2	-	-	<0.2	-
Arochlor 1262	mg/kg	0.2	-	-	<0.2	-
Arochlor 1268	mg/kg	0.2	-	-	<0.2	-
Total PCBs (Arochlors)	mg/kg	1	-	-	<1	-

Surrogates

TCMX (Surrogate)	%	-	-	-	99	-



ANALYTICAL REPORT

SE247983 R1

Parameter	Units	LOR	Sample Number	SE247983.013	SE247983.014	SE247983.015	SE247983.016
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	23 May 2023	23 May 2023	23 May 2023	23 May 2023
			Sample Name	TP135_2	QA100	DRUM_1	GS1

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES Method: AN040/AN320 Tested: 26/5/2023

Arsenic, As	mg/kg	1	3	3	3	4
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	9.0	16	12	11
Copper, Cu	mg/kg	0.5	3.5	13	8.4	14
Nickel, Ni	mg/kg	0.5	6.5	27	4.7	21
Lead, Pb	mg/kg	1	7	9	7	8
Zinc, Zn	mg/kg	2	15	27	6.1	180

Mercury in Soil Method: AN312 Tested: 26/5/2023

Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05

Moisture Content Method: AN002 Tested: 26/5/2023

% Moisture	%w/w	1	16.4	9.5	10.4	2.5

Fibre Identification in soil Method: AS4964/AN602 Tested: 31/5/2023

FibreID

Asbestos Detected	No unit	-	-	-	No	Yes

SemiQuant

Estimated Fibres*	%w/w	0.01	-	-	<0.01	>0.01

Gravimetric Determination of Asbestos in Soil Method: AN605 Tested: 31/5/2023

Total Sample Weight*	g	1	-	-	567	482
Bonded ACM in >7mm Sample*	g	0.001	-	-	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	-	-	<0.00001	0.0445
AF/FA in <2mm Sample*	g	0.00001	-	-	<0.00001	0.0364
Asbestos in soil (>7mm ACM)*	%w/w	0.01	-	-	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	-	-	<0.001	0.009
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	-	-	<0.001	0.008
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	-	-	<0.001	0.017
Fibre Type*	No unit	-	-	-	NAD	Chrysotile, Amosite



ANALYTICAL REPORT

SE247983 R1

			Sample Number	SE247983.013	SE247983.014	SE247983.015	SE247983.016
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	23 May 2023	23 May 2023	23 May 2023	23 May 2023
			Sample Name	TP135_2	QA100	DRUM_1	GS1
Parameter	Units	LOR					

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples Method: MA-1523 Tested: 31/5/2023

Perfluorobutanoic acid (PFBA)	mg/kg	0.0016	-	-	<0.0016	-
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0016	-	-	<0.0016	-
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0016	-	-	<0.0016	-
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0016	-	-	<0.0016	-
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0008	-	-	<0.0008	-
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0016	-	-	<0.0016	-
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0016	-	-	<0.0016	-
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0016	-	-	<0.0016	-
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0016	-	-	<0.0016	-
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0016	-	-	<0.0016	-
Sum PFOS and PFHXS	mg/kg	0.0016	-	-	<0.0016	-
Perfluorononane sulfonate (PFNS)	mg/kg	0.0016	-	-	<0.0016	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.0016	-	-	<0.0016	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.0016	-	-	<0.0016	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.0016	-	-	<0.0016	-
(13C4-PFBA) Isotopically Labelled Internal Recovery	%	-	-	-	113	-
(13C5-PFPeA) Isotopically Labelled Internal Recovery	%	-	-	-	112	-
(13C5-PFHxA) Isotopically Labelled Internal Recovery	%	-	-	-	110	-
(13C4-PFHpA) Isotopically Labelled Internal Recovery	%	-	-	-	118	-
(13C4_PFOA) Isotopically Labelled Internal Recovery	%	-	-	-	115	-
(13C3-PFBS) Isotopically Labelled Internal Recovery	%	-	-	-	106	-
(13C3-PFHxS) Isotopically Labelled Internal Recovery	%	-	-	-	110	-
(13C8-PFOS) Isotopically Labelled Internal Recovery	%	-	-	-	113	-



ANALYTICAL REPORT

SE247983 R1

Parameter	Units	LOR	Sample Number	SE247983.017	SE247983.018	SE247983.019
			Sample Matrix	Soil	Soil	Soil
			Sample Date	23 May 2023	23 May 2023	23 May 2023
			Sample Name	GS3	GS5	GS7

VOC's in Soil Method: AN433 Tested: 26/5/2023

Monocyclic Aromatic Hydrocarbons

Benzene	mg/kg	0.1	<0.1	<0.1	-
Toluene	mg/kg	0.1	<0.1	<0.1	-
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	-
m/p-xylene	mg/kg	0.2	<0.2	<0.2	-
o-xylene	mg/kg	0.1	<0.1	<0.1	-

Polycyclic VOCs

Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	-

Surrogates

d4-1,2-dichloroethane (Surrogate)	%	-	84	90	-
d8-toluene (Surrogate)	%	-	86	94	-
Bromofluorobenzene (Surrogate)	%	-	85	94	-

Totals

Total BTEX*	mg/kg	0.6	<0.6	<0.6	-
Total Xylenes*	mg/kg	0.3	<0.3	<0.3	-

Volatile Petroleum Hydrocarbons in Soil Method: AN433 Tested: 26/5/2023

TRH C6-C10	mg/kg	25	<25	<25	-
TRH C6-C9	mg/kg	20	<20	<20	-

Surrogates

d4-1,2-dichloroethane (Surrogate)	%	-	84	90	-
d8-toluene (Surrogate)	%	-	86	94	-
Bromofluorobenzene (Surrogate)	%	-	85	94	-

VPH F Bands

Benzene (F0)	mg/kg	0.1	<0.1	<0.1	-
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	-



ANALYTICAL REPORT

SE247983 R1

Parameter	Units	LOR

Sample Number	SE247983.017	SE247983.018	SE247983.019
Sample Matrix	Soil	Soil	Soil
Sample Date	23 May 2023	23 May 2023	23 May 2023
Sample Name	GS3	GS5	GS7

TRH (Total Recoverable Hydrocarbons) in Soil Method: AN403 Tested: 26/5/2023

TRH C10-C14	mg/kg	20	<20	<20	-
TRH C15-C28	mg/kg	45	<45	<45	-
TRH C29-C36	mg/kg	45	82	50	-
TRH C37-C40	mg/kg	100	<100	<100	-
TRH C10-C36 Total	mg/kg	110	<110	<110	-
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	-

TRH F Bands

TRH >C10-C16	mg/kg	25	<25	<25	-
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	-
TRH >C16-C34 (F3)	mg/kg	90	95	<90	-
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	-

PAH (Polynuclear Aromatic Hydrocarbons) in Soil Method: AN420 Tested: 26/5/2023

Naphthalene	mg/kg	0.1	<0.1	<0.1	-
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	-
Acenaphthene	mg/kg	0.1	<0.1	<0.1	-
Fluorene	mg/kg	0.1	<0.1	<0.1	-
Phenanthrene	mg/kg	0.1	<0.1	<0.1	-
Anthracene	mg/kg	0.1	<0.1	<0.1	-
Fluoranthene	mg/kg	0.1	<0.1	<0.1	-
Pyrene	mg/kg	0.1	<0.1	<0.1	-
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	-
Chrysene	mg/kg	0.1	<0.1	<0.1	-
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	-
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	-
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	-
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	-
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	-
Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	<0.2	<0.2	-
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	<0.2	<0.2	-
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	<0.3	<0.3	-
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	-
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	-

Surrogates

d5-nitrobenzene (Surrogate)	%	-	87	86	-
2-fluorobiphenyl (Surrogate)	%	-	87	84	-
d14-p-terphenyl (Surrogate)	%	-	93	91	-

OC Pesticides in Soil Method: AN420 Tested: 26/5/2023

Alpha BHC	mg/kg	0.1	<0.1	<0.1	-
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	-
Beta BHC	mg/kg	0.1	<0.1	<0.1	-
Lindane (gamma BHC)	mg/kg	0.1	<0.1	<0.1	-
Delta BHC	mg/kg	0.1	<0.1	<0.1	-
Heptachlor	mg/kg	0.1	<0.1	<0.1	-
Aldrin	mg/kg	0.1	<0.1	<0.1	-
Isodrin	mg/kg	0.1	<0.1	<0.1	-
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	-
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	-
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	-
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	-
o,p'-DDE*	mg/kg	0.1	<0.1	<0.1	-
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	-
Dieldrin	mg/kg	0.2	<0.2	<0.2	-



ANALYTICAL REPORT

SE247983 R1

Parameter	Units	Sample Number	SE247983.017	SE247983.018	SE247983.019
		Sample Matrix	Soil	Soil	Soil
		Sample Date	23 May 2023	23 May 2023	23 May 2023
		Sample Name	GS3	GS5	GS7
		LOR			

OC Pesticides in Soil Method: AN420 Tested: 31/5/2023 (continued)

Endrin	mg/kg	0.2	<0.2	<0.2	-
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	-
o,p'-DDD*	mg/kg	0.1	<0.1	<0.1	-
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	-
Endrin aldehyde	mg/kg	0.1	<0.1	<0.1	-
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	-
o,p'-DDT*	mg/kg	0.1	<0.1	<0.1	-
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	-
Endrin ketone	mg/kg	0.1	<0.1	<0.1	-
Methoxychlor	mg/kg	0.1	<0.1	<0.1	-
Mirex	mg/kg	0.1	<0.1	<0.1	-
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	-
Total CLP OC Pesticides	mg/kg	1	<1	<1	-
Total OC VIC EPA	mg/kg	1	<1	<1	-

Surrogates

Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	99	94	-

OP Pesticides in Soil Method: AN420 Tested: 26/5/2023

Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	-
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	-
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	-
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	-
Dichlorvos	mg/kg	0.5	<0.5	<0.5	-
Dimethoate	mg/kg	0.5	<0.5	<0.5	-
Ethion	mg/kg	0.2	<0.2	<0.2	-
Fenitrothion	mg/kg	0.2	<0.2	<0.2	-
Malathion	mg/kg	0.2	<0.2	<0.2	-
Methidathion	mg/kg	0.5	<0.5	<0.5	-
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	-
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	-

Surrogates

2-fluorobiphenyl (Surrogate)	%	-	87	84	-
d14-p-terphenyl (Surrogate)	%	-	93	91	-

PCBs in Soil Method: AN420 Tested: 26/5/2023

Arochlor 1016	mg/kg	0.2	-	-	-
Arochlor 1221	mg/kg	0.2	-	-	-
Arochlor 1232	mg/kg	0.2	-	-	-
Arochlor 1242	mg/kg	0.2	-	-	-
Arochlor 1248	mg/kg	0.2	-	-	-
Arochlor 1254	mg/kg	0.2	-	-	-
Arochlor 1260	mg/kg	0.2	-	-	-
Arochlor 1262	mg/kg	0.2	-	-	-
Arochlor 1268	mg/kg	0.2	-	-	-
Total PCBs (Arochlors)	mg/kg	1	-	-	-



ANALYTICAL REPORT

SE247983 R1

Parameter	Units	LOR

Sample Number	SE247983.017	SE247983.018	SE247983.019
Sample Matrix	Soil	Soil	Soil
Sample Date	23 May 2023	23 May 2023	23 May 2023
Sample Name	GS3	GS5	GS7

PCBs in Soil Method: AN420 Tested: 26/5/2023 (continued)

Surrogates

TCMX (Surrogate)	%	-	-	-	-

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES Method: AN040/AN320 Tested: 26/5/2023

Arsenic, As	mg/kg	1	2	2	-
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	-
Chromium, Cr	mg/kg	0.5	7.8	7.4	-
Copper, Cu	mg/kg	0.5	14	12	-
Nickel, Ni	mg/kg	0.5	7.7	17	-
Lead, Pb	mg/kg	1	18	4	-
Zinc, Zn	mg/kg	2	89	38	-

Mercury in Soil Method: AN312 Tested: 26/5/2023

Mercury	mg/kg	0.05	<0.05	<0.05	-

Moisture Content Method: AN002 Tested: 26/5/2023

% Moisture	%w/w	1	20.4	5.3	-

Fibre Identification in soil Method: AS4964/AN602 Tested: 30/5/2023

FibreID

Asbestos Detected	No unit	-	No	Yes	Yes

SemiQuant

Estimated Fibres*	%w/w	0.01	<0.01	>0.01	>0.01



ANALYTICAL REPORT

SE247983 R1

Parameter	Units	LOR
Sample Number SE247983.017 Sample Matrix Soil Sample Date 23 May 2023 Sample Name GS3		
Sample Number SE247983.018 Sample Matrix Soil Sample Date 23 May 2023 Sample Name GS5		
Sample Number SE247983.019 Sample Matrix Soil Sample Date 23 May 2023 Sample Name GS7		

Gravimetric Determination of Asbestos in Soil Method: AN605 Tested: 30/5/2023

Total Sample Weight*	g	1	171	460	284
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	0.00940	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	0.0674	0.0396
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	0.005	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	0.015	0.014
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	0.005	0.015	0.014
Fibre Type*	No unit	-	Chrysotile, Amosite	Chrysotile, Amosite	Chrysotile, Amosite

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples Method: MA-1523 Tested: 31/5/2023

Perfluorobutanoic acid (PFBA)	mg/kg	0.0016	-	-	-
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0016	-	-	-
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0016	-	-	-
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0016	-	-	-
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0008	-	-	-
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0016	-	-	-
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0016	-	-	-
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0016	-	-	-
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0016	-	-	-
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0016	-	-	-
Sum PFOS and PFHXS	mg/kg	0.0016	-	-	-
Perfluorononane sulfonate (PFNS)	mg/kg	0.0016	-	-	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.0016	-	-	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.0016	-	-	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.0016	-	-	-
(13C4-PFBA) Isotopically Labelled Internal Recovery	%	-	-	-	-
(13C5-PFPeA) Isotopically Labelled Internal Recovery	%	-	-	-	-
(13C5-PFHxA) Isotopically Labelled Internal Recovery	%	-	-	-	-
(13C4-PFHpA) Isotopically Labelled Internal Recovery	%	-	-	-	-
(13C4_PFOA) Isotopically Labelled Internal Recovery	%	-	-	-	-
(13C3-PFBS) Isotopically Labelled Internal Recovery	%	-	-	-	-
(13C3-PFHxS) Isotopically Labelled Internal Recovery	%	-	-	-	-
(13C8-PFOS) Isotopically Labelled Internal Recovery	%	-	-	-	-

MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Mercury in Soil Method: ME-(AU)-[ENV]AN312

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Mercury	LB280666	mg/kg	0.05	<0.05	0%	108%	108%

Moisture Content Method: ME-(AU)-[ENV]AN002

Parameter	QC Reference	Units	LOR	DUP %RPD
% Moisture	LB280658	%w/w	1	7 - 10%

OC Pesticides in Soil Method: ME-(AU)-[ENV]AN420

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Alpha BHC	LB280654	mg/kg	0.1	<0.1	0%	NA	NA
Hexachlorobenzene (HCB)	LB280654	mg/kg	0.1	<0.1	0%	NA	NA
Beta BHC	LB280654	mg/kg	0.1	<0.1	0%	NA	NA
Lindane (gamma BHC)	LB280654	mg/kg	0.1	<0.1	0%	NA	NA
Delta BHC	LB280654	mg/kg	0.1	<0.1	0%	87%	89%
Heptachlor	LB280654	mg/kg	0.1	<0.1	0%	93%	94%
Aldrin	LB280654	mg/kg	0.1	<0.1	0%	90%	92%
Isodrin	LB280654	mg/kg	0.1	<0.1	0%	NA	NA
Heptachlor epoxide	LB280654	mg/kg	0.1	<0.1	0%	NA	NA
Gamma Chlordane	LB280654	mg/kg	0.1	<0.1	0%	NA	NA
Alpha Chlordane	LB280654	mg/kg	0.1	<0.1	0%	NA	NA
Alpha Endosulfan	LB280654	mg/kg	0.2	<0.2	0%	NA	NA
o,p'-DDE*	LB280654	mg/kg	0.1	<0.1	0%	NA	NA
p,p'-DDE	LB280654	mg/kg	0.1	<0.1	0%	NA	NA
Dieldrin	LB280654	mg/kg	0.2	<0.2	0%	87%	90%
Endrin	LB280654	mg/kg	0.2	<0.2	0%	94%	97%
Beta Endosulfan	LB280654	mg/kg	0.2	<0.2	0%	NA	NA
o,p'-DDD*	LB280654	mg/kg	0.1	<0.1	0%	NA	NA
p,p'-DDD	LB280654	mg/kg	0.1	<0.1	0%	NA	NA
Endrin aldehyde	LB280654	mg/kg	0.1	<0.1	0%	NA	NA
Endosulfan sulphate	LB280654	mg/kg	0.1	<0.1	0%	NA	NA
o,p'-DDT*	LB280654	mg/kg	0.1	<0.1	0%	NA	NA
p,p'-DDT	LB280654	mg/kg	0.1	<0.1	0%	83%	86%
Endrin ketone	LB280654	mg/kg	0.1	<0.1	0%	NA	NA
Methoxychlor	LB280654	mg/kg	0.1	<0.1	0%	NA	NA
Mirex	LB280654	mg/kg	0.1	<0.1	0%	NA	NA
trans-Nonachlor	LB280654	mg/kg	0.1	<0.1	0%	NA	NA
Total CLP OC Pesticides	LB280654	mg/kg	1	<1	0%	NA	NA
Total OC VIC EPA	LB280654	mg/kg	1	<1	0%	NA	NA

Surrogates

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Tetrachloro-m-xylene (TCMX) (Surrogate)	LB280654	%	-	86%	1%	95%	95%

MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

OP Pesticides in Soil Method: ME-(AU)-[ENV]AN420

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Azinphos-methyl (Guthion)	LB280654	mg/kg	0.2	<0.2	0%	NA	NA
Bromophos Ethyl	LB280654	mg/kg	0.2	<0.2	0%	NA	NA
Chlorpyrifos (Chlorpyrifos Ethyl)	LB280654	mg/kg	0.2	<0.2	0%	86%	87%
Diazinon (Dimpylate)	LB280654	mg/kg	0.5	<0.5	0%	87%	88%
Dichlorvos	LB280654	mg/kg	0.5	<0.5	0%	73%	72%
Dimethoate	LB280654	mg/kg	0.5	<0.5	0%	NA	NA
Ethion	LB280654	mg/kg	0.2	<0.2	0%	68%	72%
Fenitrothion	LB280654	mg/kg	0.2	<0.2	0%	NA	NA
Malathion	LB280654	mg/kg	0.2	<0.2	0%	NA	NA
Methidathion	LB280654	mg/kg	0.5	<0.5	0%	NA	NA
Parathion-ethyl (Parathion)	LB280654	mg/kg	0.2	<0.2	0%	NA	NA
Total OP Pesticides*	LB280654	mg/kg	1.7	<1.7	0%	NA	NA

Surrogates

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
2-fluorobiphenyl (Surrogate)	LB280654	%	-	88%	1%	92%	91%
d14-p-terphenyl (Surrogate)	LB280654	%	-	96%	0%	90%	88%

PAH (Polynuclear Aromatic Hydrocarbons) in Soil Method: ME-(AU)-[ENV]AN420

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Naphthalene	LB280654	mg/kg	0.1	<0.1	0%	90%	88%
2-methylnaphthalene	LB280654	mg/kg	0.1	<0.1	0%	NA	NA
1-methylnaphthalene	LB280654	mg/kg	0.1	<0.1	0%	NA	NA
Acenaphthylene	LB280654	mg/kg	0.1	<0.1	0%	86%	84%
Acenaphthene	LB280654	mg/kg	0.1	<0.1	0%	94%	92%
Fluorene	LB280654	mg/kg	0.1	<0.1	0%	NA	NA
Phenanthrene	LB280654	mg/kg	0.1	<0.1	0%	93%	91%
Anthracene	LB280654	mg/kg	0.1	<0.1	0%	89%	87%
Fluoranthene	LB280654	mg/kg	0.1	<0.1	0%	88%	87%
Pyrene	LB280654	mg/kg	0.1	<0.1	0%	94%	90%
Benzo(a)anthracene	LB280654	mg/kg	0.1	<0.1	0%	NA	NA
Chrysene	LB280654	mg/kg	0.1	<0.1	0%	NA	NA
Benzo(b&j)fluoranthene	LB280654	mg/kg	0.1	<0.1	0%	NA	NA
Benzo(k)fluoranthene	LB280654	mg/kg	0.1	<0.1	0%	NA	NA
Benzo(a)pyrene	LB280654	mg/kg	0.1	<0.1	0%	89%	87%
Indeno(1,2,3-cd)pyrene	LB280654	mg/kg	0.1	<0.1	0%	NA	NA
Dibenzo(ah)anthracene	LB280654	mg/kg	0.1	<0.1	0%	NA	NA
Benzo(ghi)perylene	LB280654	mg/kg	0.1	<0.1	0%	NA	NA
Carcinogenic PAHs, BaP TEQ <LOR=0*	LB280654	TEQ (mg/kg)	0.2	<0.2	0%	NA	NA
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	LB280654	TEQ (mg/kg)	0.2	<0.2	0%	NA	NA
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	LB280654	TEQ (mg/kg)	0.3	<0.3	0%	NA	NA
Total PAH (18)	LB280654	mg/kg	0.8	<0.8	0%	NA	NA
Total PAH (NEPM/WHO 16)	LB280654	mg/kg	0.8	<0.8			

Surrogates

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
d5-nitrobenzene (Surrogate)	LB280654	%	-	85%	0 - 1%	85%	85%
2-fluorobiphenyl (Surrogate)	LB280654	%	-	88%	0 - 1%	92%	91%
d14-p-terphenyl (Surrogate)	LB280654	%	-	96%	0 - 2%	90%	88%

MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

PCBs in Soil Method: ME-(AU)-[ENV]AN420

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery	MS %Recovery
Arochlor 1016	LB280654	mg/kg	0.2	<0.2	NA	NA
Arochlor 1221	LB280654	mg/kg	0.2	<0.2	NA	NA
Arochlor 1232	LB280654	mg/kg	0.2	<0.2	NA	NA
Arochlor 1242	LB280654	mg/kg	0.2	<0.2	NA	NA
Arochlor 1248	LB280654	mg/kg	0.2	<0.2	NA	NA
Arochlor 1254	LB280654	mg/kg	0.2	<0.2	NA	NA
Arochlor 1260	LB280654	mg/kg	0.2	<0.2	84%	91%
Arochlor 1262	LB280654	mg/kg	0.2	<0.2	NA	NA
Arochlor 1268	LB280654	mg/kg	0.2	<0.2	NA	NA
Total PCBs (Arochlors)	LB280654	mg/kg	1	<1	NA	NA

Surrogates

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery	MS %Recovery
TCMX (Surrogate)	LB280654	%	-	88%	96%	96%

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES Method: ME-(AU)-[ENV]AN040/AN320

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Arsenic, As	LB280656	mg/kg	1	<1	15 - 42%	112%	100%
Cadmium, Cd	LB280656	mg/kg	0.3	<0.3	0%	82%	82%
Chromium, Cr	LB280656	mg/kg	0.5	<0.5	5 - 9%	109%	100%
Copper, Cu	LB280656	mg/kg	0.5	<0.5	0 - 24%	116%	103%
Nickel, Ni	LB280656	mg/kg	0.5	<0.5	0 - 18%	106%	101%
Lead, Pb	LB280656	mg/kg	1	<1	1 - 11%	109%	101%
Zinc, Zn	LB280656	mg/kg	2	<2.0	6 - 12%	109%	102%

TRH (Total Recoverable Hydrocarbons) in Soil Method: ME-(AU)-[ENV]AN403

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
TRH C10-C14	LB280654	mg/kg	20	<20	0%	123%	136%
TRH C15-C28	LB280654	mg/kg	45	<45	0%	97%	108%
TRH C29-C36	LB280654	mg/kg	45	<45	0 - 1%	81%	70%
TRH C37-C40	LB280654	mg/kg	100	<100	0%	NA	NA
TRH C10-C36 Total	LB280654	mg/kg	110	<110	0%	NA	NA
TRH >C10-C40 Total (F bands)	LB280654	mg/kg	210	<210	0%	NA	NA

TRH F Bands

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
TRH >C10-C16	LB280654	mg/kg	25	<25	0%	120%	132%
TRH >C10-C16 - Naphthalene (F2)	LB280654	mg/kg	25	<25	0%	NA	NA
TRH >C16-C34 (F3)	LB280654	mg/kg	90	<90	0%	83%	87%
TRH >C34-C40 (F4)	LB280654	mg/kg	120	<120	0%	82%	NA

MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

VOC's in Soil Method: ME-(AU)-[ENV]AN433

Monocyclic Aromatic Hydrocarbons

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Benzene	LB280655	mg/kg	0.1	<0.1	0%	103%	99%
Toluene	LB280655	mg/kg	0.1	<0.1	0%	98%	97%
Ethylbenzene	LB280655	mg/kg	0.1	<0.1	0%	93%	94%
m/p-xylene	LB280655	mg/kg	0.2	<0.2	0%	93%	94%
o-xylene	LB280655	mg/kg	0.1	<0.1	0%	95%	96%

Polycyclic VOCs

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Naphthalene (VOC)*	LB280655	mg/kg	0.1	<0.1	0%	NA	NA

Surrogates

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
d4-1,2-dichloroethane (Surrogate)	LB280655	%	-	97%	1 - 5%	108%	108%
d8-toluene (Surrogate)	LB280655	%	-	98%	0 - 5%	110%	108%
Bromofluorobenzene (Surrogate)	LB280655	%	-	98%	2 - 7%	98%	99%

Totals

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Total BTEX*	LB280655	mg/kg	0.6	<0.6	0%	NA	NA
Total Xylenes*	LB280655	mg/kg	0.3	<0.3	0%	NA	NA

Volatile Petroleum Hydrocarbons in Soil Method: ME-(AU)-[ENV]AN433

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
TRH C6-C10	LB280655	mg/kg	25	<25	0%	92%	103%
TRH C6-C9	LB280655	mg/kg	20	<20	0%	92%	103%

Surrogates

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
d4-1,2-dichloroethane (Surrogate)	LB280655	%	-	97%	1 - 5%	108%	108%
d8-toluene (Surrogate)	LB280655	%	-	98%	0 - 5%	110%	108%
Bromofluorobenzene (Surrogate)	LB280655	%	-	98%	2 - 7%	98%	99%

VPH F Bands

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Benzene (F0)	LB280655	mg/kg	0.1	<0.1	0%	NA	NA
TRH C6-C10 minus BTEX (F1)	LB280655	mg/kg	25	<25	0%	90%	106%

METHOD

METHODOLOGY SUMMARY

AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by AAS or ICP as per USEPA Method 200.8.
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.
AN312	Mercury by Cold Vapour AAS in Soils: After digestion with nitric acid, hydrogen peroxide and hydrochloric acid, mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). F2 is reported directly and also corrected by subtracting Naphthalene (from VOC method AN433) where available.
AN403	Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Recoverable Hydrocarbons - Silica (TRH-Si) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents.
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D). Total PAH calculated from individual analyte detections at or above the limit of reporting.
AN420	SVOC Compounds: Semi-Volatile Organic Compounds (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC's are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.

METHOD

METHODOLOGY SUMMARY

AN602/AS4964

Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic 'clues', which provide a reasonable degree of certainty, dispersion staining is a mandatory 'clue' for positive identification. If sufficient 'clues' are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.

AN602/AS4964

Fibres/material that cannot be unequivocally identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf). The fibres detected may or may not be asbestos fibres.

AN602/AS4964

AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples, Section 8.4, Trace Analysis Criteria, Note 4 states: "Depending upon sample condition and fibre type, the detection/reporting limit (RL) of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."

AN602/AS4964

The sample can be reported "no asbestos found at the reporting limit (RL) of 0.1 g/kg" (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if-

- (a) no trace asbestos fibres have been detected (i.e. no 'respirable' fibres);
- (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg; and
- (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.

AN605

This technique gravimetrically determines the mass of Bonded Asbestos Containing Material retained on a 7mm Sieve and assumes that 15% of this ACM is asbestos. This calculated asbestos weight is then calculated as a percentage of the total sample weight. Any fibrous asbestos (FA) found in this fraction will be added to the 2-7mm fraction and its mass recorded there.

AN605

This technique also gravimetrically determines the mass of Fibrous Asbestos (FA) and Asbestos Fines (AF) Containing Material retained on and passing a 2mm sieve post 7mm sieving. Assumes that FA and AF are 100% asbestos containing. This calculated asbestos weight is then calculated as a percentage of the total sample weight. This does not include free/respirable fibres which are only observed by standard trace analysis as per AN602.

AN605

Bonded asbestos containing material (Bonded ACM) comprises asbestos-containing-material which is sound in condition.

Fibrous asbestos (FA) comprises friable asbestos material and includes severely weathered cement sheet, insulation products and woven asbestos material.

Asbestos fines (AF) includes free fibres, small fibre bundles and also small fragments of bonded ACM that passes through a 7mm sieve - which implies that the bonded ACM fragments have a substantial degree of damage which increases the potential for fibre release.

AN-605

Insofar as is technically feasible, this report is consistent with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment Remediation and Management of Asbestos - Contaminated Sites in Western Australia - May 2009 and NEPM 1999 (2013) schedule B1 section 4..

MA-1523

This method covers the analysis of per- and polyfluoroalkyl substances (PFAS) in aqueous, solid and biosolid samples and solvent extracts, determined as the total of linear and branched isomers. After spiking with isotopically labelled quantification surrogates and clean-up via SPE cartridges sample extracts are analysed by liquid chromatography/mass spectrometry (LC-MS/MS). PFAS concentrations are determined by isotope dilution quantification.

FOOTNOTES

IS	Insufficient sample for analysis.	LOR	Limit of Reporting
LNR	Sample listed, but not received.	↑↓	Raised or Lowered Limit of Reporting
*	NATA accreditation does not cover the performance of this service.	QFH	QC result is above the upper tolerance
**	Indicative data, theoretical holding time exceeded.	QFL	QC result is below the lower tolerance
***	Indicates that both * and ** apply.	-	The sample was not analysed for this analyte
		NVL	Not Validated

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.

Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the "Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.

Note that in terms of units of radioactivity:

- 1 Bq is equivalent to 27 pCi
- 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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ANALYTICAL REPORT



Accreditation No. 2562

CLIENT DETAILS

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SGS Reference SE247983 R1
Date Received 23 May 2023
Date Reported 01 Jun 2023

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

This report cancels and supersedes the report No. SE247983 R0 dated 31.05.2023 issued by SGS Environment, Health and Safety due to amended asbestos results.

PFAS subcontracted to SGS Melbourne, 10/585 Blackburn Road, Notting Hill, VIC, NATA Accreditation Number. 2562/14420. Report No ME334394

No respirable fibres detected in all soil samples using trace analysis technique.

Sample #16: Asbestos found as approx 7-8 x 2mm and loose fibre bundles x >10 and found as 8x4x2mm fibrous mass.

Sample #17: Asbestos found as approx 6-7 x 2mm loose fibre bundles x > 10.

Sample #18: Asbestos found as approx 6-7 x 2mm loose fibre bundles x > 10.

Sample #19: Asbestos found as approx 5-6 x 2mm loose fibre bundles x > 10.

Asbestos analysed by Approved Identifiers Ravee Sivasubramaniam and Yusuf Kuthpudin

SIGNATORIES

Ravee SIVASUBRAMANIAM
Hygiene Team Leader

RESULTS

Fibre Identification in soil

Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE247983.001	TP129_0.3	Soil	572g Sand, Soil, Rocks	23 May 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE247983.003	TP130_0.3	Soil	606g Clay, Sand, Rocks	23 May 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE247983.005	TP131_0.3	Soil	587g Clay, Sand, Soil, Rocks	23 May 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE247983.007	TP133_0.3	Soil	789g Clay, Sand, Rocks	23 May 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE247983.009	TP134_0.3	Soil	798g Sand, Rocks	23 May 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE247983.011	TP135_0.3	Soil	539g Sand, Soil, Rocks	23 May 2023	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE247983.015	DRUM_1	Soil	567g Clay, Sand, Rocks	23 May 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE247983.016	GS1	Soil	482g Sand, Soil, Rocks	23 May 2023	Amosite & Chrysotile Asbestos Found at RL of 0.1g/kg	>0.01
SE247983.017	GS3	Soil	171g Sand, Soil, Rocks, Plant Matter	23 May 2023	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE247983.018	GS5	Soil	460g Sand, Soil, Rocks, Plant Matter	23 May 2023	Amosite & Chrysotile Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	>0.01
SE247983.019	GS7	Soil	284g Sand, Soil, Rocks, Plant Matter	23 May 2023	Amosite & Chrysotile Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	>0.01



ANALYTICAL REPORT

SE247983 R1

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 30/5/2023

PARAMETER	UOM	LOR	TP129_0.3	TP130_0.3	TP131_0.3	TP133_0.3	TP134_0.3
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			23/5/2023 SE247983.001	23/5/2023 SE247983.003	23/5/2023 SE247983.005	23/5/2023 SE247983.007	23/5/2023 SE247983.009
Total Sample Weight*	g	1	572	606	587	789	798
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	NAD	NAD	NAD	NAD	NAD

PARAMETER	UOM	LOR	TP135_0.3	DRUM_1	GS1	GS3	GS5
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			23/5/2023 SE247983.011	23/5/2023 SE247983.015	23/5/2023 SE247983.016	23/5/2023 SE247983.017	23/5/2023 SE247983.018
Total Sample Weight*	g	1	539	567	482	171	460
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	0.0445	0.00940	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	0.0364	<0.00001	0.0674
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	0.009	0.005	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	0.008	<0.001	0.015
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	0.017	0.005	0.015
Fibre Type*	No unit	-	NAD	NAD	Chrysotile, Amosite	Chrysotile, Amosite	Chrysotile, Amosite

PARAMETER	UOM	LOR	GS7
			SOIL
			-
			23/5/2023 SE247983.019
Total Sample Weight*	g	1	284
Bonded ACM in >7mm Sample*	g	0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	0.0396
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	0.014
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	0.014
Fibre Type*	No unit	-	Chrysotile, Amosite

METHOD

METHODOLOGY SUMMARY

AN602/AS4964	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic 'clues', which provide a reasonable degree of certainty, dispersion staining is a mandatory 'clue' for positive identification. If sufficient 'clues' are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602/AS4964	Fibres/material that cannot be unequivocally identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602/AS4964	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples, Section 8.4, Trace Analysis Criteria, Note 4 states: "Depending upon sample condition and fibre type, the detection/reporting limit (RL) of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602/AS4964	The sample can be reported "no asbestos found at the reporting limit (RL) of 0.1 g/kg" (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no 'respirable' fibres); (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg; and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.
AN605	This technique gravimetrically determines the mass of Bonded Asbestos Containing Material retained on a 7mm Sieve and assumes that 15% of this ACM is asbestos. This calculated asbestos weight is then calculated as a percentage of the total sample weight. Any fibrous asbestos (FA) found in this fraction will be added to the 2-7mm fraction and its mass recorded there.
AN605	This technique also gravimetrically determines the mass of Fibrous Asbestos (FA) and Asbestos Fines (AF) Containing Material retained on and passing a 2mm sieve post 7mm sieving. Assumes that FA and AF are 100% asbestos containing. This calculated asbestos weight is then calculated as a percentage of the total sample weight. This does not include free/respirable fibres which are only observed by standard trace analysis as per AN602.
AN605	Bonded asbestos containing material (Bonded ACM) comprises asbestos-containing-material which is sound in condition. Fibrous asbestos (FA) comprises friable asbestos material and includes severely weathered cement sheet, insulation products and woven asbestos material. Asbestos fines (AF) includes free fibres, small fibre bundles and also small fragments of bonded ACM that passes through a 7mm sieve - which implies that the bonded ACM fragments have a substantial degree of damage which increases the potential for fibre release.
AN-605	Insofar as is technically feasible, this report is consistent with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment Remediation and Management of Asbestos - Contaminated Sites in Western Australia - May 2009 and NEPM 1999 (2013) schedule B1 section 4..

FOOTNOTES

Amosite	-	Brown Asbestos	NA	-	Not Analysed
Chrysotile	-	White Asbestos	LNR	-	Listed, Not Required
Crocidolite	-	Blue Asbestos	*	-	NATA accreditation does not cover the performance of this service.
Amphiboles	-	Amosite and/or Crocidolite	**	-	Indicative data, theoretical holding time exceeded.
			***	-	Indicates that both * and ** apply.

(In reference to soil samples only) This report does not comply with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment and Remediation and Management of Asbestos Contaminated sites in Western Australia - May 2009.

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.

Where reported: 'Asbestos Detected': Asbestos detected by polarised light microscopy, including dispersion staining.

Where reported: 'No Asbestos Found': No Asbestos Found by polarised light microscopy, including dispersion staining.

Where reported: 'UMF Detected': Mineral fibres of unknown type detected by polarised light microscopy, including dispersion staining. Confirmation by another independent analytical technique may be necessary.

Even after disintegration it can be very difficult, or impossible, to detect the presence of asbestos in some asbestos-containing bulk materials using polarised light microscopy. This is due to the low grade or small length or diameter of asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE247983 R1

CLIENT DETAILS

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Project **300304375 Racecourse Rd**
Order Number **300304375**
Samples 19

LABORATORY DETAILS

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SGS Reference **SE247983 R1**
Date Received 23 May 2023
Date Reported 01 Jun 2023

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.

This QA/QC Statement must be read in conjunction with the referenced Analytical Report.

The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met (within the SGS Alexandria Environmental laboratory).

SAMPLE SUMMARY

Sample counts by matrix	19 Soil	Type of documentation received	COC
Date documentation received	24/5/2023@10:06ar	Samples received in good order	Yes
Samples received without headspace	Yes	Sample temperature upon receipt	4.7°C
Sample container provider	Other Lab	Turnaround time requested	Standard
Samples received in correct containers	Yes	Sufficient sample for analysis	Yes
Sample cooling method	Ice	Samples clearly labelled	Yes
Complete documentation received	Yes	Number of eskies/boxes received	



HOLDING TIME SUMMARY

SE247983 R1

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Fibre Identification in soil

Method: ME-(AU)-[ENV]AS4964/AN602

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP129_0.3	SE247983.001	LB280944	23 May 2023	23 May 2023	22 May 2024	30 May 2023	22 May 2024	31 May 2023
TP130_0.3	SE247983.003	LB280944	23 May 2023	23 May 2023	22 May 2024	30 May 2023	22 May 2024	31 May 2023
TP131_0.3	SE247983.005	LB280944	23 May 2023	23 May 2023	22 May 2024	30 May 2023	22 May 2024	31 May 2023
TP133_0.3	SE247983.007	LB280944	23 May 2023	23 May 2023	22 May 2024	30 May 2023	22 May 2024	31 May 2023
TP134_0.3	SE247983.009	LB280944	23 May 2023	23 May 2023	22 May 2024	30 May 2023	22 May 2024	31 May 2023
TP135_0.3	SE247983.011	LB280944	23 May 2023	23 May 2023	22 May 2024	30 May 2023	22 May 2024	31 May 2023
DRUM_1	SE247983.015	LB280944	23 May 2023	23 May 2023	22 May 2024	30 May 2023	22 May 2024	31 May 2023
GS1	SE247983.016	LB280944	23 May 2023	23 May 2023	22 May 2024	30 May 2023	22 May 2024	31 May 2023
GS3	SE247983.017	LB280944	23 May 2023	23 May 2023	22 May 2024	30 May 2023	22 May 2024	31 May 2023
GS5	SE247983.018	LB280944	23 May 2023	23 May 2023	22 May 2024	30 May 2023	22 May 2024	31 May 2023
GS7	SE247983.019	LB280944	23 May 2023	23 May 2023	22 May 2024	30 May 2023	22 May 2024	31 May 2023

Gravimetric Determination of Asbestos in Soil

Method: ME-(AU)-[ENV]AN605

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP129_0.3	SE247983.001	LB280944	23 May 2023	23 May 2023	19 Nov 2023	30 May 2023	19 Nov 2023	31 May 2023
TP130_0.3	SE247983.003	LB280944	23 May 2023	23 May 2023	19 Nov 2023	30 May 2023	19 Nov 2023	31 May 2023
TP131_0.3	SE247983.005	LB280944	23 May 2023	23 May 2023	19 Nov 2023	30 May 2023	19 Nov 2023	31 May 2023
TP133_0.3	SE247983.007	LB280944	23 May 2023	23 May 2023	19 Nov 2023	30 May 2023	19 Nov 2023	31 May 2023
TP134_0.3	SE247983.009	LB280944	23 May 2023	23 May 2023	19 Nov 2023	30 May 2023	19 Nov 2023	31 May 2023
TP135_0.3	SE247983.011	LB280944	23 May 2023	23 May 2023	19 Nov 2023	30 May 2023	19 Nov 2023	31 May 2023
DRUM_1	SE247983.015	LB280944	23 May 2023	23 May 2023	19 Nov 2023	30 May 2023	19 Nov 2023	31 May 2023
GS1	SE247983.016	LB280944	23 May 2023	23 May 2023	19 Nov 2023	30 May 2023	19 Nov 2023	31 May 2023
GS3	SE247983.017	LB280944	23 May 2023	23 May 2023	19 Nov 2023	30 May 2023	19 Nov 2023	31 May 2023
GS5	SE247983.018	LB280944	23 May 2023	23 May 2023	19 Nov 2023	30 May 2023	19 Nov 2023	31 May 2023
GS7	SE247983.019	LB280944	23 May 2023	23 May 2023	19 Nov 2023	30 May 2023	19 Nov 2023	31 May 2023

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP129_0.3	SE247983.001	LB280666	23 May 2023	23 May 2023	20 Jun 2023	26 May 2023	20 Jun 2023	30 May 2023
TP129_0.5	SE247983.002	LB280666	23 May 2023	23 May 2023	20 Jun 2023	26 May 2023	20 Jun 2023	30 May 2023
TP130_0.3	SE247983.003	LB280666	23 May 2023	23 May 2023	20 Jun 2023	26 May 2023	20 Jun 2023	30 May 2023
TP130_1.5	SE247983.004	LB280666	23 May 2023	23 May 2023	20 Jun 2023	26 May 2023	20 Jun 2023	30 May 2023
TP131_0.3	SE247983.005	LB280666	23 May 2023	23 May 2023	20 Jun 2023	26 May 2023	20 Jun 2023	30 May 2023
TP131_1	SE247983.006	LB280666	23 May 2023	23 May 2023	20 Jun 2023	26 May 2023	20 Jun 2023	30 May 2023
TP133_0.3	SE247983.007	LB280666	23 May 2023	23 May 2023	20 Jun 2023	26 May 2023	20 Jun 2023	30 May 2023
TP133_1	SE247983.008	LB280666	23 May 2023	23 May 2023	20 Jun 2023	26 May 2023	20 Jun 2023	30 May 2023
TP134_0.3	SE247983.009	LB280666	23 May 2023	23 May 2023	20 Jun 2023	26 May 2023	20 Jun 2023	30 May 2023
TP134_0.5	SE247983.010	LB280666	23 May 2023	23 May 2023	20 Jun 2023	26 May 2023	20 Jun 2023	30 May 2023
TP135_0.3	SE247983.011	LB280666	23 May 2023	23 May 2023	20 Jun 2023	26 May 2023	20 Jun 2023	30 May 2023
TP135_1.5	SE247983.012	LB280666	23 May 2023	23 May 2023	20 Jun 2023	26 May 2023	20 Jun 2023	30 May 2023
TP135_2	SE247983.013	LB280666	23 May 2023	23 May 2023	20 Jun 2023	26 May 2023	20 Jun 2023	30 May 2023
QA100	SE247983.014	LB280666	23 May 2023	23 May 2023	20 Jun 2023	26 May 2023	20 Jun 2023	30 May 2023
DRUM_1	SE247983.015	LB280666	23 May 2023	23 May 2023	20 Jun 2023	26 May 2023	20 Jun 2023	30 May 2023
GS1	SE247983.016	LB280666	23 May 2023	23 May 2023	20 Jun 2023	26 May 2023	20 Jun 2023	30 May 2023
GS3	SE247983.017	LB280666	23 May 2023	23 May 2023	20 Jun 2023	26 May 2023	20 Jun 2023	30 May 2023
GS5	SE247983.018	LB280666	23 May 2023	23 May 2023	20 Jun 2023	26 May 2023	20 Jun 2023	30 May 2023

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP129_0.3	SE247983.001	LB280658	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	31 May 2023	30 May 2023
TP129_0.5	SE247983.002	LB280658	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	31 May 2023	30 May 2023
TP130_0.3	SE247983.003	LB280658	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	31 May 2023	30 May 2023
TP130_1.5	SE247983.004	LB280658	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	31 May 2023	30 May 2023
TP131_0.3	SE247983.005	LB280658	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	31 May 2023	30 May 2023
TP131_1	SE247983.006	LB280658	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	31 May 2023	30 May 2023
TP133_0.3	SE247983.007	LB280658	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	31 May 2023	30 May 2023
TP133_1	SE247983.008	LB280658	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	31 May 2023	30 May 2023
TP134_0.3	SE247983.009	LB280658	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	31 May 2023	30 May 2023
TP134_0.5	SE247983.010	LB280658	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	31 May 2023	30 May 2023
TP135_0.3	SE247983.011	LB280658	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	31 May 2023	30 May 2023
TP135_1.5	SE247983.012	LB280658	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	31 May 2023	30 May 2023



HOLDING TIME SUMMARY

SE247983 R1

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Moisture Content (continued)

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP135_2	SE247983.013	LB280658	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	31 May 2023	30 May 2023
QA100	SE247983.014	LB280658	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	31 May 2023	30 May 2023
DRUM_1	SE247983.015	LB280658	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	31 May 2023	30 May 2023
GS1	SE247983.016	LB280658	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	31 May 2023	30 May 2023
GS3	SE247983.017	LB280658	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	31 May 2023	30 May 2023
GS5	SE247983.018	LB280658	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	31 May 2023	30 May 2023

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP129_0.3	SE247983.001	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	31 May 2023
TP129_0.5	SE247983.002	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	31 May 2023
TP130_0.3	SE247983.003	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	31 May 2023
TP130_1.5	SE247983.004	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	31 May 2023
TP131_0.3	SE247983.005	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	31 May 2023
TP131_1	SE247983.006	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	31 May 2023
TP133_0.3	SE247983.007	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	31 May 2023
TP133_1	SE247983.008	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	31 May 2023
TP134_0.3	SE247983.009	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	31 May 2023
TP134_0.5	SE247983.010	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	31 May 2023
TP135_0.3	SE247983.011	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	31 May 2023
TP135_1.5	SE247983.012	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	31 May 2023
TP135_2	SE247983.013	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	31 May 2023
QA100	SE247983.014	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	31 May 2023
DRUM_1	SE247983.015	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	31 May 2023
GS1	SE247983.016	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	31 May 2023
GS3	SE247983.017	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	31 May 2023
GS5	SE247983.018	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	31 May 2023

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP129_0.3	SE247983.001	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	30 May 2023
TP129_0.5	SE247983.002	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	30 May 2023
TP130_0.3	SE247983.003	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	30 May 2023
TP130_1.5	SE247983.004	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	30 May 2023
TP131_0.3	SE247983.005	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	30 May 2023
TP131_1	SE247983.006	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	30 May 2023
TP133_0.3	SE247983.007	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	30 May 2023
TP133_1	SE247983.008	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	30 May 2023
TP134_0.3	SE247983.009	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	30 May 2023
TP134_0.5	SE247983.010	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	30 May 2023
TP135_0.3	SE247983.011	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	30 May 2023
TP135_1.5	SE247983.012	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	30 May 2023
TP135_2	SE247983.013	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	30 May 2023
QA100	SE247983.014	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	30 May 2023
DRUM_1	SE247983.015	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	30 May 2023
GS1	SE247983.016	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	30 May 2023
GS3	SE247983.017	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	30 May 2023
GS5	SE247983.018	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	30 May 2023

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP129_0.3	SE247983.001	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	30 May 2023
TP129_0.5	SE247983.002	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	30 May 2023
TP130_0.3	SE247983.003	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	30 May 2023
TP130_1.5	SE247983.004	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	30 May 2023
TP131_0.3	SE247983.005	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	30 May 2023
TP131_1	SE247983.006	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	30 May 2023
TP133_0.3	SE247983.007	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	30 May 2023
TP133_1	SE247983.008	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	30 May 2023
TP134_0.3	SE247983.009	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	30 May 2023
TP134_0.5	SE247983.010	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	30 May 2023



HOLDING TIME SUMMARY

SE247983 R1

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP135_0.3	SE247983.011	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	30 May 2023
TP135_1.5	SE247983.012	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	30 May 2023
TP135_2	SE247983.013	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	30 May 2023
QA100	SE247983.014	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	30 May 2023
DRUM_1	SE247983.015	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	30 May 2023
GS1	SE247983.016	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	30 May 2023
GS3	SE247983.017	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	30 May 2023
GS5	SE247983.018	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	30 May 2023

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP129_0.3	SE247983.001	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	31 May 2023
TP129_0.5	SE247983.002	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	31 May 2023
TP130_0.3	SE247983.003	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	31 May 2023
TP130_1.5	SE247983.004	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	31 May 2023
TP131_0.3	SE247983.005	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	31 May 2023
TP131_1	SE247983.006	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	31 May 2023
TP133_0.3	SE247983.007	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	31 May 2023
TP133_1	SE247983.008	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	31 May 2023
TP134_0.3	SE247983.009	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	31 May 2023
TP134_0.5	SE247983.010	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	31 May 2023
TP135_0.3	SE247983.011	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	31 May 2023
TP135_1.5	SE247983.012	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	31 May 2023
TP135_2	SE247983.013	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	31 May 2023
QA100	SE247983.014	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	31 May 2023
DRUM_1	SE247983.015	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	31 May 2023
GS1	SE247983.016	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	31 May 2023
GS3	SE247983.017	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	31 May 2023
GS5	SE247983.018	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	31 May 2023

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP129_0.3	SE247983.001	LB280656	23 May 2023	23 May 2023	19 Nov 2023	26 May 2023	19 Nov 2023	30 May 2023
TP129_0.5	SE247983.002	LB280656	23 May 2023	23 May 2023	19 Nov 2023	26 May 2023	19 Nov 2023	30 May 2023
TP130_0.3	SE247983.003	LB280656	23 May 2023	23 May 2023	19 Nov 2023	26 May 2023	19 Nov 2023	30 May 2023
TP130_1.5	SE247983.004	LB280656	23 May 2023	23 May 2023	19 Nov 2023	26 May 2023	19 Nov 2023	30 May 2023
TP131_0.3	SE247983.005	LB280656	23 May 2023	23 May 2023	19 Nov 2023	26 May 2023	19 Nov 2023	30 May 2023
TP131_1	SE247983.006	LB280656	23 May 2023	23 May 2023	19 Nov 2023	26 May 2023	19 Nov 2023	30 May 2023
TP133_0.3	SE247983.007	LB280656	23 May 2023	23 May 2023	19 Nov 2023	26 May 2023	19 Nov 2023	30 May 2023
TP133_1	SE247983.008	LB280656	23 May 2023	23 May 2023	19 Nov 2023	26 May 2023	19 Nov 2023	30 May 2023
TP134_0.3	SE247983.009	LB280656	23 May 2023	23 May 2023	19 Nov 2023	26 May 2023	19 Nov 2023	30 May 2023
TP134_0.5	SE247983.010	LB280656	23 May 2023	23 May 2023	19 Nov 2023	26 May 2023	19 Nov 2023	30 May 2023
TP135_0.3	SE247983.011	LB280656	23 May 2023	23 May 2023	19 Nov 2023	26 May 2023	19 Nov 2023	30 May 2023
TP135_1.5	SE247983.012	LB280656	23 May 2023	23 May 2023	19 Nov 2023	26 May 2023	19 Nov 2023	30 May 2023
TP135_2	SE247983.013	LB280656	23 May 2023	23 May 2023	19 Nov 2023	26 May 2023	19 Nov 2023	30 May 2023
QA100	SE247983.014	LB280656	23 May 2023	23 May 2023	19 Nov 2023	26 May 2023	19 Nov 2023	30 May 2023
DRUM_1	SE247983.015	LB280656	23 May 2023	23 May 2023	19 Nov 2023	26 May 2023	19 Nov 2023	30 May 2023
GS1	SE247983.016	LB280656	23 May 2023	23 May 2023	19 Nov 2023	26 May 2023	19 Nov 2023	30 May 2023
GS3	SE247983.017	LB280656	23 May 2023	23 May 2023	19 Nov 2023	26 May 2023	19 Nov 2023	30 May 2023
GS5	SE247983.018	LB280656	23 May 2023	23 May 2023	19 Nov 2023	26 May 2023	19 Nov 2023	30 May 2023

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP129_0.3	SE247983.001	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	31 May 2023
TP129_0.5	SE247983.002	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	31 May 2023
TP130_0.3	SE247983.003	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	31 May 2023
TP130_1.5	SE247983.004	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	31 May 2023
TP131_0.3	SE247983.005	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	31 May 2023
TP131_1	SE247983.006	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	31 May 2023
TP133_0.3	SE247983.007	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	31 May 2023
TP133_1	SE247983.008	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	31 May 2023



HOLDING TIME SUMMARY

SE247983 R1

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]JAN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP134_0.3	SE247983.009	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	31 May 2023
TP134_0.5	SE247983.010	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	31 May 2023
TP135_0.3	SE247983.011	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	31 May 2023
TP135_1.5	SE247983.012	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	31 May 2023
TP135_2	SE247983.013	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	31 May 2023
QA100	SE247983.014	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	31 May 2023
DRUM_1	SE247983.015	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	31 May 2023
GS1	SE247983.016	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	31 May 2023
GS3	SE247983.017	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	31 May 2023
GS5	SE247983.018	LB280654	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	05 Jul 2023	31 May 2023

VOC's in Soil

Method: ME-(AU)-[ENV]JAN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP129_0.3	SE247983.001	LB280655	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	06 Jun 2023	30 May 2023
TP129_0.5	SE247983.002	LB280655	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	06 Jun 2023	30 May 2023
TP130_0.3	SE247983.003	LB280655	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	06 Jun 2023	30 May 2023
TP130_1.5	SE247983.004	LB280655	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	06 Jun 2023	30 May 2023
TP131_0.3	SE247983.005	LB280655	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	06 Jun 2023	30 May 2023
TP131_1	SE247983.006	LB280655	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	06 Jun 2023	30 May 2023
TP133_0.3	SE247983.007	LB280655	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	06 Jun 2023	30 May 2023
TP133_1	SE247983.008	LB280655	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	06 Jun 2023	30 May 2023
TP134_0.3	SE247983.009	LB280655	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	06 Jun 2023	30 May 2023
TP134_0.5	SE247983.010	LB280655	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	06 Jun 2023	30 May 2023
TP135_0.3	SE247983.011	LB280655	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	06 Jun 2023	30 May 2023
TP135_1.5	SE247983.012	LB280655	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	06 Jun 2023	30 May 2023
TP135_2	SE247983.013	LB280655	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	06 Jun 2023	30 May 2023
QA100	SE247983.014	LB280655	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	06 Jun 2023	30 May 2023
DRUM_1	SE247983.015	LB280655	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	06 Jun 2023	30 May 2023
GS1	SE247983.016	LB280655	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	06 Jun 2023	30 May 2023
GS3	SE247983.017	LB280655	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	06 Jun 2023	30 May 2023
GS5	SE247983.018	LB280655	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	06 Jun 2023	30 May 2023

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]JAN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP129_0.3	SE247983.001	LB280655	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	06 Jun 2023	30 May 2023
TP129_0.5	SE247983.002	LB280655	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	06 Jun 2023	30 May 2023
TP130_0.3	SE247983.003	LB280655	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	06 Jun 2023	30 May 2023
TP130_1.5	SE247983.004	LB280655	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	06 Jun 2023	30 May 2023
TP131_0.3	SE247983.005	LB280655	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	06 Jun 2023	30 May 2023
TP131_1	SE247983.006	LB280655	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	06 Jun 2023	30 May 2023
TP133_0.3	SE247983.007	LB280655	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	06 Jun 2023	30 May 2023
TP133_1	SE247983.008	LB280655	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	06 Jun 2023	30 May 2023
TP134_0.3	SE247983.009	LB280655	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	06 Jun 2023	30 May 2023
TP134_0.5	SE247983.010	LB280655	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	06 Jun 2023	30 May 2023
TP135_0.3	SE247983.011	LB280655	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	06 Jun 2023	30 May 2023
TP135_1.5	SE247983.012	LB280655	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	06 Jun 2023	30 May 2023
TP135_2	SE247983.013	LB280655	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	06 Jun 2023	30 May 2023
QA100	SE247983.014	LB280655	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	06 Jun 2023	30 May 2023
DRUM_1	SE247983.015	LB280655	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	06 Jun 2023	30 May 2023
GS1	SE247983.016	LB280655	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	06 Jun 2023	30 May 2023
GS3	SE247983.017	LB280655	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	06 Jun 2023	30 May 2023
GS5	SE247983.018	LB280655	23 May 2023	23 May 2023	06 Jun 2023	26 May 2023	06 Jun 2023	30 May 2023



SURROGATES

SE247983 R1

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	TP129_0.3	SE247983.001	%	60 - 130%	98
	TP130_0.3	SE247983.003	%	60 - 130%	93
	TP131_0.3	SE247983.005	%	60 - 130%	96
	TP133_0.3	SE247983.007	%	60 - 130%	108
	TP134_0.3	SE247983.009	%	60 - 130%	93
	TP135_0.3	SE247983.011	%	60 - 130%	95
	DRUM_1	SE247983.015	%	60 - 130%	98
	GS1	SE247983.016	%	60 - 130%	96
	GS3	SE247983.017	%	60 - 130%	99
	GS5	SE247983.018	%	60 - 130%	94

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	TP129_0.3	SE247983.001	%	60 - 130%	87
	TP130_0.3	SE247983.003	%	60 - 130%	87
	TP131_0.3	SE247983.005	%	60 - 130%	87
	TP133_0.3	SE247983.007	%	60 - 130%	76
	TP134_0.3	SE247983.009	%	60 - 130%	85
	TP135_0.3	SE247983.011	%	60 - 130%	86
	DRUM_1	SE247983.015	%	60 - 130%	86
	GS1	SE247983.016	%	60 - 130%	88
	GS3	SE247983.017	%	60 - 130%	87
	GS5	SE247983.018	%	60 - 130%	84
d14-p-terphenyl (Surrogate)	TP129_0.3	SE247983.001	%	60 - 130%	93
	TP130_0.3	SE247983.003	%	60 - 130%	91
	TP131_0.3	SE247983.005	%	60 - 130%	96
	TP133_0.3	SE247983.007	%	60 - 130%	83
	TP134_0.3	SE247983.009	%	60 - 130%	92
	TP135_0.3	SE247983.011	%	60 - 130%	94
	DRUM_1	SE247983.015	%	60 - 130%	94
	GS1	SE247983.016	%	60 - 130%	94
	GS3	SE247983.017	%	60 - 130%	93
	GS5	SE247983.018	%	60 - 130%	91

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	TP129_0.3	SE247983.001	%	70 - 130%	87
	TP129_0.5	SE247983.002	%	70 - 130%	86
	TP130_0.3	SE247983.003	%	70 - 130%	87
	TP130_1.5	SE247983.004	%	70 - 130%	86
	TP131_0.3	SE247983.005	%	70 - 130%	87
	TP131_1	SE247983.006	%	70 - 130%	86
	TP133_0.3	SE247983.007	%	70 - 130%	76
	TP133_1	SE247983.008	%	70 - 130%	85
	TP134_0.3	SE247983.009	%	70 - 130%	85
	TP134_0.5	SE247983.010	%	70 - 130%	84
	TP135_0.3	SE247983.011	%	70 - 130%	86
	TP135_1.5	SE247983.012	%	70 - 130%	86
	TP135_2	SE247983.013	%	70 - 130%	86
	QA100	SE247983.014	%	70 - 130%	95
	DRUM_1	SE247983.015	%	70 - 130%	86
	GS1	SE247983.016	%	70 - 130%	88
	GS3	SE247983.017	%	70 - 130%	87
	GS5	SE247983.018	%	70 - 130%	84
d14-p-terphenyl (Surrogate)	TP129_0.3	SE247983.001	%	70 - 130%	93
	TP129_0.5	SE247983.002	%	70 - 130%	93
	TP130_0.3	SE247983.003	%	70 - 130%	91
	TP130_1.5	SE247983.004	%	70 - 130%	93
	TP131_0.3	SE247983.005	%	70 - 130%	96
	TP131_1	SE247983.006	%	70 - 130%	94
	TP133_0.3	SE247983.007	%	70 - 130%	83
	TP133_1	SE247983.008	%	70 - 130%	94

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d14-p-terphenyl (Surrogate)	TP134_0.3	SE247983.009	%	70 - 130%	92
	TP134_0.5	SE247983.010	%	70 - 130%	93
	TP135_0.3	SE247983.011	%	70 - 130%	94
	TP135_1.5	SE247983.012	%	70 - 130%	92
	TP135_2	SE247983.013	%	70 - 130%	94
	QA100	SE247983.014	%	70 - 130%	103
	DRUM_1	SE247983.015	%	70 - 130%	94
	GS1	SE247983.016	%	70 - 130%	94
	GS3	SE247983.017	%	70 - 130%	93
	GS5	SE247983.018	%	70 - 130%	91
d5-nitrobenzene (Surrogate)	TP129_0.3	SE247983.001	%	70 - 130%	83
	TP129_0.5	SE247983.002	%	70 - 130%	84
	TP130_0.3	SE247983.003	%	70 - 130%	86
	TP130_1.5	SE247983.004	%	70 - 130%	84
	TP131_0.3	SE247983.005	%	70 - 130%	86
	TP131_1	SE247983.006	%	70 - 130%	85
	TP133_0.3	SE247983.007	%	70 - 130%	74
	TP133_1	SE247983.008	%	70 - 130%	83
	TP134_0.3	SE247983.009	%	70 - 130%	83
	TP134_0.5	SE247983.010	%	70 - 130%	83
	TP135_0.3	SE247983.011	%	70 - 130%	84
	TP135_1.5	SE247983.012	%	70 - 130%	84
	TP135_2	SE247983.013	%	70 - 130%	86
	QA100	SE247983.014	%	70 - 130%	94
	DRUM_1	SE247983.015	%	70 - 130%	85
	GS1	SE247983.016	%	70 - 130%	86
	GS3	SE247983.017	%	70 - 130%	87
	GS5	SE247983.018	%	70 - 130%	86

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
TCMX (Surrogate)	TP129_0.3	SE247983.001	%	60 - 130%	100
	TP130_0.3	SE247983.003	%	60 - 130%	94
	TP131_0.3	SE247983.005	%	60 - 130%	97
	TP133_0.3	SE247983.007	%	60 - 130%	109
	TP134_0.3	SE247983.009	%	60 - 130%	95
	TP135_0.3	SE247983.011	%	60 - 130%	96
	DRUM_1	SE247983.015	%	60 - 130%	99

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples

Method: MA-1523

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C3-PFBS) Isotopically Labelled Internal Recovery Standard	TP130_1.5	SE247983.004	%	0 - 150%	104
	TP135_1.5	SE247983.012	%	0 - 150%	105
	DRUM_1	SE247983.015	%	0 - 150%	106
(13C3-PFHxS) Isotopically Labelled Internal Recovery Standard	TP130_1.5	SE247983.004	%	0 - 150%	111
	TP135_1.5	SE247983.012	%	0 - 150%	114
	DRUM_1	SE247983.015	%	0 - 150%	110
(13C4_PFOA) Isotopically Labelled Internal Recovery Standard	TP130_1.5	SE247983.004	%	0 - 150%	120
	TP135_1.5	SE247983.012	%	0 - 150%	105
	DRUM_1	SE247983.015	%	0 - 150%	115
(13C4-PFBA) Isotopically Labelled Internal Recovery Standard	TP130_1.5	SE247983.004	%	0 - 150%	111
	TP135_1.5	SE247983.012	%	0 - 150%	111
	DRUM_1	SE247983.015	%	0 - 150%	113
(13C4-PFHpA) Isotopically Labelled Internal Recovery Standard	TP130_1.5	SE247983.004	%	0 - 150%	119
	TP135_1.5	SE247983.012	%	0 - 150%	111
	DRUM_1	SE247983.015	%	0 - 150%	118
(13C5-PFHxA) Isotopically Labelled Internal Recovery Standard	TP130_1.5	SE247983.004	%	0 - 150%	111
	TP135_1.5	SE247983.012	%	0 - 150%	105
	DRUM_1	SE247983.015	%	0 - 150%	110
(13C5-PFPeA) Isotopically Labelled Internal Recovery Standard	TP130_1.5	SE247983.004	%	0 - 150%	113
	TP135_1.5	SE247983.012	%	0 - 150%	113
	DRUM_1	SE247983.015	%	0 - 150%	112



SURROGATES

SE247983 R1

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples (continued)

Method: MA-1523

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C8-PFOS) Isotopically Labelled Internal Recovery Standard	TP130_1.5	SE247983.004	%	0 - 150%	102
	TP135_1.5	SE247983.012	%	0 - 150%	131
	DRUM_1	SE247983.015	%	0 - 150%	113

VOC's in Soil

Method: ME-(AU)-[ENV]JAN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	TP129_0.3	SE247983.001	%	60 - 130%	96
	TP129_0.5	SE247983.002	%	60 - 130%	98
	TP130_0.3	SE247983.003	%	60 - 130%	96
	TP130_1.5	SE247983.004	%	60 - 130%	91
	TP131_0.3	SE247983.005	%	60 - 130%	93
	TP131_1	SE247983.006	%	60 - 130%	91
	TP133_0.3	SE247983.007	%	60 - 130%	97
	TP133_1	SE247983.008	%	60 - 130%	94
	TP134_0.3	SE247983.009	%	60 - 130%	86
	TP134_0.5	SE247983.010	%	60 - 130%	95
	TP135_0.3	SE247983.011	%	60 - 130%	94
	TP135_1.5	SE247983.012	%	60 - 130%	93
	TP135_2	SE247983.013	%	60 - 130%	92
	QA100	SE247983.014	%	60 - 130%	89
	DRUM_1	SE247983.015	%	60 - 130%	96
	GS1	SE247983.016	%	60 - 130%	96
	GS3	SE247983.017	%	60 - 130%	85
	GS5	SE247983.018	%	60 - 130%	94
d4-1,2-dichloroethane (Surrogate)	TP129_0.3	SE247983.001	%	60 - 130%	96
	TP129_0.5	SE247983.002	%	60 - 130%	95
	TP130_0.3	SE247983.003	%	60 - 130%	93
	TP130_1.5	SE247983.004	%	60 - 130%	87
	TP131_0.3	SE247983.005	%	60 - 130%	90
	TP131_1	SE247983.006	%	60 - 130%	87
	TP133_0.3	SE247983.007	%	60 - 130%	91
	TP133_1	SE247983.008	%	60 - 130%	92
	TP134_0.3	SE247983.009	%	60 - 130%	87
	TP134_0.5	SE247983.010	%	60 - 130%	91
	TP135_0.3	SE247983.011	%	60 - 130%	87
	TP135_1.5	SE247983.012	%	60 - 130%	93
	TP135_2	SE247983.013	%	60 - 130%	87
	QA100	SE247983.014	%	60 - 130%	88
	DRUM_1	SE247983.015	%	60 - 130%	93
	GS1	SE247983.016	%	60 - 130%	95
	GS3	SE247983.017	%	60 - 130%	84
	GS5	SE247983.018	%	60 - 130%	90
d8-toluene (Surrogate)	TP129_0.3	SE247983.001	%	60 - 130%	96
	TP129_0.5	SE247983.002	%	60 - 130%	97
	TP130_0.3	SE247983.003	%	60 - 130%	96
	TP130_1.5	SE247983.004	%	60 - 130%	91
	TP131_0.3	SE247983.005	%	60 - 130%	92
	TP131_1	SE247983.006	%	60 - 130%	92
	TP133_0.3	SE247983.007	%	60 - 130%	96
	TP133_1	SE247983.008	%	60 - 130%	94
	TP134_0.3	SE247983.009	%	60 - 130%	88
	TP134_0.5	SE247983.010	%	60 - 130%	94
	TP135_0.3	SE247983.011	%	60 - 130%	91
	TP135_1.5	SE247983.012	%	60 - 130%	95
	TP135_2	SE247983.013	%	60 - 130%	91
	QA100	SE247983.014	%	60 - 130%	90
	DRUM_1	SE247983.015	%	60 - 130%	98
	GS1	SE247983.016	%	60 - 130%	100
	GS3	SE247983.017	%	60 - 130%	86
	GS5	SE247983.018	%	60 - 130%	94



SURROGATES

SE247983 R1

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	TP129_0.3	SE247983.001	%	60 - 130%	96
	TP129_0.5	SE247983.002	%	60 - 130%	98
	TP130_0.3	SE247983.003	%	60 - 130%	96
	TP130_1.5	SE247983.004	%	60 - 130%	91
	TP131_0.3	SE247983.005	%	60 - 130%	93
	TP131_1	SE247983.006	%	60 - 130%	91
	TP133_0.3	SE247983.007	%	60 - 130%	97
	TP133_1	SE247983.008	%	60 - 130%	94
	TP134_0.3	SE247983.009	%	60 - 130%	86
	TP134_0.5	SE247983.010	%	60 - 130%	95
	TP135_0.3	SE247983.011	%	60 - 130%	94
	TP135_1.5	SE247983.012	%	60 - 130%	93
	TP135_2	SE247983.013	%	60 - 130%	92
	QA100	SE247983.014	%	60 - 130%	89
	DRUM_1	SE247983.015	%	60 - 130%	96
	GS1	SE247983.016	%	60 - 130%	96
	GS3	SE247983.017	%	60 - 130%	85
	GS5	SE247983.018	%	60 - 130%	94
d4-1,2-dichloroethane (Surrogate)	TP129_0.3	SE247983.001	%	60 - 130%	96
	TP129_0.5	SE247983.002	%	60 - 130%	95
	TP130_0.3	SE247983.003	%	60 - 130%	93
	TP130_1.5	SE247983.004	%	60 - 130%	87
	TP131_0.3	SE247983.005	%	60 - 130%	90
	TP131_1	SE247983.006	%	60 - 130%	87
	TP133_0.3	SE247983.007	%	60 - 130%	91
	TP133_1	SE247983.008	%	60 - 130%	92
	TP134_0.3	SE247983.009	%	60 - 130%	87
	TP134_0.5	SE247983.010	%	60 - 130%	91
	TP135_0.3	SE247983.011	%	60 - 130%	87
	TP135_1.5	SE247983.012	%	60 - 130%	93
	TP135_2	SE247983.013	%	60 - 130%	87
	QA100	SE247983.014	%	60 - 130%	88
	DRUM_1	SE247983.015	%	60 - 130%	93
	GS1	SE247983.016	%	60 - 130%	95
	GS3	SE247983.017	%	60 - 130%	84
	GS5	SE247983.018	%	60 - 130%	90
d8-toluene (Surrogate)	TP129_0.3	SE247983.001	%	60 - 130%	96
	TP129_0.5	SE247983.002	%	60 - 130%	97
	TP130_0.3	SE247983.003	%	60 - 130%	96
	TP130_1.5	SE247983.004	%	60 - 130%	91
	TP131_0.3	SE247983.005	%	60 - 130%	92
	TP131_1	SE247983.006	%	60 - 130%	92
	TP133_0.3	SE247983.007	%	60 - 130%	96
	TP133_1	SE247983.008	%	60 - 130%	94
	TP134_0.3	SE247983.009	%	60 - 130%	88
	TP134_0.5	SE247983.010	%	60 - 130%	94
	TP135_0.3	SE247983.011	%	60 - 130%	91
	TP135_1.5	SE247983.012	%	60 - 130%	95
	TP135_2	SE247983.013	%	60 - 130%	91
	QA100	SE247983.014	%	60 - 130%	90
	DRUM_1	SE247983.015	%	60 - 130%	98
	GS1	SE247983.016	%	60 - 130%	100
	GS3	SE247983.017	%	60 - 130%	86
	GS5	SE247983.018	%	60 - 130%	94



METHOD BLANKS

SE247983 R1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result
LB280666.001	Mercury	mg/kg	0.05	<0.05

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB280654.001	Alpha BHC	mg/kg	0.1	<0.1
	Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
	Beta BHC	mg/kg	0.1	<0.1
	Lindane (gamma BHC)	mg/kg	0.1	<0.1
	Delta BHC	mg/kg	0.1	<0.1
	Heptachlor	mg/kg	0.1	<0.1
	Aldrin	mg/kg	0.1	<0.1
	Isodrin	mg/kg	0.1	<0.1
	Heptachlor epoxide	mg/kg	0.1	<0.1
	Gamma Chlordane	mg/kg	0.1	<0.1
	Alpha Chlordane	mg/kg	0.1	<0.1
	Alpha Endosulfan	mg/kg	0.2	<0.2
	p,p'-DDE	mg/kg	0.1	<0.1
	Dieldrin	mg/kg	0.2	<0.2
	Endrin	mg/kg	0.2	<0.2
	Beta Endosulfan	mg/kg	0.2	<0.2
	p,p'-DDD	mg/kg	0.1	<0.1
	Endrin aldehyde	mg/kg	0.1	<0.1
	Endosulfan sulphate	mg/kg	0.1	<0.1
	p,p'-DDT	mg/kg	0.1	<0.1
	Endrin ketone	mg/kg	0.1	<0.1
	Methoxychlor	mg/kg	0.1	<0.1
	Mirex	mg/kg	0.1	<0.1
Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	86

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB280654.001	Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Bromophos Ethyl	mg/kg	0.2	<0.2
	Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
	Diazinon (Dimpylate)	mg/kg	0.5	<0.5
	Dichlorvos	mg/kg	0.5	<0.5
	Dimethoate	mg/kg	0.5	<0.5
	Ethion	mg/kg	0.2	<0.2
	Fenitrothion	mg/kg	0.2	<0.2
	Malathion	mg/kg	0.2	<0.2
	Methidathion	mg/kg	0.5	<0.5
	Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
	2-fluorobiphenyl (Surrogate)	%	-	88
	d14-p-terphenyl (Surrogate)	%	-	96
Surrogates				

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB280654.001	Naphthalene	mg/kg	0.1	<0.1
	2-methylnaphthalene	mg/kg	0.1	<0.1
	1-methylnaphthalene	mg/kg	0.1	<0.1
	Acenaphthylene	mg/kg	0.1	<0.1
	Acenaphthene	mg/kg	0.1	<0.1
	Fluorene	mg/kg	0.1	<0.1
	Phenanthrene	mg/kg	0.1	<0.1
	Anthracene	mg/kg	0.1	<0.1
	Fluoranthene	mg/kg	0.1	<0.1
	Pyrene	mg/kg	0.1	<0.1
	Benzo(a)anthracene	mg/kg	0.1	<0.1
	Chrysene	mg/kg	0.1	<0.1
	Benzo(a)pyrene	mg/kg	0.1	<0.1



METHOD BLANKS

SE247983 R1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB280654.001	Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
	Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
	Benzo(ghi)perylene	mg/kg	0.1	<0.1
	Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates			
	d5-nitrobenzene (Surrogate)	%	-	85
	2-fluorobiphenyl (Surrogate)	%	-	88
	d14-p-terphenyl (Surrogate)	%	-	96

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB280654.001	Arochlor 1016	mg/kg	0.2	<0.2
	Arochlor 1221	mg/kg	0.2	<0.2
	Arochlor 1232	mg/kg	0.2	<0.2
	Arochlor 1242	mg/kg	0.2	<0.2
	Arochlor 1248	mg/kg	0.2	<0.2
	Arochlor 1254	mg/kg	0.2	<0.2
	Arochlor 1260	mg/kg	0.2	<0.2
	Arochlor 1262	mg/kg	0.2	<0.2
	Arochlor 1268	mg/kg	0.2	<0.2
	Total PCBs (Arochlors)	mg/kg	1	<1
Surrogates	TCMX (Surrogate)	%	-	88

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result
LB280656.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB280654.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB280655.001	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
	Polycyclic VOCs	Naphthalene (VOC)*	mg/kg	0.1	<0.1
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	97
		d8-toluene (Surrogate)	%	-	98
		Bromofluorobenzene (Surrogate)	%	-	98
	Totals	Total BTEX*	mg/kg	0.6	<0.6

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number	Parameter	Units	LOR	Result
LB280655.001	TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-



DUPLICATES

SE247983 R1

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: $RPD = | \text{OriginalResult} - \text{ReplicateResult} | \times 100 / \text{Mean}$

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: $MAD = 100 \times \text{SDL} / \text{Mean} + \text{LR}$

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may give a different calculated RPD.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE247983.010	LB280666.014	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE247983.018	LB280666.023	Mercury	mg/kg	0.05	<0.05	<0.05	200	0

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE247983.010	LB280658.011	% Moisture	%w/w	1	14.7	13.7	37	7
SE247983.018	LB280658.020	% Moisture	%w/w	1	5.3	5.8	48	10

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE247983.018	LB280654.023	Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
		Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
		Lindane (gamma BHC)	mg/kg	0.1	<0.1	<0.1	200	0
		Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
		Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
		Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
		Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
		Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
		Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
		Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
		Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
		o,p'-DDE*	mg/kg	0.1	<0.1	<0.1	200	0
		p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
		Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
		Endrin	mg/kg	0.2	<0.2	<0.2	200	0
		Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
		o,p'-DDD*	mg/kg	0.1	<0.1	<0.1	200	0
		p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
		Endrin aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
		Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
		o,p'-DDT*	mg/kg	0.1	<0.1	<0.1	200	0
		p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
		Endrin ketone	mg/kg	0.1	<0.1	<0.1	200	0
		Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
		Mirex	mg/kg	0.1	<0.1	<0.1	200	0
		trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
		Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
		Total OC VIC EPA	mg/kg	1	<1	<1	200	0
Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.14	0.14	30	1	

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE247983.018	LB280654.023	Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
		Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
		Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
		Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
		Ethion	mg/kg	0.2	<0.2	<0.2	200	0
		Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
		Malathion	mg/kg	0.2	<0.2	<0.2	200	0
		Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
		Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	1
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	0

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate	Parameter	Units	LOR

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: $RPD = \frac{|OriginalResult - ReplicateResult|}{Mean} \times 100$

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: $MAD = 100 \times \frac{SDL}{Mean} + LR$

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may give a different calculated RPD.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE247983.010	LB280654.014	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
		Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
		Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
		Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
		Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
		Carcinogenic PAHs, BaP TEQ <LOR=0*	mg/kg	0.2	<0.2	<0.2	200	0
		Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	mg/kg	0.2	<0.2	<0.2	175	0
		Carcinogenic PAHs, BaP TEQ <LOR=LOR*	mg/kg	0.3	<0.3	<0.3	134	0
		Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	30	0
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	0
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	2
SE247983.018	LB280654.023	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
		Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
		Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
		Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
		Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
		Carcinogenic PAHs, BaP TEQ <LOR=0*	mg/kg	0.2	<0.2	<0.2	200	0
		Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	mg/kg	0.2	<0.2	<0.2	175	0
		Carcinogenic PAHs, BaP TEQ <LOR=LOR*	mg/kg	0.3	<0.3	<0.3	134	0
		Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	30	1
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	1
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	0

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE247983.010	LB280656.014	Arsenic, As	mg/kg	1	3	2	69	15
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	13	12	34	9
		Copper, Cu	mg/kg	0.5	<0.5	<0.5	200	0
		Nickel, Ni	mg/kg	0.5	<0.5	<0.5	160	0
		Lead, Pb	mg/kg	1	6	6	48	1
		Zinc, Zn	mg/kg	2	2.1	<2.0	130	6
SE247983.018	LB280656.023	Arsenic, As	mg/kg	1	2	1	107	42

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: $RPD = | \text{OriginalResult} - \text{ReplicateResult} | \times 100 / \text{Mean}$

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: $MAD = 100 \times \text{SDL} / \text{Mean} + \text{LR}$

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may give a different calculated RPD.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]JAN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE247983.018	LB280656.023	Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	7.4	7.8	37	5
		Copper, Cu	mg/kg	0.5	12	15	34	24
		Nickel, Ni	mg/kg	0.5	17	20	33	18
		Lead, Pb	mg/kg	1	4	3	59	11
		Zinc, Zn	mg/kg	2	38	42	35	12

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]JAN403

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE247983.010	LB280654.014	TRH C10-C14	mg/kg	20	<20	<20	200	0
		TRH C15-C28	mg/kg	45	<45	<45	200	0
		TRH C29-C36	mg/kg	45	<45	<45	200	0
		TRH C37-C40	mg/kg	100	<100	<100	200	0
		TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
		TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands						
		TRH >C10-C16	mg/kg	25	<25	<25	200	0
		TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
		TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
		TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE247983.018	LB280654.023	TRH C10-C14	mg/kg	20	<20	<20	200	0
		TRH C15-C28	mg/kg	45	<45	<45	200	0
		TRH C29-C36	mg/kg	45	50	49	121	1
		TRH C37-C40	mg/kg	100	<100	<100	200	0
		TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
		TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands						
		TRH >C10-C16	mg/kg	25	<25	<25	200	0
		TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
		TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
		TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0

VOC's in Soil

Method: ME-(AU)-[ENV]JAN433

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE247983.010	LB280655.014	Monocyclic Aromatic						
		Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Toluene	mg/kg	0.1	<0.1	<0.1	200	0
		Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
		o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
		Polycyclic						
		Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates						
		d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.1	8.6	50	5
		d8-toluene (Surrogate)	mg/kg	-	9.4	9.0	50	5
		Bromofluorobenzene (Surrogate)	mg/kg	-	9.5	8.8	50	7
		Totals						
		Total BTEX*	mg/kg	0.6	<0.6	<0.6	200	0
		Total Xylenes*	mg/kg	0.3	<0.3	<0.3	200	0
SE247983.018	LB280655.023	Monocyclic Aromatic						
		Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Toluene	mg/kg	0.1	<0.1	<0.1	200	0
		Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
		o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
		Polycyclic						
		Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates						
		d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.0	9.1	50	1
		d8-toluene (Surrogate)	mg/kg	-	9.4	9.5	50	0
		Bromofluorobenzene (Surrogate)	mg/kg	-	9.4	9.6	50	2
		Totals						
		Total BTEX*	mg/kg	0.6	<0.6	<0.6	200	0
		Total Xylenes*	mg/kg	0.3	<0.3	<0.3	200	0

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]JAN433

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE247983.010	LB280655.014	TRH C6-C10	mg/kg	25	<25	<25	200	0
		TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates						
		d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.1	8.6	50	5
		d8-toluene (Surrogate)	mg/kg	-	9.4	9.0	50	5
		Bromofluorobenzene (Surrogate)	mg/kg	-	9.5	8.8	50	7



DUPLICATES

SE247983 R1

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: $RPD = | \text{OriginalResult} - \text{ReplicateResult} | \times 100 / \text{Mean}$

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: $MAD = 100 \times \text{SDL} / \text{Mean} + \text{LR}$

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may give a different calculated RPD.

Volatile Petroleum Hydrocarbons in Soil (continued)

Method: ME-(AU)-ENVJAN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE247983.010	LB280655.014	VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE247983.018	LB280655.023		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.0	9.1	50	1
			d8-toluene (Surrogate)	mg/kg	-	9.4	9.5	50	0
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.4	9.6	50	2
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB280666.002	Mercury	mg/kg	0.05	0.22	0.2	80 - 120	108

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB280654.002	Delta BHC	mg/kg	0.1	0.2	0.2	60 - 140	87
	Heptachlor	mg/kg	0.1	0.2	0.2	60 - 140	93
	Aldrin	mg/kg	0.1	0.2	0.2	60 - 140	90
	Dieldrin	mg/kg	0.2	<0.2	0.2	60 - 140	87
	Endrin	mg/kg	0.2	<0.2	0.2	60 - 140	94
	p,p'-DDT	mg/kg	0.1	0.2	0.2	60 - 140	83
Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.14	0.15	40 - 130	95

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB280654.002	Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	1.7	2	60 - 140	86
	Diazinon (Dimpylate)	mg/kg	0.5	1.7	2	60 - 140	87
	Dichlorvos	mg/kg	0.5	1.5	2	60 - 140	73
	Ethion	mg/kg	0.2	1.4	2	60 - 140	68
Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	92
	d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	90

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB280654.002	Naphthalene	mg/kg	0.1	3.6	4	60 - 140	90
	Acenaphthylene	mg/kg	0.1	3.4	4	60 - 140	86
	Acenaphthene	mg/kg	0.1	3.8	4	60 - 140	94
	Phenanthrene	mg/kg	0.1	3.7	4	60 - 140	93
	Anthracene	mg/kg	0.1	3.6	4	60 - 140	89
	Fluoranthene	mg/kg	0.1	3.5	4	60 - 140	88
	Pyrene	mg/kg	0.1	3.8	4	60 - 140	94
	Benzo(a)pyrene	mg/kg	0.1	3.6	4	60 - 140	89
	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	85
	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	92
Surrogates	d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	90

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB280654.002	Arochlor 1260	mg/kg	0.2	0.3	0.4	60 - 140	84

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB280656.002	Arsenic, As	mg/kg	1	360	318.22	80 - 120	112
	Cadmium, Cd	mg/kg	0.3	3.9	4.81	70 - 130	82
	Chromium, Cr	mg/kg	0.5	42	38.31	80 - 120	109
	Copper, Cu	mg/kg	0.5	340	290	80 - 120	116
	Nickel, Ni	mg/kg	0.5	200	187	80 - 120	106
	Lead, Pb	mg/kg	1	98	89.9	80 - 120	109
	Zinc, Zn	mg/kg	2	300	273	80 - 120	109

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB280654.002	TRH C10-C14	mg/kg	20	49	40	60 - 140	123
	TRH C15-C28	mg/kg	45	<45	40	60 - 140	97
	TRH C29-C36	mg/kg	45	<45	40	60 - 140	81
	TRH >C10-C16	mg/kg	25	48	40	60 - 140	120
	TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	83
	TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	82

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number	Parameter	Units	LOR



LABORATORY CONTROL SAMPLES

SE247983 R1

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB280655.002	Monocyclic	Benzene	mg/kg	0.1	5.1	5	60 - 140
	Aromatic	Toluene	mg/kg	0.1	4.9	5	60 - 140
		Ethylbenzene	mg/kg	0.1	4.7	5	60 - 140
		m/p-xylene	mg/kg	0.2	9.3	10	60 - 140
		o-xylene	mg/kg	0.1	4.7	5	60 - 140
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.8	10	70 - 130
		d8-toluene (Surrogate)	mg/kg	-	11.0	10	70 - 130
		Bromofluorobenzene (Surrogate)	mg/kg	-	9.8	10	70 - 130

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %	
LB280655.002	TRH C6-C10	mg/kg	25	85	92.5	60 - 140	92	
	TRH C6-C9	mg/kg	20	73	80	60 - 140	92	
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.8	10	70 - 130	108
		Bromofluorobenzene (Surrogate)	mg/kg	-	9.8	10	70 - 130	98
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	ma/ka	25	56	62.5	60 - 140	90

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub-sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE247983.001	LB280666.004	Mercury	mg/kg	0.05	0.23	<0.05	0.2	108

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE247983.001	LB280654.004	Alpha BHC	mg/kg	0.1	<0.1	<0.1	-	-
		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	-	-
		Beta BHC	mg/kg	0.1	<0.1	<0.1	-	-
		Lindane (gamma BHC)	mg/kg	0.1	<0.1	<0.1	-	-
		Delta BHC	mg/kg	0.1	0.2	<0.1	0.2	89
		Heptachlor	mg/kg	0.1	0.2	<0.1	0.2	94
		Aldrin	mg/kg	0.1	0.2	<0.1	0.2	92
		Isodrin	mg/kg	0.1	<0.1	<0.1	-	-
		Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	-	-
		Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	-	-
		Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	-	-
		Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	-	-
		o,p'-DDE*	mg/kg	0.1	<0.1	<0.1	-	-
		p,p'-DDE	mg/kg	0.1	<0.1	<0.1	-	-
		Dieldrin	mg/kg	0.2	<0.2	<0.2	0.2	90
		Endrin	mg/kg	0.2	<0.2	<0.2	0.2	97
		Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	-	-
		o,p'-DDD*	mg/kg	0.1	<0.1	<0.1	-	-
		p,p'-DDD	mg/kg	0.1	<0.1	<0.1	-	-
		Endrin aldehyde	mg/kg	0.1	<0.1	<0.1	-	-
		Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	-	-
		o,p'-DDT*	mg/kg	0.1	<0.1	<0.1	-	-
		p,p'-DDT	mg/kg	0.1	0.2	<0.1	0.2	86
		Endrin ketone	mg/kg	0.1	<0.1	<0.1	-	-
		Methoxychlor	mg/kg	0.1	<0.1	<0.1	-	-
		Mirex	mg/kg	0.1	<0.1	<0.1	-	-
		trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	-	-
		Total CLP OC Pesticides	mg/kg	1	1	<1	-	-
		Total OC VIC EPA	mg/kg	1	1	<1	-	-
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.14	0.15	-	95

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE247983.001	LB280654.004	Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	-	-
		Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	-	-
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	1.7	<0.2	2	87
		Diazinon (Dimpylate)	mg/kg	0.5	1.8	<0.5	2	88
		Dichlorvos	mg/kg	0.5	1.4	<0.5	2	72
		Dimethoate	mg/kg	0.5	<0.5	<0.5	-	-
		Ethion	mg/kg	0.2	1.4	<0.2	2	72
		Fenitrothion	mg/kg	0.2	<0.2	<0.2	-	-
		Malathion	mg/kg	0.2	<0.2	<0.2	-	-
		Methidathion	mg/kg	0.5	<0.5	<0.5	-	-
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	-	-
		Total OP Pesticides*	mg/kg	1.7	6.4	<1.7	-	-
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.4	-	91
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	-	88

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE247983.001	LB280654.004	Naphthalene	mg/kg	0.1	3.6	<0.1	4	88
		2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		Acenaphthylene	mg/kg	0.1	3.4	<0.1	4	84
		Acenaphthene	mg/kg	0.1	3.7	<0.1	4	92
		Fluorene	mg/kg	0.1	<0.1	<0.1	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub-sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE247983.001	LB280654.004	Phenanthrene	mg/kg	0.1	3.7	<0.1	4	91
		Anthracene	mg/kg	0.1	3.5	<0.1	4	87
		Fluoranthene	mg/kg	0.1	3.5	<0.1	4	87
		Pyrene	mg/kg	0.1	3.6	<0.1	4	90
		Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
		Chrysene	mg/kg	0.1	<0.1	<0.1	-	-
		Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-
		Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-
		Benzo(a)pyrene	mg/kg	0.1	3.5	<0.1	4	87
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	-	-
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
		Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	-	-
		Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	3.5	<0.2	-	-
		Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	3.6	<0.2	-	-
		Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	3.6	<0.3	-	-
		Total PAH (18)	mg/kg	0.8	28	<0.8	-	-
		d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	-	85
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.4	-	91
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	-	88

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE247983.001	LB280654.004	Arochlor 1016	mg/kg	0.2	<0.2	<0.2	-	-
		Arochlor 1221	mg/kg	0.2	<0.2	<0.2	-	-
		Arochlor 1232	mg/kg	0.2	<0.2	<0.2	-	-
		Arochlor 1242	mg/kg	0.2	<0.2	<0.2	-	-
		Arochlor 1248	mg/kg	0.2	<0.2	<0.2	-	-
		Arochlor 1254	mg/kg	0.2	<0.2	<0.2	-	-
		Arochlor 1260	mg/kg	0.2	0.4	<0.2	0.4	91
		Arochlor 1262	mg/kg	0.2	<0.2	<0.2	-	-
		Arochlor 1268	mg/kg	0.2	<0.2	<0.2	-	-
		Total PCBs (Arochlors)	mg/kg	1	<1	<1	-	-
	Surrogates	TCMX (Surrogate)	mg/kg	-	0	0	-	96

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE247983.001	LB280656.004	Arsenic, As	mg/kg	1	54	4	50	100
		Cadmium, Cd	mg/kg	0.3	41	<0.3	50	82
		Chromium, Cr	mg/kg	0.5	55	4.7	50	100
		Copper, Cu	mg/kg	0.5	58	6.1	50	103
		Nickel, Ni	mg/kg	0.5	55	4.2	50	101
		Lead, Pb	mg/kg	1	69	18	50	101
		Zinc, Zn	mg/kg	2	87	36	50	102

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE247983.001	LB280654.004	TRH C10-C14	mg/kg	20	56	<20	40	136
		TRH C15-C28	mg/kg	45	48	<45	40	108
		TRH C29-C36	mg/kg	45	<45	<45	40	70
		TRH C37-C40	mg/kg	100	<100	<100	-	-
		TRH C10-C36 Total	mg/kg	110	<110	<110	-	-
		TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	-	-
		TRH >C10-C16	mg/kg	25	55	<25	40	132
		TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	55	<25	-	-
		TRH >C16-C34 (F3)	mg/kg	90	<90	<90	40	87
		TRH >C34-C40 (F4)	mg/kg	120	<120	<120	-	-

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE247983.001	LB280655.004	Monocyclic	Benzene	mg/kg	0.1	<0.1	5	99
		Aromatic	Toluene	mg/kg	0.1	<0.1	5	97
			Ethylbenzene	mg/kg	0.1	<0.1	5	94
			m/p-xylene	mg/kg	0.2	<0.2	10	94



MATRIX SPIKES

SE247983 R1

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub-sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE247983.001	LB280655.004	Monocyclic	o-xylene	mg/kg	0.1	4.8	<0.1	5	96
		Polycyclic	Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.8	9.6	10	108
			d8-toluene (Surrogate)	mg/kg	-	10.8	9.6	10	108
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.9	9.6	10	99
			Totals	Total BTEX*	mg/kg	0.6	29	<0.6	-
			Total Xylenes*	mg/kg	0.3	14	<0.3	-	-

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%	
SE247983.001	LB280655.004	TRH C6-C10	mg/kg	25	96	<25	92.5	103	
		TRH C6-C9	mg/kg	20	83	<20	80	103	
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.8	9.6	10	108
			d8-toluene (Surrogate)	mg/kg	-	10.8	9.6	10	108
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.9	9.6	-	99
		VPH F	Benzene (F0)	mg/kg	0.1	5.0	<0.1	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	67	<25	62.5	106



MATRIX SPIKE DUPLICATES

SE247983 R1

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: $RPD = | \text{OriginalResult} - \text{ReplicateResult} | \times 100 / \text{Mean}$

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: $MAD = 100 \times \text{SDL} / \text{Mean} + \text{LR}$

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

CLIENT DETAILS

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Order Number **300304375**
Samples 19

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SGS Reference **SE247983A R0**
Date Received 14 Jun 2023
Date Reported 21 Jun 2023

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

Clay Content subcontracted to SGS Cairns, 2/58 Comport St, Portsmith QLD 4870, NATA Accreditation Number: 2562, Site Number: 3146. Report No CE167552

SIGNATORIES



Huong CRAWFORD
Production Manager



Shane MCDERMOTT
Inorganic/Metals Chemist

Parameter	Units	LOR	Sample Number	SE247983A.001	SE247983A.002	SE247983A.003	SE247983A.004
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	23 May 2023	23 May 2023	23 May 2023	23 May 2023
			Sample Name	TP129_0.3	TP129_0.5	TP130_0.3	TP130_1.5

pH in soil (1:5) Method: AN101 Tested: 16/6/2023

pH (CaCl ₂)*	pH Units	0.1	-	-	-	-

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR) Method: AN122 Tested: 16/6/2023

Exchangeable Sodium, Na	mg/kg	2	-	-	-	-
Exchangeable Sodium, Na	meq/100g	0.01	-	-	-	-
Exchangeable Sodium Percentage*	%	0.1	-	-	-	-
Exchangeable Potassium, K	mg/kg	2	-	-	-	-
Exchangeable Potassium, K	meq/100g	0.01	-	-	-	-
Exchangeable Potassium Percentage*	%	0.1	-	-	-	-
Exchangeable Calcium, Ca	mg/kg	2	-	-	-	-
Exchangeable Calcium, Ca	meq/100g	0.01	-	-	-	-
Exchangeable Calcium Percentage*	%	0.1	-	-	-	-
Exchangeable Magnesium, Mg	mg/kg	2	-	-	-	-
Exchangeable Magnesium, Mg	meq/100g	0.02	-	-	-	-
Exchangeable Magnesium Percentage*	%	0.1	-	-	-	-
Cation Exchange Capacity	meq/100g	0.02	-	-	-	-

TOC in Soil Method: AN188 Tested: 16/6/2023

Total Organic Carbon	%w/w	0.05	-	-	-	-
Organic Matter (calc)*	%w/w	0.1	-	-	-	-

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES Method: AN040/AN320 Tested: 16/6/2023

Iron, Fe	mg/kg	50	-	-	-	-

Particle sizing of soils by sieving Method: AN005 Tested: 21/6/2023

Passing 75µm*	%w/w	1	-	-	-	-
Retained 75µm*	%w/w	1	-	-	-	-

Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 21/6/2023

Clay (<0.002mm)*	%w/w	0.1	-	-	-	-

Parameter	Units	LOR	Sample Number	SE247983A.005	SE247983A.006	SE247983A.007	SE247983A.008
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	23 May 2023	23 May 2023	23 May 2023	23 May 2023
			Sample Name	TP131_0.3	TP131_1	TP133_0.3	TP133_1

pH in soil (1:5) Method: AN101 Tested: 16/6/2023

pH (CaCl ₂)*	pH Units	0.1	-	-	-	-

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR) Method: AN122 Tested: 16/6/2023

Exchangeable Sodium, Na	mg/kg	2	-	-	-	-
Exchangeable Sodium, Na	meq/100g	0.01	-	-	-	-
Exchangeable Sodium Percentage*	%	0.1	-	-	-	-
Exchangeable Potassium, K	mg/kg	2	-	-	-	-
Exchangeable Potassium, K	meq/100g	0.01	-	-	-	-
Exchangeable Potassium Percentage*	%	0.1	-	-	-	-
Exchangeable Calcium, Ca	mg/kg	2	-	-	-	-
Exchangeable Calcium, Ca	meq/100g	0.01	-	-	-	-
Exchangeable Calcium Percentage*	%	0.1	-	-	-	-
Exchangeable Magnesium, Mg	mg/kg	2	-	-	-	-
Exchangeable Magnesium, Mg	meq/100g	0.02	-	-	-	-
Exchangeable Magnesium Percentage*	%	0.1	-	-	-	-
Cation Exchange Capacity	meq/100g	0.02	-	-	-	-

TOC in Soil Method: AN188 Tested: 16/6/2023

Total Organic Carbon	%w/w	0.05	-	-	-	-
Organic Matter (calc)*	%w/w	0.1	-	-	-	-

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES Method: AN040/AN320 Tested: 16/6/2023

Iron, Fe	mg/kg	50	-	-	-	-

Particle sizing of soils by sieving Method: AN005 Tested: 21/6/2023

Passing 75µm*	%w/w	1	-	-	-	-
Retained 75µm*	%w/w	1	-	-	-	-

Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 21/6/2023

Clay (<0.002mm)*	%w/w	0.1	-	-	-	-

Parameter	Units	LOR	Sample Number	SE247983A.009	SE247983A.010	SE247983A.011	SE247983A.012
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	23 May 2023	23 May 2023	23 May 2023	23 May 2023
			Sample Name	TP134_0.3	TP134_0.5	TP135_0.3	TP135_1.5

pH in soil (1:5) Method: AN101 Tested: 16/6/2023

pH (CaCl ₂)*	pH Units	0.1	7.6	-	-	-

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR) Method: AN122 Tested: 16/6/2023

Exchangeable Sodium, Na	mg/kg	2	130	-	-	-
Exchangeable Sodium, Na	meq/100g	0.01	0.56	-	-	-
Exchangeable Sodium Percentage*	%	0.1	1.5	-	-	-
Exchangeable Potassium, K	mg/kg	2	900	-	-	-
Exchangeable Potassium, K	meq/100g	0.01	2.3	-	-	-
Exchangeable Potassium Percentage*	%	0.1	6.3	-	-	-
Exchangeable Calcium, Ca	mg/kg	2	5900	-	-	-
Exchangeable Calcium, Ca	meq/100g	0.01	29	-	-	-
Exchangeable Calcium Percentage*	%	0.1	81.7	-	-	-
Exchangeable Magnesium, Mg	mg/kg	2	460	-	-	-
Exchangeable Magnesium, Mg	meq/100g	0.02	3.8	-	-	-
Exchangeable Magnesium Percentage*	%	0.1	10.4	-	-	-
Cation Exchange Capacity	meq/100g	0.02	36	-	-	-

TOC in Soil Method: AN188 Tested: 16/6/2023

Total Organic Carbon	%w/w	0.05	0.09	-	-	-
Organic Matter (calc)*	%w/w	0.1	0.2	-	-	-

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES Method: AN040/AN320 Tested: 14/6/2023

Iron, Fe	mg/kg	50	37000	-	-	-

Particle sizing of soils by sieving Method: AN005 Tested: 21/6/2023

Passing 75µm*	%w/w	1	8	-	-	-
Retained 75µm*	%w/w	1	92	-	-	-

Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 21/6/2023

Clay (<0.002mm)*	%w/w	0.1	4.0	-	-	-

Parameter	Units	LOR	Sample Number	SE247983A.013	SE247983A.014	SE247983A.015	SE247983A.016
			Sample Matrix	Soil	Soil	Soil	Soil
			Sample Date	23 May 2023	23 May 2023	23 May 2023	23 May 2023
			Sample Name	TP135_2	QA100	DRUM_1	GS1

pH in soil (1:5) Method: AN101 Tested: 16/6/2023

pH (CaCl ₂)*	pH Units	0.1	-	-	-	-

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR) Method: AN122 Tested: 16/6/2023

Exchangeable Sodium, Na	mg/kg	2	-	-	-	-
Exchangeable Sodium, Na	meq/100g	0.01	-	-	-	-
Exchangeable Sodium Percentage*	%	0.1	-	-	-	-
Exchangeable Potassium, K	mg/kg	2	-	-	-	-
Exchangeable Potassium, K	meq/100g	0.01	-	-	-	-
Exchangeable Potassium Percentage*	%	0.1	-	-	-	-
Exchangeable Calcium, Ca	mg/kg	2	-	-	-	-
Exchangeable Calcium, Ca	meq/100g	0.01	-	-	-	-
Exchangeable Calcium Percentage*	%	0.1	-	-	-	-
Exchangeable Magnesium, Mg	mg/kg	2	-	-	-	-
Exchangeable Magnesium, Mg	meq/100g	0.02	-	-	-	-
Exchangeable Magnesium Percentage*	%	0.1	-	-	-	-
Cation Exchange Capacity	meq/100g	0.02	-	-	-	-

TOC in Soil Method: AN188 Tested: 16/6/2023

Total Organic Carbon	%w/w	0.05	-	-	-	-
Organic Matter (calc)*	%w/w	0.1	-	-	-	-

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES Method: AN040/AN320 Tested: 16/6/2023

Iron, Fe	mg/kg	50	-	-	-	-

Particle sizing of soils by sieving Method: AN005 Tested: 21/6/2023

Passing 75µm*	%w/w	1	-	-	-	-
Retained 75µm*	%w/w	1	-	-	-	-

Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 21/6/2023

Clay (<0.002mm)*	%w/w	0.1	-	-	-	-

Parameter	Units	LOR	Sample Number	SE247983A.017	SE247983A.018	SE247983A.019
			Sample Matrix	Soil	Soil	Soil
			Sample Date	23 May 2023	23 May 2023	23 May 2023
			Sample Name	GS3	GS5	GS7

pH in soil (1:5) Method: AN101 Tested: 16/6/2023

pH (CaCl ₂)*	pH Units	0.1	-	-	-

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR) Method: AN122 Tested: 16/6/2023

Exchangeable Sodium, Na	mg/kg	2	-	-	-
Exchangeable Sodium, Na	meq/100g	0.01	-	-	-
Exchangeable Sodium Percentage*	%	0.1	-	-	-
Exchangeable Potassium, K	mg/kg	2	-	-	-
Exchangeable Potassium, K	meq/100g	0.01	-	-	-
Exchangeable Potassium Percentage*	%	0.1	-	-	-
Exchangeable Calcium, Ca	mg/kg	2	-	-	-
Exchangeable Calcium, Ca	meq/100g	0.01	-	-	-
Exchangeable Calcium Percentage*	%	0.1	-	-	-
Exchangeable Magnesium, Mg	mg/kg	2	-	-	-
Exchangeable Magnesium, Mg	meq/100g	0.02	-	-	-
Exchangeable Magnesium Percentage*	%	0.1	-	-	-
Cation Exchange Capacity	meq/100g	0.02	-	-	-

TOC in Soil Method: AN188 Tested: 16/6/2023

Total Organic Carbon	%w/w	0.05	-	-	-
Organic Matter (calc)*	%w/w	0.1	-	-	-

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES Method: AN040/AN320 Tested: 16/6/2023

Iron, Fe	mg/kg	50	-	-	-

Particle sizing of soils by sieving Method: AN005 Tested: 21/6/2023

Passing 75µm*	%w/w	1	-	-	-
Retained 75µm*	%w/w	1	-	-	-

Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 21/6/2023

Clay (<0.002mm)*	%w/w	0.1	-	-	-

MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR) Method: ME-(AU)-[ENV]AN122

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Exchangeable Sodium, Na	LB282572	mg/kg	2		NA
Exchangeable Sodium, Na	LB282572	meq/100g	0.01	<0.01	98%
Exchangeable Sodium Percentage*	LB282572	%	0.1	<0.1	NA
Exchangeable Potassium, K	LB282572	mg/kg	2		NA
Exchangeable Potassium, K	LB282572	meq/100g	0.01	<0.01	97%
Exchangeable Potassium Percentage*	LB282572	%	0.1	<0.1	NA
Exchangeable Calcium, Ca	LB282572	mg/kg	2		NA
Exchangeable Calcium, Ca	LB282572	meq/100g	0.01	<0.01	107%
Exchangeable Calcium Percentage*	LB282572	%	0.1	570.2	NA
Exchangeable Magnesium, Mg	LB282572	mg/kg	2		NA
Exchangeable Magnesium, Mg	LB282572	meq/100g	0.02	<0.02	83%
Exchangeable Magnesium Percentage*	LB282572	%	0.1	<0.1	NA
Cation Exchange Capacity	LB282572	meq/100g	0.02	<0.02	NA

pH in soil (1:5) Method: ME-(AU)-[ENV]AN101

Parameter	QC Reference	Units	LOR	LCS %Recovery
pH (CaCl2)*	LB282576	pH Units	0.1	NA

TOC in Soil Method: ME-(AU)-[ENV]AN188

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Total Organic Carbon	LB282574	%w/w	0.05	<0.05	10%	82%	NA
Organic Matter (calc)*	LB282574	%w/w	0.1	<0.1			

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES Method: ME-(AU)-[ENV]AN040/AN320

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Iron, Fe	LB282379	mg/kg	50	<50	102%

METHOD

METHODOLOGY SUMMARY

AN005	The particle size distribution of a soil is determined by wet sieving, using a maximum of 900 mL of deionised water to sieve all fractions down to 75 µm. Referenced to AS1289.3.6.1 and AS1141.11.
AN005	Following wet sieving of the sample,(particles smaller than 75 µm) a dispersing solution is added and a hydrometer is used to measure sedimentation. Soil density is determined and the percentage of each size fraction calculated. Referenced to AS1289.3.6.3.
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by AAS or ICP as per USEPA Method 200.8.
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.
AN101	pH in Soil Sludge Sediment and Water: pH is measured electrometrically using a combination electrode and is calibrated against 3 buffers purchased commercially. For soils, sediments and sludges, an extract with water (or 0.01M CaCl ₂) is made at a ratio of 1:5 and the pH determined and reported on the extract. Reference APHA 4500-H+.
AN122	Exchangeable Cations, CEC and ESP: Soil sample is extracted in 1 M Ammonium Acetate at pH=7 (or 1M Ammonium Chloride at pH=7) with cations (Na, K, Ca & Mg) then determined by ICP OES/ICP MS and reported as Exchangeable Cations. For saline soils, these results can be corrected for water soluble cations and reported as Exchangeable cations in meq/100g or soil can be pre-treated (aqueous ethanol/aqueous glycerol) prior to extraction. Cation Exchange Capacity (CEC) is the sum of the exchangeable cations in meq/100g.
AN122	The Exchangeable Sodium Percentage (ESP) is calculated as the exchangeable sodium divided by the CEC (all in meq/100g) times 100. ESP can be used to categorise the sodicity of the soil as below : ESP < 6% non-sodic ESP 6-15% sodic ESP >15% strongly sodic Method is referenced to Rayment and Lyons, 2011, sections 15D3 and 15N1.-
AN188	The organic material in the soil sample is oxidised with chromic acid in the presence of excess sulfuric acid, without external heat being applied. The excess dichromate ion is determined by titration with standard ammonium iron (II) sulfate solution and the amount of oxidised material is calculated from the quantity of dichromate reduced. Referenced to NEPM 105 and AS1289.1.1.1.

FOOTNOTES

IS	Insufficient sample for analysis.	LOR	Limit of Reporting
LNR	Sample listed, but not received.	↑↓	Raised or Lowered Limit of Reporting
*	NATA accreditation does not cover the performance of this service.	QFH	QC result is above the upper tolerance
**	Indicative data, theoretical holding time exceeded.	QFL	QC result is below the lower tolerance
***	Indicates that both * and ** apply.	-	The sample was not analysed for this analyte
		NVL	Not Validated

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.

Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the "Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.

Note that in terms of units of radioactivity:

- 1 Bq is equivalent to 27 pCi
- 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here : https://www.sgs.com.au/~media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022_QA_QC_Plan.pdf

- * NATA accreditation does not cover the performance of this service.
- ** Indicative data, theoretical holding time exceeded.
- *** Indicates that both * and ** apply.
- Sample not analysed for this analyte.
- IS Insufficient sample for analysis.
- LNR Sample listed, but not received.
- LOR Limit of reporting.
- QFH QC result is above the upper tolerance.
- QFL QC result is below the lower tolerance.
- ① At least 2 of 3 surrogates are within acceptance criteria.
- ② RPD failed acceptance criteria due to sample heterogeneity.
- ③ Results less than 5 times LOR preclude acceptance criteria for RPD.
- ④ Recovery failed acceptance criteria due to matrix interference.
- ⑤ Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
- ⑥ LOR was raised due to sample matrix interference.
- ⑦ LOR was raised due to dilution of significantly high concentration of analyte in sample.
- ⑧ Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
- ⑨ Recovery failed acceptance criteria due to sample heterogeneity.
- ⑩ LOR was raised due to high conductivity of the sample (required dilution).
- † Refer to relevant report comments for further information.

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STATEMENT OF QA/QC PERFORMANCE

SE247983A R0

CLIENT DETAILS

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Email Katelyn.Elliot@cardno.com

Project **300304375 Racecourse Rd - Additional**
Order Number **300304375**
Samples 19

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SGS Reference **SE247983A R0**
Date Received 14 Jun 2023
Date Reported 21 Jun 2023

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.

This QA/QC Statement must be read in conjunction with the referenced Analytical Report.

The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Extraction Date

pH in soil (1:5)

1 item

SAMPLE SUMMARY

Sample counts by matrix	1 Soil	Type of documentation received	Email
Date documentation received	14/6/2023@11:58an	Samples received in good order	Yes
Samples received without headspace	Yes	Sample temperature upon receipt	4.7°C
Sample container provider	Other Lab	Turnaround time requested	Three Days
Samples received in correct containers	Yes	Sufficient sample for analysis	Yes
Sample cooling method	Ice	Samples clearly labelled	Yes
Complete documentation received	Yes	Number of eskies/boxes received	

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)

Method: ME-(AU)-[ENV]AN122

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP134_0.3	SE247983A.009	LB282572	23 May 2023	14 Jun 2023	20 Jun 2023	16 Jun 2023	20 Jun 2023	16 Jun 2023

pH in soil (1:5)

Method: ME-(AU)-[ENV]AN101

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP134_0.3	SE247983A.009	LB282576	23 May 2023	14 Jun 2023	30 May 2023	16 Jun 2023†	17 Jun 2023	16 Jun 2023

TOC in Soil

Method: ME-(AU)-[ENV]AN188

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP134_0.3	SE247983A.009	LB282574	23 May 2023	14 Jun 2023	20 Jun 2023	16 Jun 2023	20 Jun 2023	16 Jun 2023

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP134_0.3	SE247983A.009	LB282379	23 May 2023	14 Jun 2023	19 Nov 2023	14 Jun 2023	19 Nov 2023	16 Jun 2023



Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No surrogates were required for this job.



METHOD BLANKS

SE247983A R0

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)

Method: ME-(AU)-[ENV]AN122

Sample Number	Parameter	Units	LOR	Result
LB282572.001	Exchangeable Sodium, Na	mg/kg	2	-0.3548
	Exchangeable Potassium, K	mg/kg	2	-0.0908
	Exchangeable Calcium, Ca	mg/kg	2	0.4722
	Exchangeable Magnesium, Mg	mg/kg	2	-0.021

TOC in Soil

Method: ME-(AU)-[ENV]AN188

Sample Number	Parameter	Units	LOR	Result
LB282574.001	Total Organic Carbon	%w/w	0.05	<0.05

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result
LB282379.001	Iron, Fe	mg/kg	50	<50



DUPLICATES

SE247983A R0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: $RPD = | \text{OriginalResult} - \text{ReplicateResult} | \times 100 / \text{Mean}$
The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: $MAD = 100 \times \text{SDL} / \text{Mean} + \text{LR}$
Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may give a different calculated RPD.

TOC in Soil					Method: ME-(AU)-ENVJAN188			
Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE249016.010	LB282574.004	Total Organic Carbon	%w/w	0.05	0.27	0.30	48	10



Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)**Method: ME-(AU)-[ENV]AN122**

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB282572.002	Exchangeable Sodium, Na	meq/100g	0.01	0.19	0.194	80 - 120	98
	Exchangeable Potassium, K	meq/100g	0.01	0.61	0.63	80 - 120	97
	Exchangeable Calcium, Ca	meq/100g	0.01	6.8	6.3	80 - 120	107
	Exchangeable Magnesium, Mg	meq/100g	0.02	0.93	1.11	80 - 120	83

TOC in Soil**Method: ME-(AU)-[ENV]AN188**

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB282574.002	Total Organic Carbon	%w/w	0.05	0.27	0.325	80 - 120	82

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES**Method: ME-(AU)-[ENV]AN040/AN320**

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB282379.002	Iron, Fe	mg/kg	50	41000	39905	80 - 120	102



MATRIX SPIKES

SE247983A R0

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

TOC in Soil			Method: ME-(AU)-[ENV]AN188					
QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE248958.032	LB282574.014	Total Organic Carbon	%w/w	0.05	3.2	3.22833523203	-	-



MATRIX SPIKE DUPLICATES

SE247983A R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: $RPD = | \text{OriginalResult} - \text{ReplicateResult} | \times 100 / \text{Mean}$

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: $MAD = 100 \times \text{SDL} / \text{Mean} + \text{LR}$

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.



Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here : https://www.sgs.com.au/~media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022_QA_QC_Plan.pdf

- * NATA accreditation does not cover the performance of this service.
- ** Indicative data, theoretical holding time exceeded.
- *** Indicates that both * and ** apply.
- Sample not analysed for this analyte.
- IS Insufficient sample for analysis.
- LNR Sample listed, but not received.
- LOR Limit of reporting.
- QFH QC result is above the upper tolerance.
- QFL QC result is below the lower tolerance.
- ① At least 2 of 3 surrogates are within acceptance criteria.
- ② RPD failed acceptance criteria due to sample heterogeneity.
- ③ Results less than 5 times LOR preclude acceptance criteria for RPD.
- ④ Recovery failed acceptance criteria due to matrix interference.
- ⑤ Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
- ⑥ LOR was raised due to sample matrix interference.
- ⑦ LOR was raised due to dilution of significantly high concentration of analyte in sample.
- ⑧ Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
- ⑨ Recovery failed acceptance criteria due to sample heterogeneity.
- ⑩ LOR was raised due to high conductivity of the sample (required dilution).
- † Refer to relevant report comments for further information.

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This test report shall not be reproduced, except in full.



SAMPLE RECEIPT ADVICE

SE247983

CLIENT DETAILS

Contact Katelyn.Elliot
Client STANTEC AUSTRALIA PTY LTD
Address LEVEL 22, 570 BOURKE STREET
MELBOURNE VIC 3000

Telephone 61 3 85547000
Facsimile (Not specified)
Email Katelyn.Elliot@stantec.com

Project **300304375 Racecourse Rd**
Order Number **300304375**
Samples 19

LABORATORY DETAILS

Manager Huong Crawford
Laboratory SGS Alexandria Environmental
Address Unit 16, 33 Maddox St
Alexandria NSW 2015

Telephone +61 2 8594 0400
Facsimile +61 2 8594 0499
Email au.environmental.sydney@sgs.com

Samples Received Tue 23/5/2023
Report Due Wed 31/5/2023
SGS Reference **SE247983**

SUBMISSION DETAILS

This is to confirm that 19 samples were received on Tuesday 23/5/2023. Results are expected to be ready by COB Wednesday 31/5/2023. Please quote SGS reference SE247983 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Sample counts by matrix	19 Soil	Type of documentation received	COC
Date documentation received	24/5/2023@10:06am	Samples received in good order	Yes
Samples received without headspace	Yes	Sample temperature upon receipt	4.7°C
Sample container provider	Other Lab	Turnaround time requested	Standard
Samples received in correct containers	Yes	Sufficient sample for analysis	Yes
Sample cooling method	Ice	Samples clearly labelled	Yes
Complete documentation received	Yes	Number of eskies/boxes received	

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

PFAS subcontracted to SGS Melbourne, 10/585 Blackburn Road, Notting Hill, VIC, NATA Accreditation Number. 2562/14420.
12 Soil samples have been placed on hold as no tests have been assigned for them by the client. These samples will not be processed.

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SAMPLE RECEIPT ADVICE

SE247983

CLIENT DETAILS

Client STANTEC AUSTRALIA PTY LTD

Project 300304375 Racecourse Rd

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	Total Recoverable Elements in Soil/Waste	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
001	TP129_0.3	30	14	26	11	7	10	11	7
002	TP129_0.5	-	-	26	-	7	10	11	7
003	TP130_0.3	30	14	26	11	7	10	11	7
004	TP130_1.5	-	-	26	-	7	10	11	7
005	TP131_0.3	30	14	26	11	7	10	11	7
006	TP131_1	-	-	26	-	7	10	11	7
007	TP133_0.3	30	14	26	11	7	10	11	7
008	TP133_1	-	-	26	-	7	10	11	7
009	TP134_0.3	30	14	26	11	7	10	11	7
010	TP134_0.5	-	-	26	-	7	10	11	7
011	TP135_0.3	30	14	26	11	7	10	11	7
012	TP135_1.5	-	-	26	-	7	10	11	7
013	TP135_2	-	-	26	-	7	10	11	7
014	QA100	-	-	26	-	7	10	11	7
015	DRUM_1	30	14	26	11	7	10	11	7
016	GS1	30	14	26	-	7	10	11	7
017	GS3	30	14	26	-	7	10	11	7
018	GS5	30	14	26	-	7	10	11	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.

The numbers shown in the table indicate the number of results requested in each package.

Please indicate as soon as possible should your request differ from these details .

Testing as per this table shall commence immediately unless the client intervenes with a correction .



SAMPLE RECEIPT ADVICE

SE247983

CLIENT DETAILS

Client STANTEC AUSTRALIA PTY LTD

Project 300304375 Racecourse Rd

SUMMARY OF ANALYSIS

No.	Sample ID	Fibre Identification in soil	Gravimetric Determination of Asbestos in Soil	Mercury in Soil	Moisture Content
001	TP129_0.3	2	9	1	1
002	TP129_0.5	-	-	1	1
003	TP130_0.3	2	9	1	1
004	TP130_1.5	-	-	1	1
005	TP131_0.3	2	9	1	1
006	TP131_1	-	-	1	1
007	TP133_0.3	2	9	1	1
008	TP133_1	-	-	1	1
009	TP134_0.3	2	9	1	1
010	TP134_0.5	-	-	1	1
011	TP135_0.3	2	9	1	1
012	TP135_1.5	-	-	1	1
013	TP135_2	-	-	1	1
014	QA100	-	-	1	1
015	DRUM_1	2	9	1	1
016	GS1	2	9	1	1
017	GS3	2	9	1	1
018	GS5	2	9	1	1
019	GS7	2	-	-	-

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.

The numbers shown in the table indicate the number of results requested in each package.

Please indicate as soon as possible should your request differ from these details .

Testing as per this table shall commence immediately unless the client intervenes with a correction .



SAMPLE RECEIPT ADVICE

SE247983

CLIENT DETAILS

Client **STANTEC AUSTRALIA PTY LTD**

Project **300304375 Racecourse Rd**

SUMMARY OF ANALYSIS

No.	Sample ID	Per- and Polyfluoroalkyl Substances (PFAS) in
004	TP130_1.5	23
012	TP135_1.5	23
015	DRUM_1	23

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

EM-MAILED
24/5/23 @ 10.06



Stantec

From: Stantec Wollongong
Address: Shop 1, Level 1
16 Burelli St
Wollongong NSW 2500
Phone: (02) 4231 9600
Attention: **Kateelyn Elliott**
Email: ContamNSW@cardno.com.au
Mobile: **0477 928 328**

To: SGS
Address: Unit 16
33 Maddox Street
Alexandria NSW 2015
Phone: (02) 8594 0400
Email: au.environmental.sydney@sgs.com
katelyn.elliott@cardno.com.au; christopher.cook@cardno.c

Attempt to chill evident: Y / N

Sample Temperature on Arrival:

Date: 23/05/2023
TAT: Standard TAT (5 days)
Purchase Order: 300304375
Laboratory Quote ID: Start -IE -JUL 22 -275935
Project number: 300304375
Project name: Racecourse Rd
Data output format: PDF, Estdat

Notes: Please hold all samples, sample analysis request to be issued tomorrow

SGS EHS Sydney COC

SE247983



Notes:		Please hold all samples, sample analysis request to be issued tomorrow																										
Laboratory Sample Number	Cardio Sample Number	Sample Date	Matrix	Container Plastic Tube – PT Bag – B Petri Dish – PD Plastic Bottle – PB Plastic Jar – PJ Glass Jar – GJ Glass Bottle – GB Glass Vial – GV	Analytes																Applicable Suites	Sample Comments						
					Single Analytes																							
					TRH	TRH w/ Silica Gel	BTEXN	PAHS	OCP	OPP	PCB	Lead	CL1 - 7 Metals	CL2 - 8 Metals	CL3 - 13 Metals	Phenols - Speciated	VOCs	SVOC	Asbestos in Soil (NEPM)	PFA5 Short Suite - Std LOR			Dup to 2nd Lab	Hold	Select Analyte or Delete to Clear	Select Analyte or Delete to Clear	Select Analyte or Delete to Clear	Select Analyte or Delete to Clear
1	TP129_0.3	22/05/2023	Soil	GJ, PJ, B	1		1	1	1	1	1						1								CL17	Std M8	Relinquished By: Katelyn Elliott	
2	TP129_0.5	22/05/2023	Soil	GJ, PJ, B	1		1	1																	CL10	Std M8	Company: Stantec Time: 2:30pm Date: 23/5/23	
3	TP130_0.3	22/05/2023	Soil	GJ, PJ, B	1		1	1	1	1	1						1			1					CL17	Std M8	Received By:	
	TP130_0.5	22/05/2023	Soil	GJ, PJ, B																1						Hold		
	TP130_1	22/05/2023	Soil	GJ, PJ, B																1						Hold		
4	TP130_1.5	22/05/2023	Soil	GJ, PJ, B	1		1	1									1								CL10	Std M8	Company: Time: Date:	
	TP130_2	22/05/2023	Soil	GJ, PJ, B																1						Hold		
5	TP131_0.3	22/05/2023	Soil	GJ, PJ, B	1		1	1	1	1	1						1								CL17	Std M8	Relinquished By:	
	TP131_0.5	22/05/2023	Soil	GJ, PJ, B																1						Hold		
6	TP131_1	22/05/2023	Soil	GJ, PJ, B	1		1	1									1								CL10	Std M8	Company: Time: Date:	
	TP133_0.3	22/05/2023	Soil	GJ, PJ, B	1		1	1	1	1	1						1								CL17	Std M8	Received By:	
	TP133_0.5	22/05/2023	Soil	GJ, PJ, B																1						Hold		
8	TP133_1	22/05/2023	Soil	GJ, PJ, B	1		1	1									1								CL10	Std M8		
	TP133_1.5	22/05/2023	Soil	GJ, PJ, B																1						Hold		Company: Time: Date:
Total					8		8	8	4	4	4						8							4	1			7

SGS EHS Sydney COC

SE247983

300304375_COC_22-23.5.23_KE.xlsx

Chain Of Custody Page 1 Of 3



From: Stantec Wollongong
Address: Shop 1, Level 1
16 Burelli St
Wollongong NSW 2500
Phone: (02) 4231 9600
Attention: **Katelyn Elliott**
Email: ContamNSW@cardno.com.au
Mobile: **0477 928 328**

To: SGS
Address: Unit 16
33 Maddox Street
Alexandria NSW 2015
Phone: (02) 8594 0400
Email: au.environmental.sydney@sgs.com
katelyn.elliott@cardno.com.au; christopher.cook@cardno.c

Date: 23/05/2023
TAT: Standard TAT (5 days)
Purchase Order: 300304375
Laboratory Quote ID: Stant -IE -JUL 22 -275935
Project number: 300304375
Project name: Racecourse Rd
Data output format: PDF, Esdat

Chain of Custody

Attempt to chill evident: Y / N Sample Temperature on Arrival: _____

Notes: Please hold all samples, sample analysis request to be issued tomorrow

Laboratory Sample Number	Cardio Sample Number	Sample Date	Matrix	Container	Analytes																		Applicable Suites	Sample Comments																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
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					TRH	TRH w/ Silica Gel	BTEXN	PAHS	OCP	OPP	PCB	Lead	CL1 - 7 Metals	CL2 - 8 Metals	CL3 - 13 Metals	Phenols - Speciated	VOCs	SVOC	Asbestos in Soil (NEPM)	PFAS Short Suite - Std LOR	Dup to 2nd Lab	Hold			Select Analyte or Delete to Clear	Select Analyte or Delete to Clear	Select Analyte or Delete to Clear	Select Analyte or Delete to Clear																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
9	TP134_0.3	22/05/2023	Soil	GJ, PJ, B	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

For Subancy 23/05/23 @ 2.40



To: SGS
Address: Unit 16
33 Maddox Street
Alexandria NSW 2015
Phone: (02) 8594 0400
Email: au.environmental.sydney@sgs.com
katelyn.elliott@cardno.com.au; christopher.cook@cardno.c

Date: 23/05/2023
TAT: Standard TAT (5 days)
Purchase Order: 300304375
Laboratory Quote ID: Stant -IE -JUL 22 -275935
Project number: 300304375
Project name: Racecourse Rd
Data output format: PDF, Estdat

Attempt to chill evident: Y / N

Sample Temperature on Arrival:

Notes:	Please hold all samples, sample analysis request to be issued tomorrow

[illegible]

Yin, Emily (Sydney)

From: Chris Cook <christopher.cook@cardno.com.au>
Sent: Wednesday, 24 May 2023 4:18 PM
To: AU.Environmental.Sydney, AU (Sydney)
Cc: Katelyn Elliott; AU.SampleReceipt.Sydney, AU (Sydney)
Subject: RE: [EXTERNAL] Stantec - 300304375 - COC

*** WARNING: this message is from an EXTERNAL SENDER. Please be cautious, particularly with links and attachments. ***

Hi Matt,

Thanks for that.

Can confirm that there was only one bag for that sample.

Please proceed with the standard ID.

Regards,

Chris Cook
Senior Environmental Scientist

Phone: +61 2 4254 8732
Mobile: 0415 753 569
christopher.cook@cardno.com.au

Stantec Australia
Ground Floor, 16 Burelli Street Wollongong New South Wales 2500 Australia



Stantec acknowledges the Traditional Owners of Country throughout Australia and recognises their continuing connection to lands, waters and communities. We pay our respect to Aboriginal and Torres Strait Islander cultures and to Elders past and present.

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Please consider the environment before printing this email.

From: AU.Environmental.Sydney, AU (Sydney) <AU.Environmental.Sydney@sgs.com>
Sent: Wednesday, May 24, 2023 3:16 PM
To: Chris Cook <christopher.cook@cardno.com.au>
Cc: AU.Environmental.Sydney, AU (Sydney) <AU.Environmental.Sydney@sgs.com>; Katelyn Elliott <katelyn.elliott@cardno.com.au>; AU.SampleReceipt.Sydney, AU (Sydney) <AU.SampleReceipt.Sydney@sgs.com>
Subject: RE: [EXTERNAL] Stantec - 300304375 - COC

Hi Chris.

Thanks for the chat earlier. I've spoken with our lab team, and they've advised that for sample GS7, the bag received was about half full, and has only ~350 g of sample in it. This is insufficient for Asbestos Quantification (NEPM), which requires a filled 500mL bag to run.

CERTIFICATE OF ANALYSIS 324759

Client Details

Client	Cardno (NSW/ACT) Pty Ltd
Attention	Katelyn Elliott
Address	PO Box 19, St Leonards, NSW, 1590

Sample Details

Your Reference	<u>300304375, Racecourse Rd</u>
Number of Samples	1 Soil
Date samples received	02/06/2023
Date completed instructions received	02/06/2023

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.
Samples were analysed as received from the client. Results relate specifically to the samples as received.
Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Report Details

Date results requested by	09/06/2023
Date of Issue	08/06/2023
NATA Accreditation Number 2901. This document shall not be reproduced except in full.	
Accredited for compliance with ISO/IEC 17025 - Testing. Tests not covered by NATA are denoted with *	

Results Approved By

Kyle Gavrily, Senior Chemist
Loren Bardwell, Development Chemist

Authorised By

Nancy Zhang, Laboratory Manager

vTRH(C6-C10)/BTEXN in Soil		
Our Reference		324759-1
Your Reference	UNITS	QC100
Date Sampled		22/05/2023
Type of sample		Soil
Date extracted	-	05/06/2023
Date analysed	-	06/06/2023
TRH C ₆ - C ₉	mg/kg	<25
TRH C ₆ - C ₁₀	mg/kg	<25
vTPH C ₆ - C ₁₀ less BTEX (F1)	mg/kg	<25
Benzene	mg/kg	<0.2
Toluene	mg/kg	<0.5
Ethylbenzene	mg/kg	<1
m+p-xylene	mg/kg	<2
o-Xylene	mg/kg	<1
Naphthalene	mg/kg	<1
Total +ve Xylenes	mg/kg	<1
Surrogate aaa-Trifluorotoluene	%	121

svTRH (C10-C40) in Soil		
Our Reference		324759-1
Your Reference	UNITS	QC100
Date Sampled		22/05/2023
Type of sample		Soil
Date extracted	-	5/06/2023
Date analysed	-	05/06/2023
TRH C ₁₀ - C ₁₄	mg/kg	<50
TRH C ₁₅ - C ₂₈	mg/kg	<100
TRH C ₂₉ - C ₃₆	mg/kg	<100
Total +ve TRH (C10-C36)	mg/kg	<50
TRH >C ₁₀ -C ₁₆	mg/kg	<50
TRH >C ₁₀ - C ₁₆ less Naphthalene (F2)	mg/kg	<50
TRH >C ₁₆ -C ₃₄	mg/kg	<100
TRH >C ₃₄ -C ₄₀	mg/kg	<100
Total +ve TRH (>C10-C40)	mg/kg	<50
Surrogate o-Terphenyl	%	83

PAHs in Soil		
Our Reference		324759-1
Your Reference	UNITS	QC100
Date Sampled		22/05/2023
Type of sample		Soil
Date extracted	-	05/06/2023
Date analysed	-	06/06/2023
Naphthalene	mg/kg	<0.1
Acenaphthylene	mg/kg	<0.1
Acenaphthene	mg/kg	<0.1
Fluorene	mg/kg	<0.1
Phenanthrene	mg/kg	<0.1
Anthracene	mg/kg	<0.1
Fluoranthene	mg/kg	<0.1
Pyrene	mg/kg	<0.1
Benzo(a)anthracene	mg/kg	<0.1
Chrysene	mg/kg	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2
Benzo(a)pyrene	mg/kg	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1
Total +ve PAH's	mg/kg	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5
Surrogate <i>p</i> -Terphenyl-d14	%	95

Acid Extractable metals in soil		
Our Reference		324759-1
Your Reference	UNITS	QC100
Date Sampled		22/05/2023
Type of sample		Soil
Date prepared	-	05/06/2023
Date analysed	-	06/06/2023
Arsenic	mg/kg	6
Cadmium	mg/kg	<0.4
Chromium	mg/kg	18
Copper	mg/kg	11
Lead	mg/kg	9
Mercury	mg/kg	<0.1
Nickel	mg/kg	16
Zinc	mg/kg	21

Moisture		
Our Reference		324759-1
Your Reference	UNITS	QC100
Date Sampled		22/05/2023
Type of sample		Soil
Date prepared	-	05/06/2023
Date analysed	-	06/06/2023
Moisture	%	11

Method ID	Methodology Summary
Inorg-008	Moisture content determined by heating at 105+/-5 °C for a minimum of 12 hours.
Metals-020	Determination of various metals by ICP-AES.
Metals-021	Determination of Mercury by Cold Vapour AAS.
Org-020	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis.
Org-020	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis. Note, the Total +ve TRH PQL is reflective of the lowest individual PQL and is therefore "Total +ve TRH" is simply a sum of the positive individual TRH fractions (>C10-C40).
Org-022/025	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS and/or GC-MS/MS. Benzo(a)pyrene TEQ as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater - 2013. For soil results:- 1. 'EQ PQL' values are assuming all contributing PAHs reported as <PQL are actually at the PQL. This is the most conservative approach and can give false positive TEQs given that PAHs that contribute to the TEQ calculation may not be present. 2. 'EQ zero' values are assuming all contributing PAHs reported as <PQL are zero. This is the least conservative approach and is more susceptible to false negative TEQs when PAHs that contribute to the TEQ calculation are present but below PQL. 3. 'EQ half PQL' values are assuming all contributing PAHs reported as <PQL are half the stipulated PQL. Hence a mid-point between the most and least conservative approaches above. Note, the Total +ve PAHs PQL is reflective of the lowest individual PQL and is therefore "Total +ve PAHs" is simply a sum of the positive individual PAHs.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater.

Method ID	Methodology Summary
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater. Note, the Total +ve Xylene PQL is reflective of the lowest individual PQL and is therefore "Total +ve Xylenes" is simply a sum of the positive individual Xylenes.

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-6	[NT]
Date extracted	-			05/06/2023	[NT]	[NT]	[NT]	[NT]	05/06/2023	[NT]
Date analysed	-			06/06/2023	[NT]	[NT]	[NT]	[NT]	06/06/2023	[NT]
TRH C ₆ - C ₉	mg/kg	25	Org-023	<25	[NT]	[NT]	[NT]	[NT]	128	[NT]
TRH C ₆ - C ₁₀	mg/kg	25	Org-023	<25	[NT]	[NT]	[NT]	[NT]	128	[NT]
Benzene	mg/kg	0.2	Org-023	<0.2	[NT]	[NT]	[NT]	[NT]	126	[NT]
Toluene	mg/kg	0.5	Org-023	<0.5	[NT]	[NT]	[NT]	[NT]	127	[NT]
Ethylbenzene	mg/kg	1	Org-023	<1	[NT]	[NT]	[NT]	[NT]	119	[NT]
m+p-xylene	mg/kg	2	Org-023	<2	[NT]	[NT]	[NT]	[NT]	133	[NT]
o-Xylene	mg/kg	1	Org-023	<1	[NT]	[NT]	[NT]	[NT]	136	[NT]
Naphthalene	mg/kg	1	Org-023	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-023	133	[NT]	[NT]	[NT]	[NT]	120	[NT]

QUALITY CONTROL: svTRH (C10-C40) in Soil					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-6	[NT]
Date extracted	-			/06/2023	[NT]	[NT]	[NT]	[NT]	05/06/2023	[NT]
Date analysed	-			05/06/2023	[NT]	[NT]	[NT]	[NT]	05/06/2023	[NT]
TRH C ₁₀ - C ₁₄	mg/kg	50	Org-020	<50	[NT]	[NT]	[NT]	[NT]	115	[NT]
TRH C ₁₅ - C ₂₈	mg/kg	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	107	[NT]
TRH C ₂₉ - C ₃₆	mg/kg	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	114	[NT]
TRH >C ₁₀ -C ₁₆	mg/kg	50	Org-020	<50	[NT]	[NT]	[NT]	[NT]	115	[NT]
TRH >C ₁₆ -C ₃₄	mg/kg	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	107	[NT]
TRH >C ₃₄ -C ₄₀	mg/kg	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	114	[NT]
Surrogate o-Terphenyl	%		Org-020	87	[NT]	[NT]	[NT]	[NT]	91	[NT]

QUALITY CONTROL: PAHs in Soil					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-6	[NT]
Date extracted	-			05/06/2023	[NT]	[NT]	[NT]	[NT]	05/06/2023	[NT]
Date analysed	-			06/06/2023	[NT]	[NT]	[NT]	[NT]	06/06/2023	[NT]
Naphthalene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	107	[NT]
Acenaphthylene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	109	[NT]
Fluorene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	103	[NT]
Phenanthrene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	104	[NT]
Anthracene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	108	[NT]
Pyrene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	109	[NT]
Benzo(a)anthracene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	113	[NT]
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-022/025	<0.2	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-022/025	<0.05	[NT]	[NT]	[NT]	[NT]	110	[NT]
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-022/025	113	[NT]	[NT]	[NT]	[NT]	116	[NT]

QUALITY CONTROL: Acid Extractable metals in soil					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-6	[NT]
Date prepared	-			05/06/2023	[NT]	[NT]	[NT]	[NT]	05/06/2023	[NT]
Date analysed	-			06/06/2023	[NT]	[NT]	[NT]	[NT]	06/06/2023	[NT]
Arsenic	mg/kg	4	Metals-020	<4	[NT]	[NT]	[NT]	[NT]	102	[NT]
Cadmium	mg/kg	0.4	Metals-020	<0.4	[NT]	[NT]	[NT]	[NT]	98	[NT]
Chromium	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	99	[NT]
Copper	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	105	[NT]
Lead	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	101	[NT]
Mercury	mg/kg	0.1	Metals-021	<0.1	[NT]	[NT]	[NT]	[NT]	111	[NT]
Nickel	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	100	[NT]
Zinc	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	99	[NT]

Result Definitions

NT	Not tested
NA	Test not required
INS	Insufficient sample for this test
PQL	Practical Quantitation Limit
<	Less than
>	Greater than
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
NS	Not specified
NEPM	National Environmental Protection Measure
NR	Not Reported

Quality Control Definitions

Blank	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
Duplicate	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
Matrix Spike	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample)	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
Surrogate Spike	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.
Australian Drinking Water Guidelines recommend that Thermotolerant Coliform, Faecal Enterococci, & E.Coli levels are less than 1cfu/100mL. The recommended maximums are taken from "Australian Drinking Water Guidelines", published by NHMRC & ARMC 2011.	
The recommended maximums for analytes in urine are taken from "2018 TLVs and BEIs", as published by ACGIH (where available). Limit provided for Nickel is a precautionary guideline as per Position Paper prepared by AIOH Exposure Standards Committee, 2016.	
Guideline limits for Rinse Water Quality reported as per analytical requirements and specifications of AS 4187, Amdt 2 2019, Table 7.2	

Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.

Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.

Spikes for Physical and Aggregate Tests are not applicable.

For VOCs in water samples, three vials are required for duplicate or spike analysis.

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% – see ELN-P05 QA/QC tables for details; <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals (not SPOCAS); 60-140% for organics/SPOCAS (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

In circumstances where no duplicate and/or sample spike has been reported at 1 in 10 and/or 1 in 20 samples respectively, the sample volume submitted was insufficient in order to satisfy laboratory QA/QC protocols.

When samples are received where certain analytes are outside of recommended technical holding times (THTs), the analysis has proceeded. Where analytes are on the verge of breaching THTs, every effort will be made to analyse within the THT or as soon as practicable.

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached.

Where matrix spike recoveries fall below the lower limit of the acceptance criteria (e.g. for non-labile or standard Organics <60%), positive result(s) in the parent sample will subsequently have a higher than typical estimated uncertainty (MU estimates supplied on request) and in these circumstances the sample result is likely biased significantly low.

Measurement Uncertainty estimates are available for most tests upon request.

Analysis of aqueous samples typically involves the extraction/digestion and/or analysis of the liquid phase only (i.e. NOT any settled sediment phase but inclusive of suspended particles if present), unless stipulated on the Envirolab COC and/or by correspondence. Notable exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, total recoverable metals and PFAS where solids are included by default.

Samples for Microbiological analysis (not Amoeba forms) received outside of the 2-8°C temperature range do not meet the ideal cooling conditions as stated in AS2031-2012.

SAMPLE RECEIPT ADVICE

Client Details

Client	Cardno (NSW/ACT) Pty Ltd
Attention	Katelyn Elliott

Sample Login Details

Your reference	300304375, Racecourse Rd
Envirolab Reference	324759
Date Sample Received	02/06/2023
Date Instructions Received	02/06/2023
Date Results Expected to be Reported	09/06/2023

Sample Condition

Samples received in appropriate condition for analysis	Yes
No. of Samples Provided	1 Soil
Turnaround Time Requested	Standard
Temperature on Receipt (°C)	12
Cooling Method	Ice Pack
Sampling Date Provided	YES

Comments

Nil

Please direct any queries to:

Aileen Hie

Phone: 02 9910 6200
Fax: 02 9910 6201
Email: ahie@envirolab.com.au

Jacinta Hurst

Phone: 02 9910 6200
Fax: 02 9910 6201
Email: jhurst@envirolab.com.au

Analysis Underway, details on the following page:

**Envirolab Services Pty Ltd**

ABN 37 112 535 645

12 Ashley St Chatswood NSW 2067

ph 02 9910 6200 fax 02 9910 6201

customerservice@envirolab.com.au

www.envirolab.com.au

Sample ID	VTRH(C6-C10)/BTEXN in Soil	svTRH (C10-C40) in Soil	PAHs in Soil	Acid Extractable metals in soil
QC100	✓	✓	✓	✓

The '✓' indicates the testing you have requested. **THIS IS NOT A REPORT OF THE RESULTS.**

Additional Info

Sample storage - Waters are routinely disposed of approximately 1 month and soils approximately 2 months from receipt.

Requests for longer term sample storage must be received in writing.

Please contact the laboratory immediately if observed settled sediment present in water samples is to be included in the extraction and/or analysis (exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, Total Recoverable metals and PFAS analysis where solids are included by default.

TAT for Micro is dependent on incubation. This varies from 3 to 6 days.

CLIENT DETAILS

Contact Katelyn.Elliot
Client STANTEC AUSTRALIA PTY LTD
Address LEVEL 22, 570 BOURKE STREET
MELBOURNE VIC 3000

Telephone 61 3 85547000
Facsimile (Not specified)
Email Katelyn.Elliot@cardno.com
Project **300304375 Racecourse Rd**
Order Number **300304375**
Samples 7

LABORATORY DETAILS

Manager Huong Crawford
Laboratory SGS Alexandria Environmental
Address Unit 16, 33 Maddox St
Alexandria NSW 2015
Telephone +61 2 8594 0400
Facsimile +61 2 8594 0499
Email au.environmental.sydney@sgs.com
SGS Reference **SE248449 R0**
Date Received 31/5/2023
Date Reported 8/6/2023

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

PFAS subcontracted to SGS Melbourne, 10/585 Blackburn Road, Notting Hill, VIC, NATA Accreditation Number. 2562/14420. Report No. ME334500

SIGNATORIES



Akheeque BENIAMEEN
Chemist



Bennet LO
Senior Chemist



Huong CRAWFORD
Production Manager



Kamrul AHSAN
Senior Chemist



Ly Kim HA
Organic Section Head



ANALYTICAL RESULTS

SE248449 R0

VOCs in Water [AN433] Tested: 6/6/2023

PARAMETER	UOM	LOR	MW01	MW02	MW03	MW04	QA100
			WATER - 31/5/2023 SE248449.001	WATER - 31/5/2023 SE248449.002	WATER - 31/5/2023 SE248449.003	WATER - 31/5/2023 SE248449.004	WATER - 31/5/2023 SE248449.005
Benzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Toluene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
m/p-xylene	µg/L	1	<1	<1	<1	<1	<1
o-xylene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Total Xylenes	µg/L	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
Total BTEX	µg/L	3	<3	<3	<3	<3	<3
Naphthalene (VOC)*	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dichlorodifluoromethane (CFC-12)	µg/L	5	<5	<5	<5	<5	<5
Chloromethane	µg/L	5	<5	<5	<5	<5	<5
Vinyl chloride (Chloroethene)	µg/L	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Bromomethane	µg/L	10	<10	<10	<10	<10	<10
Chloroethane	µg/L	5	<5	<5	<5	<5	<5
Trichlorofluoromethane	µg/L	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	µg/L	10	<10	<10	<10	<10	<10
Iodomethane	µg/L	5	<5	<5	<5	<5	<5
1,1-dichloroethene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Acrylonitrile	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dichloromethane (Methylene chloride)	µg/L	5	<5	<5	<5	<5	<5
Allyl chloride	µg/L	2	<2	<2	<2	<2	<2
Carbon disulfide	µg/L	2	<2	<2	<2	<2	<2
trans-1,2-dichloroethene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
MtBE (Methyl-tert-butyl ether)	µg/L	2	<2	<2	<2	<2	<2
1,1-dichloroethane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Vinyl acetate*	µg/L	10	<10	<10	<10	<10	<10
MEK (2-butanone)	µg/L	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromochloromethane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroform (THM)	µg/L	0.5	<0.5	<0.5	<0.5	1.0	<0.5
2,2-dichloropropane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-dichloroethane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-trichloroethane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1-dichloropropene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Carbon tetrachloride	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-dichloropropane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitropropane	µg/L	100	<100	<100	<100	<100	<100
Bromodichloromethane (THM)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
MIBK (4-methyl-2-pentanone)	µg/L	5	<5	<5	<5	<5	<5
cis-1,3-dichloropropene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,3-dichloropropene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-trichloroethane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,3-dichloropropane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane (THM)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-hexanone (MBK)	µg/L	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Tetrachloroethene (Perchloroethylene,PCE)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1,2-tetrachloroethane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chlorobenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoform (THM)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Styrene (Vinyl benzene)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2,2-tetrachloroethane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2,3-trichloropropane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,4-dichloro-2-butene	µg/L	1	<1	<1	<1	<1	<1
Isopropylbenzene (Cumene)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5



ANALYTICAL RESULTS

SE248449 R0

VOCs in Water [AN433] Tested: 6/6/2023 (continued)

PARAMETER	UOM	LOR	MW01	MW02	MW03	MW04	QA100
			WATER	WATER	WATER	WATER	WATER
			31/5/2023 SE248449.001	31/5/2023 SE248449.002	31/5/2023 SE248449.003	31/5/2023 SE248449.004	31/5/2023 SE248449.005
Bromobenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
n-propylbenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-chlorotoluene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-chlorotoluene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,3,5-trimethylbenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
tert-butylbenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2,4-trimethylbenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
sec-butylbenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,3-dichlorobenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,4-dichlorobenzene	µg/L	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
p-isopropyltoluene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-dichlorobenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
n-butylbenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-dibromo-3-chloropropane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2,4-trichlorobenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Hexachlorobutadiene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2,3-trichlorobenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Total VOC	µg/L	10	<10	<10	<10	<10	<10



ANALYTICAL RESULTS

SE248449 R0

VOCs in Water [AN433] Tested: 6/6/2023 (continued)

PARAMETER	UOM	LOR	QC100	RIN1
			WATER - 31/5/2023 SE248449.006	WATER - 31/5/2023 SE248449.007
Benzene	µg/L	0.5	<0.5	<0.5
Toluene	µg/L	0.5	<0.5	<0.5
Ethylbenzene	µg/L	0.5	<0.5	<0.5
m/p-xylene	µg/L	1	<1	<1
o-xylene	µg/L	0.5	<0.5	<0.5
Total Xylenes	µg/L	1.5	<1.5	<1.5
Total BTEX	µg/L	3	<3	<3
Naphthalene (VOC)*	µg/L	0.5	<0.5	<0.5
Dichlorodifluoromethane (CFC-12)	µg/L	5	<5	<5
Chloromethane	µg/L	5	<5	<5
Vinyl chloride (Chloroethene)	µg/L	0.3	<0.3	<0.3
Bromomethane	µg/L	10	<10	<10
Chloroethane	µg/L	5	<5	<5
Trichlorofluoromethane	µg/L	1	<1	<1
Acetone (2-propanone)	µg/L	10	<10	<10
Iodomethane	µg/L	5	<5	<5
1,1-dichloroethene	µg/L	0.5	<0.5	<0.5
Acrylonitrile	µg/L	0.5	<0.5	<0.5
Dichloromethane (Methylene chloride)	µg/L	5	<5	<5
Allyl chloride	µg/L	2	<2	<2
Carbon disulfide	µg/L	2	<2	<2
trans-1,2-dichloroethene	µg/L	0.5	<0.5	<0.5
MtBE (Methyl-tert-butyl ether)	µg/L	2	<2	<2
1,1-dichloroethane	µg/L	0.5	<0.5	<0.5
Vinyl acetate*	µg/L	10	<10	<10
MEK (2-butanone)	µg/L	10	<10	<10
cis-1,2-dichloroethene	µg/L	0.5	<0.5	<0.5
Bromochloromethane	µg/L	0.5	<0.5	<0.5
Chloroform (THM)	µg/L	0.5	<0.5	<0.5
2,2-dichloropropane	µg/L	0.5	<0.5	<0.5
1,2-dichloroethane	µg/L	0.5	<0.5	<0.5
1,1,1-trichloroethane	µg/L	0.5	<0.5	<0.5
1,1-dichloropropene	µg/L	0.5	<0.5	<0.5
Carbon tetrachloride	µg/L	0.5	<0.5	<0.5
Dibromomethane	µg/L	0.5	<0.5	<0.5
1,2-dichloropropane	µg/L	0.5	<0.5	<0.5
Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	<0.5	<0.5
2-nitropropane	µg/L	100	<100	<100
Bromodichloromethane (THM)	µg/L	0.5	<0.5	<0.5
MIBK (4-methyl-2-pentanone)	µg/L	5	<5	<5
cis-1,3-dichloropropene	µg/L	0.5	<0.5	<0.5
trans-1,3-dichloropropene	µg/L	0.5	<0.5	<0.5
1,1,2-trichloroethane	µg/L	0.5	<0.5	<0.5
1,3-dichloropropane	µg/L	0.5	<0.5	<0.5
Dibromochloromethane (THM)	µg/L	0.5	<0.5	<0.5
2-hexanone (MBK)	µg/L	5	<5	<5
1,2-dibromoethane (EDB)	µg/L	0.5	<0.5	<0.5
Tetrachloroethene (Perchloroethylene,PCE)	µg/L	0.5	<0.5	<0.5
1,1,1,2-tetrachloroethane	µg/L	0.5	<0.5	<0.5
Chlorobenzene	µg/L	0.5	<0.5	<0.5
Bromoform (THM)	µg/L	0.5	<0.5	<0.5
Styrene (Vinyl benzene)	µg/L	0.5	<0.5	<0.5
1,1,2,2-tetrachloroethane	µg/L	0.5	<0.5	<0.5
1,2,3-trichloropropane	µg/L	0.5	<0.5	<0.5
trans-1,4-dichloro-2-butene	µg/L	1	<1	<1
Isopropylbenzene (Cumene)	µg/L	0.5	<0.5	<0.5



ANALYTICAL RESULTS

SE248449 R0

VOCs in Water [AN433] Tested: 6/6/2023 (continued)

			QC100	RIN1
			WATER	WATER
			-	-
			31/5/2023	31/5/2023
			SE248449.006	SE248449.007
PARAMETER	UOM	LOR		
Bromobenzene	µg/L	0.5	<0.5	<0.5
n-propylbenzene	µg/L	0.5	<0.5	<0.5
2-chlorotoluene	µg/L	0.5	<0.5	<0.5
4-chlorotoluene	µg/L	0.5	<0.5	<0.5
1,3,5-trimethylbenzene	µg/L	0.5	<0.5	<0.5
tert-butylbenzene	µg/L	0.5	<0.5	<0.5
1,2,4-trimethylbenzene	µg/L	0.5	<0.5	<0.5
sec-butylbenzene	µg/L	0.5	<0.5	<0.5
1,3-dichlorobenzene	µg/L	0.5	<0.5	<0.5
1,4-dichlorobenzene	µg/L	0.3	<0.3	<0.3
p-isopropyltoluene	µg/L	0.5	<0.5	<0.5
1,2-dichlorobenzene	µg/L	0.5	<0.5	<0.5
n-butylbenzene	µg/L	0.5	<0.5	<0.5
1,2-dibromo-3-chloropropane	µg/L	0.5	<0.5	<0.5
1,2,4-trichlorobenzene	µg/L	0.5	<0.5	<0.5
Hexachlorobutadiene	µg/L	0.5	<0.5	<0.5
1,2,3-trichlorobenzene	µg/L	0.5	<0.5	<0.5
Total VOC	µg/L	10	<10	<10



ANALYTICAL RESULTS

SE248449 R0

Volatile Petroleum Hydrocarbons in Water [AN433] Tested: 6/6/2023

			MW01	MW02	MW03	MW04	QA100
			WATER	WATER	WATER	WATER	WATER
			-	-	-	-	-
			31/5/2023	31/5/2023	31/5/2023	31/5/2023	31/5/2023
PARAMETER	UOM	LOR	SE248449.001	SE248449.002	SE248449.003	SE248449.004	SE248449.005
TRH C6-C9	µg/L	40	<40	<40	<40	<40	<40
Benzene (F0)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TRH C6-C10	µg/L	50	<50	<50	<50	<50	<50
TRH C6-C10 minus BTEX (F1)	µg/L	50	<50	<50	<50	<50	<50

			QC100	RIN1
			WATER	WATER
			-	-
			31/5/2023	31/5/2023
PARAMETER	UOM	LOR	SE248449.006	SE248449.007
TRH C6-C9	µg/L	40	<40	<40
Benzene (F0)	µg/L	0.5	<0.5	<0.5
TRH C6-C10	µg/L	50	<50	<50
TRH C6-C10 minus BTEX (F1)	µg/L	50	<50	<50



ANALYTICAL RESULTS

SE248449 R0

TRH (Total Recoverable Hydrocarbons) in Water [AN403] Tested: 5/6/2023

			MW01	MW02	MW03	MW04	QA100
			WATER	WATER	WATER	WATER	WATER
			-	-	-	-	-
			31/5/2023	31/5/2023	31/5/2023	31/5/2023	31/5/2023
PARAMETER	UOM	LOR	SE248449.001	SE248449.002	SE248449.003	SE248449.004	SE248449.005
TRH C10-C14	µg/L	50	<50	<50	<50	<50	<50
TRH C15-C28	µg/L	200	<200	<200	<200	<200	<200
TRH C29-C36	µg/L	200	<200	<200	<200	<200	<200
TRH C37-C40	µg/L	200	<200	<200	<200	<200	<200
TRH >C10-C16	µg/L	60	<60	<60	<60	<60	<60
TRH >C10-C16 - Naphthalene (F2)	µg/L	60	<60	<60	<60	<60	<60
TRH >C16-C34 (F3)	µg/L	500	<500	<500	<500	<500	<500
TRH >C34-C40 (F4)	µg/L	500	<500	<500	<500	<500	<500
TRH C10-C40	µg/L	320	<320	<320	<320	<320	<320

			QC100	RIN1
			WATER	WATER
			-	-
			31/5/2023	31/5/2023
PARAMETER	UOM	LOR	SE248449.006	SE248449.007
TRH C10-C14	µg/L	50	<50	<50
TRH C15-C28	µg/L	200	<200	<200
TRH C29-C36	µg/L	200	<200	<200
TRH C37-C40	µg/L	200	<200	<200
TRH >C10-C16	µg/L	60	<60	<60
TRH >C10-C16 - Naphthalene (F2)	µg/L	60	<60	<60
TRH >C16-C34 (F3)	µg/L	500	<500	<500
TRH >C34-C40 (F4)	µg/L	500	<500	<500
TRH C10-C40	µg/L	320	<320	<320



ANALYTICAL RESULTS

SE248449 R0

Low Level PAH (Poly Aromatic Hydrocarbons) in Water [AN420] Tested: 5/6/2023

			MW01	MW02	MW03	MW04	QA100
			WATER	WATER	WATER	WATER	WATER
			-	-	-	-	-
			31/5/2023	31/5/2023	31/5/2023	31/5/2023	31/5/2023
PARAMETER	UOM	LOR	SE248449.001	SE248449.002	SE248449.003	SE248449.004	SE248449.005
Naphthalene	µg/L	0.02	<0.02	<0.02	<0.02	<0.02	<0.02
2-methylnaphthalene	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1-methylnaphthalene	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Acenaphthylene	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Acenaphthene	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Fluorene	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Phenanthrene	µg/L	0.01	0.01	0.02	0.01	<0.01	0.01
Anthracene	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Fluoranthene	µg/L	0.01	<0.01	0.02	0.01	<0.01	0.02
Pyrene	µg/L	0.01	0.01	0.02	0.01	0.01	0.01
Benzo(a)anthracene	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chrysene	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Benzo(b&j&k)fluoranthene	µg/L	0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Benzo(a)pyrene	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Indeno(1,2,3-cd)pyrene	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Dibenzo(ah)anthracene	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Benzo(ghi)perylene	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Carcinogenic PAHs (as BaP TEQ) - assume non detects	TEQ (µg/L)	0.012	<0.012	<0.012	<0.012	<0.012	<0.012
Total PAH VIC EPA Guidelines (16)*	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total PAH (18)*	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1

			QC100
			WATER
			-
			31/5/2023
PARAMETER	UOM	LOR	SE248449.006
Naphthalene	µg/L	0.02	<0.02
2-methylnaphthalene	µg/L	0.01	<0.01
1-methylnaphthalene	µg/L	0.01	<0.01
Acenaphthylene	µg/L	0.01	<0.01
Acenaphthene	µg/L	0.01	<0.01
Fluorene	µg/L	0.01	<0.01
Phenanthrene	µg/L	0.01	0.01
Anthracene	µg/L	0.01	<0.01
Fluoranthene	µg/L	0.01	0.01
Pyrene	µg/L	0.01	0.01
Benzo(a)anthracene	µg/L	0.01	<0.01
Chrysene	µg/L	0.01	<0.01
Benzo(b&j&k)fluoranthene	µg/L	0.02	<0.02
Benzo(a)pyrene	µg/L	0.01	<0.01
Indeno(1,2,3-cd)pyrene	µg/L	0.01	<0.01
Dibenzo(ah)anthracene	µg/L	0.01	<0.01
Benzo(ghi)perylene	µg/L	0.01	<0.01
Carcinogenic PAHs (as BaP TEQ) - assume non detects	TEQ (µg/L)	0.012	<0.012
Total PAH VIC EPA Guidelines (16)*	µg/L	0.1	<0.1
Total PAH (18)*	µg/L	0.1	<0.1



ANALYTICAL RESULTS

SE248449 R0

Low Level OC Pesticides in Water [AN420] Tested: 5/6/2023

PARAMETER	UOM	LOR	MW01	MW02	MW03	MW04	QA100
			WATER	WATER	WATER	WATER	WATER
			31/5/2023 SE248449.001	31/5/2023 SE248449.002	31/5/2023 SE248449.003	31/5/2023 SE248449.004	31/5/2023 SE248449.005
Hexachlorobenzene (HCB)	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Alpha BHC	µg/L	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Lindane (gamma BHC)	µg/L	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	µg/L	0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Aldrin	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Beta BHC	µg/L	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Delta BHC	µg/L	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	µg/L	0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Alpha Endosulfan	µg/L	0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Gamma Chlordane	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Alpha Chlordane	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
p,p'-DDE	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Dieldrin	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Endrin	µg/L	0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Beta Endosulfan	µg/L	0.02	<0.02	<0.02	<0.02	<0.02	<0.02
p,p'-DDD	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
p,p'-DDT	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Endosulfan sulphate	µg/L	0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Endrin Aldehyde	µg/L	0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Methoxychlor	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	µg/L	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Isodrin	µg/L	0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Mirex	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Oxychlordane	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Total OC	µg/L	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	QC100
			WATER
			31/5/2023 SE248449.006
Hexachlorobenzene (HCB)	µg/L	0.01	<0.01
Alpha BHC	µg/L	0.05	<0.05
Lindane (gamma BHC)	µg/L	0.05	<0.05
Heptachlor	µg/L	0.02	<0.02
Aldrin	µg/L	0.01	<0.01
Beta BHC	µg/L	0.05	<0.05
Delta BHC	µg/L	0.05	<0.05
Heptachlor epoxide	µg/L	0.02	<0.02
Alpha Endosulfan	µg/L	0.02	<0.02
Gamma Chlordane	µg/L	0.01	<0.01
Alpha Chlordane	µg/L	0.01	<0.01
p,p'-DDE	µg/L	0.01	<0.01
Dieldrin	µg/L	0.01	<0.01
Endrin	µg/L	0.02	<0.02
Beta Endosulfan	µg/L	0.02	<0.02
p,p'-DDD	µg/L	0.01	<0.01
p,p'-DDT	µg/L	0.01	<0.01
Endosulfan sulphate	µg/L	0.02	<0.02
Endrin Aldehyde	µg/L	0.02	<0.02
Methoxychlor	µg/L	0.1	<0.1
Endrin Ketone	µg/L	0.05	<0.05
Isodrin	µg/L	0.02	<0.02
Mirex	µg/L	0.01	<0.01
Oxychlordane	µg/L	0.01	<0.01
Total OC	µg/L	1	<1



ANALYTICAL RESULTS

SE248449 R0

Low Level OP Pesticides in Water [AN420] Tested: 5/6/2023

			MW01	MW02	MW03	MW04	QA100
			WATER	WATER	WATER	WATER	WATER
			-	-	-	-	-
			31/5/2023	31/5/2023	31/5/2023	31/5/2023	31/5/2023
PARAMETER	UOM	LOR	SE248449.001	SE248449.002	SE248449.003	SE248449.004	SE248449.005
Dichlorvos	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	µg/L	0.15	<0.15	<0.15	<0.15	<0.15	<0.15
Diazinon (Dimpylate)	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Fenitrothion	µg/L	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	µg/L	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos (Chlorpyrifos Ethyl)	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Parathion-ethyl (Parathion)	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bromophos Ethyl	µg/L	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Methidathion	µg/L	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Ethion	µg/L	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos-methyl (Guthion)	µg/L	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

			QC100
			WATER
			-
			31/5/2023
PARAMETER	UOM	LOR	SE248449.006
Dichlorvos	µg/L	0.5	<0.5
Dimethoate	µg/L	0.15	<0.15
Diazinon (Dimpylate)	µg/L	0.01	<0.01
Fenitrothion	µg/L	0.2	<0.2
Malathion	µg/L	0.05	<0.05
Chlorpyrifos (Chlorpyrifos Ethyl)	µg/L	0.01	<0.01
Parathion-ethyl (Parathion)	µg/L	0.01	<0.01
Bromophos Ethyl	µg/L	0.05	<0.05
Methidathion	µg/L	0.05	<0.05
Ethion	µg/L	0.05	<0.05
Azinphos-methyl (Guthion)	µg/L	0.05	<0.05



ANALYTICAL RESULTS

SE248449 R0

Full 8270 SVOC in Water [AN420] Tested: 5/6/2023

PARAMETER	UOM	LOR	MW01	MW02	MW03	MW04	QA100
			WATER	WATER	WATER	WATER	WATER
			31/5/2023 SE248449.001	31/5/2023 SE248449.002	31/5/2023 SE248449.003	31/5/2023 SE248449.004	31/5/2023 SE248449.005
Acenaphthene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j&k)fluoranthene	µg/L	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(b&j)fluoranthene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-acetylaminofluorene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
7,12-dimethyl-benz(a)anthracene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3-methylcholanthrene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Aldrin	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha-BHC	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta-BHC	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta-BHC	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Gamma-BHC (Lindane)	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p-DDD	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p-DDE	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p-DDT	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha-endosulfan	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta-endosulfan	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha-chlordane	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Gamma-chlordane	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin ketone	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Azinphos-methyl (Guthion)	µg/L	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos ethyl	µg/L	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carbophenothion	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chlorfenvinphos-cis	µg/L	5	<5	<5	<5	<5	<5
Chlorfenvinphos-trans	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chlorpyrifos (Chlorpyrifos Ethyl)	µg/L	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos-methyl	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Co-Ral (Coumaphos)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dichlorvos	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1/2-Chloronaphthalene	µg/L	1	<1	<1	<1	<1	<1
Demeton-S-methyl	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Disulfoton (Di-syston)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
EPN*	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5



ANALYTICAL RESULTS

SE248449 R0

Full 8270 SVOC in Water [AN420] Tested: 5/6/2023 (continued)

PARAMETER	UOM	LOR	MW01	MW02	MW03	MW04	QA100
			WATER	WATER	WATER	WATER	WATER
			31/5/2023 SE248449.001	31/5/2023 SE248449.002	31/5/2023 SE248449.003	31/5/2023 SE248449.004	31/5/2023 SE248449.005
Ethion	µg/L	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Ethoprophos (ethoprop or prophos)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Famphur (Famophos)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenamiphos (Phenamiphos)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenchlorophos (Ronne)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	µg/L	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Fenthion	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Malathion (Maldison)	µg/L	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Mevinphos-cis/trans	µg/L	1	<1	<1	<1	<1	<1
o,o,o-triethyl phosphorothioate	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Parathion ethyl (Parathion)	µg/L	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion methyl	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Phorate	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Pirimiphos-ethyl	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Pirimiphos-methyl	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Profenofos	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Prothiophos (Tokuthion)*	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Sulfotepp	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PCB Congener C28	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB Congener C52	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB Congener C101	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB Congener C118	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB Congener C138	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB Congener C153	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB Congener C180	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobenzene (HCB)	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,3-dichlorobenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,4-dichlorobenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Hexachlorobutadiene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Hexachlorocyclopentadiene	µg/L	2	<2	<2	<2	<2	<2
Hexachloroethane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Hexachloropropene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Pentachlorobenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Pentachloroethane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2,3,5 and 1,2,4,5 -tetrachlorobenzene	µg/L	1	<1	<1	<1	<1	<1
1,2,3,4-tetrachlorobenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2,4-trichlorobenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bis(2-ethylhexyl)phthalate	µg/L	50	<50	<50	<50	<50	<50
Bis(2-ethylhexyl)adipate	µg/L	1	<1	<1	<1	<1	<1
Butyl benzyl phthalate	µg/L	1	<1	<1	<1	<1	<1
Di-n-butyl phthalate	µg/L	10	<10	<10	<10	<10	<10
Diethyl phthalate	µg/L	5	<5	<5	<5	<5	<5
Dimethyl phthalate	µg/L	1	<1	<1	<1	<1	<1
Di-n-octyl phthalate	µg/L	1	<1	<1	<1	<1	<1
Carbofuran	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Carbaryl	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Trifluralin	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
N-nitroso-di-n-butylamine (NDBA)	µg/L	1	<1	<1	<1	<1	<1
N-nitroso-diethylamine (NDEA)	µg/L	1	<1	<1	<1	<1	<1
N-nitroso-di-n-propylamine (NDPA)	µg/L	1	<1	<1	<1	<1	<1
N-nitroso-morpholine (NMOR)	µg/L	1	<1	<1	<1	<1	<1
N-nitroso-piperidine (NPIP)	µg/L	1	<1	<1	<1	<1	<1
N-nitroso-pyrrolidine (NPYR)	µg/L	1	<1	<1	<1	<1	<1
4-amino biphenyl	µg/L	1	<1	<1	<1	<1	<1



ANALYTICAL RESULTS

SE248449 R0

Full 8270 SVOC in Water [AN420] Tested: 5/6/2023 (continued)

PARAMETER	UOM	LOR	MW01	MW02	MW03	MW04	QA100
			WATER	WATER	WATER	WATER	WATER
			- 31/5/2023 SE248449.001	- 31/5/2023 SE248449.002	- 31/5/2023 SE248449.003	- 31/5/2023 SE248449.004	- 31/5/2023 SE248449.005
Acetophenone	µg/L	1	<1	<1	<1	<1	<1
1,3-dinitrobenzene	µg/L	1	<1	<1	<1	<1	<1
2,4-dinitrotoluene	µg/L	1	<1	<1	<1	<1	<1
2,6-dinitrotoluene	µg/L	1	<1	<1	<1	<1	<1
Isophorone	µg/L	1	<1	<1	<1	<1	<1
Nitrobenzene	µg/L	1	<1	<1	<1	<1	<1
p-(dimethylamino) azobenzene	µg/L	1	<1	<1	<1	<1	<1
Phenacetin	µg/L	1	<1	<1	<1	<1	<1
Pentachloronitrobenzene (quintozene)	µg/L	1	<1	<1	<1	<1	<1
Aniline	µg/L	5	<5	<5	<5	<5	<5
4-chloroaniline	µg/L	1	<1	<1	<1	<1	<1
2-nitroaniline	µg/L	1	<1	<1	<1	<1	<1
3-nitroaniline	µg/L	1	<1	<1	<1	<1	<1
4-nitroaniline	µg/L	1	<1	<1	<1	<1	<1
Diphenylamine	µg/L	1	<1	<1	<1	<1	<1
o-toluidine	µg/L	1	<1	<1	<1	<1	<1
5-nitro-o-toluidine	µg/L	1	<1	<1	<1	<1	<1
1-naphthylamine	µg/L	2	<2	<2	<2	<2	<2
2-naphthylamine	µg/L	2	<2	<2	<2	<2	<2
Bis(2-chloroethoxy) methane	µg/L	1	<1	<1	<1	<1	<1
Bis(2-chloroethyl) ether	µg/L	1	<1	<1	<1	<1	<1
Bis(2-chloroisopropyl) ether	µg/L	1	<1	<1	<1	<1	<1
4-chlorophenyl phenyl ether	µg/L	1	<1	<1	<1	<1	<1
4-bromophenyl phenyl ether	µg/L	1	<1	<1	<1	<1	<1
Methyl methanesulfonate	µg/L	1	<1	<1	<1	<1	<1
Ethyl methanesulfonate	µg/L	1	<1	<1	<1	<1	<1
Dibenzofuran	µg/L	1	<1	<1	<1	<1	<1
Benzyl alcohol	µg/L	1	<1	<1	<1	<1	<1
Safrole	µg/L	1	<1	<1	<1	<1	<1
Isosafrole Isomer 1	µg/L	1	<1	<1	<1	<1	<1
Isosafrole Isomer 2	µg/L	1	<1	<1	<1	<1	<1
1,4-naphthoquinone	µg/L	1	<1	<1	<1	<1	<1
Thionazin	µg/L	1	<1	<1	<1	<1	<1
3/4-methyl phenol (m/p-cresol)	µg/L	1	<1	<1	<1	<1	<1
2-methyl phenol (o-cresol)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6 and 2,3,5,6-tetrachlorophenol	µg/L	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-chloro-3-methylphenol	µg/L	2	<2	<2	<2	<2	<2
2-chlorophenol	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Phenol	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Pentachlorophenol	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	µg/L	1	<1	<1	<1	<1	<1
Total Endosulfan (alpha+beta+sulfate)	µg/L	0.2	<0.2	<0.2	<0.2	<0.2	<0.2



ANALYTICAL RESULTS

SE248449 R0

Full 8270 SVOC in Water [AN420] Tested: 5/6/2023 (continued)

PARAMETER	UOM	LOR	QC100	RIN1
			WATER - 31/5/2023 SE248449.006	WATER - 31/5/2023 SE248449.007
Acenaphthene	µg/L	0.1	<0.1	<0.1
Acenaphthylene	µg/L	0.1	<0.1	<0.1
Anthracene	µg/L	0.1	<0.1	<0.1
Benzo(a)anthracene	µg/L	0.1	<0.1	<0.1
Benzo(b&j&k)fluoranthene	µg/L	0.2	<0.2	<0.2
Benzo(b&j)fluoranthene	µg/L	0.1	<0.1	<0.1
Benzo(k)fluoranthene	µg/L	0.1	<0.1	<0.1
Benzo(a)pyrene	µg/L	0.1	<0.1	<0.1
Chrysene	µg/L	0.1	<0.1	<0.1
Dibenzo(ah)anthracene	µg/L	0.1	<0.1	<0.1
Fluoranthene	µg/L	0.1	<0.1	<0.1
Fluorene	µg/L	0.1	<0.1	<0.1
1-methylnaphthalene	µg/L	0.1	<0.1	<0.1
2-methylnaphthalene	µg/L	0.1	<0.1	<0.1
Naphthalene	µg/L	0.1	<0.1	<0.1
Phenanthrene	µg/L	0.1	<0.1	<0.1
Pyrene	µg/L	0.1	<0.1	<0.1
2-acetylaminofluorene	µg/L	0.5	<0.5	<0.5
7,12-dimethyl-benz(a)anthracene	µg/L	0.5	<0.5	<0.5
3-methylcholanthrene	µg/L	0.5	<0.5	<0.5
Aldrin	µg/L	0.1	<0.1	<0.1
Alpha-BHC	µg/L	0.1	<0.1	<0.1
Beta-BHC	µg/L	0.1	<0.1	<0.1
Delta-BHC	µg/L	0.1	<0.1	<0.1
Gamma-BHC (Lindane)	µg/L	0.1	<0.1	<0.1
p,p-DDD	µg/L	0.1	<0.1	<0.1
p,p-DDE	µg/L	0.1	<0.1	<0.1
p,p-DDT	µg/L	0.1	<0.1	<0.1
Dieldrin	µg/L	0.1	<0.1	<0.1
Alpha-endosulfan	µg/L	0.1	<0.1	<0.1
Beta-endosulfan	µg/L	0.1	<0.1	<0.1
Endosulfan sulphate	µg/L	0.1	<0.1	<0.1
Endrin	µg/L	0.1	<0.1	<0.1
Heptachlor	µg/L	0.1	<0.1	<0.1
Heptachlor epoxide	µg/L	0.1	<0.1	<0.1
Isodrin	µg/L	0.1	<0.1	<0.1
Methoxychlor	µg/L	0.1	<0.1	<0.1
Mirex	µg/L	0.1	<0.1	<0.1
Alpha-chlordane	µg/L	0.1	<0.1	<0.1
Gamma-chlordane	µg/L	0.1	<0.1	<0.1
Endrin ketone	µg/L	0.1	<0.1	<0.1
Azinphos-methyl (Guthion)	µg/L	0.2	<0.2	<0.2
Bromophos ethyl	µg/L	0.2	<0.2	<0.2
Carbophenothion	µg/L	0.5	<0.5	<0.5
Chlorfenvinphos-cis	µg/L	5	<5	<5
Chlorfenvinphos-trans	µg/L	0.5	<0.5	<0.5
Chlorpyrifos (Chlorpyrifos Ethyl)	µg/L	0.2	<0.2	<0.2
Chlorpyrifos-methyl	µg/L	0.5	<0.5	<0.5
Co-Ral (Coumaphos)	µg/L	0.5	<0.5	<0.5
Diazinon (Dimpylate)	µg/L	0.5	<0.5	<0.5
Dichlorvos	µg/L	0.5	<0.5	<0.5
1/2-Chloronaphthalene	µg/L	1	<1	<1
Demeton-S-methyl	µg/L	0.5	<0.5	<0.5
Dimethoate	µg/L	0.5	<0.5	<0.5
Disulfoton (Di-syston)	µg/L	0.5	<0.5	<0.5
EPN*	µg/L	0.5	<0.5	<0.5



ANALYTICAL RESULTS

SE248449 R0

Full 8270 SVOC in Water [AN420] Tested: 5/6/2023 (continued)

PARAMETER	UOM	LOR	QC100	RIN1
			WATER - 31/5/2023 SE248449.006	WATER - 31/5/2023 SE248449.007
Ethion	µg/L	0.2	<0.2	<0.2
Ethoprophos (ethoprop or prophos)	µg/L	0.5	<0.5	<0.5
Famphur (Famophos)	µg/L	0.5	<0.5	<0.5
Fenamiphos (Phenamiphos)	µg/L	0.5	<0.5	<0.5
Fenchlorophos (Ronne)	µg/L	0.5	<0.5	<0.5
Fenitrothion	µg/L	0.2	<0.2	<0.2
Fenthion	µg/L	0.5	<0.5	<0.5
Malathion (Maldison)	µg/L	0.2	<0.2	<0.2
Methidathion	µg/L	0.5	<0.5	<0.5
Mevinphos-cis/trans	µg/L	1	<1	<1
o,o,o-triethyl phosphorothioate	µg/L	0.5	<0.5	<0.5
Parathion ethyl (Parathion)	µg/L	0.2	<0.2	<0.2
Parathion methyl	µg/L	0.5	<0.5	<0.5
Phorate	µg/L	0.5	<0.5	<0.5
Pirimiphos-ethyl	µg/L	0.5	<0.5	<0.5
Pirimiphos-methyl	µg/L	0.5	<0.5	<0.5
Profenofos	µg/L	0.5	<0.5	<0.5
Prothiophos (Tokuthion)*	µg/L	0.5	<0.5	<0.5
Sulfotepp	µg/L	0.5	<0.5	<0.5
PCB Congener C28	µg/L	0.1	<0.1	<0.1
PCB Congener C52	µg/L	0.1	<0.1	<0.1
PCB Congener C101	µg/L	0.1	<0.1	<0.1
PCB Congener C118	µg/L	0.1	<0.1	<0.1
PCB Congener C138	µg/L	0.1	<0.1	<0.1
PCB Congener C153	µg/L	0.1	<0.1	<0.1
PCB Congener C180	µg/L	0.1	<0.1	<0.1
Hexachlorobenzene (HCB)	µg/L	0.1	<0.1	<0.1
1,2-dichlorobenzene	µg/L	0.5	<0.5	<0.5
1,3-dichlorobenzene	µg/L	0.5	<0.5	<0.5
1,4-dichlorobenzene	µg/L	0.5	<0.5	<0.5
Hexachlorobutadiene	µg/L	0.5	<0.5	<0.5
Hexachlorocyclopentadiene	µg/L	2	<2	<2
Hexachloroethane	µg/L	0.5	<0.5	<0.5
Hexachloropropene	µg/L	0.5	<0.5	<0.5
Pentachlorobenzene	µg/L	0.5	<0.5	<0.5
Pentachloroethane	µg/L	0.5	<0.5	<0.5
1,2,3,5 and 1,2,4,5 -tetrachlorobenzene	µg/L	1	<1	<1
1,2,3,4-tetrachlorobenzene	µg/L	0.5	<0.5	<0.5
1,2,4-trichlorobenzene	µg/L	0.5	<0.5	<0.5
Bis(2-ethylhexyl)phthalate	µg/L	50	<50	<50
Bis(2-ethylhexyl)adipate	µg/L	1	<1	<1
Butyl benzyl phthalate	µg/L	1	<1	<1
Di-n-butyl phthalate	µg/L	10	<10	<10
Diethyl phthalate	µg/L	5	<5	<5
Dimethyl phthalate	µg/L	1	<1	<1
Di-n-octyl phthalate	µg/L	1	<1	<1
Carbofuran	µg/L	0.5	<0.5	<0.5
Carbaryl	µg/L	0.5	<0.5	<0.5
Trifluralin	µg/L	0.5	<0.5	<0.5
N-nitroso-di-n-butylamine (NDBA)	µg/L	1	<1	<1
N-nitroso-diethylamine (NDEA)	µg/L	1	<1	<1
N-nitroso-di-n-propylamine (NDPA)	µg/L	1	<1	<1
N-nitroso-morpholine (NMOR)	µg/L	1	<1	<1
N-nitroso-piperidine (NPIP)	µg/L	1	<1	<1
N-nitroso-pyrrolidine (NPYR)	µg/L	1	<1	<1
4-amino biphenyl	µg/L	1	<1	<1



ANALYTICAL RESULTS

SE248449 R0

Full 8270 SVOC in Water [AN420] Tested: 5/6/2023 (continued)

PARAMETER	UOM	LOR	QC100	RIN1
			WATER - 31/5/2023 SE248449.006	WATER - 31/5/2023 SE248449.007
Acetophenone	µg/L	1	<1	<1
1,3-dinitrobenzene	µg/L	1	<1	<1
2,4-dinitrotoluene	µg/L	1	<1	<1
2,6-dinitrotoluene	µg/L	1	<1	<1
Isophorone	µg/L	1	<1	<1
Nitrobenzene	µg/L	1	<1	<1
p-(dimethylamino) azobenzene	µg/L	1	<1	<1
Phenacetin	µg/L	1	<1	<1
Pentachloronitrobenzene (quintozene)	µg/L	1	<1	<1
Aniline	µg/L	5	<5	<5
4-chloroaniline	µg/L	1	<1	<1
2-nitroaniline	µg/L	1	<1	<1
3-nitroaniline	µg/L	1	<1	<1
4-nitroaniline	µg/L	1	<1	<1
Diphenylamine	µg/L	1	<1	<1
o-toluidine	µg/L	1	<1	<1
5-nitro-o-toluidine	µg/L	1	<1	<1
1-naphthylamine	µg/L	2	<2	<2
2-naphthylamine	µg/L	2	<2	<2
Bis(2-chloroethoxy) methane	µg/L	1	<1	<1
Bis(2-chloroethyl) ether	µg/L	1	<1	<1
Bis(2-chloroisopropyl) ether	µg/L	1	<1	<1
4-chlorophenyl phenyl ether	µg/L	1	<1	<1
4-bromophenyl phenyl ether	µg/L	1	<1	<1
Methyl methanesulfonate	µg/L	1	<1	<1
Ethyl methanesulfonate	µg/L	1	<1	<1
Dibenzofuran	µg/L	1	<1	<1
Benzyl alcohol	µg/L	1	<1	<1
Safrole	µg/L	1	<1	<1
Isosafrole Isomer 1	µg/L	1	<1	<1
Isosafrole Isomer 2	µg/L	1	<1	<1
1,4-naphthoquinone	µg/L	1	<1	<1
Thionazin	µg/L	1	<1	<1
3/4-methyl phenol (m/p-cresol)	µg/L	1	<1	<1
2-methyl phenol (o-cresol)	µg/L	0.5	<0.5	<0.5
2,6-dichlorophenol	µg/L	0.5	<0.5	<0.5
2,3,4,6 and 2,3,5,6-tetrachlorophenol	µg/L	1	<1	<1
2,4,5-trichlorophenol	µg/L	0.5	<0.5	<0.5
4-chloro-3-methylphenol	µg/L	2	<2	<2
2-chlorophenol	µg/L	0.5	<0.5	<0.5
2,4-dichlorophenol	µg/L	0.5	<0.5	<0.5
2,4-dimethylphenol	µg/L	0.5	<0.5	<0.5
2-nitrophenol	µg/L	0.5	<0.5	<0.5
Phenol	µg/L	0.5	<0.5	<0.5
2,4,6-trichlorophenol	µg/L	0.5	<0.5	<0.5
Pentachlorophenol	µg/L	0.5	<0.5	<0.5
4-nitrophenol	µg/L	1	<1	<1
Total Endosulfan (alpha+beta+sulfate)	µg/L	0.2	<0.2	<0.2



ANALYTICAL RESULTS

SE248449 R0

PAH (Polynuclear Aromatic Hydrocarbons) in Water [AN420] Tested: 7/6/2023

			RIN1
			WATER
			-
			31/5/2023
			SE248449.007
PARAMETER	UOM	LOR	
Naphthalene	µg/L	0.1	<0.1
2-methylnaphthalene	µg/L	0.1	<0.1
1-methylnaphthalene	µg/L	0.1	<0.1
Acenaphthylene	µg/L	0.1	<0.1
Acenaphthene	µg/L	0.1	<0.1
Fluorene	µg/L	0.1	<0.1
Phenanthrene	µg/L	0.1	<0.1
Anthracene	µg/L	0.1	<0.1
Fluoranthene	µg/L	0.1	<0.1
Pyrene	µg/L	0.1	<0.1
Benzo(a)anthracene	µg/L	0.1	<0.1
Chrysene	µg/L	0.1	<0.1
Benzo(b&j)fluoranthene	µg/L	0.1	<0.1
Benzo(k)fluoranthene	µg/L	0.1	<0.1
Benzo(a)pyrene	µg/L	0.1	<0.1
Indeno(1,2,3-cd)pyrene	µg/L	0.1	<0.1
Dibenzo(ah)anthracene	µg/L	0.1	<0.1
Benzo(ghi)perylene	µg/L	0.1	<0.1
Total PAH (18)	µg/L	1	<1



ANALYTICAL RESULTS

SE248449 R0

OC Pesticides in Water [AN420] Tested: 7/6/2023

			RIN1
			WATER
			-
			31/5/2023
PARAMETER	UOM	LOR	SE248449.007
Hexachlorobenzene (HCB)	µg/L	0.1	<0.1
Alpha BHC	µg/L	0.1	<0.1
Lindane (gamma BHC)	µg/L	0.1	<0.1
Heptachlor	µg/L	0.1	<0.1
Aldrin	µg/L	0.1	<0.1
Beta BHC	µg/L	0.1	<0.1
Delta BHC	µg/L	0.1	<0.1
Heptachlor epoxide	µg/L	0.1	<0.1
o,p'-DDE	µg/L	0.1	<0.1
Alpha Endosulfan	µg/L	0.1	<0.1
Gamma Chlordane	µg/L	0.1	<0.1
Alpha Chlordane	µg/L	0.1	<0.1
trans-Nonachlor	µg/L	0.1	<0.1
p,p'-DDE	µg/L	0.1	<0.1
Dieldrin	µg/L	0.1	<0.1
Endrin	µg/L	0.1	<0.1
o,p'-DDD	µg/L	0.1	<0.1
o,p'-DDT	µg/L	0.1	<0.1
Beta Endosulfan	µg/L	0.1	<0.1
p,p'-DDD	µg/L	0.1	<0.1
p,p'-DDT	µg/L	0.1	<0.1
Endosulfan sulphate	µg/L	0.1	<0.1
Endrin aldehyde	µg/L	0.1	<0.1
Methoxychlor	µg/L	0.1	<0.1
Endrin ketone	µg/L	0.1	<0.1
Isodrin	µg/L	0.1	<0.1
Mirex	µg/L	0.1	<0.1
Total OC	µg/L	1	<1
Total OC	µg/L	1	<1



ANALYTICAL RESULTS

SE248449 R0

OP Pesticides in Water [AN420] Tested: 7/6/2023

			RIN1
			WATER
			-
			31/5/2023
PARAMETER	UOM	LOR	SE248449.007
Dichlorvos	µg/L	0.5	<0.5
Dimethoate	µg/L	0.5	<0.5
Diazinon (Dimpylate)	µg/L	0.5	<0.5
Fenitrothion	µg/L	0.2	<0.2
Malathion	µg/L	0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	µg/L	0.2	<0.2
Parathion-ethyl (Parathion)	µg/L	0.2	<0.2
Bromophos Ethyl	µg/L	0.2	<0.2
Methidathion	µg/L	0.5	<0.5
Ethion	µg/L	0.2	<0.2
Azinphos-methyl	µg/L	0.2	<0.2



ANALYTICAL RESULTS

SE248449 R0

Trace Metals (Dissolved) in Water by ICPMS [AN318] Tested: 5/6/2023

			MW01	MW02	MW03	MW04	QA100
			WATER	WATER	WATER	WATER	WATER
			-	-	-	-	-
			31/5/2023	31/5/2023	31/5/2023	31/5/2023	31/5/2023
PARAMETER	UOM	LOR	SE248449.001	SE248449.002	SE248449.003	SE248449.004	SE248449.005
Arsenic	µg/L	1	<1	<1	<1	<1	<1
Cadmium	µg/L	0.1	0.2	0.1	<0.1	0.1	<0.1
Chromium	µg/L	1	<1	<1	<1	<1	<1
Copper	µg/L	1	1	14	6	<1	7
Lead	µg/L	1	<1	<1	<1	<1	<1
Nickel	µg/L	1	49	27	13	18	14
Zinc	µg/L	5	160	200	69	34	68

			QC100	RIN1
			WATER	WATER
			-	-
			31/5/2023	31/5/2023
PARAMETER	UOM	LOR	SE248449.006	SE248449.007
Arsenic	µg/L	1	<1	<1
Cadmium	µg/L	0.1	<0.1	<0.1
Chromium	µg/L	1	<1	<1
Copper	µg/L	1	8	<1
Lead	µg/L	1	<1	<1
Nickel	µg/L	1	16	<1
Zinc	µg/L	5	82	<5



ANALYTICAL RESULTS

SE248449 R0

Mercury (dissolved) in Water [AN311(Perth)/AN312] Tested: 5/6/2023

			MW01	MW02	MW03	MW04	QA100
			WATER	WATER	WATER	WATER	WATER
			-	-	-	-	-
			31/5/2023	31/5/2023	31/5/2023	31/5/2023	31/5/2023
PARAMETER	UOM	LOR	SE248449.001	SE248449.002	SE248449.003	SE248449.004	SE248449.005
Mercury	mg/L	0.0001	0.0023	<0.0001	<0.0001	<0.0001	<0.0001

			QC100	RIN1
			WATER	WATER
			-	-
			31/5/2023	31/5/2023
PARAMETER	UOM	LOR	SE248449.006	SE248449.007
Mercury	mg/L	0.0001	<0.0001	0.0003



ANALYTICAL RESULTS

SE248449 R0

Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples - Low Level [MA-1523] Tested: 7/6/2023

PARAMETER	UOM	LOR	MW01	MW02	MW03	MW04	QA100
			WATER	WATER	WATER	WATER	WATER
			31/5/2023 SE248449.001	31/5/2023 SE248449.002	31/5/2023 SE248449.003	31/5/2023 SE248449.004	31/5/2023 SE248449.005
Perfluorobutanoic acid (PFBA)	µg/L	0.0005	0.0018	0.0018	<0.0005	<0.0005	<0.0005
Perfluoropentanoic acid (PFPeA)	µg/L	0.0005	0.0013	0.0009	<0.0005	<0.0005	<0.0005
Perfluorohexanoic acid (PFHxA)	µg/L	0.0005	0.0023	0.0016	0.0006	0.0019	0.0007
Perfluoroheptanoic acid (PFHpA)	µg/L	0.0005	0.0013	<0.0005	<0.0005	0.0006	<0.0005
Perfluorooctanoic Acid (PFOA)	µg/L	0.0005	0.0032	0.0029	0.0005	0.0023	0.0005
Perfluorononanoic acid (PFNA)	µg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Perfluorodecanoic acid (PFDA)	µg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Perfluoroundecanoic acid (PFUnA)	µg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Perfluorododecanoic acid (PFDoA)	µg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Perfluorohexadecanoic acid (PFHxDA)	µg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Perfluorobutane sulfonate (PFBS)	µg/L	0.001	0.002	0.003	<0.001	<0.001	<0.001
Perfluoropentane sulfonate (PFPeS)	µg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Perfluorohexane sulfonate (PFHxS)	µg/L	0.0002	0.0066	0.0079	0.0024	0.0022	0.0032
Perfluoroheptane sulfonate (PFHpS)	µg/L	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorooctane sulfonate (PFOS)	µg/L	0.0002	0.0029	0.0041	0.0012	0.0007	0.0013
Sum of PFHxS and PFOS	µg/L	0.0002	0.0096	0.012	0.0036	0.0029	0.0045
Perfluorononane sulfonate (PFNS)	µg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Perfluorodecane sulfonate (PFDS)	µg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Perfluorododecane sulfonate (PFDoS)	µg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	µg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	µg/L	0.0005	0.076	0.014	0.0055	0.0076	0.0045
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	µg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	µg/L	0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	µg/L	0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
2-(N-Methylperfluorooctane sulfonamido)-ethanol	µg/L	0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	µg/L	0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
N-Methylperfluorooctanesulfonamidoacetic acid	µg/L	0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
N-Ethylperfluorooctanesulfonamidoacetic Acid	µg/L	0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
Total PFAS (n=30)	µg/L	0.006	0.098	0.036	0.010	0.015	0.010



ANALYTICAL RESULTS

SE248449 R0

Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples - Low Level [MA-1523] Tested: 7/6/2023

			QC100
			WATER
			-
			31/5/2023
PARAMETER	UOM	LOR	SE248449.006
Perfluorobutanoic acid (PFBA)	µg/L	0.0005	<0.0005
Perfluoropentanoic acid (PFPeA)	µg/L	0.0005	<0.0005
Perfluorohexanoic acid (PFHxA)	µg/L	0.0005	0.0005
Perfluoroheptanoic acid (PFHpA)	µg/L	0.0005	<0.0005
Perfluorooctanoic Acid (PFOA)	µg/L	0.0005	<0.0005
Perfluorononanoic acid (PFNA)	µg/L	0.001	<0.001
Perfluorodecanoic acid (PFDA)	µg/L	0.001	<0.001
Perfluoroundecanoic acid (PFUnA)	µg/L	0.001	<0.001
Perfluorododecanoic acid (PFDoA)	µg/L	0.001	<0.001
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.001	<0.001
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.001	<0.001
Perfluorohexadecanoic acid (PFHxDA)	µg/L	0.002	<0.002
Perfluorobutane sulfonate (PFBS)	µg/L	0.001	<0.001
Perfluoropentane sulfonate (PFPeS)	µg/L	0.001	<0.001
Perfluorohexane sulfonate (PFHxS)	µg/L	0.0002	0.0028
Perfluoroheptane sulfonate (PFHpS)	µg/L	0.0002	<0.0002
Perfluorooctane sulfonate (PFOS)	µg/L	0.0002	0.0010
Sum of PFHxS and PFOS	µg/L	0.0002	0.0039
Perfluorononane sulfonate (PFNS)	µg/L	0.0005	<0.0005
Perfluorodecane sulfonate (PFDS)	µg/L	0.0005	<0.0005
Perfluorododecane sulfonate (PFDoS)	µg/L	0.0005	<0.0005
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	µg/L	0.0005	<0.0005
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	µg/L	0.0005	0.0056
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	µg/L	0.0005	<0.0005
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.002	<0.002
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	µg/L	0.0025	<0.0025
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	µg/L	0.0025	<0.0025
2-(N-Methylperfluorooctane sulfonamido)-ethanol	µg/L	0.0025	<0.0025
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	µg/L	0.0025	<0.0025
N-Methylperfluorooctanesulfonamidoacetic acid	µg/L	0.0025	<0.0025
N-Ethylperfluorooctanesulfonamidoacetic Acid	µg/L	0.0025	<0.0025
Total PFAS (n=30)	µg/L	0.006	0.010

METHOD

METHODOLOGY SUMMARY

- AN020** Unpreserved water sample is filtered through a 0.45µm membrane filter and acidified with nitric acid similar to APHA3030B.
- AN311(Perth)/AN312** Mercury by Cold Vapour AAS in Waters: Mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500.
- AN318** Determination of elements at trace level in waters by ICP-MS technique,, referenced to USEPA 6020B and USEPA 200.8 (5.4).
- AN403** Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). Where F2 is corrected for Naphthalene, the VOC data for Naphthalene is used.
- AN403** Additionally, the volatile C6-C9/C6-C10 fractions may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Recoverable Hydrocarbons - Silica (TRH-Silica) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents.
- AN403** The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.
- AN420** (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
Total PAH calculated from individual analyte detections at or above the limit of reporting .
- AN420** SVOC Compounds: Semi-Volatile Organic Compounds (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
- AN433** VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC's are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.
- MA-1523** This method covers the analysis of per- and polyfluoroalkyl substances (PFAS) in aqueous, solid and biosolid samples and solvent extracts, determined as the total of linear and branched isomers. After spiking with isotopically labelled quantification surrogates and clean-up via SPE cartridges sample extracts are analysed by liquid chromatography/mass spectrometry (LC-MS/MS). PFAS concentrations are determined by isotope dilution quantification.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
**	Indicative data, theoretical holding time exceeded.	NVL	Not validated.	LOR	Limit of Reporting.
***	Indicates that both * and ** apply.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the "Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.

Note that in terms of units of radioactivity:

- 1 Bq is equivalent to 27 pCi
- 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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SAMPLE RECEIPT ADVICE

SE248449

CLIENT DETAILS

Contact Katelyn.Elliot
Client STANTEC AUSTRALIA PTY LTD
Address LEVEL 22, 570 BOURKE STREET
MELBOURNE VIC 3000

Telephone 61 3 85547000
Facsimile (Not specified)
Email Katelyn.Elliot@cardno.com

Project **300304375 Racecourse Rd**
Order Number **300304375**
Samples **7**

LABORATORY DETAILS

Manager Huong Crawford
Laboratory SGS Alexandria Environmental
Address Unit 16, 33 Maddox St
Alexandria NSW 2015

Telephone +61 2 8594 0400
Facsimile +61 2 8594 0499
Email au.environmental.sydney@sgs.com

Samples Received Wed 31/5/2023
Report Due Thu 8/6/2023
SGS Reference **SE248449**

SUBMISSION DETAILS

This is to confirm that 7 samples were received on Wednesday 31/5/2023. Results are expected to be ready by COB Thursday 8/6/2023. Please quote SGS reference SE248449 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Sample counts by matrix	7 Water	Type of documentation received	COC
Date documentation received	31/5/2023@5:02pm	Samples received in good order	Yes
Samples received without headspace	Yes	Sample temperature upon receipt	8.1°C
Sample container provider	SGS	Turnaround time requested	Standard
Samples received in correct containers	Yes	Sufficient sample for analysis	Yes
Sample cooling method	Ice	Samples clearly labelled	Yes
Complete documentation received	Yes		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

PFAS subcontracted to SGS Melbourne, 10/585 Blackburn Road, Notting Hill, VIC, NATA Accreditation Number. 2562/14420. Report No. Due to insufficient sample provided for RIN 1, standard level PAH/OC/OP will be analysed. Also PFAS sample not supplied for RIN1.

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SAMPLE RECEIPT ADVICE

SE248449

CLIENT DETAILS

Client STANTEC AUSTRALIA PTY LTD

Project 300304375 Racecourse Rd

SUMMARY OF ANALYSIS

No.	Sample ID	Full 8270 SVOC in Water	Low Level OC Pesticides in Water	Low Level OP Pesticides in Water	Low Level PAH (Poly Aromatic Hydrocarbons) in	OC Pesticides in Water	PAH (Polynuclear Aromatic Hydrocarbons) in Water	TRH (Total Recoverable Hydrocarbons) in Water	VOCs in Water	Volatile Petroleum Hydrocarbons in Water
001	MW01	165	27	13	23	-	-	9	77	7
002	MW02	165	27	13	23	-	-	9	77	7
003	MW03	165	27	13	23	-	-	9	77	7
004	MW04	165	27	13	23	-	-	9	77	7
005	QA100	165	27	13	23	-	-	9	77	7
006	QC100	165	27	13	23	-	-	9	77	7
007	RIN1	165	-	-	-	30	22	9	77	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .



SAMPLE RECEIPT ADVICE

SE248449

CLIENT DETAILS

Client STANTEC AUSTRALIA PTY LTD

Project 300304375 Racecourse Rd

SUMMARY OF ANALYSIS

No.	Sample ID	Mercury (dissolved) in Water	OP Pesticides in Water	Per- and Polyfluoroalkyl Substances (PFAS) in	Trace Metals (Dissolved) in Water by ICPMS
001	MW01	1	-	56	7
002	MW02	1	-	56	7
003	MW03	1	-	56	7
004	MW04	1	-	56	7
005	QA100	1	-	56	7
006	QC100	1	-	56	7
007	RIN1	1	13	-	7

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .



From: Stantec Wollongong
Address: Shop 1, Level 1
16 Burelli St
Wollongong NSW 2500
Phone: (02) 4231 9600
Attention: **Katelyn Elliott**
Email: ContaminNSW@caradna.com.au
Mobile: **0476 144 110**

To: SGS
Address: Unit 16
33 Maddox Street
Alexandria NSW 2015
Phone: (02) 8594 0400
Email: au.environmental@sgs.com
katelyn.elliott@cardno.com.au; christopher.cook@cardno.c

Date: 31/05/2023
TAT: Standard TAT (5 days)
Purchase Order: 300304375
Laboratory Quote ID: 275935
Project number: 300304375
Project name: Racecourse Rd
Data output format: PDF, Estdat

31/5/2024

Chain of Custody

Attempt to chill evident: ☒ Y / N

Sample Temperature on Arrival:

Notes: Please hold all samples, sample analysis request to be issued tomorrow

[illegible]

Luong, Thi Song Van (Sydney)

From: Katelyn Elliott <katelyn.elliott@cardno.com.au>
Sent: Thursday, 1 June 2023 9:45 AM
To: AU.SampleReceipt.Sydney, AU (Sydney); AU.Environmental.Sydney, AU (Sydney)
Cc: Chris Cook
Subject: [EXTERNAL] RE: COC - 300304375

*** WARNING: this message is from an EXTERNAL SENDER. Please be cautious, particularly with links and attachments.

Hello,

Following this COC that I sent yesterday,
Field filtering for metals was not done, would the lab please be able filter for metals out of the amber bottle.

Thank you

Katelyn Elliott (She/Her)
Graduate Environmental Geoscientist

Phone: +61 2 4254 8706

katelyn.elliott@cardno.com.au

Stantec Australia
Ground Floor, 16 Burelli Street Wollongong New South Wales 2500 Australia



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Please consider the environment before printing this email.

From: Katelyn Elliott
Sent: Wednesday, May 31, 2023 4:48 PM
To: AU.Environmental.Sydney, AU (Sydney) <AU.Environmental.Sydney@sgs.com>
Cc: Chris Cook <christopher.cook@cardno.com.au>
Subject: COC - 300304375

Hello,

Here is the COC with the sample analysis for the water samples that were dropped off by Stantec this afternoon (2 eskys),

Yin, Emily (Sydney)

From: Miguel Barritt, Elsa (Sydney)
Sent: Friday, 2 June 2023 10:39 AM
To: Katelyn Elliott
Cc: Chris Cook; AU.Environmental.Sydney, AU (Sydney); AU.SampleReceipt.Sydney, AU (Sydney); Miguel Barritt, Elsa (Sydney)
Subject: RE: [EXTERNAL] COC - 300304375- Stantec

Follow Up Flag: Follow up
Flag Status: Completed

Hi Katelyn,

Thanks for your quick reply. I did check your order form and our dispatch sheet and all looks in order / fine. Maybe you can have a look and see if the extra PFAS bottle was misplaced? I find it strange that we received all the required bottles except the 1 PFAS bottle. I did get sample receipt to double check all bottles and it was still missing.

Noted: we'll remove the PFAS testing on Sample 7 as requested below.

Should you have any questions or need anything please don't hesitate to contact me anytime.

Kind Regards

Elsa Miguel Barritt
Industries and Environment
Key Account Manager
Asbestos Sampler : CPCC8C5014A

SGS Australia Pty Ltd
Unit 16, 33 Maddox Street
Alexandria, NSW, 2015
Phone: +61 (0)2 8594 0400
Direct: +61 (0)2 8594 0455
Mobile : (0)4 0797 2867
E-mail: Elsa.MiguelBarritt@sgs.com
General E-mail : au.environmental.sydney@sgs.com
Web: www.au.sgs.com
Note: Working Hours : Office Tuesday, Thursday, Friday : 9am to 4:30pm
Office Wednesday 8am to 3pm
Working Remotely Monday : 9am to 5pm

Making the world
a better, safer place

SGS

From: Katelyn Elliott <katelyn.elliott@cardno.com.au>
Sent: Friday, 2 June 2023 10:26 AM
To: Miguel Barritt, Elsa (Sydney) <Elsa.MiguelBarritt@sgs.com>
Cc: Chris Cook <christopher.cook@cardno.com.au>; AU.Environmental.Sydney, AU (Sydney)

<AU.Environmental.Sydney@sgs.com>

Subject: RE: [EXTERNAL] COC - 300304375- Stantec

*** WARNING: this message is from an EXTERNAL SENDER. Please be cautious, particularly with links and attachments. ***

Hi Elsa,

When I sent the email asking for the rinsate water and sample bottles I replied to the original email that had the suite analysis for the primary sample bottles, which included Trace PFAS. When I picked everything up, I just assumed that I received everything I needed for you guys to be able to do that. Sorry my mistake, I should have double checked. If PFAS can't be completed for that sample it is ok,

Please disregard the analysis on the COC,

Thank you

Katelyn Elliott (She/Her)

Graduate Environmental Geoscientist

Phone: +61 2 4254 8706

katelyn.elliott@cardno.com.au

Stantec Australia

Ground Floor, 16 Burelli Street Wollongong New South Wales 2500 Australia



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From: Miguel Barritt, Elsa (Sydney) <Elsa.MiguelBarritt@sgs.com>

Sent: Friday, June 2, 2023 10:10 AM

To: Katelyn Elliott <katelyn.elliott@cardno.com.au>

Cc: Chris Cook <christopher.cook@cardno.com.au>; AU.Environmental.Sydney, AU (Sydney)

<AU.Environmental.Sydney@sgs.com>

Subject: FW: [EXTERNAL] COC - 300304375- Stantec

Hi Katelyn,

Can you please confirm if PFAS is required on Sample 7 (see COC attached), as no separate sample (container) was provided for this analysis. We can't test for PAFS without the appropriate container as it can't be subsampled as this would jeopardise the integrity of the results. Can you please let me know as soon as possible. Thanks

Kind Regards

Elsa Miguel Barritt

APPENDIX F

Field Forms / Field Records

F3.01 – Fieldwork Daily Report

Project Details

Project Name: ~~WATERBURY~~

Job Number: ~~20180004~~

Site Address: ~~95 Orchard Road, Killybegs~~

7A-50, Rucamore Rd
Woolgarfield

PP/PM: ~~Colleen Laker~~

Chris Cook

Client Company/Contact: Stantec

Date: 23/06/2023

Persons Present: Angus Cadogan

Notes By: AC

Site Activities

Yes

Comment/Details

PESA Site Inspection / Interview personnel

n/a

Inspect or supervise bores/test pits/ observe sampling/ remediation works

n/a

Audit fieldwork methods QA/QC

n/a

Soil sampling - test pit / soil bore / soil grab

of surveying

Soil gas / LFG investigation

Groundwater bore construction / GME / Groundwater levels / sampling

Geotechnical Investigation

Compaction Control Tests

n/a

Field consumables used? (if so what?)

These must be charged via timesheet

Photographs (Digital)

Supplementary notes attached

Weather Conditions & Temperature

nice T: 17 °C

Valid Calibration Certificate for Relevant Equipment

Notes / Sketch Plan:

mw04
* 1


Elevation

	Grndl	Tot	Grndl
mw01	5.912	5.855	5.981
mw02	6.034	5.920	6.059
mw03	11.860	11.932	11.477
mw04	14.367		
	14.580	14.403	14.395

mw02
*

MN01
*

mw03
*

F3.04 – Groundwater Sampling Field Record

Site / Project: Gosford - 300304375		Bore ID Number: M401						
Client:		Job No. 300304375						
Person Sampling: Katelyn Elliott		Initials: KE						
Bore / Site Details								
Bore Condition / Locked? ☒	Type Protect. Cap / Cover: Gatic	Bore Depth (bTOC): 1.44 m						
Inner casing/screen type & diameter: 50 mm	Screen interval (bgl): 0-94 m	SWL (bTOC): 1.34 m						
WL Measurement Point: TOC	RL of measurement point (mAHD)	SWL Date/Time: 10:40 am						
Other Observations on Bore/Site								
Bore Purge Data								
Purge method: low flow	Bore Volume (L):	Purge Date: 31/5/23						
Purge rate (L/min): used	Total Purge volume (L): bailer	LNAPL / PSH Thickness (mm): None / mm						
Purge Field Physicochemical Measurements:								
	Reading 1	Reading 2	Reading 3	Reading 4	Reading 5	Reading 6	Reading 7	Reading 8
Start Time:	10:50	10:55	(dipped in container with water)					
DO (mg/L) ±10% (or ±0.2 if DO < 2 mg/L)	41.4	44.9						
EC (µS/Cm) ±3%	57.2	526.1						
pH ±0.1	4.95	5.14						
Eh (mV) ±10mV	207.6	179.7						
Temp (°C)	19.3	19.9						
SWL (m) after	1.92	-						
Cum. Volume (L)								
Water Colour	Brown							
Turbidity ±10%	50%	30%						
Other Observations / Notes								
Sample Container & Preservation Data								
Number of sample container: (Include QC samples)								
Container Volume								
Container Type								
Filtration								
Preservation								
Sample Number (for Lab ID):								
QC Dup Sample No.:								

F3.04 – Groundwater Sampling Field Record

Site / Project: Gosford		Bore ID Number: M402						
Client:		Job No. 200304375						
Person Sampling: Katelyn Elliott		Initials: KE						
Bore / Site Details								
Bore Condition / Locked? ☒	Type Protect. Cap / Cover: Gatic	Bore Depth (bTOC): 3.7 m						
Inner casing/screen type & diameter: 50 mm	Screen interval (bgl): 1.7 m	SWL (bTOC): 1.34 m						
WL Measurement Point: TOC	RL of measurement point (mAHD)	SWL Date/Time: 31/5/23						
Other Observations on Bore/Site								
Bore Purge Data								
Purge method: low flow	Bore Volume (L):	Purge Date: 31/5/23						
Purge rate (L/min):	Total Purge volume (L):	LNAPL / PSH Thickness (mm): None / mm						
Purge Field Physicochemical Measurements:								
	Reading 1	Reading 2	Reading 3	Reading 4	Reading 5	Reading 6	Reading 7	Reading 8
Start Time:	11:05	11:10	11:15	11:20				
DO (mg/L) ±10% (or ±0.2 if DO < 2 mg/L)	31.8	33.7	29.7	29.4				
EC (µS/Cm) ±3%	358.1	352.8	351.5	352.0				
pH ±0.1	5.16	5.21	5.18	5.12				
Eh (mV) ±10mV	173.0	174.3	181.0	185.6				
Temp (°C)	20.2	20.0	20.0	19.9				
SWL (m) after	1.16	1.52	1.67	1.7				
Cum. Volume (L)								
Water Colour	Brown			Light brown				
Turbidity ±10%	20%			5%				
Other Observations / Notes								
Sample Container & Preservation Data								
Number of sample container: (Include QC samples)								
Container Volume								
Container Type								
Filtration								
Preservation								
Sample Number (for Lab ID):								
QC Dup Sample No.:								

F3.04 – Groundwater Sampling Field Record

Site / Project: Gosford		Bore ID Number: MW03						
Client:		Job No. 200304375						
Person Sampling: Katelyn Elliott		Initials: KE						
Bore / Site Details								
Bore Condition / Locked? ☒	Type Protect. Cap / Cover: Gatic	Bore Depth (bTOC): 8.88m						
Inner casing/screen type & diameter: 50mm	Screen interval (bgl): 5.88m	SWL (bTOC): 2.24m						
WL Measurement Point: TOC	RL of measurement point (mAHD)	SWL Date/Time: 31/5/23						
Other Observations on Bore/Site								
Bore Purge Data								
Purge method: low flow	Bore Volume (L):	Purge Date: 31/5/23						
Purge rate (L/min):	Total Purge volume (L):	LNAPL / PSH Thickness (mm) None / mm						
Purge Field Physicochemical Measurements:								
	Reading1	Reading2	Reading3	Reading4	Reading5	Reading6	Reading7	Reading8
Start Time:	12:00	12:05	12:10	12:15				
DO (mg/L) ±10% (or ±0.2 if DO < 2 mg/L)	120.7	16.3	5.3	3.9				
EC (µS/Cm) ±3%	338.3	700	702	706				
pH ±0.1	5.10	4.97	4.98	4.99				
Eh (mV) ±10mV	184.7	165.1	168.4	170.2				
Temp (°C)	21.0	19.8	19.7	19.8				
SWL (m) after	1.99	2.43	2.74	3.4				
Cum. Volume (L)								
Water Colour	Brown	cloudy						
Turbidity ±10%	5%	5%						
Other Observations / Notes								
Sample Container & Preservation Data								
Number of sample container: (Include QC samples)								
Container Volume								
Container Type								
Filtration								
Preservation								
Sample Number (for Lab ID):								
QC Dup Sample No.:								

F3.04 – Groundwater Sampling Field Record

Site / Project: Gosford		Bore ID Number: MW04						
Client:		Job No. 200304375						
Person Sampling: Katelyn Elliott		Initials: KE						
Bore / Site Details								
Bore Condition / Locked? ☒	Type Protect. Cap / Cover: Gatic	Bore Depth (bTOC): 4.2m						
Inner casing/screen type & diameter: 50mm	Screen interval (bgl): 2.2m	SWL (bTOC): 3.3m						
WL Measurement Point: TOC	RL of measurement point (mAHD)	SWL Date/Time: 31/5/23						
Other Observations on Bore/Site								
Bore Purge Data								
Purge method: low flow	Bore Volume (L):	Purge Date: 31/5/23						
Purge rate (L/min):	Total Purge volume (L):	LNAPL / PSH Thickness (mm) None / mm						
Purge Field Physicochemical Measurements:								
	Reading1	Reading2	Reading3	Reading4	Reading5	Reading6	Reading7	Reading8
Start Time:	12:50	12:55	1:00	1:05				
DO (mg/L) ±10% (or ±0.2 if DO < 2 mg/L)	70.6	30.3	28.3	27.4				
EC (µS/Cm) ±3%	105.7	103.6	101.7	100.9				
pH ±0.1	5.87	6.09	6.06	6.01				
Eh (mV) ±10mV	169.6	93.0	77.7	73.3				
Temp (°C)	21.5	21.1	21.3	21.3				
SWL (m) after	3.12	3.49	3.74	3.88				
Cum. Volume (L)								
Water Colour	cloudy			light brown				
Turbidity ±10%	5%			10%				
Other Observations / Notes								
Sample Container & Preservation Data								
Number of sample container: (Include QC samples)								
Container Volume								
Container Type								
Filtration								
Preservation								
Sample Number (for Lab ID):								
QC Dup Sample No.:								

APPENDIX G

Calibration Certificates

Certificate of Service and Calibration
Interface Meter
Heron H.Oil

Company Name	WAM Scientific
Office Address	26 Bungarra Crescent, Chipping Norton NSW 2170
Phone Number	+61 405 241 484
Contact Name	William Pak
Instrument	Heron H.Oil Interface Meter (30m)
Serial Number	01-7876
Client Name	Katelyn Elliot (Stantec Australia)
Project Number	300304375

Instrument Check			
Item	Test	Test Passed	Comments
9V Battery	Klein Tools MM300 Multimeter	✓	Battery voltage reading above 7.9V
Battery Box	Check	✓	No damage
Face and Back Plates	Check	✓	No damage
Thumb Screws	Check	✓	Rubber ends intact
Tape Hangar/Protector	Check	✓	No damage
On/Off Button	Operation	✓	Button is functional
Buzzer	Operation	✓	Intermittent tone in H ₂ O, solid tone in product
LED Signal Light	Operation	✓	LED light functional – green and red
Probe	Operation/Check	✓	Decontaminated, cleaned and tested
Tape	Condition/Check	✓	Decontaminated and cleaned, no damage
Connection	Check	✓	Probe and link connected correctly and tightly
PCB	Operation	✓	Unit is fully functional
Electronics Panel	Orientation	✓	Correctly aligned

Instrument Readings		
Product	Buzzer	LED Light
H ₂ O	Intermittent	Blinking – Red
Petroleum	Solid	Steady – Red

Declaration
WAM Scientific certifies that the above instrument was successfully tested according to manufacturer's standards and all necessary checks were conducted to ensure the instrument was fully operational prior to dispatch. The interface meter was decontaminated, cleaned and tested with a mixture of tap water and petrol, shielded from ambient light.

Checked By	William Pak
Calibration Date	29/05/2023
Calibration Due	29/11/2023

Company Name	WAM Scientific
Office Address	26 Bungarra Crescent, Chipping Norton NSW 2170
Phone Number	+61 405 241 484
Contact Name	William Pak
Instrument	YSI Pro Plus Water Quality Meter w/ 1m Quatro Cable
Serial Number	20G100643
Client Name	Katelyn Elliot (Stantec Australia)
Project Number	300304375
Comments	-

Instrument Check

Item	Test	Test Passed	Comments
2 x Alkaline C-size Batteries	Klein Tools MM300 Multimeter	✓	Both batteries reading above 2.9V
Battery Saver Function	Operation	✓	Automatically turns off after 60 minutes if idle
Unit Display	Operation	✓	Screen visible, no damage
Keypad	Operation	✓	Responsive, no damage
Connection Port and Cable	Condition/Check	✓	Clean, no damage
Monitor Housing	Condition/Check	✓	No damage
Firmware	Version	✓	4.0.0
pH Probe	Condition/Calibration	✓	Calibrated and conforms to manufacturer's specs
pH millivolts for pH 7.00	Calibration	✓	pH 7.00 calibration range between 0 mV ± 50 mV
pH millivolts for pH 4.00	Calibration	✓	pH 4 mV range +165 to +180 from 7 buffer mV value
pH slope	Calibration	✓	Range between 55 to 60 mV/pH (ideal value 59 mV)
Response time < 90 seconds	Calibration	✓	Responds to correct value within 90 seconds
ORP Probe	Condition/Calibration	✓	Calibrated and conforms to manufacturer's specs
ORP Reading	Calibration	✓	Within ± 80 mV of reference Zobell Reading
Response time < 90 seconds	Calibration	✓	Responds to correct value within 90 seconds
Conductivity/Temp Probe	Condition/Calibration	✓	Calibrated and conforms to manufacturer's specs
Conductivity Cell	Calibration	✓	Conductivity cell constant 5.0 ± 1.0 in GLP file
Clean Sensor Readings	Calibration	✓	Clean sensor reads less than 3 uS/cm in dry air
Dissolved Oxygen Probe	Condition/Calibration	✓	Calibrated and conforms to manufacturer's specs
DO Cap	Condition/Calibration	✓	1.25 mil PE membrane (yellow membrane)
DO Sensor in Use	Condition	✓	Polarographic DO sensor
DO Sensor Value	Calibration	✓	(min 4.31 uA - max 8.00 uA) Avg 6.15 uA

Instrument Readings

Parameter	Standard Used	Reference No.	Calibration Value	Observed	Actual	Units
Temperature	Centre 370 Thermometer	Room Temp.	10.9	11.0	10.9	°C
pH	pH 4.00	386466	4.01	4.04	4.01	pH
pH	pH 7.00	387329	7.00	7.05	7.00	pH
Conductivity	2760 µS/cm at 25°C	388521	2760	2688	2760	µS/cm
ORP (Ref. check only)	Zobell A & B	380835/382785	262.0	250.2	262.0	mV
Zero Dissolved O ₂	NaSO ₃ in Distilled H ₂ O	389912	0.0	-0.1	0.0	%
100% Dissolved O ₂	100% Air Saturated H ₂ O	Fresh Air	100.0	99.5	100.0	%

Declaration

WAM Scientific certifies that the above instrument was successfully tested according to manufacturer's standards and all necessary checks were conducted to ensure the instrument was fully operational prior to dispatch. The calibration data supplied was obtained in accordance with manufacturer's specifications using solutions of known values.

Calibrated By	William Pak
Calibration Date	29/05/2023
Calibration Due	29/11/2023

Certificate of Service and Calibration

Bladder Pump QED MP15 Micropurge Kit

Company Name	WAM Scientific
Office Address	26 Bungarra Crescent, Chipping Norton NSW 2170
Phone Number	+61 405 241 484
Contact Name	William Pak
Instrument	QED MP15 Kit
Serial Number	Sample Pro Pump: 144816
Serial Number	MP15 Backpack: 1735
Client Name	Katelyn Elliot (Stantec Australia)
Project Number	300304375

Instrument Check			
Item	Test	Test Passed	Comments
MP15 Backpack Controller	Operation	✓	Controller operational
Gas Regulator	Condition	✓	No damage, good condition
Wrench and Tube Cutter	Condition	✓	Attached to the controller
Blue Coiled Hose	Condition	✓	No tears, clean, good condition
Tube Connection Fitting	Condition	✓	No damage
Black Canvas Bag	Condition	✓	No damage, clean
Sample Pro Pump	Condition	✓	No damage, decontaminated
Bladder	Condition	✓	1x New bladder included free of charge
Pump Fittings	Condition	✓	No damage, good condition
CO2 Gas Bottle	Check & Test	✓	1x CO2 bottle included free of charge
Kit Operation	Operation	✓	MP15 kit fully operational
Instructional Manual	-	✓	User manual included

Inclusions
The MP15 Kit should include the following items: - QED MP15 Backpack Controller, Blue Coiled Hose with Tube Connection Fitting, Wrench and Tube Cutter, Sample Pro Pump, 1x CO2 gas bottle fitted with the MP15 Backpack, Wire Cable Hand Reel and spares/accessories box - Additional CO2 gas bottles will be supplied upon request at an additional cost

Declaration
WAM Scientific certifies that the above instrument was successfully tested according to manufacturer's standards and all necessary checks were conducted to ensure the instrument was fully operational prior to dispatch. The pump has been decontaminated and cleaned upon return from the previous hire and is in good working order.

Checked By	William Pak
Calibration Date	29/05/2023
Calibration Due	29/11/2023