

## DUFFY KENNEDY CONSTRUCTIONS PTY LTD



# **Detailed Site Investigation**

1 Veno Street, Heathcote NSW

E26160.E02\_Rev0 28 June 2024

## **Document Control**

Report Title: Detailed Site Investigation; 1 Veno Street, Heathcote NSW

Report No: E26160.E02\_Rev0

Copies		Recipient		
1	Soft Copy	Duffy Kennedy Constructions Pty Ltd Suite 5, 55 Kiora Road,		
	(PDF – Secured, issued by email)	MIRANDA NSW 2228		
1 Original		El Australia Pty Ltd		
	(Saved to Digital Archives)	Suite 126, Level 1, 1 Burelli Street,		
		WOLLONGONG NSW 2500		
Author		Technical Reviewer		
	SA.	First Juninger		
SE	SA. EAN NOLAN	Juit Juinger JOEL HEININGER		
	SAN NOLAN EAN NOLAN	Joel Heininger Senior Environmental Scientist		

Date

28 June 2024

0 Original

Details

Revision

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## EXECUTIVE SUMMARY

El Australia (El) was engaged by Duffy Kennedy Constructions Pty Ltd ('the client') to conduct a Detailed Site Investigation (DSI) of 1 Veno Street, Heathcote NSW 2233 ('the site').

At the time of this investigation, the site was occupied by the Heathcote Hotel and attached 'Bottle Mart' liquor store, surrounded by on-grade car parking and landscaping areas. The proposed development would involve the demolition of existing structures on site and the construction of two separate mix-use (commercial / residential) four-storey buildings with two basement levels for car parking.

A Preliminary Site Investigation (PSI) with limited sampling was previously completed by EI (2023), which comprised 10 borehole locations. The PSI identified potential contamination in the form of an existing underground storage tank (UST) and asbestos in shallow fill at borehole BH7M, which warranted further investigation. The scope of works of the DSI included:

- An intrusive investigation comprising seven boreholes, followed by multiple level soil sampling of both fill and natural soils,
- Delineation of the asbestos contamination at BH7M;
- Installation of one groundwater monitoring well down-gradient of the UST; and
- One round of monitoring (sampling) within the newly and previously installed groundwater wells for laboratory analysis.

The aim of this investigation was to appraise the environmental condition (potential contamination) and determine the contamination status of the land, in support of a Development Application relating to the construction of a mixed use residential / commercial development. This investigation enables the future developer (if any) to meet obligations under the *Contaminated Land Management Act 1997* and *State Environmental Planning Policy (Resilience and Hazards) 2021*, in particular the requirements for the assessment and management of contaminated soil and groundwater in a mixed use (residential/commercial) land use scenario.

#### Objectives

The objectives of this investigation were to:

- Provide a qualitative assessment of the environmental condition of the site, by appraising the potential for contamination on the basis of field observations, historical land uses and other documentary evidence, including a quantitative assessment by means of intrusive sampling and laboratory analysis;
- Make recommendations for the appropriate management and/or further assessment of any impacted soils and/or groundwater, should site contamination be confirmed.

#### Findings

The key findings of this DSI were as follows:

- The site comprised the Heathcote Hotel Inn and Bottle Mart liquor store, surrounded by ongrade parking areas.
- The building structures appeared to be in fair to good condition, with deterioration in the form of paint flaking and cracking of concrete and asphalt observed during the inspection.
- Evidence of an Underground Storage Tank (UST) was observed on the western side of the site which included one dip/fill point and tank vents. The UST dip/fill point was observed to still contain petroleum liquid (EI, 2023). Based on a Ground Penetrating Radar (GPR) scan, the UST is estimated to be 1.8m x 1.6m x 1.0 mBGL.



- Initial soil sampling and analysis was conducted on at 17 October 2023 and included 10 borehole locations (BH1-BH10M). Further detailed assessment was undertaken and included an additional seven borehole locations (BH11-BH17M). The intrusive soil assessment revealed the following:
  - The sub-surface conditions of the site were generalised as a layer of silty clay, clayey sand and gravelly sand filling (0.1m to 0.6m thickness), overlying natural (residual) silty clay, with (weathered) sandstone bedrock occurring at varying depths (0.4 to 2.1 mBGL).
  - An assessment of the soil concentrations against NEPC (2013) human health investigation levels (HIL-B/HSL-D) and ecological investigation/screening levels (EIL/ESL) indicated all samples meeting the adopted criteria.
- Asbestos-containing material (ACM) in the form of a 'fibrous mass' was previously detected within the sample BH7\_0.2-0.3 (EI, 2023).
  - Delineation fill samples collected adjacent to BH7M (BH7M-DL1 to BH7M-DL3) reported no asbestos detected.
  - The remainder of samples collected across the site did not contain significant anthropogenic material that could allude to the presence of ACM.
  - It is considered that there is a low risk of widespread asbestos contamination at the site and asbestos contamination is likely limited to an isolated hotspot at location BH7M.
- Initial groundwater sampling and analysis was conducted at three monitoring well locations (BH2M, BH7M, and BH10M) on 26 October 2023 (EI, 2023). Further assessment was undertaken at BH2M, BH10M, and the recently installed well BH17M on 20 June 2024. The results of the groundwater assessments indicated:
  - The hydraulic gradient was inferred to be to the north-west, towards Bottle Gully and then Heathcote Creek.
  - An assessment against the ANZG Fresh Water Criteria indicated concentrations of BTEX, VOCs, and phenols to be below the adopted criteria. Concentrations of metals (cadmium, copper, nickel, and zinc) were reported above the adopted ecological criteria. Metal concentrations in groundwater were considered to be representative of background conditions, and of low risk to future occupants and ecological receptors.
  - There were no reported impacts in BH17M, which was installed down-gradient of the previously identified UST. The risk of potential groundwater contamination from the UST at the site is considered low.

#### Conclusion

Based on the findings of the investigation, it was concluded that there is a low potential of widespread contamination to exist on site. Isolated asbestos contamination at BH7M and the presence of UPSS infrastructure on the western side of the site will require management and remediation in accordance with appropriate guidelines. El considers that the site can be made suitable for the proposed mixed-use commercial / residential development, provided that the following recommendations (further outlined in **Section 10**) are implemented:

- A Remedial Action Plan (RAP) should be prepared, detailing the methodology and procedures required for effective site remediation.
- Before commencement of demolition works, a Hazardous Materials Survey (HMS) should be completed by a suitably qualified consultant, to confirm the presence/location of any hazardous materials within the existing building fabrics.



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## 1. INTRODUCTION

## 1.1. Background and Purpose

El Australia (El) was engaged by Duffy Kennedy Constructions Pty Ltd ('the client') to conduct a Detailed Site Investigation for the property located at 1 Veno Street, Heathcote NSW ('the site').

The site is located within the local government area (LGA) of Sutherland Shire Council (**Figure 1**, **Appendix A**). It covers an area of approximately 7,050 m<sup>2</sup> (**Figure 2**, **Appendix A**) and is further identified as Lots 1, 2, and 3 in Deposited Plan (DP) 455292, and Lots 9, 10, 23, and 24 in DP 2499. At the time of this investigation, the site was occupied by the Heathcote Hotel and attached 'Bottle Mart' liquor store, surrounded by car parking and landscaping areas.

A Preliminary Site Investigation (PSI) with limited sampling was previously completed at the site (EI, 2023), which identified asbestos in shallow fill materials at one location, and an underground storage tank in the central-western portion of the site.

The aim of this investigation was to appraise the environmental condition (potential contamination) and determine the contamination status of the land, in support of a Development Application relating to the construction of a mixed use residential / commercial development.

This investigation also enables the future developer (if any) to meet obligations under the *Contaminated Land Management Act 1997* and *State Environmental Planning Policy* (*Resilience and Hazards*) 2021, in particular the requirements for the assessment and management of contaminated soil and groundwater in a mixed land use scenario (residential/commercial).

### 1.2. Proposed Development

The following drawings and survey plans were provided and entitled:

- DR Design (2023) *Mixed Use Development Option 3*, prepared by DR Design Pty Ltd, 1 Veno Street, Heathcote, Project No. 23-049, dated 27 September 2023;
- Boxall (2023) *Plan of Site Detail & Levels*, prepared by Boxall Surveyors, 1 Veno Street, Heathcote, Drawing Reference: 11260-001-A, dated 8 September 2021.

Based on the provided documents (**Appendix C**), EI understands that the proposed development involves the demolition of the existing site structures and the construction of a mixed-use development (residential, retail and hotel) comprising three buildings of five to sixstorey high above ground each, across two adjacent allotments (Lots 1 and 2). The two buildings on Lot 2 (denoted in the architectural drawings as building S2 and S2-H) overlie a common two-level basement and share a common ground floor level. The building on Lot 1 (denoted in the architectural drawings as building S1) overlie an individual two-level basement. EI notes that the site is located on sloping land, and as such, the lowest basement levels may only be a partial basement dependant on the location across the site.

The lowest basement level of Building S1 is proposed to have a Finished Floor Level (FFL) of RL182.65m AHD. The ground floor level with FFL of RL185.8m AHD transitions to below ground in the southern portion of the building S1 footprint. The lowest common basement level of Buildings S2 / S2-H is proposed to have a FFL of RL185.25m AHD. Vehicular access into the basement is off Veno Street.

A Bulk Excavation Level (BEL) of RL182.35m AHD for building S1 and RL184.95m AHD for Building S2 / S2-H is assumed, which includes allowance for the construction of the basement slab. To achieve the BEL, excavation depths of between 3.5m to 7m Below Existing Ground



Level (BEGL) within the basement footprint of Building S1, and between 5.3m to 7.6m BEGL within the basement footprint of Building S2 / S2-H have been estimated. Locally deeper excavations may be required for footings, lift overrun pits, crane pads, and service trenches.

Building S1 basement is proposed to be set back 6m from the western and eastern site boundaries and set back 7.5m from the Strickland Street frontage. Deep soil zones have been assumed to be present along outside areas of the basement footprints.

### 1.3. Project Objectives

The objectives of this investigation were to:

- Provide a qualitative assessment of the environmental conditions of the site, by appraising the potential for contamination on the basis of field observations, historical land uses and other documentary evidence;
- Provide a quantitative assessment of the environmental conditions of the site, by means of intrusive sampling and laboratory analysis for the relevant potential contaminants, and
- Make recommendations for further investigations and appropriate management of any impacted soils and/or groundwater, should site contamination be confirmed.

### 1.4. Scope of Works

To achieve the above objectives, the following scope of works was completed:

#### Desktop Study

- Review of relevant topographical, geological and soil landscape maps for the project area;
- Review of previous environmental reports;
- Preparation of an existing conceptual site model (CSM); and
- Data interpretation and reporting.

#### Fieldwork and Laboratory Analysis

- Review of existing underground services on-site, utilising *Before-You-Dig* plans;
- A detailed site inspection;
- Drilling of test boreholes at seven locations (BH11 to BH17), distributed in a systematic grid across the site;
- Delineation of asbestos hotspot at former borehole BH7M, including targeted drilling of test bores at three locations;
- Multiple level sampling of fill and natural soils at each of the boreholes;
- Installation of groundwater monitoring wells at one location identified as BH17M;
- Completion of a groundwater monitoring event (GME), which included measurement of standing water levels (SWLs) and sampling at the all previously installed wells (BH2M, BH7M, BH10M), and the newly constructed BH17M; and
- Laboratory analysis of selected soil and groundwater samples for the potential contaminants, as determined by the conceptual site model (CSM) and by field observations.



#### Data Analysis and Reporting

This report documents the desk study findings, the CSM, data quality objectives, sampling methodologies and laboratory analytical results. It also provides a record of observations made during the site walkover inspections, test bore and monitoring well construction logs. It discusses the results in regards to potential risks to human health and the environment and it concludes with a statement concerning the suitability of the site for future redevelopment works, and if any additional investigations should be conducted prior to the future development.

### 1.5. Regulatory Framework

The following regulatory framework and guidelines were considered during this DSI:

- Contaminated Land Management Act 1997 (the CLM Act 1997);
- Environmental Planning and Assessment Act 1979 (the EP&A Act 1979);
- NEPC (2013) National Environmental Protection (Assessment of Site Contamination) Amendment Measure 1999;
- NSW EPA (2017) Guidelines for the NSW Site Auditor Scheme;
- NSW EPA (2020a) Consultants Reporting on Contaminated Land: Contaminated Land Guidelines;
- NSW EPA (2020b) Guidelines for Implementing the Protection of the Environment Operations (Underground Petroleum Storage Systems) Regulation;
- NSW EPA (2022) Sampling Design Part 1 Application;
- Protection of the Environment Operations Act 1997 (the POEO Act 1997);
- State Environmental Planning Policy (Resilience and Hazards) 2021; and
- Sutherland Shire Local Environmental Plan 2015.



## 2. SITE DESCRIPTION

## 2.1. Property Identification, Location and Physical Setting

The site identification details and associated information are presented in **Table 2-1**. The site locality and assessment area are illustrated in **Figures 1** and **2**, **Appendix A**.

Table 2-1 Site Identification Details

Attribute	Description
Street Address	1 Veno Street, Heathcote NSW
Location and Description	<ul> <li>The site in Heathcote was bound by:</li> <li>North: Strickland Street, followed by low density residential;</li> <li>East: Medium density residential and Princes Highway;</li> <li>South: Veno Street / Princes Highway, followed by Veno Street Reserve and low density residential;</li> <li>West: Medium density residential, followed by Sydney Wildflower Nursery and Heathcote Public School (southwest).</li> </ul>
Geographical Coordinates	Northern-western corner of site (GDA2020-MGA56): Easting: 316285.574 Northing: 6226624.62 (Source: http://maps.six.nsw.gov.au)
Site Area	Approximately 7,050m <sup>2</sup> (Figure 2, Appendix A) (Source: http://maps.six.nsw.gov.au)
Lot and DP	Lot 1 in DP455292 Lot 2 in DP455292 Lot 3 in DP455292 Lot 9 in DP2499 Lot 10 in DP2499 Lot 23 in DP2499 Lot 24 in DP2499
State Survey Marks	<ul> <li>Four state survey marks are situated within close proximity to the site:</li> <li>SS56873: on Princes Highway (approximately 118 m east);</li> <li>SS56874: on footpath at intersection between Princes Highway and Veno Street (immediately adjacent south-west);</li> <li>SS56869 D: on intersection between Veno Street and Rosebery Street (approximately 129m west);</li> <li>SS56866: on intersection between Stickland Street and King Street (approximately 137m west);</li> <li>(Source: http://maps.six.nsw.gov.au)</li> </ul>
LGA	Sutherland Shire Council
Current Zoning	E1: Local Centre ( <i>Sutherland Shire Local Environmental Plan 2015</i> )



## 2.2. Local Land Use

The site is situated within an area of mixed use. The local sensitive receptors within close proximity (<500m) to the site are identified in **Table 2-2**.

Table 2-2 Local Sensitive Receptors

Direction	Land Use Description	Sensitive Receptor (and distance from site)
North	<ul> <li>Residential properties</li> </ul>	<ul> <li>Residents (immediately adjacent)</li> </ul>
	<ul> <li>Creative Garden Early Learning Centre</li> </ul>	<ul> <li>Children (430 m north-east)</li> </ul>
South	<ul> <li>Veno Street Reserve</li> </ul>	<ul> <li>Ecological receptors and recreational users</li> </ul>
	<ul> <li>Residential properties</li> </ul>	(approximately 15 m south)
		<ul> <li>Residence (approximately 30 m south-east)</li> </ul>
East	<ul> <li>Residential properties</li> </ul>	<ul> <li>Residents (immediately adjacent north-east)</li> </ul>
West	<ul> <li>Residential properties</li> </ul>	<ul> <li>Residents (immediately adjacent)</li> </ul>
	<ul> <li>Sydney Wildlife Nursery</li> </ul>	<ul> <li>Ecological receptors (approximately 30 m west)</li> </ul>
	<ul> <li>Heathcote Public School</li> </ul>	<ul> <li>Children (approximately 60 m south-west)</li> </ul>
	Heathcote Pre-School	<ul> <li>Children (approximately 267 m south-west)</li> </ul>

## 2.3. Regional Setting

The topography, (hydro)geology and soil landscape information is summarised in **Table 2-3**.

Attribute	Description
Topography	The site slopes to the north-west, with elevations ranging from approximately 193 mAHD (southern side of the site) to approximately 185 mAHD (northern side of the site adjacent Strickland Street) (Boxall, 2021).
Drainage	Likely to be consistent with the general slope of the site. Surface runoff is expected to be collected in stormwater pits and piped to the municipal drain system.
Geology	The Geological Survey of NSW Wollongong - Port Hacking 1:100,000 Geological Series Sheet 9029-9129, indicates the site is underlain by Hawkesbury Sandstone (more specifically, on a ridgeline between medium to coarse-grained quartz sandstone (with very minor shale and laminite lenses), and claystone, siltstone and laminate).
Soil Landscape	<ul> <li>The NSW Government Department of Planning, Industry, and Environment <i>eSPADE</i> v2.2 website indicates that the site overlies the <i>Faulconbridge – Residual Landscape</i> (<i>fb</i>).</li> <li>This landscape is characterised by level to gently undulating crests and ridges on plateau surfaces of Hawkesbury Sandstone. Local relief &lt;20 m, slopes &lt;5%. Infrequent rock outcrop and partially cleared eucalypt woodland.</li> </ul>
Acid Sulfate Soil (ASS) Risk	The Sutherland Shire Acid Sulfate Soil Risk Map (1:25,000 scale; 2015), indicates the subject land lies within the map class description of <i>No Known Occurrence</i> . In such cases, acid sulfate soils (ASS) are not known or expected to occur and "land management activities are not likely to be affected by ASS materials". As the site is underlain by sandstone, the potential for ASS presence on-site was
	considered to be low and further assessment or management is not deemed required.
Nearest Surface Water Features	Scout Gully (450 m south-west), Bottle Gully (900 m north-west), and Goburra Gully (915 m west) diverge towards Heathcote Creek, located approximately 1.2 km north- west of the site.

 Table 2-3
 Regional Setting Information



Attribute	Description
Groundwater Flow Direction	Groundwater flow direction in the area was inferred to be north-west towards Bottle Gully and ultimately Heathcote Creek.

#### 2.4. Site Inspection

Observations were recorded during a site walkover, conducted on 17 October 2023 and 6 June 2024. Relevant observations are summarised below, with photographs taken during the inspection presented in **Appendix E**. Site features are noted in **Figure 2**, **Appendix A**.

- The site was occupied and operated by the Heathcote Hotel, at the time of inspection.
- The site is an irregularly shaped block of land. The Heathcote Hotel building predominately covers the western-central section of the site, and is comprised of a main restaurant and bar section, 'Bottle Mart' liquor store, and the residential hotel section on the northern wing. The northern, eastern, and southern sides of the hotel are occupied by on-grade parking areas.
- The site was observed to be sloping to the north-west.
- Evidence of an underground storage tank (UST) was observed in the central-western portion of the site, including:
  - One dip/fill point, which was observed to still have a suspected petroleum product within the piping.
  - Tank vent pipes within an adjacent room, which potentially lead into other areas of the building.
  - A Ground Penetrating Radar (GPR) scan estimated the UST to be approximately 1.8m x 1.6m x 1.0 mBGL (see Appendix K). Underground piping infrastructure was identified during the service locating.
- The building structure appeared to be in fair condition, with some significant paint flaking and deterioration observed to the building materials.
- Asphalt road surfaces covered the car parking area, which was observed to be in fair condition, with some potholes and cracks evident throughout.
- Drainage pits were noted within the car parking areas and adjacent to the building.
- Vegetation was present on the site within the car parking area, including large trees, grasses and weeds. The vegetation did not appear to be distressed, indicating that phytotoxicity is not currently an issue for local soils.
- No olfactory indicator of contamination (i.e. suspicious odour) was detected within any of the soil samples examined.
- No significant presence of anthropogenic building material (e.g. bricks, tiles, ACM) was observed within any of the soil samples.



## 3. PREVIOUS INVESTIGATIONS

The following environmental investigation report was reviewed as part of this investigation:

 EI (2023) Preliminary Site Investigation / Limited Sampling, 1 Veno Street, Heathcote NSW, Report Ref. E26160.E01\_Rev0, dated 17 November 2023.

Key findings from this report are summarised in Table 3-1.

Table 3-1 Summary of Previous Reports

Assessment	Findings	
Preliminary Site Investi	gation / Limited Sampling (El, 2023)	
Purpose	To provide a qualitative assessment of the environmental conditions of the site, by appraising the potential for site contamination on the basis of field observations, historical land uses, documentary evidence, and limited intrusive assessment (soil and groundwater).	
Scope of works	<ul> <li>Review of available site history, including aerial photographs, land title records, geological and acid sulfate soil risk maps, council and SafeWork NSW records, a Lotsearch report, and NSW EPA online databases.</li> </ul>	
	<ul> <li>A site inspection.</li> <li>Intrusive soil investigation at 10 test borehole locations (BH1 to BH10).</li> <li>Installation of three groundwater wells (BH2M, BH7M, BH10M).</li> <li>Completion of one groundwater monitoring event (GME) from the newly installed monitoring wells.</li> </ul>	
Key Findings	<ul> <li>Based on the available historical information, the site was likely used for residential and agricultural purposes from 1916 to the early 1960s. In the early 1960s the Heathcote Hotel was constructed and has been in commercial use until the present day. The current site layout has not significantly changed since.</li> </ul>	
	<ul> <li>A database search of the site reported that a commercial dry cleaner was situated up-gradient approximately 75m south-west from 1983 to 1985. It was concluded that the dry cleaner is a low source of (migrating) contamination to the site, considering the small time-frame in which it was operational.</li> </ul>	
	<ul> <li>Evidence of an underground storage tank (UST) was observed in the central-western portion of the site, which included one dip/fill point and tank vents. The UST dip/fill point was observed to still contain petroleum liquid.</li> </ul>	
	<ul> <li>A SafeWork NSW Dangerous Goods Register Records search was completed. A response from SafeWork NSW reported that no relevant records were found pertaining to the site.</li> </ul>	
	<ul> <li>No olfactory indicator of contamination (i.e. suspicious odour) was detected within any of the examined soil samples.</li> </ul>	
	Soil sampling and analysis was conducted at 10 borehole locations (BH1- BH10):	
	<ul> <li>Sub-surface conditions were generalised as a layer of silty clay and clayey sand filling (0.1-0.6m thickness), overlying natural (residual) clays (0.4-2.1m thickness) and sandstone bedrock. The potential for ASS to be present on the site was considered low.</li> </ul>	



Assessment	Findings		
	<ul> <li>All soil samples complied with the adopted NEPC (2013) human health investigation levels (HIL-B/HSL-D) and ecological investigation/screening levels (EIL/ESL).</li> </ul>		
	<ul> <li>Asbestos was detected within shallow fill material in the form a 'friable mass' at BH107_0.3-0.4.</li> </ul>		
	<ul> <li>Groundwater sampling and analysis was conducted at three newly installed monitoring wells:</li> </ul>		
	<ul> <li>Standing water level (SWL) was recorded between 3.32 and 4,43 mBGL (RL 182.5 to 186.8 mAHD). The hydraulic gradient was inferred to be to the north-west, towards Bottle Gully and then Heathcote Creek</li> </ul>		
	<ul> <li>An assessment against the ANZG Marine Water Criteria indicated concentrations of BTEX, VOCs, and phenols to be below the adopted criteria. Concentrations of metals (copper, nickel, and zinc) were reported above the adopted criteria.</li> </ul>		
	<ul> <li>It was considered that the elevated metal concentrations in groundwater were representative of background conditions, ubiquitous in urbanised areas of Sydney.</li> </ul>		
Conclusions and Recommendations	It was concluded that the potential for site contamination may exist in areas of underground petroleum storage systems (UPSS), and asbestos identified in surface soils will require management. El considered the site could be made suitable for the proposed development, subject to the following recommendations:		
	A Remedial Action Plan (RAP) should be prepared, detailing the methodology and procedures required for effective site remediation. Additional site investigations were recommended:		
	<ul> <li>Ground penetrating radar (GPR) scan to more accurately determine the location and depth of the UST;</li> </ul>		
	<ul> <li>Targeted intrusive sampling investigation in vicinity of UST to identify potential soil impacts, and on the south-eastern portion of the site to assist with delineating the asbestos hotspot; and</li> </ul>		
	<ul> <li>Additional ground monitoring event (GME) from the three previously installed wells.</li> </ul>		



## 4. CONCEPTUAL SITE MODEL

In accordance with NEPC (2013) Schedule B2 - Guideline on Site Characterisation, El developed a conceptual site model (CSM) assessing plausible pollutant linkages between potential contamination sources, migration pathways and receptors. The CSM provides a framework for identifying data gaps in the existing site characterisation and future site assessments. Potential contamination sources, exposure pathways and receptors that were considered relevant for this assessment are summarised along with a qualitative assessment of the potential risks posed by complete exposure pathways.

### 4.1. Summary of Site History

Based on the previous investigations (**Section 3**), the site was likely used for residential and agricultural purposes from 1916 to the early 1960s. In the early 1960s the Heathcote Hotel was constructed and has been in commercial use until the present day. The current site layout has not significantly changed since.

An underground storage tank was observed on the western boundary. A GPR scan estimated the dimensions 1.8 m x 1.6 m and 1 mBGL.

Residential and commercial developments have significantly increased in the local area from the latter part of the 20<sup>th</sup> century.

### 4.2. Subsurface Conditions

The sub-surface conditions were described as a shallow layer of variable silty clay filling (likely cut-and-fill), overlying natural (residual) silty clay and (weathered) sandstone (**Section 7.1**). The potential for ASS to be present on the site was deemed low.

Based on the GME conducted on 26 October 2023, the groundwater elevation ranged between 182.5 and 186.8 mAHD, and the hydraulic gradient (potentiometric slope) was inferred to be to the north-west, towards Bottle Gully and then ultimately Heathcote Creek.

### 4.3. Potential Contamination Sources

The potential contamination sources were as follows:

- Hazardous building materials within current and former site structures (including asbestoscontaining material (ACM), lead-based paints and metallic objects), as a result of historical demolitions and/or weathering;
- Application of pesticides around building (footing) perimeters;
- Potential leaking from the UST located in the central-western portion of the site;
- Leaks from vehicles in the parking area; and
- Off-site migration from up-gradient sources.



## 4.4. Potential Contaminants

The potential contaminants the sites were considered to be:

- Priority Metals (PM) arsenic, cadmium, chromium, copper, lead, mercury, nickel and zinc;
- Total Recoverable Hydrocarbons (TRHs);
- The monocyclic aromatic hydrocarbons benzene, toluene, ethylbenzene, xylenes (BTEX);
- Polycyclic Aromatic Hydrocarbons (PAHs);
- Organochlorine and Organophosphorus Pesticides (OCPs / OPPs);
- Volatile Organic Compounds (VOCS);
- Chlorinated Volatile Organic Compounds (cVOCs);
- Light Non-Aqueous Phase Liquids (LNAPL);
- Phenols; and
- Asbestos.

### 4.5. Qualitative Risk Assessment

An assessment of the potential contamination risks for the site is outlined in Table 4-1.

Table 4-1	Assessment of Potential Co	ntamination Risk
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Potential Source	Impacted Medium	COPC	Risk of Contamination
Hazardous building materials	Building fabrics Near surface soil	PM (lead in particular) and asbestos	<b>Moderate</b> Given site history and the age of construction of the building, hazardous building materials may be present and weathering of such materials may impace near surface soils. Asbestos in the form of a 'friable mass' was identified at former borehole BH7M (EI, 2023).
Leakage from vehicles, UPSS infrastructure	Soil Groundwater	PM, TRH, BTEX, PAH, Phenols, VOCs, OCP/OPP, LNAPL	<b>Low-Moderate</b> Potential leaking of the UPSS infrastructure on the western side of the site. UST has not been decommissioned
Off-site migration from neighbouring properties	Groundwater	PM, TRH, BTEX, PAH, VOC, cVOCs, Phenols, LNAPL	Low Migration of contaminants from former up-gradient (south-west) dry cleaner at 1335 Princes Highway, Heathcote is considered low due to its small operational time-frame (2 years). Migration of contaminants from cross- gradient petrol service stations is considered low due to local topography.
Application of pesticides	Near surface soil (building footing areas)	PM (arsenic and copper), OCP and OPP	Low If present, pesticides are expected to be limited to shallow, building footprint soils



## 4.6. Identified Receptors

The following potential receptors of site contamination were identified:

- Current and future site users / occupiers;
- On-site demolition / construction workers (during future redevelopment);
- Users of the adjacent land during future demolition / construction works;
- Future intrusive workers;
- Down-gradient ecological receptors;
- Local groundwater and (ultimately) Heathcote Creek.

Given the qualitative risk assessment summarised in **Section 4.5**, the risk to these receptors were considered to be low to moderate. Refer to **Table 4-2** for an overview of the preliminary CSM, identifying the potential contamination sources, exposure pathways and human and environmental receptors.



#### Table 4-2 Preliminary Conceptual Site Model

Potential Source	Impacted Media	Contaminants of Potential Concern	Transport mechanism	Exposure pathway	Potential receptor	Source-Pathway-Receptor (SPR) Linkage
Hazardous building materials (existing and previously demolished) Application of pesticides	Soil	PM, TRH, BTEX, PAH, OCP, OPP, and asbestos	Disturbance of surface and subsurface soils during site redevelopment, future site maintenance and future use of the site post redevelopment	Ingestion Dermal contact Inhalation of particulates	Current and future site users Demolition / construction workers Adjacent site users Future intrusive workers	<b>Potentially complete.</b> However, the use of personal protective equipment (PPE) is mandatory for construction workers.
Leakage from vehicles and UPSS			Atmospheric dispersion from soil to outdoor and indoor air spaces			
Migration from off-site upgradient sources (former			Volatilisation of contamination from soil and diffusion to indoor air spaces.	Inhalation of vapours	_	
dry cleaner)		PM, TRH, BTEX, PAH, OCP, OPP	Roots absorption of bioavailable compounds from impacted soils.	Biota uptake	Ecological receptors in areas of exposed soil/landscaping	<b>No.</b> All results were within the EIL/ESL criteria.
	Groundwater	PM, TRH, BTEX, PAH, VOCs and cVOCs	Volatilisation of contamination from groundwater to indoor or outdoor air spaces (onsite and offsite)	Inhalation of vapours	Current and future site users Demolition / construction workers Adjacent site users Future intrusive workers	Potentially complete. However, the use of personal protective equipment (PPE) is mandatory for construction
			Disturbance of surface soils during site redevelopment, future site maintenance and future use of the site post redevelopment	Ingestion Dermal contact	Demolition / construction workers Future intrusive workers	workers.
			Migration of dissolved phase impacts in groundwater via diffusion and advection	Biota uptake	Heathcote Creek	Potentially complete. Cadmium, copper, nickel, and zinc exceedances were reported. Groundwater was inferred to flow north-west towards Bottle Gully, which ultimately connects in to Heathcote Creek.



## 5. METHODOLOGY

## 5.1. Sampling, Analytical and Quality Plan

The sampling, analytical and quality plan (SAQP) ensures that the data collected during environmental works are representative and provided a robust basis for assessment decisions. The SAQP for this investigation included the following:

- Data quality objectives (DQOs), including a summary of the objectives of this investigation;
- Investigation methodology, including the media to be sampled, details of analytes and parameters to be monitored and a description of the rationale for intended sampling points;
- Sampling procedures (including sample handling, preservation and storage);
- Field screening methods;
- Laboratory analysis methods; and
- Analytical quality assurance / quality control (QA/QC).

### 5.2. Data Quality Objectives

In accordance with the NEPC (2013) *Schedule B2 Guideline on Site Characterisation*, the USEPA (2006) *Data Quality Assessment* and NSW EPA (2017) *Guidelines for the NSW Site Auditor Scheme*, DQOs were developed by the El investigation team, following the NEPM- / NSW EPA- endorsed, seven step process (**Table 5-1**). In doing so, the appropriate levels of data quantity and quality needed for the specific requirements of the project were established.



#### Table 5-1 Summary of Project Data Quality Objectives

DQO Step	Details
<b>1. State the Problem</b> Summarise the contamination problem that will require new environmental data, and identify the resources available to resolve the problem; develop a conceptual site model.	The site is designate for residential and commercial redevelopment ( <b>Section 1.2</b> ). The site was assessed against the NEPC (2013) land use setting of; residential with minimal opportunities for soil access. The site history review ( <b>Section 3</b> ) and CSM showed that there was potential for contamination. The site required a preliminary understanding involving a desktop study and limited intrusive investigation into the nature and degree of any soil and groundwater contamination; in support of the development application to Sutherland Shire Council and enable the developer to meet its obligations under State Environmental Planning Policy 2021 and the Co <i>ntaminated Land Management Act 1997</i> .
2. Identify the Goal of the Study (Identify the decisions) Identify the decisions that need to be made on the contamination problem and the new environmental data required to make them.	<ul> <li>Based on the objectives outlined in Section 1.3, the decisions for this DSI concerned the following questions:</li> <li>Has the nature, extent and source of any soil and/or groundwater impacts onsite been defined?</li> <li>What impact do the local geological conditions have on the fate and transport of any contaminants that may be present?</li> <li>Does the level of impact coupled with the fate and transport of potential contaminants represent an unacceptable risk to identified human and/or environmental receptors on- or off- site?</li> <li>Does the collected data provide sufficient information to allow the selection and design of an appropriate remedial strategy, if necessary?</li> <li>If the data does not provide sufficient information, what data gaps require closure to enable the suitability of the site to be determined, or selection and design of an appropriate remedial strategy?</li> </ul>
<b>3. Identify Information Inputs (Identify inputs to decision)</b> Identify the information needed to support any decision and specify which inputs require new environmental measurements.	<ul> <li>Inputs to the decision making process included:</li> <li>The proposed development plans and land use;</li> <li>National and NSW EPA guidelines endorsed under the <i>NSW Contaminated Land Management Act 1997</i>;</li> <li>Observations obtained from an intrusive investigation in locations and to depths deemed appropriate for assessment purposes; and</li> <li>Laboratory analysis of selected samples for the COPCs.</li> <li>At the end of the DSI, a decision had to be made regarding whether the environmental conditions were suitable for the proposed redevelopment, or if additional assessment / remedial works were required to make the site suitable.</li> </ul>
<b>4. Define the Boundaries of the Study</b> Specify the spatial and temporal aspects of the environmental media that the data must represent to support decision.	Lateral – The investigation was conducted within the cadastral boundaries of the site. Vertical – From the ground surface, down to the deepest depth of borehole drilling (BH2M, 9 mBGL (RL 176.81 mAHD)). Temporal – Results were valid on 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 off-site sources.
5. Develop the Analytic Approach (Develop a decision rule) 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.	<ul> <li>The decision rules for the investigation were:</li> <li>If the concentrations of contaminants in the soil and/or groundwater data exceed the adopted criteria, then assess the need to further investigate the extent of impacts onsite.</li> <li>Decision criteria for QA/QC measures are defined by the Data Quality Indicators (DQI) in Table 5-2.</li> </ul>



DQO Step	Details
6. Specify Performance or Acceptance Criteria (Specify limits on decision errors)	Specific limits for this project were in accordance with National and NSW EPA guidance, and appropriate indicators of data quality and standard procedures for field sampling and handling. This included the following points to quantify tolerable limits:
Specify the decision-maker's acceptable	<ul> <li>The null hypothesis for the investigation was that the 95% Upper Confidence Limits (UCL) of the average concentration of contaminants of concern exceed relevant land use criteria across the site.</li> </ul>
limits on decision errors, which are used to	Acceptance of site suitability was based on the probability that:
establish performance goals for limiting uncertainties in the data.	<ul> <li>The 95% UCL of the average concentration of the data set satisfied the given site criteria (thus, a limit on the decision error was 5% that a conclusive statement may be incorrect);</li> </ul>
	<ul> <li>The standard deviation of the data set was less than 50% of the relevant criteria; and</li> </ul>
	<ul> <li>No single result exceeded the criteria by 250% or more.</li> </ul>
	<ul> <li>Soil and groundwater concentrations for the potential chemicals that were below investigation criteria made or approved by the NSW EPA were treated as acceptable and indicative of suitability for the proposed land use(s).</li> </ul>
	<ul> <li>If contaminant concentrations exceeded the adopted criteria, further investigation was considered prudent. If no contamination was detected, no further action was required.</li> </ul>
7. Develop the Detailed Plan for	In order to identify the most resource-effective sampling and analysis design and satisfy the DQOs:
Obtaining Data (Optimise the design for obtaining data) Identify the most resource-effective	<ul> <li>Soil sampling was conducted at an additional seven locations using a mixed systematic grid and targeted pattern across accessible parts of the site. This sampling was in continuation to the previous investigation (EI, 2023).</li> </ul>
sampling and analysis design for general	An additional three locations were targeted adjacent to the previous borehole BH7M to delineate asbestos contamination.
data that are expected to satisfy the DQOs.	<ul> <li>An upper soil profile sample was collected at each borehole location and tested for potential contaminants, to assess the conditions of the fil layer, and impacts from activities at ground level.</li> </ul>
	<ul> <li>Further discrete, natural samples were analysed for primary metals, TRH, BTEX and PAH. Samples were selected on field observations (including visual and olfactory evidence), giving consideration to the subsurface stratigraphy.</li> </ul>
	One groundwater monitoring well was installed down-gradient of the UST to assess any groundwater impacts.
	<ul> <li>A GME to be completed from three previously installed groundwater monitoring wells (BH2M, BH7M and BH10M), and one newly installed groundwater monitoring well (BH17M) with laboratory analysis of representative samples for potential contaminants.</li> </ul>
	<ul> <li>Review of the results was undertaken to determine if further sampling was warranted.</li> </ul>
	During the DSI, written instructions were issued to guide field personnel in the required fieldwork activities. All field works were performed in accordance with NSW EPA guidelines and EI standard operating procedures (SOPs).



To ensure that the investigation data were of an acceptable quality, they were assessed against the quality indicators outlined in **Table 5-2**. Assessment of data quality is presented in **Section 6** and **Appendix I**.

Table 5-2Data Quality Indicators

QA/QC Component	Data Quality Indicator(s)
<b>Precision</b> A quantitative measure of the variability (or reproducibility) of data	<ul> <li>Data precision was assessed by reviewing the performance of blind field duplicate sample sets, through calculation of relative percentage differences (RPD). Precision was deemed acceptable if RPDs were found dominantly to be less than 30%.</li> <li>RPDs that exceeded this range were considered acceptable where: <ul> <li>Results were less than 10 times the limits of reporting (LOR);</li> <li>Results were less than 20 times the LOR and the RPD was less than 50%; or</li> <li>Heterogeneous materials or volatile compounds were encountered.</li> </ul> </li> </ul>
Accuracy A quantitative measure of the closeness of reported data to the "true" value	<ul> <li>Data accuracy was assessed through the analysis of:</li> <li>Split field duplicate sample sets;</li> <li>Field / method blanks, analysed for the analytes targeted in the primary samples;</li> <li>Matrix spike sample sets; and</li> <li>Laboratory control samples.</li> </ul>
Representativeness The confidence (expressed qualitatively) that data are representative of each medium present onsite	<ul> <li>To ensure the data produced by the laboratory were representative of conditions encountered in the field, the following measures were taken:</li> <li>Blank samples run in parallel with field samples, to confirm there were no unacceptable instances of laboratory artefacts;</li> <li>Review of RPDs for field and laboratory duplicates to provide an indication that the samples were generally homogeneous, with no unacceptable instances of significant sample matrix heterogeneities; and</li> <li>The appropriateness of collection methodologies, handling, storage and preservation techniques was 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).</li> </ul>
<b>Completeness</b> A measure of the amount of useable data from a data collection activity	Analytical data sets were considered complete upon confirmation that: SOPs for sampling protocols were adhered to; and All chain of custody (COC) documentation was properly completed. It could then be determined whether the generated data were sufficient for the purposes of the land use assessment.
<b>Comparability</b> The confidence that data are equivalent for each sampling event	Given that several data sets from separate sampling episodes were required, issues of comparability were reduced through adherence to SOPs and regulator-endorsed or published guidelines and standards on each data gathering activity. In addition the data were collected by experienced samplers and NATA-accredited laboratory methodologies will be employed.



## 5.4. Sampling Rationale

With reference to the CSM describe in **Section 3** and DQOs, the soil / groundwater sampling and analytical plans were in accordance with the following rationale:

- Multiple level (fill and natural) soil sampling at seven boreholes, located across accessible
  parts of the site in order to further characterise *in situ* materials. The number of boreholes in
  addition to the previous 10 boreholes (EI, 2023), was considered to provide a detailed
  overview of the potential contamination at the site in accordance with the NSW EPA
  Sampling Design Guidelines (2022).
- Delineation soil (fill) sampling at three boreholes in cardinal directions from the original BH7M location;
- Completion of a GME, utilising newly and previously installed monitoring wells (BH2M, BH7M, BH10M, and BH17M), to further characterise local groundwater conditions and any impacts from the previously identified UPSS; and
- Laboratory analysis of representative soil and groundwater samples for the potential contaminants.

#### 5.5. Assessment Criteria

The assessment criteria adopted for this DSI were selected from available published guidelines that are endorsed by national or state regulatory authorities, with due consideration of the exposure scenario that is expected for the site, the likely exposure pathways, and the identified potential receptors. The adopted assessment criteria are outlined in **Table 5-3**.

For the purposes of this DSI, the adopted soil assessment criteria are referred to as the *Soil Investigation Levels* (SILs) and the adopted groundwater assessment criteria are referred to as *Groundwater Investigation Levels* (GILs).

Medium	Guidelines	Rationale
Soil	NEPC (2013)	Soil Health-based Investigation Levels (HILs)
	HILs, HSLs, Management Limits	NEPC (2013) <i>HIL-B</i> thresholds for residential with minimal access to soils.
		Soil Health-based Screening Levels (HSLs)
		NEPC (2013) <i>HSL-D</i> thresholds for vapour intrusion in low to high density residential (to assess potential human health impacts from residual vapours resulting from petroleum, BTEX and naphthalene).
		Asbestos Health Based Screening Levels:
		<ul><li>For asbestos in soil, the following criteria are applicable:</li><li>No visible asbestos on soil surface in all areas of the site;</li></ul>
		<ul> <li>Bonded ACM - HSL-A&amp;B</li> </ul>
		<ul> <li>Friable Asbestos: 0.001% w/w in all areas of the site;</li> </ul>
		Management Limits for Petroleum Hydrocarbons
		Where the HSLs and ESLs for petroleum hydrocarbons were exceeded, sample results were also assessed against the NEPC (2013) <i>Management Limits</i> for the F1-F4 TRH fractions, to assess propensity for phase-separated hydrocarbons (PSH), fire and explosive hazards and adverse effects on buried infrastructure.

Table 5-3	Adopted Investigation	Levels for Soil	and Groundwater



Medium	Guidelines	Rationale
	NEPC (2013) EILs, ESLs	Ecological Investigation Levels (EILs) / Ecological Screening Levels (ESLs)
		EILs/ESLs for commercial urban residential and open public spaces were adopted, to assess the potential impact to proposed landscaping areas, where plants could be exposed to soils and where precipitation may result in subsurface infiltration and resulting leaching of soil impacts to groundwater.
		EILs were calculated from Ecological Investigation Level Calculation Spreadsheet developed by CSIRO for the National Environment Protection Council for a high traffic NSW suburb and NEPC (2013) Schedule B1 Guideline on Investigation Levels for Soil by the addition of site specific Added Contaminant Limit (ACL) and the Ambient Background Concentration (ABC) for a high traffic NSW suburb. The adopted ESL criteria were based on fine grained criteria.
	CRC CARE (2017) high reliability ecological criteria	High reliability ecological criterion for Benzo( $\alpha$ )pyrene The CRC Care (2017) high reliability ecological guideline for benzo( $\alpha$ )pyrene in urban residential and public open space settings are not endorsed by NSW EPA. However, the criteria will be adopted as appropriate to assess for protection of terrestrial ecosystems.
Groundwater	ANZG (2018) GILs for Fresh Waters and NEPC (2013) Groundwater HSLs	Groundwater Investigation Levels (GILs) for Fresh Waters ANZG (2018) provides GILs for typical, slightly-moderately disturbed aquatic ecosystems, Trigger Values (TVs) for the 95% level of protection of aquatic ecosystems; however, the 99% TVs were applied for the bio-accumulative analytes. Health-based Screening Levels (HSLs) The NEPC (2013) groundwater <i>HSL-D</i> thresholds for vapour intrusion in commercial/industrial land settings were applied to assess potential human health impacts from residual vapours resulting from petroleum BTEX and naphthalene impacts.

### 5.6. Soil Sampling Methodology

The soil sampling works conducted at the site are described in **Table 5-4**. Sampling locations are illustrated in **Figure 2**, **Appendix A**.

Table 5-4	Summary	of Soil	Sampling	Methodology

Activity/Item	Details			
Fieldwork	Initial PSI fieldwork was conducted on 17 October 2023 and comprised of 10 borehole locations across accessible parts of the site (EI, 2023). Additional DSI fieldwork was conducted on 6 June 2024, comprising a further 10 borehole locations across accessible parts of the site. Prior to drilling, locations were surveyed by a contracted services locator, with assistance from <i>Before-You-Dig</i> plans.			
Drilling Method	Test bores BH7M-DL1 to BH7M-DL3 and BH1 to BH17M were drilled using a mechanical drilling rig, fitted with solid stem augers. The maximum drilling depth was 1.0 mBGL. Borehole logs are presented in <b>Appendix D</b> . Groundwater well bores were drilled using a track-mounted drill rig using solid flight augers equipped with a 'Tungsten-Carbide' (T-C)			
Soil Logging	Drilled / examined soils were logged in the field in accordance with Australian Standard AS1726-2017. Soil was evaluated on a qualitative basis for visual and olfactory signs of contamination. Soil descriptions are included in the borehole logs ( <b>Appendix D</b> ).			



Activity/Item	Details
Soil Sampling	Soil samples were collected by dry grab method from the augers (the sampler wearing dedicated nitrile gloves) and placed into laboratory-supplied, acid-washed, solvent-rinsed glass jars and zip-lock, plastic bags (the latter for asbestos samples). Blind and split field duplicates for QA assessment were prepared by collecting a bulk amount of soil and dividing (post mixing) into three separate glass jars.
Decontamination	Nitrile sampling gloves were replaced between each sampling location. The augers were cleaned of all residual soil between each borehole location by washing with a mixture of Alconox and potable water (1/20) until free of all residual materials, then rinsed with water.
Management of Soil Cuttings	Soil cuttings were used to backfill the completed boreholes.
Sample Preservation and Transport	<ul> <li>Sealed sample containers were stored in an insulated chilled chest (with frozen ice packs), whilst on-site and in transit to the contracted laboratories.</li> <li>Chilled sample chests were transported to the primary laboratory (SGS Australia Pty Ltd (SGS)) using chain-of-custody (COC) procedures. Signed COC certificates and sample receipt advice (SRA) were provided by SGS for confirmation purposes (<b>Appendix G</b>).</li> <li>Split (inter-laboratory) soil field duplicates were submitted to Envirolab Services Pty Ltd (Envirolab; the secondary laboratory) under strict COC conditions. Signed COC certificates and SRA were provided by Envirolab for confirmation purposes (<b>Appendix G</b>).</li> </ul>
Laboratory Analysis and Quality Control	Soil samples were analysed by SGS and Envirolab for the COPCs. All samples were analysed within the required holding period, as documented in the corresponding laboratory reports ( <b>Appendix H</b> and <b>Appendix J</b> ). In addition to the split (inter-laboratory) field duplicates (analysed by Envirolab), QC testing comprised one blind (intra-laboratory) field duplicate, an equipment rinsate blank, a laboratory-prepared trip spike soil sample and a laboratory-prepared trip blank soil sample.

## 5.7. Groundwater Sampling

The groundwater sampling works are described in **Table 5-5**. The monitoring well locations are illustrated in **Figure 2**, **Appendix A**.

Activity/Item	Details	
Fieldwork	Three groundwater monitoring wells (BH2M, BH7M, ad BH10M) were previously installed between 16 to 20 October 2023 (EI, 2023). An additional well (BH17M) was installed on 11 June 2024.	
	A GME, involving water level gauging, well purging, field testing and groundwater sampling, was completed on 20 June 2024.	
Well Construction	Well construction was in general accordance with the standards described in NUDLC (2020) and involved the following:	
	<ul> <li>Ø50mm, Class 18 uPVC, threaded, machine-slotted screen and casing;</li> </ul>	
	<ul> <li>Base and top of each well was sealed with a uPVC cap;</li> </ul>	
	<ul> <li>Annular, graded sand filter was used to approximately 300 mm above top of screen interval;</li> </ul>	
	<ul> <li>Granular bentonite was applied above annular filter to seal the screened interval; and</li> </ul>	
	<ul> <li>Surface completion comprised of a stick-up section of pipe, a plastic J-cap closing the well and a gatic cover at ground level.</li> </ul>	
	Well construction details are provided in <b>Table 7-3</b> .	

 Table 5-5
 Summary of Groundwater Sampling Methodology



Activity/Item	Details
Well Elevations	Top of casing elevations at each monitoring well were obtained using SparkFun RTK Express Tool. The RTK Express works with GIS software and SW Maps and is connected to tablets via Bluetooth.
Well Development	Well development was conducted immediately after installation. The development process involved the removal of water and accumulated sediment within the full length of the water column using a dedicated, high density polyethylene (HDPE), disposable bailer. Bailing was continued until no further reduction in suspended sediment was observed (i.e. after removal of several well volumes of water).
Well Gauging	Monitoring wells were gauged to determine SWL prior to groundwater purging and sampling Gauging was conducted with a water/oil interface probe.
Well Purging, Field Testing and	Groundwater was purged and sampled by a low-flow / minimal draw-down method, using peristaltic pump with dedicated tubing.
Sampling	During the purging process, water was continuously measured for field parameter (temperature (T), electrical conductivity (EC), reduction-oxidation potential (Redox), dissolve oxygen (DO) and pH) using a <i>Hanna Multi Parameter 9829</i> positioned within an open flow through cell. Once water quality parameters stabilised (i.e. within $\pm$ 10% for DO, $\pm$ 3% for EC, $\pm$ 0.05 for pH, $\pm$ 0.2° for temperature and $\pm$ 20mV for redox), groundwater sampling wa undertaken, by diverting the outlet of the pump (immediately before the flow cell) to the sampling vials and bottles. Refer to <b>Appendix F</b> for all field data sheets.
Decontamination Procedure	Sampling equipment (interface probe and water quality kit probes) were decontaminated between uses by washing in a solution of potable water and Decon 90, then rinsed wit potable water. Decontamination was not required for the sampling pump, as dedicated disposable tubing wa used for sampling at each individual well. Dedicated gloves were used for the collection of each sample.
Sample Containers and Preservation	<ul> <li>Sample containers were supplied by the laboratory with the following preservatives:</li> <li>one, 1 litre amber glass, acid-washed and solvent-rinsed bottle;</li> <li>two, 40ml glass vials, pre-preserved with dilute hydrochloric acid, Teflon-sealed; and</li> <li>one, 250mL, HDPE bottle, pre-preserved with dilute nitric acid (1mL).</li> <li>Samples for metals analysis were field-filtered using 0.45 µm pore-size membranes.</li> <li>All containers were filled with sample to the brim then capped and stored in insulated chest (containing ice bricks), until completion of the fieldwork and during sample transit to the laboratory.</li> </ul>
Sample Transport	After sampling, the ice brick filled chests were transported to SGS using strict COC procedures. SRA was provided by the laboratory to document sample condition upon receip Copies of the SRA and COC certificates are presented in <b>Appendix G</b> . A split (inter-laboratory) field duplicate was submitted to Envirolab under strict COC procedures. Signed COC certificates and sample receipt documentation were provided b Envirolab for contamination purposes ( <b>Appendix G</b> ).
Laboratory Analysis and Quality Control	Groundwater samples were analysed by SGS and Envirolab for the potential contaminants. A samples were analysed within the required holding period, as documented in the corresponding laboratory reports ( <b>Appendix H</b> ). In addition to the split (inter-laboratory) field duplicate (analysed by Envirolab), QC testing comprised a blind (intra-laboratory) field duplicate, an equipment rinsate blank, a laboratory prepared, trip spike water sample and a laboratory-prepared, trip blank water sample, all tester by SGS.



## 6. DATA QUALITY ASSESSMENT

The assessment of data quality is defined as the scientific and statistical evaluation of environmental results to determine if they meet the objectives of the project (USEPA, 2006). For this DSI, data quality assessment involved an evaluation of the compliance of the field (sampling) and laboratory procedures with established protocols, as well as the accuracy and precision of the associated results from the quality control measures. The findings are summarised in **Table 6-1** and discussed in detail in **Appendix I**.

In summary, the overall quality of the analytical data from this DSI was considered to be of an acceptable standard for interpretive use and preparation of an updated CSM.

DQOs and DQIs established Suitable documentation of fieldwork observations including borehole logs and field	Yes	See Sections 5.2 and 5.3
observations including borehole logs and field		
notes.	Yes	See <b>Appendix D</b> and <b>Appendix F</b>
Use of relevant and appropriate sampling plan (density, type, and location)	Yes	See <b>Section 5.4</b> for a preliminary overview
All media sampled and duplicates collected	Yes	See Appendix G
Use of approved and appropriate sampling methods	Yes	See Sections 5.6 and 5.7
Selection of soil samples according to field PID readings (where VOCs are present)	No	N/A
Preservation and storage of samples upon collection and during transport to laboratory	Yes	See Sections 5.6 and 5.7
Appropriate field rinsate and trip blanks taken	Yes	See Appendix G
Completed field and analytical laboratory sample COC procedures and documentation	Yes	See Appendix G
Sample holding times within acceptable limits	Yes	See Appendices H, I, J
Use of appropriate analytical procedures and NATA-accredited laboratories	Yes	See Appendices H, I, J
LOR low enough to meet adopted criteria	Yes	See Appendices H, I, J
Laboratory blanks	Yes	See Appendices H, I, J
Laboratory duplicates	Yes	See Appendices H, I, J
Matrix spikes	Yes	See Appendices H, I, J
Surrogates	Yes	See Appendices H, I, J
Analytical results for replicated samples, including field and laboratory duplicates, expressed as RPD	Yes	See Appendices H, I
Checking for the occurrence of apparently unusual or anomalous results (e.g. laboratory results that appear to be inconsistent with field observations or measurements)	Yes	See Appendices B, D, H
Report reviewed by senior staff to assess project meets NSW EPA guidelines and objectives	Yes	See Document Control
	Selection of soil samples according to field PID eadings (where VOCs are present) Preservation and storage of samples upon collection and during transport to laboratory Appropriate field rinsate and trip blanks taken Completed field and analytical laboratory sample COC procedures and documentation Sample holding times within acceptable limits Jse of appropriate analytical procedures and VATA-accredited laboratories COR low enough to meet adopted criteria aboratory blanks aboratory duplicates Matrix spikes Surrogates Analytical results for replicated samples, necluding field and laboratory duplicates, expressed as RPD Checking for the occurrence of apparently unusual or anomalous results (e.g. laboratory esults that appear to be inconsistent with field observations or measurements) Report reviewed by senior staff to assess project meets NSW EPA guidelines and	Selection of soil samples according to field PID eadings (where VOCs are present)NoPreservation and storage of samples upon collection and during transport to laboratoryYesAppropriate field rinsate and trip blanks takenYesCompleted field and analytical laboratory sample COC procedures and documentationYesSample holding times within acceptable limitsYesJse of appropriate analytical procedures and VATA-accredited laboratoriesYes.OR low enough to meet adopted criteriaYes.aboratory duplicatesYesMatrix spikesYesSurrogatesYes.nalytical results for replicated samples, ncluding field and laboratory duplicates, expressed as RPDYesChecking for the occurrence of apparently unusual or anomalous results (e.g. laboratory esults that appear to be inconsistent with field observations or measurements)YesReport reviewed by senior staff to assess project meets NSW EPA guidelines and YesYes

Table 6-1 Quality Assurance Process



## 7. RESULTS

## 7.1. Soil

## Sub-Surface Conditions

Based on the borehole logs (and excluding any hardstand), the sub-surface conditions of the site were generalised as a layer of silty clay, clayey sand and gravelly sand filling (0.1m to 0.6m thickness), overlying natural (residual) silty clay, with (weathered) sandstone bedrock occurring at varying depths (0.4 to 2.1 mBGL). The potential for ASS to be present on the site was very low.

More details encountered during the soil investigation by EI are provided in **Table 7-1** and borehole logs are presented in **Appendix D**.

Layer	Description	Minimum - Maximum Depth (mBGL)
Hardstand	Asphalt	0.0 - 0.2
Fill	Silty CLAY; medium plasticity, brown / orange, with sub-angular to angular gravels.	0.1 - 0.6
	Gravelly SAND; fine to medium-grained, yellow / brown, with sub- angular to angular gravels	0.1 - 0.3
	Silty / Clayey SAND; low plasticity, brown / yellow, with bitumen and sub-angular to angular gravels	0.1 - 0.6
Natural	Silty CLAY; medium to high plasticity, brown / yellow / red / mottled white, with trace sub-angular to angular ironstone fragments	0.3 – 1.0
Bedrock	SANDSTONE; moderately weathered, yellow / brown	0.4 – 2.1
Groundwater	Based on groundwater levels from the three monitoring wells, groundwater was colourless to light brown, low turbidity, with slight oil/grease sheen.	2.19 – 4.53

Table 7-1 Generalised Sub-Surface Profile

#### Field Observations and PID Results

Soil samples were collected from the test bores at various depths to describe lithology summarised in **Table 7-1**. 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, and charcoal), with the following observations noted:

- No soil staining was observed in any of the examined soils.
- No fragments of potential ACM was observed in examined soil samples.
- No ash, slag, fibre cement sheeting or other foreign materials were observed in examined soil samples.
- No evidence of actual or potential ASSs was encountered in any of the examined soils.
- PID concentrations were low in all samples examined (maximum 0.4 ppm).



#### Laboratory Analytical Results

A summary of the DSI laboratory results for the analysed (representative) soil samples is presented in **Table 7-2**. More detailed tabulation is presented in **Table B.1**, **Appendix B**, which also includes the previous EI (2023) PSI results.

All results were found to comply with the adopted SILs applicable to the proposed land use settings, with the exception of asbestos identified in fill at BH7M.

Number of Primary Samples	Analyte	Minimum Concentration (mg/kg)	Maximum Concentration (mg/kg)	Samples Exceeding SILs
Priority Metals (to	otal)			
30	Arsenic	2	12	None
30	Cadmium	<0.3	<0.3	None
30	Chromium	<0.5	89	None
30	Copper	<0.5	31	None
30	Lead	3	44	None
30	Mercury	<0.05	<0.05	None
30	Nickel	0.5	93	None
30	Zinc	2.1	85	None
PAHs				
30	Naphthalene	<0.1	0.1	None
30	Benzo(α)pyrene	<0.1	<0.1	None
30	Carcinogenic PAHs (as $B(\alpha)P$ TEQ)	<0.3	<0.3	None
30	Total PAHs	<0.8	<0.8	None
BTEX and TRHs				
30	Benzene	<0.1	<0.1	None
30	Toluene	<0.1	<0.1	None
30	Ethyl benzene	<0.1	<0.1	None
30	Total Xylenes	<0.3	<0.3	None
30	F1 – TRHs	<25	<25	None
30	F2 – TRHs	<25	<25	None
30	F3 – TRHs	<90	<90	None
30	F4 – TRHs	<120	<120	None
Pesticides				
20	Total OCPs	<1	<1	None
20	Total OPPs	<1.7	<1.7	None
РСВ				
20	Total PCBs	<1	<1	None

 Table 7-2
 Summary of Soil Analytical Results



Number of Primary Samples	Analyte	Minimum Concentration (mg/kg)	Maximum Concentration (mg/kg)	Samples Exceeding SILs
Asbestos				
20	Asbestos	No Asbestos Detected	Asbestos Detected	BH7_0.2-0.3 (friable mass)

### 7.2. Groundwater

#### Monitoring Well Construction

Three groundwater monitoring wells (labelled BH2M, BH7M, and BH10M) were installed in October 2023. A GME of these wells was undertaken on 26 October 2023 during the PSI (EI, 2023). An additional well (labelled BH17M) was installed in May 2024 to further characterise any potential groundwater impacts from the up-gradient UST.

A GME for all wells was undertaken on 20 June 2024 to further characterise local groundwater conditions. Location BH7M was inaccessible during the second GME, and was unable to be monitored. Construction details for the groundwater monitoring wells are summarised in **Table 7-3**. Monitoring well locations are shown in **Figure 2**, **Appendix A**.

		•			
Well	Well Depth (mBGL)	RL <sup>1</sup> (mAHD)	Well Stick-up / down <sup>2</sup> (m)	Screen Interval (mBGL)	Lithology Screened
BH2M	9.2	185.81	-0.1	1.2 - 9.2	Sandstone
BH7M	8.9	190.85	-0.1	5.9 - 8.9	Sandstone
BH10M	9.0	191.37	-0.1	6.0 - 9.0	Sandstone
BH17M	6.0	188.4	-0.1	3.0 - 6.0	Sandstone

Table 7-3 Monitoring Well Construction Details

Note 1 The relative level (RL; mAHD) corresponds to the ground surface at the well location, obtained using SparkFun RTK Express Tool

Note 2 Well stick-up / down, + above ground, - below ground

#### Field Observations

Field data obtained during the GME are presented in **Table 7-4**. Field data sheets are attached in **Appendix F**. Samples were evaluated on the basis of odour and visual signs of contamination, with the following observations noted:

#### 26 October 2023 (BH2M, BH7M, and BH10M):

- Groundwater was found to be colourless to light brown, with low turbidity;
- A hydrocarbon odour was detected in BH10M; and
- Slight oil/grease sheen was observed on the sampled groundwater in BH2M and BH10M.

The collected physiochemical parameters presented in **Table 7-4** indicated that the groundwater was mildly acidic (pH ranging between 5.32 and 5.49), oxygenated (DO ranging between 1.59 and 2.65 mg/L), fresh (EC lower than 521  $\mu$ S/cm)<sup>1</sup> and oxidising (Redox ranging between 197.6 and 309.7 mV). Groundwater flow was inferred to be north-west, towards Bottle Gully and Heathcote Creek, and consistent with the surface topography.



#### 20 June 2023 (BH2M, BH10M, and BH17M):

- Groundwater was found to be colourless, with low turbidity;
- No odours or sheens were noted.

The collected physiochemical parameters presented in **Table 7-4** indicated that the groundwater was mildly acidic (pH ranging between 4.81 and 6.22), oxygenated (DO ranging between 1.79 and 4.85 mg/L), fresh (EC ranging between 296 and 495  $\mu$ S/cm)<sup>1</sup> and oxidising (Redox ranging between 238.3 and 320.7 mV). Similarly to the GME on 26 October 2023, groundwater flow was inferred to be north.

Well	Date	DTW <sup>1</sup> (mBTOC <sup>2</sup> )	DTW <sup>1</sup> (mBGL)	SWL <sup>3</sup> (estimated mAHD)	DO (mg/L)	рН	EC (μS/cm)	Temp (°C)	Redox⁴ (mV)
BH2M		3.23	3.33	182.5	1.59	5.61	272	20.38	197.6
BH7M	26/10/2023	2.09	2.19	188.7	2.42	5.49	521	18.19	309.7
BH10M		4.43	4.53	186.8	2.65	5.32	408	18.54	286.5
BH2M		3.18	3.28	182.53	1.79	6.22	296	20.31	238.3
BH10M	20/06/2024	4.10	4.20	187.17	4.85	5.52	411	21.13	297.9
BH17M		3.40	4.50	183.90	3.25	4.81	495	19.42	320.7

Table 7-4	Groundwater	<b>Field Data</b>
	Giounuwater	I IEIU Dala

Note 1 DTW: Depth to Water

Note 2 MBTOC: metres below top of casing

Note 3 SWL: Standing water level, calculated as SWL (mAHD) = RL (mAHD) – DTW (mBGL)

Note 4 Redox readings were adjusted to the Standard Hydrogen Electrode by adding 205mV to the field electrode potential

#### Laboratory Analytical Results

A summary of the laboratory analytical results for the groundwater samples is presented in **Table 7-5**. More detailed tabulation is presented in **Table B.2**, **Appendix B**, which includes the EI (2023) PSI results.

All results were found to comply with the adopted GILs, with the exception of dissolved cadmium, copper, nickel, and zinc.

Number of Primary Samples	Analyte	Minimum Concentration (µg/L)	Maximum Concentration (µg/L)	Sample(s) Exceeding GILs
Priority Meta	ls (total dissolved)			
6	Arsenic	<1	4	None
6	Cadmium	<0.1	0.5	ANZG (2018) 0.2 μg/L ■ BH17M-1 (0.5 μg/L)
6	Chromium	<1	1	None
6	Copper	1	5	ANZG (2018) 1.4 μg/L • BH10M-1 (2 μg/L) • BH2M-2 (2 μg/L) • BH10M-2 (5 μg/L) • BH17M-1 (4 μg/L)

 Table 7-5
 Summary of Groundwater Analytical Results



Number of Primary Samples	Analyte	Minimum Concentration (µg/L)	Maximum Concentration (µg/L)	Sample(s) Exceeding GILs
6	Lead	<1	<1	None
6	Mercury	<0.1	<0.1	None
6	Nickel	2	13	<u>ANZG (2018) 11 μg/L</u> ■ BH7M-1 (13 μg/L)
6	Zinc	<5	36	<u>ANZG (2018) 8 μg/L</u> • BH7M-1 (15 μg/L) • BH10M-1 (36 μg/L) • BH17M-1 (17 μg/L)
PAHs				
6	Naphthalene	<0.1	<0.1	None
6	Benzo(α)pyrene	<0.1	<0.1	None
6	Total PAHs	<1	<1	None
BTEX and TR	Hs			
6	Benzene	<0.5	<0.5	None
6	Toluene	<0.5	1.2	None
6	Ethyl benzene	<0.5	<0.5	None
6	o-Xylene	<0.5	<0.5	None
6	m + p-Xylenes	<1	<1	None
6	F1 – TRHs	<50	<50	None
6	F2 – TRHs	<60	180	None
6	F3 – TRHs	<500	<500	None
6	F4 – TRHs	<500	<500	None
VOCs				
6	Carbon disulfide	<2	5	None
6	Chloroform	<0.5	3	None
6	Total VOCs	<10	<10	None
Total Phenols	3			
6	Total Phenols	<50	<50	None

To obtain F1, subtract the sum of BTEX concentrations from the C<sub>6</sub>-C<sub>10</sub> fraction. To obtain F2, subtract Naphthalene from the >C<sub>10</sub>-C<sub>16</sub> fraction. F3 - (C<sub>16</sub>-C<sub>34</sub>). F4 - (C<sub>34</sub>-C<sub>40</sub>). Note 1

Note 2 Note 3

Note 4



## 8. SITE CHARACTERISATION

### 8.1. Subsurface Conditions

Based on the borehole logs (**Appendix D**), the sub-surface conditions of the site were generalised as a layer of silty clay, clayey sand and gravelly sand filling (0.1m to 0.6m thickness), overlying natural (residual) silty clay, with (weathered) sandstone bedrock occurring at varying depths (0.4 to 2.1 mBGL).

### 8.2. Soil Impacts

Laboratory analytical results for the representative fill and natural soil samples were compared to adopted soil investigation levels.

#### <u>Human Health</u>

All boreholes were assessed against the adopted HIL-B / HSL-D criteria, with concentrations of potential contaminants reported below the human health criteria. . Results are summarised in **Table 7-2** and **Table B.1**, **Appendix B.** 

#### Ecological

All boreholes within proposed/presumed landscaping areas outside of the proposed basement area were assessed against the adopted EIL/ESL criteria, with all concentrations of potential contaminants reported below the adopted ecological criteria. Results are summarised in **Table 7-2** and **Table B.1**, **Appendix B.** 

#### 8.3. Groundwater Impacts

#### GME - 26 October 2023 (EI, 2023)

Based on the GME conducted on 26 October 2023 (EI, 2023), the groundwater elevation ranged between 182.5 and 188.7 mAHD, and the hydraulic gradient (potentiometric slope) was inferred to be to the north-west, towards Bottle Gully and Heathcote Creek. Local groundwater conditions were mildly acidic, oxygenated, fresh and oxidising. A slight oil/grease sheen was observed within the sampled groundwater.

Reported concentrations of potential contaminants from the initial GME were generally below the adopted ANZG (2018) criteria, with the exception of metals copper, nickel, and zinc.

#### GME - 20 June 2024

The GME of BH2M, BH10M, and newly installed well BH17M was conducted on 20 June 2024, and identified similar local groundwater conditions (mildly acidic, oxygenated, fresh and oxidising), however no oil/grease sheen was noted. Groundwater elevations ranged between 182.53 and 187.17 mAHD, and the hydraulic gradient was inferred to be to the north.

The GME reported concentrations to exceed the adopted ANZG (2018) criteria for cadmium, copper and zinc. A minor detection above the laboratory practical quantitation limit for TRH-F2 was reported in BH2M (180  $\mu$ g/L). Groundwater results are summarised in **Table 7-4**, **Table 7-5** and **Table B.2**, **Appendix B.** Groundwater exceedances are presented in **Figure 3**, **Appendix A**.



Local soils were not considered to be the source of metal or TRH impacts, given the low concentrations reported in representative (fill and natural) soil samples. Elevated metal concentrations in groundwater are common in disturbed urbanised areas of Sydney, and it was considered that the reported concentrations of cadmium, copper, nickel, and zinc were representative of urban background groundwater conditions, as opposed to site-specific impacts.

The detection of TRH-F2 in groundwater at BH2M was likely attributed to surface pavement runoff, and was considered to pose a low risk to future site users, and down-gradient ecological receptors. Further, there were no reported impacts in BH17M, which was installed down-gradient of the previously identified UST. Therefore, the risk of potential groundwater contamination from the UST is considered low.

### 8.4. Asbestos Risk

ACM in the form of a 'fibrous mass' was previously detected within the sample BH7\_0.2-0.3 (EI, 2023). Delineation fill samples (BH7M-DL1 to BH7M-DL3) and all other samples reported no asbestos detected. Further, the remainder of samples across the site did not contain anthropogenic materials that could allude to the presence of ACM. It is therefore considered that there is a low risk of widespread asbestos contamination at the site, and the contamination is likely limited to an isolated hotspot (BH7M). The presence of ACM beneath the asphalt car park will require management as part of site remedial works.

### 8.5. Underground Storage Tank

A single UST was identified in the central-western portion of the site during the site walkover inspection. The UST was observed to still be in operation, with suspected petroleum liquid evident within the dip and fill point. Vent pipes were observed within the storage room adjacent to the area. Inferred locations of UPSS infrastructure are presented in **Figure 2** and **3**, **Appendix A**.

A GPR scan estimated the UST to be approximately 1.8 m x 1.6 m x 1 mBGL (see **Appendix K**). The integrity of the UST is unknown; however, reported groundwater concentrations in down-gradient monitoring well BH17M suggest a low risk of residual impact to groundwater.

Decommissioning of all UPSS infrastructure will need to be managed in accordance with the Underground Petroleum Storage Systems Regulation (POEO, 2019) and Guidelines for Implementing the Protection of the Environment Operations (Underground Petroleum Storage Systems) Regulation (NSW EPA, 2020b) during further stages of works.

### 8.6. Limitations, Uncertainties and Data Gaps

On the basis of investigation findings, the CSM discussed in **Section 4** was considered to appropriately identify contamination sources, migration mechanisms and exposure pathways, as well as potential on and off-site receptors.

Previously known data gaps, as outlined in **Section 4.6** have largely been addressed; however the following data gaps should be addressed during future works:

- At the time of the fieldworks, the site was occupied, operational and substantially covered by either asphalt and concrete hardstands or buildings. Soil investigation was limited to samples collected from a mechanical drill rig auger.
- The spatial distribution of soil sampling locations was both systematic and targeted, though this was limited by existing infrastructure, as the site was still occupied and operational.



## 9. CONCLUSION

The property identified as 1 Veno Street, Heathcote NSW was the subject of a Detailed Site Investigation, conducted in order to assess the nature and degree of on-site contamination. The key findings of this DSI were as follows:

- The site comprised the Heathcote Hotel Inn and Bottle Mart liquor store, surrounded by ongrade parking areas.
- The building structures appeared to be in fair to good condition, with deterioration in the form of paint flaking and cracking of concrete and asphalt observed during the inspection.
- Evidence of an Underground Storage Tank (UST) was observed on the western side of the site which included one dip/fill point and tank vents. The UST dip/fill point was observed to still contain petroleum liquid (EI, 2023). Based on a Ground Penetrating Radar (GPR) scan, the UST is estimated to be 1.8m x 1.6m x 1.0 mBGL.
- Initial soil sampling and analysis was conducted on at 17 October 2023 and included 10 borehole locations (BH1-BH10M). Further detailed assessment was undertaken and included an additional seven borehole locations (BH11-BH17M). The intrusive soil assessment revealed the following:
  - The sub-surface conditions of the site were generalised as a layer of silty clay, clayey sand and gravelly sand filling (0.1m to 0.6m thickness), overlying natural (residual) silty clay, with (weathered) sandstone bedrock occurring at varying depths (0.4 to 2.1 mBGL).
  - An assessment of the soil concentrations against NEPC (2013) human health investigation levels (HIL-B/HSL-D) and ecological investigation/screening levels (EIL/ESL) indicated all samples meeting the adopted criteria.
- Asbestos-containing material (ACM) in the form of a 'fibrous mass' was previously detected within the sample BH7\_0.2-0.3 (EI, 2023).
  - Delineation fill samples collected adjacent to BH7M (BH7M-DL1 to BH7M-DL3) reported no asbestos detected;
  - The remainder of samples collected across the site did not contain significant anthropogenic material that could allude to the presence of ACM;
  - It is considered that there is a low risk of widespread asbestos contamination at the site, asbestos contamination is likely limited to an isolated hotspot at location BH7M,
- Initial groundwater sampling and analysis was conducted at three monitoring well locations (BH2M, BH7M, and BH10M) on 26 October 2023 (EI, 2023). Further assessment was undertaken at BH2M, BH10M, and the recently installed well BH17M on 20 June 2024. The results of the groundwater assessments indicated:
  - Standing water level (SWL) was recorded between 2.19 and 4.53 metres below (existing) ground level (mBGL), and the elevation ranged between 182.5 and 188.7mAHD. The hydraulic gradient was inferred to be to the north-west, towards Bottle Gully and then Heathcote Creek. Local groundwater conditions were mildly acidic, oxygenated, fresh (low salinity) and oxidising.



- An assessment against the ANZG Fresh Water Criteria indicated concentrations of BTEX, VOCs, and phenols to be below the adopted criteria. Concentrations of metals (cadmium, copper, nickel, and zinc) were reported above the adopted ecological criteria. Metal concentrations in groundwater were considered to be representative of background conditions, and of low risk to future occupants and ecological receptors.
- There were no reported impacts in BH17M, which was installed down-gradient of the previously identified UST. The risk of potential groundwater contamination from the UST at the site is considered low.

Based on the findings of this DSI, and with consideration of El's *Statement of Limitations* (**Section 11**), it was concluded that there is a low potential of widespread contamination to exist on-site. Isolated asbestos contamination at BH7M and the presence of UPSS infrastructure in the central-western portion of the site will require management and remediation in accordance with the appropriate guidelines. El considers that the site can be made suitable for the proposed mixed-use commercial / residential development, provided that the recommendations described in **Section 10** are implemented.



# 10. RECOMMENDATIONS

El provides the following recommendations in relation to any future redevelopment of the site:

- A Remedial Action Plan (RAP) should be prepared, detailing the methodology and procedures required for effective site remediation, including:
  - The management of asbestos-impacted soils at borehole location BH7M, and UPSS infrastructure in accordance with the Underground Petroleum Storage Systems Regulation (POEO, 2019), Guidelines for Implementing the Protection of the Environment Operations (Underground Petroleum Storage Systems) Regulation (NSW EPA, 2020a), and Technical Note: Contamination assessment of service station sites (NSW EPA, 2023);
  - Waste classification assessment, in order to enable classification of surplus soils to be excavated and disposed off-site during remediation works and material imported to site, in accordance with the NSW EPA (2014) Waste Classification Guidelines and Waste Regulations;
  - Work health and safety considerations; and
  - Unexpected finds protocol to address any unforeseen contingencies that may arise.
- Before commencement of demolition works, a Hazardous Materials Survey (HMS) should be completed by a suitably qualified consultant, to confirm the presence/location of any hazardous materials within existing building fabrics.
  - All identified hazardous materials must be appropriately managed, to maintain worker health and safety during future demolition works and prevent the spread of hazardous substances onto the site (soil) surfaces.
  - An asbestos clearance inspection and certificate should be completed by a suitably qualified professional (SafeWork NSW Licensed Asbestos Assessor) following the removal of asbestos-containing materials if identified by the HMS.
  - Where clearance inspection indicates the presence of hazardous materials remaining on site, further removal and validation or further clearance inspection works must be undertaken.



# **11. STATEMENT OF LIMITATIONS**

This report has been prepared for the exclusive use of Duffy Kennedy Constructions Pty Ltd, whom is the only intended beneficiary of El's work. The scope of the investigation carried out for the purpose of this report was limited to that agreed with Duffy Kennedy Constructions Pty Ltd.

No other party should rely on this document without the prior written consent of EI, and EI undertakes no duty, or accepts any responsibility or liability, to any third party who purports to rely upon this document without EI's approval.

The findings presented in this report are the result of discrete and specific sampling methodologies used in accordance with best industry practices and standards. Due to the site-specific nature of soil sampling from point locations, it is considered likely that all variations in subsurface conditions across a site cannot be fully defined, no matter how comprehensive the field program.

While normal assessments of data reliability have been made, El assumes no responsibility or liability for errors in any data obtained from regulatory agencies (e.g. Council, NSW EPA), statements from sources outside of El, or developments resulting from situations outside the scope of works of this project.

Despite all reasonable care and diligence, the ground conditions encountered and concentrations of contaminants measured may not be representative of conditions between the locations sampled and investigated. In addition, site characteristics may change at any time in response to variations in natural conditions, chemical reactions and other events (e.g. groundwater movement and or spillages of contaminating substances). These changes may occur subsequent to El's investigation.

El's assessment is necessarily based upon the results of the site investigation and the restricted program of surface and subsurface sampling, screening and chemical testing which was set out in the project proposal. Neither El, nor any other reputable consultant, can provide unqualified warranties nor does El assume any liability for site conditions not observed or accessible during the time of the investigations.

This report was prepared for Duffy Kennedy Constructions Pty Ltd and no responsibility is accepted for use of any part of this report in any other context or for any other purpose or by other third parties. This report does not purport to provide legal advice.

This report and associated documents remain the property of EI subject to payment of all fees due for this assessment. The report shall not be reproduced except in full and with prior written permission by EI.



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# Abbreviations

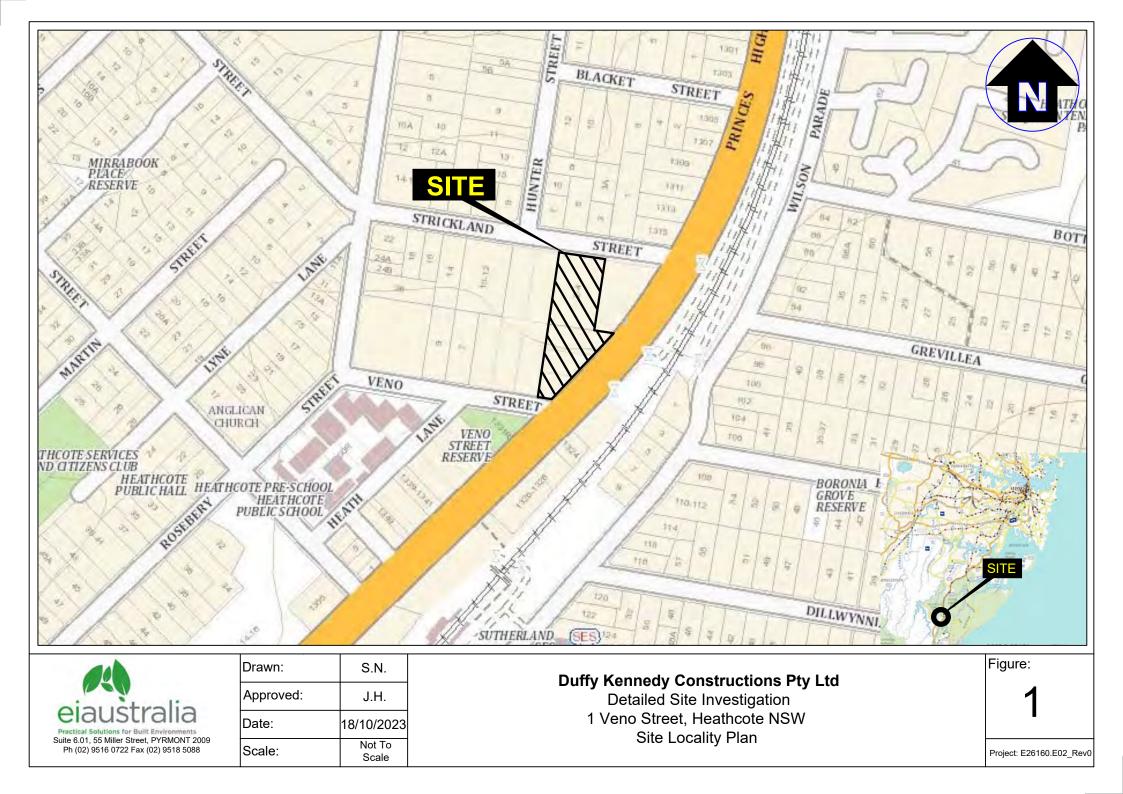
ABC ACL ACM ASS AST B(α)P BH BTEX CCO CLM COC CSM	Ambient Background ConcentrationAdded Contaminant LimitAsbestos-Containing MaterialsAcid Sulfate SoilsAbove-ground Storage TanksBenzo(α)Pyrene (a PAH compound)BoreholeBenzene, Toluene, Ethylbenzene, XyleneChemical Control OrderContaminated Land ManagementChain of CustodyConceptual Site Model
CVOC	Chlorinated Volatile Organic Compounds (a sub-set of the VOC analysis suite)
DA	Development Application
DO	Dissolved Oxygen
DP	Deposited Plan
DQI	Data Quality Indicators
DQO	Data Quality Objectives
EC	Electrical Conductivity
EI	El Australia
EIL	Ecological Investigation Level
EPA	Environment Protection Authority (of New South Wales)
ESL	Ecological Screening Level
F1	$C_6$ - $C_{10}$ TRH (less the sum of BTEX concentrations)
F2	> $C_{10}$ - $C_{16}$ TRH (less the concentration of naphthalene)
F3	> $C_{16}$ - $C_{34}$ TRH
F4	> $C_{34}$ - $C_{40}$ TRH
FCS	Fibre Cement Sheeting
FFL	Finished Floor Level
GIL	Groundwater Investigation Level
GME	Groundwater Monitoring Event
HDPE	High Density Polyethylene
HIL	Health-based Investigation Level
HSL	Health-based Screening Level
km	Kilometres
L	Litres
LGA	Local Government Area
LOR	Limit of Reporting (limit of reporting for respective laboratory method)
m	Metres
mAHD	meters Australian Height Datum
mBGL	meters Below Ground Level
µg/L	Micrograms per Litre
mg/L mV N/A NATA NEPC NEPM NSW OCP	Milligrams per Litre Milligrams per Litre Millivolts Not Applicable National Association of Testing Authorities, Australia National Environment Protection Council National Environment Protection Measure New South Wales Organochlorine Pesticides



OPP	Organophosphate Pesticides
PAH	Polycyclic Aromatic Hydrocarbons
PCB	Polychlorinated Biphenyls
PFAS	Per- and Poly-Fluoroalkyl Substances
pН	Potential Hydrogen (a measure of the acidity or basicity of an aqueous solution)
PID	Photo-Ionisation Detector
PM	Priority Metals
POEO	Protection of the Environment Operations
PQL	Practical Quantitation Limit (limit of detection for respective laboratory method)
PSH	Phase-Separated Hydrocarbons
QA/QC	Quality Assurance / Quality Control
Redox	Reduction-Oxidation Potential
RPD	Relative Percentage Difference
SAQP	Sampling, Analytical and Quality Plan
SEPP	State Environmental Planning Policy
SIL	Soil Investigation Level
SOP	Standard Operating Procedure
SRA	Sample Receipt Advice (document confirming laboratory receipt of samples)
SWL	Standing Water Level
TEC	Threatened Ecological Communities
TEQ	Toxicity Equivalent Quotient
TRH	Total Recoverable Hydrocarbons (non-specific analysis of organic compounds)
TV	Trigger Value
UCL	Upper Confidence Limit (of the mean)
UPSS	Underground Petroleum Storage System
USEPA	United States Environmental Protection Agency
UST	Underground Storage Tank
VOC	Volatile Organic Compounds (specific organic compounds which are volatile)
WHSEP	Work, Health, Safety and Environment Plan



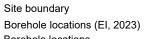
Appendix A – Figures





#### LEGEND (All locations are Approximate)

\_ \_ 



Borehole locations Monitoring well locations

- Estimated UST Location (estimated dimensions 1.8m x 1.6m x 1 mBGL) ) ( Location of tank dip and fill point

0 Ŏ Location of tank vents



Drawn:	S.N.	
Approved:	J.H.	
Date:	21-06-24	

**Duffy Kennedy Constructions** Detailed Site Investigation

1 Veno Street, Heathcote NSW Borehole Location Plan

Figure:

Project: E26160.E02



#### **LEGEND** (All locations are Approximate)

Site boundary \_ \_ 

) (

Proposed basement boundary

- Monitoring well / borehole locations
- Estimated UST Location (estimated dimensions 1.8m x 1.6m x 1 mBGL)

eiaustralia Suite 6.01, 55 Miller Street, PYRMONT 2009 Ph (02) 9516 0722 Fax (02) 9518 5088

= Exceedance of ANZG (2018) fresh water criteria

= Exceedance of HSL-A&B soil criteria

Drawn:	S.N.	
Approved:	J.H.	
Date:	21-06-24	

**Duffy Kennedy Constructions** Detailed Site Investigation

1 Veno Street, Heathcote NSW **Exceedance** Plan

Figure:

Project: E26160.E02\_Rev0

Appendix B – Tables

#### Table D 4 Cu of Coll Analytical Deculta

	mmary of Sc		yucai N	coulto																						26160 - Hea		
						Metals						Ρ	AHs			B	TEX			T	RHs		Pest	ticides		Asbesto		
Sample ID	Sampling Date	Sampling Date	Sampling Date	As	Cd	Cr#	Cu	Pb	Hg	Ni	Ni TCLP	Zn	Carcinogenic PAHs (as B(α)P TEQ)	Benzo(α)pyrene	Total PAHs	Naphthalene	Benzene	Toluene	Ethylbenzene	Total Xylenes	F	F2	-3	F4	OCPs	OPPs	PCBs	Presence / absence
I																												
023) 1_0.2-0.3		6	<0.3	37	8.8	0	<0.05	30	NA	26	<0.3	<0.1	<0.8	<0.1	<0.1	<0.1	<0.1	<0.3	<25	<25	<90	<120	<1	<1.7	<1	Absent		
2_0.2-0.3		3	< 0.3	88	27	6	<0.05	93	NA	60	< 0.3	<0.1	<0.8	0.1	<0.1	<0.1	<0.1	< 0.3	<25	<25	<90	<120	<1	<1.7	<1	Absen		
3_0.3-0.4		2	<0.3	70	22	4	< 0.05	78	NA	49	<0.3	<0.1	<0.8	<0.1	<0.1	<0.1	<0.1	<0.3	<25	<25	<90	<120	<1	<1.7	<1	Absen		
4_0.3-0.4		5	<0.3	36	13	44	<0.05	31	NA	85	<0.3	<0.1	<0.8	<0.1	<0.1	<0.1	<0.1	<0.3	<25	<25	<90	<120	<1	<1.7	<1	Absen		
5_0.3-0.4	21/09/2023	5	<0.3	36	6.3	10	< 0.05	26	NA	18	<0.3	<0.1	<0.8	<0.1	<0.1	<0.1	<0.1	<0.3	<25	<25	<90	<120	<1	<1.7	<1	Absen		
6_0.2-0.3 7_0.2-0.3		7	<0.3 <0.3	26 47	1.7 11	11 25	<0.05 <0.05	8.9 40	NA NA	10 32	<0.3 <0.3	<0.1 <0.1	<0.8 <0.8	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.3 <0.3	<25 <25	<25 <25	<90 <90	<120 <120	<1	<1.7 <1.7	<1	Absen Preser		
_0.2-0.3 3_0.2-0.2		7	< 0.3	35	2.8	5	<0.05	13	NA	32 8	< 0.3	<0.1	<0.8	<0.1	<0.1	<0.1	<0.1	< 0.3	<25	<25	<90	<120	<1	<1.7	<1	Absen		
9_0.1-0.2		4	< 0.3	48	12	9	< 0.05	48	NA	32	< 0.3	<0.1	<0.8	<0.1	<0.1	<0.1	<0.1	< 0.3	<25	<25	<90	<120	<1	<1.7	<1	Absen		
0_0.2-0.3		2	<0.3	14	3.1	3	<0.05	13	NA	7.7	<0.3	<0.1	<0.8	<0.1	<0.1	<0.1	<0.1	<0.3	<25	<25	<90	<120	<1	<1.7	<1	Absen		
				1																		100						
1_0.2-0.3 2_0.1-0.2		3	< 0.3	51 72	12	3	<0.05 <0.05	50 73	NA	31 47	< 0.3	<0.1	<0.8	<0.1	<0.1	<0.1 <0.1	<0.1	< 0.3	<25	<25	<90	<120	<1	<1.7 <1.7	<1 <1	Absen		
2_0.1-0.2 3_0.1-0.2		3	<0.3 <0.3	26	31 3.5	3 12	< 0.05	73 17	0.030 NA	47 15	<0.3 <0.3	<0.1 <0.1	<0.8 <0.8	<0.1 <0.1	<0.1 <0.1	<0.1	<0.1 <0.1	<0.3 <0.3	<25 <25	<25 <25	<90 <90	<120 <120	<1 <1	<1.7	<1	Absen Absen		
4_0.1-0.2		4	< 0.3	55	14	12	<0.05	52	0.035	39	< 0.3	<0.1	<0.8	<0.1	<0.1	<0.1	<0.1	< 0.3	<25	<25	<90	<120	<1	<1.7	<1	Absen		
5_0.2-0.3	5/06/2024	3	<0.3	46	12	7	< 0.05	49	NA	35	<0.3	<0.1	<0.8	<0.1	<0.1	<0.1	<0.1	<0.3	<25	<25	<90	<120	<1	<1.7	<1	Absen		
6_0.2-0.3	5/00/2024	6	<0.3	23	5.8	10	<0.05	16	NA	21	<0.3	<0.1	<0.8	<0.1	<0.1	<0.1	<0.1	<0.3	<25	<25	<90	<120	<1	<1.7	<1	Absen		
7_0.2-0.3		5	<0.3	22	2.9	12	<0.05	9.7	NA	9.7	<0.3	<0.1	<0.8	<0.1	<0.1	<0.1	<0.1	<0.3	<25	<25	<90	<120	<1	<1.7	<1	Absen		
_DL1_0.1-0.2 _DL2_0.2-0.3		3	<0.3 <0.3	77 89	26 23	5	<0.05 <0.05	79 93	NA 0.073	47 58	< 0.3	<0.1 <0.1	<0.8	<0.1 0.2	<0.1	<0.1 <0.1	<0.1 <0.1	<0.3 <0.3	<25 <25	<25 <25	<90 <90	<120	<1	<1.7 <1.7	<1	Absen		
_DL2_0.2-0.3 _DL3_0.1-0.2		4	< 0.3	45	12	7	< 0.05	93 44	0.073 NA	29	<0.3 <0.3	<0.1	<0.8	<0.1	<0.1	<0.1	<0.1	< 0.3	<25	<25	<90	<120 <120	<1	<1.7	<1	Absen Absen		
												St	atistical Analy	sis														
Minimum conc		2	<0.3	14	1.7	3	<0.05	8.9	0.030	7.7	<0.3	<0.1	<0.8	<0.1	<0.1	<0.1	<0.1	<0.3	<25	<25	<90	<120	<1	<1.7	<1	Absen		
Maximum conc	centration	7	<0.3	89	31	44	<0.05	93	0.073	85	<0.3	<0.1	<0.8	0.1	<0.1	<0.1	<0.1	<0.3	<25	<25	<90	<120	<1	<1.7	<1	Preser		
23)																												
3_0.7-0.8		12	<0.3	24	<0.5	10	<0.05	0.7	NA	6.4	<0.3	<0.1	<0.8	<0.1	<0.1	<0.1	<0.1	<0.3	<25	<25	<90	<120	NA	NA	NA	NA		
4_0.6-0.7		3	<0.3	11	<0.5	9	<0.05	1.4	NA	10	<0.3	<0.1	<0.8	<0.1	<0.1	<0.1	<0.1	<0.3	<25	<25	<90	<120	NA	NA	NA	NA		
5_0.8-0.9	21/09/2023	5	<0.3	14	<0.5	13	<0.05	0.5	NA	2.8	<0.3	<0.1	<0.8	<0.1	<0.1	<0.1	<0.1	<0.3	<25	<25	<90	<120	NA	NA	NA	NA		
7_0.5-0.6 0_0.5-0.6		4	<0.3 <0.3	30	<0.5 <0.5	11	<0.05 <0.05	1.6 0.7	NA	7.7 2.1	< 0.3	<0.1 <0.1	<0.8	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.3 <0.3	<25 <25	<25	<90 <90	<120	NA NA	NA	NA	NA		
0_0.3-0.0		3	<0.5	0	<0.5	12	<0.05	0.7	NA	2.1	<0.3	<b>\</b> 0.1	<0.8	<b>\</b> 0.1	<0.1	<0.1	<b>~</b> 0.1	<0.5	~25	<25	<90	<120	NA	NA	NA	NA		
1_0.6-0.7		5	<0.3	22	12	12	<0.05	0.9	NA	4.2	<0.3	<0.1	<0.8	<0.1	<0.1	<0.1	<0.1	<0.3	<25	<25	<90	<120	NA	NA	NA	NA		
3_0.5-0.7		5	<0.3	22	<0.5	10	<0.05	0.8	NA	3.5	<0.3	<0.1	<0.8	<0.1	<0.1	<0.1	<0.1	<0.3	<25	<25	<90	<120	NA	NA	NA	NA		
4_0.5-0.6	5/06/2024	6	<0.3	13	15	14	<0.05	1.7	NA	13	<0.3	<0.1	<0.8	<0.1	<0.1	<0.1	<0.1	<0.3	<25	<25	<90	<120	NA	NA	NA	NA		
5_0.6-0.7		5	< 0.3	21	< 0.5	8	< 0.05	0.8	NA	3.3	< 0.3	< 0.1	<0.8	<0.1	<0.1	<0.1	<0.1	< 0.3	<25	<25	<90	<120	NA	NA	NA	NA		
7_0.5-0.6		10	<0.3	25	<0.5	13	<0.05	3.8	NA	4.3	<0.3	<0.1	<0.8 atistical Analy	<0.1	<0.1	<0.1	<0.1	<0.3	<25	<25	<90	<120	NA	NA	NA	NA		
Minimum conc	centration	3	<0.3	<0.5	<0.5	8	<0.05	0.5	NA	2.1	<0.3	<0.1	<0.8	<0.1	<0.1	<0.1	<0.1	<0.3	<25	<25	<90	<120	NA	NA	NA	NC		
Maximum conc	centration	12	<0.3	30	15	14	<0.05	3.8	NA	13	<0.3	<0.1	<0.8	<0.1	<0.1	<0.1	<0.1	<0.3	<25	<25	<90	<120	NA	NA	NA	NC		
												NE	PC (2013) Crit	eria									<b>u</b>					
Residential with r	minimal soil access	500	150	500 Cr(VI)	30,000	1,200	120	1,200		60,000	4		400										600		1			
					•		ource depths (0			•				NL	3	NL	NL	230	260	NL								
SL D - Commercia							ource depths (1							NL	3	NL	NL	NL	370	NL								
il texture classific	ication – SAND					S	ource depths (2 Source depth		,					NL	3	NL	NL	NL	630	NL								
s - Urban reside	ential and open public								L)					NL	3	NL	NL	NL	NL	NL								
spaces		100		640	240	1,100		330		990		33 <sup>3</sup>		170	65	105	125	45	180	120	1,300	5,600	640					
	idential, parkland and																		700	1,000	2,500	10,000						
public open s	space <sup>1</sup> SL - B Residential with																											
ontamination HS minimal soil a																										0.04		
Bonded ACM	/I (%w/w)																											
Asbestos Contam	nination HSL Asbestos (%w/w)																									0.001		
lotes:	Highlighted values exceed Highlight values exceed E Highlighted values exceed	IL/ESL criteria		<u>.</u> 1.																								
	NEPC 1999 Amendment NEPC 1999 Amendment Ecological Investigation L Ecology Screening Level Thresholds are for Chrom	2013 'HSL D' H evel for urban for urban resid	Health Based Sc residential and p	reening Levels public open spa	applicable for vace land use.				rcial / industrial se	ettings.																		

Not Analysed NA Not calculated NC As soils are predominantly clay, fine-grained soil assessment criteria values were applied. EIL criteria is derived from calculated Added Contaminant Limit (ACL) averages (pH 8.6 / CEC 26.6) with the Ambient Background Concentration (ABC) for a high traffic NSW suburb. The ecological criteria for benzo(α)pyrene was sourced from CRC Care (2017) Technical Report No. 39 Risk-based management and remediation guidance for benzo(a)pyrene. Ecological citeria only applies to boreholes located within proposed/presumed deep soil zones (i.e. BH1, BH2M, BH5, BH6, and BH7M). F1 To obtain F1 subtract the sum of BTEX concentrations from the C6-C10 fraction. To obtain F2 subtract naphthalene from the >C10-C16 fraction. F2 (>C16-C34) F3

(>C34-C40) F4

TCLP

Toxicity Characteristic Leachate Procedure. Results are recorded in mg/L

E26160 - H	Heathcote
------------	-----------



#### Table B.2 - Summary of Groundwater Analytical Results

#### E26160 - Heathcote

		Metals								PAHs				BTEX				TF	RHs				vocs		
Sample II	) Sampling Date	As	Cd	Cr	Cu	Pb	Hg	Ni	Zn	Total PAHs	Benzo(α)pyrene	Naphthalene	Benzene	Toluene	Ethylbenzene	o-xylene	m/p-xylene	F1	F2	F3	F4	Total Phenols	Carbon disulfide	Chloroform (THM)	Total VOCs
Preliminary Sit	e Investigation (EI, 202	23)																							
BH2M-1		4	<0.1	1	<1	<1	<0.1	2	6	<1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.5	<1	<50	<60	<500	<500	<50	<2	<0.5	<10
BH7M-1	26/10/2023	<1	<0.1	<1	<1	<1	<0.1	13	15	<1	<0.1	<0.1	<0.5	1.2	<0.5	<0.5	<1	<50	<60	<500	<500	<50	<2	3	<10
BH10M-1		<1	<0.1	<1	2	<1	<0.1	5	36	<1	<0.1	<0.1	<0.5	0.8	<0.5	<0.5	<1	<50	<60	<500	<500	<50	5	2.4	<10
Detailed Site In	vestigation (EI, 2024)									•															
BH2M-2		1	<0.1	<1	2	<1	<0.1	<1	<5	<1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.5	<1	<50	180	<500	<500	<50	<2	<0.5	<10
BH10M-2	20/6/2024	<1	0.1	<1	5	<1	<0.1	1	6	<1	<0.1	<0.1	< 0.5	<0.5	<0.5	<0.5	<1	<50	<60	<500	<500	<50	<2	<0.5	<10
BH17M-1		<1	0.5	<1	4	<1	<0.1	3	17	<1	<0.1	<0.1	<0.5	<0.5	< 0.5	<0.5	<1	<50	<60	<500	<500	<50	<2	<0.5	<10
											GILs														
						2m to <4m						NL	5,000	NL	NL	NL	NL	6,000	NL						
	nmercial / industrial assification – SAND					4m to <8m						NL	5,000	NL	NL	NL	NL	6,000	NL						
8m+							NL	5,000	NL	NL	NL	NL	7,000	NL											
ANZG (2018)	Fresh Waters 1	24	0.2	3.3 (Cr III) 1.0 (Cr VI)	1.4	3.4	0.06 <sup>3</sup>	11	8 <sup>3</sup>		0.1 <sup>3</sup>	16	950	180 <sup>4</sup>	80 4	350	275 <sup>4</sup>						20	370	
NHMRC (2008)	Recreational <sup>2</sup>	100	20	500 (Cr VI)	1000	100	10	200	3000			16	950	180 <sup>4</sup>	80 <sup>4</sup>	350	275 <sup>4</sup>								

#### Notes:

Highlighted indicates criteria exceeded

Highlighted indicates criteria not met

All values are µg/L unless stated otherwise

HSL D NEPC 1999 Amendment 2013 'HSL D' Health Based Screening Levels for vapour intrusion applicable for commercial / industrial settings.

NL Not Limiting

F1 To obtain F1 subtract the sum of BTEX concentrations from the C6-C10 fraction.

F2 To obtain F2 subtract naphthalene from the >C10-C16 fraction.

F3 (>C16-C34)

F4 (>C34-C40)

1 NEPM (2013) Groundwater Investigation Levels for fresh and marine water quality 95% protection level based on ANZECC & ARMCANZ (2000).

2 Based on NHMRC (2011 - update August 2018 v.3.5) Drinking Water Guidelines. The lowest of the Health Guideline x10 or the Aesthetic Guideline has been chosen as the assessment criteria. Aesthetic based criteria have been indicated by \*

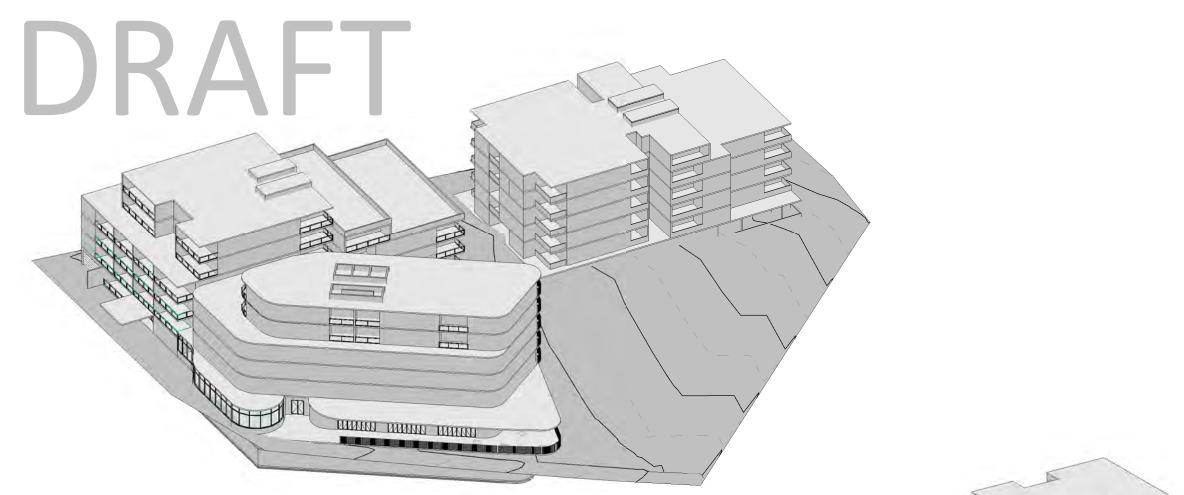
3 To account for the bioaccumulating nature of this toxicant, 99% species protection level DGV is used for slightly to moderately disturbed systems. Refer to Warne et al. (2017) for details.

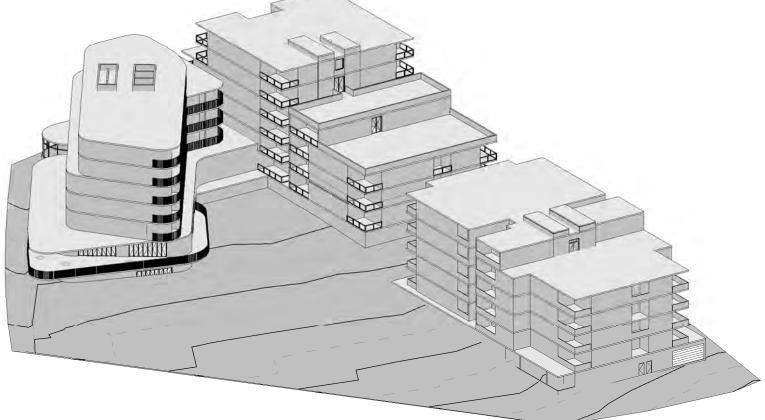
4 Low reliability toxicity data, refer to ANZECC & ARMCANZ (2000)

5 Quality Control (QAQC) duplicates of BH2M



Appendix C – Proposed Development Plans





Dickson Rothschild
D.R. Design (NSW) Pty. Ltd.
Suite 1 & 2, Level 5
Grafton Bond Building
201 Kent St, Sydney NSW 2000
ABN: 35 134 237 540
Phone: +61 2 8540 8720

Nominated Architects: Robert Nigel Dickson NSW ARB #5364 Paul Oreshkin NSW ARB #7774

www.dicksonrothschild.com.au

This drawing and design is subject to D.R. Design (NSW) Pty Ltd copyright and may not be reproduced without prior written consent. Contract to verify all dimensions on site before commencing work. Resolve all discrepancies with the Architect before proceeding. Figured dimensions be taken in preference to scaled drawings. All work is to conform to relevant Australian Standards and other Codes as applicable, together with other Authorities' requirements and regulations.

	REV	DESCRIPTION	DATE	ISSUED	CHECKED
	А	ISSUE FOR REVIEW	25/08/2023	RM	ND
	В	ISSUE FOR REVIEW	30/08/2023	RM	ND
	С	ISSUE FOR REVIEW	22/09/2023	HS	PO
	D	ISSUE FOR REVIEW	27/09/2023	HS	PO
ntractor					
nsions to					
er with					

MIXED USE DEVELOPMENT - OPTION 3 (SERVICED APARTMENTS) 1 VENO STREET, HEATHCOTE

GAVIN DUFFY

PROJEC 23-0 NOT

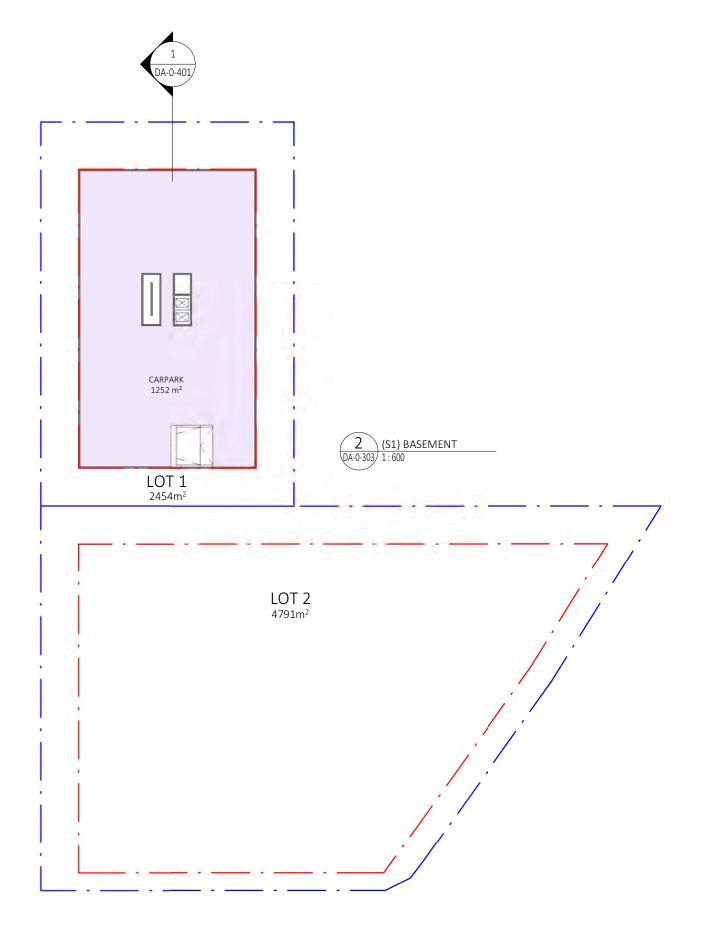
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	DRAWING LIST	
SHEET	DRAWING NAME	REV
0 - GENERA	L	
DA-0-001	COVER SHEET	D
2 - PLANS		
DA-0-210	(S1) BASEMENT	D
DA-0-211	(S1) GROUND LEVEL & (S2) BASEMENT	D
DA-0-212	(S1) LEVEL 1 & (S2) LOWER GROUND	D
DA-0-213	(S1) LEVEL 2 & (S2) GROUND LEVEL	D
DA-0-214	(S1) LEVEL 3 & (S2) LEVEL 1	D
DA-0-215	(S1) LEVEL 4 & (S2) LEVEL 2	D
DA-0-216	(S1) LEVEL 5 & (S2) LEVEL 3	D
DA-0-217	(S1) ROOF & (S2) LEVEL 4-5	D
4 - SECTION	IS	
DA-0-401	SECTION 1	D
9 - DIAGRA	MS & SCHEDULES	
DA-0-901	GFA DIAGRAMS - STAGE 1	D
DA-0-904	GFA DIAGRAMS - STAGE 2	D
DA-0-951	SHADOW ANALYSIS	С

#### COVER SHEET

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Dickson Rothschild	Nominated Architects:	REV	DESCRIPTION	DATE	ISSUED	CHECKED		PROJECT			
D.R. Design (NSW) Pty. Ltd.	Robert Nigel Dickson NSW ARB #5364	A	ISSUE FOR REVIEW	25/08/2023	RM	ND		MIXED USE DEVELOPMENT - OPTION 3			
	6	В	ISSUE FOR REVIEW	30/08/2023	RM	ND		WINED OSE DEVELOPIVIEINT - OF HOIN S			
Suite 1 & 2, Level 5	Paul Oreshkin NSW ARB #7774 www.dicksonrothschild.com.au	С	ISSUE FOR REVIEW	22/09/2023	HS	PO		(SERVICED APARTMENTS)			
Grafton Bond Building		D	ISSUE FOR REVIEW	27/09/2023	HS	PO		1 VENO STREET, HEATHCOTE			
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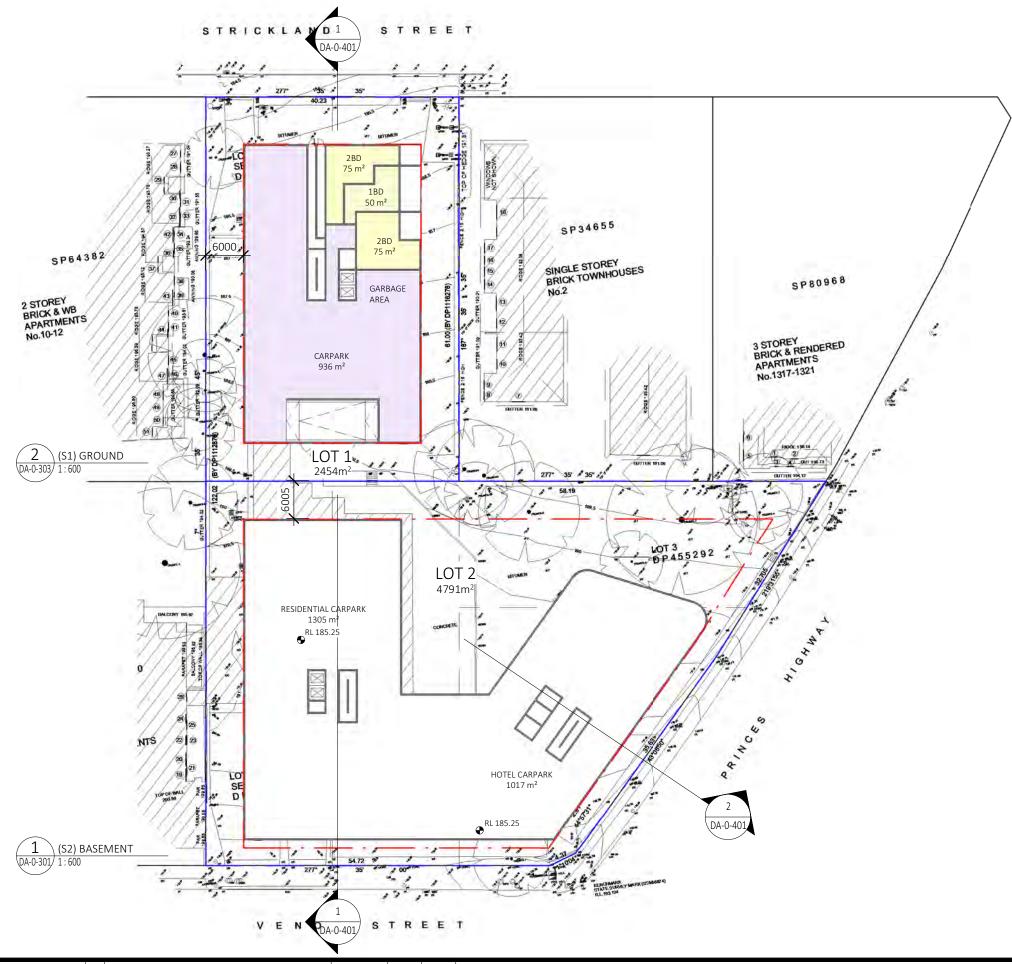
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# (S1) BASEMENT

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MIXED USE DEVELOPMENT - OPTION 3 (SERVICED APARTMENTS) 1 VENO STREET, HEATHCOTE CLIENT

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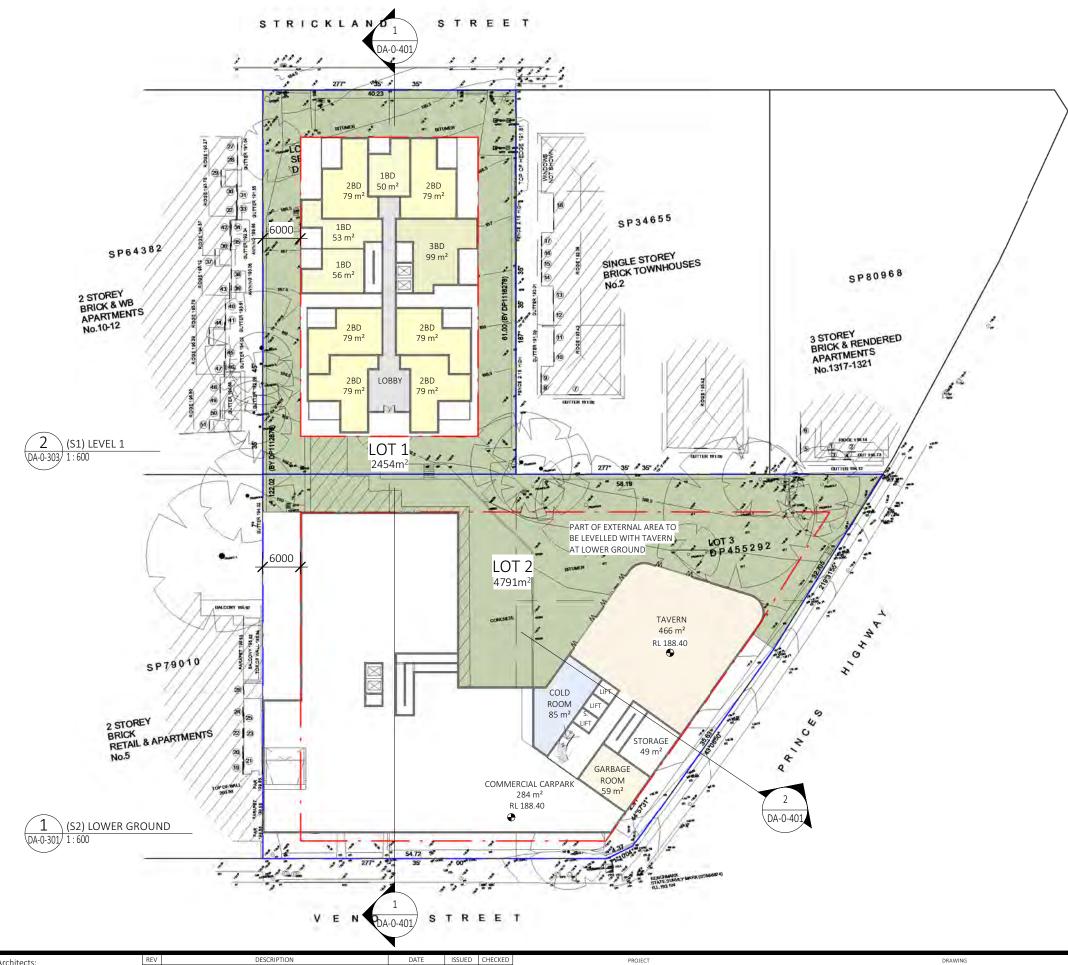
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1) GROUND LEVEL & (S2)							
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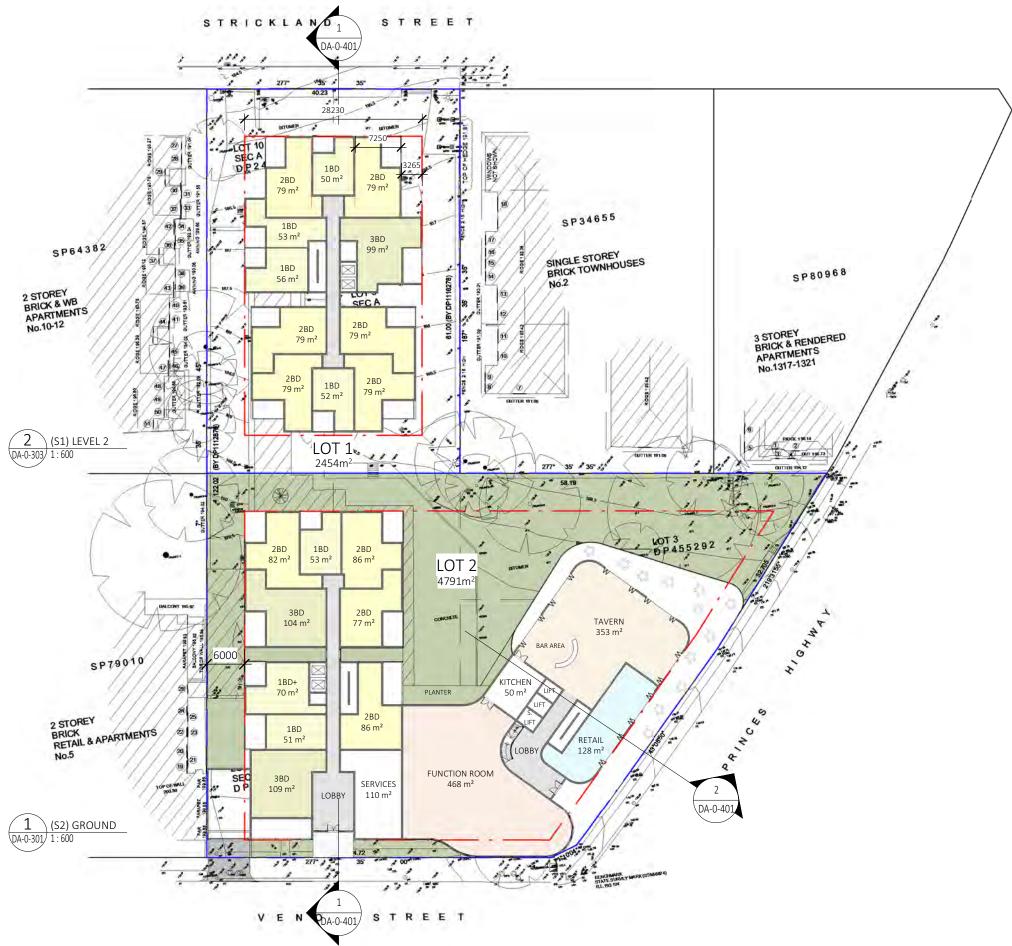
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<sup>WING</sup> 1) LEVEL 1 & (S2) LOWER ROUND						
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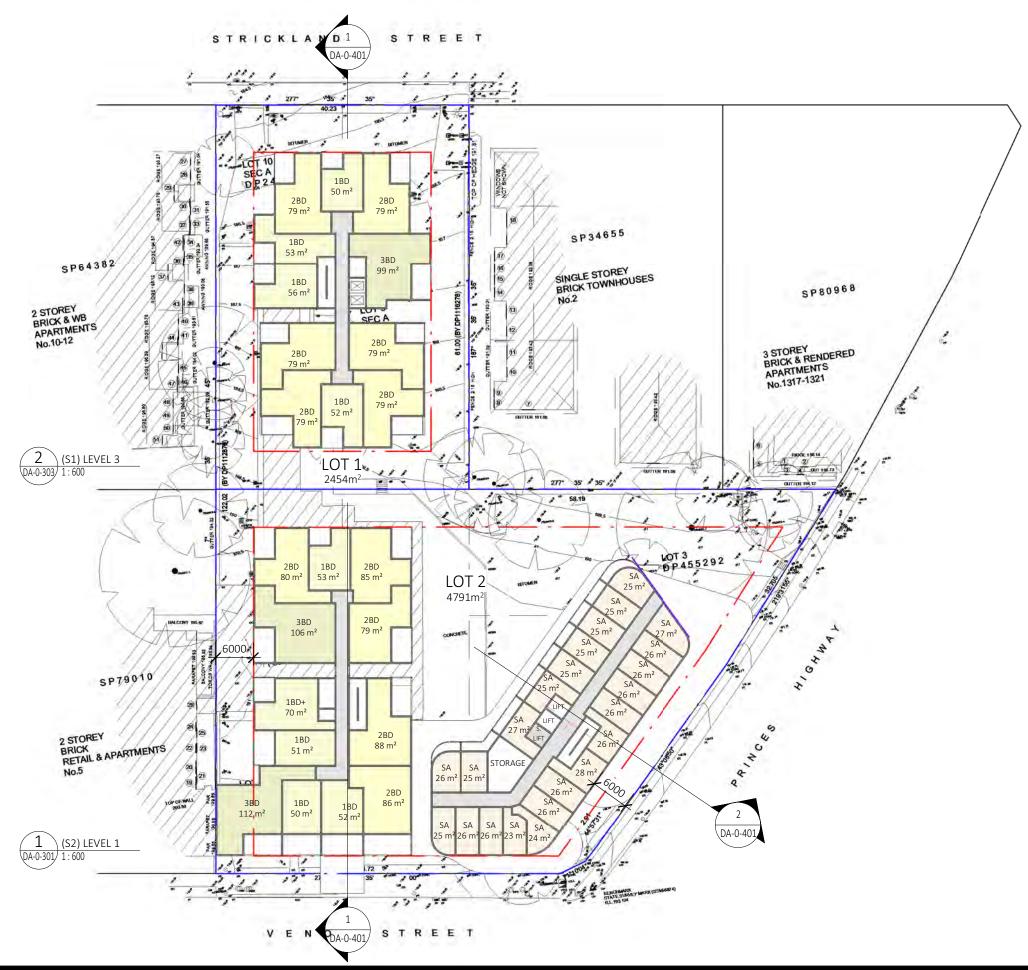
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(S1) LEVEL 2 & (S2) GROUND LEVEL						
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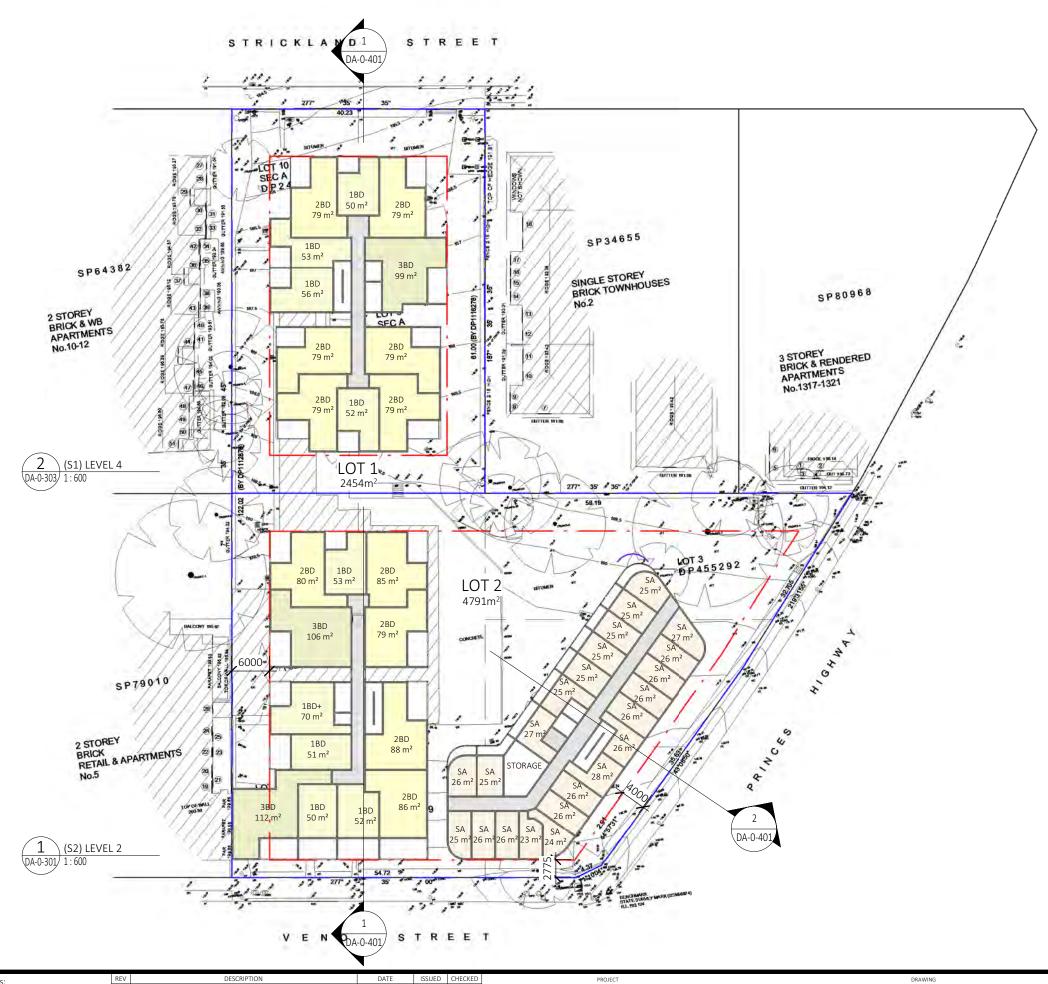
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#### (S1) LEVEL 3 & (S2) LEVEL 1

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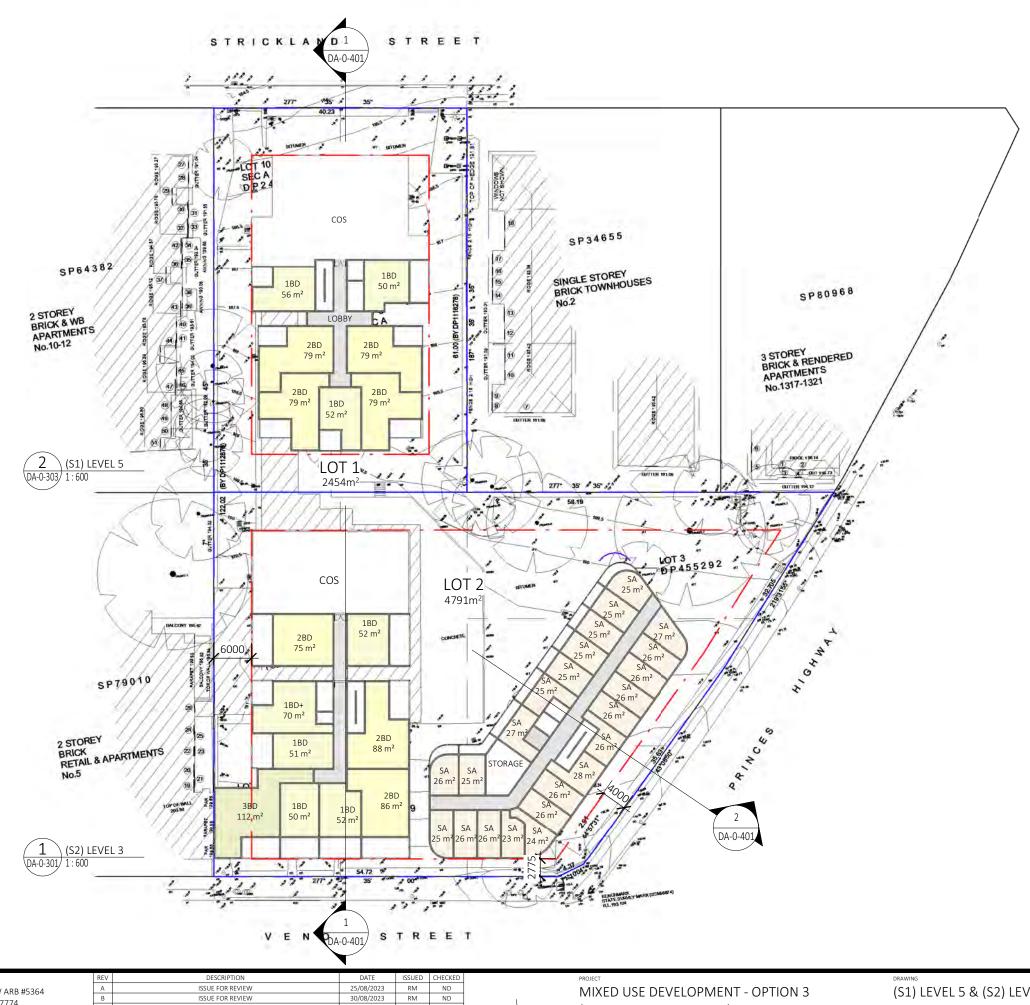
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#### (S1) LEVEL 4 & (S2) LEVEL 2

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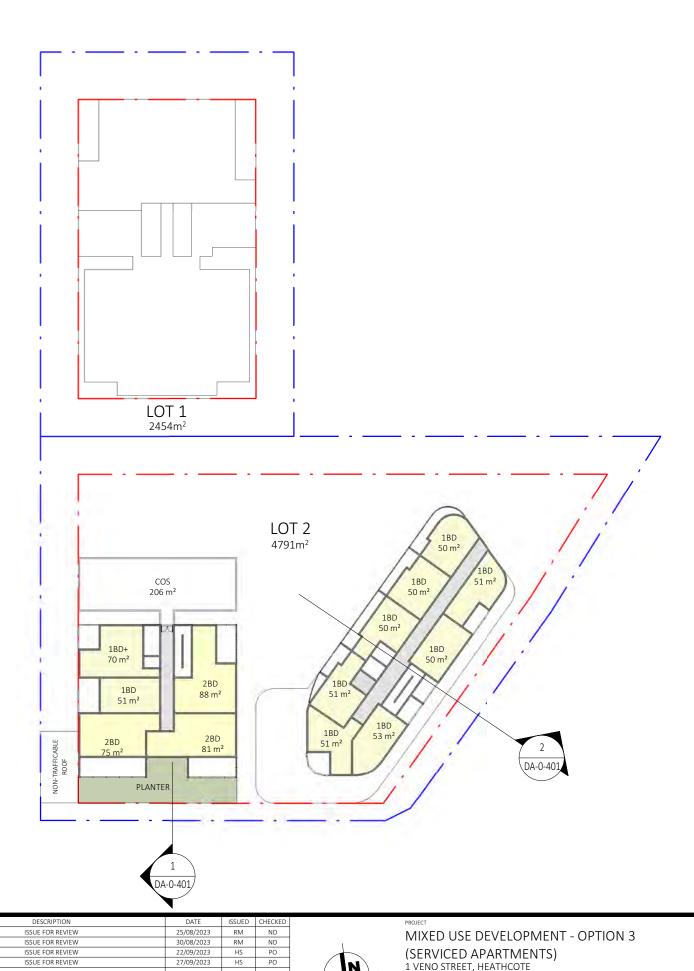
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#### (S1) LEVEL 5 & (S2) LEVEL 3

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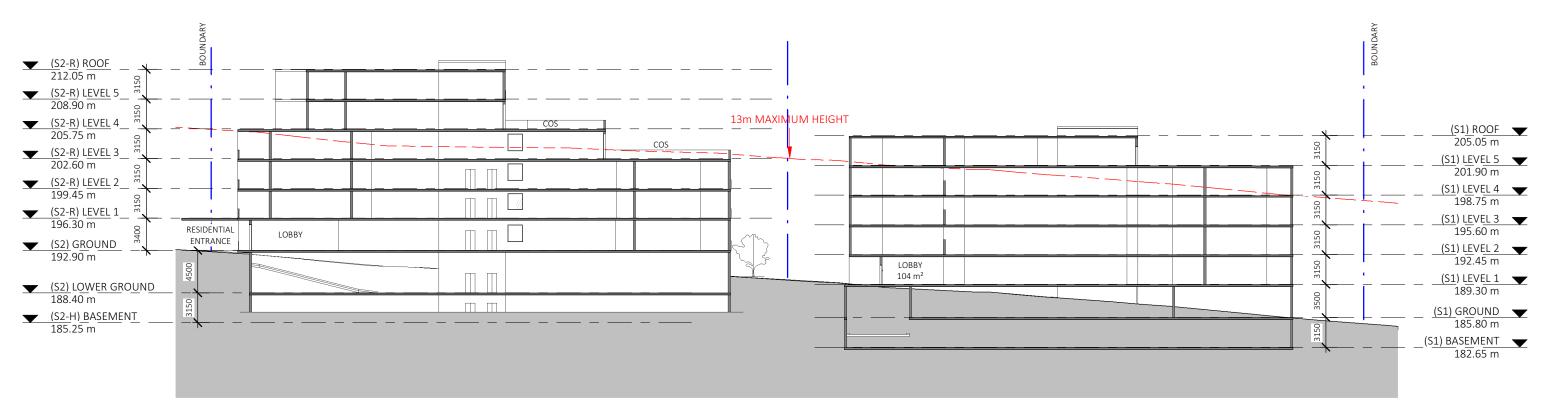
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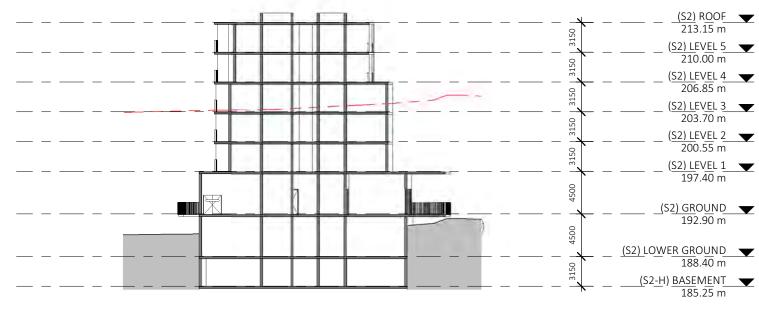
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1 SECTION 1 \DA-0-111/1:400





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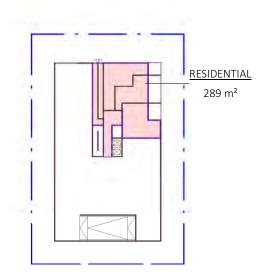
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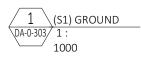
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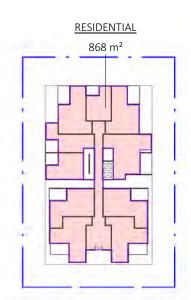
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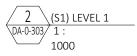
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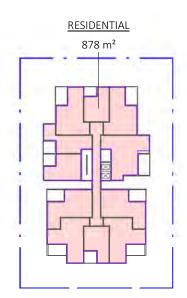


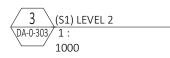


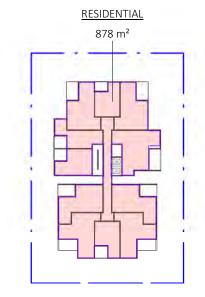


RESIDENTIAL

556 m²









(STAGE 1) R	A)		
Name	Count	Area	Le
(S1) GROUND			RESIDENTIAL

1BD	1	50 m <sup>2</sup>	(S1)
2BD	2	75 m² 75 m²	(S1)
			(S1)
(S1) LEVEL 1			(S1)
1BD	3	50 m² 56 m²	(S1)
2BD	6	79 m <sup>2</sup> 79 m <sup>2</sup>	(S1)
3BD	1	99 m²	Tota

1) GROUND 1) LEVEL 1 1) LEVEL 2 1) LEVEL 3 1) LEVEL 4 1) LEVEL 5 tal

(S1) LEVEL 2		
1BD	4	50 m² 56 m²
2BD	6	79 m² 79 m²
3BD	1	99 m²

(S1) LEVEL 3		
1BD	4	50 m <sup>2</sup> 56 m <sup>2</sup>
2BD	6	79 m² 79 m²
3BD	1	99 m²

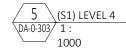
1)	LEVEL 4	
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() ·		
1BD	4	50 m² 56 m²
2BD	6	79 m² 79 m²
3BD	1	99 m²

(S1) LEVEL 5		
1BD	3	50 m² 56 m²
2BD	4	79 m² 79 m²
Grand total	53	

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Suite 1 & 2, Level 5	Paul Oreshkin NSW ARB #7774	В	ISSUE FOR REVIEW	30/08/2023	RM	ND		
,	Faul OLESTIKITI NOW AND #7774	С	ISSUE FOR REVIEW	22/09/2023	HS	PO		(SERVICED APARTMENTS)
Grafton Bond Building		D	ISSUE FOR REVIEW	27/09/2023	HS	PO		1 VENO STREET, HEATHCOTE
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RESIDENTIAL 878 m²



6 (S1) LEVEL 5 DA-0-303 1 : 1000

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(Area) GFA - STAGE 1	
----------------------	--

Area
289 m²
868 m²
878 m²
878 m²
878 m²
556 m²
4348 m <sup>2</sup>

SITE	AREA
------	------

2454m²

EP BASE FSR	2.0:1
ALLOWED GFA	4908m <sup>2</sup>
PROPOSED FSR	1.8:1
PROPOSED GFA	4348m <sup>2</sup>

TOTAL 53 UNITS
----------------

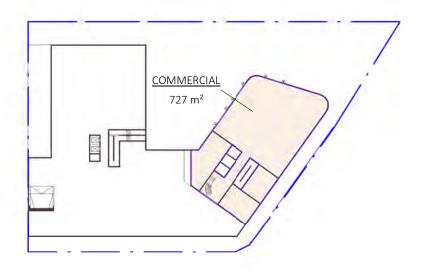
(STAGE 1) Unit Mix		
Name	Count	
1BD	19	
2BD	30	
3BD	4	
Grand total 53		

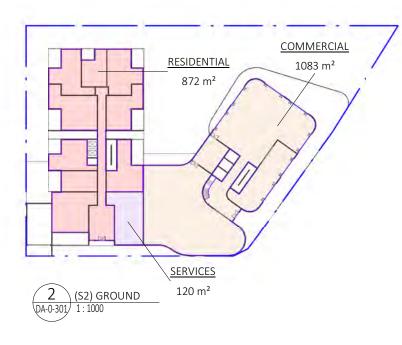
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RESIDENTIAL





RESIDENTIAL

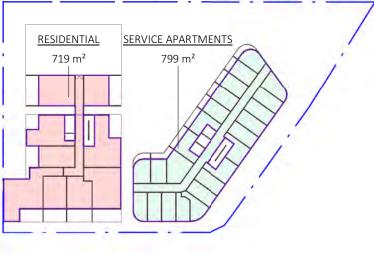
501 m²

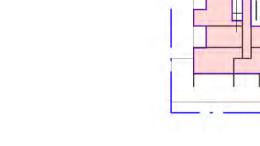


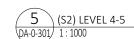


(STAGE 2) Residential By Bedrooms

Area







RESIDENTIAL

411 m²

(S2) GROUND		
1BD	2	51 m² 53 m²
1BD+	1	70 m²
2BD	4	77 m² 86 m²
3BD	2	104 m <sup>2</sup> 109 m <sup>2</sup>
(S2) LEVEL 1		
1BD	4	50 m² 53 m²
1BD+	1	70 m²
2BD	5	79 m² 88 m²
3BD	2	106 m <sup>2</sup> 112 m <sup>2</sup>
(S2) LEVEL 2		
1BD	4	50 m <sup>2</sup> 53 m <sup>2</sup>
1BD+	1	70 m <sup>2</sup>
2BD	5	79 m <sup>2</sup> 88 m <sup>2</sup>
3BD	2	106 m <sup>2</sup> 112 m <sup>2</sup>
(S2) LEVEL 3		
1BD	4	50 m <sup>2</sup> 52 m <sup>2</sup>
1BD+	1	70 m²
2BD	3	75 m² 88 m²
3BD	1	112 m²
(S2) LEVEL 4		
1BD	9	50 m² 53 m²
1BD+	1	70 m <sup>2</sup>
2BD	3	75 m² 88 m²
(S2) LEVEL 5		
1BD	9	50 m² 53 m²
1BD+	1	70 m <sup>2</sup>
2BD	3	75 m² 88 m²
Grand total	68	

Name Count

(STAGE 2) Unit Mix	
Name	Count
1BD	32
1BD+	6
2BD	23
3BD	7

	6
	23
	7
total	68

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MIXED USE DEVELOPMENT - OPTION 3

Grand

(SERVICED APARTMENTS) 1 VENO STREET, HEATHCOTE

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4 (<u>S2) LEVEL 3</u> DA-0-301/1:1000

(S2) LOWER GROUND DA-0-301) 1: 1000

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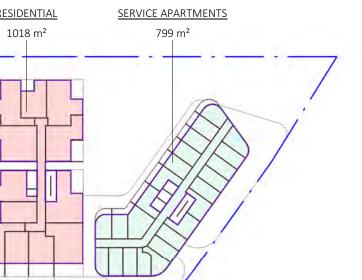
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	REV	DESCRIPTION	DATE	ISSUED	CHECKED	
364	Α	ISSUE FOR REVIEW	25/08/2023	RM	ND	
504	В	ISSUE FOR REVIEW	30/08/2023	RM	ND	
	С	ISSUE FOR REVIEW	22/09/2023	HS	PO	
	D	ISSUE FOR REVIEW	27/09/2023	HS	PO	
ten consent. Contractor						
g. Figured dimensions to						
oplicable, together with						

CLIENT



(S2) TYPICAL LEVEL 1-2 DA-0-301) 1:1000

(S2) LEVEL 4

(S2) LEVEL 5

(S2) LEVEL 5

(Area) GFA - STAGE 2		
Level	Area	
COMMERCIAL		
(S2) LOWER GROUND	727 m <sup>2</sup>	
(S2) GROUND	1083 m²	
	1810 m²	
RESIDENTIAL		
(S2) GROUND	872 m²	
(S2) LEVEL 1	1018 m²	
(S2) LEVEL 2	1098 m²	
(S2) LEVEL 3	719 m²	
(S2) LEVEL 4	411 m²	

SITE 1 AREA	4791m <sup>2</sup>
LEP BASE FSR	2.0:1
ALLOWED GFA	9582m <sup>2</sup>
PROPOSED FSR	2.02:1
PROPOSED GFA	9699m <sup>2</sup>

#### **RESIDENTIAL**

TOTAL 68 UNITS
----------------

#### SERVICED APARTMENTS

TOTAL	

SERVICE APARTMENTS	
S2) LEVEL 1	799 m²
S2) LEVEL 2	640 m²
S2) LEVEL 3	799 m²
	2238 m²

501 m²

411 m²

501 m² 5532 m²

SERVICES	
(S2) GROUND	120 m²
	120 m²
Total	9699 m²

(STAGE 2) Serviced Apartments by Levels							
Name	Count	Area					

(S2) LEVEL 1		
SA	23	23 m² 28 m²
(S2) LEVEL 2		
SA	23	23 m² 28 m²
(S2) LEVEL 3		
SA	23	23 m² 28 m²
Grand total	69	

#### GFA DIAGRAMS - STAGE 2

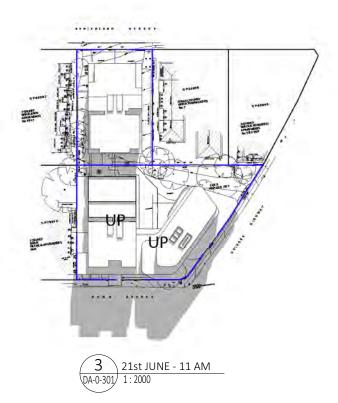
ECT NO.	DRAWING NO.	REVISIO	N DATE
-049	DA-0-904	D	27/09/2023
E @ A3		DRAWN	AUTHORISED
: 1000		RM	ND
	SCALE	1:1000	50m

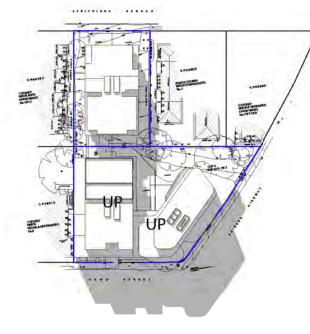


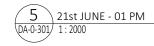
69 UNITS

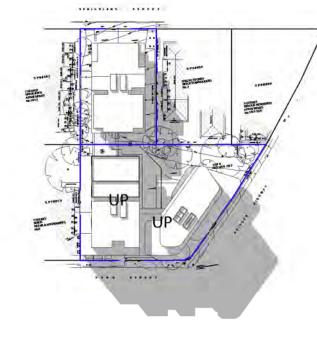
















DATE

25/08/2023

30/08/2023

27/09/2023

ISSUED CHECKED

ND

ND PO

RM RM

HS

DESCRIPTION

ISSUE FOR REVIEW

ISSUE FOR REVIEW

ISSUE FOR REVIEW

А

В



# MIXED USE DEVELOPMENT - OPTION 3

DRAW SHA PROJEC 23-SCALE 1:

Dickson Rothschild D.R. Design (NSW) Pty. Ltd. Suite 1 & 2, Level 5 Grafton Bond Building 201 Kent St, Sydney NSW 2000 ABN: 35 134 237 540

Phone: +61 2 8540 8720

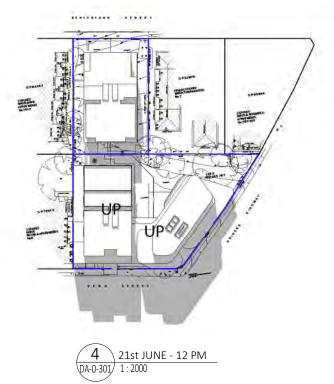
Nominated Architects: Robert Nigel Dickson NSW ARB #5364 Paul Oreshkin NSW ARB #7774

www.dicksonrothschild.com.au

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FEASIBILITY STUDY

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VING	
IADOW	ANALYSIS

ECT NO.	DRAWING NO.	REVISION	DATE
-049	DA-0-951	С	27/09/2023
E @ A3		DRAWN	AUTHORISED
: 2000		RM	ND



WINDO	OW SCHED	ULE		
WINDOW No.	HEAD R.L.	SILL R.L.		
1	196.44	195.45		
2	196.44	195.32		
3	193.58	192.92		
4	193.58	192.49		
5	193.59	192.66		
6	193.59	192.66		
7	190.68	189.42		
8	190.68	DOOR		
9	190.68	189.42		
10	190.69			
11	190.69			
12	189.67	188.59		
13	189.67	DOOR		
14	189.67	188.59		
14	189.67	DOOR		
16	189.67	DOOR		
17	189.67	188.59		
18	185.07	100.33		
18	109 52	107.02		
	198.53	197.02		
20	198.53	197.02		
21	195.35	100.00		
22	198.18	196.83		
23	195.35			
24	198.18	196.83		
25	195.34			
26	198.16	197.53		
27	190.89	189.85		
28	190.89	189.85		
29	190.88	190.28		
30	188.55			
31	191.40	190.36		
32	188.51	DOOR		
33	191.39	190.36		
34	192.14	191.14		
35	192.13	191.14		
36	189.33			
37	192.70	192.09		
38	192.62	191.64		
39	192.62	191.65		
40	193.30	192.33		
41	193.30	192.33		
42	189.30	DOOR		
43	189.78	DOOR		
44	190.50			
45	193.88	192.85		
46	193.88	192.85		
47	191.08	DOOR		
48	194.55	193.51		
49	194.55	193.51		
50	194.55	193.51		
51	194.58	193.96		

I, Scott Keith Murray BSurv (UNSW) MIS of Boxall Surveyors, a surveyor registered under the Surveying and Spatial Information Act 2002, certify that the survey represented in this plan was made in accordance with Clause 9 of the Surveying and Spatial Information Regulation 2017 with regard to the location of the approximate boundaries shown on this plan. & Mu Dated: 08-Sep-21 Signature: Surveyor Identification No: 1680  $\mathcal{O}$ 

# Surveyor registered under the Surveying and Spatial Information Act 2002

## NOTES:

- 1. ONLY SERVICES WHICH WERE VISIBLE & ACCESSIBLE AT THE TIME OF THE SURVEY ARE SHOWN. FULL DETAILS OF SEWER AND OTHER SERVICES SHOULD BE OBTAINED FROM THE RELEVANT AUTHORITIES. UNDERGROUND SERVICES INFORMATION CAN BE OBTAINED FROM DIAL BEFORE YOU DIG (PH 1100) OR www.dialbeforeyoudig.com.au.
- 2. CONTOURS ARE APPROXIMATE ONLY, PREFERENCE TO BE GIVEN TO SPOT HEIGHTS. 3. MAJOR TREES SHOWN ONLY.
- 4. DIMENSIONS AND AREA ARE SUBJECT TO SURVEY.
- 5. PROJECT CO-ORDINTES ARE MGA2020 (ZONE56)
- 6. THIS PLAN HAS BEEN PREPARED FOR THE SOLE PURPOSE OF LODGING A DEVELOPMENT APPLICATION WITH THE LOCAL COUNCIL. THIS PLAN IS NOT TO BE USED FOR ANY OTHER PURPOSE WITHOUT THE EXPRESS PERMISSION OF BOXALL SURVEYORS PTY LTD.





**PRINT IN COLOUR** 



Image: Sever vent       Im	CLIENT: CENTRAL REAL ADDRESS: No. 1 VENO STREET HEATHCOTE "HEATHCOTE INN"	Liabilit, PO Bc 02 95
--	--	-----------------------------

	MGA
The set of	
ITTLE:       PLAN OF SITE DETAIL & LEVELS         REV       DATE         REVISION DETAILS	AZIMUTH: MGA20         DATUM:         AHD           SURVEY:         BC         DATE:         27.08.2021           DRAWN:         EL         DATE:         08.09.2021           APPROVED:         SM         DATE:         08.09.2021
limited by a scheme approved under Professional Standards Legislation         x 519 Sutherland NSW 1499   Suite 8/49-51 Eton Street         21 5737   www.boxallsurveyors.com.au   ACN 114 644 058	SCALE:         1:300         SHEET         1         OF         1           DRAWING No:         REV:         SIZE:         11260-001-A         A         A1

# Appendix D – Borehole Logs



#### BH ID: BH1

Locat Clien Job N Shee	t Io.	1 Veno Street, Heathc Duffy Kennedy .EO1 1 of 1	ote I	NSW			C La	tarted complete ogged By ceview By	<b>d</b> 1 , SI	7 Octo	bber 2023 bber 2023 <b>Date</b> 17 October 2023 <b>Date</b>
		ontractor Hartgeo						atitude	-		
Plant	:	Ute-Moun	ited I	Rig			Inclination 90° Lo	ongitude	-		
METHOD	GROUND WATER LEVELS	SAMPLES & FIELD TESTS	SAMPLE RECOVERY	DEPTH (m)	GRAPHIC LOG	RL (mAHD)	MATERIAL DESCRIPTION		MOISTURE CONDITION	CONSISTENCY / REL. DENSITY	MATERIAL ORIGIN & OBSERVATIONS
		BH1_0.20-0.30		0.00_ 0.10_		185.51 185.41	ASPHALT: 100mm thick FILL: Silty CLAY: medium plasticity, dark brown, with angu	ular to	м		ASPHALT FILL
AD/T	GWNE	PID = 0.2 PPM		0.40		_ -185.11  _	sub-angular gravels, No odour SANDSTONE: yellow-brown, extremely weathered				WEATHERED ROCK
							Terminated at 0.90m. Refusal on bedrock.				

This log should be read in conjunction with El Australia's accompanying explanatory notes.



### BH ID: BH10M

Loca	tion	1 Veno Street, Heathc	ote l	NSW					Started		7 Octo	ber 2023	
Clien		Duffy Kennedy							Complete			ber 2023	
Job		.E01							Logged B		N	Date	17 October 2023
Shee		1 of 1							Review B	у		Date	
		ntractor Hartgeo						.37 m (AHD)	Latitude	-			
Plan		Ute-Moun		Rig	T	1	Inclination 90°		Longitude	e -			
METHOD	GROUND WATER LEVELS	SAMPLES & FIELD TESTS	SAMPLE RECOVERY	DEPTH (m)	GRAPHIC LOG	RL (mAHD)	MATERIAL DES	CRIPTION		MOISTURE	CONSISTENCY / REL. DENSITY	& C	TERIAL ORIGIN BSERVATIONS
		BH10M_0.20-0.30		0.00		191.37 191.27	ASPHALT: 100mm thick FILL: Clayey SAND: fine to medium gr	rained, brown, su	ıb-angular			ASPHALT FILL	
		PID = 0.2 PPM		0.40		- 190.97	to angular gravels, No odour						
AD/T		BH10M_0.50-0.60		0.40 1- 1- 2- - - - - - - - - - - - - -			Silty CLAY: medium plasticity, brown / ironstone gravels, No odour	ly weathered	red, trace	М	St	BEDROCK	DIL
				9		182.37      	Terminated at 9.00m. Target Depth Re	ached.					

This log should be read in conjunction with El Australia's accompanying explanatory notes.



### BH ID: BH10M

Location 1 Veno Stre Client Duffy Kenn Job NoE01 Sheets 1 of 1		eathcot	e NS	W			Started Completed Logged By Review By	17 Octobe 17 Octobe SN	17 October 2023
Drilling Contractor	Hartg	eo		Surface RL ≈191	.37 m	n (AHD)	Latitude	-	
Plant	Ute-N	Nounte	d Rig	Inclination 90°			Longitude	-	
SAMPLES & FIELD TESTS	DEPTH (m)	GRAPHIC LOG	RL (m AHD)	MATERIAL DESCRIPTION	MOISTURE CONDITION	BACKF	ILL DETAILS		STANDPIPE DETAILS
BH10M_0.20-0.30 PID = 0.2 PPM BH10M_0.50-0.60	-			SANDSTONE: yellow-brown, extremely weathered	M		Cuttings 0.00m - 5.00m 5.00m - 5.50m 5.00m - 5.50m Sand 5.50m - 9.00m		0.10m - 5.50m PVC casing (50mm Ø) 5.50m - 9.0m PVC screen (50mm Ø)



#### BH ID: BH2M

Client		1 Veno Street, Heathc Duffy Kennedy .E01	NSW			Started         17 October 2023           Completed         17 October 2023           Logged By         SN         Date         17 October 2023					
Shee		1 of 1						Review I			Date
Drilli	ng Co	ntractor Hartgeo					<b>Surface RL</b> ≈185.81 m (AHD)	Latitude	-		
Plan		Ute-Moun		Rig	1		Inclination 90°	Longitud	le -		
METHOD	GROUND WATER LEVELS	SAMPLES & FIELD TESTS	SAMPLE RECOVERY	DEPTH (m)	GRAPHIC LOG	RL (m AHD)	MATERIAL DESCRIPTION		MOISTURE CONDITION	CONSISTENCY / REL. DENSITY	MATERIAL ORIGIN & OBSERVATIONS
		BH2M_0.20-0.30 PID = 0.3 PPM		0.00_		185.81 185.71		with angular	м		ASPHALT FILL
ADIT	GWNE	PID = 0.3 PPM		0.40			to sub-angular gravels, No odour SANDSTONE: fine to medium grained, yellow brown weathered	extremely			WEATHERED ROCK
							Terminated at 9.20m. Target Depth Reached.				

This log should be read in conjunction with El Australia's accompanying explanatory notes.



#### BH ID: BH2M

Locat Clien Job N	,		athcote	e NS	N		Started Completed Logged By	17 Octobe 17 Octobe SN		17 October 2023	
Shee								Review By	UL I	Date	17 OCTOBEL 2023
Drilli	ng Contractor	Hartge	eo		Surface RL ≈185	.81 m	n (AHD)	Latitude	-		
Plant	t	Ute-N	lounte	d Rig	Inclination 90°			Longitude	-		
WATER	SAMPLES & FIELD TESTS	DEPTH (m)	GRAPHIC LOG	RL (m AHD)	MATERIAL DESCRIPTION	MOISTURE CONDITION	BACKF	ILL DETAILS			STANDPIPE DETAILS
NE	BH2M_0.20-0.30 PID = 0.3 PPM	0.00 0.10 0.40		1 185.7 1 185.4		М		Grout 0.00m - 0.20m			
GWNE	PID = 0.3 PPM			1				Bentonite 0.20m - 1.00m Sand 1.00m - 9.20m			0.10m - 1.20m PVC casing (50mm Ø) 1.20m - 9.20m PVC screen (50mm Ø)
		9 		- - 476.6 - 1 - - - -	Terminated at 9.20m. Target Depth Reached.						

This log should be read in conjunction with EI Australia's accompanying explanatory notes.



#### BH ID: BH3

Clien Job N	t Io.	1 Veno Street, Heathc Duffy Kennedy .E01	ote I	NSW					Started Complete Logged B	ed 1 y Si	7 Octo	ober 2023 ober 2023 <b>Date</b> 17 October 2023	
Shee		1 of 1 ntractor Hartgeo					Surface RL ≈188.00 m (AHD)		Review B Latitude	у		Date	
Plant		Ute-Moun	ted F	Ria			Inclination 90°		Longitude	- -			
METHOD	GROUND WATER LEVELS	SAMPLES & FIELD TESTS	SAMPLE RECOVERY	DEPTH (m)	GRAPHIC LOG	RL (mAHD)	MATERIAL DESCRIPTION		Longitud	MOISTURE	CONSISTENCY / REL. DENSITY	MATERIAL ORIGIN & OBSERVATIONS	
	ц		SA	0.00_		188.00	ASPHALT: 200mm thick				<u>о</u> щ	ASPHALT	
		BH3_0.30-0.40		0.20		187.80	FILL: Silty CLAY: low plasticity, brown / orange, with	n ang	gular to			FILL	_
AD/T	ш	PID = 0.1 PPM BH3_0.70-0.80		0.50		- 187.50	sub-angular gravels, No odour Silty CLAY: medium plasticity, brown / orange, trace	san	detone	М		RESIDUAL SOIL	_
AI	BWND			- - 1-		- - - -	gravels, No odour	Journ		M < PL	St		
							Terminated at 1.10m. Target Depth Reached.						

This log should be read in conjunction with EI Australia's accompanying explanatory notes.



#### BH ID: BH4

Loca Clien	t	1 Veno Street, Heathc Duffy Kennedy	ote l	NSW				Started Complete	ed 1		ber 2023 ber 2023	
Job N		.E01						Logged B		N	Date 17 October 202	3
Shee		1 of 1 ntractor Hartgeo					<b>Surface RL</b> ≈192.61 m (AHD)	Review B Latitude	y .		Date	
Plant	-	Ute-Moun	ted I	Riø			Inclination 90°	Longitude	e -			
								Longitud		۶۲		
METHOD	GROUND WATER LEVELS	SAMPLES & FIELD TESTS	SAMPLE RECOVERY	DEPTH (m)	GRAPHIC LOG	RL (mAHD)	MATERIAL DESCRIPTION		MOISTURE CONDITION	CONSISTENCY / REL. DENSITY	MATERIAL ORIGIN & OBSERVATIONS	
				0.00		192.61 192.41	ASPHALT: 200mm thick				ASPHALT	
AD/T	Щ	BH4_0.30-0.40 PID = 0.4 PPM BH4_0.60-0.70		0.20		 	FILL: Clayey SAND: fine to medium grained, brown, su to angular gravels, No odour		М		FILL	
A	GWNE	BH4_0.60-0.70 PID = 0.1 PPM				-	Silty CLAY: medium plasticity, brown / orange, mottled ironstone gravels, No odour	red, trace	М	F	RESIDUAL SOIL	
				-		-191.41 	Terminated at 1.20m. Target Depth Reached.					
				-		_						
				-		_						
				2-		_						
				-		_						
				-		_						
				-		_						
				3-		_						
				-		_						
				-		_						
						_						
				4		_						
				-		_						
				-		_						
				5-		_						
				-		_						
				-		-						
				-		_						
				6-		_						
				-		-						
				-		_						
				-		_						
				7-		-						
				-		_						
				-		_						
				-		-						
				8-		_						
				-		_						
				-		-						
						_						
				9		_						
						-						
				-		_						
				10		_						



#### BH ID: BH5

		1 Veno Street, Heathc	ote l	NSW				arted			ber 2023
Clien		Duffy Kennedy						mpleted			ber 2023
Job N Shee		.E01 1 of 1						gged By view By		N	Date 17 October 2023 Date
		ontractor Hartgeo						titude	-		Date
Plan		Ute-Moun	ted I	Rio				ngitude	_		
		ote-moun		n ng					_	22	
METHOD	GROUND WATER LEVELS	SAMPLES & FIELD TESTS	SAMPLE RECOVERY	DEPTH (m)	GRAPHIC LOG	RL (m AHD)	MATERIAL DESCRIPTION		MOISTURE	CONSISTENCY / REL. DENSITY	MATERIAL ORIGIN & OBSERVATIONS
	-			0.00		190.44 190.24	ASPHALT: mm thick				ASPHALT
		BH5_0.3-0.4		0.20			FILL: Clayey SAND: fine-grained, pale brown, trace sub-ang to angular gravels, No odour	gular [	рм		FILL
AD/T	GWNE	BH5_0.8-0.9		0.50		189.94      	Silty CLAY: medium plasticity, fine to medium grained, yellow brown, mottled red, trace sub-angular to angular ironstone gravels, No odour	w	м	F	RESIDUAL SOIL
				2			Terminated at 1.50m. Target depth reached Refusal on bedra	rock.			



#### BH ID: BH6

Clien Job N	t Io.	1 Veno Street, Heathc Duffy Kennedy .E01	ote I	NSW				Started Complete Logged B	ed 1 y Si	7 Octo	bber 2023 bber 2023 <b>Date</b> 17 October 2023
Shee		1 of 1 ntractor Hartgeo					<b>Surface RL</b> ≈190.03 m (AHD)	Review B	У		Date
Plant		Ute-Moun	tod (	Ria			Inclination 90°	Longitude	-		
METHOD	GROUND WATER LEVELS	SAMPLES & FIELD TESTS	SAMPLE RECOVERY	, DEPTH (m)	GRAPHIC LOG	RL (mAHD)	MATERIAL DESCRIPTION	Longitud	MOISTURE	CONSISTENCY / REL. DENSITY	MATERIAL ORIGIN & OBSERVATIONS
		BH6_0.2-0.3		0.00		190.03 189.83	ASPHALT: mm thick FILL: Silty CLAY: medium plasticity, brown yellow, with angular to angular gravels, No odour	sub-	М		ASPHALT FILL
AD/T	GWNE			0.50 _ - - 1- - - - - - - - - - - - - - - - -		      	Silty CLAY: medium plasticity, brown yellow, mottled re odour	d, No	М	F	RESIDUAL SOIL
							Terminated at 1.90m. Target depth reached.				



#### BH ID: BH7M

Clien Job N	t Io.	1 Veno Street, Heathc Duffy Kennedy .E01	ote N	NSW			Co	tarted ompleted ogged By	I 17 Si	7 Octo	ber 2023 ber 2023 <b>Date</b> 17 October 2023
Shee		1 of 1						eview By			Date
		ntractor Hartgeo						atitude	-		
Plant	r r	Ute-Moun		Rig			Inclination 90° Lo	ongitude	-	/	
METHOD	GROUND WATER LEVELS	SAMPLES & FIELD TESTS	SAMPLE RECOVERY	DEPTH (m)	GRAPHIC LOG	RL (mAHD)	MATERIAL DESCRIPTION		MOISTURE	CONSISTENCY / REL. DENSITY	MATERIAL ORIGIN & OBSERVATIONS
		BH7_0.2-0.3		0.00_		190.85 190.65	ASPHALT: mm thick				ASPHALT
				0.20_			FILL: Silty CLAY: low plasticity, brown yellow, with sub-angi angular gravels, No odour	gular to	М		FILL
	GWNE	BH7_0.5-0.6		0.50 		190.35	Silty CLAY: medium plasticity, brown yellow, mottled red, tr sub-angular to angular ironstone gravels, No odour From 3.00m, medium plasticity, grey-red, grading into weat sandstone, No odour		М	F	RESIDUAL SOIL
AD/T				4			SANDSTONE: fine to medium-grained, orange-pale grey				BEDROCK
				-							



#### BH ID: BH7M

Loca Clien Job N Shee	NoE01		hcote	e NS	N			Started Completed Logged By Review By	17 Octob 17 Octob SN	17 October 2023
Drilli	ng Contractor	Hartgeo	)		Surface RL ≈190	).85 m	n (AHD)	Latitude	-	
Plan	t	Ute-Mo	unted	l Rig	Inclination 90°	-		Longitude	-	
WATER	SAMPLES & FIELD TESTS		GRAPHIC LOG	RL (mAHD)	MATERIAL DESCRIPTION	MOISTURE CONDITION	BACKF	ILL DETAILS		STANDPIPE DETAILS
	BH7_0.2-0.3	0.00		- 5	ASPHALT: mm thick					
		0.20		190.6 - 5 -	FILL: Silty CLAY: low plasticity, brown yellow, with sub-angular to angular gravels, No odour					
GWNE	BH7_0.5-0.6	0.50 1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-		190.3 5 5 - - - - - - - - - - - - - - - - -	Silty CLAY: medium plasticity, brown yellow, mottled red, trace sub-angular to angular ironstone gravels, No odour From 3.00m, medium plasticity, grey-red, grading into weather sandstone, No odour	м		Cuttings 0.10m - 4.00m		0.10m - 5.90m PVC casing (50mm Ø)
95-95% Water					SANDSTONE: fine to medium-grained, orange-pale grey			Bentonite 4.00m - 5.00m 5.00m - 9.00m		5.90m - 9.0m PVC screen (50mm Ø)
		10		- - - - his la	og should be read in conjunction with El Austr.		accompa	nying explana	tory notes	



#### BH ID: BH8

Locat	ion	1 Veno Street, Heathc	ote N	١SW			Starte	d	1	7 Octo	ber 2023
Clien		Duffy Kennedy					Comp		1	7 Octo	ber 2023
Jop N		.E01					Logge		SI	N	Date 17 October 2023
Shee		1 of 1					Revie				Date
		ntractor Hartgeo					Surface RL ≈190.94 m (AHD) Latitu		-		
Plant	~	Ute-Moun		Rig		-	Inclination 90° Longi	ude	-		<b></b>
METHOD	GROUND WATER LEVELS	SAMPLES & FIELD TESTS	SAMPLE RECOVERY	DEPTH (m)	LOG LOG	RL (mAHD)	MATERIAL DESCRIPTION	MOISTIBE	CONDITION	CONSISTENCY / REL. DENSITY	MATERIAL ORIGIN & OBSERVATIONS
		BH8_0.1-0.2		0.00_0.10		190.94 190.84	ASPHALT:, No odourmm thick FILL: Silty CLAY: medium plasticity, brown yellow, with sub-				ASPHALT FILL
AD/T	GWNE			0.30		190.64	sub-angular to angular gravels, No odour Silty CLAY: medium plasticity, brown yellow, mottled white, trace sub-angular to angular ironstone gravels, No odour	*	м	F	RESIDUAL SOIL
							Terminated at 0.80m. Target depth reached.				



#### BH ID: BH9

Locat Clien Job N Shee	t Io.	1 Veno Street, Heathc Duffy Kennedy .E01 1 of 1	ote I	NSW			( 	Started Complete Logged By Review By	d 11 / Si	7 Octo	ber 2023 ber 2023 Date 17 October 2023 Date
Drilli		ntractor Hartgeo						Latitude	-		
Plant	:	Ute-Moun	ted f	Rig			Inclination 90° L	Longitude	<b>:</b> -		
METHOD	GROUND WATER LEVELS	SAMPLES & FIELD TESTS	SAMPLE RECOVERY	DEPTH (m)	GRAPHIC LOG	RL (m AHD)	MATERIAL DESCRIPTION		MOISTURE CONDITION	CONSISTENCY / REL. DENSITY	MATERIAL ORIGIN & OBSERVATIONS
		BH9_0.10-0.20 PID = 0.4 PPM		0.00_ 0.10_		191.91 191.81	ASPHALT: 100mm thick FILL: Silty CLAY: low plasticity, brown / orange, with angu	ular to			ASPHALT FILL
AD/T	GWNE			0.30		- - - -	Sub-angular gravels, No odour Silty CLAY: medium plasticity, brown / orange, mottled re- ironstone gravels, No odour	d, trace	VI < PL	St	RESIDUAL SOIL
							Terminated at 1.00m. Target depth reached.				



#### BH ID: BH11

Loca Clier Job I	nt	1 Veno Street, Heatho Duffy Kennedy E26160.E02	cote	NSW				Started Complete Logged By	<b>d</b> 0	6 June	2024 2024 <b>Date</b> 06 June 2024
Shee		1 of 1						Review By			Date
Drilli	ng Co	ontractor Hartgeo						Latitude	-		
Plan	t	Ute-Moun		Rig			Inclination 90° I	Longitude		~	Γ
METHOD	GROUND WATER LEVELS	SAMPLES & FIELD TESTS	SAMPLE RECOVERY	DEPTH (m)	GRAPHIC LOG	RL (mAHD)	MATERIAL DESCRIPTION		MOISTURE CONDITION	CONSISTENCY / REL. DENSITY	MATERIAL ORIGIN & OBSERVATIONS
		BH11_0.20-0.30 PID = 0.1 PPM		0.00_0.10_0.30_0		-	ASPHALT: 100mm thick FILL: Gravelly SAND: fine to medium-grained, yellow / br sub-angular to angular gravels, No odour FILL: Silty CLAY: medium plasticity, yellow / brown, trace				ASPHALT FILL
AD/T		BH11_0.60-0.70		0.50		-	to sub-angular gravels, No odour Silty CLAY: medium to high plasticity, yellow / brown, mo trace ironstone gravels, No odour	ittled red,	м		RESIDUAL SOIL
				1		_	Terminated at 1.00m. Target Depth Reached.				
				-		_					
				2-	-	-					
				-		-					
						-					
				-	-	-					
						-					
				4-	-	-  -					
				-		-					
				5-	-	- - -					
				-		_					
				-	-	-					
				6	-	-					
				-		-					
				7-		-					
				-	-	-					
						_					
				-	-	-					
				-		-					
				9	•	_					
				-		-					
				-	1	-					



#### BH ID: BH12

Clien Job N	t Io.	1 Veno Street, Heathc Duffy Kennedy E26160.E02	ote I	NSW			C L	Started Complete Logged By	<b>d</b> 0 , SI	6 June 6 June N	2024 Date 06 June 2024
Shee		1 of 1 ontractor Hartgeo						Review By Latitude	/		Date
Plan		Ute-Moun	ited I	Riø				Longitude			
	GROUND WATER LEVELS	SAMPLES & FIELD TESTS	SAMPLE RECOVERY	DEPTH (m)	GRAPHIC LOG	RL (m AHD)	MATERIAL DESCRIPTION			CONSISTENCY / REL. DENSITY	MATERIAL ORIGIN & OBSERVATIONS
AD/T		BH12_0.10-0.20 PID = 0.0 PPM		0.00 0.10 0.20 			ASPHALT: 100mm thick FILL: Silty CLAY: low plasticity, yellow / brown, with angul sub-angular gravels, No odour Silty CLAY: low plasticity, yellow / brown, mottled red, trac ironstone gravels, No odour From 0.70m, Mottled white	lar to	М		ASPHALT FILL RESIDUAL SOIL
							Terminated at 1.00m. Target Depth Reached. Terminated at 1.00m. Target Depth Reached.				



#### BH ID: BH14

Loca	tion	1 Veno Street, Heatho	ote	NSW				Started	0	6 June	2024
Clien	t	Duffy Kennedy						Complete	e <b>d</b> 0	6 June	2024
Job I	lo.	E26160.E02						Logged By	<b>y</b> S	N	Date 06 June 2024
Shee	ts	1 of 1						Review B	у		Date
Drilli	ng Co	ntractor Hartgeo					Surface RL -	Latitude	-		
Plan	:	Ute-Moun	ted	Rig			Inclination 90°	Longitude	e -		
METHOD	GROUND WATER LEVELS	SAMPLES & FIELD TESTS	SAMPLE RECOVERY	DEPTH (m)	GRAPHIC LOG	RL (mAHD)	MATERIAL DESCRIPTION		MOISTURE	CONSISTENCY / REL. DENSITY	MATERIAL ORIGIN & OBSERVATIONS
		BH14_0.10-0.20 PID = 0.0 PPM		0.00		-	ASPHALT: 100mm thick FILL: Sandy GRAVEL: sub-angular to angular gravels,	fine to			ASPHALT FILL
⊢				0.20		_	medium-grained sands, grey, No odour FILL: Clayey SAND: brown mottled red, fine to medium	arained			FILL
AD/T		BH14_0.50-0.60		0.50			SAND: fine-grained, yellow, No odour		М		WEATHERED ROCK
				1-		-	Terminated at 1.00m. Target Depth Reached.				



#### BH ID: BH15

Locat		1 Veno Street, Heathc	ote l	NSW				Started	0	5 June	2024
Clien	t	Duffy Kennedy						Complete	<b>d</b> 0	5 June	2024
Jop N	lo.	E26160.E02						Logged By	l SI	N	Date 06 June 2024
Shee	ts	1 of 1						<b>Review By</b>	y		Date
Drilli	ng Co	ntractor Hartgeo					Surface RL -	Latitude	-		
Plant		Ute-Moun		Rig			Inclination 90°	Longitude	<b>.</b> -		
METHOD	GROUND WATER LEVELS	SAMPLES & FIELD TESTS	SAMPLE RECOVERY	DEPTH (m)	GRAPHIC LOG	RL (mAHD)	MATERIAL DESCRIPTION		MOISTURE	CONSISTENCY / REL. DENSITY	MATERIAL ORIGIN & OBSERVATIONS
		BH15_0.20-0.30				_	ASPHALT: 200mm thick				ASPHALT
AD/T		PID = 0.0 PPM		0.20		_	FILL: Silty CLAY: low plasticity, brown / orange, with sub to angular gravels, No odour				FILL
AI		BH15_0.60-0.70		0.40		_	Clayey SAND: fine to medium-grained, yellow / brown, I	No odour	М		RESIDUAL SOIL
		BI113_0.00-0.70		0.60		_	Silty CLAY: medium plasticity, yellow / brown, mottled or fine to medium-grained sands. No odour	range, with			
		BH15_0.60-0.70		0.60 			Silty CLAY: medium plasticity, yellow / brown, mottled or fine to medium-grained sands, No odour Terminated at 0.80m. Target Depth Reached.	range, with			
						-					



#### BH ID: BH16

Locat		1 Veno Street, Heatho	ote l	NSW				Started	0	6 June	2024
Clien		Duffy Kennedy						Complete		6 June	
Jop N		E26160.E02						Logged By		N	<b>Date</b> 06 June 2024
Shee	ts	1 of 1						Review B	y		Date
Drilli	ng Co	ntractor Hartgeo					Surface RL -	Latitude	-		
Plant	:	Ute-Moun	nted I	Rig			Inclination 90°	Longitude	e -		
METHOD	GROUND WATER LEVELS	SAMPLES & FIELD TESTS	SAMPLE RECOVERY	DEPTH (m)	GRAPHIC LOG	RL (m AHD)	MATERIAL DESCRIPTION		MOISTURE CONDITION	CONSISTENCY / REL. DENSITY	MATERIAL ORIGIN & OBSERVATIONS
		BU16 0.20 0.20		0.00	ix ix	-	ASPHALT: 200mm thick				ASPHALT
F		BH16_0.20-0.30 PID = 0.1 PPM		0.20		-	FILL: Clayey SAND: fine to medium-grained, yellow / br odour	rown, No	М		FILL
AD/T				0.50		-	SAND: fine to medium-grained, yellow, mottled red / wh sandstone gravels, No odour	nite, trace	D		RESIDUAL SOIL
				 1-	-20158-2019	_	Terminated at 0.90m. Refusal on bedrock.				



#### BH ID: BH17M

Locat	tion	1 Veno Street, Heathc	ote	NSW			Started	0	6 June	2024
Clien		Duffy Kennedy					Comple	ted 1	1 June	2024
Job N	lo.	E26160.E02					Logged	By S	N	Date 11 June 2024
Shee	ts	1 of 1					Review			Date
Drilli	ng Co	ntractor Geosense	Drilli	ing Er	nginee	rs	Surface RL ≈188.40 m (AHD) Latitude			
Plant	:	Comacchio	o Ge				Inclination 90° Longitu			
METHOD	GROUND WATER LEVELS	SAMPLES & FIELD TESTS	SAMPLE RECOVERY	DEPTH (m)	GRAPHIC LOG	RL (m AHD)	MATERIAL DESCRIPTION	MOISTURE CONDITION	CONSISTENCY / REL. DENSITY	MATERIAL ORIGIN & OBSERVATIONS
		BH17_0.20-0.30		0.00		188.40 188.20	ASPHALT: 200mm thick			ASPHALT
		PID = 0.0 PPM		0.20		-	FILL: Clayey SAND: fine to medium-grained, pale brown, with sub-angular to angular gravels, No odour			FILL
		BH17_0.50-0.60		0.50		187.90	Silty CLAY: medium plasticity, pale red, trace sandstone gravels,	м		RESIDUAL SOIL
				-		_	No odour	IVI		
				-		_ -187.40				
				1.00_             			SANDSTONE: fine to medium-grained, pale red, extremely weathered, No odour			WEATHERED ROCK
AD/T				2.30 			SANDSTONE: fine to medium grained, pale red / grey			BEDROCK
						- - - - - - - - - - - - - - - - - - -	Terminated at 6.00m. Target Depth Reached.			
				8						



### MONITORING WELL LOG BH ID: BH17M

Client         Duty Strandy         Li Lunc 2024         EXAMPLE         Strand 200         Date         Li Lunc 2024           Sheet or 1917         1917         Review 39         Date         11 Junc 2024           Pinter or 1918         Contraction C40-205         Indianto         107         Lengtude         -         -           Image: Sheet or 1918         -<	Locat	ion 1 Veno Str	eet, He	eathcot	e NS	W			Started	06 June	e 2024	
Sheets 1-011 Drilling Contraction Georeance Unit Reprinteron Read Discrete Contraction Georeance Unit Read Read Read Discrete Contra	Clien	<b>t</b> Duffy Kenr	nedy						Completed			
Drilling Contractor         Geosche Drilling Expinsers         Surface RL	Jop N	lo. E26160.E0	)2						Logged By	SN	Date	11 June 2024
Plent         Concretione 201         Inclinetion         90*         Longitude									Review By		Date	
B         SAMPLER A PILL TESTA         E         V g Status         MATERIAL DESCRIPTION         V g Status         Status         STANDPREDETALS         STANDPREDETALS           H17/R_0.00.00         APPLET 200mm flok         APPLET 200mm flok         APPLET 200mm flok         No         Status         Status         Status         Status         APPLET 200mm flok         No         Status         Status <td< td=""><td>Drilli</td><td>ng Contractor</td><td>Geos</td><td>ense D</td><td>rilling</td><td>g Engineers Surface RL ≈1</td><td>88.40 r</td><td>n (AHD)</td><td>Latitude</td><td>-</td><td></td><td></td></td<>	Drilli	ng Contractor	Geos	ense D	rilling	g Engineers Surface RL ≈1	88.40 r	n (AHD)	Latitude	-		
BH17M_0.00.00 PID = 0.5 PH 30         PA         PMEAL 2000 mildle parts	Plant		Coma	acchio (	Geo 2	205 Inclination 90	°		Longitude	-		
PID = 0.5 FPA     0.0	WATER	SAMPLES & FIELD TESTS	DEPTH (m)	GRAPHIC LOG	RL (m AHD)	MATERIAL DESCRIPTION	MOISTURE	BACKF	FILL DETAILS			STANDPIPE DETAILS
PID = 0.5 FPA     0.0			0.80		188.4	ASPHALT: 200mm thick				김동영의		Well Stickup =0.0m
BH17/0_00.000         association of provide in the to medium grained, plat red.         M         Genut         Genut         But of the to medium grained, plat red.         M           1         1         1         1         1         1         1         1         1         1         1         1         1         0			0.20		§ <u>1</u> 88.2			1				(RL 188.40m)
Image: Second		BH17M_0.50-0.60	0.50		187.9							
Image: Second						sandstone gravels, No odour			0.00m - 1.00m			
Image: Second			1.40			CANDSTONE fine to medium argined hale and		_				
1.00m - 2.00m       PVC casing (50mm 0)         2:00 - 2.00m       Bertonia         1:00 - 2.00m <td></td> <td></td> <td>1.00</td> <td></td> <td>- 0</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>			1.00		- 0							
1.00m - 2.00m       PVC casing (50mm 0)         2:00 - 2.00m       Bertonia         1:00 - 2.00m <td></td> <td></td> <td></td> <td></td> <td>E</td> <td></td> <td></td> <td></td> <td>Sand</td> <td></td> <td></td> <td>0.0m 3.0m</td>					E				Sand			0.0m 3.0m
Image: second					E							
Image: Second				_	F							
2.00 - 2.50m 3 4 4 4 4 5 6 7 7 7 7 7 7 7 7 7 7 7 7 7			2-		F							
0     100 m - 8.0m       0 <t< td=""><td></td><td></td><td>2.30</td><td></td><td>186.1</td><td>SANDSTONE: fine to medium grained, pale red /</td><td>_</td><td></td><td></td><td></td><td></td><td></td></t<>			2.30		186.1	SANDSTONE: fine to medium grained, pale red /	_					
a       a       b       a       b       a       b       a					F	grey						
a       a       b       a       b       a       b       a				-	F							
8       8       102.0       Terminated at 6.00m. Target Depth Reached.       100.0			3-		E						— <sub>I</sub>	
8       8       102.0       Terminated at 6.00m. Target Depth Reached.       100.0					E							
8       8       102.0       Terminated at 6.00m. Target Depth Reached.       100.0				-	F						—	
8       8       102.0       Terminated at 6.00m. Target Depth Reached.       100.0				-	-							
s       s			4-		E						—	
2.50m - 6.00m 8- 8- 1					F						$\equiv$	
PVC screen (60mm /2)					L						—	
0         1824           7         1           7         1           8         1           9         1           9         1					-							
0         1824           7         1           7         1           8         1           9         1           9         1					E						—	
-       -			5-	-	F						$\equiv$	
-       -					-						-	
-       -					E							
-       -				_	-						$\equiv$	
			6-		- 182.4	Termineted at 6.00m Terget Depth Received	_					
				-	- 0	Terminated at 0.00m. Target Deptit Reached.						
				_	-							
				-	_							
				-	-							
					_							
				-	-							
				-	-							
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			8-	-	-							
				-	-							
					_							
					E							
			9-	-	F							
				-	-							
					_							
					F							
			10-	-	-							



#### BH ID: BH7M-DL1

Clien Job N Shee	t Io. ts	1 Veno Street, Heatho Duffy Kennedy E26160.E02 1 of 1 <b>ntractor</b> Hartgeo	ote	NSW			C L R	Started Completed Logged By Review By Latitude	d 00 / SN	6 June	2024 2024 Date Date
Plan		Ute-Moun	nted I	Rig				.ongitude	-		
METHOD	GROUND WATER LEVELS	SAMPLES & FIELD TESTS	SAMPLE RECOVERY	DEPTH (m)	GRAPHIC LOG	RL (m AHD)	MATERIAL DESCRIPTION		MOISTURE	CONSISTENCY / REL. DENSITY	MATERIAL ORIGIN & OBSERVATIONS
AD/T		BH7M-DL1_0.10-0.20 PID = 0.0 PPM		0.00			ASPHALT: 100mm thick FILL: Silty CLAY: medium plasticity, yellow / brown, with a to sub-angular gravels, No odour Silty CLAY: medium to high plasticity, yellow / brown, trace ironstone gravels, No odour		М		ASPHALT FILL RESIDUAL SOIL
							Terminated at 1.00m. Target Depth Reached.				

 $10^{10}$   $10^{10}$   $10^{10}$   $10^{10}$   $10^{10}$  This log should be read in conjunction with EI Australia's accompanying explanatory notes.



#### BH ID: BH7M-DL2

Location 1 Veno Street, Heathcote NSW 06 June 2024 Started Client Duffy Kennedy Completed 06 June 2024 Job No. E26160.E02 Logged By Date SN 1 of 19 **Review By** Sheets Date **Drilling Contractor** Hartgeo Surface RL Latitude Plant Ute-Mounted Rig Inclination 90° Longitude GROUND WATER LEVELS CONSISTENCY / REL. DENSITY SAMPLE RECOVERY MOISTURE GRAPHIC LOG RL (m AHD) DEPTH (m) METHOD SAMPLES & FIELD TESTS MATERIAL ORIGIN & OBSERVATIONS MATERIAL DESCRIPTION 0.00 0.10 ASPHALT: 100mm thick FILL: Silty CLAY: low plasticity, yellow / brown, with angular to sub-angular gravels, No odour ASPHALT FILL BH7M-DL2\_0.20-0.30 PID = 0.0 PPM AD/T Silty CLAY: medium to high plasticity, yellow / brown, trace ironstone gravels, No odour 0.50 Μ Terminated at 1.00m. Target Depth Reached. 2-3-4 5 6 7 8-9-



#### BH ID: BH7M-DL3

06 June 2024 Location 1 Veno Street, Heathcote NSW Started Completed Duffy Kennedy 06 June 2024 Client Job No. E26160.E02 Logged By Date SN **Review By** Sheets 1 of 1 Date **Drilling Contractor** Hartgeo Surface RL Latitude \_ Plant Ute-Mounted Rig Inclination 90° Longitude GROUND WATER LEVELS CONSISTENCY / REL. DENSITY SAMPLE RECOVERN MOISTURE GRAPHIC LOG RL (m AHD) DEPTH (m) METHOD SAMPLES & FIELD TESTS MATERIAL ORIGIN & OBSERVATIONS MATERIAL DESCRIPTION ASPHALT: 100mm thick FILL: Gravelly SAND: fine to medium-grained, yellow, with aub-angular to angular gravels, No odour FILL: Silty CLAY: one plasticity, yellow / brown, with angular to sub-angular gravels, No odour Silty CLAY: medium to high plasticity, yellow / brown, trace irrogetone gravels. No odour BH7M-DL3\_0.10-0.20 PID = 0.0 PPM 0.00 0.10 ASPHALT FILL 0.30 AD/T 0.50 Μ RESIDUAL SOIL ironstone gravels, No odour Terminated at 1.00m. Target Depth Reached. 2-3-4 5 6 7 8-9-

Appendix E – Site Photographs



Photograph 1: Image of the Heathcote Hotel (dated 17 October 2023).



Photograph 2: Image of the south-eastern section of the car park (dated 17 October 2023).



Photograph 3: Image of the northern section of the car park (dated 17 October 2023).



Photograph 4: Image of the western driveway, looking south (dated 17 October 2023).



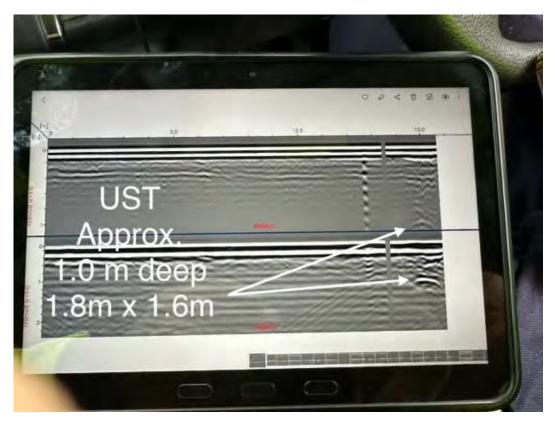
Photograph 5: Image of the approximate location of the UST (dated 5 June 2024).



Photograph 6: Image of the approximate location of the UST and service locating showing potential underground piping, looking east (dated 5 June 2024).



Photograph 7: Image of the approximate location of the UST and service locating showing potential underground piping, looking north (dated 5 June 2024).



Photograph 8: Image of the GPR scan showing approximate depth of UST (image courtesy of A1 Locate Pty Ltd).



Photograph 9: Image BH7M hotspot delineation location (dated 5 June 2024).



Photograph 10: Image of borehole BH11 (dated 5 June 2024).



Photograph 11: Image of borehole BH16 (dated 5 June 2024).

Appendix F – Field Data Sheets



								eiaustralia	
Site Addr	ress: 1 \	leno St,	Heathcol	٥			Job Num	ber: F26160	
		inedy	THE ANY LOT	e				/10/23	
Field Sta	ff. C	1						$p \text{ Location ID } \beta \mu \gamma M$	
	Jean I	n brdhern s	.d.				Round N		
MEDIUM		<u>огльет у</u>	Groundwa	tor D	Surface W	ator	Stormv		
			Ciounawa						
		ate: 16/10	- 62				Stick up	/ down (m): - O.( O (+ above ground - below ground)	
		mBTOĆ):						nterval (mBTOC): 1.1 - 9.1	
-	Sampling		9.10					SWL (mBTOC): –	
PID REA							Flevious		
	dspace (p	om):						kground (ppm):	
		ce (ppm): <b>`</b>	_						
PID Brea		ce (ppm).							
		nBTOC): (						ad Condition:	
	BTOC): <b>2</b>		1.10					blumn (m): <b>5,9</b> 7	
							Water Co		
				N3 (F3H)				uelly Confirmed (Beiler):	
	CKNESS (MB	TOC):						ually Confirmed (Bailer): ~	
Field Filt		<u></u>							
							No		
Yes (0.45	. ,						No	(Request lab 0.45 μm filter the sample)	
	AND SAM						10		
-	g Method			er ·	Peristait	c L	ISubmersi		
		et (mBTOC	,				Fill Time		
		gulator (ps					Discharg	e Timer:	
		s: Ove(C	ast				Cycle:		
	time: ¶:						Pump of	f time:	
		PARAME	TERS						
Probe Ma	ake and N	1	1	1	-		· · ·	est Date and Time:	
Time	Volume (L)	SWL (mbtoc)	Temp (°C)	EC (µS/cm)	Redox (mV)	DO (mg/L)	pH (units)	Comments (colour, turbidity, odour, sheen etc.)	
	0.5	3.26	20.23	351	-24.G	1.50	6.30	Grey, low turbidity, no odow, stigh	+shelr
	۰.0	3.30	20.46	260	-3.6	1.64	5.63	"· · · · · · · · · · · · · · · · · · ·	
	1.5	3.32	20.32	281	-6.3	1.61	5.59	Light brown, law turb., no odour sheen	
	2.0	3.33	20.38	272	- 7.[	1.59	5.61	0 × , × , /	
	1	1	1	1	ł		1		
			1	1	1		1		
	1				1				
Stat	oilisation r	ange:							
	secutive re	-	±0.2°C	±3%	±20mV	±10%	±0.2		
		TS/OBSEI		⊥ S: √ ∩ ⁄			1	$2^{2} = 2$	
		.0.0000		- * V	اللا '.	(n)	212_21	0231026	
			1			Curr	s⊤ ?	0231026	
		$\sim 1$					x1 ~ L		
SIGNATI	URE: (	<del>/</del>							
		$\sum / $	,						
		0							



								elaustralia
Site Addr	ess:   V	eno St. 1	Heathcold	٩,			Job Num	ber: F26160
Client: 🕻		nedy					Date: 26	/10/22
Field Stat		lieny						Location ID RH7M
Well Loca	ation: C.	stern sig	Ao,				Round No	
MEDIUM			Groundwa	ter 🗆 🛙	Surface Wa	ater	□Stormw	/ater □Other:
SAMPLIN		INFO						
	allation Da		7/23				Stick up /	down (m): -O.() (+ above ground - below ground)
		nBTOC):						nterval (mBTOC): <b>5.8</b> - <b>8.8</b>
	Sampling		0.0					SWL (mBTOC): -
PID REA		Duto.					rioneue	
	dspace (pp	om).					PID Back	ground (ppm): —
		ce (ppm): •	-					g (pp).
PRE PUF		o (ppiii).						
		nBTOC): 🦕					Well Hea	d Condition:
			5-0					blumn (m): 6, 7
			OCARBO	NS (PSH)			Water ee	
	PSH (mB		OUAILBOI					ially Confirmed (Bailer): —
	kness (mr	-					1 011 0130	
Field Filt	í	<u></u>					1	
Yes (0.45		<u> </u>					No	(Request lab 0.45 µm filter the sample)
· · ·	ομm) AND SAM	_					No	□ (Request lab 0.45 µm filter the sample)
		FLC	Bladde			<u> </u>	ISubmersil	
	g Method			er e		C L		
		t (mBTOC	<i>.</i>				Fill Timer	
		gulator (ps		)			Discharge	e limer:
		s: Overc	<u>cast / C</u>	_ui^			Cycle:	
	time: 10						Pump off	time:
		PARAME	TERS				D	A Data and Time
Probe Ma	ake and M				1			st Date and Time:
Time	Volume (L)	SWL (mbtoc)	Temp (°C)	EC (µS/cm)	Redox (mV)	DO (mg/L)	pH (units)	Comments (colour, turbidity, odour, sheen etc.)
	0.5	2.14	16.55		92.4	Z.36	539	Colourless to turbid / odour /sheer
	١.0	2.19	18.26		102.3	2.39	5.45	" " " · · · · · · · · · · · · · · · · ·
	1.5	2.24	18.21	519	105.2	2.43	5.51	Light brown, ow turb, no odour sheer
	2.0	2.26	18.19	521	104.7	2.42	5.49	
							1	
Stab	ilisation ra	ange:						
3 cons	secutive re	adings	±0.2°C	±3%	±20mV	±10%	±0.2	
			RVATIONS	S:	1	1	1	<u>'</u>
			//					
			/					
		$\sim 1$	/					
SIGNATU	JRE: (		~					
		$\sum / ($	/					
		/-						



										0.014	aderonica	
Site Addr	ress: IV	eno SI, I	teathcold	e				ber: E26160	>			
Client:		nedy					Date: 16		-			
Field Stat		- I					Sampling	Location ID	BHIC	)M		
Well Loca			ide				Round N	o: )				
MEDIUM		,	Groundwa	ter 🗆 S	Surface W	ater	□Stormv	vater D	Other:			
SAMPLIN	NG POINT	INFO										
Well Insta	allation Da	te: 19/1	7/23				Stick up /	/ down (m): -	-0.10	(+ at	oove ground - below grou	und)
Initial We	ell Depth (r	nBTOC):	1					nterval (mBT		9-8.9		
Previous	Sampling	Date: -	0					SWL (mBT				
PID REA									,			
PID Head	dspace (pp	om):					PID Back	ground (ppn	n): 🗕			
	thing Space	,						0 (11	,			
PRE PUF												_
	ell Depth (n		29				Well Hea	d Condition:	Good			
	BTOC): 4							olumn (m):	May	<i>,</i>		
	SEPARAT		OCARBO	NS (PSH)								$\neg$
	PSH (mB1						PSH Vier	ually Confirm	ed (Rail	er): -		$\neg$
	ckness (mr									j.		$\neg$
Field Filt		···,·					I					
		<u> </u>					No		Dogueri		um filter the	
Yes (0.45							INU	ш (	Request	. Iad 0.45	um filter the samp	ne)
		PLE			for the second sec	-		h la s	704			_
	g Method	+ /		er ·	Peristalt		ISubmersi		□Other:			
-	Pump Inle		-				Fill Timer					
	essure Re			0.			Discharg	e Timer:				
	Condition		<u>cast /</u>	Lain			Cycle:					
	time: 11:		,				Pump off	time:				
	QUALITY		TERS				1					
Probe Ma	ake and M	odel:	1	1	1	1	Bump Te	st Date and	Time:			
Time	Volume	SWL	Temp	EC	Redox	DO	рН	Comment	s (colou	r, turbidity	, odour, sheen etc	:.)
	(L)	(mbtoc)	(°C)	(µS/cm)	(mV)	(mg/L)	(units)		,{		i	/
	05	4.50	18.64	396	69.7	2.40	5-38	Colour	<u>less la</u>	w turb.	hydrocartoon od	an /sl
	1.0	4.55	18.61	401	75.2	2.59	5.25	N				
	1.5	4.57	18.55	405	79.9	2.62	5.36	Grey, med	Lturs.	hydroco	stoon adour /:	sheen
	2.0	4.59	18.54	408	81.5	2.65	5.32	<u> </u>			/	
								1				
	1				1	1	1	1				-
												$\neg$
					1	1	1	1				-
							-	1				$\neg$
Stab	oilisation ra	ande.			1	1	+	ł				-
	secutive re	-	±0.2°C	±3%	±20mV	±10%	±0.2					
		-			I	I						_
	COMMEN.	IS/UBSEF	<b>VATIONS</b>	5:								
		,										
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$2 \circ \left( \circ 6 \right) 2 \times 2 \neq$ $2 \circ \left( \circ 6 \right) 2 \times 2 \Rightarrow$ $2 \circ \left( \circ 6 \right) 2 \times$ $2 \circ \left( \circ 6 \right) 2 \times 2 \Rightarrow$ $2 \circ \left( \circ 6 \right) 2 \times 2 \Rightarrow$ $2 \circ \left( \circ 6 \right) 2 \times 2 \Rightarrow$ $2 \circ \left( \circ 6 \right) 2 \times 2 \Rightarrow$ $2 \circ \left( \circ 6 \right) 2 \times 2 \Rightarrow$ $2 \circ \left( \circ 6 \right) 2 \times 2 \Rightarrow$ $2 \circ \left( \circ 6 \right) 2 \times 2 \Rightarrow$ $2 \circ \left( \circ 6 \right) 2 \times 2 \Rightarrow$ $2 \circ \left( \circ 6 \right) 2 \times 2 \Rightarrow$ $2 \circ \left( \circ 6 \right) 2 \times 2 \Rightarrow$ $2 \circ \left( \circ$
d No: 2 rmwater $\Box$ Other: up / $\bigcirc$ (m): $) - \bigcirc .10$ (+ above ground - below ground) en Interval (mBTOC): $1.1 - 9.1$ bus SWL (mBTOC): $3.23$ Background (ppm): $\bigcirc .1$ Head Condition: $\bigcirc \bigcirc \bigcirc .1$ Head Condition: $\bigcirc \bigcirc .1$
Image: Image Time:       Image: Image Time:         Image: Image Time:       Image Time:         Image: Image Time:       Image Time:
up / $(wn (m):) - 0 \cdot 10 (+ above ground - below ground)en Interval (mBTOC): 1 \cdot 1 - 9 \cdot 1bus SWL (mBTOC): 3 \cdot 23background (ppm): 0 \cdot 1Head Condition: 6 = 0 .r Column (m): 5 \cdot 98 .Visually Confirmed (Bailer): A \cdot pp \in A-A \cdot no \tau \cdot iDen : fieldersible \Box Other:mer: -barge Timer: -is -bo off time:$
en Interval (mBTOC): $1 \cdot 1 - 9 \cdot 1$ bus SWL (mBTOC): $3 \cdot 23$ background (ppm): $0 \cdot 1$ Head Condition: $6 = 0$ . r Column (m): $5 \cdot 98$ . Visually Confirmed (Bailer): $A \cdot ppEA$ $A \cdot NOT  Dentified$ ersible $\Box Other:$ mer: $-$ is $-$ b off time:
en Interval (mBTOC): $1 \cdot 1 - 9 \cdot 1$ bus SWL (mBTOC): $3 \cdot 23$ background (ppm): $0 \cdot 1$ Head Condition: $6 = 0$ . r Column (m): $5 \cdot 98$ . Visually Confirmed (Bailer): $A \cdot ppEA$ $A \cdot NOT \cdot iDentified$ ersible $\Box Other:$ mer: $-$ is $-$ b off time:
bus SWL (mBTOC): $3.23$ Background (ppm): $0.1$ Head Condition: $6 = 0$ . r Column (m): $5.98$ . Visually Confirmed (Bailer): $A.ppEA$ A NOT DENTIFIED ersible $\Box$ Other: mer: $-$ barge Timer: $-$ a = 0 off time:
Background (ppm): $0.1$ Head Condition: $6000$ . r Column (m): $5.98$ . Visually Confirmed (Bailer): $A.ppEA$ A NOT Dentified ersible $\Box Other:$ mer: $-$ barge Timer: $-$ arge Timer: - bo off time:
Head Condition: Good. r Column (m): 5.98. Visually Confirmed (Bailer): Arppea A NOT IDentified ersible Other: mer: arge Timer: b off time:
Head Condition: Good. r Column (m): 5.98. Visually Confirmed (Bailer): Arppea A NOT IDentified ersible Other: mer: arge Timer: b off time:
r Column (m): 5.98. Visually Confirmed (Bailer): ArppEA ▲ NOT IDENTIFIED ersible □Other: mer: — arge Timer: — b off time:
r Column (m): 5.98. Visually Confirmed (Bailer): ArppEA → NOT IDENTIFIED ersible □Other: mer: → arge Timer: → b off time:
r Column (m): 5.98. Visually Confirmed (Bailer): ArppEA → NOT IDENTIFIED ersible □Other: mer: → arge Timer: → b off time:
Visually Confirmed (Bailer): A press wor preventions ersible Other: mer: arge Timer: b off time:
ersible Other: mer: - marge Timer: - s: -
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mer: arge Timer: : o off time:
arge Timer:
o off time:
o off time:
o off time:
Test Date and Time:
Comments (colour, turbidity, odour, sheen etc.)
1 CLEAR / LOCOURCESS, LOW TURDIDIT
5 NO DADUR SHEEN.
3
2
.2



								oradocraria
	ress: /			ATHEOTE	NSI	$\checkmark$		per: E26160
Client:	DUFFY	KENN	any '				Date: 2	0/06/2024
Field Sta	ff: Joer	H.	/				Sampling	Location ID BH 7M -2
Well Loc	ation: EA	STERN	Bour	ronny	- et		Round No	): Z
MEDIUM		Ø(	Groundwa	ter 🖆 S	urface Wa	iter	□Stormw	ater DOther:
SAMPLI	NG POINT	INFO						· · · · · · · · · · · · · · · · · · ·
Construction of the second second	allation Dat	the second se	10/20	23				fown (m); O. (O (+ above ground - below ground)
Initial We	ell Depth (m	BTOC):	8.80	1			Screen In	terval (mBTOC): 5-8-8.8
Previous	Sampling	Date: 26	10/2	2023			Previous	SWL (mBTOC): 2.09
PID REA	DINGS		, ,			1.00		
PID Head	dspace (pp	m): O	.1 .				PID Back	ground (ppm): O · /
PID Brea	thing Spac	e (ppm):	0.1					
PRE PUI	RGE	_						
Total We	ell Depth (m	BTOC):	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~				Well Head	d Condition: 6000
SWL (ml	BTOC):						Water Co	lumn (m):
PHASE S	SEPARATE	D HYDRC	CARBON	IS (PSH)				
Depth to	PSH (mBT	OC):	-				PSH Visu	ally Confirmed (Bailer):
PSH Thio	ckness (mn	n): -	-					
PURGE	AND SAME	PLE						
Samplin	g Method		□Bladde	er E	Peristalti	c D	Submersit	ble 🛛 Other:
Depth of	Pump Inle	(mBTOC)	):				Fill Timer	
Pump Pr	essure Reg	gulator (psi	i):		-		Discharge	e Timer:
Weather	Conditions	:					Cycle:	
Pump on	time:						Pump off	time:
WATER	QUALITY	PARAMET	ERS				/	
Probe Ma	ake and Mo	odel:					Bump Te	st Date and Time:
Time	Volume (L)	SWL (mbtoc)	Temp (°C)	EC (µS/cm)	Redox (mV)	DO (mg/L)	pH (units)	Comments (colour, turbidity, odour, sheen etc.)
-	-				-/		-	
-	1				/			
	-			/				
				/	-	-	-	
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	-/-			6	-		-	
	1						-	
	1					-	-	
and	bilisation ra	ande.	-			-		
CELL OF LEATING A PLAN	secutive re		±0.2°C	±3%	±20mV	±10%	±0.2	
HABITED AND AND AND AND	COMMEN	的基础是有限的主要的自己的现在分词	NATION	s.			1	
-	NO	MONI	DRIN	6 C	mpl	EVED		were)
	wen	INA	ecess	IBLE	(VEH	ice	OVER	neup
SIGNAT		Thetop	iniaia	~	4			
	V	1	1					



Site Address Client: Field Staff:		V MANA				CI-1	Job Mumal	or: E36160									
Field Staff:	11/100			TERTHO	OTE N	ISM		er: E26160 0/08/2024									
i leiu Stall.	alty	RENN	07	,			Sampling	Location ID BHIOM-R									
Wall Lanatic				1 02-2	1	201	Round No: 2										
Well Location	50. 300	and here the second	Groundwat		urface Wa	lan	DStormwa										
SAMPLING	POINT		Groundwar	er La	ourrace wa	lter	LIStormwa	aler LiO(ner.									
Well Installa			1. 1	- 10			Stick up /	down (m):) 5.13 (+ above ground - below ground)									
Initial Well D				2023				(+ above ground - below ground) erval (mBTOC): 5-9 - 8-9									
							A COMPANY OF A COM	SWL (mBTOC): $4 \cdot 43$ .									
Previous Sa		Jate: 26	1101	2023			Previous a	SWL (MBTOC): 4345.									
PID READI																	
PID Headsp				_	_		РІД Васко	ground (ppm): Ø . /									
PID Breathin		e (ppm):	0.1		_		-										
PRE PURG		DTOOL	* 0				Mall I I and										
Total Well D			8.90				Well Head	UCondition: Good . umn (m): 4-9									
SWL (mBTC			CAPRON	e (peu)		-	water Col	unin (m). 4 - 1									
PHASE SEP			CARBON	S (PSH)			DOLLA	ally Confirmed (Dailor)									
Depth to PS							PSH VISU	ally Confirmed (Bailer): CHECKED									
PSH Thickn				_	_			- A NOT IDENTIFIED									
PURGE AN		LE	-		-		0.1	- Polis									
Sampling M			Bladde	r l	Peristalti		Submersib										
Depth of Pu				_			Fill Timer:										
Pump Press							Discharge	Timer:									
Weather Co		FINE	E/SUNN	4			Cycle:										
Pump on tin		/	/	-	_	_	Pump off	time:									
WATER QU			ERS				-										
Probe Make						-	1	st Date and Time:									
Time	Volume (L)	SWL (mbtoc)	Temp (°C)	EC (µS/cm)	Redox (mV)	DO (mg/L)	pH (units)	Comments (colour, turbidity, odour, sheen etc.)									
			21.22			4.72		NO ODUR / SHEEN,									
			21.15			4-81	5.55	NO ODUR / SHEEN,									
			21,14		92.7	4.84		(									
			21.18	411	92.9	4-85	5-52										
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And the second state of th	sation ra	inge:					1.1.1										
Stabilis		adings	±0.2°C	±3%	±20mV	±10%	±0.2										

1



								eiaustralia
Site Addr	ess: / /	ENG	Sr, He	ATHCOS	E NISW	,	Job Numb	er: E26160
Client:	DUFFY	KEN	NEDY	211 PLCOV				0/06/2024
	f: Joer	11					Sampling	Location ID BUITM-1
	ation: eEr		JANEST	Bour	army.		Round No	
MEDIUM			Groundwat		Surface Wa	ater		
	IG POINT				~			
	allation Dat	And the second second	06 /	2024			Stick up r	down (m): O · ( (+ above ground - below ground)
	I Depth (m		101	27				terval (mBTOC): 3, 0 - 6.0
	Sampling		10.					SWL (mBTOC): N/A .
PID REA		Sulo. N	109.				1100000	
	ispace (pp	m): 0	2 .				PID Back	ground (ppm): O. 2
	thing Space						I ID Dacky	
PRE PUF		e (ppin).	0.2	_				
10.96.96 D. 16. 196.6	II Depth (m	BTOCH	6.0				Woll Hoor	Condition: 600
SWL (mE		3.4	0.0				A COLORADO A COLORADO	
	SEPARATE	the second s					I valer Co	umm (m). 2-6
			JCARDON	5 (F3H)				ally Confirmed (Bailer): CHECHED
	PSH (mBT		_				FOR VISU	
	kness (mn		•					- A NOT identifien.
V 32.6 3 March 19		LE			Denier III		10k	
and the second se	g Method	(mDTOC	Bladde	r j	Peristalti	c L	Submersit	
	Pump Inle						Fill Timer:	
	essure Reg						Discharge	e limer:
	Conditions	: rin	e / s	undy	1		Cycle:	
Pump on		-					Pump off	time:
	QUALITY		FERS	_		_	-	
Probe Ma	ake and Mo				1			st Date and Time:
Time	Volume	SWL	Temp	EC (µS/cm)	Redox	DO	pH (unite)	Comments (colour, turbidity, odour, sheen etc.)
	(L)	(mbtoc)	(°C)	- F	(mV)	(mg/L)	(units)	
é			19.51	512	110.1	3.11	4.91	NO ODOUR / SHEEN,
		-	19.50		112.2		4.85	NO OIDUR / SHEEN,
		-	19.44	441	113.4		4.82	
-			19.42	475	115.7	3.2)	4.01	
				-	-			
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	1.1.1.1.1.1							
					-			
			1.	1-2-2		-		
	ilisation ra	inge:	±0.2°C	±3%	±20mV	±10%	±0.2	
Stat	mouton	adinas	10.2 0	13 /0	Tround	10%	10.2	
	secutive re	aumys	2					
3 cons			RVATIONS	S:				
3 cons	secutive re		RVATIONS	5:				
3 cons	secutive re		RVATIONS	5:				
3 cons OTHER (	secutive re COMMENT	TS/OBSE						
3 cons	secutive re COMMENT	TS/OBSE	RVATIONS					

# Appendix G – Chain of Custody and Sample Receipt Documentation

Sheet 1 of 1		-			5	Sampl	e Mati	rix									Æ	Analys	is				-					Comments
Site: Veno Street, Hea	thcote NSW	7	Pr E26	oject No: 160												ENM) Suite				(CrS)	-		lty)					HM A Arsenic Cadmium Chromium Copper
Laboratory:	Envirolab S 12 Ashley S CHATSWOO P: 02 9910 6	treet, DD NSW 2061	7				0.45 μm field filtered		HM <sup>A</sup> /TRH/BTEX/PAHs OCP/OP/PCB/Asbestos	/PAHs	/BTEX				Asbestos Quantification	Excavated Natural Material (ENM) Suite	Suite	oxide		Chromíum Reducible Sulfur (CrS)		pH / CEC (cation exchange)	pH / EC (electrical conductivity)	Sulphate / Chloride			/ PAH	Lead Mercury Nicke! Zinc HM <sup>B</sup> Arsenic Cadmium
Sample	Laboratory	Container	Samp	ling	] .	6	μm fiet	ER	VOP/P(	HM * /TRH/PAHs	НМ <sup>А</sup> /ТRH/ВТЕХ	×	so So	Asbestos	estos Q	vated h	Dewatering Suite	pH / pH peroxide	sPOCAS	míum	s v	CEC (	EC (el	nate / C			TCLP HM <sup>B</sup> / PAH	Chromium Lead Mercury
D		Туре	Date	Time	solL	WATER	0.45	OTHER	,¥ Ω	Ě		втех	vocs	Asbe	Asbe	Exca	Dew	H	04°s	- <del>S</del>	PFAS	/Hq	/Hq	Sulpt	НОГЪ		тсг	Nickel
QT1_20240606	Û.	J	6/06/2024	AM	X					ļ	X					ļ								[	<u> </u>			Dewatering Suite pH & EC
										<u> </u>						<u> </u>												TDS / TDU Hardness
			,		.	<u> </u>	<u> </u>																					Total Cyanide Metals (Al, As, Cd, Cr, Cu, Pb, Hg, Ni, Zn)
						<u> </u>											EŃ	No:	в	Envire	lab Se 12 Asi	rvices loy St						TRH (F1, F2, F3, F4) BTEX
							<u> </u>					<u> </u>								atswoo Rh: fa	d NSV 2) 991(	2067 6200						PAH Total Phenol
	,									•		· .				·	000			67	<u> </u>				[			LABORATORY TURNAROUND
						_											Date Tima	Rece Rece Ved E	ived: 7	[6]	24							X Standard
																	Rece	ved E	V: CIL									24 Hours
																	Cooli		Ambi	ent								48 Hours
								1					ľ				Secu	rty: Uni	action	oken/	None							72 Hours
						_													[									Other
																											_	
Container Type: J = solvent washed, acid i S = solvent washed, acid						ļ	nvestig	ator: I	attest ti	nat the			ere col ng proc			ordanc	e with	standa	rd El fie	eld		R	eport w	rith EI V	Vaste (	Classific	ation T	fable .
S = solvent washed, acid P = natural HDPE plastic VC = glass vial, Tefton Se	bottle -	19				Samp		me (El)	): Sharoi		,		Receiv Print	ved by (	Envirola	- ab):					Samp							
ZLB = Zip-Lock Bag	-provid								sean	Nolan											Plea				_		,	1 0
		Ş	Suite 6.01, 55 PYRMONT I	VSW 2009	l,		ature		5/				Signi Date			,		_					S	<u>ل</u> ت ^	20	66 :69 7-6	47 22	૬.૪
eiausi	ralia	1	Ph: 951 lab@eiaustra		l	Date			6/06/	2024			Date											A	तर	104 7 C	ີ່	15
	LI CIIIC	I	COC June 2021 FOR		I				: atory re	eulte to	. lahé	බත්න	ustral	ia co	m au										-	1-6	-2	-1

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Envirolab Services Pty Ltd ABN 37 112 535 645 12 Ashley St Chatswood NSW 2067 ph 02 9910 6200 fax 02 9910 6201 customerservice@envirolab.com.au www.envirolab.com.au

#### SAMPLE RECEIPT ADVICE

Client Details	
Client	El Australia
Attention	Lab Email

Sample Login Details	
Your reference	E26160 - 1 Veno Street, Heathcote
Envirolab Reference	353462
Date Sample Received	07/06/2024
Date Instructions Received	07/06/2024
Date Results Expected to be Reported	17/06/2024

Sample Condition	
Samples received in appropriate condition for analysis	Yes
No. of Samples Provided	1 Soil
Turnaround Time Requested	Standard
Temperature on Receipt (°C)	8
Cooling Method	Ice Pack
Sampling Date Provided	YES

Comments Nil

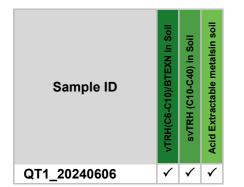
Please direct any queries to:

Aileen Hie	Jacinta Hurst
Phone: 02 9910 6200	Phone: 02 9910 6200
Fax: 02 9910 6201	Fax: 02 9910 6201
Email: ahie@envirolab.com.au	Email: jhurst@envirolab.com.au

Analysis Underway, details on the following page:



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



The ' $\checkmark$ ' 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.

Sheet <u>/</u> of /			5	Sampl	e Mat	rix								_	ļ	Analys	sis									Comments		
Sheet <u>i</u> of 1 Site: 1 VEN MEATHO	10 ST	-	Pro E2	oject No:												Suite												HM A Arsenic Cadmium
	ore .	NSW														(ENM) S				(CrS)			vity)					Chromium Copper Lead
Laboratory:	Envirolab S 12 Ashley S CHATSWO P: 02 9910 (	Street, OD NSW 206	7				d filtered		HM <sup>A</sup> /TRH/BTEX/PAHs OCP/OP/PCB/Asbestos	HM <sup>A</sup> /TRH/BTEX/PAHs	ИВТЕХ				Asbestos Quantification	Excavated Natural Material (ENM)	Suite	oxide		Chromium Reducible Suffur (CrS)		pH / CEC (cation exchange)	pH / EC (electrical conductivity)	hloride			/ PAH	Mercury Nickel Zinc HM B Arsenic Cadmium
Sample ID	Laboratory ID	Container Type	Sampl Date	ing Time	SOIL	WATER	0.45 µm field filtered	OTHER	IM A /TRP	IM <sup>A</sup> /TRH	HM <sup>A</sup> /TRH/BTEX	BTEX	vocs	Asbestos	sbestos C	cavated N	Dewatering Suite	pH / pH peroxide	sPOCAS	hromium f	PFAS	H / CEC (c	H / EC (ele	Sulphate / Chloride			TCLP HM <sup>B</sup> /	Chromium Lead Mercury Nickel
Q7 240620		S, P yc x2	20/6/24	/		7	 /			<u> </u>		ш		A	_∢	ம்		흐	<u>.</u>	0	<u> </u>			ดี		-+	Ĕ	NICKEI
140020		<u> ve x</u> 2																								$\rightarrow$		Dewatering Suite pH & EC TDS / TDU
										-									† —									Hardness Total Cyanide
										_										F	<b>NIROL</b>	AB	Env	irolab 12 A	Service shley S	s St		Metals (Al, As, Cd, Cr, Cu, Pb, Hg, Ni, Zn) TRH (F1, F2, F3, F4)
																					(000)	<del>ب د</del>	Ph:	(02) 9	<del>SW 206</del> 910 620		_	BTEX PAH Total Phenot
																				<u> </u>	ob N	- 35	44	60				LABORATORY
																				D	ate Re ime R	ceive	d: 20	1612	4			
																			_	R	eœive	d By:	vi	<u> </u>				Standard
																					emp. ooling	: ice/	rubier cepad	ίιο°	c			24 Hours
																					ecurit				one			72 Hours
																					* <u>1</u>							Other
																	-											
Container Type: J = solvent washed, acid ri S = solvent washed, acid r	insed, Tefton se insed glass botil	aled glass jar le				In	vestiga	itor: I a	attest th	at thes			ere coll g proce			rdance	with s	tandar	d El fie	id		Re	eport wi	th El W	/aste Cla	issificat	tion Ta	able
P = natural HDPE plastic t VC = glass vial, Tefton Se							er's Nar								nvirolal						Sampl	er's Co	ommer	nts:				
ZLB = Zip-Lock Bag							Ve	ŧL,	hlein	VIN	s E ba				w	as	i											
			ite 6.01, 55 M PYRMONT N	SW 2009	ι,		uure	Jan	ec7	que	نعند	<u> </u>	Signa	ure	3													
eiaust	ralia	la	Ph: 9516 b@eiaustrali		u I	Date	20	79	6/2	24			Date	20/6	124		1500											
Cations Indian Remediation   George Innew Cool June 2021 FORM v5- Envirolab						IMP( Please			:/ itory res	ults to:	lab@	)eiau	strali	a.con	n.au													



Envirolab Services Pty Ltd ABN 37 112 535 645 12 Ashley St Chatswood NSW 2067 ph 02 9910 6200 fax 02 9910 6201 customerservice@envirolab.com.au www.envirolab.com.au

## SAMPLE RECEIPT ADVICE

Client Details	
Client	El Australia
Attention	Joel Heininger

Sample Login Details	
Your reference	E26160
Envirolab Reference	354460
Date Sample Received	20/06/2024
Date Instructions Received	20/06/2024
Date Results Expected to be Reported	25/06/2024

Sample Condition	
Samples received in appropriate condition for analysis	Yes
No. of Samples Provided	1 Water
Turnaround Time Requested	3 days
Temperature on Receipt (°C)	10
Cooling Method	Ice Pack
Sampling Date Provided	YES

Comments Nil

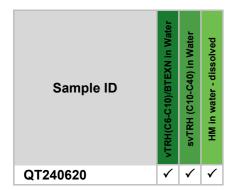
Please direct any queries to:

Aileen Hie	Jacinta Hurst
Phone: 02 9910 6200	Phone: 02 9910 6200
Fax: 02 9910 6201	Fax: 02 9910 6201
Email: ahie@envirolab.com.au	Email: jhurst@envirolab.com.au

Analysis Underway, details on the following page:



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



The ' $\checkmark$ ' 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.

Sheet of 2						S	ample	e Mat	rix										ŀ	Analys	is	_									Comments
	NO St, Heath-cote Project No: E26160 SGS Australia Unit 16, 33 Maddox Street,						×	Ø					(500ml)	ening	Excavated Natural Material (ENM) Suite	discrete	composite gn Materials)				ulfur (CrS)		exchange)	ductivity)				HM A Arsenic Cadmium Chromium Copper Lead Mercury Nickel			
	Unit 16, 33 ALEXANDI		5					0.45 µm field filtered		HM <sup>A</sup> /TRH/BTEX/PAHs OCP/OP/PCB/Asbestos	/TRH/BTEX/PAHs	/TRH/BTEX				Asbestos Quantification (500ml)	Asbestos 10L field screening	Vatural Mate	skpile (s)	Kpile	Suite	oxide		Chromium Reducible Sulfur (CrS)		pH / CEC (cation excha	pH / EC (electrical conductivity)	Sulphate / Chloride	101	HM <sup>8</sup> / PAH	Zinc HM <sup>B</sup> Arsenic Cadmium
Sample	Laboratory	Container		Sampling	)		R.	um fiel	с Ш	/TRH			×	s	stos	istos C	stos 1(	vated 1	ENM Suite - Stoc (TRH/BTEX/PAH	Suite	Dewatering Suite	pH / pH peroxide	sPOCAS	mium	S	CEC (	EC (e	nate / (	H	P HM	Chromium Lead
ID	ID	Туре	Da	ate	Time	SOIL	WATER	0.45 µ	OTHER	HM <sup>A</sup> OCP/	A MH	V WH	BTEX	VOCs	Asbestos	Asbe	Asbe	Exca	ENM (TRH	ENM (HM)	Dew	H/Hd	sPO	Chro	PFAS	/Hd	/ Hd	Sulpl	peer	TCLP	Mercury Nickel
BHI1_02-0,7	1	J.ZLB	6/6,	/24	AM	×				X																				_	Dewatering Suite pH & EC
BHIL_0.6-0.7	2	5	1 1	1	1	I					×																				TDS / TDU Hardness Total Cyanide
BIA12_0.1-0.2	3	5,223								X											_	-				-					Metals (Al, As, Cd, Cr, Cu, Pb, Hg, Ni, Zn)
BH12_04-05		5																	1	1		1	1		·		_		X		TRH (F1, F2, F3, F4) BTEX PAH
Bit13_0.1-6.2		5,2LB		_						X			-			_	4	GS	EHS	Sve	dne	v cc	C		4				_		Total Phenol
BH13_0.5-0.7		5									X								26								-				TURNAROUND
Bi114_01-0.2	6	J, 21B								X								_									-	_		_	Standard
BH14-0.5-0.	67	5		:							×															-	_	_	-	_	24 Hours
BH15_0.2-0.3	8	5,268								X																	-	_		_	48 Hours
BH15-0.6-0.7	2	5									X						-	-	-	-	1	-	-	-	-	-	-	_			72 Hours
Bi-116_0.2-0.3	Ø	5,2LB								X									_	-	_			_	_		-			_	Other
BH16-0.7-6	8	5	+		1	+																							X		
Container Type: J = solvent washed, acid r							In	vestig	ator: I a	attest th	at thes	e sam	ples we		ected in edures.	accor	dance	with st	tandard	El field	d samp	ling			Rep	ort with	El Was	ste Clas	ssificati	on Tab	le
S = solvent washed, acid r P = natural HDPE plastic t	oottle	tile						10.0	ame (El	):					ived by	(SGS):							Sam	oler's C	comme	ents:					
VC = glass vial, Tefton Se ZLB = Zip-Lock Bag		Bulk Bag					Print		ea	~ 1	D.	ola	~	Prin	13	00	32	n													
		5	Suite 6.01	1, 55 Mil ONT NS			Sign	ature	S	1				Sign	ature	C		_													
			Ph:	9516 0	722		Date	6	16	12	4			Date	7	6.	29	-	9:	00											
eiaust	ralia	1	lab@eia	ustralia	.com.au			OR	TAN	r:							-		1												
Contamination   Mamaidae	nnn i Genotecheven	it.	COC Jun	e 2021 FORM	v.5 - SGS		Pleas	e e-ma	ail labor	atory re	sults to	: lab(	@eia	ustral	ia.co	n.au		>	sec	an	+										

Sheet Lof L						Sampl	e Matr	rix										ŀ	Analys	is										Comments
ite: 1 Veno	St, Ha	eathco	10	oject No:				2	4						(Iml)		ENM) Suite	e	composite ign Materials)				(CrS)			ity)				HM ≜ Arsenic Cadmium Chromium Copper
aboratory:	ALEXANDR	alia Maddox Stre RIA NSW 201 0400 F: 02 85	5				0.45 µm field filtered		HM <sup>A</sup> /TRH/BTEX/PAHs OCP/OP/PCB/Asbestos	/TRH/BTEX/PAHs	/TRH/BTEX				Asbestos Quantification (500ml)	Asbestos 10L field screening	Excavated Natural Material (ENM) Suite	ENM Suite - Stockpile discrete (TRH/BTEX/PAHs)	- Stockpile compc EC / Foreign Ma	Suite	oxide		Chromium Reducible Sulfur (CrS)		CEC (cation exchange)	pH / EC (electrical conductivity)	Sulphate / Chloride		HM <sup>B</sup> / PAH	Lead Mercury Nickel Zinc HM <sup>#</sup> Arsenic
Sample	Laboratory	Container	Samp	ling		ĸ	um fiel	ж.	/TRH	TRH		~	10	stos	stos C	stos 10	ated 1	Suite - BTEX	Suite -	Dewatering	pH / pH peroxide	SAS	mium		CEC (	EC (el	ate / C		HW	Cadmium Chromium Lead
ID	ID	Туре	Date	Time	SOIL	WATER	0.45 µ	OTHER	HMA	A MH	V WH	BTEX	VOCs	Asbestos	Asbe	Asbes	Excav	ENM (TRH)	ENM S	Dewa	d / Hd	sPOCAS	Chro	PFAS	H/ Hd	H/Hd	Sulph	Lead	TCLP	Mercury Nickel
BH17_0.2-0.3	11	3,2LB	6/6/24	AV	X				X																					Dewatering Suite
3417_0.5-06	12	5		++	X	-				X																				TDS / TDU Hardness Total Cyanide Metals (Al, As, Cd, Cr,
20-20240606 2R-20240606	13	5,74			-	X	X				X						-			-										Cu, Pb, Hg, Ni, Zn) TRH (F1, F2, F3, F4) BTEX
TB	15	Ve			X							×																		PAH Total Phenol
TS	(6	VE	4	+	×							×																		LABORATOR TURNAROUN Standard 24 Hours
-					-	-																								48 Hours
																														Other
ntainer Type: solvent washed, acid rinsed, Tefton sealed glass jar solvent washed, acid rinsed glass bollle						In	vestiga	tor: I a	ttest that	at thes	e samp	les we	re colle proce		accord	dance v	vith sta	andard	El field	sampli	-	Report with El Waste Classification Table							ie .	
e = natural HDPE plastic bo /C = glass vial, Tefton Sep /LB = Zip-Lock Bag	≃ glass vial, Tefton Septum						Ser's Nar		V	Si			1. S. 7 . L. S. 7	ved by (		4						Sampler's Comments:								
Suite 6.01, 55 Miller Street, PYRMONT NSW 2009 Ph: 9516 0722					et,	Print Sean Bolan Print Bours * Aleace send QT-2 Signature State Date 76.29 9:00 to envirolab. COC									1-2	otto clas														

.



CLIENT DETAIL	s	LABORATORY DETA	AILS	
Contact	Sean Nolan	Manager	Huong Crawford	
Client	EI AUSTRALIA	Laboratory	SGS Alexandria Environmental	
Address	SUITE 6.01 55 MILLER STREET PYRMONT NSW 2009	Address	Unit 16, 33 Maddox St Alexandria NSW 2015	
Telephone	61 2 95160722	Telephone	+61 2 8594 0400	
Facsimile	(Not specified)	Facsimile	+61 2 8594 0499	
Email	sean.nolan@eiaustralia.com.au	Email	au.environmental.sydney@sgs.com	
Project	E26160 1 Veno St, Heathcote	Samples Received	Fri 7/6/2024	
Order Number	E26160	Report Due	Mon 17/6/2024	
Samples	16	SGS Reference	SE266428	

- SUBMISSION DETAILS

This is to confirm that 16 samples were received on Friday 7/6/2024. Results are expected to be ready by COB Monday 17/6/2024. Please quote SGS reference SE266428 when making enquiries. Refer below for details relating to sample integrity upon receipt.

- Sample counts by matrix Date documentation received Samples received without headspace Sample container provider Samples received in correct containers Sample cooling method Complete documentation received
- 15 Soil, 1 Water 7/6/2024 Yes SGS Yes Ice Bricks Yes

Type of documentation received Samples received in good order Sample temperature upon receipt Turnaround time requested Sufficient sample for analysis Samples clearly labelled COC Yes 15.5°C Standard Yes 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 -

2 Soil samples have been placed on hold as no tests have been assigned for them by the client. These samples will not be processed.

This document is issued by the Company under its General Conditions of Service accessible at <u>www.sgs.com/en/Terms-and-Conditions.aspx</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

SGS Australia Pty Ltd ABN 44 000 964 278 Environment, Health and Safety

Unit 16 33 Maddox St PO Box 6432 Bourke Rd BC Alexandria NSW 2015 Alexandria NSW 2015

Australia Australia

a t +61 2 8594 0400 a f +61 2 8594 0499

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#### - CLIENT DETAILS -

Client EI AUSTRALIA

Project E26160 1 Veno St, Heathcote

		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
No.	Sample ID	8	Ŋ	РА Н	PO	P H	НЧ	>	° A
001	BH11_0.2-0.3	30	14	26	11	7	10	11	7
002	BH11_0.6-0.7	-	-	26	-	7	10	11	7
003	BH12_0.1-0.2	30	14	26	11	7	10	11	7
004	BH13_0.1-0.2	30	14	26	11	7	10	11	7
005	BH13_0.5-0.7	-	-	26	-	7	10	11	7
006	BH14_0.1-0.2	30	14	26	11	7	10	11	7
007	BH14_0.5-0.6	-	-	26	-	7	10	11	7
008	BH15_0.2-0.3	30	14	26	11	7	10	11	7
009	BH15_0.6-0.7	-	-	26	-	7	10	11	7
010	BH16_0.2-0.3	30	14	26	11	7	10	11	7
011	BH17_0.2-0.3	30	14	26	11	7	10	11	7
012	BH17_0.5-0.6	-	-	26	-	7	10	11	7
013	QD_20240606	-	-	-	-	7	10	11	7
015	ТВ	-	-	-	-	-	-	11	-
016	TS	_	-	-	-	-	-	11	-

\_ 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 .



#### CLIENT DETAILS

Client EI AUSTRALIA

- SUMMARY OF ANALYSIS -

		oi		
No.	Sample ID	Fibre Identification in soil	Mercury in Soil	Moisture Content
001	BH11_0.2-0.3	3	1	1
002	BH11_0.6-0.7	-	1	1
003	BH12_0.1-0.2	3	1	1
004	BH13_0.1-0.2	3	1	1
005	BH13_0.5-0.7	-	1	1
006	BH14_0.1-0.2	3	1	1
007	BH14_0.5-0.6	-	1	1
008	BH15_0.2-0.3	3	1	1
009	BH15_0.6-0.7	-	1	1
010	BH16_0.2-0.3	3	1	1
011	BH17_0.2-0.3	3	1	1
012	BH17_0.5-0.6	-	1	1
013	QD_20240606	-	1	1
015	тв	-	-	1

Project E26160 1 Veno St, Heathcote

\_ 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 .

6/7/2024



#### CLIENT DETAILS

#### Client EI AUSTRALIA

Project E26160 1 Veno St, Heathcote

SUMMARY	OF ANALYSIS					
No.	Sample ID	Mercury (dissolved) in Water	Trace Metals (Dissolved) in Water by ICPMS	TRH (Total Recoverable Hydrocarbons) in Water	VOCs in Water	Volatile Petroleum Hydrocarbons in Water
014	QR_20240606	1	7	9	11	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 .

## Yin, Emily (Alexandria)

From:	AU.Environmental.Sydney, AU (Sydney)
Sent:	Tuesday, 18 June 2024 1:34 PM
То:	Joel Heininger - ElAustralia
Cc:	Sean Nolan - El Australia; AU.Environmental.Sydney, AU (Sydney);
	AU.SampleReceipt.Sydney, AU (Sydney)
Subject:	RE: [EXTERNAL] RE: Report Job SE266428, your reference E26160 1 Veno St, Heathcote, order number E26160

Hi Joel.

No worries. We'll get both this and SE266429 as per your earlier email booked in for additional testing jobs, 2 day TAT. Hope this helps.

Matthew Tyler Industries & Environment Client Services Officer

SGS Australia Pty Ltd Unit 16, 33 Maddox St Alexandria NSW 2015

Phone: +61 2 8594 0400 Email: <u>matthew.tyler@sgs.com</u> Visit: <u>https://www.sgs.com/en-au</u>



How did we go? Your feedback helps us to improve.

·希望義國國際機械感染的文字。 <u>上述</u> 了二	二、 上於自由國國國際的標準 医原生物 化二乙基乙烯 医弗里尔 医
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	a National die station and alle die station
	ကြည့်သေးက ကြည့်သို့သောကြိုးရှိကြီးသည်။ သက် ကြည်သည်။ သည် ကျည်သည်။
SGS OI NEW VISION	👞 en l'hits i se gestalte ha nor i son a
BECAUSE	
Brotocting omployees and	the covironment by
we Protecting employees and	
CARE promoting a culture of cari	
CARE promoting a culture of cari	ng unougnout sus.
	A start these backings

From: Joel Heininger - ElAustralia <joel.heininger@eiaustralia.com.au> Sent: Tuesday, June 18, 2024 1:29 PM To: AU.Environmental.Sydney, AU (Sydney) <AU.Environmental.Sydney@SGS.com> Cc: Sean Nolan - El Australia <sean.nolan@eiaustralia.com.au> Subject: [EXTERNAL] RE: Report Job SE266428, your reference E26160 1 Veno St, Heathcote, order number E26160

\*\*\* WARNING: this message is from an EXTERNAL SENDER. Please be cautious, particularly with links and attachments. \*\*\*

Good-afternoon SGS,

Could we please request some additional analysis as follows:

Sample ID	Analysis	Turnaround
BH12_0.1-0.2	TCLP – Nickel	48 hour
BH14_0.1-0.2		40 11001



CLIENT DETAIL	S	LABORATORY DETA	ILS	
Contact Client Address	Sean Nolan EI AUSTRALIA SUITE 6.01 55 MILLER STREET PYRMONT NSW 2009	Manager Laboratory Address	Shane McDermott SGS Alexandria Environmental Unit 16, 33 Maddox St Alexandria NSW 2015	
Telephone	61 2 95160722	Telephone	+61 2 8594 0400	
Facsimile	(Not specified)	Facsimile	+61 2 8594 0499	
Email	sean.nolan@eiaustralia.com.au	Email	au.environmental.sydney@sgs.com	
Project	E26160 1 Veno St, Heathcote-Additional	Samples Received	Tue 18/6/2024	
Order Number	E26160	Report Due	Thu 20/6/2024	
Samples	16	SGS Reference	<b>SE266428A</b>	

- SUBMISSION DETAILS

This is to confirm that 16 samples were received on Tuesday 18/6/2024. Results are expected to be ready by COB Thursday 20/6/2024. Please quote SGS reference SE266428A when making enquiries. Refer below for details relating to sample integrity upon receipt.

- Sample counts by matrix Date documentation received Samples received without headspace Sample container provider Samples received in correct containers Sample cooling method Complete documentation received
- 2 Soil 18/6/2024@1:29pm Yes SGS Yes Ice Bricks Yes

Type of documentation received Samples received in good order Sample temperature upon receipt Turnaround time requested Sufficient sample for analysis Samples clearly labelled Email Yes 15.5°C Two Days Yes 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 -

This is the Company its General Conditions of Service at document issued by under accessible Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined www.sgs.com/en/Terms-and-Conditions.aspx. therein.

SGS Australia Pty Ltd ABN 44 000 964 278 Environment, Health and Safety

Unit 16 33 Maddox St PO Box 6432 Bourke Rd Alexandria NSW 2015 Alexandria NSW 2015 Australiat +61 2 8594 0400Australiaf +61 2 8594 0499

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#### CLIENT DETAILS -

Client EI AUSTRALIA

Project E26160 1 Veno St, Heathcote-Additional

- ;	SUMMARY	OF ANALYSIS		
	No.	Sample ID	Metals in TCLP Extract by ICPOES	TCLP (Toxicity Characteristic Leaching
	003	BH12_0.1-0.2	1	6
	006	BH14_0.1-0.2	1	6

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 .

				ed glass jar	Laboratory: SGS Australia SGS Australia P: 02 8594 04 P: 02 8594 04 D D D D D D D D D D D D D	SGS Australia Unit 16, 33 Maddox Street, ALEXANDRIA NSW 2015 P: 02 8594 0400 F: 02 8594 0499 Laboratory Container Type D: Container D: Container	ddox Street, NSW 2015 Container Type Type S, ZLB 6 S, ZLB 6 Suite	Date Date Date 6.01, 55 Miller Ph: 9516 072			The stig 0.45 μm field filtered		HM <sup>A</sup> /TRH/BTEX/PAHs COP/OP/PCB/Asbestos		- S sa HM^ /TRH/BTEX	BTEX	Prince Sign	Asbestos	Asbestos Quantification (50	Asbestos 10L field screenin	Excavated Natural Material	ENM Suite - Stockpile discr (TRH/BTEX/PAHs)	Image: Second	Image: Second	pH / pH peroxide		Chromium Reducible Sulfu			pH / CEC (cation exchange	pH / CEC (cation exchange	Port     pH / CEC (cation exchange)       PH / CEC (cation exchange)     pH / EC (electrical conduct)       Vasie     Sulphate / Chloride	Port with EI Waste Classification and a second seco	Image: Stress of the stress
Image: Second state     Image: Second state       Ima	Image: Second secon	Image: Second secon	Image: Second Secon	Image: Second Secon	SGS Australia Unit 16, 33 Maddox Street, ALEXANDRIA NSW 2015 P: 02 8594 0400 F: 02 8594	ad	dox Street, VSW 2015 F: 02 8594 (	499			filtered				BTEX				antification (500r	field screening	atural Material (E		Stockpile compos		tide			educible Sulfur (0	educible Sulfur (C		tion exchange)	tion exchange)	tion exchange)	tion exchange) strical conductivit
Image: Second secon	Image: Second state     Image: Second state     Solid	Image: Second secon	Image: Second state     Image: Second state     Soll       Image: Second state     Image: Second state     Soll       Image: Second state     0.45 μm field     Other       Image: Second state     Image: Second state     HM <sup>A</sup> /TRH/E       Image: Second state     Image: Second state     Asbestos       Image: Second state     Image: Second state     Asbestos       Image: Second state     Image: Second state     Image: Second state       Image: Second state     Image: Second state     Image: Second state       Image: Second state     Image: Second state     Image: Second state       Image: Second state     Image: Second state     Image: Second state       Image: Second state     Image: Second state     Image: Second state       Image: Second state     Image: Second state     Image: Second state       Image: Second state     Image: Second state     Image: Second state       Image: Second state     Image: Second state     Image: Second state       Image: Second state     Image: Second state     Image: Second state	Image: Second State     Image: Second State       Imag	GS Australia Init 16, 33 Ma LEXANDRIA : 02 8594 04		nddox Street, NSW 2015 10 F: 02 8594 (	1499			filtered				TEX				antification	field screen	tural Mater		tockpile co		ide			educible Su	educible Su		tion exchar	tion exchar trical condu	tion exchar trical condu	tion exchar trical condu loride
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<u>8</u>	<u>8</u>	<u>8</u>	Sa	Sampler's Name (EI):	ptu	1.	Bag			Pri	A In	New ,	5	d,	5		Print	-	'n		2													
		Se	Sa	BB = Bulk Bag			Suite	6.01, 55 Miller	Street,	Sig	mature	S	A		•		Sign	ature	4	H	A													
Suite 6.01, 55 Miller Street,	BB = Bulk Bag Suite 6.01, 55 Miller Street, DVDMONT NSW 2000			- 2	Ph: 9516 072	2	Da	1e 6	6	24				Date	4	5	24			0	3													
Suite 6.01, 55 Miller Street, PYRMONT NSW 2009 Ph: 9516 0722	Suite 6.01, 55 Miller Street, PYRMONT NSW 2009 Ph: 9516 0722	Suite 6.01, 55 Miller Street, PYRMONT NSW 2009 Ph: 9516 0722	Suite 6.01, 55 Miller Street, PYRMONT NSW 2009 Ph: 9516 0722	BB = Buik Bag Suite 6.01, 55 Miller Street, PYRMONT NSW 2009 Ph; 9516 0722 Date 6/6/24 Date 7-6-24	~		laha	lab@eiaustralia.com.au	om.au		ADD DT ALT	1														1								



CLIENT DETAIL	S	LABORATORY DETA	ILS	
Contact Client Address	Sean Nolan EI AUSTRALIA SUITE 6.01 55 MILLER STREET PYRMONT NSW 2009	Manager Laboratory Address	Huong Crawford SGS Alexandria Environmental Unit 16, 33 Maddox St Alexandria NSW 2015	
Telephone	61 2 95160722	Telephone	+61 2 8594 0400	
Facsimile	(Not specified)	Facsimile	+61 2 8594 0499	
Email	sean.nolan@eiaustralia.com.au	Email	au.environmental.sydney@sgs.com	
Project	E26160 1 Veno St Heathcote	Samples Received	Fri 7/6/2024	
Order Number	E26160	Report Due	Mon 17/6/2024	
Samples	3	SGS Reference	<b>SE266429</b>	

- SUBMISSION DETAILS -

This is to confirm that 3 samples were received on Friday 7/6/2024. Results are expected to be ready by COB Monday 17/6/2024. Please quote SGS reference SE266429 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Sample counts by matrix Date documentation received Samples received without headspace Sample container provider Samples received in correct containers Sample cooling method Complete documentation received 3 Soil 7/6/2024 Yes SGS Yes Ice Bricks Yes Type of documentation received Samples received in good order Sample temperature upon receipt Turnaround time requested Sufficient sample for analysis Samples clearly labelled COC Yes 15.5°C Standard Yes 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 -

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SGS Australia Pty Ltd ABN 44 000 964 278 Environment, Health and Safety

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www.sgs.com.au



SE266429

#### CLIENT DETAILS

Client EI AUSTRALIA

Project E26160 1 Veno St Heathcote

SUMMAR	Y OF ANALYSIS		1		1	1	1		
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	BH7M_DL1_0.1-0.2	30	14	26	11	7	10	11	7
002	BH7M_DL2_0.2-0.3	30	14	26	11	7	10	11	7
003	BH7M_DL3_0.1-0.2	30	14	26	11	7	10	11	7

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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 .



#### CLIENT DETAILS

Client EI AUSTRALIA

Project E26160 1 Veno St Heathcote

 SUMMARY	OF ANALYSIS			
No.	Sample ID	Fibre Identification in soil	Mercury in Soil	Moisture Content
001	BH7M_DL1_0.1-0.2	3	1	1
002	BH7M_DL2_0.2-0.3	3	1	1
003	BH7M_DL3_0.1-0.2	3	1	1

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 .

## Yin, Emily (Alexandria)

From:AU.Environmental.Sydney, AU (Sydney)Sent:Tuesday, 18 June 2024 1:32 PMTo:AU.SampleReceipt.GBS, AU (Alexandria)Cc:AU.SampleReceipt.Sydney, AU (Sydney); AU.Environmental.Sydney, AU (Sydney)Subject:FW: [EXTERNAL] RE: Report Job SE266429, your reference E26160 1 Veno St Heathcote,<br/>order number E26160

Hi GBS team.

Please book in A job, 2 day TAT. Thanks.

Matthew Tyler Industries & Environment Client Services Officer

SGS Australia Pty Ltd Unit 16, 33 Maddox St Alexandria NSW 2015

Phone: +61 2 8594 0400 Email: <u>matthew.tyler@sgs.com</u> Visit: <u>https://www.sgs.com/en-au</u>

How did we go? Your feedback helps us to improve.



From: Joel Heininger - ElAustralia <joel.heininger@eiaustralia.com.au> Sent: Tuesday, June 18, 2024 1:25 PM To: AU.Environmental.Sydney, AU (Sydney) <AU.Environmental.Sydney@SGS.com> Cc: Sean Nolan - El Australia <sean.nolan@eiaustralia.com.au> Subject: [EXTERNAL] RE: Report Job SE266429, your reference E26160 1 Veno St Heathcote, order number E26160

\*\*\* WARNING: this message is from an EXTERNAL SENDER. Please be cautious, particularly with links and attachments. \*\*\*

Good-afternoon SGS,

Could you please analyse BH7M\_DL2\_0.2-0.3 for TCLP-Nickel? 48 hour turn-around please.

Kind regards,





SE266429A

Contact	Sean Nolan	Manager	Shane McDermott
Client	EI AUSTRALIA	Laboratory	SGS Alexandria Environmental
Address	SUITE 6.01	Address	Unit 16, 33 Maddox St
	55 MILLER STREET		Alexandria NSW 2015
	PYRMONT NSW 2009		
Telephone	61 2 95160722	Telephone	+61 2 8594 0400
Facsimile	(Not specified)	Facsimile	+61 2 8594 0499
Email	sean.nolan@eiaustralia.com.au	Email	au.environmental.sydney@sgs.com
Project	E26160 1 Veno St Heathcote -Additional	Samples Received	Tue 18/6/2024
Order Number	E26160	Report Due	Thu 20/6/2024
Samples	3	SGS Reference	SE266429A

- SUBMISSION DETAILS -

This is to confirm that 3 samples were received on Tuesday 18/6/2024. Results are expected to be ready by COB Thursday 20/6/2024. Please quote SGS reference SE266429A when making enquiries. Refer below for details relating to sample integrity upon receipt.

- Sample counts by matrix Date documentation received Samples received without headspace Sample container provider Samples received in correct containers Sample cooling method Complete documentation received
- 1 Soil 18/6/2024@1:25pm Yes SGS Yes Ice Bricks Yes

Type of documentation received Samples received in good order Sample temperature upon receipt Turnaround time requested Sufficient sample for analysis Samples clearly labelled Email Yes 15.5°C Two Days Yes 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 -

This is the Company its General Conditions of Service accessible at document issued by under Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined www.sgs.com/en/Terms-and-Conditions.aspx. therein.

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CLIENT DETAILS -

No.

002

Sample ID

BH7M\_DL2\_0.2-0.3

## SAMPLE RECEIPT ADVICE

## Client EI AUSTRALIA E26160 1 Veno St Heathcote -Additional Project - SUMMARY OF ANALYSIS Metals in TCLP Extract by ICPOES TCLP (Toxicity Characteristic Leaching

1

6

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 .

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Laboratory:	SGS Australia Unit 16, 33 Ma ALEXANDRIA P: 02 8594 040	SGS Australia Unit 16, 33 Maddox Street, Unit 16, 33 Maddox Street, ALEXANDRIA NSW 2015 P: 02 8594 0400 F: 02 8594 0499	lreet, 015 8594 0499				filtered			BTEX/PAHs	BTEX				ation exchange)		strical conductiv	25	'S	P	s	Suite	Mandatory Para		NADTER OWER C	OLVED C	OLVED C									10-11-1-	Major Alkalın hydrox RedOx TDS / N Dissolv Hardne	Major Anions Alkalinity (bic hydroxide & t RedOx potent TDS / NTU / T Dissolved Oxy Hardness	Major Anions / Major Cations, Alaliotity (bicarbonate, carbonate, hydroxide & tota) RedOx potentia) TUS / NTU / TSS / TOC / SAR Disolved Oxygen Hardness
			Sar	nolina			field			_	TRH/				C (c		(ele	ticide	ticide		heno	ring	-		0	55	55									0.2	Cu, Fe,	Cu, Fe, Pb, L),	Metals (A), Sb, As, Ba, Be, B, Cd, Cr, Co, Cu, Fe, Pb, Li, Mn, Hg, Mo, Ni, Se, Si, Ag,
Sample	Laboratory	Container	2	sampling Time	OIL	ATER	15 µm 1		THER		M ^ /T	TEX	OCs	AS	I/ CEC		1/EC	C Pest	P Pesti	CBs	tal Phe	ewateri		-	EDI	A	A.	-								12.00	SI, U, V	Sr. U. V. Zn) Nitrogen and	Sr, U, V, Zn) Nitrogen and Phosphorous
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P = natural HDPE plastic bottle	oottle					Sam	pler's l	Sampler's Name (EI)	(EI):					Rece	Received by (SGS)	y (SGS	S)							Sa	mpler	's Co	Sampler's Comments:	ents:											
ZLB = Zip-Lock Bag		BB = Bulk Bag				Print	2	Del	1	E	2	ENINGER	4	Print	nt									-	DPIE S	uite C	lite Quot	Refe	ence	EIA	U-IE	- DE	C 23		23	231011	DPIE Suite Quote Reference: EI AU - IE - DEC 23 - 231011MK	231011MK	231011MK
eiaustralia	<u>n</u>		Suite 6.01, 55 Miller Street, PYRMONT NSW 2009 Ph: 9516 0722 lab@eiaustralia.com.au	PYRMONT NSW 2009 PYRMONT NSW 2009 Ph: 9516 0722 lab@eiaustralia.com.au		Signa Date	Signature Date	Signature Date 20	10 21	621	0 eC	NSC: 9	nor have		Signature Date	0	6	M			5:1	5	LM &																

# SGS EHS Sydney COC SE267083



CLIENT DETAILS	3	LABORATORY DETA	NLS
Contact	Joel Heininger	Manager	Shane McDermott
Client	EIAUSTRALIA	Laboratory	SGS Alexandria Environmental
Address	SUITE 6.01 55 MILLER STREET PYRMONT NSW 2009	Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	61 2 95160722	Telephone	+61 2 8594 0400
Facsimile	(Not specified)	Facsimile	+61 2 8594 0499
Email	joel.heininger@eiaustralia.com.au	Email	au.environmental.sydney@sgs.com
Project	E26160 1 Veno Street Heathcote NSW	Samples Received	Thu 20/6/2024
Order Number	E26160	Report Due	Tue 25/6/2024
Samples	7	SGS Reference	SE267083

SUBMISSION DETAILS

This is to confirm that 7 samples were received on Thursday 20/6/2024. Results are expected to be ready by COB Tuesday 25/6/2024. Please quote SGS reference SE267083 when making enquiries. Refer below for details relating to sample integrity upon receipt.

- Type of documentation received Samples received in good order Sample temperature upon receipt Turnaround time requested Sufficient sample for analysis Samples clearly labelled
- COC Yes 8.5°C Three Days Yes Yes

Date documentation received Samples received without headspace Sample container provider Samples received in correct containers Sample cooling method Complete documentation received 20/06/2024 Yes SGS Yes Ice Bricks 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

Micros subcontracted to Symbio Laboratories, 2 Sirius Road, Lane Cove West NSW 2066, NATA Accreditation Number 2455.

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SGS Australia Pty Ltd ABN 44 000 964 278 Environment, Health and Safety

Unit 16 33 Maddox St PO Box 6432 Bourke Rd BC Alexandria NSW 2015 Alexandria NSW 2015 Australiat +61 2 8594 0400Australiaf +61 2 8594 0499

www.sgs.com.au



#### CLIENT DETAILS

Client EI AUSTRALIA

Project E26160 1 Veno Street Heathcote NSW

SUMN	IARY OF ANALYSIS									
Ν	o. Sample ID	Anions by Ion Chromatography in Water	Nitrite in Water	PAH (Polynuclear Aromatic Hydrocarbons) in Water	TKN Kjeldahl Digestion by Discrete Analyser	Total Phenolics in Water	TRH (Total Recoverable Hydrocarbons) in Water	VOCs in Water	Volatile Petroleum Hydrocarbons in Water	
001	BH2M-2	-	-	22	-	1	9	77	7	
002	BH10M-2	3	2	22	2	1	9	77	7	
003	BH17M-1	-	-	22	-	1	9	77	7	
004	QD240620	-	-	-	-	-	9	11	7	
005	QR240620	-	-	-	-	-	9	11	7	
006	QTS240620	-	-	-	-	-	-	11	-	
007	QTB240620	-	-	-	-	-	-	11	-	

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#### CLIENT DETAILS

Client EI AUSTRALIA

Project E26160 1 Veno Street Heathcote NSW

SUMMAR'	Y OF ANALYSIS			1		1		1	1	1	
No.	Sample ID	Alkalinity	Ammonia Nitrogen by Discrete Analyser	Conductivity and TDS by Calculation - Water	Dissolved Oxygen by Membrane Electrode	Filterable Reactive Phosphorus (FRP)	Forms of Carbon	pH in water	Total and Volatile Suspended Solids (TSS /	Total Dissolved Solids (TDS) in water	Total Phosphorus by Kjeldahl Digestion DA in
001	BH2M-2	-	-	2	2	-	-	1	-	-	-
002	BH10M-2	7	1	2	2	1	1	1	1	1	1
003	BH17M-1	-	-	2	2	-	-	1	-	-	-

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#### CLIENT DETAILS

Client EI AUSTRALIA

SUMMARY OF ANALYSIS

Project E26160 1 Veno Street Heathcote NSW

	0.7.0.2.0.0					
No.	Sample ID	Mercury (dissolved) in Water	Metals in Water (Dissolved) by ICPOES	Redox Potential (Eh) in water	Trace Metals (Dissolved) in Water by ICPMS	Turbidity
001	BH2M-2	1	-	2	7	-
002	BH10M-2	1	8	2	21	1
003	BH17M-1	1	-	2	7	-
004	QD240620	1	-	-	7	-
005	QR240620	1	-	-	7	-

CONTINUED OVERLEAF



CLIENT DETAILS

## SAMPLE RECEIPT ADVICE

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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 .

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aboratory:	Envirolab So 12 Ashley So CHATSWOO P: 02 9910 6	treet, DD NSW 206	57	1		-		d filtered	,	HM <sup>A</sup> /TRH/BTEX/PAHs OCP/OP/PCB/Asbestos	HM <sup>A</sup> /TRH/BTEX/PAHs	(IBTEX		1		Asbestos Quantification	Excavated Natural Material (ENM)	Suite	зхіde		Chromium Reducible Sulfur (CrS)		pH / CEC (cation exchange)	pH / EC (electrical conductivity)	thoride		/ PAH	Lead Mercury Nickel Zinc HM <sup>®</sup> Arsenic Cadmium
Samp <b>!e</b> ID	Laboratory ID	Container Type	Da	Samplin ite	ng Tíme	soll	WATER	0.45 µm field filtered	OTHER	HM <sup>A</sup> /TRH	HM <sup>A</sup> /TRH	HM <sup>A</sup> /TRH/BTEX	втех	vocs	Asbestos	Asbestos C	xcavated	Dewatering Suite	pH / pH peroxide	sPOCAS	Chromium	PFAS	H / CEC (	h / EC (el	Sutphate / Chtoride		TCLP HM <sup>B</sup> /I	Chromlum Lead Mercury Nickel
<u><u><u></u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u>					Pm	×						×																Dewatering Suite pH & EC TDS / TDU Hardness Total Cyanide Metals (AI, As, Cd, Cr, Cu, Pb, Hg, Ni, Zn) TRH (F1, F2, F3, F4) BTEX PAH TOtal Phenol LABORATORY TURNAROUND Standard 24 Hours 48 Hours 72 Hours Other
Container Type: = solvent washed, acid I = solvent washed, acid I = natural HDPE plastic Ce glass vial, Tefton Se 1B = Zip-Lock Bag	rinsed glass botil bottle	le Su Ia	PYRMO Ph: ab@eiai	ONT NS 9516 0 ustralia	iller Stre SW 2009 0722 a.com.a x5-Emirolao	iu	Sample Print Signa Date	er's Nar Sa iture		1		<u>s</u>		g proce Receiv Print Signa Date	edures. ed by (E ture	nvirolat		with s	tandaro			Sample				2		Envirolab Service Straints OL BLSwood NSW20 Ph. (02) St Ph. (02) S

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Site:   Veno St	, Healho	ote	Proj E26	ect No: VGO												(ENM) Suite				Sulfur (CrS)		()	ivity)					HM & Arsenic Cadmium Chromium Copper Lead
Laboratory:	Envirolab S 12 Ashley S CHATSWOO P: 02 9910 6	itreet, OD NSW 206	7				0.45 µm fie!d filtered		HM <sup>A</sup> /TRH/BTEX/PAHs OCP/OP/PCB/Asbestos	HM <sup>A</sup> /TRH/BTEX/PAHs	/ТКН/ВТЕХ				Asbestos Quantification	Excavated Natural Material (ENM) Suite	Dewatering Sulte	roxide		Chromium Reducible Sulfu		(cation exchange)	pH / EC (electrical conductivity)	' Chlaride			HB / PAH	Mercury Nickel Zinc HM <sup>B</sup> Aršenic Cadmium Chadmium Chromium
Sample	Laboratory ID	Container Type	Samp!i	<u> </u>		WATER	ыт fie	OTHER	1 <sup>A</sup> /TRI	_ ≜^ ЛR	HM <sup>A</sup> /TRI	втех	vocs	Asbestos	bestos	cavated	ewaterin	pH / pH peroxide	sPOCAS	Iromiun	PFAS	pH / CEC (	1/EC (	Sulphate /			TCLP HM	Lead Mercury Nickel
			Date	Time	soil	MA	0.45	6	₹ö	ЧН	Ĩ	B	8	As	As	ŭ	ă	<u> </u>	5	<u>ð</u>		古	<u> </u>	ns.				inc.c.
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				<u> </u>		ļ	ļ	ļ							<b> </b>		<b> </b>	_										TDS / TDU Haidness Total Cyanide
															<u> </u>									<b></b>	·			Metals (Al, As, Cd, Cr, Cu, Pb, Hg, Ni, Zn)
						<u> </u>					<u> </u>			<u> </u>	<u> </u>		ļ	<u> </u>	<u> </u>		 		-	ļ				TRH (F1, F2, F3, F4) BTEX PAH
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Container Type: J = solvent washed, acid	rinsed, Tefton s	sealed glass jar	<u> </u>	<u> </u>	<u> </u>	- <del> </del>	l nvestig	jator: 1	attest t	l hat the	ise san	ı nples v sampli	vere co ing pro	liected cedure	l in acc s.	ordano	e with	standa	ard El f	elđ		F	leport v		Waste	Classi	iceciant 1	ab Services
S = solvent washed, acid P = natural HDPE plastic	bottie	otlie						ame (El	):	_				ived by			_				Sam	pler's (	Comme	ents		Chat	517000	I NSW 2067 9910 6230
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To the one life in	elaustralia	in the second se		ZLB = Zip-Lock Bag	P = natural HDPE plastic bottle	Container Type: J = solvent washed, acid rinsed, Tefton sealed glass jar S = solvent washed acid rinsed class bottle	BH8_0.1-0.2	817-050.	BH7-0.20:	816-0.2-0.3	BH5_0.80.0	BH5-0.3-0.4	BH4_0.6-0.	814-0304	SH3_0.7-0!	813-03-04	BH2_0.2-0.	BH1_0.20	a	Sample	Laboratory:	site: Jeno S	
pet 1 Gestionerse	ralla	-		BB = Bulk Bag	ottle	nsed, Tefton sealed g	125	1 9	10 7	97	8	22	761	9	5 4 5	3	2 2 -1	3 - 5		Laboratory Co	SGS Australia Unit 16, 33 Maddox Street, ALEXANDRIA NSW 2015 P: 02 8594 0400 F: 02 8594 0499	Vero St, Heash-cote	
nr 303	lab@eia	Ph	Suite 6.0	9		lass jar	248	~1	268	ST2	4	22	4	218	1	25	248	31 972		Container	dox Street, SW 2015 F: 02 8594 04	cote	
COC June 2021 FORM v.5 - SGS	ab@eiaustralia.com.au	Ph: 9516 0722	Suite 6.01, 55 Miller Street, PYRMONT NSW 2009				4											10 AM	Date Time	Sampling	66	Froject No:	
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Pleas	IMP	Date	Sign	Print	Samp	_	1	-				-			-			-	WATE	ER			Condense and the
Please e-mail laboratory results to: lab@eiaustralia.com.au	<b>IMPORTANT</b>	õ	Signature	Secu	Sampler's Name (EI):	Investigator: I attest that these samples were collected in accordance with standard EI field sampling procedures.													0.45	ım fie	ld filtered		
labora	ANT	10	S	3	me (EI):	ator: I a													отн	ER			
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	and	9	ane	5	Sampler's Comments	R	-	-				P	3	CCC ENC Sudney COC	-	-	-	-	PFAS		Neucone Suite	(013)	
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		20	<u>.</u>	7		assifica								-			-	-	Lead				
		change	3 8	00		Report with EI Waste Classification Table													TCLP	РНМ	<sup>B</sup> / PAH		
		and all		20221017		ble		Other	72 Hours	48 Hours	24 Hours	Standard	LABORATORY	Total Phenol	TRH (F1, F2, F3, F4) BTEX	Metals (Al, As, Cd, Cr, Cu, Pb, Hg, Ni, Zn)	TDS / TDU Hardness	Dewatering Suite pH & EC	Mercury Nickel	Chromium	Mercury Nickel Zinc HM <sup>g</sup> Assenic	HM A Arsenic Cadmium Chromlum Copper Lead	Commune

Sheet Lof				Sample Matrix	le Mat	trix										P	Analysis	Sis										_	Comments
sile: 1 Veno St, Heathcore	Alucote	Project No: E26.60	<u>Ö</u>											ENM) Suite		site	terials)				(CrS)			ity)				000>=	HM A Arsenic Cadmium Copper
Laboratory: SGS Australia Unit 16, 33 Ma ALEXANDRIA P: 02 8594 040	SGS Australia Unit 16, 33 Maddox Street, ALEXANDRIA NSW 2015 P: 02 8594 0400 F: 02 8594 0499	0499			filtered		BTEX/PAHs B/Asbestos	BTEX/PAHs	BTEX				antification	atural Material (E	Stockpile discret	PAHs) Stockpile compo	C / Foreign Mat	Suite	kide		educible Sulfur (	OLD	ation exchange)	ctrical conductivi	loride		PAH		Lead Mercury Nickel Zinc HM <sup>®</sup>
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ID ID	Type	Date, Time	SOIL	VATER	).45 μπ	OTHER			HM ^ /	BTEX	VOCs	Asbest	Asbest	xcava	ENM SI	TRH/B		Dewate	pH/pH	sPOCA	Chrom	PFAS	pH / Cl	pH/E	Sulphat	ead	TCLP		Lead Mercury
RH9 0.1-02 13	5 ZLB 11	sho PM		1									-	-	1			-	-			-		1		-	-	_	Dewatering Suite
0-02-02	1	6/10	X					X	-				-	-	_	_		_	_							-		3 2 3	TDS / TDU Hardness
5	1,248 1	0/18	X				X									_												237	Total Cyanide Metals (Al, As, Cd, Cr, Cu, Pb, Hg, Ni, Zn)
BH1-0506	5 18	3/10	X													-	-					X						8 2	TRH (F1, F2, F3, F4) BTEX
BH2M_0.5-0.6	5 18	0	X										-			_	-					×						T P	PAH Total Phenol
BH6 0.60.7	5 18	5/0	X													_						X							LABORATORY
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849-0.70.8	2 10	0/6	×									-										X							24 Hours
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Container Type: J = solvent washed, acid rinsed, Tefton sealed glass jar	aled glass jar			-	nvestig	jator: I	attest	hat the	se sar	nples v sampl	Investigator: I attest that these samples were collected in accordance with sampling procedures.	ollecte	d in ac es.	cordar	ICE wit		standard El field	I field				Rep	ort with	EIWE	aste Cl	assific	Report with EI Waste Classification Table	able	
P = natural HDPE plastic bottle	đ			Samp	ler's Na	Sampler's Name (EI)					Rece	Received by (SGS)	(SGS)						(0)	ampl	er's Co	Sampler's Comments	nts;						
VC = glass vial, Tefton Septum ZLB = Zip-Lock Bag BB = Bulk Bag	ulk Bag			Print	S	69	Z.	dola	S		R	2	Sdr.	Se	)														
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elaustralla	co	COC June 2021 FORM v 5 - SGS	n.au	IMP	ORT	IMPORTANT: Please e-mail laborate	atory re	sults to	labi	Deia	IMPORTANT: Please e-mail laboratory results to: lab@eiaustralia.com.au	ia co	mal		6	27													



CLIENT DETAILS	3	LABORATORY DETA	NILS
Contact	Sean Nolan	Manager	Huong Crawford
Client	EIAUSTRALIA	Laboratory	SGS Alexandria Environmental
Address	SUITE 6.01 55 MILLER STREET PYRMONT NSW 2009	Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	61 2 95160722	Telephone	+61 2 8594 0400
Facsimile	(Not specified)	Facsimile	+61 2 8594 0499
Email	sean.nolan@eiaustralia.com.au	Email	au.environmental.sydney@sgs.com
Project	E26160 1 Veno St, Heathcote	Samples Received	Thu 19/10/2023
Order Number	E26160	Report Due	Thu 26/10/2023
Samples	19	SGS Reference	SE255412

SUBMISSION DETAILS

This is to confirm that 19 samples were received on Thursday 19/10/2023. Results are expected to be ready by COB Thursday 26/10/2023. Please quote SGS reference SE255412 when making enquiries. Refer below for details relating to sample integrity upon receipt.

- Sample counts by matrix Date documentation received Samples received without headspace Sample container provider Samples received in correct containers Sample cooling method Complete documentation received
- 18 Soil, 1 Water 19/10/2023 Yes SGS Yes Ice Bricks Yes

Type of documentation received Samples received in good order Sample temperature upon receipt Turnaround time requested Sufficient sample for analysis Samples clearly labelled COC Yes 13.5°C Standard Yes 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 -

5 Soil samples have been placed on hold as no tests have been assigned for them by the client. These samples will not be processed.

This document is issued by the Company under its General Conditions of Service accessible at <u>www.sgs.com/en/Terms-and-Conditions.aspx</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

SGS Australia Pty Ltd ABN 44 000 964 278 Environment, Health and Safety

Unit 16 33 Maddox St PO Box 6432 Bourke Rd BC Alexandria NSW 2015 Alexandria NSW 2015

5 Australia 5 Australia

tralia t +61 2 8594 0400 tralia f +61 2 8594 0499

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#### CLIENT DETAILS

Client EI AUSTRALIA

SUMMARY OF ANALYSIS

Project E26160 1 Veno St, Heathcote

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	BH1_0.2-0.3	30	14	26	11	7	10	11	7
002	BH2_0.2-0.3	30	14	26	11	7	10	11	7
003	BH3_0.3-0.4	30	14	26	11	7	10	11	7
004	BH3_0.7-0.8	-	-	26	-	7	10	11	7
005	BH4_0.3-0.4	30	14	26	11	7	10	11	7
006	BH4_0.6-0.7	-	-	26	-	7	10	11	7
007	BH5_0.3-0.4	30	14	26	11	7	10	11	7
008	BH5_0.8-0.9	-	-	26	-	7	10	11	7
009	BH6_0.2-0.3	30	14	26	11	7	10	11	7
010	BH7_0.2-0.3	30	14	26	11	7	10	11	7
011	BH7_0.5-0.6	-	-	26	-	7	10	11	7
012	BH8_0.1-0.2	30	14	26	11	7	10	11	7
013	BH9_0.1-0.2	30	14	26	11	7	10	11	7
014	BH10_0.2-0.3	-	-	26	-	7	10	11	7
015	BH10_0.5-0.6	30	14	26	11	7	10	11	7
016	QD_20231017	-	-	-	-	7	10	11	7
018	QTB1	-	-	-	-	-	-	11	-
019	QTS1	-	-	-	-	-	-	11	_

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 .



#### CLIENT DETAILS

Client EI AUSTRALIA

SUMMARY OF ANALYSIS

Project E26160 1 Veno St, Heathcote

001111/0111				
No.	Sample ID	Fibre Identification in soil	Mercury in Soil	Moisture Content
001	BH1_0.2-0.3	2	1	1
002	BH2_0.2-0.3	2	1	1
003	BH3_0.3-0.4	2	1	1
004	BH3_0.7-0.8	-	1	1
005	BH4_0.3-0.4	2	1	1
006	BH4_0.6-0.7	-	1	1
007	BH5_0.3-0.4	2	1	1
008	BH5_0.8-0.9	-	1	1
009	BH6_0.2-0.3	2	1	1
010	BH7_0.2-0.3	2	1	1
011	BH7_0.5-0.6	-	1	1
012	BH8_0.1-0.2	2	1	1
013	BH9_0.1-0.2	2	1	1
014	BH10_0.2-0.3	-	1	1
015	BH10_0.5-0.6	2	1	1
016	QD_20231017	-	1	1
018	QTB1	-	-	1

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 .



#### CLIENT DETAILS

#### Client EI AUSTRALIA

SUMMARY OF ANALYSIS

Project E26160 1 Veno St, Heathcote

No.	Sample ID	Mercury (dissolved) in Water	Trace Metals (Dissolved) in Water by ICPMS	TRH (Total Recoverable Hydrocarbons) in Water	VOCs in Water	Volatile Petroleum Hydrocarbons in Water
017	QR_20231017	1	7	9	11	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 .

## Yin, Emily (Sydney)

From: Sent: To: Cc: Subject:	Sean Nolan - El Australia <sean.nolan@eiaustralia.com.au> Wednesday, 1 November 2023 11:06 AM AU.Environmental.Sydney, AU (Sydney); AU.SampleReceipt.Sydney, AU (Sydney) Joel Heininger - ElAustralia [EXTERNAL] RE: Report Job SE255412, your reference E26160 1 Veno St, Heathcote, order number E26160</sean.nolan@eiaustralia.com.au>
Follow Up Flag:	Follow up
Flag Status:	Flagged

\*\*\* WARNING: this message is from an EXTERNAL SENDER. Please be cautious, particularly with links and attachments. \*\*\*

### Good morning SGS,

Could we please test for pH and CEC for the following samples:

- BH2\_0.2-0.3
- BH5\_0.3-0.4
- BH9\_0.1-0.2

For a 3-day TAT?

Thanks and kind regards,

Sean Nolan Environmental Scientist SafeWork NSW Licensed Asbestos Assessor

**T** (02) 4254 1004 **M** 0430 468 538 **E** <u>sean.nolan@eiaustralia.com.au</u>

Suite 126, Level 1 1 Burelli Street Wollongong, NSW 2500

www.eiaustralia.com.au





## Environmental | Geotechnical | Structural | Civil | Hazardous Materials

El Australia is a proud member of the Australian Contaminated Land Consultants Association and the Australian Geomechanics Society.

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Please consider the environment before printing this email.

From: AU.Environmental.Sydney@SGS.com [mailto:AU.Environmental.Sydney@SGS.com]
Sent: Thursday, 26 October 2023 4:19 PM
To: Laboratory Results - EIAustralia; Sean Nolan - EI Australia
Subject: Report Job SE255412, your reference E26160 1 Veno St, Heathcote, order number E26160

**Caution:** This email originated from outside your organization and might have suspicious subject or content. PLEASE DO NOT CLICK ANY LINKS AND/OR OPEN ANY ATTACHEMENTS UNLESS YOU CAN CONFIRM THE SENDER.



ontact	Sean Nolan	Manager	Huong Crawford
Client	EI AUSTRALIA	Laboratory	SGS Alexandria Environmental
Address	SUITE 6.01 55 MILLER STREET PYRMONT NSW 2009	Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	61 2 95160722	Telephone	+61 2 8594 0400
Facsimile	(Not specified)	Facsimile	+61 2 8594 0499
Email	sean.nolan@eiaustralia.com.au	Email	au.environmental.sydney@sgs.com
Project	E26160 1 Veno St, Heathcote -Addtional	Samples Received	Wed 1/11/2023
Order Number	E26160	Report Due	Mon 6/11/2023
Samples	19	SGS Reference	SE255412A

This is to confirm that 19 samples were received on Wednesday 1/11/2023. Results are expected to be ready by COB Monday 6/11/2023. Please quote SGS reference SE255412A when making enquiries. Refer below for details relating to sample integrity upon receipt.

- Sample counts by matrix Date documentation received Samples received without headspace Sample container provider Samples received in correct containers Sample cooling method Complete documentation received
- 3 Soil 1/11/2023@11:06am Yes SGS Yes Ice Bricks Yes

Type of documentation received Samples received in good order Sample temperature upon receipt Turnaround time requested Sufficient sample for analysis Samples clearly labelled Email Yes 13.5°C Three Days Yes 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 -

This document is issued by the Company under its General Conditions of Service accessible at <u>www.sqs.com/en/Terms-and-Conditions.aspx</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

SGS Australia Pty Ltd ABN 44 000 964 278 Environment, Health and Safety

Unit 16 33 Maddox St PO Box 6432 Bourke Rd BC Alexandria NSW 2015 Alexandria NSW 2015 Australiat +61 2 8594 0400Australiaf +61 2 8594 0499

) www.sgs.com.au



#### CLIENT DETAILS

#### Client EI AUSTRALIA

SUMMARY OF ANALYSIS

Project E26160 1 Veno St, Heathcote -Addtional

Sample ID	Exchangeable Cations and Cation Exchange Capacity	Moisture Content	pH in soil (1:5)
BH2_0.2-0.3	13	1	1
BH5_0.3-0.4	13	1	1
BH9_0.1-0.2	13	1	1
	BH2_0.2-0.3 BH5_0.3-0.4	BH2_0.2-0.3         13           BH5_0.3-0.4         13	BH2_0.2-0.3     13     1       BH5_0.3-0.4     13     1

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 .

Sheet of						S	ample	Mat	ix										A	Analys	is										Comment
Site: Vero	St,  -	teathco	ite	Project E261												(Im		(ENM) Suite		site arials)				CrS)			()				HM A Arsenic Cadmium Chromium Copper
Laboratory:	ALEXAND	alia Maddox Stro RIA NSW 201 0400 F: 02 8	5					0.45 µm field filtered		/BTEX/PAHs CB/Asbestos	/ITRH/BIEX/PAHS (OP/PCB/Asbestos /TRH/BTEX/PAHS /TRH/BTEX		henols	Quantification (500ml)	L field screening	Natural Material (	Material	ckpile dis 1s)	Sui EC Sto	peroxide		Reducible Sulfur (CrS)		ation exchange)	ctrical conductivity)	Chloride		РАН	Lead Mercury Nickel Zinc HM <sup>®</sup> Arsenic		
Sample	Laboratory	Container		Sampling	3		R	um fiel	ER	/TRH	TRH		~	0	e des		stos 10L	ated N	Suite - BTEX/	Suite - /pH /	0)	pH pero	AS	nium F		pH / CEC (cation	pH / EC (electr			HM <sup>B</sup> /	Cadmium Chromium Lead
ID	ID	Туре	Da	ate	Time	SOIL	WATER	0.45	OTHER	HM A	HM A	HM A	BTEX	VOCS	1	Asbestos	Asbes	Excavated	ENM Suit (TRH/BTE	ENM (HMA	Dewa	ld / Hd	sPOCAS	Chromium	PFAS	pH / C	pH / E	Sulphate /	Lead	TCLP	Mercury Nickel
BH2M		5, 1, 40	26/1	0/23	AM		X				X			X	X																Dewatering Suite
BHZM	2	SP, VC	-	Í							×			X	X																TDS / TDU Hardness
BHIOM	3	s, Pive							_		X			X	X																Total Cyanide Metals (Al, As, Cd, C Cu, Pb, Hg, Ni, Zn)
20220231026	4	s, P, JC										×										1									TRH (F1, F2, F3, F4) BTEX
QR_20231026	5	S, P, VC										X										50									PAH Total Phenol
QTB1	6	VC											×									SG	S EH	SS	ydne	ey C	ОС				LABORATO
QTSI	2	VC	t	-			#						X	1											77						_
		-																													Standar
		-																													48 Hour
					_			-													1	1	1		1					_	72 Hour
																-															Other
		1			_																										_
Container Type: J = solvent washed, acid ri							Inve	estigat	or: I att	est tha	these	sampl	es wer	e colle	cted in	accord	lance v	with sta	andard	El field	l samp	oling			Repo	ort with I	El Was	te Clas	sificatio	on Tabl	e . 🗖
S = solvent washed, acid r P = natural HDPE plastic b VC = glass vial, Tefton Ser	ottle	ule						er's Nai	ne (EI):	): Received by (SGS):				-					Samp	ler's C	comme	nts:									
ZLB = Zip-Lock Bag		Bulk Bag					Print	Se	ean	Dolan Prin			Print	n che	or;	4							Pa	r.S.P	-	dage	C	100	-	20021001	
		S	Suite 6.01 PYRMO				Signa	ture 🤇	51					Signa	ature 2									1	use	, se	a	1			wide
	12		Ph:	9516 07	722		Date	26,	10	0/23 Date 27.10.				1.2	3	11	019	7			to	eni	JICO	ab	(se	paro	nte	20231026 COC at			
eiaust	ralla		ab@eiau	ustralia.	.com.au		IMP	ORT																							

1

Please e-mail laboratory results to: lab@eiaustralia.com.au

joel

source: Sydney.pdf page: 14 SGS Ref: SE255779\_COC



# SAMPLE RECEIPT ADVICE

CLIENT DETAIL	S	LABORATORY DETA	NLS
Contact	Joel Heininger	Manager	Huong Crawford
Client	EIAUSTRALIA	Laboratory	SGS Alexandria Environmental
Address	SUITE 6.01 55 MILLER STREET PYRMONT NSW 2009	Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	61 2 95160722	Telephone	+61 2 8594 0400
Facsimile	(Not specified)	Facsimile	+61 2 8594 0499
Email	joel.heininger@eiaustralia.com.au	Email	au.environmental.sydney@sgs.com
Project	E26160 1 Veno St, Heathcote	Samples Received	Fri 27/10/2023
Order Number	E26160	Report Due	Fri 3/11/2023
Samples	7	SGS Reference	SE255779

SUBMISSION DETAILS

This is to confirm that 7 samples were received on Friday 27/10/2023. Results are expected to be ready by COB Friday 3/ 11/2023. Please quote SGS reference SE255779 when making enquiries. Refer below for details relating to sample integrity upon receipt.

- Sample counts by matrix Date documentation received Samples received without headspace Sample container provider Samples received in correct containers Sample cooling method Complete documentation received
- 7 Water 27/10/2023 Yes SGS Yes Ice Bricks Yes

Type of documentation received Samples received in good order Sample temperature upon receipt Turnaround time requested Sufficient sample for analysis Samples clearly labelled COC Yes 15.6°C Standard Yes 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 -

This document is issued by the Company under its General Conditions of Service accessible at <u>www.sqs.com/en/Terms-and-Conditions.aspx</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

SGS Australia Pty Ltd ABN 44 000 964 278 Environment, Health and Safety

Unit 16 33 Maddox St PO Box 6432 Bourke Rd BC Alexandria NSW 2015 Alexandria NSW 2015

015 Australia 015 Australia

ıstralia t +61 2 8594 0400 ıstralia f +61 2 8594 0499

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# SAMPLE RECEIPT ADVICE

#### CLIENT DETAILS

Client EI AUSTRALIA

Project E26160 1 Veno St, Heathcote

SUMMARY	OF ANALYSIS		1	1	1		1	1
No.	Sample ID	Mercury (dissolved) in Water	PAH (Polynuclear Aromatic Hydrocarbons) in Water	Total Phenolics in Water	Trace Metals (Dissolved) in Water by ICPMS	TRH (Total Recoverable Hydrocarbons) in Water	VOCs in Water	Volatile Petroleum Hydrocarbons in Water
001	BH2M	1	22	1	7	9	77	7
002	BH7M	1	22	1	7	9	77	7
003	BH10M	1	22	1	7	9	77	7
004	GWQD_20231026	1	-	-	7	9	11	7
005	GWQR_20231026	1	-	-	7	9	11	7
006	QTB1	-	-	-	-	-	11	-
007	QTS1	-	-	-	-	-	11	-

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 .

Appendix H – Laboratory Analytical Reports



# **ANALYTICAL REPORT**



CLIENT DETAILS		LABORATORY DE	TAILS
Contact	Sean Nolan	Manager	Shane McDermott
Client	EI AUSTRALIA	Laboratory	SGS Alexandria Environmental
Address	SUITE 6.01 55 MILLER STREET PYRMONT NSW 2009	Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	61 2 95160722	Telephone	+61 2 8594 0400
Facsimile	(Not specified)	Facsimile	+61 2 8594 0499
Email	sean.nolan@eiaustralia.com.au	Email	au.environmental.sydney@sgs.com
Project	E26160 1 Veno St, Heathcote	SGS Reference	SE266428 R0
Order Number	E26160	Date Received	7/6/2024
Samples	16	Date Reported	17/6/2024

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. Asbestos analysed by Approved Identifier Ravee Sivasubramaniam

SIGNATORIES

Akheeqar BENIAMEEN Chemist

S. Ravender.

Ravee SIVASUBRAMANIAM

Hygiene Team Leader



Metals/Inorganics Team Leader

Shane MCDERMOTT Laboratory Manager

Kamrul AHSAN Senior Chemist

Acm/n/

Ly Kim HA Organic Section Head

Teresa NGUYEN Organic Chemist

SGS Australia Pty Ltd ABN 44 000 964 278

Environment, Health and Safety

Unit 16 33 Maddox St PO Box 6432 Bourke Rd BC Alexandria NSW 2015 Alexandria NSW 2015 Australiat +61 2 8594 0400Australiaf +61 2 8594 0499

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## SE266428 R0

## VOC's in Soil [AN433] Tested: 11/6/2024

			BH11_0.2-0.3	BH11_0.6-0.7	BH12_0.1-0.2	BH13_0.1-0.2	BH13_0.5-0.7
			SOIL	SOIL	SOIL	SOIL	SOIL
			- 6/6/2024	- 6/6/2024	- 6/6/2024	- 6/6/2024	- 6/6/2024
PARAMETER	UOM	LOR	SE266428.001	SE266428.002	SE266428.003	SE266428.004	SE266428.005
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

			BH14_0.1-0.2	BH14_0.5-0.6	BH15_0.2-0.3	BH15_0.6-0.7	BH16_0.2-0.3
			SOIL	SOIL	SOIL	SOIL	SOIL
							-
			6/6/2024	6/6/2024	6/6/2024	6/6/2024	6/6/2024
PARAMETER	UOM	LOR	SE266428.006	SE266428.007	SE266428.008	SE266428.009	SE266428.010
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

			BH17_0.2-0.3	BH17_0.5-0.6	QD_20240606	ТВ	TS
			SOIL	SOIL	SOIL	SOIL	SOIL
							-
			6/6/2024	6/6/2024	6/6/2024	6/6/2024	6/6/2024
PARAMETER	UOM	LOR	SE266428.011	SE266428.012	SE266428.013	SE266428.015	SE266428.016
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	[124%]
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	[116%]
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	[121%]
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	[120%]
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	[120%]
Total Xylenes*	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	-
Total BTEX*	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	-
Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-



## Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 11/6/2024

			BH11_0.2-0.3	BH11_0.6-0.7	BH12_0.1-0.2	BH13_0.1-0.2	BH13_0.5-0.7
			SOIL	SOIL	SOIL	SOIL	SOIL
			6/6/2024	6/6/2024	6/6/2024	6/6/2024	6/6/2024
PARAMETER	UOM	LOR	SE266428.001	SE266428.002	SE266428.003	SE266428.004	SE266428.005
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

			BH14_0.1-0.2	BH14_0.5-0.6	BH15_0.2-0.3	BH15_0.6-0.7	BH16_0.2-0.3
			SOIL	SOIL	SOIL	SOIL	SOIL
			6/6/2024	6/6/2024	6/6/2024	6/6/2024	6/6/2024
PARAMETER	UOM	LOR	SE266428.006	SE266428.007	SE266428.008	SE266428.009	SE266428.010
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

			BH17_0.2-0.3	BH17_0.5-0.6	QD_20240606
			SOIL	SOIL	SOIL
					-
			6/6/2024	6/6/2024	6/6/2024
PARAMETER	UOM	LOR	SE266428.011	SE266428.012	SE266428.013
TRH C6-C9	mg/kg	20	<20	<20	<20
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1
TRH C6-C10	mg/kg	25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25



## TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 11/6/2024

			BH11_0.2-0.3	BH11_0.6-0.7	BH12_0.1-0.2	BH13_0.1-0.2	BH13_0.5-0.7
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
PARAMETER		1.05	6/6/2024	6/6/2024	6/6/2024	6/6/2024	6/6/2024
PARAMETER	UOM	LOR	SE266428.001	SE266428.002	SE266428.003	SE266428.004	SE266428.005
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

			BH14_0.1-0.2	BH14_0.5-0.6	BH15_0.2-0.3	BH15_0.6-0.7	BH16_0.2-0.3
			SOIL	SOIL	SOIL	SOIL	SOIL
			6/6/2024	6/6/2024	6/6/2024	6/6/2024	6/6/2024
PARAMETER	UOM	LOR	SE266428.006	SE266428.007	SE266428.008	SE266428.009	SE266428.010
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

			BH17_0.2-0.3	BH17_0.5-0.6	QD_20240606
			SOIL	SOIL	SOIL
			- 6/6/2024	- 6/6/2024	- 6/6/2024
PARAMETER	UOM	LOR	SE266428.011	SE266428.012	SE266428.013
TRH C10-C14	mg/kg	20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100
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	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210



## SE266428 R0

## PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 11/6/2024

			BH11_0.2-0.3	BH11_0.6-0.7	BH12_0.1-0.2	BH13_0.1-0.2	BH13_0.5-0.7
PARAMETER	UOM	LOR	SOIL - 6/6/2024 SE266428.001	SOIL - 6/6/2024 SE266428.002	SOIL - 6/6/2024 SE266428.003	SOIL - 6/6/2024 SE266428.004	SOIL - 6/6/2024 SE266428.005
Naphthalene	mg/kg	0.1	<0.1	<0.1	0.2	<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	0.3	<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	0.2	<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*< td=""><td>TEQ (mg/kg)</td><td>0.2</td><td>&lt;0.2</td><td>&lt;0.2</td><td>&lt;0.2</td><td>&lt;0.2</td><td>&lt;0.2</td></lor=0*<>	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <lor=lor*< td=""><td>TEQ (mg/kg)</td><td>0.3</td><td>&lt;0.3</td><td>&lt;0.3</td><td>&lt;0.3</td><td>&lt;0.3</td><td>&lt;0.3</td></lor=lor*<>	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <lor=lor 2*<="" td=""><td>TEQ (mg/kg)</td><td>0.2</td><td>&lt;0.2</td><td>&lt;0.2</td><td>&lt;0.2</td><td>&lt;0.2</td><td>&lt;0.2</td></lor=lor>	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

			BH14_0.1-0.2	BH14_0.5-0.6	BH15_0.2-0.3	BH15_0.6-0.7	BH16_0.2-0.3
			SOIL - 6/6/2024	SOIL - 6/6/2024	SOIL - 6/6/2024	SOIL - 6/6/2024	SOIL - 6/6/2024
PARAMETER	UOM	LOR	SE266428.006	SE266428.007	SE266428.008	SE266428.009	SE266428.010
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	0.2
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*< td=""><td>TEQ (mg/kg)</td><td>0.2</td><td>&lt;0.2</td><td>&lt;0.2</td><td>&lt;0.2</td><td>&lt;0.2</td><td>&lt;0.2</td></lor=0*<>	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <lor=lor*< td=""><td>TEQ (mg/kg)</td><td>0.3</td><td>&lt;0.3</td><td>&lt;0.3</td><td>&lt;0.3</td><td>&lt;0.3</td><td>&lt;0.3</td></lor=lor*<>	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <lor=lor 2*<="" td=""><td>TEQ (mg/kg)</td><td>0.2</td><td>&lt;0.2</td><td>&lt;0.2</td><td>&lt;0.2</td><td>&lt;0.2</td><td>&lt;0.2</td></lor=lor>	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



## SE266428 R0

## PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 11/6/2024 (continued)

			BH17_0.2-0.3	BH17_0.5-0.6
			SOIL	SOIL
		1.05	6/6/2024	6/6/2024
PARAMETER	UOM	LOR	SE266428.011	SE266428.012
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*< td=""><td>TEQ (mg/kg)</td><td>0.2</td><td>&lt;0.2</td><td>&lt;0.2</td></lor=0*<>	TEQ (mg/kg)	0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <lor=lor*< td=""><td>TEQ (mg/kg)</td><td>0.3</td><td>&lt;0.3</td><td>&lt;0.3</td></lor=lor*<>	TEQ (mg/kg)	0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <lor=lor 2*<="" td=""><td>TEQ (mg/kg)</td><td>0.2</td><td>&lt;0.2</td><td>&lt;0.2</td></lor=lor>	TEQ (mg/kg)	0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8



## SE266428 R0

## OC Pesticides in Soil [AN420] Tested: 11/6/2024

			BH11_0.2-0.3	BH12_0.1-0.2	BH13_0.1-0.2	BH14_0.1-0.2	BH15_0.2-0.3
			SOIL	SOIL	SOIL	SOIL	SOIL
			6/6/2024	6/6/2024	6/6/2024	6/6/2024	6/6/2024
PARAMETER	UOM	LOR	SE266428.001	SE266428.003	SE266428.004	SE266428.006	SE266428.008
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



## OC Pesticides in Soil [AN420] Tested: 11/6/2024 (continued)

			BH16_0.2-0.3	BH17_0.2-0.3
			SOIL	SOIL
			6/6/2024	6/6/2024
PARAMETER	UOM	LOR	SE266428.010	SE266428.011
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1
Lindane (gamma 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
Beta BHC	mg/kg	0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1
o,p'-DDE*	mg/kg	0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1
trans-Nonachlor	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
o,p'-DDD*	mg/kg	0.1	<0.1	<0.1
o,p'-DDT*	mg/kg	0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1
Endrin aldehyde	mg/kg	0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1
Endrin ketone	mg/kg	0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1
Mirex	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



## SE266428 R0

## OP Pesticides in Soil [AN420] Tested: 11/6/2024

			BH11_0.2-0.3	BH12_0.1-0.2	BH13_0.1-0.2	BH14_0.1-0.2	BH15_0.2-0.3
			SOIL -	SOIL -	SOIL -	SOIL -	SOIL -
			6/6/2024	6/6/2024	6/6/2024	6/6/2024	6/6/2024
PARAMETER	UOM	LOR	SE266428.001	SE266428.003	SE266428.004	SE266428.006	SE266428.008
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

			BH16_0.2-0.3	BH17_0.2-0.3
PARAMETER	UOM	LOR	SOIL - 6/6/2024 SE266428.010	SOIL - 6/6/2024 SE266428.011
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



## SE266428 R0

## PCBs in Soil [AN420] Tested: 11/6/2024

			BH11_0.2-0.3	BH12_0.1-0.2	BH13_0.1-0.2	BH14_0.1-0.2	BH15_0.2-0.3
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
PARAMETER	UOM	LOR	6/6/2024 SE266428.001	6/6/2024 SE266428.003	6/6/2024 SE266428.004	6/6/2024 SE266428.006	6/6/2024 SE266428.008
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

			BH16_0.2-0.3	BH17_0.2-0.3
			SOIL	SOIL
			- 6/6/2024	- 6/6/2024
PARAMETER	UOM	LOR	SE266428.010	SE266428.011
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



## SE266428 R0

## Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 11/6/2024

			BH11_0.2-0.3	BH11_0.6-0.7	BH12_0.1-0.2	BH13_0.1-0.2	BH13_0.5-0.7
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
PARAMETER	UOM	LOR	6/6/2024 SE266428.001	6/6/2024 SE266428.002	6/6/2024 SE266428.003	6/6/2024 SE266428.004	6/6/2024 SE266428.005
Arsenic, As	mg/kg	1	3	5	3	5	5
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	51	22	72	26	22
Copper, Cu	mg/kg	0.5	12	<0.5	31	3.5	<0.5
Lead, Pb	mg/kg	1	3	12	3	12	10
Nickel, Ni	mg/kg	0.5	50	0.9	73	17	0.8
Zinc, Zn	mg/kg	2	31	4.2	47	15	3.5

			BH14_0.1-0.2	BH14_0.5-0.6	BH15_0.2-0.3	BH15_0.6-0.7	BH16_0.2-0.3
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
PARAMETER	UOM	LOR	6/6/2024 SE266428.006	6/6/2024 SE266428.007	6/6/2024 SE266428.008	6/6/2024 SE266428.009	6/6/2024 SE266428.010
Arsenic, As	mg/kg	1	4	6	3	5	6
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	55	13	46	21	23
Copper, Cu	mg/kg	0.5	14	15	12	<0.5	5.8
Lead, Pb	mg/kg	1	10	14	7	8	10
Nickel, Ni	mg/kg	0.5	52	1.7	49	0.8	16
Zinc, Zn	mg/kg	2	39	13	35	3.3	21

			BH17_0.2-0.3	BH17_0.5-0.6	QD_20240606
			SOIL	SOIL	SOIL
			6/6/2024	6/6/2024	6/6/2024
PARAMETER	UOM	LOR	SE266428.011	SE266428.012	SE266428.013
Arsenic, As	mg/kg	1	5	10	3
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	22	25	70
Copper, Cu	mg/kg	0.5	2.9	<0.5	17
Lead, Pb	mg/kg	1	12	13	8
Nickel, Ni	mg/kg	0.5	9.7	3.8	73
Zinc, Zn	mg/kg	2	9.7	4.3	45



## Mercury in Soil [AN312] Tested: 11/6/2024

			BH11_0.2-0.3	BH11_0.6-0.7	BH12_0.1-0.2	BH13_0.1-0.2	BH13_0.5-0.7
			SOIL	SOIL	SOIL	SOIL	SOIL
			6/6/2024	6/6/2024	6/6/2024	6/6/2024	6/6/2024
PARAMETER	UOM	LOR	SE266428.001	SE266428.002	SE266428.003	SE266428.004	SE266428.005
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

			BH14_0.1-0.2	BH14_0.5-0.6	BH15_0.2-0.3	BH15_0.6-0.7	BH16_0.2-0.3
			SOIL	SOIL	SOIL	SOIL	SOIL
							-
			6/6/2024	6/6/2024	6/6/2024	6/6/2024	6/6/2024
PARAMETER	UOM	LOR	SE266428.006	SE266428.007	SE266428.008	SE266428.009	SE266428.010
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

			BH17_0.2-0.3	BH17_0.5-0.6	QD_20240606
			SOIL	SOIL	SOIL
					-
			6/6/2024	6/6/2024	6/6/2024
PARAMETER	UOM	LOR	SE266428.011	SE266428.012	SE266428.013
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05



## Moisture Content [AN002] Tested: 11/6/2024

			BH11_0.2-0.3	BH11_0.6-0.7	BH12_0.1-0.2	BH13_0.1-0.2	BH13_0.5-0.7
			SOIL	SOIL	SOIL	SOIL	SOIL
			6/6/2024	6/6/2024	6/6/2024	6/6/2024	6/6/2024
PARAMETER	UOM	LOR	SE266428.001	SE266428.002	SE266428.003	SE266428.004	SE266428.005
% Moisture	%w/w	1	10.1	20.2	11.2	12.1	14.2

			BH14_0.1-0.2	BH14_0.5-0.6	BH15_0.2-0.3	BH15_0.6-0.7	BH16_0.2-0.3
			SOIL	SOIL	SOIL	SOIL	SOIL
			6/6/2024	6/6/2024	6/6/2024	6/6/2024	6/6/2024
PARAMETER	UOM	LOR	SE266428.006	SE266428.007	SE266428.008	SE266428.009	SE266428.010
% Moisture	%w/w	1	10.5	9.3	11.4	18.3	12.6

			BH17_0.2-0.3	BH17_0.5-0.6	QD_20240606	ТВ
			SOIL	SOIL	SOIL	SOIL
						-
			6/6/2024	6/6/2024	6/6/2024	6/6/2024
PARAMETER	UOM	LOR	SE266428.011	SE266428.012	SE266428.013	SE266428.015
% Moisture	%w/w	1	14.4	17.0	11.4	<1.0



## Fibre Identification in soil [AS4964/AN602] Tested: 13/6/2024

			BH11_0.2-0.3	BH12_0.1-0.2	BH13_0.1-0.2	BH14_0.1-0.2	BH15_0.2-0.3
			SOIL	SOIL	SOIL	SOIL	SOIL
			- 6/6/2024	- 6/6/2024	- 6/6/2024	- 6/6/2024	- 6/6/2024
PARAMETER	UOM	LOR	SE266428.001	SE266428.003	SE266428.004	SE266428.006	SE266428.008
Date Analysed*	No unit	-	14/06/2024 00:00	14/06/2024 00:00	14/06/2024 00:00	14/06/2024 00:00	14/06/2024 00:00
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

			BH16_0.2-0.3	BH17_0.2-0.3
			SOIL -	SOIL -
PARAMETER	UOM	LOR	6/6/2024 SE266428.010	6/6/2024 SE266428.011
Date Analysed*	No unit	-	14/06/2024 00:00	14/06/2024 00:00
Asbestos Detected	No unit	-	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01



## SE266428 R0

## VOCs in Water [AN433] Tested: 13/6/2024

			QR_20240606
PARAMETER	UOM	LOR	WATER - 6/6/2024 <b>SE266428.014</b>
Benzene	µg/L	0.5	<0.5
Toluene	µg/L	0.5	<0.5
Ethylbenzene	µg/L	0.5	<0.5
m/p-xylene	µg/L	1	<1
o-xylene	µg/L	0.5	<0.5
Total Xylenes	µg/L	1.5	<1.5
Total BTEX	µg/L	3	<3
Naphthalene (VOC)*	μg/L	0.5	<0.5



## SE266428 R0

## Volatile Petroleum Hydrocarbons in Water [AN433] Tested: 13/6/2024

			QR_20240606
			WATER
			- 6/6/2024
PARAMETER	UOM	LOR	SE266428.014
TRH C6-C9	µg/L	40	<40
Benzene (F0)	µg/L	0.5	<0.5
TRH C6-C10	µg/L	50	<50
TRH C6-C10 minus BTEX (F1)	µg/L	50	<50



## SE266428 R0

## TRH (Total Recoverable Hydrocarbons) in Water [AN403] Tested: 13/6/2024

			QR_20240606
			WATER - 6/6/2024
PARAMETER	UOM	LOR	SE266428.014
TRH C10-C14	µg/L	50	<50
TRH C15-C28	µg/L	200	<200
TRH C29-C36	µg/L	200	<200
TRH C37-C40	µg/L	200	<200
TRH >C10-C16	µg/L	60	<60
TRH >C10-C16 - Naphthalene (F2)	µg/L	60	<60
TRH >C16-C34 (F3)	µg/L	500	<500
TRH >C34-C40 (F4)	µg/L	500	<500
TRH C10-C40	µg/L	320	<320



## SE266428 R0

## Trace Metals (Dissolved) in Water by ICPMS [AN318] Tested: 11/6/2024

			QR_20240606
			WATER
			- 6/6/2024
PARAMETER	UOM	LOR	SE266428.014
Arsenic	µg/L	1	<1
Cadmium	µg/L	0.1	<0.1
Chromium	µg/L	1	<1
Copper	µg/L	1	<1
Lead	µg/L	1	<1
Nickel	µg/L	1	<1
Zinc	µg/L	5	<5



## SE266428 R0

## Mercury (dissolved) in Water [AN311(Perth)/AN312] Tested: 12/6/2024

			QR_20240606
			WATER
			- 6/6/2024
PARAMETER	UOM	LOR	SE266428.014
Mercury	mg/L	0.0001	<0.0001



	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.
AN020	Unpreserved water sample is filtered through a 0.45µm membrane filter and acidified with nitric acid similar to APHA3030B.
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.
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.
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
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). 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 unequivocably 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-
	<ul> <li>(a) no trace asbestos fibres have been detected (i.e. no 'respirable' fibres):</li> <li>(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</li> </ul>
	(c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.

#### FOOTNOTES -

*	NATA accreditation does not cover	-	Not analysed.	UOM	Unit of Measure.
	the performance of this service.	NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding	IS	Insufficient sample for analysis.	ţ↑	Raised/lowered Limit of
	time exceeded.	LNR	Sample listed, but not received.		Reporting.
***	Indicates that both * and ** apply.				

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:

- a. 1 Bq is equivalent to 27 pCi
- b. 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: <u>www.sgs.com.au/en-gb/environment-health-and-safety</u>.

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# **ANALYTICAL REPORT**



- CLIENT DETAILS		LABORATORY DETAI	ILS
Contact	Sean Nolan	Manager	Shane McDermott
Client	EI AUSTRALIA	Laboratory	SGS Alexandria Environmental
Address	SUITE 6.01 55 MILLER STREET PYRMONT NSW 2009	Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	61 2 95160722	Telephone	+61 2 8594 0400
Facsimile	(Not specified)	Facsimile	+61 2 8594 0499
Email	sean.nolan@eiaustralia.com.au	Email	au.environmental.sydney@sgs.com
Project	E26160 1 Veno St, Heathcote	SGS Reference	SE266428 R0
Order Number	E26160	Date Received	07 Jun 2024
Samples	7	Date Reported	17 Jun 2024

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. Asbestos analysed by Approved Identifier Ravee Sivasubramaniam

SIGNATORIES -

S. Ravender.

Ravee SIVASUBRAMANIAM Hygiene Team Leader

> SGS Australia Pty Ltd ABN 44 000 964 278

Australiat +61 2 8594 0400Australiaf +61 2 8594 0499

www.sgs.com.au Member of the SGS Group



# ANALYTICAL REPORT

Fibre Identification in soil					Method AN602		
Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Date Analysed	Fibre Identification	Est.%w/w*
SE266428.001	BH11_0.2-0.3	Soil	100g Clay, Sand, Rocks	06 Jun 2024	14 Jun 2024	No Asbestos Found at RL of 0.1g/kg	<0.01
SE266428.003	BH12_0.1-0.2	Soil	87g Clay, Sand, Rocks, Bitumen	06 Jun 2024	14 Jun 2024	No Asbestos Found at RL of 0.1g/kg	<0.01
SE266428.004	BH13_0.1-0.2	Soil	78g Clay, Sand, Rocks	06 Jun 2024	14 Jun 2024	No Asbestos Found at RL of 0.1g/kg	<0.01
SE266428.006	BH14_0.1-0.2	Soil	124g Clay, Sand, Rocks	06 Jun 2024	14 Jun 2024	No Asbestos Found at RL of 0.1g/kg	<0.01
SE266428.008	BH15_0.2-0.3	Soil	101g Clay, Sand, Rocks	06 Jun 2024	14 Jun 2024	No Asbestos Found at RL of 0.1g/kg	<0.01
SE266428.010	BH16_0.2-0.3	Soil	115g Clay, Sand, Rocks	06 Jun 2024	14 Jun 2024	No Asbestos Found at RL of 0.1g/kg	<0.01
SE266428.011	BH17_0.2-0.3	Soil	107g Clay, Sand, Rocks	06 Jun 2024	14 Jun 2024	No Asbestos Found at RL of 0.1g/kg	<0.01



# **METHOD SUMMARY**

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 unequivocably 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-				
	<ul> <li>(a) no trace asbestos fibres have been detected (i.e. no 'respirable ' fibres):</li> <li>(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</li> <li>(c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.</li> </ul>				

Amosite Brown Asbestos NA Not Analysed White Asbestos Chrysotile INR Listed. Not Required --Crocidolite Blue Asbestos -NATA accreditation does not cover the performance of this service . \*\* Amosite and/or Crocidolite Indicative data, theoretical holding time exceeded. Amphiboles \*\*\* 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: <a href="https://www.sgs.com.au/en-gb/environment-health-and-safety">www.sgs.com.au/en-gb/environment-health-and-safety</a>.

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FOOTNOTES -



# **ANALYTICAL REPORT**



CLIENT DETAILS	S	LABORATORY DE	TAILS
Contact	Sean Nolan	Manager	Shane McDermott
Client	EI AUSTRALIA	Laboratory	SGS Alexandria Environmental
Address	SUITE 6.01 55 MILLER STREET PYRMONT NSW 2009	Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	61 2 95160722	Telephone	+61 2 8594 0400
Facsimile	(Not specified)	Facsimile	+61 2 8594 0499
Email	sean.nolan@eiaustralia.com.au	Email	au.environmental.sydney@sgs.com
Project	E26160 1 Veno St, Heathcote-Additional	SGS Reference	SE266428A R0
Order Number	E26160	Date Received	18/6/2024
Samples	16	Date Reported	20/6/2024

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

SIGNATORIES

Kamrul AHSAN Senior Chemist

Shane MCDERMOTT

Laboratory Manager

SGS Australia Pty Ltd ABN 44 000 964 278

Environment, Health and Safety

Unit 16 33 Maddox St PO Box 6432 Bourke Rd BC Alexandria NSW 2015 Alexandria NSW 2015 Australiat +61 2 8594 0400Australiaf +61 2 8594 0499

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## TCLP (Toxicity Characteristic Leaching Procedure) for Metals [AN006] Tested: 19/6/2024

			BH12_0.1-0.2	BH14_0.1-0.2
			SOIL - 6/6/2024	SOIL - 6/6/2024
PARAMETER	UOM	LOR	SE266428A.003	SE266428A.006
pH 1:20	pH Units	-	8.7	8.5
pH 1:20 plus HCL	pH Units	-	2.1	2.0
Extraction Solution Used	No unit	-	1	1
Mass of Sample Used*	g	-	13	13
Volume of ExtractionSolution Used*	mL	-	250	250
pH TCLP after 18 hours	pH Units	-	5.5	5.1



## Metals in TCLP Extract by ICPOES [AN320] Tested: 20/6/2024

			BH12_0.1-0.2	BH14_0.1-0.2
			SOIL	SOIL
			- 6/6/2024	- 6/6/2024
PARAMETER	UOM	LOR	SE266428A.003	SE266428A.006
Nickel, Ni	mg/L	0.005	0.030	0.035



FOOTNOTES -

METHOD	METHODOLOGY SUMMARY
AN006	Contaminants of interest in a waste material are leached out of the waste with a selected leaching solution under controlled conditions. The ratio of sample to extraction fluid is 100g to 2L (1 to 20 by mass). The concentration of each contaminant of interest is determined in the leachate by appropriate methods after separation from the sample by filtering. Base on USEPA 1311.
AN006	Extraction Fluid #1: This fluid is made by combining 128.6mL of dilute sodium hydroxide solution and 11.5mL glacial acetic acid with water and diluting to a volume of 2 litres. The pH of this fluid should be 4.93 ± 0.05.
AN006	Extraction Fluid #2: This fluid is made by diluting 5.7mL glacial acetic acid with water to a volume of 1 litre. The pH of this fluid should be 2.88 ± 0.05.
AN020	Unpreserved water sample is filtered through a 0.45µm membrane filter and acidified with nitric acid similar to APHA3030B.
AN320	Metals by ICP-OES: Samples are preserved with 10% nitric acid for a wide range of metals and some non-metals. This solution is measured by Inductively Coupled Plasma. Solutions are aspirated into an argon plasma at 8000-10000K and emit characteristic energy or light as a result of electron transitions through unique energy levels. The emitted light is focused onto a diffraction grating where it is separated into components.
AN320	Photomultipliers or CCDs are used to measure the light intensity at specific wavelengths. This intensity is directly proportional to concentration. Corrections are required to compensate for spectral overlap between elements. Reference APHA 3120 B.

*	NATA accreditation does not cover	-	Not analysed.	UOM	Unit of Measure.
	the performance of this service.	NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of
	time exceeded.	LNR	Sample listed, but not received.		Reporting.
***	Indicates that both * and ** apply.				

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:

- a. 1 Bq is equivalent to 27 pCi b.
- 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.sqs.com.au/en-gb/environment-health-and-safety

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# **ANALYTICAL REPORT**



CLIENT DETAILS		LABORATORY DE	TAILS
Contact	Sean Nolan	Manager	Shane McDermott
Client	EI AUSTRALIA	Laboratory	SGS Alexandria Environmental
Address	SUITE 6.01 55 MILLER STREET PYRMONT NSW 2009	Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	61 2 95160722	Telephone	+61 2 8594 0400
Facsimile	(Not specified)	Facsimile	+61 2 8594 0499
Email	sean.nolan@eiaustralia.com.au	Email	au.environmental.sydney@sgs.com
Project	E26160 1 Veno St Heathcote	SGS Reference	SE266429 R0
Order Number	E26160	Date Received	7/6/2024
Samples	3	Date Reported	17/6/2024

#### 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. Asbestos analysed by Approved Identifier Ravee Sivasubramaniam

- SIGNATORIES

Akheeqar BENIAMEEN Chemist

kinter

Ly Kim HA Organic Section Head



Senior Chemist

S. Ravender.

Ravee SIVASUBRAMANIAM

Hygiene Team Leader

Dong LIANG Metals/Inorganics Team Leader

Shane MCDERMOTT Laboratory Manager

Kamrul AHSAN Senior Chemist

Teresa NGUYEN Organic Chemist

SGS Australia Pty Ltd ABN 44 000 964 278

Environment, Health and Safety

Unit 16 33 Maddox St PO Box 6432 Bourke Rd BC Alexandria NSW 2015 Alexandria NSW 2015 Australiat +61 2 8594 0400Australiaf +61 2 8594 0499

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## VOC's in Soil [AN433] Tested: 11/6/2024

			BH7M_DL1_0.1-0.2	BH7M_DL2_0.2-0.3	BH7M_DL3_0.1-0.2
			SOIL	SOIL	SOIL
			- 6/6/2024	- 6/6/2024	- 6/6/2024
PARAMETER	UOM	LOR	SE266429.001	SE266429.002	SE266429.003
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
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1
Total Xylenes*	mg/kg	0.3	<0.3	<0.3	<0.3
Total BTEX*	mg/kg	0.6	<0.6	<0.6	<0.6
Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	<0.1



## Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 11/6/2024

			BH7M_DL1_0.1-0.2	BH7M_DL2_0.2-0.3	BH7M_DL3_0.1-0.2
			SOIL	SOIL	SOIL
			6/6/2024	6/6/2024	6/6/2024
PARAMETER	UOM	LOR	SE266429.001	SE266429.002	SE266429.003
TRH C6-C9	mg/kg	20	<20	<20	<20
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1
TRH C6-C10	mg/kg	25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25



## TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 11/6/2024

			BH7M_DL1_0.1-0.2	BH7M_DL2_0.2-0.3	BH7M_DL3_0.1-0.2
			SOIL	SOIL	SOIL
			- 6/6/2024	- 6/6/2024	- 6/6/2024
PARAMETER	UOM	LOR	SE266429.001	SE266429.002	SE266429.003
TRH C10-C14	mg/kg	20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100
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	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210



### PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 11/6/2024

			BH7M_DL1_0.1-0.2	BH7M_DL2_0.2-0.3	BH7M_DL3_0.1-0.2
			SOIL	SOIL	SOIL
			- 6/6/2024	- 6/6/2024	- 6/6/2024
PARAMETER	UOM	LOR	SE266429.001	SE266429.002	SE266429.003
Naphthalene	mg/kg	0.1	<0.1	0.2	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	0.2	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	0.3	<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	0.2	<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*< td=""><td>TEQ (mg/kg)</td><td>0.2</td><td>&lt;0.2</td><td>&lt;0.2</td><td>&lt;0.2</td></lor=0*<>	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <lor=lor*< td=""><td>TEQ (mg/kg)</td><td>0.3</td><td>&lt;0.3</td><td>&lt;0.3</td><td>&lt;0.3</td></lor=lor*<>	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <lor=lor 2*<="" td=""><td>TEQ (mg/kg)</td><td>0.2</td><td>&lt;0.2</td><td>&lt;0.2</td><td>&lt;0.2</td></lor=lor>	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	0.9	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8



### OC Pesticides in Soil [AN420] Tested: 11/6/2024

			BH7M_DL1_0.1-0.2	BH7M_DL2_0.2-0.3	BH7M_DL3_0.1-0.2
			SOIL	SOIL	SOIL
			-	-	-
			6/6/2024	6/6/2024	6/6/2024
PARAMETER	UOM	LOR	SE266429.001	SE266429.002	SE266429.003
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1
Lindane (gamma 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
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1
o,p'-DDE*	mg/kg	0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1
trans-Nonachlor	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
o,p'-DDD*	mg/kg	0.1	<0.1	<0.1	<0.1
o,p'-DDT*	mg/kg	0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1
Endrin aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1
Endrin ketone	mg/kg	0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1
Mirex	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



### OP Pesticides in Soil [AN420] Tested: 11/6/2024

			BH7M_DL1_0.1-0.2	BH7M_DL2_0.2-0.3	BH7M_DL3_0.1-0.2
			SOIL	SOIL	SOIL
					-
			6/6/2024	6/6/2024	6/6/2024
PARAMETER	UOM	LOR	SE266429.001	SE266429.002	SE266429.003
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7



### PCBs in Soil [AN420] Tested: 11/6/2024

			BH7M_DL1_0.1-0.2	BH7M_DL2_0.2-0.3	BH7M_DL3_0.1-0.2
			SOIL	SOIL	SOIL
					-
			6/6/2024	6/6/2024	6/6/2024
PARAMETER	UOM	LOR	SE266429.001	SE266429.002	SE266429.003
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



### Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 11/6/2024

			BH7M_DL1_0.1-0.2	BH7M_DL2_0.2-0.3	BH7M_DL3_0.1-0.2
			SOIL	SOIL	SOIL
			-	-	-
PARAMETER	UOM	LOR	6/6/2024 SE266429.001	6/6/2024 SE266429.002	6/6/2024 SE266429.003
Arsenic, As	mg/kg	1	3	3	4
Cadmium, Cd	mg/kg	0.3	<0.3	<b>3</b> <0.3	<0.3
			-0.3	<0.5	
Chromium, Cr	mg/kg	0.5	77	89	45
Copper, Cu	mg/kg	0.5	26	23	12
Lead, Pb	mg/kg	1	5	6	7
Nickel, Ni	mg/kg	0.5	79	93	44
Zinc, Zn	mg/kg	2	47	58	29



### Mercury in Soil [AN312] Tested: 11/6/2024

			BH7M_DL1_0.1-0.2	BH7M_DL2_0.2-0.3	BH7M_DL3_0.1-0.2
			SOIL	SOIL	SOIL
			6/6/2024	6/6/2024	6/6/2024
PARAMETER	UOM	LOR	SE266429.001	SE266429.002	SE266429.003
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05



### Moisture Content [AN002] Tested: 11/6/2024

			BH7M_DL1_0.1-0.2	BH7M_DL2_0.2-0.3	BH7M_DL3_0.1-0.2
			SOIL	SOIL	SOIL
					-
			6/6/2024	6/6/2024	6/6/2024
PARAMETER	UOM	LOR	SE266429.001	SE266429.002	SE266429.003
% Moisture	%w/w	1	11.8	8.0	13.4



### Fibre Identification in soil [AS4964/AN602] Tested: 13/6/2024

			BH7M_DL1_0.1-0.2	BH7M_DL2_0.2-0.3	BH7M_DL3_0.1-0.2
			SOIL	00"	SOIL
			- SOIL	SOIL	- SOIL
			6/6/2024	6/6/2024	6/6/2024
PARAMETER	UOM	LOR	SE266429.001	SE266429.002	SE266429.003
Date Analysed*	No unit	-	14/06/2024 00:00	14/06/2024 00:00	14/06/2024 00:00
Asbestos Detected	No unit	-	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01



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 AAS 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 unequivocably 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-
	<ul> <li>(a) no trace asbestos fibres have been detected (i.e. no 'respirable ' fibres):</li> <li>(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</li> <li>(c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.</li> </ul>



#### FOOTNOTES -

NATA accreditation does not cover
the performance of this service.
Indicative data, theoretical holding time exceeded.

\*\*\* Indicates that both \* and \*\* apply.

Not analysed.
 NVL Not validated.
 IS Insufficient sample for analysis.
 LNR Sample listed, but not received.

UOM Unit of Measure. LOR Limit of Reporting. ↑↓ Raised/lowered Limit of Reporting.

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:

- a. 1 Bq is equivalent to 27 pCi
- b. 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: <u>www.sgs.com.au/en-gb/environment-health-and-safety</u>.

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## **ANALYTICAL REPORT**



CLIENT DETAILS		LABORATORY DETAI	LS
Contact	Sean Nolan	Manager	Shane McDermott
Client	EI AUSTRALIA	Laboratory	SGS Alexandria Environmental
Address	SUITE 6.01 55 MILLER STREET PYRMONT NSW 2009	Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	61 2 95160722	Telephone	+61 2 8594 0400
Facsimile	(Not specified)	Facsimile	+61 2 8594 0499
Email	sean.nolan@eiaustralia.com.au	Email	au.environmental.sydney@sgs.com
Project	E26160 1 Veno St Heathcote	SGS Reference	SE266429 R0
Order Number	E26160	Date Received	07 Jun 2024
Samples	3	Date Reported	17 Jun 2024

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. Asbestos analysed by Approved Identifier Ravee Sivasubramaniam

SIGNATORIES -

S. Ravender.

Ravee SIVASUBRAMANIAM Hygiene Team Leader

> SGS Australia Pty Ltd ABN 44 000 964 278

Unit 16 33 Maddox St PO Box 6432 Bourke Rd BC Alexandria NSW 2015 Alexandria NSW 2015 Australiat +61 2 8594 0400Australiaf +61 2 8594 0499

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## ANALYTICAL REPORT

Fibre Identifica	Fibre Identification in soil     Method     AN602								
Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Date Analysed	Fibre Identification	Est.%w/w*		
SE266429.001	BH7M_DL1_0.1- 0.2	Soil	125g Clay, Sand, Rocks	06 Jun 2024	14 Jun 2024	No Asbestos Found at RL of 0.1g/kg	<0.01		
SE266429.002	BH7M_DL2_0.2- 0.3	Soil	135g Clay, Sand, Rocks	06 Jun 2024	14 Jun 2024	No Asbestos Found at RL of 0.1g/kg	<0.01		
SE266429.003	BH7M_DL3_0.1- 0.2	Soil	114g Clay, Sand, Rocks	06 Jun 2024	14 Jun 2024	No Asbestos Found at RL of 0.1g/kg	<0.01		



## **METHOD SUMMARY**

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 unequivocably 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-
	<ul> <li>(a) no trace asbestos fibres have been detected (i.e. no 'respirable ' fibres):</li> <li>(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</li> <li>(c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.</li> </ul>

Amosite Brown Asbestos NA Not Analysed White Asbestos Chrysotile INR Listed. Not Required --Crocidolite Blue Asbestos -NATA accreditation does not cover the performance of this service . \*\* Amosite and/or Crocidolite Indicative data, theoretical holding time exceeded. Amphiboles \*\*\* 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: <a href="https://www.sgs.com.au/en-gb/environment-health-and-safety">www.sgs.com.au/en-gb/environment-health-and-safety</a>.

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This test report shall not be reproduced, except in full.

FOOTNOTES -



## **ANALYTICAL REPORT**



- CLIENT DETAILS		LABORATORY DE	LABORATORY DETAILS						
Contact Client Address	Sean Nolan EI AUSTRALIA SUITE 6.01 55 MILLER STREET PYRMONT NSW 2009	Manager Laboratory Address	Shane McDermott SGS Alexandria Environmental Unit 16, 33 Maddox St Alexandria NSW 2015						
Telephone	61 2 95160722	Telephone	+61 2 8594 0400						
Facsimile	(Not specified)	Facsimile	+61 2 8594 0499						
Email	sean.nolan@eiaustralia.com.au	Email	au.environmental.sydney@sgs.com						
Project	E26160 1 Veno St Heathcote -Additional	SGS Reference	<b>SE266429A R0</b>						
Order Number	E26160	Date Received	18/6/2024						
Samples	3	Date Reported	20/6/2024						

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

SIGNATORIES

Kamrul AHSAN Senior Chemist

Shane MCDERMOTT

Laboratory Manager

SGS Australia Pty Ltd ABN 44 000 964 278 Environment, Health and Safety

Unit 16 33 Maddox St PO Box 6432 Bourke Rd Alexandria NSW 2015 Alexandria NSW 2015 Australiat +61 2 8594 0400Australiaf +61 2 8594 0499

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### TCLP (Toxicity Characteristic Leaching Procedure) for Metals [AN006] Tested: 19/6/2024

			BH7M_DL2_0.2-0.3
PARAMETER	UOM	LOR	6/6/2024 SE266429A.002
рН 1:20	pH Units	-	9.1
pH 1:20 plus HCL	pH Units	-	2.1
Extraction Solution Used	No unit	-	1
Mass of Sample Used*	g	-	13
Volume of ExtractionSolution Used*	mL	-	250
pH TCLP after 18 hours	pH Units	-	5.4



### Metals in TCLP Extract by ICPOES [AN320] Tested: 20/6/2024

			BH7M_DL2_0.2-0.3
			SOIL
			- 6/6/2024
PARAMETER	UOM	LOR	SE266429A.002
Nickel, Ni	mg/L	0.005	0.073



METHOD	METHODOLOGY SUMMARY
AN006	Contaminants of interest in a waste material are leached out of the waste with a selected leaching solution under controlled conditions. The ratio of sample to extraction fluid is 100g to 2L (1 to 20 by mass). The concentration of each contaminant of interest is determined in the leachate by appropriate methods after separation from the sample by filtering. Base on USEPA 1311.
AN006	Extraction Fluid #1: This fluid is made by combining 128.6mL of dilute sodium hydroxide solution and 11.5mL glacial acetic acid with water and diluting to a volume of 2 litres. The pH of this fluid should be 4.93 ± 0.05.
AN006	Extraction Fluid #2: This fluid is made by diluting 5.7mL glacial acetic acid with water to a volume of 1 litre. The pH of this fluid should be 2.88 ± 0.05.
AN020	Unpreserved water sample is filtered through a 0.45µm membrane filter and acidified with nitric acid similar to APHA3030B.
AN320	Metals by ICP-OES: Samples are preserved with 10% nitric acid for a wide range of metals and some non-metals. This solution is measured by Inductively Coupled Plasma. Solutions are aspirated into an argon plasma at 8000-10000K and emit characteristic energy or light as a result of electron transitions through unique energy levels. The emitted light is focused onto a diffraction grating where it is separated into components.
AN320	Photomultipliers or CCDs are used to measure the light intensity at specific wavelengths. This intensity is directly proportional to concentration. Corrections are required to compensate for spectral overlap between elements. Reference APHA 3120 B.



#### FOOTNOTES -

*	NATA accreditation does not cover
	the performance of this service.
**	Indicative data, theoretical holding
	time exceeded.
***	

Indicates that both \* and \*\* apply.

Not analysed. NVL Not validated. Insufficient sample for IS LNR analysis. Sample listed, but not received. UOM Unit of Measure. LOR Limit of Reporting. Raised/lowered Limit of î↓ Reporting.

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:
  - a. 1 Bq is equivalent to 27 pCi
  - 37 MBq is equivalent to 1 mCi b.

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**



CLIENT DETAILS		LABORATORY DETAILS					
Contact	Joel Heininger	Manager	Shane McDermott				
Client	EI AUSTRALIA	Laboratory	SGS Alexandria Environmental				
Address	SUITE 6.01 55 MILLER STREET PYRMONT NSW 2009	Address	Unit 16, 33 Maddox St Alexandria NSW 2015				
Telephone	61 2 95160722	Telephone	+61 2 8594 0400				
Facsimile	(Not specified)	Facsimile	+61 2 8594 0499				
Email	joel.heininger@eiaustralia.com.au	Email	au.environmental.sydney@sgs.com				
Project	E26160 1 Veno Street Heathcote NSW	SGS Reference	SE267083 R0				
Order Number	E26160	Date Received	20/6/2024				
Samples	7	Date Reported	25/6/2024				

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

Micros subcontracted to Symbio Laboratories, 2 Sirius Road, Lane Cove West NSW 2066, NATA Accreditation Number 2455. Report No S1559269

- SIGNATORIES

Akheeqar BENIAMEEN Chemist

Shane MCDERMOTT Laboratory Manager



Dong LIANG Metals/Inorganics Team Leader

уэла узма гивац

Ying Ying ZHANG Laboratory Technician

Kamrul AHSAN Senior Chemist

Acm/n/

Ly Kim HA Organic Section Head

SGS Australia Pty Ltd ABN 44 000 964 278

Environment, Health and Safety

Unit 16 33 Maddox St PO Box 6432 Bourke Rd BC Alexandria NSW 2015 Alexandria NSW 2015 Australiat +61 2 8594 0400Australiaf +61 2 8594 0499

www.sgs.com.au



## SE267083 R0

### VOCs in Water [AN433] Tested: 24/6/2024

			BH2M-2	BH10M-2	BH17M-1	QD240620	QR240620
			WATER	WATER	WATER	WATER	WATER
			20/6/2024	20/6/2024	20/6/2024	20/6/2024	20/6/2024
PARAMETER	UOM	LOR	SE267083.001	SE267083.002	SE267083.003	SE267083.004	SE267083.005
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	-	-
Chloromethane	µg/L	5	<5	<5	<5	-	-
Vinyl chloride (Chloroethene)	µg/L	0.3	<0.3	<0.3	<0.3	-	-
Bromomethane	µg/L	10	<10	<10	<10	-	-
Chloroethane	µg/L	5	<5	<5	<5	-	-
Trichlorofluoromethane	µg/L	1	<1	<1	<1	-	-
Acetone (2-propanone)	µg/L	10	<10	<10	<10	-	-
lodomethane	µg/L	5	<5	<5	<5	-	-
1,1-dichloroethene	µg/L	0.5	<0.5	<0.5	<0.5	-	-
Acrylonitrile	µg/L	0.5	<0.5	<0.5	<0.5	-	-
Dichloromethane (Methylene chloride)	µg/L	5	<5	<5	<5	-	-
Allyl chloride	µg/L	2	<2	<2	<2	-	-
Carbon disulfide	µg/L	2	<2	<2	<2	-	-
trans-1,2-dichloroethene	µg/L	0.5	<0.5	<0.5	<0.5	-	-
MtBE (Methyl-tert-butyl ether)	µg/L	0.5	<0.5	<0.5	<0.5	-	-
1,1-dichloroethane	µg/L	0.5	<0.5	<0.5	<0.5	-	-
Vinyl acetate*	µg/L	10	<10	<10	<10	-	-
MEK (2-butanone)	µg/L	10	<10	<10	<10	-	-
cis-1,2-dichloroethene	µg/L	0.5	<0.5	<0.5	<0.5	-	-
Bromochloromethane	µg/L	0.5	<0.5	<0.5	<0.5	-	-
Chloroform (THM)	µg/L	0.5	<0.5	<0.5	<0.5	-	-
2,2-dichloropropane	µg/L	0.5	<0.5	<0.5	<0.5	-	-
1,2-dichloroethane	µg/L	0.5	<0.5	<0.5	<0.5	-	-
1,1,1-trichloroethane	µg/L	0.5	<0.5	<0.5	<0.5	-	-
1,1-dichloropropene	µg/L	0.5	<0.5	<0.5	<0.5	-	-
Carbon tetrachloride	µg/L	0.5	<0.5	<0.5	<0.5	-	-
Dibromomethane	µg/L	0.5	<0.5	<0.5	<0.5	-	-
1,2-dichloropropane	µg/L	0.5	<0.5	<0.5	<0.5	-	-
Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	<0.5	<0.5	<0.5	-	-
2-nitropropane	µg/L	100	<100	<100	<100	-	-
Bromodichloromethane (THM)	µg/L	0.5	<0.5	<0.5	<0.5	-	-
MIBK (4-methyl-2-pentanone)	µg/L	5	<5	<5	<5	-	-
cis-1,3-dichloropropene	µg/L	0.5	<0.5	<0.5	<0.5	-	-
trans-1,3-dichloropropene	µg/L	0.5	<0.5	<0.5	<0.5	-	-
1,1,2-trichloroethane	µg/L	0.5	<0.5	<0.5	<0.5	-	-
1,3-dichloropropane	µg/L	0.5	<0.5	<0.5	<0.5	-	-
Dibromochloromethane (THM)	µg/L	0.5	<0.5	<0.5	<0.5	-	-
2-hexanone (MBK)	µg/L	0.5	<0.5	<0.5		-	-
1,2-dibromoethane (EDB) Tetrachloroethene (Perchloroethylene,PCE)	µg/L	0.5	<0.5	<0.5	<0.5	-	-
	µg/L	0.5	<0.5	<0.5	<0.5	-	-
1,1,1,2-tetrachloroethane Chlorobenzene	µg/L	0.5		<0.5	<0.5	-	-
	µg/L		0.6				-
Bromoform (THM)	µg/L	0.5	<0.5	<0.5	<0.5	-	
Styrene (Vinyl benzene)	µg/L	0.5	<0.5	<0.5	<0.5	-	-
1,1,2,2-tetrachloroethane	µg/L	0.5	<0.5	<0.5	<0.5	-	-
1,2,3-trichloropropane	µg/L	0.5	<0.5	<0.5	<0.5	-	-
trans-1,4-dichloro-2-butene	µg/L	1	<1	<1	<1	-	-
Isopropylbenzene (Cumene)	µg/L	0.5	<0.5	<0.5	<0.5	-	-



## SE267083 R0

### VOCs in Water [AN433] Tested: 24/6/2024 (continued)

			BH2M-2	BH10M-2	BH17M-1	QD240620	QR240620
			WATER	WATER	WATER	WATER	WATER
	UOM	LOR	20/6/2024	20/6/2024	20/6/2024	20/6/2024	20/6/2024
PARAMETER Bromobenzene	μg/L	0.5	SE267083.001 <0.5	SE267083.002 <0.5	SE267083.003 <0.5	SE267083.004	SE267083.005
		-					
n-propylbenzene	µg/L	0.5	<0.5	<0.5	<0.5	-	-
2-chlorotoluene	µg/L	0.5	<0.5	<0.5	<0.5	-	-
4-chlorotoluene	µg/L	0.5	<0.5	<0.5	<0.5	-	-
1,3,5-trimethylbenzene	µg/L	0.5	<0.5	<0.5	<0.5	-	-
tert-butylbenzene	µg/L	0.5	<0.5	<0.5	<0.5	-	-
1,2,4-trimethylbenzene	µg/L	0.5	<0.5	<0.5	<0.5	-	-
sec-butylbenzene	µg/L	0.5	<0.5	<0.5	<0.5	-	-
1,3-dichlorobenzene	µg/L	0.5	<0.5	<0.5	<0.5	-	-
1,4-dichlorobenzene	µg/L	0.3	<0.3	<0.3	<0.3	-	-
p-isopropyltoluene	µg/L	0.5	<0.5	<0.5	<0.5	-	-
1,2-dichlorobenzene	µg/L	0.5	<0.5	<0.5	<0.5	-	-
n-butylbenzene	µg/L	0.5	<0.5	<0.5	<0.5	-	-
1,2-dibromo-3-chloropropane	µg/L	0.5	<0.5	<0.5	<0.5	-	-
1,2,4-trichlorobenzene	µg/L	0.5	<0.5	<0.5	<0.5	-	-
Hexachlorobutadiene	µg/L	0.5	<0.5	<0.5	<0.5	-	-
1,2,3-trichlorobenzene	µg/L	0.5	<0.5	<0.5	<0.5	-	-
Total VOC	µg/L	10	<10	<10	<10	-	-



### SE267083 R0

### VOCs in Water [AN433] Tested: 24/6/2024 (continued)

			QTS240620	QTB240620
			WATER	WATER
			20/6/2024	20/6/2024
PARAMETER	UOM	LOR	SE267083.006	SE267083.007
Benzene	µg/L	0.5	[96%]	<0.5
Toluene	μg/L	0.5	[94%]	<0.5
Ethylbenzene	µg/L	0.5	[101%]	<0.5
m/p-xylene	μg/L	1	[105%]	<1
o-xylene	µg/L	0.5	[105%]	<0.5
Total Xylenes	μg/L	1.5	-	<1.5
Total BTEX	μg/L	3	-	<3
Naphthalene (VOC)*	µg/L	0.5	[96%]	<0.5
Dichlorodifluoromethane (CFC-12)	μg/L	5	-	-
Chloromethane	µg/L	5	-	-
Vinyl chloride (Chloroethene)	µg/L	0.3	-	-
Bromomethane	µg/L	10	-	-
Chloroethane	µg/L	5	-	-
Trichlorofluoromethane	µg/L	1	-	-
Acetone (2-propanone)	µg/L	10	-	-
lodomethane	µg/L	5	-	-
1,1-dichloroethene	µg/L	0.5	-	-
Acrylonitrile	µg/L	0.5	-	-
Dichloromethane (Methylene chloride)	μg/L	5	-	-
Allyl chloride	μg/L	2	-	-
Carbon disulfide	µg/L	2	-	-
trans-1,2-dichloroethene	μg/L	0.5	-	-
MtBE (Methyl-tert-butyl ether)	μg/L	0.5	-	-
1,1-dichloroethane	μg/L	0.5	-	-
Vinyl acetate*	μg/L	10	-	-
MEK (2-butanone)	μg/L	10	-	-
cis-1,2-dichloroethene	μg/L	0.5	-	-
Bromochloromethane	μg/L	0.5	-	-
Chloroform (THM)	μg/L	0.5	-	-
2,2-dichloropropane	μg/L	0.5	-	-
1,2-dichloroethane	μg/L	0.5	-	-
1,1,1-trichloroethane	μg/L	0.5	-	-
1,1-dichloropropene	μg/L	0.5	-	-
Carbon tetrachloride	µg/L	0.5	-	-
Dibromomethane	μg/L	0.5	-	-
1,2-dichloropropane	μg/L	0.5	-	-
Trichloroethene (Trichloroethylene, TCE)	μg/L	0.5	-	-
2-nitropropane	µg/L	100	-	-
Bromodichloromethane (THM)	µg/L	0.5	-	-
MIBK (4-methyl-2-pentanone)	µg/L	5	-	-
cis-1,3-dichloropropene	µg/L	0.5	-	-
trans-1,3-dichloropropene	µg/L	0.5	-	-
1,1,2-trichloroethane	µg/L	0.5	-	-
1,3-dichloropropane	μg/L	0.5	-	-
Dibromochloromethane (THM)	μg/L	0.5	-	-
2-hexanone (MBK)	µg/L	5	-	-
1,2-dibromoethane (EDB)	μg/L	0.5	-	-
Tetrachloroethene (Perchloroethylene,PCE)	µg/L	0.5	-	-
1,1,1,2-tetrachloroethane	μg/L	0.5	-	-
Chlorobenzene	μg/L	0.5	-	-
Bromoform (THM)	µg/L	0.5	-	-
Styrene (Vinyl benzene)	μg/L	0.5	-	-
1,1,2,2-tetrachloroethane	μg/L	0.5	-	-
1,2,3-trichloropropane	μg/L	0.5	-	-
trans-1,4-dichloro-2-butene	μg/L	1	-	-
Isopropylbenzene (Cumene)	μg/L	0.5	-	-
	P8/-	0.0		



### SE267083 R0

### VOCs in Water [AN433] Tested: 24/6/2024 (continued)

			QTS240620	QTB240620
			WATER	WATER
			- 20/6/2024	- 20/6/2024
PARAMETER	UOM	LOR	SE267083.006	SE267083.007
Bromobenzene	µg/L	0.5	-	-
n-propylbenzene	µg/L	0.5	-	-
2-chlorotoluene	µg/L	0.5	-	-
4-chlorotoluene	µg/L	0.5	-	-
1,3,5-trimethylbenzene	µg/L	0.5	-	-
tert-butylbenzene	µg/L	0.5	-	-
1,2,4-trimethylbenzene	µg/L	0.5	-	-
sec-butylbenzene	µg/L	0.5	-	-
1,3-dichlorobenzene	µg/L	0.5	-	-
1,4-dichlorobenzene	µg/L	0.3	-	-
p-isopropyltoluene	µg/L	0.5	-	-
1,2-dichlorobenzene	µg/L	0.5	-	-
n-butylbenzene	µg/L	0.5	-	-
1,2-dibromo-3-chloropropane	µg/L	0.5	-	-
1,2,4-trichlorobenzene	µg/L	0.5	-	-
Hexachlorobutadiene	µg/L	0.5	-	-
1,2,3-trichlorobenzene	µg/L	0.5	-	-
Total VOC	µg/L	10	-	-



## SE267083 R0

### Volatile Petroleum Hydrocarbons in Water [AN433] Tested: 24/6/2024

			BH2M-2	BH10M-2	BH17M-1	QD240620	QR240620
			WATER	WATER	WATER	WATER	WATER
			20/6/2024	20/6/2024	20/6/2024	20/6/2024	20/6/2024
PARAMETER	UOM	LOR	SE267083.001	SE267083.002	SE267083.003	SE267083.004	SE267083.005
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



## SE267083 R0

### TRH (Total Recoverable Hydrocarbons) in Water [AN403] Tested: 21/6/2024

			BH2M-2	BH10M-2	BH17M-1	QD240620	QR240620
			WATER	WATER	WATER	WATER	WATER
			20/6/2024	20/6/2024	20/6/2024	20/6/2024	20/6/2024
PARAMETER	UOM	LOR	SE267083.001	SE267083.002	SE267083.003	SE267083.004	SE267083.005
TRH C10-C14	µg/L	50	170	<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	180	<60	<60	<60	<60
TRH >C10-C16 - Naphthalene (F2)	µg/L	60	180	<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	430	<320	<320	<320	<320



### PAH (Polynuclear Aromatic Hydrocarbons) in Water [AN420] Tested: 21/6/2024

			BH2M-2	BH10M-2	BH17M-1
			WATER	WATER	WATER
			20/6/2024	20/6/2024	20/6/2024
PARAMETER	UOM	LOR	SE267083.001	SE267083.002	SE267083.003
Naphthalene	µg/L	0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	µg/L	0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	µg/L	0.1	<0.1	<0.1	<0.1
Acenaphthylene	µg/L	0.1	<0.1	<0.1	<0.1
Acenaphthene	µg/L	0.1	<0.1	<0.1	<0.1
Fluorene	µg/L	0.1	<0.1	<0.1	<0.1
Phenanthrene	µg/L	0.1	<0.1	<0.1	<0.1
Anthracene	µg/L	0.1	<0.1	<0.1	<0.1
Fluoranthene	µg/L	0.1	<0.1	<0.1	<0.1
Pyrene	µg/L	0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	µg/L	0.1	<0.1	<0.1	<0.1
Chrysene	µg/L	0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	µg/L	0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	µg/L	0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	μg/L	0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	µg/L	0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	μg/L	0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	µg/L	0.1	<0.1	<0.1	<0.1
Total PAH (18)	µg/L	1	<1	<1	<1



### Total Phenolics in Water [AN295] Tested: 25/6/2024

			BH2M-2	BH10M-2	BH17M-1
			WATER	WATER	WATER
			20/6/2024	20/6/2024	20/6/2024
PARAMETER	UOM	LOR	SE267083.001	SE267083.002	SE267083.003
Total Phenols	mg/L	0.05	<0.05	<0.05	<0.05



### Anions by Ion Chromatography in Water [AN245] Tested: 21/6/2024

			BH10M-2
			WATER
			- 20/6/2024
PARAMETER	UOM	LOR	SE267083.002
Chloride	mg/L	1	38
Sulfate, SO4	mg/L	1	100
Nitrate Nitrogen, NO3-N	mg/L	0.005	0.013



## SE267083 R0

### Nitrite in Water [AN277] Tested: 21/6/2024

			BH10M-2
			WATER
			-
			20/6/2024
PARAMETER	UOM	LOR	SE267083.002
Nitrite Nitrogen, NO2 as N	mg/L	0.005	<0.005
Total Oxidised Nitrogen, NOx-N	mg/L	0.005	0.017



### TKN Kjeldahl Digestion by Discrete Analyser [AN292] Tested: 21/6/2024

			BH10M-2
			WATER
			- 20/6/2024
PARAMETER	UOM	LOR	SE267083.002
Total Kjeldahl Nitrogen	mg/L	0.05	0.46
Total Nitrogen (calc)	mg/L	0.05	0.47



### Ammonia Nitrogen by Discrete Analyser [AN291] Tested: 21/6/2024

			BH10M-2
			WATER
			-
			20/6/2024
PARAMETER	UOM	LOR	SE267083.002
Ammonia Nitrogen, NH <sub>3</sub> as N	mg/L	0.01	0.07



### Total Phosphorus by Kjeldahl Digestion DA in Water [AN279/AN293(Sydney only)] Tested: 21/6/2024

			BH10M-2
			WATER
			-
			20/6/2024
PARAMETER	UOM	LOR	SE267083.002
Total Phosphorus (Kjeldahl Digestion) as P	mg/L	0.02	0.19



### Filterable Reactive Phosphorus (FRP) [AN278] Tested: 21/6/2024

			BH10M-2
			WATER
			-
			20/6/2024
PARAMETER	UOM	LOR	SE267083.002
Filterable Reactive Phosphorus as P	mg/L	0.005	<0.005



### pH in water [AN101] Tested: 21/6/2024

			BH2M-2	BH10M-2	BH17M-1
			WATER	WATER	WATER
			20/6/2024	20/6/2024	20/6/2024
PARAMETER	UOM	LOR	SE267083.001	SE267083.002	SE267083.003
pH**	No unit	-	6.1	5.5	4.6



### Conductivity and TDS by Calculation - Water [AN106] Tested: 21/6/2024

			BH2M-2	BH10M-2	BH17M-1
			WATER	WATER	WATER
			20/6/2024	20/6/2024	20/6/2024
PARAMETER	UOM	LOR	SE267083.001	SE267083.002	SE267083.003
Conductivity @ 25 C	µS/cm	2	320	400	470
Total Dissolved Solids (by calculation)	mg/L	10	190	240	280



### Total Dissolved Solids (TDS) in water [AN113] Tested: 21/6/2024

			BH10M-2
			WATER
			20/6/2024
PARAMETER	UOM	LOR	SE267083.002
Total Dissolved Solids Dried at 175-185°C	mg/L	10	260



### SE267083 R0

#### Alkalinity [AN135] Tested: 21/6/2024

			BH10M-2
			WATER
			- 20/6/2024
PARAMETER	UOM	LOR	SE267083.002
Bicarbonate Alkalinity as CaCO3	mg/L	5	<5
Carbonate Alkalinity as CaCO3	mg/L	1	<1
Hydroxide Alkalinity as CaCO3	mg/L	5	<5
Total Alkalinity as CaCO3	mg/L	5	<5
Hydroxide Alkalinity as OH (meq/L)	meq/L	0.06	<0.06
Bicarbonate Alkalinity as HCO3 (meq/L)	meq/L	0.03	<0.03
Carbonate Alkalinity as CO3 (meq/L)	meq/L	0.03	<0.03



#### Dissolved Oxygen by Membrane Electrode [AN176] Tested: 21/6/2024

			BH2M-2	BH10M-2	BH17M-1
			WATER	WATER	WATER
			20/6/2024	20/6/2024	20/6/2024
PARAMETER	UOM	LOR	SE267083.001	SE267083.002	SE267083.003
Temperature*	°C	-	17.3	19.1	17.4
Dissolved Oxygen**	mg/L	0.5	3.8	8.5	5.9



#### Forms of Carbon [AN190] Tested: 24/6/2024

			BH10M-2
			WATER
			- 20/6/2024
PARAMETER	UOM	LOR	SE267083.002
Total Organic Carbon as NPOC	mg/L	0.2	4.3



#### Total and Volatile Suspended Solids (TSS / VSS) [AN114] Tested: 21/6/2024

			BH10M-2
			WATER
			20/6/2024
PARAMETER	UOM	LOR	SE267083.002
Total Suspended Solids Dried at 103-105°C	mg/L	5	80



## SE267083 R0

#### Turbidity [AN119] Tested: 21/6/2024

			BH10M-2
			WATER
			- 20/6/2024
PARAMETER	UOM	LOR	SE267083.002
Turbidity	NTU	0.5	83



#### Redox Potential (Eh) in water [AN240] Tested: 21/6/2024

			BH2M-2	BH10M-2	BH17M-1
			WATER	WATER	WATER
			20/6/2024	20/6/2024	20/6/2024
PARAMETER	UOM	LOR	SE267083.001	SE267083.002	SE267083.003
Eh of Sample Relative to Standard H+ Electrode***	mV	-500	187	392	381
Temperature of Sample*	°C	0.1	19.5	19.2	19.3



#### Metals in Water (Dissolved) by ICPOES [AN320] Tested: 24/6/2024

			BH10M-2
			WATER
			- 20/6/2024
PARAMETER	UOM	LOR	SE267083.002
Calcium, Ca	mg/L	0.1	0.8
Magnesium, Mg	mg/L	0.1	4.0
Total Hardness by Calculation	mg CaCO3/L	1	19
Sodium Adsorption Ratio	No unit	0.2	6.4
Sodium, Na	mg/L	0.5	63
Potassium, K	mg/L	0.1	0.6
Lithium, Li	mg/L	0.005	<0.005
Soluble Silicon as Silica, SiO2*	mg/L	0.1	38



## SE267083 R0

#### Trace Metals (Dissolved) in Water by ICPMS [AN318] Tested: 24/6/2024

			BH2M-2	BH10M-2	BH17M-1	QD240620	QR240620
			WATER	WATER	WATER	WATER	WATER
				-			
			20/6/2024	20/6/2024	20/6/2024	20/6/2024	20/6/2024
PARAMETER	UOM	LOR	SE267083.001	SE267083.002	SE267083.003	SE267083.004	SE267083.005
Arsenic	µg/L	1	1	<1	<1	1	<1
Cadmium	µg/L	0.1	<0.1	0.1	0.5	<0.1	<0.1
Copper	µg/L	1	2	5	4	<1	7
Chromium	µg/L	1	<1	<1	<1	<1	<1
Nickel	µg/L	1	<1	1	3	<1	1
Lead	µg/L	1	<1	<1	<1	<1	<1
Zinc	µg/L	5	<5	6	17	<5	<5
Aluminium	µg/L	5	-	11	-	-	-
Antimony	µg/L	1	-	<1	-	-	-
Barium	µg/L	1	-	6	-	-	-
Beryllium	µg/L	1	-	<1	-	-	-
Boron	µg/L	5	-	170	-	-	-
Cobalt	µg/L	1	-	<1	-	-	-
Iron	µg/L	5	-	49	-	-	-
Manganese	µg/L	1	-	23	-	-	-
Molybdenum	µg/L	1	-	<1	-	-	-
Selenium	µg/L	1	-	<1	-	-	-
Silver	µg/L	1	-	<1	-	-	-
Strontium	µg/L	1	-	7	-	-	-
Uranium	µg/L	1	-	<1	-	-	-
Vanadium	µg/L	1	-	<1	-	-	-



## SE267083 R0

#### Mercury (dissolved) in Water [AN311(Perth)/AN312] Tested: 21/6/2024

			BH2M-2	BH10M-2	BH17M-1	QD240620	QR240620
			WATER	WATER	WATER	WATER	WATER
			20/6/2024	20/6/2024	20/6/2024	20/6/2024	20/6/2024
PARAMETER	UOM	LOR	SE267083.001	SE267083.002	SE267083.003	SE267083.004	SE267083.005
Mercury	mg/L	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001



## SE267083 R0

#### Sample Subcontracted [] Tested: 24/6/2024

			BH10M-2
			WATER
			- 20/6/2024
PARAMETER	UOM	LOR	SE267083.002
Sample Subcontracted*	No unit	-	Subcontracted



METHOD	METHODOLOGY SUMMARY
AN020	Unpreserved water sample is filtered through a 0.45µm membrane filter and acidified with nitric acid similar to APHA3030B.
AN101	pH in Soil Sludge Sediment and Water: pH is measured electrometrically using a combination electrode (glass plus reference electrode) and is calibrated against 3 buffers purchased commercially. For soils, an extract with water is made at a ratio of 1:5 and the pH determined and reported on the extract. Reference APHA 4500-H+.
AN106	Conductivity and TDS by Calculation: Conductivity is measured by meter with temperature compensation and is calibrated against a standard solution of potassium chloride. Conductivity is generally reported as $\mu$ mhos/cm or $\mu$ S/cm @ 25°C. For soils, an extract with water is made at a ratio of 1:5 and the EC determined and reported on the extract, or calculated back to the as-received sample. Total Dissolved Salts can be estimated from conductivity using a conversion factor, which for natural waters, is in the range 0.55 to 0.75. SGS use 0.6. Reference APHA 2510 B.
AN106	Salinity may be calculated in terms of NaCl from the sample conductivity. This assumes all soluble salts present, measured by the conductivity, are present as NaCl.
AN113	Total Dissolved Solids: A well-mixed filtered sample of known volume is evaporated to dryness at 180°C and the residue weighed. Approximate methods for correlating chemical analysis with dissolved solids are available. Reference APHA 2540 C.
AN113	The Total Dissolved Solids residue may also be ignited at 550 C and volatile TDS (Organic TDS) and non-volatile TDS (Inorganic) can be determined.
AN114	Total Suspended and Volatile Suspended Solids: The sample is homogenised by shaking and a known volume is filtered through a pre-weighed GF/C filter paper and washed well with deionised water. The filter paper is dried and reweighed. The TSS is the residue retained by the filter per unit volume of sample. Reference APHA 2540 D. Internal Reference AN114
AN119	Turbidity by Nepholometry: Small particles in a light beam scatter light at a range of angles. A turbidimeter measures this scatter and reports results compared to turbidity standards, in NTU. This procedure is not suitable for very dark coloured liquids or samples with high solids because light absorption causes artificially low light scatter and low turbidity. Reference APHA 2130B.
AN135	Alkalinity (and forms of) by Titration: The sample is titrated with standard acid to pH 8.3 (P titre) and pH 4.5 (T titre) and permanent and/or total alkalinity calculated. The results are expressed as equivalents of calcium carbonate or recalculated as bicarbonate, carbonate and hydroxide. Reference APHA 2320. Internal Reference AN135
AN176	Dissolved Oxygen: Dissolved oxygen is measured directly using an oxygen permeable membrane electrode and meter. Under steady state conditions the current is directly proportional to the DO concentration. Samples with no headspace are required for this analysis and if headspace is observed this will be recorded on the report. Internal Reference is AN176 based on APHA 4500-O, C and G.
AN190	TOC and DOC in Water: A homogenised micro portion of sample is injected into a heated reaction chamber packed with an oxidative catalyst that converts organic carbon to carbon dioxide. The CO2 is measured using a non-dispersive infrared detector. The process is fully automated in a commercially available analyser. If required a sugar value can be calculated from the TOC result. Reference APHA 5310 B.
AN190	Chemical oxygen demand can be calculated/estimated based on the O2/C relation as 2.67*NPOC (TOC). This is an estimate only and the factor will vary with sample matrix so results should be interpreted with caution.
AN240	Oxidation-Reduction Potential (Eh): Electrometric measurements are made by potentiometric determination of electron activity (or intensity) with an inert indicator electrode and a suitable reference electrode. At redox equilibrium, the potential difference between the two electrodes equals the redox potential of the system. This measurement is then corrected for the difference between the potential of the reference electrode and that of the standard hydrogen electrode.
AN245	Anions by Ion Chromatography: A water sample is injected into an eluent stream that passes through the ion chromatographic system where the anions of interest ie Br, Cl, NO2, NO3 and SO4 are separated on their relative affinities for the active sites on the column packing material. Changes to the conductivity and the UV-visible absorbance of the eluent enable identification and quantitation of the anions based on their retention time and peak height or area. APHA 4110 B
AN277	Nitrite ions, when reacted with a reagent containing sulphanilamide and N-(1-naphthyl)-ethylenediamine dihydrochloride produce a highly coloured azo dye that is measured photometrically at 540nm.
AN278	Filterable Reactive Phosphorus by DA (determined on filtered sample): Orthophosphate reacts with ammonium molybdate (Mo VI) and potassium antimonyl tartrate (Sb III) in acid medium to form an antimony-phosphomolybdate complex. This complex is subsequently reduced with ascorbic acid to form a blue colour and the absorbance is read at 880 nm. The sensitivity of the automated method is 10-20 times that of the macro method. Reference APHA 4500-P F
AN279/AN293(Sydney)	The sample is digested with Sulphuric acid, K2SO4 and CuSO4. All forms of phosphorus are converted into orthophosphate. The digest is cooled and placed on the discrete analyser for colorimetric analysis.



## **METHOD SUMMARY**

AN281	An unfiltered water or soil sample is first digested in a block digestor with sulfuric acid, K2SO4 and CuSO4. The ammonia produced following digestion is then measured colourimetrically using the Discrete Analyser. A portion of the digested sample is buffered to an alkaline pH, and interfering cations are complexed. The ammonia then reacts with salicylate and hypochlorite to give a blue colour whose absorbance is measured at 660nm and compared with calibration standards. This is proportional to the concentration of Total Kjeldahl Nitrogen in the original sample.
AN291	Ammonia in solution reacts with hypochlorite ions from Sodium Dichloroisocyanuate, and salicylate in the presence of Sodium Nitroprusside to form indophenol blue and measured at 660 nm by Discrete Analyser.
AN295	The water sample or extract of sample is distilled in a phosphoric acid stream. Phenolic compounds in the distillate react with a reagent stream of potassium hexacyanoferrate(III) and 4-Amino-2,3-dimethyl-3-pryazolin-5-one in an alkaline medium to form a coloured complex which is analysed spectrophotometrically onboard a continuous flow analyser.
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).
AN320	Metals by ICP-OES: Samples are preserved with 10% nitric acid for a wide range of metals and some non-metals. This solution is measured by Inductively Coupled Plasma. Solutions are aspirated into an argon plasma at 8000-10000K and emit characteristic energy or light as a result of electron transitions through unique energy levels. The emitted light is focused onto a diffraction grating where it is separated into components.
AN320	Photomultipliers or CCDs are used to measure the light intensity at specific wavelengths. This intensity is directly proportional to concentration. Corrections are required to compensate for spectral overlap between elements. Reference APHA 3120 B.
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 Recoveerable 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.
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.
Calculation	Free and Total Carbon Dioxide may be calculated using alkalinity forms only when the samples TDS is <500mg/L. If TDS is >500mg/L free or total carbon dioxide cannot be reported. APHA4500CO2 D.



#### FOOTNOTES -

*	NATA accreditation does not cover
	the performance of this service.
**	Indicative data, theoretical holding
	time exceeded.

\*\*\* Indicates that both \* and \*\* apply.

Not analysed.
 NVL Not validated.
 IS Insufficient sample for analysis.
 LNR Sample listed, but not received.

UOM Unit of Measure. LOR Limit of Reporting. ↑↓ Raised/lowered Limit of Reporting.

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:

- a. 1 Bq is equivalent to 27 pCi
- b. 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: <u>www.sgs.com.au/en-gb/environment-health-and-safety</u>.

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## **CERTIFICATE OF ANALYSIS 353462**

Client Details	
Client	El Australia
Attention	Lab Email
Address	Suite 6.01, 55 Miller Street, Pyrmont, NSW, 2009

Sample Details	
Your Reference	E26160 - 1 Veno Street, Heathcote
Number of Samples	1 Soil
Date samples received	07/06/2024
Date completed instructions received	07/06/2024

### **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	17/06/2024	
Date of Issue	13/06/2024	
NATA Accreditation Number 290	I. This document shall not be reproduced except in full.	
Accredited for compliance with I	O/IEC 17025 - Testing. Tests not covered by NATA are denoted with *	

Results Approved By Giovanni Agosti, Group Technical Manager Timothy Toll, Senior Chemist Authorised By Nancy Zhang, Laboratory Manager



vTRH(C6-C10)/BTEXN in Soil		
Our Reference		353462-1
Your Reference	UNITS	QT1_20240606
Date Sampled		06/06/2024
Type of sample		Soil
Date extracted	-	11/06/2024
Date analysed	-	12/06/2024
TRH C <sub>6</sub> - C <sub>9</sub>	mg/kg	<25
TRH C <sub>6</sub> - C <sub>10</sub>	mg/kg	<25
vTRH C6 - C10 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	%	108

svTRH (C10-C40) in Soil		
Our Reference		353462-1
Your Reference	UNITS	QT1_20240606
Date Sampled		06/06/2024
Type of sample		Soil
Date extracted	-	11/06/2024
Date analysed	-	11/06/2024
TRH C <sub>10</sub> - C <sub>14</sub>	mg/kg	<50
TRH C <sub>15</sub> - C <sub>28</sub>	mg/kg	<100
TRH C <sub>29</sub> - C <sub>36</sub>	mg/kg	<100
Total +ve TRH (C10-C36)	mg/kg	<50
TRH >C10 -C16	mg/kg	<50
TRH >C10 -C16 less Naphthalene (F2)	mg/kg	<50
TRH >C <sub>16</sub> -C <sub>34</sub>	mg/kg	<100
TRH >C <sub>34</sub> -C <sub>40</sub>	mg/kg	<100
Total +ve TRH (>C10-C40)	mg/kg	<50
Surrogate o-Terphenyl	%	79

Acid Extractable metals in soil		
Our Reference		353462-1
Your Reference	UNITS	QT1_20240606
Date Sampled		06/06/2024
Type of sample		Soil
Date prepared	-	11/06/2024
Date analysed	-	11/06/2024
Arsenic	mg/kg	4
Cadmium	mg/kg	<0.4
Chromium	mg/kg	32
Copper	mg/kg	7
Lead	mg/kg	8
Mercury	mg/kg	<0.1
Nickel	mg/kg	23
Zinc	mg/kg	21

Moisture		
Our Reference		353462-1
Your Reference	UNITS	QT1_20240606
Date Sampled		06/06/2024
Type of sample		Soil
Date prepared	-	11/06/2024
Date analysed	-	12/06/2024
Moisture	%	13

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-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater. Note, the Total +ve Xylene PQL is reflective of the lowest individual PQL and is therefore "Total +ve Xylenes" is simply a sum of the positive individual Xylenes.

QUALITY CONT	QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil						plicate		Spike Red	covery %
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-2	[NT]
Date extracted	-			11/06/2024	[NT]		[NT]	[NT]	11/06/2024	
Date analysed	-			12/06/2024	[NT]		[NT]	[NT]	12/06/2024	
TRH C <sub>6</sub> - C <sub>9</sub>	mg/kg	25	Org-023	<25	[NT]		[NT]	[NT]	91	
TRH C <sub>6</sub> - C <sub>10</sub>	mg/kg	25	Org-023	<25	[NT]		[NT]	[NT]	91	
Benzene	mg/kg	0.2	Org-023	<0.2	[NT]		[NT]	[NT]	81	
Toluene	mg/kg	0.5	Org-023	<0.5	[NT]		[NT]	[NT]	104	
Ethylbenzene	mg/kg	1	Org-023	<1	[NT]		[NT]	[NT]	90	
m+p-xylene	mg/kg	2	Org-023	<2	[NT]		[NT]	[NT]	89	
o-Xylene	mg/kg	1	Org-023	<1	[NT]		[NT]	[NT]	89	
Naphthalene	mg/kg	1	Org-023	<1	[NT]		[NT]	[NT]	[NT]	
Surrogate aaa-Trifluorotoluene	%		Org-023	117	[NT]		[NT]	[NT]	107	

QUALITY CO	QUALITY CONTROL: svTRH (C10-C40) in Soil						plicate		Spike Re	covery %
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-2	[NT]
Date extracted	-			11/06/2024	[NT]		[NT]	[NT]	11/06/2024	
Date analysed	-			11/06/2024	[NT]		[NT]	[NT]	11/06/2024	
TRH C <sub>10</sub> - C <sub>14</sub>	mg/kg	50	Org-020	<50	[NT]		[NT]	[NT]	113	
TRH C <sub>15</sub> - C <sub>28</sub>	mg/kg	100	Org-020	<100	[NT]		[NT]	[NT]	107	
TRH C <sub>29</sub> - C <sub>36</sub>	mg/kg	100	Org-020	<100	[NT]		[NT]	[NT]	86	
TRH >C <sub>10</sub> -C <sub>16</sub>	mg/kg	50	Org-020	<50	[NT]		[NT]	[NT]	113	
TRH >C <sub>16</sub> -C <sub>34</sub>	mg/kg	100	Org-020	<100	[NT]		[NT]	[NT]	107	
TRH >C <sub>34</sub> -C <sub>40</sub>	mg/kg	100	Org-020	<100	[NT]		[NT]	[NT]	86	
Surrogate o-Terphenyl	%		Org-020	82	[NT]	[NT]	[NT]	[NT]	84	[NT]

QUALITY CONT	QUALITY CONTROL: Acid Extractable metals in soil								Spike Re	covery %
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-2	[NT]
Date prepared	-			11/06/2024	[NT]		[NT]	[NT]	11/06/2024	
Date analysed	-			11/06/2024	[NT]		[NT]	[NT]	11/06/2024	
Arsenic	mg/kg	4	Metals-020	<4	[NT]		[NT]	[NT]	106	
Cadmium	mg/kg	0.4	Metals-020	<0.4	[NT]		[NT]	[NT]	100	
Chromium	mg/kg	1	Metals-020	<1	[NT]		[NT]	[NT]	104	
Copper	mg/kg	1	Metals-020	<1	[NT]		[NT]	[NT]	101	
Lead	mg/kg	1	Metals-020	<1	[NT]		[NT]	[NT]	106	
Mercury	mg/kg	0.1	Metals-021	<0.1	[NT]		[NT]	[NT]	99	
Nickel	mg/kg	1	Metals-020	<1	[NT]		[NT]	[NT]	104	
Zinc	mg/kg	1	Metals-020	<1	[NT]		[NT]	[NT]	103	

Result Definiti	ons
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 Contro	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.



## **CERTIFICATE OF ANALYSIS 354460**

Client Details	
Client	El Australia
Attention	Joel Heininger
Address	Suite 6.01, 55 Miller Street, Pyrmont, NSW, 2009

Sample Details	
Your Reference	<u>E26160</u>
Number of Samples	1 Water
Date samples received	20/06/2024
Date completed instructions received	20/06/2024

### **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	25/06/2024
Date of Issue	25/06/2024
NATA Accreditation Number 29	01. This document shall not be reproduced except in full.
Accredited for compliance with I	SO/IEC 17025 - Testing. Tests not covered by NATA are denoted with *

Results Approved By Giovanni Agosti, Group Technical Manager Liam Timmins, Organics Supervisor Authorised By Nancy Zhang, Laboratory Manager



vTRH(C6-C10)/BTEXN in Water		
Our Reference		354460-1
Your Reference	UNITS	QT240620
Date Sampled		20/06/2024
Type of sample		Water
Date extracted	-	21/06/2024
Date analysed	-	24/06/2024
TRH C <sub>6</sub> - C <sub>9</sub>	μg/L	<10
TRH C6 - C10	μg/L	<10
TRH C <sub>6</sub> - C <sub>10</sub> less BTEX (F1)	μg/L	<10
Benzene	μg/L	<1
Toluene	μg/L	<1
Ethylbenzene	μg/L	<1
m+p-xylene	μg/L	<2
o-xylene	μg/L	<1
Naphthalene	μg/L	<1
Surrogate Dibromofluoromethane	%	113
Surrogate Toluene-d8	%	99
Surrogate 4-Bromofluorobenzene	%	93

svTRH (C10-C40) in Water		
Our Reference		354460-1
Your Reference	UNITS	QT240620
Date Sampled		20/06/2024
Type of sample		Water
Date extracted	-	21/06/2024
Date analysed	-	22/06/2024
TRH C <sub>10</sub> - C <sub>14</sub>	μg/L	81
TRH C <sub>15</sub> - C <sub>28</sub>	μg/L	<100
TRH C <sub>29</sub> - C <sub>36</sub>	μg/L	<100
Total +ve TRH (C10-C36)	μg/L	80
TRH >C10 - C16	µg/L	80
TRH >C <sub>10</sub> - C <sub>16</sub> less Naphthalene (F2)	µg/L	80
TRH >C <sub>16</sub> - C <sub>34</sub>	µg/L	<100
TRH >C <sub>34</sub> - C <sub>40</sub>	µg/L	<100
Total +ve TRH (>C10-C40)	µg/L	80
Surrogate o-Terphenyl	%	77

HM in water - dissolved		
Our Reference		354460-1
Your Reference	UNITS	QT240620
Date Sampled		20/06/2024
Type of sample		Water
Date prepared	-	21/06/2024
Date analysed	-	21/06/2024
Arsenic-Dissolved	µg/L	9
Cadmium-Dissolved	µg/L	<0.1
Chromium-Dissolved	µg/L	2
Copper-Dissolved	µg/L	1
Lead-Dissolved	µg/L	2
Mercury-Dissolved	µg/L	<0.05
Nickel-Dissolved	μg/L	<1
Zinc-Dissolved	µg/L	4

Method ID	Methodology Summary
Metals-021	Determination of Mercury by Cold Vapour AAS.
Metals-022	Determination of various metals by ICP-MS.
	Please note for Bromine and lodine, any forms of these elements that are present are included together in the one result reported for each of these two elements.
	Salt forms (e.g. FeO, PbO, ZnO) are determined stoichiometrically from the base metal concentration.
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-023	Water samples are analysed directly 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.

QUALITY CONT	ROL: vTRH((	C6-C10)/E	BTEXN in Water			Du	plicate		Spike Re	covery %
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W4	[NT]
Date extracted	-			21/06/2024	1	21/06/2024	24/06/2024		21/06/2024	
Date analysed	-			24/06/2024	1	24/06/2024	25/06/2024		24/06/2024	
TRH C <sub>6</sub> - C <sub>9</sub>	μg/L	10	Org-023	<10	1	<10	<10	0	105	
TRH C <sub>6</sub> - C <sub>10</sub>	μg/L	10	Org-023	<10	1	<10	<10	0	105	
Benzene	μg/L	1	Org-023	<1	1	<1	<1	0	104	
Toluene	μg/L	1	Org-023	<1	1	<1	<1	0	104	
Ethylbenzene	μg/L	1	Org-023	<1	1	<1	<1	0	104	
m+p-xylene	μg/L	2	Org-023	<2	1	<2	<2	0	106	
o-xylene	μg/L	1	Org-023	<1	1	<1	<1	0	109	
Naphthalene	μg/L	1	Org-023	<1	1	<1	<1	0	[NT]	
Surrogate Dibromofluoromethane	%		Org-023	102	1	113	113	0	106	
Surrogate Toluene-d8	%		Org-023	99	1	99	100	1	100	
Surrogate 4-Bromofluorobenzene	%		Org-023	97	1	93	97	4	110	

QUALITY CONTROL: svTRH (C10-C40) in Water						Du	plicate		Spike Re	covery %
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W1	[NT]
Date extracted	-			21/06/2024	[NT]		[NT]	[NT]	21/06/2024	
Date analysed	-			21/06/2024	[NT]		[NT]	[NT]	21/06/2024	
TRH C <sub>10</sub> - C <sub>14</sub>	µg/L	50	Org-020	<50	[NT]		[NT]	[NT]	123	
TRH C <sub>15</sub> - C <sub>28</sub>	µg/L	100	Org-020	<100	[NT]		[NT]	[NT]	124	
TRH C <sub>29</sub> - C <sub>36</sub>	µg/L	100	Org-020	<100	[NT]		[NT]	[NT]	112	
TRH >C <sub>10</sub> - C <sub>16</sub>	µg/L	50	Org-020	<50	[NT]		[NT]	[NT]	123	
TRH >C <sub>16</sub> - C <sub>34</sub>	µg/L	100	Org-020	<100	[NT]		[NT]	[NT]	124	
TRH >C <sub>34</sub> - C <sub>40</sub>	µg/L	100	Org-020	<100	[NT]		[NT]	[NT]	112	
Surrogate o-Terphenyl	%		Org-020	91	[NT]	[NT]	[NT]	[NT]	121	[NT]

QUALITY CC	QUALITY CONTROL: HM in water - dissolved						Duplicate			
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W1	[NT]
Date prepared	-			21/06/2024	[NT]		[NT]	[NT]	21/06/2024	
Date analysed	-			21/06/2024	[NT]		[NT]	[NT]	21/06/2024	
Arsenic-Dissolved	µg/L	1	Metals-022	<1	[NT]		[NT]	[NT]	99	
Cadmium-Dissolved	µg/L	0.1	Metals-022	<0.1	[NT]		[NT]	[NT]	100	
Chromium-Dissolved	μg/L	1	Metals-022	<1	[NT]		[NT]	[NT]	86	
Copper-Dissolved	µg/L	1	Metals-022	<1	[NT]		[NT]	[NT]	89	
Lead-Dissolved	µg/L	1	Metals-022	<1	[NT]		[NT]	[NT]	102	
Mercury-Dissolved	µg/L	0.05	Metals-021	<0.05	[NT]		[NT]	[NT]	109	
Nickel-Dissolved	µg/L	1	Metals-022	<1	[NT]		[NT]	[NT]	90	
Zinc-Dissolved	µg/L	1	Metals-022	<1	[NT]		[NT]	[NT]	92	

Result Definiti	ons
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.					
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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.					

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## **ANALYTICAL REPORT**



CLIENT DETAILS		LABORATORY DE	TAILS
Contact	Sean Nolan	Manager	Huong Crawford
Client	EI AUSTRALIA	Laboratory	SGS Alexandria Environmental
Address	SUITE 6.01 55 MILLER STREET PYRMONT NSW 2009	Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	61 2 95160722	Telephone	+61 2 8594 0400
Facsimile	(Not specified)	Facsimile	+61 2 8594 0499
Email	sean.nolan@eiaustralia.com.au	Email	au.environmental.sydney@sgs.com
Project	E26160 1 Veno St, Heathcote	SGS Reference	SE255412 R0
Order Number	E26160	Date Received	19/10/2023
Samples	19	Date Reported	26/10/2023

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 #10: Chrysotile asbestos found as approx 0.4g fibrous mass(25x10x3mm) and loose fibre bundles Asbestos analysed by Approved Identifier Ravee Sivasubramaniam.

SIGNATORIES

Akheeqar BENIAMEEN Chemist

Bennet LO

Senior Chemist

Dong LIANG Metals/Inorganics Team Leader

Acm/m/

Ly Kim HA Organic Section Head

S. Ravender.

Ravee SIVASUBRAMANIAM Hygiene Team Leader

> SGS Australia Pty Ltd ABN 44 000 964 278

26/10/2023

Environment, Health and Safety

Unit 16 33 Maddox St PO Box 6432 Bourke Rd BC Alexandria NSW 2015 Alexandria NSW 2015 Australiat +61 2 8594 0400Australiaf +61 2 8594 0499

www.sgs.com.au



## SE255412 R0

### VOC's in Soil [AN433] Tested: 24/10/2023

			BH1_0.2-0.3	BH2_0.2-0.3	BH3_0.3-0.4	BH3_0.7-0.8	BH4_0.3-0.4
PARAMETER	UOM	LOR	SOIL - 18/10/2023 SE255412.001	SOIL - 18/10/2023 SE255412.002	SOIL - 18/10/2023 SE255412.003	SOIL - 18/10/2023 SE255412.004	SOIL - 18/10/2023 SE255412.005
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

			BH4_0.6-0.7	BH5_0.3-0.4	BH5_0.8-0.9	BH6_0.2-0.3	BH7_0.2-0.3
			SOIL	SOIL	SOIL	SOIL	SOIL
							-
			18/10/2023	18/10/2023	18/10/2023	18/10/2023	18/10/2023
PARAMETER	UOM	LOR	SE255412.006	SE255412.007	SE255412.008	SE255412.009	SE255412.010
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

			BH7_0.5-0.6	BH8_0.1-0.2	BH9_0.1-0.2	BH10_0.2-0.3	BH10_0.5-0.6
			SOIL	SOIL	SOIL	SOIL	SOIL
			- 18/10/2023	- 18/10/2023	- 18/10/2023	- 18/10/2023	- 18/10/2023
PARAMETER	UOM	LOR	SE255412.011	SE255412.012	SE255412.013	SE255412.014	SE255412.015
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

			QD_20231017	QTB1	QTS1
			SOIL	SOIL	SOIL
			-	-	-
			18/10/2023	18/10/2023	18/10/2023
PARAMETER	UOM	LOR	SE255412.016	SE255412.018	SE255412.019
Benzene	mg/kg	0.1	<0.1	<0.1	[99%]
Toluene	mg/kg	0.1	<0.1	<0.1	[95%]
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	[93%]
m/p-xylene	mg/kg	0.2	<0.2	<0.2	[94%]
o-xylene	mg/kg	0.1	<0.1	<0.1	[93%]
Total Xylenes*	mg/kg	0.3	<0.3	<0.3	-
Total BTEX*	mg/kg	0.6	<0.6	<0.6	-
Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	-



### Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 24/10/2023

			BH1_0.2-0.3	BH2_0.2-0.3	BH3_0.3-0.4	BH3_0.7-0.8	BH4_0.3-0.4
			SOIL	SOIL	SOIL	SOIL	SOIL
							-
			18/10/2023	18/10/2023	18/10/2023	18/10/2023	18/10/2023
PARAMETER	UOM	LOR	SE255412.001	SE255412.002	SE255412.003	SE255412.004	SE255412.005
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

			BH4_0.6-0.7	BH5_0.3-0.4	BH5_0.8-0.9	BH6_0.2-0.3	BH7_0.2-0.3
			SOIL	SOIL	SOIL	SOIL	SOIL
			18/10/2023	18/10/2023	18/10/2023	18/10/2023	18/10/2023
PARAMETER	UOM	LOR	SE255412.006	SE255412.007	SE255412.008	SE255412.009	SE255412.010
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

			BH7_0.5-0.6	BH8_0.1-0.2	BH9_0.1-0.2	BH10_0.2-0.3	BH10_0.5-0.6
			SOIL	SOIL	SOIL	SOIL	SOIL
							-
			18/10/2023	18/10/2023	18/10/2023	18/10/2023	18/10/2023
PARAMETER	UOM	LOR	SE255412.011	SE255412.012	SE255412.013	SE255412.014	SE255412.015
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

			QD_20231017
			SOIL
			- 18/10/2023
PARAMETER	UOM	LOR	SE255412.016
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



### TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 24/10/2023

			BH1_0.2-0.3	BH2_0.2-0.3	BH3_0.3-0.4	BH3_0.7-0.8	BH4_0.3-0.4
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
PARAMETER	UOM	LOR	18/10/2023 SE255412.001	18/10/2023 SE255412.002	18/10/2023 SE255412.003	18/10/2023 SE255412.004	18/10/2023 SE255412.005
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

			BH4_0.6-0.7	BH5_0.3-0.4	BH5_0.8-0.9	BH6_0.2-0.3	BH7_0.2-0.3
PARAMETER	UOM	LOR	SOIL - 18/10/2023 SE255412.006	SOIL - 18/10/2023 SE255412.007	SOIL - 18/10/2023 SE255412.008	SOIL - 18/10/2023 SE255412.009	SOIL - 18/10/2023 SE255412.010
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

			BH7_0.5-0.6	BH8_0.1-0.2	BH9_0.1-0.2	BH10_0.2-0.3	BH10_0.5-0.6
			SOIL - 18/10/2023	SOIL - 18/10/2023	SOIL - 18/10/2023	SOIL - 18/10/2023	SOIL - 18/10/2023
PARAMETER	UOM	LOR	SE255412.011	SE255412.012	SE255412.013	SE255412.014	SE255412.015
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



### TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 24/10/2023 (continued)

			QD_20231017
			SOIL - 18/10/2023
PARAMETER	UOM	LOR	SE255412.016
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



### PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 24/10/2023

		BH2_0.2-0.3	BH3_0.3-0.4	BH3_0.7-0.8	BH4_0.3-0.4
	SOIL	SOIL	SOIL	SOIL	SOIL
	8/10/2023 <b>255412.001</b>	18/10/2023 SE255412.002	18/10/2023 SE255412.003	18/10/2023 SE255412.004	18/10/2023 SE255412.005
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	0.2	<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* (mg="" 0.2<="" kg)="" td="" teq=""><td>&lt;0.2</td><td>&lt;0.2</td><td>&lt;0.2</td><td>&lt;0.2</td><td>&lt;0.2</td></lor=0*>	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <lor=lor* (mg="" 0.3<="" kg)="" td="" teq=""><td>&lt;0.3</td><td>&lt;0.3</td><td>&lt;0.3</td><td>&lt;0.3</td><td>&lt;0.3</td></lor=lor*>	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <lor=lor (mg="" 0.2<="" 2*="" kg)="" td="" teq=""><td>&lt;0.2</td><td>&lt;0.2</td><td>&lt;0.2</td><td>&lt;0.2</td><td>&lt;0.2</td></lor=lor>	<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

			BH4_0.6-0.7	BH5_0.3-0.4	BH5_0.8-0.9	BH6_0.2-0.3	BH7_0.2-0.3
			SOIL	SOIL	SOIL	SOIL	SOIL
			- SOIL	- SOIL	501L	501L	501L
			18/10/2023	18/10/2023	18/10/2023	18/10/2023	18/10/2023
PARAMETER	UOM	LOR	SE255412.006	SE255412.007	SE255412.008	SE255412.009	SE255412.010
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*< td=""><td>TEQ (mg/kg)</td><td>0.2</td><td>&lt;0.2</td><td>&lt;0.2</td><td>&lt;0.2</td><td>&lt;0.2</td><td>&lt;0.2</td></lor=0*<>	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <lor=lor*< td=""><td>TEQ (mg/kg)</td><td>0.3</td><td>&lt;0.3</td><td>&lt;0.3</td><td>&lt;0.3</td><td>&lt;0.3</td><td>&lt;0.3</td></lor=lor*<>	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <lor=lor 2*<="" td=""><td>TEQ (mg/kg)</td><td>0.2</td><td>&lt;0.2</td><td>&lt;0.2</td><td>&lt;0.2</td><td>&lt;0.2</td><td>&lt;0.2</td></lor=lor>	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



### PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 24/10/2023 (continued)

			BH7_0.5-0.6	BH8_0.1-0.2	BH9_0.1-0.2	BH10_0.2-0.3	BH10_0.5-0.6
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			18/10/2023	18/10/2023	18/10/2023	18/10/2023	18/10/2023
PARAMETER	UOM	LOR	SE255412.011	SE255412.012	SE255412.013	SE255412.014	SE255412.015
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*< td=""><td>TEQ (mg/kg)</td><td>0.2</td><td>&lt;0.2</td><td>&lt;0.2</td><td>&lt;0.2</td><td>&lt;0.2</td><td>&lt;0.2</td></lor=0*<>	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <lor=lor*< td=""><td>TEQ (mg/kg)</td><td>0.3</td><td>&lt;0.3</td><td>&lt;0.3</td><td>&lt;0.3</td><td>&lt;0.3</td><td>&lt;0.3</td></lor=lor*<>	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <lor=lor 2*<="" td=""><td>TEQ (mg/kg)</td><td>0.2</td><td>&lt;0.2</td><td>&lt;0.2</td><td>&lt;0.2</td><td>&lt;0.2</td><td>&lt;0.2</td></lor=lor>	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



### SE255412 R0

### OC Pesticides in Soil [AN420] Tested: 24/10/2023

			BH1_0.2-0.3	BH2_0.2-0.3	BH3_0.3-0.4	BH4_0.3-0.4	BH5_0.3-0.4
			SOIL	SOIL	SOIL	SOIL	SOIL
							-
PARAMETER	UOM	LOR	18/10/2023 SE255412.001	18/10/2023 SE255412.002	18/10/2023 SE255412.003	18/10/2023 SE255412.005	18/10/2023 SE255412.007
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
0,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



### OC Pesticides in Soil [AN420] Tested: 24/10/2023 (continued)

			BH6_0.2-0.3	BH7_0.2-0.3	BH8_0.1-0.2	BH9_0.1-0.2	BH10_0.5-0.6
			SOIL	SOIL	SOIL	SOIL	SOIL
							-
			18/10/2023	18/10/2023	18/10/2023	18/10/2023	18/10/2023
PARAMETER	UOM	LOR	SE255412.009	SE255412.010	SE255412.012	SE255412.013	SE255412.015
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



### OP Pesticides in Soil [AN420] Tested: 24/10/2023

			BH1_0.2-0.3	BH2_0.2-0.3	BH3_0.3-0.4	BH4_0.3-0.4	BH5_0.3-0.4
			SOIL - 18/10/2023	SOIL - 18/10/2023	SOIL - 18/10/2023	SOIL - 18/10/2023	SOIL - 18/10/2023
PARAMETER	UOM	LOR	SE255412.001	SE255412.002	SE255412.003	SE255412.005	SE255412.007
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

			BH6_0.2-0.3	BH7_0.2-0.3	BH8_0.1-0.2	BH9_0.1-0.2	BH10_0.5-0.6
			SOIL - 18/10/2023	SOIL - 18/10/2023	SOIL - 18/10/2023	SOIL - 18/10/2023	SOIL - 18/10/2023
PARAMETER	UOM	LOR	SE255412.009	SE255412.010	SE255412.012	SE255412.013	SE255412.015
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



### PCBs in Soil [AN420] Tested: 24/10/2023

			BH1_0.2-0.3	BH2_0.2-0.3	BH3_0.3-0.4	BH4_0.3-0.4	BH5_0.3-0.4
			SOIL	SOIL	SOIL	SOIL	SOIL
			18/10/2023	18/10/2023	18/10/2023	18/10/2023	18/10/2023
PARAMETER	UOM	LOR	SE255412.001	SE255412.002	SE255412.003	SE255412.005	SE255412.007
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

			BH6_0.2-0.3	BH7_0.2-0.3	BH8_0.1-0.2	BH9_0.1-0.2	BH10_0.5-0.6
PARAMETER	UOM	LOR	SOIL - 18/10/2023 SE255412.009	SOIL - 18/10/2023 SE255412.010	SOIL - 18/10/2023 SE255412.012	SOIL - 18/10/2023 SE255412.013	SOIL - 18/10/2023 SE255412.015
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



### SE255412 R0

### Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 24/10/2023

			BH1_0.2-0.3	BH2_0.2-0.3	BH3_0.3-0.4	BH3_0.7-0.8	BH4_0.3-0.4
			SOIL	SOIL	SOIL	SOIL	SOIL
			18/10/2023	18/10/2023	18/10/2023	18/10/2023	18/10/2023
PARAMETER	UOM	LOR	SE255412.001	SE255412.002	SE255412.003	SE255412.004	SE255412.005
Arsenic, As	mg/kg	1	6	3	2	12	5
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	37	88	70	24	36
Copper, Cu	mg/kg	0.5	8.8	27	22	<0.5	13
Lead, Pb	mg/kg	1	9	6	4	10	44
Nickel, Ni	mg/kg	0.5	30	93	78	0.7	31
Zinc, Zn	mg/kg	2	26	60	49	6.4	85

			BH4_0.6-0.7	BH5_0.3-0.4	BH5_0.8-0.9	BH6_0.2-0.3	BH7_0.2-0.3
			SOIL	SOIL	SOIL	SOIL	SOIL
			18/10/2023	18/10/2023	18/10/2023	18/10/2023	18/10/2023
PARAMETER	UOM	LOR	SE255412.006	SE255412.007	SE255412.008	SE255412.009	SE255412.010
Arsenic, As	mg/kg	1	3	5	5	7	4
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	11	36	14	26	47
Copper, Cu	mg/kg	0.5	<0.5	6.3	<0.5	1.7	11
Lead, Pb	mg/kg	1	9	10	13	11	25
Nickel, Ni	mg/kg	0.5	1.4	26	0.5	8.9	40
Zinc, Zn	mg/kg	2	10	18	2.8	9.9	32

			BH7_0.5-0.6	BH8_0.1-0.2	BH9_0.1-0.2	BH10_0.2-0.3	BH10_0.5-0.6
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
PARAMETER	UOM	LOR	18/10/2023 SE255412.011	18/10/2023 SE255412.012	18/10/2023 SE255412.013	18/10/2023 SE255412.014	18/10/2023 SE255412.015
Arsenic, As	mg/kg	1	4	7	4	2	3
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	30	35	48	14	8.0
Copper, Cu	mg/kg	0.5	<0.5	2.8	12	3.1	<0.5
Lead, Pb	mg/kg	1	11	5	9	3	12
Nickel, Ni	mg/kg	0.5	1.6	13	48	13	0.7
Zinc, Zn	mg/kg	2	7.7	8.0	32	7.7	2.1

			QD_20231017
			SOIL
			- 18/10/2023
PARAMETER	UOM	LOR	SE255412.016
Arsenic, As	mg/kg	1	7
Cadmium, Cd	mg/kg	0.3	<0.3
Chromium, Cr	mg/kg	0.5	19
Copper, Cu	mg/kg	0.5	1.3
Lead, Pb	mg/kg	1	10
Nickel, Ni	mg/kg	0.5	4.8
Zinc, Zn	mg/kg	2	6.9



### Mercury in Soil [AN312] Tested: 24/10/2023

			BH1_0.2-0.3	BH2_0.2-0.3	BH3_0.3-0.4	BH3_0.7-0.8	BH4_0.3-0.4
			SOIL	SOIL	SOIL	SOIL	SOIL
							-
			18/10/2023	18/10/2023	18/10/2023	18/10/2023	18/10/2023
PARAMETER	UOM	LOR	SE255412.001	SE255412.002	SE255412.003	SE255412.004	SE255412.005
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

			BH4_0.6-0.7	BH5_0.3-0.4	BH5_0.8-0.9	BH6_0.2-0.3	BH7_0.2-0.3
			SOIL	SOIL	SOIL	SOIL	SOIL
							-
			18/10/2023	18/10/2023	18/10/2023	18/10/2023	18/10/2023
PARAMETER	UOM	LOR	SE255412.006	SE255412.007	SE255412.008	SE255412.009	SE255412.010
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

			BH7_0.5-0.6	BH8_0.1-0.2	BH9_0.1-0.2	BH10_0.2-0.3	BH10_0.5-0.6
			SOIL	SOIL	SOIL	SOIL	SOIL
							-
			18/10/2023	18/10/2023	18/10/2023	18/10/2023	18/10/2023
PARAMETER	UOM	LOR	SE255412.011	SE255412.012	SE255412.013	SE255412.014	SE255412.015
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

			QD_20231017
			SOIL
			- 18/10/2023
PARAMETER	UOM	LOR	SE255412.016
Mercury	mg/kg	0.05	<0.05



### Moisture Content [AN002] Tested: 24/10/2023

			BH1_0.2-0.3	BH2_0.2-0.3	BH3_0.3-0.4	BH3_0.7-0.8	BH4_0.3-0.4
			SOIL	SOIL	SOIL	SOIL	SOIL
			18/10/2023	18/10/2023	18/10/2023	18/10/2023	18/10/2023
PARAMETER	UOM	LOR	SE255412.001	SE255412.002	SE255412.003	SE255412.004	SE255412.005
% Moisture	%w/w	1	9.5	9.5	11.6	16.6	10.6

			BH4_0.6-0.7	BH5_0.3-0.4	BH5_0.8-0.9	BH6_0.2-0.3	BH7_0.2-0.3
			SOIL	SOIL	SOIL	SOIL	SOIL
							-
			18/10/2023	18/10/2023	18/10/2023	18/10/2023	18/10/2023
PARAMETER	UOM	LOR	SE255412.006	SE255412.007	SE255412.008	SE255412.009	SE255412.010
% Moisture	%w/w	1	8.7	10.0	14.5	15.3	13.3

			BH7_0.5-0.6	BH8_0.1-0.2	BH9_0.1-0.2	BH10_0.2-0.3	BH10_0.5-0.6
			SOIL	SOIL	SOIL	SOIL	SOIL
							-
			18/10/2023	18/10/2023	18/10/2023	18/10/2023	18/10/2023
PARAMETER	UOM	LOR	SE255412.011	SE255412.012	SE255412.013	SE255412.014	SE255412.015
% Moisture	%w/w	1	20.4	13.3	11.6	8.5	12.3

			QD_20231017	QTB1
			SOIL	SOIL
			- 18/10/2023	- 18/10/2023
PARAMETER	UOM	LOR	SE255412.016	SE255412.018
% Moisture	%w/w	1	20.9	<1.0



#### Fibre Identification in soil [AS4964/AN602] Tested: 25/10/2023

			BH1_0.2-0.3	BH2_0.2-0.3	BH3_0.3-0.4	BH4_0.3-0.4	BH5_0.3-0.4
			SOIL	SOIL	SOIL	SOIL	SOIL
			18/10/2023	18/10/2023	18/10/2023	18/10/2023	18/10/2023
PARAMETER	UOM	LOR	SE255412.001	SE255412.002	SE255412.003	SE255412.005	SE255412.007
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

			BH6_0.2-0.3	BH7_0.2-0.3	BH8_0.1-0.2	BH9_0.1-0.2	BH10_0.5-0.6
			SOIL	SOIL	SOIL	SOIL	SOIL
							-
			18/10/2023	18/10/2023	18/10/2023	18/10/2023	18/10/2023
PARAMETER	UOM	LOR	SE255412.009	SE255412.010	SE255412.012	SE255412.013	SE255412.015
Asbestos Detected	No unit	-	No	Yes	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	>0.01	<0.01	<0.01	<0.01



### VOCs in Water [AN433] Tested: 23/10/2023

PARAMETER	UOM	LOR	QR_20231017 WATER - 18/10/2023 SE255412.017
Benzene	µg/L	0.5	<0.5
Toluene	µg/L	0.5	0.6
Ethylbenzene	µg/L	0.5	<0.5
m/p-xylene	µg/L	1	<1
o-xylene	µg/L	0.5	<0.5
Total Xylenes	µg/L	1.5	<1.5
Total BTEX	µg/L	3	<3
Naphthalene (VOC)*	µg/L	0.5	<0.5



### Volatile Petroleum Hydrocarbons in Water [AN433] Tested: 23/10/2023

			QR_20231017
			WATER
PARAMETER	UOM	LOR	- 18/10/2023 <b>SE255412.017</b>
TRH C6-C9	µg/L	40	<40
Benzene (F0)	µg/L	0.5	<0.5
TRH C6-C10	µg/L	50	<50
TRH C6-C10 minus BTEX (F1)	µg/L	50	<50



### TRH (Total Recoverable Hydrocarbons) in Water [AN403] Tested: 20/10/2023

			QR_20231017
			WATER
			-
			18/10/2023
PARAMETER	UOM	LOR	SE255412.017
TRH C10-C14	µg/L	50	<50
TRH C15-C28	µg/L	200	<200
TRH C29-C36	µg/L	200	<200
TRH C37-C40	µg/L	200	<200
TRH >C10-C16	µg/L	60	<60
TRH >C10-C16 - Naphthalene (F2)	µg/L	60	<60
TRH >C16-C34 (F3)	µg/L	500	<500
TRH >C34-C40 (F4)	µg/L	500	<500
TRH C10-C40	µg/L	320	<320



### Trace Metals (Dissolved) in Water by ICPMS [AN318] Tested: 23/10/2023

			QR_20231017
PARAMETER	UOM	LOR	WATER - 18/10/2023 SE255412.017
Arsenic	μg/L	1	<1
Cadmium	μg/L	0.1	<0.1
Chromium	µg/L	1	<1
Copper	μg/L	1	<1
Lead	µg/L	1	<1
Nickel	μg/L	1	<1
Zinc	μg/L	5	<5



### Mercury (dissolved) in Water [AN311(Perth)/AN312] Tested: 20/10/2023

			QR_20231017
			WATER
			- 18/10/2023
PARAMETER	UOM	LOR	SE255412.017
Mercury	mg/L	0.0001	<0.0001



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.
AN020	Unpreserved water sample is filtered through a 0.45µm membrane filter and acidified with nitric acid similar to APHA3030B.
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.
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.
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
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). 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 unequivocably 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-						
	<ul> <li>(a) no trace asbestos fibres have been detected (i.e. no 'respirable ' fibres):</li> <li>(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</li> <li>(c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.</li> </ul>						

#### FOOTNOTES -

*	NATA accreditation does not cover	-	Not analysed.	UOM	Unit of Measure.
	the performance of this service.	NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of
	time exceeded.	LNR	Sample listed, but not received.		Reporting.
***	Indicates that both * and ** apply.				

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:

- a. 1 Bq is equivalent to 27 pCi
- b. 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: <u>www.sgs.com.au/en-gb/environment-health-and-safety</u>.

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# **ANALYTICAL REPORT**



CLIENT DETAILS		LABORATORY DETAI	LS
Contact Client Address	Sean Nolan EI AUSTRALIA SUITE 6.01 55 MILLER STREET PYRMONT NSW 2009	Manager Laboratory Address	Huong Crawford SGS Alexandria Environmental Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	61 2 95160722	Telephone	+61 2 8594 0400
Facsimile	(Not specified)	Facsimile	+61 2 8594 0499
Email	sean.nolan@eiaustralia.com.au	Email	au.environmental.sydney@sgs.com
Project	E26160 1 Veno St, Heathcote	SGS Reference	<b>SE255412 R0</b>
Order Number	E26160	Date Received	19 Oct 2023
Samples	10	Date Reported	26 Oct 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 #10: Chrysotile asbestos found as approx 0.4g fibrous mass(25x10x3mm) and loose fibre bundles Asbestos analysed by Approved Identifier Ravee Sivasubramaniam.

SIGNATORIES -

S. Ravender.

Ravee SIVASUBRAMANIAM Hygiene Team Leader

> SGS Australia Pty Ltd ABN 44 000 964 278

Environment, Health and Safety

Unit 16 33 Maddox St PO Box 6432 Bourke Rd Alexandria NSW 2015 Alexandria NSW 2015 Australiat +61 2 8594 0400Australiaf +61 2 8594 0499

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26/10/2023

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# ANALYTICAL REPORT

Fibre Identifica	tion in soil				Method AS4964/AN60	)2
Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE255412.001	BH1_0.2-0.3	Soil	89g Clay, Sand, Rocks	18 Oct 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE255412.002	BH2_0.2-0.3	Soil	69g Clay, Sand, Soil, Rocks, Bitumen	18 Oct 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE255412.003	BH3_0.3-0.4	Soil	148g Clay, Sand, Soil, Rocks	18 Oct 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE255412.005	BH4_0.3-0.4	Soil	89g Clay, Sand, Soil, Rocks	18 Oct 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE255412.007	BH5_0.3-0.4	Soil	55g Clay, Rocks	18 Oct 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE255412.009	BH6_0.2-0.3	Soil	95g Clay, Sand, Rocks	18 Oct 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE255412.010	BH7_0.2-0.3	Soil	87g Clay	18 Oct 2023	Chrysotile Asbestos Found at RL of 0.1g/kg	>0.01
SE255412.012	BH8_0.1-0.2	Soil	173g Clay, Sand, Rocks	18 Oct 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE255412.013	BH9_0.1-0.2	Soil	200g Clay, Sand, Rocks	18 Oct 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE255412.015	BH10_0.5-0.6	Soil	99g Clay, Sand, Rocks	18 Oct 2023	No Asbestos Found at RL of 0.1g/kg	<0.01



# **METHOD SUMMARY**

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 unequivocably 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 0.1q/kg; and
	(c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible
	under stereo-microscope viewing conditions.

- FO	DTNOTES						
	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.	
				**	-	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: <u>www.sgs.com.au/en-gb/environment-health-and-safety</u>.

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# **ANALYTICAL REPORT**



Contact	Sean Nolan	Manager	Huong Crawford
Client	EI AUSTRALIA	Laboratory	SGS Alexandria Environmental
Address	SUITE 6.01 55 MILLER STREET PYRMONT NSW 2009	Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	61 2 95160722	Telephone	+61 2 8594 0400
Facsimile	(Not specified)	Facsimile	+61 2 8594 0499
Email	sean.nolan@eiaustralia.com.au	Email	au.environmental.sydney@sgs.com
Project	E26160 1 Veno St, Heathcote -Addtional	SGS Reference	SE255412A R0
Order Number	E26160	Date Received	1/11/2023
Samples	19	Date Reported	6/11/2023

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

SIGNATORIES

Dong LIANG Metals/Inorganics Team Leader

SGS Australia Pty Ltd ABN 44 000 964 278

t +61 2 8594 0400 f +61 2 8594 0499 Australia Australia

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#### Moisture Content [AN002] Tested: 2/11/2023

			BH2_0.2-0.3	BH5_0.3-0.4	BH9_0.1-0.2
			SOIL	SOIL	SOIL
			18/10/2023	18/10/2023	18/10/2023
PARAMETER	UOM	LOR	SE255412A.002	SE255412A.007	SE255412A.013
% Moisture	%w/w	1	9.0	10.1	13.8



### pH in soil (1:5) [AN101] Tested: 3/11/2023

			BH2_0.2-0.3	BH5_0.3-0.4	BH9_0.1-0.2
			SOIL	SOIL	SOIL
			18/10/2023	18/10/2023	18/10/2023
PARAMETER	UOM	LOR	SE255412A.002	SE255412A.007	SE255412A.013
pH	pH Units	0.1	9.4	8.0	8.6



#### Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR) [AN122] Tested: 6/11/2023

			BH2_0.2-0.3	BH5_0.3-0.4	BH9_0.1-0.2
			SOIL	SOIL	SOIL
PARAMETER	UOM	LOR	- 18/10/2023 SE255412A.002	- 18/10/2023 SE255412A.007	- 18/10/2023 SE255412A.013
Exchangeable Calcium, Ca	mg/kg	2	5900	2400	2900
Exchangeable Calcium, Ca	meq/100g	0.01	29	12	15
Exchangeable Calcium Percentage*	%	0.1	71.8	75.6	62.8
Exchangeable Potassium, K	mg/kg	2	180	93	140
Exchangeable Potassium, K	meq/100g	0.01	0.47	0.24	0.36
Exchangeable Potassium Percentage*	%	0.1	1.2	1.5	1.5
Exchangeable Magnesium, Mg	mg/kg	2	390	320	360
Exchangeable Magnesium, Mg	meq/100g	0.02	3.2	2.6	2.9
Exchangeable Magnesium Percentage*	%	0.1	7.9	16.7	12.5
Exchangeable Sodium, Na	mg/kg	2	1800	220	1200
Exchangeable Sodium, Na	meq/100g	0.01	7.8	0.97	5.4
Exchangeable Sodium Percentage*	%	0.1	19.2	6.2	23.1
Cation Exchange Capacity	meq/100g	0.02	41	16	23



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.				
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-sodicESP 6-15%sodicESP >15%strongly sodic				
	Method is referenced to Rayment and Lyons, 2011, sections 15D3 and 15N1				



#### FOOTNOTES -

*	NATA accreditation does not cover
	the performance of this service.
**	Indicative data, theoretical holding
	time exceeded.

\*\*\* Indicates that both \* and \*\* apply.

Not analysed.
 NVL Not validated.
 IS Insufficient sample for analysis.
 LNR Sample listed, but not received.

UOM Unit of Measure. LOR Limit of Reporting. ↑↓ Raised/lowered Limit of Reporting.

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:

- a. 1 Bq is equivalent to 27 pCi
- b. 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: <u>www.sgs.com.au/en-gb/environment-health-and-safety</u>.

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# **ANALYTICAL REPORT**



CLIENT DETAILS		LABORATORY DE	TAILS
Contact	Joel Heininger	Manager	Huong Crawford
Client	EI AUSTRALIA	Laboratory	SGS Alexandria Environmental
Address	SUITE 6.01 55 MILLER STREET PYRMONT NSW 2009	Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	61 2 95160722	Telephone	+61 2 8594 0400
Facsimile	(Not specified)	Facsimile	+61 2 8594 0499
Email	joel.heininger@eiaustralia.com.au	Email	au.environmental.sydney@sgs.com
Project	E26160 1 Veno St, Heathcote	SGS Reference	SE255779 R1
Order Number	E26160	Date Received	27/10/2023
Samples	7	Date Reported	3/11/2023

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

This report cancels and supersedes the report No. SE255779 R0 dated 02.11.2023 issued by SGS Environment, Health and Safety due to amended sample IDs.

- SIGNATORIES

Akheeqar BENIAMEEN Chemist



Metals/Inorganics Team Leader

Acm/m/

Ly Kim HA Organic Section Head

уэль узль гивни

Ying Ying ZHANG Laboratory Technician

SGS Australia Pty Ltd ABN 44 000 964 278

Environment, Health and Safety

Unit 16 33 Maddox St PO Box 6432 Bourke Rd BC Alexandria NSW 2015 Alexandria NSW 2015 Australiat +61 2 8594 0400Australiaf +61 2 8594 0499

www.sgs.com.au



### SE255779 R1

### VOCs in Water [AN433] Tested: 31/10/2023

			BH2M-1	BH7M-1	BH10M-1	GWQD_20231026	GWQR_20231026
			WATER -	WATER	WATER	WATER	WATER -
			26/10/2023	26/10/2023	26/10/2023	26/10/2023	26/10/2023
PARAMETER	UOM	LOR	SE255779.001	SE255779.002	SE255779.003	SE255779.004	SE255779.005
Benzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Toluene	µg/L	0.5	<0.5	1.2	0.8	<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					
Total BTEX Naphthalene (VOC)*	µg/L	3 0.5	<3 <0.5	<3 <0.5	<3 <0.5	<3 <0.5	<3 <0.5
Dichlorodifluoromethane (CFC-12)	µg/L	5	<5	<5	<5		
Chloromethane	µg/L	5	<5	<5	<5	-	-
Vinyl chloride (Chloroethene)	µg/L	0.3	<0.3	<0.3	<0.3	-	-
Bromomethane	μg/L μg/L	10	<0.3	<0.3	<10	-	-
Chloroethane		5	<5	<5	<5	-	-
Trichlorofluoromethane	µg/L	1	<1	<1	<1	-	-
	µg/L	10	<10	<10	<10	-	-
Acetone (2-propanone) Iodomethane	µg/L	10 5	<10	<10	<10	-	-
1,1-dichloroethene	μg/L μg/L	0.5	<0.5	<0.5	<0.5	-	-
		0.5	<0.5	<0.5	<0.5	-	-
Acrylonitrile	µg/L	5	<0.5	<0.5	<0.5	-	-
Dichloromethane (Methylene chloride) Allyl chloride	µg/L	2	<2	<2	<2	-	-
Carbon disulfide	μg/L μg/L	2	<2	<2		-	-
trans-1,2-dichloroethene		0.5	<0.5	<0.5	<b>5</b> <0.5	-	-
MtBE (Methyl-tert-butyl ether)	μg/L μg/L	2	<0.5	<0.5	<0.5	-	-
1,1-dichloroethane		0.5	<0.5	<0.5	<0.5		-
Vinyl acetate*	μg/L μg/L	10	<10	<10	<10	-	-
MEK (2-butanone)		10	<10	<10	<10		-
cis-1,2-dichloroethene	μg/L μg/L	0.5	<0.5	<0.5	<0.5	-	-
Bromochloromethane	µg/L	0.5	<0.5	<0.5	<0.5		
Chloroform (THM)	µg/L	0.5	<0.5				-
2,2-dichloropropane	µg/L	0.5	<0.5	<b>3.0</b> <0.5	<b>2.4</b> <0.5		<u> </u>
1,2-dichloroethane	µg/L	0.5	<0.5	<0.5	<0.5	-	
1,1,1-trichloroethane	µg/L	0.5	<0.5	<0.5	<0.5		<u> </u>
1,1-dichloropropene	μg/L	0.5	<0.5	<0.5	<0.5		
Carbon tetrachloride	µg/L	0.5	<0.5	<0.5	<0.5		
Dibromomethane	µg/L	0.5	<0.5	<0.5	<0.5		<u> </u>
1,2-dichloropropane	µg/L	0.5	<0.5	<0.5	<0.5	-	<u> </u>
Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	<0.5	<0.5	<0.5	-	-
2-nitropropane	µg/L	100	<100	<100	<100	_	
Bromodichloromethane (THM)	μg/L	0.5	<0.5	<0.5	<0.5	-	-
MIBK (4-methyl-2-pentanone)	µg/L	5	<5	<5	<5	-	-
cis-1,3-dichloropropene	μg/L	0.5	<0.5	<0.5	<0.5	-	-
trans-1,3-dichloropropene	μg/L	0.5	<0.5	<0.5	<0.5	-	-
1,1,2-trichloroethane	µg/L	0.5	<0.5	<0.5	<0.5	-	-
1,3-dichloropropane	µg/L	0.5	<0.5	<0.5	<0.5	-	-
Dibromochloromethane (THM)	μg/L	0.5	<0.5	<0.5	<0.5	-	-
2-hexanone (MBK)	µg/L	5	<5	<5	<5	-	-
1,2-dibromoethane (EDB)	µg/L	0.5	<0.5	<0.5	<0.5	-	-
Tetrachloroethene (Perchloroethylene,PCE)	µg/L	0.5	<0.5	<0.5	<0.5	-	-
1,1,1,2-tetrachloroethane	μg/L	0.5	<0.5	<0.5	<0.5	-	-
Chlorobenzene	µg/L	0.5	<0.5	<0.5	<0.5	-	-
Bromoform (THM)	µg/L	0.5	<0.5	<0.5	<0.5	-	-
Styrene (Vinyl benzene)	µg/L	0.5	<0.5	<0.5	<0.5	-	-
1,1,2,2-tetrachloroethane	µg/L	0.5	<0.5	<0.5	<0.5	-	-
1,2,3-trichloropropane	μg/L	0.5	<0.5	<0.5	<0.5	-	-
trans-1,4-dichloro-2-butene	µg/L	1	<1	<1	<1	-	-
Isopropylbenzene (Cumene)	µg/L	0.5	<0.5	<0.5	<0.5	-	-
	10-						



# SE255779 R1

### VOCs in Water [AN433] Tested: 31/10/2023 (continued)

			BH2M-1	BH7M-1	BH10M-1	GWQD_20231026	GWQR_20231026
			WATER	WATER	WATER	WATER	WATER
			26/10/2023	26/10/2023	26/10/2023	26/10/2023	26/10/2023
PARAMETER	UOM	LOR	SE255779.001	SE255779.002	SE255779.003	SE255779.004	SE255779.005
Bromobenzene	µg/L	0.5	<0.5	<0.5	<0.5	-	-
n-propylbenzene	µg/L	0.5	<0.5	<0.5	<0.5	-	-
2-chlorotoluene	µg/L	0.5	<0.5	<0.5	<0.5	-	-
4-chlorotoluene	µg/L	0.5	<0.5	<0.5	<0.5	-	-
1,3,5-trimethylbenzene	µg/L	0.5	<0.5	<0.5	<0.5	-	-
tert-butylbenzene	µg/L	0.5	<0.5	<0.5	<0.5	-	-
1,2,4-trimethylbenzene	µg/L	0.5	<0.5	<0.5	<0.5	-	-
sec-butylbenzene	µg/L	0.5	<0.5	<0.5	<0.5	-	-
1,3-dichlorobenzene	µg/L	0.5	<0.5	<0.5	<0.5	-	-
1,4-dichlorobenzene	µg/L	0.3	<0.3	<0.3	<0.3	-	-
p-isopropyltoluene	µg/L	0.5	<0.5	<0.5	<0.5	-	-
1,2-dichlorobenzene	µg/L	0.5	<0.5	<0.5	<0.5	-	-
n-butylbenzene	µg/L	0.5	<0.5	<0.5	<0.5	-	-
1,2-dibromo-3-chloropropane	µg/L	0.5	<0.5	<0.5	<0.5	-	-
1,2,4-trichlorobenzene	µg/L	0.5	<0.5	<0.5	<0.5	-	-
Hexachlorobutadiene	µg/L	0.5	<0.5	<0.5	<0.5	-	-
1,2,3-trichlorobenzene	µg/L	0.5	<0.5	<0.5	<0.5	-	-
Total VOC	µg/L	10	<10	<10	<10	-	-



### SE255779 R1

### VOCs in Water [AN433] Tested: 31/10/2023 (continued)

NALMERENOTENUTERNUTER0.00.0.00				QTB1	QTS1
AAAAFERUotAutomaBAAAFERUotUotBESATP3.00BrozeneUpU0.60.000003TournoUpU0.60.000.00DiplamareUpU0.60.000.00DiplamareUpU0.60.000.00Call yerseUpU0.60.000.00DiplamareUpU0.00.000.000.00DiplamareUpU0.00.000.000.00DiplamareUpU0.00.000.000.00DiplamareUpU0.00.000.000.00DiplamareUpU0.00.000.000.00DiplamareUpU0.000.000.000.00DiplamareUpU0.000.000.000.00DiplamareUpU0.000.000.000.00DiplamareUpU0.000.000.000.00DiplamareUpU0.000.000.000.00DiplamareUpU0.000.000.000.00DiplamareUpU0.000.000.000.00DiplamareUpU0.000.000.000.00DiplamareUpU0.000.000.000.00DiplamareUpU0.000.000.000.00DiplamareUpU0.000.000.000.00DiplamareUpU0.000.000.00					
PANALEREUPU<				WATER	WAIER
Barenerppd0.640.40.5 <th></th> <th></th> <th></th> <th>26/10/2023</th> <th>26/10/2023</th>				26/10/2023	26/10/2023
TubeneppL0.540.5(1102)BlydernerppL0.540.5(1074)BlydernerppL0.540.5(1024)oxytonppL0.540.5(1024)OxytonppL0.540.5(1074)Total MurstppL0.540.5(1074)Dehondlucamether (CC1-1)ppL0.540.5(1074)Dehondlucamether (CC1-1)ppL0.54.5(1074)Dehondlucamether (CC1-1)ppL0.10.10.1Dehondlucamether (CC1-1)ppL0.50.10.1Dehondlucamether (CC1-1)ppL0.50.10.1Dehondlucamether (Murst et	PARAMETER	UOM	LOR	SE255779.006	SE255779.007
ElysenameppL0.54.4.5([101%]mb-vine.ppL1.54.4.5([102%]cosylene.ppL1.54.4.5([102%]Told Nytones.ppL1.54.4.5(.10.2.1)Told Nytones.ppL0.54.4.5(.10.2.1)Dathatter (VOC)'.ppL0.54.4.5(.10.2.1)Dathatter (VOC)'.ppL0.40.4Charrentame (PTC).ppL0.54.4.5(.10.2.1)Dathatter (VOC)'.ppL0.4Charrentame (PTC).ppL0.4Charrentame (PTC).ppL0.4Charrentame (PTC).ppL0.4Charrentame (PTC).ppL0.4Charrentame (PTC).ppL0.5Charrentame (PTC).ppL0.5Charr	Benzene	µg/L	0.5	<0.5	[100%]
mip-yelnegpl14-1[1225]c-sylenipl0.54-5.5[1225]c-sylenipl1.544.5[123]Tala Marceipl1.544.5[124]Tala Marceipl0.54-5.5[113]Naphabase (VOC)*ipl0.54-5.5[114]Debredmarmember (FC-12)ipl0.33Stornenhareipl0.33Debredmarmember (FC-12)ipl0.40.1May obtaine (Notorbane)ipl0.10.1Takkorbusemberipl0.10.1Takkorbusembareipl0.10.1Action (2xoparon)ipl0.50.1Liddhorethreipl0.50.1Alycholoipl0.50.1Any obsideipl0.50.1Alycholoipl0.50.1Alycholoipl0.50.1Alycholoipl0.50.10.1Alycholoipl0.50.10.1Alycholoipl0.50.10.1<	Toluene	µg/L	0.5	<0.5	[102%]
ownerpat0.54.0.5(1023)Tatal ytems	Ethylbenzene	µg/L	0.5	<0.5	[101%]
Tedaypl1.5I.415I.415Taal BTXypl0.50.5.00.5.0Dehtorodiurometare (CC-12)ypl0.50.5.00.5.0Uny Inchrisk (Citocethen)ypl0.30.1.00.1.0Wyr Inchrisk (Citocethen)ypl0.30.1.00.1.0Bronnenhaneypl0.30.1.00.1.00.1.0Citocethaneypl0.10.1.00.1.00.1.0Triditoriurometane (CPC-12)ypl0.10.1.00.1.00.1.0Citocethaneypl0.10.1.00.1.00.1.00.1.0Triditoriurometaneypl0.50.1.00.1.00.1.00.1.0Citocethaneypl0.50.1.00.1.00.1.00.1.0Citocethaneypl0.50.1.00.1.00.1.00.1.0Citocethaneypl0.50.1.00.1.00.1.00.1.0Citocethaneypl0.50.1.00.1.00.1.00.1.0Citocethaneypl0.50.1.00.1.00.1.00.1.0Citocethaneypl0.50.1.00.1.00.1.00.1.0Citocethaneypl0.50.1.00.1.00.1.00.1.0Citocethaneypl0.50.1.00.1.00.1.00.1.0Citocethaneypl0.50.1.00.1.00.1.00.1.0Citocethaneypl0.50.1.00.1.00.1.0 <td< td=""><td>m/p-xylene</td><td>µg/L</td><td>1</td><td>&lt;1</td><td>[102%]</td></td<>	m/p-xylene	µg/L	1	<1	[102%]
Ted BTEXµp49444Nørthane (VCC/1)µpL0.50.5(P15)Dehkondhuomethane (VCC-12)µpL0.30.70.7Wird Indrike (Informethane)µpL0.30.70.7Wird Indrike (Informethane)µpL0.30.70.7RomonethaneµpL0.30.70.70.7ChronomethaneµpL0.30.70.70.7ChronomethaneµpL0.60.70.70.7ChronomethaneµpL0.60.70.70.7Schrone (Information methaneµpL0.80.70.70.7UndersteineµpL0.80.70.70.70.7Chronomethane (Methylene chorde)µpL0.80.70.70.7Chronenthane (Methylene Chorde)µpL0.80.70.70.7Chroenthane (Methylene Chorde)	o-xylene	µg/L	0.5	<0.5	[102%]
Naphbalane (VCC)'         ppL         0.5         0.45.5         (101%)           Dehodentizeomethane (CFC-12)         upL         5.5         0         0           Viry chutide (Chroenthene)         upL         0.3         0         0           Bromonthame         upL         0.3         0         0           Bromonthame         upL         0.0         0         0           Chroonthame         upL         0.0         0         0         0           Chroonthame         upL         0.0         0         0         0           Chroonthame         upL         0.0         0         0         0           1.1.dechorenthame         upL         0.0         0         0         0           Chroonthame         upL         0.0         0         0         0         0           Chroonthame         upL         0.0         0         0         0         0           Chroonthame         upL         0.0         0         0         0         0           Lindechorenthame (Methylene chords)         upL         0.0         0         0         0 <td>Total Xylenes</td> <td>µg/L</td> <td>1.5</td> <td>&lt;1.5</td> <td>-</td>	Total Xylenes	µg/L	1.5	<1.5	-
DehoendhamepplfIIChoomethameppl0.300Vory choods (Circolarmo)ppl0.300Bronomethameppl1.000Choomethameppl1.000Choomethameppl1.000Choomethameppl0.000Choomethame	Total BTEX	µg/L	3	<3	-
Disorenthaneµµl5IIViry chrone thereµµl0.3IIIBernome thereµµl0.1IIIChrone thereµµl1IIIChrone thereµµl0.1IIIIChrone thereµµl0.1IIIIIChrone thereµµl0.1IIIIIIChrone thereµµl0.1III <td>Naphthalene (VOC)*</td> <td>µg/L</td> <td>0.5</td> <td>&lt;0.5</td> <td>[101%]</td>	Naphthalene (VOC)*	µg/L	0.5	<0.5	[101%]
Vurl choride (Chloroethene)         µpL         0.3         1           Brommehane         µpL         10         0           Chloroethane         µpL         10         0           Tichkorducomethane         µpL         10         0           Lodomethane         µpL         10         0           Lodomethane         µpL         0.5         0           Lodomethane         µpL         0.5         0           Acytoninie         µpL         0.5         0           Adyt choride         µpL         0.5         0           Adyt choride         µpL         0.5         0           Barn-12-dichloroethene         µpL         0.5         0           Mich Choride         µpL         0.5         0	Dichlorodifluoromethane (CFC-12)	µg/L	5	-	-
BenomethansµpL101ChorosthaneµpL5ChorosthaneµpL10Actone (2-propanone)µpL10IscherherhaneµpL0.5IscherherhaneµpL0.5IscherherhaneµpL0.5Dehoromethane (hethylen choide)µpL0.5DythorineµpL0.5Dehoromethane (hethylen choide)µpL0.5DythorineµpL0.5Catoon distlideµpL0.5Disk (hethylen choide)µpL0.5Disk (	Chloromethane	µg/L	5	-	-
Divocetane         µµL         5         1           Trichtorothene         µµL         1            Acsters (2 ropanene)         µµL         10            Linderhore         µµL         0.5             Acytoritie         µµL         0.5             Acytoritie         µµL         0.5             Aly chrose         µµL         2             Aly chrose         µµL         0.5             Carbon distifier         µµL         0.5             Lind-Actorothene         µµL         0.5             MBE (Methyler-buly ethel)         µµL         0.6             Viry acetar         µµL         0.6             Bomochoromethene         µµL         0.6             Choorer (THM)         µµL         0.6             2.2-schlorophene         µµL         0.6             1.1-schlorophene         µµL         0.6	Vinyl chloride (Chloroethene)	µg/L	0.3	-	-
TrichlordhuromethaneppL111Actene (2)ropanne)ppL101010lodomethaneppL511lodomethaneppL0.511ArytohnileupL0.511ArytohnileupL0.511Dickorometane (Methylene choider)upL211ArytohnileupL2111Dickorometane (Methylene choider)upL0.511Dickorometane (Methylene choider)upL0.511Dickorometane (Methylene choider)upL0.511Dickorometane (Methylene choider)upL0.511DickorometaneupL0.5111DickorometaneupL0.5111DickorometaneupL0.5111DickorometaneupL0.5111DickorometaneupL0.5111DickorometaneupL0.5111DickorometaneupL0.5111DickorometaneupL0.5111DickorometaneupL0.5111DickorometaneupL0.5111DickorometaneupL0.5111DickorometaneupL0.5111Dickorom	Bromomethane	µg/L	10	-	-
Actorn (2-propanone)         µµL         10            Iodomenhane         µµL         6.5             1.1-dichlorosehane         µµL         0.5             Arybothia         µµL         0.5             Dichorosehane (Methylene chloride)         µµL         0.5             Ally chroide         µµL         0.5              Carbon disulfo         µµL         0.5              MBE (Methylene chloride)         µµL         0.1              1.1-dichlorosehane         µµL         0.1              1.1-dichlorosehane         µµL         0.1              1.1-dichlorosehane         µµL         0.1              MEK (Abutanone)         µµL         0.5              1.1-dichlorosehane         µµL         0.5              1.1-dichlorosehane         µµL         0.5         <	Chloroethane	µg/L	5	-	-
Indendering         µµL         S         I	Trichlorofluoromethane	µg/L	1	-	-
н.1.dtahtorethene         μpL         0.5            Acyoninie         μpL         0.5             Acyoninie         μpL         0.5             Dahtoromethane (Methylene choixle)         μpL         2             Adychonic         μpL         2             Mathematic         μpL         2             Mathematic         μpL         0.5             MBE (Methylencholy cher)         μpL         0.5             MEE (Mathylencholy cher)         μpL         0.5             Mathylenchole         μpL         0.5             Stantard Stantard         μpL         0.5             1.1.dtchorophane         μpL         0.5	Acetone (2-propanone)	μg/L	10	-	-
Acyonithie         µµL         0.5            Dehloromethane (Methylene chloride)         µµL         5         I           Ally chloride         µµL         2         I           Ally chloride         µµL         2         I           Carbon disulfide         µµL         0.5         I           trans-1.2-dichloroathene         µµL         0.5         I           Viryl adetale         µµL         0.6         I           Viryl adetale         µµL         0.6         I           MEE (Aubronethane         µµL         0.6         I           Bromchloromethane         µµL         0.5         I           Bromchloromethane         µµL         0.5         I           1.1-dichloropethane         µµL         0.5         I           1.1-dichlor	Iodomethane	µg/L	5	-	-
Dickoromethane (Methylene chloride)         µgL         5            Alyl chloride         µgL         2             Alyl chloride         µgL         2             Carbon disulfide         µgL         2             MtBE (Methyl-kerb-tudyl ether)         µgL         0.5             MtBE (Methyl-kerb-tudyl ether)         µgL         0.5             MtBE (Methyl-kerb-tudyl ether)         µgL         0.5             MtSE (Abutoroethane         µgL         0.5             KK (2-butoroethane         µgL         0.5             Bromochicoromethane         µgL         0.5             2-dichloroptopen         µgL         0.5             2-dichloroptopen         µgL         0.5             1.1-dichloroptopen         µgL         0.5             2-dichloroptopen         µgL         0.5             1.1-dichloroptopene         µgL         0.5	1,1-dichloroethene	μg/L	0.5	-	-
Ally choired         μpL         2            Carbon disulfide         μpL         2             trans 1.2-dichkroethane         μpL         0.5             MBE (Mehry-textury) ether)         μpL         0.5             Niryl acetale*         μpL         0.5             Viryl acetale*         μpL         0.5             Bromochicoronethane         μpL         0.5             Chordorm (THM)         μpL         0.5             1.1-dichtoropropane         μpL         0.5             1.2-dichtoropropane         μpL         0.5             1.1-dichtoropropane         μpL         0.5	Acrylonitrile	μg/L	0.5	-	-
run         run         run           Carbon disultide         µgL         0.5	Dichloromethane (Methylene chloride)	µg/L	5	-	-
run         run <thr>         run         run     &lt;</thr>	Allyl chloride	µg/L	2	-	-
MBE (Methylettebufyl etter)         upl.         2             1.1-dickloroethane         upl.         0.5             Viny actate*         upl.         10             MEK (2-butanone)         upl.         0.5             Stronchloromethane         upl.         0.5             Broncchloromethane         upl.         0.5             1.2-dickloroethane         upl.         0.5             1.2-dickloroethane         upl.         0.5             1.1-dickloropropane         upl.         0.5             1.2-dickloropropane         upl.	Carbon disulfide	µg/L	2	-	-
1.1-achioroethane       µgl.       0.5          Vinyi acetate'       µgl.       10          MEK (2-butanone)       µgl.       10          Gis-12-acitohorethene       µgl.       0.5          Bromochioromethane       µgl.       0.5           Chiordom (THM)       µgl.       0.5           1.2-acitohorethane       µgl.       0.5           1.1-dichioropropane       µgl.       0.5           1.2-dichioropropane       µgl.       0.5           Sitomochio	trans-1,2-dichloroethene	µg/L	0.5	-	-
Viryl acetate'         µgl.         10	MtBE (Methyl-tert-butyl ether)	µg/L	2	-	-
MEK (2-butanone)         µg/L         10	1,1-dichloroethane	µg/L	0.5	-	-
dis1,2-dichloroethene         µg/L         0.5	Vinyl acetate*	µg/L	10	-	-
Bromochloromethane         µg/L         0.5             Chloroform (THM)         µg/L         0.5             2.2-dichloropropane         µg/L         0.5             1.2-dichloroptopane         µg/L         0.5             1.1-dichloroptopane         µg/L         0.5             1.1-dichloroptopane         µg/L         0.5             Dibromomethane         µg/L         0.5             1.2-dichloroptopane         µg/L         0.5             1.2-dichloroptopane         µg/L         0.5             1.2-dichloroptopane         µg/L         0.5             1.2-dichloroptopane         µg/L         0.5             2-nitopropane         µg/L         0.5             1.1-dichloroptopane         µg/L         0.5             1.2-dichloroptopane         µg/L         0.5             1.1-dichloroptopane         µg/L         0.5 </td <td>MEK (2-butanone)</td> <td>µg/L</td> <td>10</td> <td>-</td> <td>-</td>	MEK (2-butanone)	µg/L	10	-	-
Chordorm (THM)         µg/L         0.5            2.2-dichloropropane         µg/L         0.5             1.2-dichloropropane         µg/L         0.5             1.1-dichloropthane         µg/L         0.5             1.1-dichloroptopene         µg/L         0.5             Dibromothane         µg/L         0.5             1.2-dichloroptopane         µg/L         0.5             2-nitropropane         µg/L         0.5             1.2-dichloroptopane         µg/L         0.5             1.3-dichloroptopane         µg/L         0.5             1.3-dichloroptopane         µg/L         0.5	cis-1,2-dichloroethene	µg/L	0.5	-	-
2.2-dichloropropane         µg/L         0.5            1.2-dichloropthane         µg/L         0.5             1.1-dichloropthane         µg/L         0.5             1.1-dichloroptopene         µg/L         0.5             Dibromothane         µg/L         0.5             1.2-dichloroptopane         µg/L         0.5             1.2-dichloroptopane         µg/L         0.5             1.2-dichloroptopane         µg/L         0.5             1.1-dichloroptopane         µg/L         0.5             1.1-dichloroptopane         µg/L         0.5             1.1-dichloroptopane         µg/L         0.5             2-nitropropane         µg/L         0.5             1.1-dichloroptopane         µg/L         0.5             1.1.2-dichloroptopane         µg/L         0.5             1.1.2-dichloroptopane         µg/L<	Bromochloromethane	µg/L	0.5	-	-
1.2-dichloroethane       µg/L       0.5          1.1.1-tichloroethane       µg/L       0.5          1.1.1-tichloroethane       µg/L       0.5          1.1.1-tichloroethane       µg/L       0.5          Carbon tetrachloride       µg/L       0.5          Dibromorethane       µg/L       0.5          1.2-dichloroethynen, TCE)       µg/L       0.5          2-nitropropane       µg/L       0.5          Bromodichloromethane (THM)       µg/L       0.5          Bromodichloropropane       µg/L       0.5          Bromodichloropropane       µg/L       0.5          Bromodichloropropane       µg/L       0.5          Ital-tichloroethane       µg/L       0.5          1.1.2-tichloroethane       µg/L       0.5	Chloroform (THM)	µg/L	0.5	-	-
1,1.4.richloroethane         µg/L         0.5         -         -           1,1.4.richloroethane         µg/L         0.5         -         -           Carbon tetrachloride         µg/L         0.5         -         -           Dibromomethane         µg/L         0.5         -         -           1.2-dichloroethylene, TCE)         µg/L         0.5         -         -           2-nitropropane         µg/L         0.5         -         -         -           2-nitropropane         µg/L         0.5         -         -         -           2-nitropropane         µg/L         0.5         -         -         -           Bromodichloromethane (THM)         µg/L         0.5         -         -         -           MBK (4-methyl-2-pentanone)         µg/L         0.5         -         -         -           1.12-trichloroethane         µg/L         0.5         -         -         -           1.3-dichloropropane         µg/L         0.5         -         -         -           1.12-trichloroethane (THM)         µg/L         0.5         -         -         -           1.3-dichloropropane         µg/L         0.5 <t< td=""><td>2,2-dichloropropane</td><td>µg/L</td><td>0.5</td><td>-</td><td>-</td></t<>	2,2-dichloropropane	µg/L	0.5	-	-
Indichloropropene         Ip/L         0.5         -         -           Carbon tetrachloride         Ip/L         0.5         1.2         -         -           Dibromorethane         Ip/L         0.5         1.2         -         -           1.2-dichloropropane         Ip/L         0.5         1.2         -         -           1.2-dichloroptropane         Ip/L         0.5         1.2         -         -           2-nitropropane         Ip/L         0.5         1.2         -         -           2-nitropropane         Ip/L         0.5         1.2         -         -           Bromodichloromethane (THM)         Ip/L         0.5         1.2         -         -           MBK (4-methyl-2-pentanone)         Ip/L         5         1.2         -         -         -           1.12-trichloroptropene         Ip/L         0.5         1.2         -         -         -           1.3-dichloropropane         Ip/L         0.5         1.2         -         -         -           1.3-dichloropropane (THM)         Ip/L         0.5         1.2         -         -         -           1.3-dichloropropane (THM)         Ip/L         0	1,2-dichloroethane	µg/L	0.5	-	-
Carbon tetrachloride         µg/L         0.5         .           Dibromomethane         µg/L         0.5         .         .           1.2-dichloropropane         µg/L         0.5         .         .           Trichloroethree (Trichloroethylene, TCE)         µg/L         0.05         .         .           2-nitropropane         µg/L         0.05         .         .         .           Bromodichloromethane (THM)         µg/L         0.5         .         .         .           MIBK (4-methyl-2-pentanone)         µg/L         0.5         .         .         .           tars-1,3-dichloropropene         µg/L         0.5         .         .         .           1,12-trichloroethane         µg/L         0.5         .         .         .           1,3-dichloropropane         µg/L         0.5         .         .         .           1,3-dichloropropane         µg/L         0.5         .         .         .           1,3-dichloropropane         µg/L         0.5         .         .         .           1,2-trichoroethane (THM)         µg/L         0.5         .         .         .         .           1,2-dibromoethane (EDB)	1,1,1-trichloroethane	µg/L	0.5	-	-
Dibromomethane         μg/L         0.5            1.2-dichloropropane         μg/L         0.5          -           Trichloroethylene,TCE)         μg/L         0.0          -           2-nitropropane         μg/L         0.0          -           Bromodichloromethane (THM)         μg/L         0.5             MIBK (4-methyl-2-pentanone)         μg/L         0.5             dis-1,3-dichloropropene         μg/L         0.5             1,1.2-trichloroethane         μg/L         0.5             1,3-dichloropropane         μg/L         0.5             1,3-dichloropropane         μg/L         0.5             1,3-dichloropropane         μg/L         0.5             1,2-trichloroethane (THM)         μg/L         0.5             1,2-dibromoethane (EDB)         μg/L         0.5             1,1,1.2-tetrachloroethane         μg/L         0.5             Chlorobenzene         μg/L	1,1-dichloropropene	µg/L	0.5	-	-
1/2-dichloropropane         µg/L         0.5         -           Trichloroethyne (Trichloroethylene, TCE)         µg/L         0.5         -         -           2-nitropropane         µg/L         100         -         -           Bromodichloromethane (THM)         µg/L         0.5         -         -           MIBK (4-methyl-2-pentanone)         µg/L         5         -         -           xtrans-1,3-dichloropropene         µg/L         0.5         -         -           1,1.2-trichloroethane         µg/L         0.5         -         -           1,1.2-trichloroethane (THM)         µg/L         0.5         -         -           1,1.2-trichloroethane (THM)         µg/L         0.5         -         -           1,2-dichloropropane         µg/L         0.5         -         -         -           1,2-dibromothane (THM)         µg/L         0.5         -         -         -           1,2-dibromothane (PBB)<	Carbon tetrachloride	µg/L	0.5	-	-
Trichloroethylene,TCE)         µg/L         0.5            2-nitropropane         µg/L         100         -         -           Bromodichloromethane (THM)         µg/L         0.5         -         -           MIBK (4-methyl-2-pentanone)         µg/L         0.5         -         -           dis-1,3-dichloropropene         µg/L         0.5         -         -           trans-1,3-dichloropropene         µg/L         0.5         -         -           1,1,2-trichloroethane         µg/L         0.5         -         -           1,3-dichloropropane         µg/L         0.5         -         -           1,1,2-trichloroethane         µg/L         0.5         -         -           1,3-dichloropropane         µg/L         0.5         -         -           1,3-dichloropropane         µg/L         0.5         -         -         -           1,3-dichloropropane         µg/L         0.5         -         -         -         -           1,2-dichloropropane         µg/L         0.5         -         -         -         -           1,2-dichloropthane (PBR)         µg/L         0.5         -         -         -	Dibromomethane	µg/L	0.5	-	-
2-nitropropane       µg/L       100       -         Bromodichloromethane (THM)       µg/L       0.5       -       -         MIBK (4-methyl-2-pentanone)       µg/L       5       -       -         dis-1,3-dichloropropene       µg/L       0.5       -       -         trans-1,3-dichloropropene       µg/L       0.5       -       -         1,1,2-trichloroethane       µg/L       0.5       -       -         1,3-dichloropropane       µg/L       0.5       -       -         1,2-trichoroethane (THM)       µg/L       0.5       -       -         1,2-dibromoethane (EDB)       µg/L       0.5       -       -         1,1,1,2-tetrachloroethane       µg/L       0.5       -       -         1,1,1,2-tetrachloroethane       µg/L       0.5       -       -         Styrene (Vinyl benzene)       µg/L       0.5       -	1,2-dichloropropane	µg/L	0.5	-	-
Bromodichloromethane (THM)         µg/L         0.5         -           MIBK (4-methyl-2-pentanone)         µg/L         5         -         -           MIBK (4-methyl-2-pentanone)         µg/L         0.5         -         -           cis-1,3-dichloropropene         µg/L         0.5         -         -           trans-1,3-dichloropropene         µg/L         0.5         -         -           1,1.2-trichloroethane         µg/L         0.5         -         -           1,3-dichloropropane         µg/L         0.5         -         -           1,3-dichloropropane         µg/L         0.5         -         -           2-hexanone (MBK)         µg/L         0.5         -         -           1,2-dibromoethane (EDB)         µg/L         0.5         -         -           1,1,1,2-tetrachloroethane         µg/L         0.5         -         -           1,1,1,2-tetrachloroethane         µg/L         0.5         -         -           1,1,1,2-tetrachloroethane         µg/L         0.5         -         -           Chlorobenzene         µg/L         0.5         -         -         -           Styrene (Vinyl benzene)         µg/L	Trichloroethene (Trichloroethylene, TCE)	µg/L	0.5	-	-
MIBK (4-methyl-2-pentanone)       µg/L       5       -         cis-1,3-dichloropropene       µg/L       0.5       -       -         trans-1,3-dichloropropene       µg/L       0.5       -       -         1,1,2-trichloroptopene       µg/L       0.5       -       -         1,3-dichloropropene       µg/L       0.5       -       -         1,3-dichloropropane       µg/L       0.5       -       -         13-dichloropropane       µg/L       0.5       -       -         Dibromochloromethane (THM)       µg/L       0.5       -       -         2-hexanone (MBK)       µg/L       0.5       -       -       -         1,2-dibromoethane (EDB)       µg/L       0.5       -       -       -         1,1,1,2-tetrachloroethane       µg/L       0.5       -       -       -         1,1,1,2-tetrachloroethane       µg/L       0.5       -       -       -         Chlorobenzene       µg/L       0.5       -       -       -         Styrene (Vinyl benzene)       µg/L       0.5       -       -       -         1,1,2,2-tetrachloroethane       µg/L       0.5       -       -       -<	2-nitropropane	µg/L	100	-	-
cis-1,3-dichloropropene       µg/L       0.5       -       -         trans-1,3-dichloropropene       µg/L       0.5       -       -         1,1,2-trichloroethane       µg/L       0.5       -       -         1,3-dichloropropane       µg/L       0.5       -       -         Dibromochloromethane (THM)       µg/L       0.5       -       -         2-hexanone (MBK)       µg/L       0.5       -       -         1,2-dibromoethane (EDB)       µg/L       0.5       -       -         1,1,1,2-tetrachloroethane       µg/L       0.5       -       -         Styrene (Vinyl benzene)       µg/L       0.5       -       -         1,1,2,2-tetrachloroethane       µg/L       0.5       -       -         1,2,3-trichloropropane       µg/L </td <td>Bromodichloromethane (THM)</td> <td>µg/L</td> <td>0.5</td> <td>-</td> <td>-</td>	Bromodichloromethane (THM)	µg/L	0.5	-	-
trans-1,3-dichloropropene       µg/L       0.5       -       -         1,1,2-trichloroethane       µg/L       0.5       -       -         1,3-dichloropropane       µg/L       0.5       -       -         Dibromochloromethane (THM)       µg/L       0.5       -       -         2-hexanone (MBK)       µg/L       0.5       -       -         1,2-dibromoethane (EDB)       µg/L       0.5       -       -         1,2-dibromoethane (Perchloroethylene,PCE)       µg/L       0.5       -       -         1,1,1,2-tetrachloroethane       µg/L       0.5       -       -         1,1,2-tetrachloroethane       µg/L       0.5       -       -       -         Styrene (Vinyl benzene)       µg/L       0.5       -       -       -         1,1,2-tetrachloroethane       µg/L       0.5       -       -       -         1,1,2-tetrachloroethane       µg/L       0.5       -       -	MIBK (4-methyl-2-pentanone)	μg/L	5	-	-
1,1,2-trichloroethane       µg/L       0.5       -       -         1,3-dichloropropane       µg/L       0.5       -       -         Dibronochloromethane (THM)       µg/L       0.5       -       -         2-hexanone (MBK)       µg/L       0.5       -       -         1,2-dibronoethane (EDB)       µg/L       0.5       -       -         1,2-dibronoethane (Perchloroethylene,PCE)       µg/L       0.5       -       -         1,1,1,2-tetrachloroethane       µg/L       0.5       -       -         1,1,1,2-tetrachloroethane       µg/L       0.5       -       -         1,1,1,2-tetrachloroethane       µg/L       0.5       -       -         1,1,2-tetrachloroethane       µg/L       0.5       -       -         1,1,2-tetrachloroethane       µg/L       0.5       -       -         1,1,2-tetrachloroethane       µg/L       0.5       -       -         Styrene (Vinyl benzene)       µg/L       0.5       -       -         1,1,2,2-tetrachloroethane       µg/L       0.5       -       -         1,2,3-trichloropropane       µg/L       0.5       -       -         1,2-tetrachloro-2-butene	cis-1,3-dichloropropene	µg/L	0.5	-	-
1,3-dichloropropane       µg/L       0.5       -       -         Dibromochloromethane (THM)       µg/L       0.5       -       -         2-hexanone (MBK)       µg/L       0.5       -       -         1.2-dibromoethane (EDB)       µg/L       0.5       -       -         1.2-dibromoethane (Perchloroethylene,PCE)       µg/L       0.5       -       -         1.1,1.2-tetrachloroethane       µg/L       0.5       -       -         Chlorobenzene       µg/L       0.5       -       -         Bromoform (THM)       µg/L       0.5       -       -         Styrene (Vinyl benzene)       µg/L       0.5       -       -         1,1,2-tetrachloroethane       µg/L       0.5       -       -         Bromoform (THM)       µg/L       0.5       -       -       -         1,1,2-tetrachloroethane       µg/L       0.5       -       -       -         1,1,2-tetrachloroethane       µg/L       0.5       -       -       -         1,2,3-trichloropropane       µg/L       0.5       -       -       -         1,2,4-tichloro-2-butene       µg/L       1       -       -       -	trans-1,3-dichloropropene	μg/L	0.5	-	-
Dibromochloromethane (THM)         µg/L         0.5         -         -           2-hexanone (MBK)         µg/L         5         -         -           1.2-dibromoethane (EDB)         µg/L         0.5         -         -           Tetrachloroethane (EDB)         µg/L         0.5         -         -           1,1,2-dibromoethane (EDB)         µg/L         0.5         -         -           1,1,2-tetrachloroethane         µg/L         0.5         -         -           1,1,1,2-tetrachloroethane         µg/L         0.5         -         -           Chlorobenzene         µg/L         0.5         -         -           Bromoform (THM)         µg/L         0.5         -         -           Styrene (Vinyl benzene)         µg/L         0.5         -         -           1,1,2,2-tetrachloroethane         µg/L         0.5         -         -           1,2,2-tetrachloroethane         µg/L         0.5         -         -           1,2,3-trichloropropane         µg/L         0.5         -         -           1,2,3-trichloror-2-butene         µg/L         1         -         -	1,1,2-trichloroethane	μg/L	0.5	-	-
2-hexanone (MBK)         µg/L         5         -         -           1.2-dibromoethane (EDB)         µg/L         0.5         -         -           Tetrachloroethene (Perchloroethylene,PCE)         µg/L         0.5         -         -           1,1,2-tetrachloroethane         µg/L         0.5         -         -           Chlorobenzene         µg/L         0.5         -         -           Bromoform (THM)         µg/L         0.5         -         -           Styrene (Vinyl benzene)         µg/L         0.5         -         -           1,1,2,2-tetrachloroethane         µg/L         0.5         -         -           1,2,2-tetrachloroethane         µg/L         0.5         -         -           1,2,2-tetrachloroethane         µg/L         0.5         -         -           1,2,2-tetrachloroethane         µg/L         0.5         -         -           1,2,3-trichloropropane         µg/L         0.5         -         -           1,2,3-trichlororo-2-butene         µg/L         1         -         -	1,3-dichloropropane	µg/L	0.5	-	-
1.2-dibromoethane (EDB)       µg/L       0.5       -         Tetrachloroethylene,PCE)       µg/L       0.5       -         1,1,2-tetrachloroethylene,PCE)       µg/L       0.5       -         1,1,2-tetrachloroethylene,PCE)       µg/L       0.5       -         Chlorobenzene       µg/L       0.5       -       -         Bromoform (THM)       µg/L       0.5       -       -         Styrene (Vinyl benzene)       µg/L       0.5       -       -         1,1,2-tetrachloroethane       µg/L       0.5       -       -         1,2,2-tetrachloroethane       µg/L       0.5       -       -         1,2,2-tetrachloroethane       µg/L       0.5       -       -         1,2,3-trichloropropane       µg/L       0.5       -       -         1,2-3-trichloro-2-butene       µg/L       1       -       -	Dibromochloromethane (THM)	µg/L	0.5	-	-
Tetrachloroethnene (Perchloroethylene,PCE)         µg/L         0.5         -         -           1,1,1,2-tetrachloroethane         µg/L         0.5         -         -           Chlorobenzene         µg/L         0.5         -         -           Bromoform (THM)         µg/L         0.5         -         -           Styrene (Vinyl benzene)         µg/L         0.5         -         -           1,1,2.2-tetrachloroethane         µg/L         0.5         -         -           1,1,2.2-tetrachloroethane         µg/L         0.5         -         -           1,2,2-tetrachloroethane         µg/L         0.5         -         -           1,2,3-trichloropropane         µg/L         0.5         -         -           trans-1,4-dichloro-2-butene         µg/L         1         -         -	2-hexanone (MBK)	µg/L	5	-	-
1,1,1,2-tetrachloroethane     µg/L     0.5        Chlorobenzene     µg/L     0.5        Bromoform (THM)     µg/L     0.5        Styrene (Vinyl benzene)     µg/L     0.5        1,1,2-tetrachloroethane     µg/L     0.5        1,2,2-tetrachloroppane     µg/L     0.5        1,2,3-trichlorop-2-butene     µg/L     1	1,2-dibromoethane (EDB)	μg/L	0.5	-	-
Chlorobenzene         µg/L         0.5         -           Bromoform (THM)         µg/L         0.5         -         -           Styrene (Vinyl benzene)         µg/L         0.5         -         -           1,1,2,2-tetrachloroethane         µg/L         0.5         -         -           1,2,3-trichloropropane         µg/L         0.5         -         -           trans-1,4-dichloro-2-butene         µg/L         1         -         -	Tetrachloroethene (Perchloroethylene,PCE)	µg/L	0.5	-	-
Bromoform (THM)         μg/L         0.5         -         -           Styrene (Vinyl benzene)         μg/L         0.5         -         -           1,1,2,2-tetrachloroethane         μg/L         0.5         -         -           1,2,3-trichloropropane         μg/L         0.5         -         -           trans-1,4-dichloro-2-butene         μg/L         1         -         -	1,1,1,2-tetrachloroethane	μg/L	0.5	-	-
Styrene (Vinyl benzene)         µg/L         0.5         -         -           1,1,2,2-tetrachloroethane         µg/L         0.5         -         -           1,2,3-trichloropropane         µg/L         0.5         -         -           trans-1,4-dichloro-2-butene         µg/L         1         -         -	Chlorobenzene	μg/L	0.5	-	-
1,1,2,2-tetrachloroethane     µg/L     0.5     -       1,2,3-trichloropropane     µg/L     0.5     -       trans-1,4-dichloro-2-butene     µg/L     1     -	Bromoform (THM)	μg/L	0.5	-	-
1,2,3-trichloropropane         µg/L         0.5         -         -           trans-1,4-dichloro-2-butene         µg/L         1         -         -	Styrene (Vinyl benzene)	μg/L	0.5	-	-
1,2,3-trichloropropane         µg/L         0.5         -         -           trans-1,4-dichloro-2-butene         µg/L         1         -         -	1,1,2,2-tetrachloroethane	μg/L	0.5	-	-
trans-1,4-dichloro-2-butene µg/L 1			0.5	-	-
				-	-
	Isopropylbenzene (Cumene)	μg/L		-	-



### SE255779 R1

### VOCs in Water [AN433] Tested: 31/10/2023 (continued)

			QTB1	QTS1
			WATER	WATER
			-	-
PARAMETER	UOM	LOR	26/10/2023 SE255779.006	26/10/2023 SE255779.007
Bromobenzene	μg/L	0.5	-	-
n-propylbenzene	μg/L	0.5	-	-
2-chlorotoluene	µg/L	0.5	-	-
4-chlorotoluene	μg/L	0.5	-	-
1,3,5-trimethylbenzene	μg/L	0.5	-	-
tert-butylbenzene	µg/L	0.5	-	-
1,2,4-trimethylbenzene	µg/L	0.5	-	-
sec-butylbenzene	µg/L	0.5	-	-
1,3-dichlorobenzene	µg/L	0.5	-	-
1,4-dichlorobenzene	µg/L	0.3	-	-
p-isopropyltoluene	µg/L	0.5	-	-
1,2-dichlorobenzene	µg/L	0.5	-	-
n-butylbenzene	µg/L	0.5	-	-
1,2-dibromo-3-chloropropane	μg/L	0.5	-	-
1,2,4-trichlorobenzene	µg/L	0.5	-	-
Hexachlorobutadiene	µg/L	0.5	-	-
1,2,3-trichlorobenzene	µg/L	0.5	-	-
Total VOC	µg/L	10	-	-



# SE255779 R1

#### Volatile Petroleum Hydrocarbons in Water [AN433] Tested: 31/10/2023

			BH2M-1	BH7M-1	BH10M-1	GWQD_20231026	GWQR_20231026
			WATER	WATER	WATER	WATER	WATER
							-
			26/10/2023	26/10/2023	26/10/2023	26/10/2023	26/10/2023
PARAMETER	UOM	LOR	SE255779.001	SE255779.002	SE255779.003	SE255779.004	SE255779.005
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



# SE255779 R1

#### TRH (Total Recoverable Hydrocarbons) in Water [AN403] Tested: 31/10/2023

			BH2M-1	BH7M-1	BH10M-1	GWQD_20231026	GWQR_20231026
			WATER	WATER	WATER	WATER	WATER
			26/10/2023	26/10/2023	26/10/2023	26/10/2023	26/10/2023
PARAMETER	UOM	LOR	SE255779.001	SE255779.002	SE255779.003	SE255779.004	SE255779.005
TRH C10-C14	µg/L	50	<50	<50	<50	410	<50
TRH C15-C28	µg/L	200	<200	<200	<200	370	<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	430	<60
TRH >C10-C16 - Naphthalene (F2)	µg/L	60	<60	<60	<60	430	<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	930	<320



#### PAH (Polynuclear Aromatic Hydrocarbons) in Water [AN420] Tested: 31/10/2023

			BH2M-1	BH7M-1	BH10M-1
			WATER	WATER	WATER
			26/10/2023	26/10/2023	26/10/2023
PARAMETER	UOM	LOR	SE255779.001	SE255779.002	SE255779.003
Naphthalene	µg/L	0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	µg/L	0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	µg/L	0.1	<0.1	<0.1	<0.1
Acenaphthylene	µg/L	0.1	<0.1	<0.1	<0.1
Acenaphthene	µg/L	0.1	<0.1	<0.1	<0.1
Fluorene	µg/L	0.1	<0.1	<0.1	<0.1
Phenanthrene	µg/L	0.1	<0.1	<0.1	<0.1
Anthracene	µg/L	0.1	<0.1	<0.1	<0.1
Fluoranthene	µg/L	0.1	<0.1	<0.1	<0.1
Pyrene	µg/L	0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	µg/L	0.1	<0.1	<0.1	<0.1
Chrysene	µg/L	0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	µg/L	0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	µg/L	0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	µg/L	0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	µg/L	0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	µg/L	0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	µg/L	0.1	<0.1	<0.1	<0.1
Total PAH (18)	µg/L	1	<1	<1	<1



# **ANALYTICAL RESULTS**

#### Total Phenolics in Water [AN295] Tested: 31/10/2023

			BH2M-1	BH7M-1	BH10M-1
			WATER	WATER	WATER
			26/10/2023	26/10/2023	26/10/2023
PARAMETER	UOM	LOR	SE255779.001	SE255779.002	SE255779.003
Total Phenols	mg/L	0.05	<0.05	<0.05	<0.05



### **ANALYTICAL RESULTS**

### SE255779 R1

#### Trace Metals (Dissolved) in Water by ICPMS [AN318] Tested: 30/10/2023

			BH2M-1	BH7M-1	BH10M-1	GWQD_20231026	GWQR_20231026
			WATER	WATER	WATER	WATER	WATER
			- 26/10/2023	- 26/10/2023	- 26/10/2023	- 26/10/2023	- 26/10/2023
PARAMETER	UOM	LOR	SE255779.001	SE255779.002	SE255779.003	SE255779.004	SE255779.005
Arsenic	µg/L	1	4	<1	<1	4	<1
Cadmium	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chromium	µg/L	1	1	<1	<1	1	<1
Copper	µg/L	1	<1	<1	2	<1	<1
Lead	µg/L	1	<1	<1	<1	<1	<1
Nickel	µg/L	1	2	13	5	2	<1
Zinc	µg/L	5	6	15	36	7	<5



# **ANALYTICAL RESULTS**

### SE255779 R1

#### Mercury (dissolved) in Water [AN311(Perth)/AN312] Tested: 30/10/2023

			BH2M-1	BH7M-1	BH10M-1	GWQD_20231026	GWQR_20231026
			WATER	WATER	WATER	WATER	WATER
							-
			26/10/2023	26/10/2023	26/10/2023	26/10/2023	26/10/2023
PARAMETER	UOM	LOR	SE255779.001	SE255779.002	SE255779.003	SE255779.004	SE255779.005
Mercury	mg/L	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001



METHOD	METHODOLOGY SUMMARY
AN020	Unpreserved water sample is filtered through a 0.45µm membrane filter and acidified with nitric acid similar to APHA3030B.
AN295	The water sample or extract of sample is distilled in a phosphoric acid stream. Phenolic compounds in the distillate react with a reagent stream of potassium hexacyanoferrate (III) and 4-Amino-2,3-dimethyl-3-pryazolin-5-one in an alkaline medium to form a coloured complex which is analysed spectrophotometrically onboard a continuous flow analyser.
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 Recoveerable 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.
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.



#### FOOTNOTES -

*	NATA accreditation does not cover
	the performance of this service.
**	Indicative data, theoretical holding
	time exceeded.

\*\*\* Indicates that both \* and \*\* apply.

Not analysed.
 NVL Not validated.
 IS Insufficient sample for analysis.
 LNR Sample listed, but not received.

UOM Unit of Measure. LOR Limit of Reporting. ↑↓ Raised/lowered Limit of Reporting.

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:

- a. 1 Bq is equivalent to 27 pCi
- b. 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: <u>www.sgs.com.au/en-gb/environment-health-and-safety</u>.

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### **CERTIFICATE OF ANALYSIS 335745**

Client Details	
Client	El Australia
Attention	Sean Nolan
Address	Suite 6.01, 55 Miller Street, Pyrmont, NSW, 2009

Sample Details	
Your Reference	<u>E26160</u>
Number of Samples	1 Soil
Date samples received	19/10/2023
Date completed instructions received	19/10/2023

#### **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	26/10/2023				
Date of Issue	25/10/2023				
NATA Accreditation Number 2901. This document shall not be reproduced except in full.					
Accredited for compliance with	Accredited for compliance with ISO/IEC 17025 - Testing. Tests not covered by NATA are denoted with *				

Results Approved By Dragana Tomas, Senior Chemist Loren Bardwell, Development Chemist Tim Toll, Chemist (FAS) <u>Authorised By</u> Nancy Zhang, Laboratory Manager



vTRH(C6-C10)/BTEXN in Soil		
Our Reference		335745-1
Your Reference	UNITS	QT_20231017
Date Sampled		17/10/2023
Type of sample		Soil
Date extracted		20/10/2023
Date analysed	-	21/10/2023
TRH C <sub>6</sub> - C <sub>9</sub>	mg/kg	<25
TRH C <sub>6</sub> - C <sub>10</sub>	mg/kg	<25
vTPH C6 - C10 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	%	101

svTRH (C10-C40) in Soil		
Our Reference		335745-1
Your Reference	UNITS	QT_20231017
Date Sampled		17/10/2023
Type of sample		Soil
Date extracted	-	20/10/2023
Date analysed	-	24/10/2023
TRH C <sub>10</sub> - C <sub>14</sub>	mg/kg	<50
TRH C <sub>15</sub> - C <sub>28</sub>	mg/kg	<100
TRH C <sub>29</sub> - C <sub>36</sub>	mg/kg	<100
Total +ve TRH (C10-C36)	mg/kg	<50
TRH >C10 -C16	mg/kg	<50
TRH >C <sub>10</sub> - C <sub>16</sub> less Naphthalene (F2)	mg/kg	<50
TRH >C <sub>16</sub> -C <sub>34</sub>	mg/kg	<100
TRH >C <sub>34</sub> -C <sub>40</sub>	mg/kg	<100
Total +ve TRH (>C10-C40)	mg/kg	<50
Surrogate o-Terphenyl	%	71

Acid Extractable metals in soil		
Our Reference		335745-1
Your Reference	UNITS	QT_20231017
Date Sampled		17/10/2023
Type of sample		Soil
Date prepared	-	20/10/2023
Date analysed	-	20/10/2023
Arsenic	mg/kg	11
Cadmium	mg/kg	<0.4
Chromium	mg/kg	34
Copper	mg/kg	5
Lead	mg/kg	16
Mercury	mg/kg	<0.1
Nickel	mg/kg	16
Zinc	mg/kg	17

Moisture		
Our Reference		335745-1
Your Reference	UNITS	QT_20231017
Date Sampled		17/10/2023
Type of sample		Soil
Date prepared	-	20/10/2023
Date analysed	-	23/10/2023
Moisture	%	17

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-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater. Note, the Total +ve Xylene PQL is reflective of the lowest individual PQL and is therefore "Total +ve Xylenes" is simply a sum of the positive individual Xylenes.

QUALITY CONT	ROL: vTRH	(C6-C10)	/BTEXN in Soil			Du	plicate		Spike Rec	overy %
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date extracted	-			20/10/2023	[NT]		[NT]	[NT]	20/10/2023	
Date analysed	-			21/10/2023	[NT]		[NT]	[NT]	21/10/2023	
TRH C <sub>6</sub> - C <sub>9</sub>	mg/kg	25	Org-023	<25	[NT]		[NT]	[NT]	118	
TRH C <sub>6</sub> - C <sub>10</sub>	mg/kg	25	Org-023	<25	[NT]		[NT]	[NT]	118	
Benzene	mg/kg	0.2	Org-023	<0.2	[NT]		[NT]	[NT]	107	
Toluene	mg/kg	0.5	Org-023	<0.5	[NT]		[NT]	[NT]	119	
Ethylbenzene	mg/kg	1	Org-023	<1	[NT]		[NT]	[NT]	122	
m+p-xylene	mg/kg	2	Org-023	<2	[NT]		[NT]	[NT]	120	
o-Xylene	mg/kg	1	Org-023	<1	[NT]		[NT]	[NT]	132	
Naphthalene	mg/kg	1	Org-023	<1	[NT]		[NT]	[NT]	[NT]	
Surrogate aaa-Trifluorotoluene	%		Org-023	104	[NT]		[NT]	[NT]	105	

QUALITY CO	NTROL: svT	RH (C10-	-C40) in Soil			Duj	plicate		Spike Re	covery %
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date extracted	-			20/10/2023	[NT]		[NT]	[NT]	20/10/2023	
Date analysed	-			24/10/2023	[NT]		[NT]	[NT]	24/10/2023	
TRH C <sub>10</sub> - C <sub>14</sub>	mg/kg	50	Org-020	<50	[NT]		[NT]	[NT]	103	
TRH C <sub>15</sub> - C <sub>28</sub>	mg/kg	100	Org-020	<100	[NT]		[NT]	[NT]	96	
TRH C <sub>29</sub> - C <sub>36</sub>	mg/kg	100	Org-020	<100	[NT]		[NT]	[NT]	100	
TRH >C <sub>10</sub> -C <sub>16</sub>	mg/kg	50	Org-020	<50	[NT]		[NT]	[NT]	103	
TRH >C <sub>16</sub> -C <sub>34</sub>	mg/kg	100	Org-020	<100	[NT]		[NT]	[NT]	96	
TRH >C <sub>34</sub> -C <sub>40</sub>	mg/kg	100	Org-020	<100	[NT]		[NT]	[NT]	100	
Surrogate o-Terphenyl	%		Org-020	77	[NT]	[NT]	[NT]	[NT]	88	[NT]

QUALITY CONT	ROL: Acid E	xtractabl	e metals in soil			Du	plicate		Spike Red	covery %
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date prepared	-			20/10/2023	[NT]		[NT]	[NT]	20/10/2023	
Date analysed	-			20/10/2023	[NT]		[NT]	[NT]	20/10/2023	
Arsenic	mg/kg	4	Metals-020	<4	[NT]		[NT]	[NT]	111	
Cadmium	mg/kg	0.4	Metals-020	<0.4	[NT]		[NT]	[NT]	106	
Chromium	mg/kg	1	Metals-020	<1	[NT]		[NT]	[NT]	117	
Copper	mg/kg	1	Metals-020	<1	[NT]		[NT]	[NT]	109	
Lead	mg/kg	1	Metals-020	<1	[NT]		[NT]	[NT]	123	
Mercury	mg/kg	0.1	Metals-021	<0.1	[NT]		[NT]	[NT]	102	
Nickel	mg/kg	1	Metals-020	<1	[NT]		[NT]	[NT]	106	
Zinc	mg/kg	1	Metals-020	<1	[NT]		[NT]	[NT]	110	

Result Definiti	ons
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 Contro	ol 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.



### **CERTIFICATE OF ANALYSIS 336423**

Client Details	
Client	El Australia
Attention	Lab Email
Address	Suite 6.01, 55 Miller Street, Pyrmont, NSW, 2009

Sample Details	
Your Reference	E26160, 1 Veno St, Heathcote
Number of Samples	1 Water
Date samples received	27/10/2023
Date completed instructions received	27/10/2023

#### **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	03/11/2023
Date of Issue	02/11/2023
NATA Accreditation Number 29	01. This document shall not be reproduced except in full.
Accredited for compliance with	SO/IEC 17025 - Testing. Tests not covered by NATA are denoted with *

Results Approved By Dragana Tomas, Senior Chemist Loren Bardwell, Development Chemist <u>Authorised By</u> Nancy Zhang, Laboratory Manager



vTRH(C6-C10)/BTEXN in Water		
Our Reference		336423-1
Your Reference	UNITS	GWQT_2023102 6
Date Sampled		26/10/2023
Type of sample		Water
Date extracted	-	30/10/2023
Date analysed	-	31/10/2023
TRH C <sub>6</sub> - C <sub>9</sub>	µg/L	<10
TRH C <sub>6</sub> - C <sub>10</sub>	µg/L	<10
TRH C <sub>6</sub> - C <sub>10</sub> less BTEX (F1)	µg/L	<10
Benzene	µg/L	<1
Toluene	µg/L	<1
Ethylbenzene	µg/L	<1
m+p-xylene	µg/L	<2
o-xylene	µg/L	<1
Naphthalene	µg/L	<1
Surrogate Dibromofluoromethane	%	103
Surrogate Toluene-d8	%	101
Surrogate 4-Bromofluorobenzene	%	104

svTRH (C10-C40) in Water		
Our Reference		336423-1
Your Reference	UNITS	GWQT_2023102 6
Date Sampled		26/10/2023
Type of sample		Water
Date extracted	-	30/10/2023
Date analysed	-	31/10/2023
TRH C <sub>10</sub> - C <sub>14</sub>	µg/L	300
TRH C <sub>15</sub> - C <sub>28</sub>	µg/L	180
TRH C <sub>29</sub> - C <sub>36</sub>	µg/L	100
Total +ve TRH (C10-C36)	µg/L	590
TRH >C <sub>10</sub> - C <sub>16</sub>	µg/L	310
TRH >C <sub>10</sub> - C <sub>16</sub> less Naphthalene (F2)	µg/L	310
TRH >C <sub>16</sub> - C <sub>34</sub>	µg/L	250
TRH >C <sub>34</sub> - C <sub>40</sub>	µg/L	<100
Total +ve TRH (>C10-C40)	μg/L	560
Surrogate o-Terphenyl	%	77

HM in water - dissolved		
Our Reference		336423-1
Your Reference	UNITS	GWQT_2023102 6
Date Sampled		26/10/2023
Type of sample		Water
Date prepared	-	30/10/2023
Date analysed	-	30/10/2023
Arsenic-Dissolved	μg/L	4
Cadmium-Dissolved	µg/L	<0.1
Chromium-Dissolved	μg/L	1
Copper-Dissolved	µg/L	4
Lead-Dissolved	μg/L	<1
Mercury-Dissolved	μg/L	<0.05
Nickel-Dissolved	µg/L	2
Zinc-Dissolved	μg/L	5

Method ID	Methodology Summary
Metals-021	Determination of Mercury by Cold Vapour AAS.
Metals-022	Determination of various metals by ICP-MS.
	Please note for Bromine and Iodine, any forms of these elements that are present are included together in the one result reported for each of these two elements.
	Salt forms (e.g. FeO, PbO, ZnO) are determinined stoichiometrically from the base metal concentration.
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-023	Water samples are analysed directly 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.

QUALITY CONTI	ROL: vTRH(	C6-C10)/E	BTEXN in Water			Du	ıplicate		Spike Rec	overy %
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W2	[NT]
Date extracted	-			30/10/2023	[NT]		[NT]	[NT]	30/10/2023	
Date analysed	-			31/10/2023	[NT]		[NT]	[NT]	31/10/2023	
TRH C <sub>6</sub> - C <sub>9</sub>	μg/L	10	Org-023	<10	[NT]		[NT]	[NT]	104	
TRH C <sub>6</sub> - C <sub>10</sub>	μg/L	10	Org-023	<10	[NT]		[NT]	[NT]	104	
Benzene	μg/L	1	Org-023	<1	[NT]		[NT]	[NT]	103	
Toluene	μg/L	1	Org-023	<1	[NT]		[NT]	[NT]	107	
Ethylbenzene	μg/L	1	Org-023	<1	[NT]		[NT]	[NT]	104	
m+p-xylene	μg/L	2	Org-023	<2	[NT]		[NT]	[NT]	104	
o-xylene	μg/L	1	Org-023	<1	[NT]		[NT]	[NT]	103	
Naphthalene	μg/L	1	Org-023	<1	[NT]		[NT]	[NT]	[NT]	
Surrogate Dibromofluoromethane	%		Org-023	105	[NT]		[NT]	[NT]	99	
Surrogate Toluene-d8	%		Org-023	102	[NT]		[NT]	[NT]	105	
Surrogate 4-Bromofluorobenzene	%		Org-023	105	[NT]		[NT]	[NT]	97	

QUALITY CONTROL: svTRH (C10-C40) in Water						Du	plicate	uplicate Spike Recove		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W2	[NT]
Date extracted	-			30/10/2023	[NT]		[NT]	[NT]	30/10/2023	
Date analysed	-			31/10/2023	[NT]		[NT]	[NT]	31/10/2023	
TRH C <sub>10</sub> - C <sub>14</sub>	µg/L	50	Org-020	<50	[NT]		[NT]	[NT]	98	
TRH C <sub>15</sub> - C <sub>28</sub>	µg/L	100	Org-020	<100	[NT]		[NT]	[NT]	76	
TRH C <sub>29</sub> - C <sub>36</sub>	µg/L	100	Org-020	<100	[NT]		[NT]	[NT]	114	
TRH >C <sub>10</sub> - C <sub>16</sub>	µg/L	50	Org-020	<50	[NT]		[NT]	[NT]	98	
TRH >C <sub>16</sub> - C <sub>34</sub>	µg/L	100	Org-020	<100	[NT]		[NT]	[NT]	76	
TRH >C <sub>34</sub> - C <sub>40</sub>	µg/L	100	Org-020	<100	[NT]		[NT]	[NT]	114	
Surrogate o-Terphenyl	%		Org-020	125	[NT]		[NT]	[NT]	106	

QUALITY CC	NTROL: HN	1 in water	- dissolved			Du	plicate		Spike Re	covery %
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W1	[NT]
Date prepared	-			30/10/2023	[NT]		[NT]	[NT]	30/10/2023	
Date analysed	-			30/10/2023	[NT]		[NT]	[NT]	30/10/2023	
Arsenic-Dissolved	µg/L	1	Metals-022	<1	[NT]		[NT]	[NT]	94	
Cadmium-Dissolved	µg/L	0.1	Metals-022	<0.1	[NT]		[NT]	[NT]	95	
Chromium-Dissolved	µg/L	1	Metals-022	<1	[NT]		[NT]	[NT]	83	
Copper-Dissolved	µg/L	1	Metals-022	<1	[NT]		[NT]	[NT]	88	
Lead-Dissolved	µg/L	1	Metals-022	<1	[NT]		[NT]	[NT]	101	
Mercury-Dissolved	µg/L	0.05	Metals-021	<0.05	[NT]		[NT]	[NT]	106	
Nickel-Dissolved	µg/L	1	Metals-022	<1	[NT]		[NT]	[NT]	90	
Zinc-Dissolved	µg/L	1	Metals-022	<1	[NT]	[NT]	[NT]	[NT]	88	[NT]

<b>Result Definiti</b>	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.				

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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.

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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.

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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.

Appendix I – QA/QC Assessment

# 11.1 Quality Assurance / Quality Control Program

Quality assurance comprises an assessment of the reliability of the field procedures and laboratory results against standard industry practices and the SAQP. A summary of the project QA/QC measures incorporated into this DSI is presented in **Table I-1**.

Table I-1 Proje	ect QC measures	
Task	Description	Project
Field QA/QC		
General	Work was to be undertaken following standard field procedures which are based on industry accepted standard practice.	Soil samples were collected directly from the augers. Soil samples were placed in 250 gram glass jars and plastic bags, which were filled to minimise headspace, and sealed using Teflon-coated lids. Groundwater samples were obtained using sample bottles/vials provided by the laboratory.
	All fieldwork was supervised by a suitably qualified and experienced scientist or engineer.	Yes
Soil Screening with PID	The PID was serviced and calibrated as per manufacturer requirements. PID calibrated at the beginning of each day of fieldwork.	Yes
Equipment Decontamination	Sampling equipment to be decontaminated after the collection of each soil sample by washing with phosphate-free detergent and potable water, followed by a final distilled water rinse. One rinsate blank would be collected and analysed for the primary contaminants. All results should be non-detect.	Yes 4 rinsate samples were collected in total. Two were previously collected during the PSI soil and groundwater investigation in October 2023. For the DSI, one was collected during the soil investigation on 6 June 2024 and the other was collected during the groundwater monitoring event on 20 June 2024. All concentrations were reported as below the detection limits, excluding toluene for soil investigation rinsate (QR1), which reported a concentration of 0.6 mg/kg. Considering the soil concentrations for toluene were all below detection limits, this minor detection is not considered to have impacted the reliability of the data.
Transport	Samples stored in a chilled cooler box and transported to the laboratories. To ensure the integrity of the samples from collection to receipt by the analytical laboratory, samples were sent by courier to the laboratories under 'chain of custody' describing sample preservation and transport duration.	Yes

Table I-1 Project QC Measures

Task	Description	Project
Trip Blanks	Trip blank samples were to be prepared and analysed by the primary laboratory for BTEX. Analytical results to be below the laboratory LOR, indicating satisfactory sample transport and handling conditions were achieved.	Four trip blank samples prepared by the primary laboratory were analysed for BTEX during soil and groundwater testing. All the other results were reported below the laboratory LOR, indicating that ideal sample transport and handling conditions were achieved (i.e. no cross- contamination of volatiles during sample transport and subsequent handling).
Trip Spikes	Trip spike samples were to be prepared and analysed by the primary laboratory for BTEX. Analytical results to be within 80- 120% recovery, indicating satisfactory sample transport and handling conditions were achieved.	Four trip spike samples prepared by the primary laboratory were analysed for BTEX during soil and groundwater testing. All the other results were within the recovery acceptance levels, indicating that satisfactory sample transport and handling conditions were achieved (i.e. no loss of volatiles during sample transport and subsequent handling).
Duplicates	<ul> <li>Field duplicate samples were to be analysed as follows (as per NEPM):</li> <li>intra-laboratory duplicates at a rate of 1 in 20 primary samples; and</li> <li>inter-laboratory duplicates at a rate of 1 in 20 primary samples.</li> <li>Field and laboratory acceptable limits between 30-50% RPD as stated by AS4482.1–2005. RPDs that exceed this range may be considered acceptable where:</li> <li>Results are less than 10 times the limits of reporting (LOR);</li> <li>Results are less than 20 times the LOR and the RPD is less than 50%; or</li> <li>Heterogeneous materials or volatile compounds are encountered.</li> <li>Non-compliance is to be documented in the report and the sample re-analysed or a higher level conservatively adopted.</li> </ul>	The required sampling density of 1 per 20 duplicated primary samples was achieved and sufficient for the investigation. Laboratory duplicates prepared and analysed. Minor non-conformance, with negligible effects on data use for interpretative purposes. Non-conformance was reported for metal concentrations for both intra/inter- laboratory soil duplicates. This is likely due to heterogeneous fill material. Field QC samples and calculated RPD values are presented in <b>Table I-5</b> and <b>Table I-6</b> . Copies of laboratory reports are included in <b>Appendix H</b> .
Laboratory QA/C	<u>10</u>	
Laboratory Analysis	The laboratories selected are NATA accredited for the analytes selected and perform their own internal QA/QC programs.	Yes SGS - primary laboratory Envirolab - secondary laboratory Laboratory QA/QC analyses are included in <b>Appendix J.</b>
	Appropriate detection limits were used for the analyses to be undertaken.	Practical Quantitation Limits for all tested parameters during the DSI are presented in laboratory analytical reports in <b>Appendix H.</b>
Holding Times	Holding times are the maximum permissible elapsed time in days from the collection of the sample to its extraction and/or analysis. All extraction and analyses should be completed within standard guidelines.	All samples were analysed within the holding times.

Task	Description	Project
Method Blanks	A method blank contains the reagents used to prepare the sample for final analysis. The purpose of this procedure is to identify contamination in the reagent materials and assess potential bias in the sample analysis due to contaminated reagents. The QC criterion aims to find no detectable contamination in the reagents. Each analysis procedure should be subject to a method blank analysis. The results of each should indicate that contaminants were not detected.	Yes
Laboratory Duplicates	Laboratory duplicates are field samples that are split in the laboratory and subsequently analysed a number of times in the same batch. These sub-samples are selected by the laboratory to assess the accuracy and precision of the analytical method. The selected laboratories should undertake QA/QC procedures such as calibration standards, laboratory control samples, surrogates, reference materials, sample duplicates and matrix spikes. Intra- laboratory duplicates should be performed at a frequency of 1 per 10 samples.	The Laboratory duplicate samples for the analysis batches showed most calculated RPDs that were within acceptable ranges and conformed to the DAC. Exceptions are noted to be: • SE255599.01 (PSI, 2023) • Total PAH (101%) • SE255412 (PSI, 2023) • Lead (60%) • SE266429.003 • Total PAH (105%) RPD failed acceptance criteria due to sample heterogeneity
Laboratory Control Standard	A laboratory control standard is a standard reference material used in preparing primary standards. The concentration should be equivalent to a mid-range standard to confirm the primary calibration. Laboratory control samples should be performed on a frequency of 1 per 20 samples or at least one per analytical run.	Assessment of laboratory control standard has been undertaken by the laboratory. All laboratory control standards were within acceptable ranges.
Matrix Spikes	Matric spikes are field samples to which a predetermined stock solution of known concentration has been added. The samples are then analysed for recovery of the known addition. Recoveries should be within the stated laboratory control limits of 70 to 130% and duplicates should have RPDs of less than 50%.	Assessment of matrix spikes has been undertaken by the laboratory. All laboratory control standards were within acceptable ranges.
Surrogate Spikes	Surrogate spikes provide a means of checking, for every analysis that no gross errors have occurred at any stage of the procedure leading to significant analyte loss. Recoveries should be within the stated laboratory control limits of 70 to 130%.	Assessment of surrogate spikes has been undertaken by the laboratory. All data quality objectives were met.
Conclusion	The QA/QC indicators should either all comply with the required standards or showed no variations that would have no significant effect on the quality of the data.	Assessment of the investigation QA/QC is presented in the following sections.

#### 11.2 Calculation of Relative Percentage Difference (RPD)

The RPD values were calculated using the following equation:

$$RPD = \frac{|C_0 - C_R|}{[(C_0 + C_R)/2]} \times 100$$

Where:

C<sub>o</sub> = Concentration obtained for the primary sample; and

C<sub>R</sub> = Concentration obtained for the blind replicate or split duplicate sample.

### I2.1 Field QA/QC

### Field QC Samples

The field (intra- / inter- laboratory) duplicate samples collected during the investigation are summarised in **Table I-2**. Inter-laboratory duplicates were analysed by the secondary laboratory, Envirolab.

Table I-2 Field QC Sampling Program

Matrix	Primary QA Sample	Duplicate (Primary Lab)	Triplicate (Secondary Lab)	Total Duplicates
Soil	BH3_0.3-0.4	QD_20231017	QT_20231017	2
	BH15_0.2-0.3	QD_20240606	QT_20240606	2
Groundwater	BH2M-1	GWQD_20231026	GWQT_20231026	2
	BH2M-2	QD240620	QT240620	2

#### I2.2 Field QC Summary

Review of the field data quality indicators is presented in Table I-3 below.

Table I-3 Field Data Quality Indicators

QA Component	Data Quality Indicator(s)	Conformance
Accuracy – a quantitative	SOPs appropriate and complied with	Yes
measure of the closeness of reported data to the "true" value	Results for inter-laboratory (split field) duplicates acceptable	Part
Precision – A quantitative	SOPs appropriate and complied with	Yes
measure of the variability (or reproducibility) of data	Results for intra-laboratory (blind field) duplicates acceptable	Part
Completeness – A measure	Each critical location sampled	Yes
of the amount of useable data from a data collection activity	Samples collected at targeted locations and depth	Yes
	SAQP appropriate and complied with	Yes
	Experienced sampler	Yes
	Field documentation correct	Yes
Comparability – The	Same sampling method used on each occasion/location	Yes

QA Component	Data Quality Indicator(s)	Conformance			
	Experienced sampler	Yes			
	Same type of samples collected (filtered, size, fractions)	Yes			
Representativeness – The confidence (expressed qualitatively) that data are representative of each medium present onsite	Appropriate media sampled according to SAQP	Yes			
	Each media identified in SAQP sampled	Yes			
	Appropriate sample collection methodologies, handling, storage and preservation techniques used	Yes			

### I2.3 Conclusion for the Field QA/QC

All field work, including equipment decontamination and sample preservation and transport, was conducted in accordance with the SAQP, which were devised with reference to industryapproved guidelines. Appropriate QC measures were integrated into each sampling event and the DQIs were met.

All samples, including field QC samples, were transported to the primary and secondary laboratories under refrigerated conditions, using strict COC procedures. Relevant documents (COC forms) were presented with the samples at the times of delivery. All supporting documents (COCs and SRAs) were completed in full and signed, where appropriate. El considered the field QA/QC program carried out during the PSI to be appropriate.

### I2.4 Laboratory QA/QC

#### Laboratory Accreditation

Primary and intra-laboratory duplicate samples were analysed by SGS (located in Alexandria NSW), with inter-laboratory duplicate samples analysed by Envirolab (located in Chatswood NSW). All laboratories are accredited by NATA for the analyses undertaken.

#### Laboratory QC Summary

Review of the laboratory data quality indicators is presented in Table I-4 below.

DQI	Item	Conformance
Completeness	All critical samples analysed according to SAQP and proposal	Yes
A measure of the amount of useable data (expressed as %) from a data collection activity	All analytes analysed according to SAQP in proposal	Yes
	Appropriate methods and PQLs	Yes
	Sample documentation complete	Yes
	Sample holding times complied with	Yes
Comparability	Sample analytical methods used (including clean-up)	Yes
The confidence (expressed qualitatively) that data may	Sample PQLs (justify/ quantify if different)	Yes
be considered to be equivalent for each	Same laboratories (justify/ quantify if different)	Yes
sampling and analytical event	Same units (justify/ quantify if different)	Yes

 Table I-4
 Laboratory Data Quality Indicators

DQI	Item	Conformance		
<b>Representativeness</b> Confidence that data are representative of each media	All key samples analysed according to SAQP in the proposal	Yes		
<b>Precision</b> A quantitative measure of the variability (or reproducibility) of data	Analysis of laboratory duplicates	Yes		
	Analysis of field duplicates	Yes		
	Analysis of laboratory-prepared volatile trip spikes	Yes		
Accuracy	Analysis of field blanks	Yes		
A quantitative measure of the closeness of reported data to the true value	Analysis of rinsate/ rinsate blanks	Yes		
	Analysis of method blanks	Yes		
	Analysis of matrix spikes (MS)	Yes		
	Analysis of surrogate spikes	Yes		
	Analysis of reference materials	Not applicable		
	Analysis of laboratory control samples	Yes		

### I2.5 Conclusion for the Laboratory QA/QC

All contracted laboratories (SGS and Envirolab) were accredited by NATA for the analyses undertaken. All analytical procedures used were industry recognised and endorsed standard methods. Appropriate QC measures were integrated into each testing batch and the DQIs were met, or if not, the variability was suitably justified.

All final reports were submitted in full and included all requested analyses, as per the signed COC forms. El considered the laboratory QA/QC programs carried out during the DSI to be appropriate.

### I2.6 Summary of Project QA/QC

The sampling (including sample preservation, transport and decontamination procedures) and laboratory methods followed during this investigation were consistent with EI protocols. The project DQOs specified in **Section 5.2**, **Table 5-1** were considered to have been achieved. The adopted QA/QC program ensured that the data collated during the PSI were accurate, precise and representative of the site condition. It was therefore considered that the data were sufficiently precise and accurate and that the results could be used for DSI interpretative purposes.

# Table I-5 Summary of QA/QC Results for Soil Investigation Samples

Site:1 Veno Street, Heathcote NSWJob No:E26160

			TRH				BTEX				Heavy Metals								
Date	Sample Identification	Description	F1	F2	F3	F4	Benzene	Toluene	Ethylbenzene	Xylene (total)	Arsenic	Cadmium	Chromium (Total)	Copper	Lead	Mercury	Nickel	Zinc	
Intra-laborat	ory Duplicate														. –	. –			
17-Oct-23	BH3_0.3-0.4	Primary Soil Sample	<25	<25	<90	<120	<0.1	<0.1	<0.1	<0.3	2	<0.3	70	22	4	<0.05	78.0	49	
17-Oct-23	QD_20231017	Duplicate of BH3_0.3-0.4	<25	<25	<90	<120	<0.1	<0.1	<0.1	<0.3	7	<0.3	19	1	10	<0.05	4.8	7	
	RPD		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	111.11	0.00	114.61	177.68	85.71	0.00	176.81	150.63	
6-Jun-25	BH15_0.2-0.3	Primary Soil Sample	<25	<25	<90	<120	<0.1	<0.1	<0.1	<0.3	5	<0.3	46	12	7	<0.05	49.0	35	
6-Jun-25	QD_20240606	Duplicate of BH15_0.2-0.3	<25	<25	<90	<120	<0.1	<0.1	<0.1	<0.3	3	<0.3	70	17	8	<0.05	73.0	45	
RPD		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	50.00	0.00	41.38	34.48	13.33	0.00	39.34	25.00		
Inter-laborat	ory Duplicate			-	-		-			-			-	-		-			
17-Oct-23	BH3_0.3-0.4	Primary Soil Sample	<25	<25	<90	<120	<0.1	<0.1	<0.1	<0.3	2	<0.3	70	22	4	<0.05	78.0	49	
17-Oct-23	QT_20231017	Duplicate of BH3_0.3-0.4	<25	<50	<100	<100	<0.2	<0.5	<1	<1	11	<0.4	34	5	16	<0.1	16	17	
RPD		0.00	NA	NA	NA	NA	NA	NA	NA	138.46	NA	69.23	125.93	120.00	NA	131.91	96.97		
6-Jun-25	BH15_0.2-0.3	Primary Soil Sample	<25	<25	<90	<120	<0.1	<0.1	<0.1	<0.3	5	<0.3	46	12	7	<0.05	49.0	35	
6-Jun-25	QT1_20240606	Duplicate of BH15_0.2-0.3	<25	<50	<100	<100	<0.2	<0.5	<1	<1	4	<0.4	32	7	8	<0.1	23	21	
RPD		0.00	NA	NA	NA	NA	NA	NA	NA	22.22	NA	35.90	52.63	13.33	NA	72.22	50.00		
Trip Blanks		Tain Disale					-0.4	-0.4	-0.4	-0.0					1				
17-Oct-23	QTB1	Trip Blank	-	-	-	-	<0.1	<0.1	<0.1 [93%]	< 0.3	-	-	-	-	-	-	-	-	
17-Oct-23	QTS1	Trip Spike	-	-	-	-	[99%]	[95%]		[93%]	-	-	-	-	-	-	-	-	
6-Jun-25 6-Jun-25	TB TS	Trip Blank Trip Spike	-	-	-	-	<0.1 [124%]	<0.1 [116%]	<0.1 [121%]	<0.3 [116%]	-	-	-	-	-	-	-	-	
Rinsate Blan	-		<u> </u>	-	I	-	[124/0]	[110/0]	[ובו/0]	[11070]	-	-	-	-	<u> </u>	I	-	-	
17-Oct-23	QR1	De-ionised Water	<50	<60	<500	<500	<0.5	0.6	<0.5	<1.5	<1	<0.1	<1	<1	<1	<0.1	<1	<5	
6-Jun-25	QR1	De-ionised Water	<50	<60	<500	<500	< 0.5	0.6	< 0.5	<1.5	<1	<0.1	<1	<1	<1	<0.1	<1	<5	
0-5011-25	QIVI		-00	-00	-000	-000	-0.0	0.0	-0.0	1.0	11	-0.1				·v. i	1	·0	

Indicates values where a single result is found to be less than detection, with the duplicate sample found to be over the detection limit. RPD exceeds 30-50% range referenced from AS4482.1 (2005)

NOTE: All soil results are reported in mg/kg . All water results are reported in  $\mu$ g/L.

F1 = TRH C6-C10 less the sum of BTEX

F2 = TRH >C10-C16 less naphthalene

F3 = TRH >C16-C34

F4 = TRH >C34-C40 <sup>1</sup> Value shown is the lowest recovery value reported for xylenes

# Table I-6 Summary of QA/QC Results for Groundwater Samples

Site:1 Veno Street, Heathcote NSWJob No:E26160

				TF	RH			BT	ΈX					Heavy	Metals			
Date	Sample Identification	Description	F1	F2	F3	F4	Benzene	Toluene	Ethylbenzene	Xylene (total)	Arsenic	Cadmium	Chromium (Total)	Copper	Lead	Mercury	Nickel	Zinc
Intra-laborate	ory Duplicate																	
26/10/2023	BH2M-1	Primary Groundwater Sample	<50	<60	<500	<500	<0.5	<0.5	<0.5	<1.5	4	<0.1	1	<1	<1	<0.1	2	6
26/10/2023	GWQD_20231026	Intra-laboratory Duplicate	<50	430	<500	<500	<0.5	<0.5	<0.5	<1.5	4	<0.1	1	<1	<1	<0.1	2	7
	RPD		0.00	160.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.38
20/06/2024	BH2M-2	Primary Groundwater Sample	<50	180	<500	<500	<0.5	<0.5	<0.5	<1.5	1	<0.1	<1	2	<1	<0.1	<1	<5
20/06/2024	QD240620	Intra-laboratory Duplicate	<50	<60	<500	<500	<0.5	<0.5	<0.5	<1.5	1	<0.1	<1	<1	<1	<0.1	<1	<5
	RPD		0.00	114.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.00	0.00	0.00	0.00	0.00
	bry Duplicate		.50		.500	.500	-0.5	-0.5	-0.5	.4.5	4	-0.4	4			-0.4		
26/10/2023	BH2M-1	Primary Groundwater Sample	<50	<60	<500	<500	<0.5	<0.5	<0.5	<1.5	4	<0.1	1	<1	<1	<0.1	2	6
26/10/2023	GWQT_20231026	Inter-laboratory Duplicate	< 10	310	250	<100	<1	<1	<1	<1	4	< 0.1	1	4	<1	< 0.05	2	5
20/06/2024	RPD BH2M-2	Primary Groundwater Sample	<b>NA</b> <50	147.06 180	<b>100.00</b> <500	<b>NA</b> <500	<b>NA</b> <0.5	NA <0.5	NA <0.5	<b>NA</b> <1.5	0.00	0.00 <0.1	0.00 <1	133.33 2	0.00 <1	<b>NA</b> <0.1	0.00 <1	18.18 <5
20/06/2024	QT240620	Inter-laboratory Duplicate	<10	80	<100	<100	<1	<1	<1	<1	9	< 0.1	2	1	2	< 0.05	<1	4
20/00/2024	RPD	• •	NA	76.92	NA	NA	NA	NA	NA	NA	160.00	0.00	80.00	66.67	80.00	NA	0.00	30.77
Trip Blanks																		
26/10/2023	QTB1	Trip Blank	-	-	-	-	<0.5	<0.5	<0.5	<1.5	-	-	-	-	-	-	-	-
26/10/2023	QTS1	Trip Spike	-	-	-	-	[100%]	[102%]	[101%]	[100%] <sup>1</sup>	-	-	-	-	-	-	-	-
20/06/2024	QTB240620	Trip Blank	-	-	-	-	<0.5	<0.5	<0.5	<1.5	-	-	-	-	-	-	-	-
20/06/2024	QTS240620	Trip Spike	-	-	-	-	[96%]	[94%]	[101%]	[94%] <sup>1</sup>	-	-	-	-	-	-	-	-
Rinsate Blan	ks													-				
26/10/2023	GWQR_20231026	De-ionised Water	<50	<60	<500	<500	<0.5	0.6	<0.5	<1.5	<1	<0.1	<1	<1	<1	<0.1	<1	<5
20/06/2024	QR240620	De-ionised Water	<50	<60	<500	<500	<0.5	0.6	<0.5	<1.5	<1	<0.1	<1	<1	<1	<0.1	<1	<5

Indicates values where a single result is found to be less than detection, with the duplicate sample found to be over the detection limit. RPD exceeds 30-50% range referenced from AS4482.1 (2005)

NOTE: All water results are reported in µg/L.

F1 = TRH C6-C10 less the sum of BTEX

F2 = TRH >C10-C16 less naphthalene

F3 = TRH >C16-C34

F4 = TRH >C34-C40

<sup>1</sup> Value shown is the lowest recovery value reported for xylenes

Appendix J – Laboratory QA/QC and DQOs



# STATEMENT OF QA/QC PERFORMANCE

CLIENT DETAILS	·	LABORATORY DETAI	LS	
Contact Client Address	Sean Nolan EI AUSTRALIA SUITE 6.01 55 MILLER STREET PYRMONT NSW 2009	Manager Laboratory Address	Shane McDermott SGS Alexandria Environmental Unit 16, 33 Maddox St Alexandria NSW 2015	
Telephone	61 2 95160722	Telephone	+61 2 8594 0400	
Facsimile	(Not specified)	Facsimile	+61 2 8594 0499	
Email	sean.nolan@eiaustralia.com.au	Email	au.environmental.sydney@sgs.com	
Project	E26160 1 Veno St, Heathcote	SGS Reference	<b>SE266428 R0</b>	
Order Number	E26160	Date Received	07 Jun 2024	
Samples	16	Date Reported	17 Jun 2024	

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 counts by matrix	15 Soil, 1 Water	Type of documentation received	COC	
Date documentation received	7/6/2024	Samples received in good order	Yes	
Samples received without headspace	Yes	Sample temperature upon receipt	15.5°C	
Sample container provider	SGS	Turnaround time requested	Standard	
Samples received in correct containers	Yes	Sufficient sample for analysis	Yes	
Sample cooling method	Ice Bricks	Samples clearly labelled	Yes	
Complete documentation received	Yes			

SGS Australia Pty Ltd ABN 44 000 964 278

SAMPLE SUMMARY

Environment, Health and Safety

Unit 16 33 Maddox St PO Box 6432 Bourke Rd Alexandria NSW 2015 Alexandria NSW 2015 t +61 2 8594 0400

Australia

Australia

www.sgs.com.au f +61 2 8594 0499



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

Fibre Identification in soil							Method: ME-(AU)	[ENV]AS4964/AN
Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH11_0.2-0.3	SE266428.001	LB314834	06 Jun 2024	07 Jun 2024	06 Jun 2025	13 Jun 2024	06 Jun 2025	17 Jun 2024
BH12_0.1-0.2	SE266428.003	LB314834	06 Jun 2024	07 Jun 2024	06 Jun 2025	13 Jun 2024	06 Jun 2025	17 Jun 2024
BH13_0.1-0.2	SE266428.004	LB314834	06 Jun 2024	07 Jun 2024	06 Jun 2025	13 Jun 2024	06 Jun 2025	17 Jun 2024
BH14_0.1-0.2	SE266428.006	LB314834	06 Jun 2024	07 Jun 2024	06 Jun 2025	13 Jun 2024	06 Jun 2025	17 Jun 2024
BH15_0.2-0.3	SE266428.008	LB314834	06 Jun 2024	07 Jun 2024	06 Jun 2025	13 Jun 2024	06 Jun 2025	17 Jun 2024
BH16_0.2-0.3	SE266428.010	LB314834	06 Jun 2024	07 Jun 2024	06 Jun 2025	13 Jun 2024	06 Jun 2025	17 Jun 2024
BH17_0.2-0.3	SE266428.011	LB314834	06 Jun 2024	07 Jun 2024	06 Jun 2025	13 Jun 2024	06 Jun 2025	17 Jun 2024
lercury (dissolved) in Water							Method: ME-(AU)-[ENV	JAN311(Perth)/AN

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
QR_20240606	SE266428.014	LB314636	06 Jun 2024	07 Jun 2024	04 Jul 2024	12 Jun 2024	04 Jul 2024	12 Jun 2024

Mercury in Soil							Method:	ME-(AU)-[ENV]AN31
Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH11_0.2-0.3	SE266428.001	LB314542	06 Jun 2024	07 Jun 2024	04 Jul 2024	11 Jun 2024	04 Jul 2024	12 Jun 2024
BH11_0.6-0.7	SE266428.002	LB314542	06 Jun 2024	07 Jun 2024	04 Jul 2024	11 Jun 2024	04 Jul 2024	12 Jun 2024
BH12_0.1-0.2	SE266428.003	LB314542	06 Jun 2024	07 Jun 2024	04 Jul 2024	11 Jun 2024	04 Jul 2024	12 Jun 2024
BH13_0.1-0.2	SE266428.004	LB314542	06 Jun 2024	07 Jun 2024	04 Jul 2024	11 Jun 2024	04 Jul 2024	12 Jun 2024
BH13_0.5-0.7	SE266428.005	LB314542	06 Jun 2024	07 Jun 2024	04 Jul 2024	11 Jun 2024	04 Jul 2024	12 Jun 2024
BH14_0.1-0.2	SE266428.006	LB314542	06 Jun 2024	07 Jun 2024	04 Jul 2024	11 Jun 2024	04 Jul 2024	12 Jun 2024
BH14_0.5-0.6	SE266428.007	LB314542	06 Jun 2024	07 Jun 2024	04 Jul 2024	11 Jun 2024	04 Jul 2024	12 Jun 2024
BH15_0.2-0.3	SE266428.008	LB314542	06 Jun 2024	07 Jun 2024	04 Jul 2024	11 Jun 2024	04 Jul 2024	12 Jun 2024
BH15_0.6-0.7	SE266428.009	LB314542	06 Jun 2024	07 Jun 2024	04 Jul 2024	11 Jun 2024	04 Jul 2024	12 Jun 2024
BH16_0.2-0.3	SE266428.010	LB314542	06 Jun 2024	07 Jun 2024	04 Jul 2024	11 Jun 2024	04 Jul 2024	12 Jun 2024
BH17_0.2-0.3	SE266428.011	LB314542	06 Jun 2024	07 Jun 2024	04 Jul 2024	11 Jun 2024	04 Jul 2024	12 Jun 2024
BH17_0.5-0.6	SE266428.012	LB314542	06 Jun 2024	07 Jun 2024	04 Jul 2024	11 Jun 2024	04 Jul 2024	12 Jun 2024
QD_20240606	SE266428.013	LB314542	06 Jun 2024	07 Jun 2024	04 Jul 2024	11 Jun 2024	04 Jul 2024	12 Jun 2024
Moisture Content							Method:	ME-(AU)-[ENV]AN00
Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH11_0.2-0.3	SE266428.001	LB314535	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	16 Jun 2024	12 Jun 2024
BH11_0.6-0.7	SE266428.002	LB314535	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	16 Jun 2024	12 Jun 2024
BH12_0.1-0.2	SE266428.003	LB314535	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	16 Jun 2024	12 Jun 2024
BH13_0.1-0.2	SE266428.004	LB314535	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	16 Jun 2024	12 Jun 2024
BH13_0.5-0.7	SE266428.005	LB314535	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	16 Jun 2024	12 Jun 2024
BH14_0.1-0.2	SE266428.006	LB314535	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	16 Jun 2024	12 Jun 2024
BH14_0.5-0.6	SE266428.007	LB314535	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	16 Jun 2024	12 Jun 2024
BH15_0.2-0.3	SE266428.008	LB314535	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	16 Jun 2024	12 Jun 2024
BH15_0.6-0.7	SE266428.009	LB314535	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	16 Jun 2024	12 Jun 2024
BH16_0.2-0.3	SE266428.010	LB314535	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	16 Jun 2024	12 Jun 2024
BH17_0.2-0.3	SE266428.011	LB314535	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	16 Jun 2024	12 Jun 2024
BH17_0.5-0.6	SE266428.012	LB314535	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	16 Jun 2024	12 Jun 2024
QD_20240606	SE266428.013	LB314535	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	16 Jun 2024	12 Jun 2024
ТВ	SE266428.015	LB314535	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	16 Jun 2024	12 Jun 2024
OC Pesticides in Soil							Method:	ME-(AU)-[ENV]AN42
Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH11_0.2-0.3	SE266428.001	LB314526	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	21 Jul 2024	13 Jun 2024
BH11_0.6-0.7	SE266428.002	LB314526	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	21 Jul 2024	13 Jun 2024
BH12_0.1-0.2	SE266428.003	LB314526	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	21 Jul 2024	13 Jun 2024
BH13_0.1-0.2	SE266428.004	LB314526	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	21 Jul 2024	13 Jun 2024
BH13_0.5-0.7	SE266428.005	LB314526	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	21 Jul 2024	13 Jun 2024
BH14_0.1-0.2	SE266428.006	LB314526	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	21 Jul 2024	13 Jun 2024
BH14_0.5-0.6	SE266428.007	LB314526	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	21 Jul 2024	13 Jun 2024
BH15_0.2-0.3	SE266428.008	LB314526	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	21 Jul 2024	13 Jun 2024
BH15_0.6-0.7	SE266428.009	LB314526	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	21 Jul 2024	13 Jun 2024
BH16_0.2-0.3	SE266428.010	LB314526	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	21 Jul 2024	13 Jun 2024
BH17_0.2-0.3	SE266428.011	LB314526	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	21 Jul 2024	13 Jun 2024
BH17_0.5-0.6	SE266428.012	LB314526	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	21 Jul 2024	13 Jun 2024
QD 20240606	SE266428.013	LB314526	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	21 Jul 2024	13 Jun 2024



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

### **OP Pesticides in Soil**

OP Pesticides in Soil							Method: I	ME-(AU)-[ENV]AN4
Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH11_0.2-0.3	SE266428.001	LB314526	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	21 Jul 2024	13 Jun 2024
BH11_0.6-0.7	SE266428.002	LB314526	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	21 Jul 2024	13 Jun 2024
BH12_0.1-0.2	SE266428.003	LB314526	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	21 Jul 2024	13 Jun 2024
BH13_0.1-0.2	SE266428.004	LB314526	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	21 Jul 2024	13 Jun 2024
BH13_0.5-0.7	SE266428.005	LB314526	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	21 Jul 2024	13 Jun 2024
BH14_0.1-0.2	SE266428.006	LB314526	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	21 Jul 2024	13 Jun 2024
BH14_0.5-0.6	SE266428.007	LB314526	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	21 Jul 2024	13 Jun 2024
BH15_0.2-0.3	SE266428.008	LB314526	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	21 Jul 2024	13 Jun 2024
BH15_0.6-0.7	SE266428.009	LB314526	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	21 Jul 2024	13 Jun 2024
BH16_0.2-0.3	SE266428.010	LB314526	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	21 Jul 2024	13 Jun 2024
BH17_0.2-0.3	SE266428.011	LB314526	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	21 Jul 2024	13 Jun 2024
BH17 0.5-0.6	SE266428.012	LB314526	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	21 Jul 2024	13 Jun 2024
QD_20240606	SE266428.013	LB314526	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	21 Jul 2024	13 Jun 2024
AH (Polynuclear Aromatic								ME-(AU)-[ENV]AN4
Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH11_0.2-0.3	SE266428.001	LB314526	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	21 Jul 2024	13 Jun 2024
BH11_0.2-0.3 BH11_0.6-0.7	SE266428.002	LB314526	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	21 Jul 2024	13 Jun 2024
BH11_0.0-0.7 BH12_0.1-0.2	SE266428.002	LB314526	06 Jun 2024	07 Jun 2024	20 Jun 2024 20 Jun 2024	11 Jun 2024	21 Jul 2024	13 Jun 2024
BH12_0.1-0.2 BH13_0.1-0.2	SE266428.003	LB314526	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	21 Jul 2024	13 Jun 2024
BH13_0.5-0.7	SE266428.005	LB314526	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	21 Jul 2024	13 Jun 2024
BH15_0.3-0.7 BH14_0.1-0.2	SE266428.005	LB314526	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	21 Jul 2024	13 Jun 2024
BH14_0.1-0.2 BH14_0.5-0.6			06 Jun 2024			11 Jun 2024		13 Jun 2024
	SE266428.007	LB314526		07 Jun 2024	20 Jun 2024		21 Jul 2024	
BH15_0.2-0.3	SE266428.008 SE266428.009	LB314526	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	21 Jul 2024	13 Jun 2024
3H15_0.6-0.7		LB314526	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	21 Jul 2024	13 Jun 2024
3H16_0.2-0.3	SE266428.010	LB314526	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	21 Jul 2024	13 Jun 2024
3H17_0.2-0.3	SE266428.011	LB314526	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	21 Jul 2024	13 Jun 2024
BH17_0.5-0.6	SE266428.012	LB314526	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	21 Jul 2024	13 Jun 2024
QD_20240606	SE266428.013	LB314526	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	21 Jul 2024	13 Jun 2024
PCBs in Soil						_		ME-(AU)-[ENV]AN4
Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH11_0.2-0.3	SE266428.001	LB314526	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	21 Jul 2024	13 Jun 2024
BH11_0.6-0.7	SE266428.002	LB314526	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	21 Jul 2024	13 Jun 2024
BH12_0.1-0.2	SE266428.003	LB314526	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	21 Jul 2024	13 Jun 2024
BH13_0.1-0.2	SE266428.004	LB314526	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	21 Jul 2024	
BH13_0.5-0.7							210012024	13 Jun 2024
BH14_0.1-0.2	SE266428.005	LB314526	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	21 Jul 2024	13 Jun 2024 13 Jun 2024
	SE266428.005 SE266428.006	LB314526 LB314526	06 Jun 2024 06 Jun 2024	07 Jun 2024 07 Jun 2024				
BH14_0.5-0.6					20 Jun 2024	11 Jun 2024	21 Jul 2024	13 Jun 2024
BH14_0.5-0.6 BH15_0.2-0.3	SE266428.006	LB314526	06 Jun 2024	07 Jun 2024	20 Jun 2024 20 Jun 2024	11 Jun 2024 11 Jun 2024	21 Jul 2024 21 Jul 2024	13 Jun 2024 13 Jun 2024
BH15_0.2-0.3	SE266428.006 SE266428.007	LB314526 LB314526	06 Jun 2024 06 Jun 2024	07 Jun 2024 07 Jun 2024	20 Jun 2024 20 Jun 2024 20 Jun 2024	11 Jun 2024 11 Jun 2024 11 Jun 2024	21 Jul 2024 21 Jul 2024 21 Jul 2024	13 Jun 2024 13 Jun 2024 13 Jun 2024
BH15_0.2-0.3 BH15_0.6-0.7	SE266428.006 SE266428.007 SE266428.008	LB314526 LB314526 LB314526	06 Jun 2024 06 Jun 2024 06 Jun 2024	07 Jun 2024 07 Jun 2024 07 Jun 2024	20 Jun 2024 20 Jun 2024 20 Jun 2024 20 Jun 2024 20 Jun 2024	11 Jun 2024 11 Jun 2024 11 Jun 2024 11 Jun 2024	21 Jul 2024 21 Jul 2024 21 Jul 2024 21 Jul 2024 21 Jul 2024	13 Jun 2024 13 Jun 2024 13 Jun 2024 13 Jun 2024
BH15_0.2-0.3 BH15_0.6-0.7 BH16_0.2-0.3	SE266428.006 SE266428.007 SE266428.008 SE266428.009	LB314526 LB314526 LB314526 LB314526	06 Jun 2024 06 Jun 2024 06 Jun 2024 06 Jun 2024	07 Jun 2024 07 Jun 2024 07 Jun 2024 07 Jun 2024 07 Jun 2024	20 Jun 2024 20 Jun 2024 20 Jun 2024 20 Jun 2024 20 Jun 2024 20 Jun 2024	11 Jun 2024 11 Jun 2024 11 Jun 2024 11 Jun 2024 11 Jun 2024 11 Jun 2024	21 Jul 2024 21 Jul 2024 21 Jul 2024 21 Jul 2024 21 Jul 2024 21 Jul 2024	13 Jun 2024 13 Jun 2024 13 Jun 2024 13 Jun 2024 13 Jun 2024 13 Jun 2024
BH15_0.2-0.3 BH15_0.6-0.7 BH16_0.2-0.3 BH17_0.2-0.3	SE266428.006 SE266428.007 SE266428.008 SE266428.009 SE266428.010	LB314526 LB314526 LB314526 LB314526 LB314526 LB314526	06 Jun 2024 06 Jun 2024 06 Jun 2024 06 Jun 2024 06 Jun 2024	07 Jun 2024 07 Jun 2024 07 Jun 2024 07 Jun 2024 07 Jun 2024 07 Jun 2024	20 Jun 2024 20 Jun 2024 20 Jun 2024 20 Jun 2024 20 Jun 2024 20 Jun 2024 20 Jun 2024	11 Jun 2024 11 Jun 2024 11 Jun 2024 11 Jun 2024 11 Jun 2024 11 Jun 2024 11 Jun 2024	21 Jul 2024 21 Jul 2024 21 Jul 2024 21 Jul 2024 21 Jul 2024 21 Jul 2024 21 Jul 2024	13 Jun 2024 13 Jun 2024 13 Jun 2024 13 Jun 2024 13 Jun 2024 13 Jun 2024 13 Jun 2024
3H15_0.2-0.3 3H15_0.6-0.7 3H16_0.2-0.3 3H17_0.2-0.3 3H17_0.5-0.6	SE266428.006 SE266428.007 SE266428.008 SE266428.009 SE266428.010 SE266428.011	LB314526 LB314526 LB314526 LB314526 LB314526 LB314526 LB314526	06 Jun 2024 06 Jun 2024 06 Jun 2024 06 Jun 2024 06 Jun 2024 06 Jun 2024 06 Jun 2024	07 Jun 2024 07 Jun 2024 07 Jun 2024 07 Jun 2024 07 Jun 2024 07 Jun 2024 07 Jun 2024	20 Jun 2024 20 Jun 2024	11 Jun 2024 11 Jun 2024	21 Jul 2024 21 Jul 2024	13 Jun 2024 13 Jun 2024
BH15_0.2-0.3 BH15_0.6-0.7 BH16_0.2-0.3 BH17_0.2-0.3 BH17_0.5-0.6 QD_20240606	SE266428.006 SE266428.007 SE266428.008 SE266428.009 SE266428.010 SE266428.011 SE266428.012 SE266428.013	LB314526 LB314526 LB314526 LB314526 LB314526 LB314526 LB314526 LB314526 LB314526	06 Jun 2024 06 Jun 2024	07 Jun 2024 07 Jun 2024	20 Jun 2024 20 Jun 2024	11 Jun 2024 11 Jun 2024	21 Jul 2024 21 Jul 2024	13 Jun 2024 13 Jun 2024
BH15_0.2-0.3 BH15_0.6-0.7 BH16_0.2-0.3 BH17_0.2-0.3 BH17_0.5-0.6 QD_20240606 otal Recoverable Elements	SE266428.006 SE266428.007 SE266428.008 SE266428.009 SE266428.010 SE266428.011 SE266428.012 SE266428.013	LB314526 LB314526 LB314526 LB314526 LB314526 LB314526 LB314526 LB314526 LB314526	06 Jun 2024 06 Jun 2024	07 Jun 2024 07 Jun 2024	20 Jun 2024 20 Jun 2024	11 Jun 2024 11 Jun 2024	21 Jul 2024 21 Jul 2024	13 Jun 2024 13 Jun 2024
BH15_0.2-0.3         BH15_0.6-0.7         BH16_0.2-0.3         BH17_0.2-0.3         BH17_0.5-0.6         QD_20240606         otal Recoverable Elements         Sample Name	SE266428.006 SE266428.007 SE266428.008 SE266428.009 SE266428.010 SE266428.011 SE266428.011 SE266428.012 SE266428.013 s in Soil/Waste Solids/Mat	LB314526 LB314526 LB314526 LB314526 LB314526 LB314526 LB314526 LB314526 B314526 erials by ICPOES	06 Jun 2024 06 Jun 2024	07 Jun 2024 07 Jun 2024	20 Jun 2024 20 Jun 2024	11 Jun 2024 11 Jun 2024 Extracted	21 Jul 2024 21 Jul 2024 Method: ME-(AU	13 Jun 2024 13 Jun 2024
BH15_0.2-0.3 BH15_0.6-0.7 BH16_0.2-0.3 BH17_0.2-0.3 BH17_0.5-0.6 DD_20240606 otal Recoverable Elements Sample Name BH11_0.2-0.3	SE266428.006 SE266428.007 SE266428.008 SE266428.009 SE266428.010 SE266428.011 SE266428.012 SE266428.013 s in Soll/Waste Solids/Mate Sample No. SE266428.001	LB314526 LB314526 LB314526 LB314526 LB314526 LB314526 LB314526 LB314526 Vertals by ICPOES QC Ref LB314539	06 Jun 2024 06 Jun 2024 Sampled 06 Jun 2024	07 Jun 2024 07 Jun 2024 Received 07 Jun 2024	20 Jun 2024 20 Jun 2024 Extraction Due 03 Dec 2024	11 Jun 2024 11 Jun 2024 Extracted 11 Jun 2024	21 Jul 2024 21 Jul 2024 Method: ME-(AU Analysis Due 03 Dec 2024	13 Jun 2024 13 Jun 2024 <b>↓</b> FENVJAN040/AN: Analysed 12 Jun 2024
BH15_0.2-0.3 BH15_0.6-0.7 BH16_0.2-0.3 BH17_0.2-0.3 BH17_0.5-0.6 QD_20240606 otal Recoverable Elements Sample Name BH11_0.2-0.3 BH11_0.6-0.7	SE266428.006 SE266428.007 SE266428.008 SE266428.009 SE266428.010 SE266428.011 SE266428.012 SE266428.013 s in Soil/Waste Solids/Mate Sample No.	LB314526 LB314526 LB314526 LB314526 LB314526 LB314526 LB314526 LB314526 LB314526 <b>VEPOES</b> QC Ref LB314539 LB314539	06 Jun 2024 06 Jun 2024 <b>Sampled</b> 06 Jun 2024 06 Jun 2024	07 Jun 2024 07 Jun 2024	20 Jun 2024 20 Jun 2024 <b>Extraction Due</b> 03 Dec 2024 03 Dec 2024	11 Jun 2024 11 Jun 2024 Extracted 11 Jun 2024 11 Jun 2024 11 Jun 2024	21 Jul 2024 21 Jul 2024 Method: ME-(AU Analysis Due 03 Dec 2024 03 Dec 2024	13 Jun 2024 13 Jun 2024 <b>JenvjAN040/AN:</b> <b>Analysed</b> 12 Jun 2024 12 Jun 2024
BH15_0.2-0.3         BH15_0.6-0.7         BH16_0.2-0.3         BH17_0.2-0.3         BH17_0.5-0.6         DD_20240606         otal Recoverable Elements         Sample Name         BH1_0.2-0.3         BH1_0.2-0.3         BH1_0.2-0.3         BH1_0.2-0.3         BH1_0.2-0.3         BH1_0.2-0.3	SE266428.006 SE266428.007 SE266428.008 SE266428.009 SE266428.010 SE266428.011 SE266428.012 SE266428.013 s in Soil/Waste Solids/Mat Sample No. SE266428.001 SE266428.002 SE266428.003	LB314526 LB314526 LB314526 LB314526 LB314526 LB314526 LB314526 LB314526 CCPOES QC Ref LB314539 LB314539 LB314539	06 Jun 2024 06 Jun 2024	07 Jun 2024 07 Jun 2024	20 Jun 2024 20 Jun 2024 <b>Extraction Due</b> 03 Dec 2024 03 Dec 2024 03 Dec 2024	11 Jun 2024 11 Jun 2024 <b>Extracted</b> 11 Jun 2024 11 Jun 2024 11 Jun 2024 11 Jun 2024 11 Jun 2024	21 Jul 2024 21 Jul 2024 Method: ME-(AU Analysis Due 03 Dec 2024 03 Dec 2024 03 Dec 2024	13 Jun 2024 13 Jun 2024 <b>3 Jun 2024</b> <b>5-[ENV]AN040/AN</b> <b>Analysed</b> 12 Jun 2024 12 Jun 2024 12 Jun 2024
BH15_0.2-0.3 BH15_0.6-0.7 BH16_0.2-0.3 BH17_0.2-0.3 BH17_0.5-0.6 QD_20240606 otal Recoverable Elements Sample Name BH11_0.2-0.3 BH11_0.6-0.7 BH12_0.1-0.2 BH13_0.1-0.2	SE266428.006 SE266428.007 SE266428.008 SE266428.009 SE266428.010 SE266428.011 SE266428.012 SE266428.013 s In Soil/Waste Solids/Mat Sample No. SE266428.001 SE266428.002 SE266428.003 SE266428.004	LB314526 LB314526 LB314526 LB314526 LB314526 LB314526 LB314526 LB314526 COULT OF COULT OF COUL	06 Jun 2024 06 Jun 2024	07 Jun 2024 07 Jun 2024	20 Jun 2024 20 Jun 2024 03 Dec 2024 03 Dec 2024 03 Dec 2024 03 Dec 2024	11 Jun 2024 11 Jun 2024	21 Jul 2024 21 Jul 2024 <b>Method: ME-(AU</b> <b>Analysis Due</b> 03 Dec 2024 03 Dec 2024 03 Dec 2024 03 Dec 2024	13 Jun 2024 13 Jun 2024 <b>CENVJAN040/AN:</b> <b>Analysed</b> 12 Jun 2024 12 Jun 2024 12 Jun 2024 12 Jun 2024
BH15_0.2-0.3 BH15_0.6-0.7 BH16_0.2-0.3 BH17_0.2-0.3 BH17_0.5-0.6 QD_20240606 otal Recoverable Elements Sample Name BH11_0.2-0.3 BH11_0.6-0.7 BH12_0.1-0.2 BH13_0.1-0.2 BH13_0.5-0.7	SE266428.006 SE266428.007 SE266428.008 SE266428.009 SE266428.010 SE266428.011 SE266428.012 SE266428.013 s In Soil/Waste Solids/Mat Sample No. SE266428.001 SE266428.002 SE266428.003 SE266428.004 SE266428.005	LB314526 LB314526 LB314526 LB314526 LB314526 LB314526 LB314526 LB314526 <b>erials by ICPOES</b> <b>QC Ref</b> LB314539 LB314539 LB314539 LB314539	06 Jun 2024 06 Jun 2024	07 Jun 2024 07 Jun 2024	20 Jun 2024 20 Jun 2024 03 Dec 2024 03 Dec 2024 03 Dec 2024 03 Dec 2024 03 Dec 2024	11 Jun 2024 11 Jun 2024	21 Jul 2024 21 Jul 2024 <b>Method: ME-(AU</b> 03 Dec 2024 03 Dec 2024 03 Dec 2024 03 Dec 2024 03 Dec 2024	13 Jun 2024 13 Jun 2024 <b>J-[ENV]AN040/AN:</b> <b>Analysed</b> 12 Jun 2024 12 Jun 2024 12 Jun 2024 12 Jun 2024 12 Jun 2024
BH15_0.2-0.3 BH15_0.6-0.7 BH16_0.2-0.3 BH17_0.2-0.3 BH17_0.5-0.6 QD_20240606 otal Recoverable Elements Sample Name BH11_0.2-0.3 BH11_0.6-0.7 BH12_0.1-0.2 BH13_0.1-0.2 BH13_0.5-0.7 BH14_0.1-0.2	SE266428.006 SE266428.007 SE266428.009 SE266428.009 SE266428.010 SE266428.011 SE266428.012 SE266428.013 s In Soil/Waste Solids/Mat Sample No. SE266428.001 SE266428.002 SE266428.003 SE266428.004 SE266428.005 SE266428.006	LB314526 LB314526 LB314526 LB314526 LB314526 LB314526 LB314526 LB314526 CPOES QC Ref LB314539 LB314539 LB314539 LB314539 LB314539 LB314539	06 Jun 2024 06 Jun 2024	07 Jun 2024 07 Jun 2024	20 Jun 2024 20 Jun 2024 30 Jun	11       Jun 2024	21 Jul 2024 21 Jul 2024 <b>Method: ME-(AU</b> 03 Dec 2024 03 Dec 2024 03 Dec 2024 03 Dec 2024 03 Dec 2024 03 Dec 2024	13 Jun 2024 13 Jun 2024 <b>J-[ENV]AN040/AN:</b> <b>Analysed</b> 12 Jun 2024 12 Jun 2024 12 Jun 2024 12 Jun 2024 12 Jun 2024 12 Jun 2024
BH15_0.2-0.3 BH15_0.6-0.7 BH16_0.2-0.3 BH17_0.2-0.3 BH17_0.5-0.6 QD_202406006 otal Recoverable Elements Sample Name BH11_0.2-0.3 BH11_0.6-0.7 BH12_0.1-0.2 BH13_0.1-0.2 BH13_0.5-0.7 BH14_0.1-0.2 BH14_0.5-0.6	SE266428.006 SE266428.007 SE266428.009 SE266428.009 SE266428.010 SE266428.011 SE266428.012 SE266428.013 s In Soil/Waste Solids/Mat Sample No. SE266428.001 SE266428.002 SE266428.003 SE266428.004 SE266428.005 SE266428.006 SE266428.007	LB314526 LB314526 LB314526 LB314526 LB314526 LB314526 LB314526 LB314526 LB314526 LB314526 LB314528 LB314539 LB314539 LB314539 LB314539 LB314539 LB314539	06 Jun 2024 06 Jun 2024	07 Jun 2024 07 Jun 2024	20 Jun 2024 20 Jun 2024 30 Jun	11       Jun 2024         11       Jun 2024	21 Jul 2024 21 Jul 2024 <b>Method: ME-(AU</b> <b>Analysis Due</b> 03 Dec 2024 03 Dec 2024 03 Dec 2024 03 Dec 2024 03 Dec 2024 03 Dec 2024 03 Dec 2024	13 Jun 2024 13 Jun 2024 <b>J.TENVJAN040/AN:</b> <b>Analysed</b> 12 Jun 2024 12 Jun 2024
BH15_0.2-0.3 BH15_0.6-0.7 BH16_0.2-0.3 BH17_0.2-0.3 BH17_0.5-0.6 QD_202406006 otal Recoverable Elements Sample Name BH11_0.2-0.3 BH11_0.6-0.7 BH12_0.1-0.2 BH13_0.1-0.2 BH13_0.5-0.7 BH14_0.1-0.2 BH14_0.5-0.6 BH15_0.2-0.3	SE266428.006 SE266428.007 SE266428.009 SE266428.009 SE266428.010 SE266428.011 SE266428.012 SE266428.013 s In Soil/Waste Solids/Mat Sample No. SE266428.001 SE266428.002 SE266428.003 SE266428.004 SE266428.005 SE266428.006 SE266428.007 SE266428.008	LB314526 LB314526 LB314526 LB314526 LB314526 LB314526 LB314526 LB314526 LB314526 LB314526 LB314528 LB314539 LB314539 LB314539 LB314539 LB314539 LB314539 LB314539 LB314539	06 Jun 2024 06 Jun 2024	07 Jun 2024 07 Jun 2024	20 Jun 2024 20 Jun 2024 30 Jun	11 Jun 2024 11 Jun 2024	21 Jul 2024 21 Jul 2024 <b>Method: ME-(AU</b> <b>Analysis Due</b> 03 Dec 2024 03 Dec 2024	13 Jun 2024 13 Jun 2024 <b>CENVJAN040/AN:</b> <b>Analysed</b> 12 Jun 2024 12 Jun 2024
BH15_0.2-0.3 BH15_0.6-0.7 BH16_0.2-0.3 BH17_0.2-0.3 BH17_0.5-0.6 QD_202406006 otal Recoverable Elements Sample Name BH11_0.2-0.3 BH11_0.6-0.7 BH12_0.1-0.2 BH13_0.1-0.2 BH13_0.5-0.7 BH14_0.1-0.2 BH14_0.5-0.6 BH15_0.2-0.3 BH15_0.6-0.7	SE266428.006 SE266428.007 SE266428.009 SE266428.009 SE266428.010 SE266428.011 SE266428.012 SE266428.013 s In Soil/Waste Solids/Mat Sample No. SE266428.001 SE266428.002 SE266428.004 SE266428.004 SE266428.006 SE266428.006 SE266428.008 SE266428.009	LB314526 LB314526 LB314526 LB314526 LB314526 LB314526 LB314526 LB314526 <b>CC Ref</b> LB314539 LB314537 LB3145	06 Jun 2024 06 Jun 2024	07 Jun 2024 07 Jun 2024	20 Jun 2024 20 Jun 2024 30 Dec 2024	11 Jun 2024 11 Jun 2024	21 Jul 2024 21 Jul 2024 <b>Method: ME-(AU</b> 03 Dec 2024 03 Dec 2024	13 Jun 2024         12 Jun 2024
BH15_0.2-0.3 BH15_0.6-0.7 BH16_0.2-0.3 BH17_0.2-0.3 BH17_0.5-0.6 QD_202406006 iotal Recoverable Elements Sample Name BH11_0.2-0.3 BH11_0.6-0.7 BH12_0.1-0.2 BH13_0.1-0.2 BH13_0.5-0.7 BH14_0.1-0.2 BH14_0.5-0.6 BH15_0.2-0.3 BH15_0.6-0.7 BH16_0.2-0.3	SE266428.006 SE266428.007 SE266428.009 SE266428.009 SE266428.010 SE266428.011 SE266428.012 SE266428.013 s In Soil/Waste Solids/Mate Sample No. SE266428.001 SE266428.002 SE266428.004 SE266428.004 SE266428.006 SE266428.006 SE266428.007 SE266428.008 SE266428.009 SE266428.009 SE266428.009	LB314526 LB314526 LB314526 LB314526 LB314526 LB314526 LB314526 LB314526 COC Ref LB314539 LB31453	06 Jun 2024 06 Jun 2024	07 Jun 2024 07 Jun 2024	20 Jun 2024 20 Jun 2024 30 Dec 2024 03 Dec 2024	11 Jun 2024 11 Jun 2024	21 Jul 2024 21 Jul 2024 <b>Method: ME-(AU</b> 03 Dec 2024 03 Dec 2024	13 Jun 2024 13 Jun 2024 12 Jun 2024
BH15_0.2-0.3 BH15_0.6-0.7 BH16_0.2-0.3 BH17_0.2-0.3 BH17_0.5-0.6 QD_202406006 <b>iotal Recoverable Elements</b> <b>Sample Name</b> BH11_0.2-0.3 BH11_0.6-0.7 BH12_0.1-0.2 BH13_0.1-0.2 BH13_0.5-0.7 BH14_0.1-0.2 BH14_0.5-0.6 BH15_0.2-0.3 BH15_0.6-0.7 BH16_0.2-0.3 BH17_0.2-0.3	SE266428.006 SE266428.007 SE266428.009 SE266428.009 SE266428.010 SE266428.011 SE266428.012 SE266428.013 s in Soil/Waste Solids/Mate Sample No. SE266428.001 SE266428.002 SE266428.004 SE266428.005 SE266428.006 SE266428.006 SE266428.006 SE266428.009 SE266428.009 SE266428.009 SE266428.010 SE266428.011	LB314526 LB314526 LB314526 LB314526 LB314526 LB314526 LB314526 LB314526 COC Ref LB314539 LB31453	06 Jun 2024 06 Jun 2024	07 Jun 2024 07 Jun 2024	20 Jun 2024 20 Jun	11 Jun 2024 11 Jun 2024	21 Jul 2024 21 Jul 2024 30 Dec 2024	13 Jun 2024 13 Jun 2024 12 Jun 2024
BH15_0.2-0.3 BH15_0.6-0.7 BH16_0.2-0.3 BH17_0.2-0.3 BH17_0.5-0.6 QD_20240606 otal Recoverable Elements Sample Name BH11_0.2-0.3 BH11_0.6-0.7 BH12_0.1-0.2 BH13_0.5-0.7 BH14_0.1-0.2 BH14_0.5-0.6 BH15_0.2-0.3 BH15_0.6-0.7 BH15_0.2-0.3 BH15_0.2-0.3 BH15_0.2-0.3 BH15_0.2-0.3 BH15_0.2-0.3 BH15_0.2-0.3 BH15_0.2-0.3 BH15_0.2-0.3 BH15_0.2-0.3 BH15_0.2-0.3 BH17_0.2-0.3 BH17_0.2-0.3 BH17_0.2-0.3	SE266428.006 SE266428.007 SE266428.009 SE266428.009 SE266428.010 SE266428.011 SE266428.012 SE266428.013 SE266428.013 SE266428.001 SE266428.002 SE266428.004 SE266428.004 SE266428.006 SE266428.006 SE266428.006 SE266428.009 SE266428.009 SE266428.009 SE266428.010 SE266428.011 SE266428.011	LB314526 LB314526 LB314526 LB314526 LB314526 LB314526 LB314526 LB314526 CPOES QC Ref LB314539 L	06 Jun 2024 06 Jun 2024	07 Jun 2024 07 Jun 2024	20 Jun 2024 20 Jun 2024 30 Dec 2024	11 Jun 2024 11 Jun 2024	21 Jul 2024 21 Jul 2024 <b>Method: ME-(AU</b> <b>Analysis Due</b> 03 Dec 2024 03 Dec 2024	13 Jun 2024 13 Jun 2024 12 Jun 2024
BH15_0.2-0.3           BH15_0.6-0.7           BH16_0.2-0.3           BH17_0.2-0.3           BH17_0.5-0.6           QD_202406006           otal Recoverable Elements           Sample Name           BH11_0.2-0.3           BH11_0.2-0.3           BH11_0.2-0.3           BH11_0.2-0.3           BH11_0.6-0.7           BH13_0.1-0.2           BH13_0.5-0.7           BH14_0.1-0.2           BH15_0.2-0.3           BH15_0.2-0.3           BH15_0.2-0.3           BH16_0.2-0.3           BH17_0.2-0.3	SE266428.006 SE266428.007 SE266428.009 SE266428.009 SE266428.010 SE266428.011 SE266428.012 SE266428.013 s in Soil/Waste Solids/Mate Sample No. SE266428.001 SE266428.002 SE266428.004 SE266428.005 SE266428.006 SE266428.006 SE266428.006 SE266428.009 SE266428.009 SE266428.009 SE266428.010 SE266428.011	LB314526 LB314526 LB314526 LB314526 LB314526 LB314526 LB314526 LB314526 COC Ref LB314539 LB31453	06 Jun 2024 06 Jun 2024	07 Jun 2024 07 Jun 2024	20 Jun 2024 20 Jun	11 Jun 2024 11 Jun 2024	21 Jul 2024 21 Jul 2024 30 Dec 2024	13 Jun 2024 13 Jun 2024 12 Jun 2024



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

Trace Metals (Dissolved)	ace Metals (Dissolved) in Water by ICPMS Method: ME-(AU)-[ENV]AN318										
Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed			
QR_20240606	SE266428.014	LB314475	06 Jun 2024	07 Jun 2024	03 Dec 2024	11 Jun 2024	03 Dec 2024	11 Jun 2024			
TRH (Total Recoverable	RH (Total Recoverable Hydrocarbons) in Soll Method: ME-(AU)-[ENV]AN403										
Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed			
BH11_0.2-0.3	SE266428.001	LB314526	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	21 Jul 2024	17 Jun 2024			
BH11_0.6-0.7	SE266428.002	LB314526	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	21 Jul 2024	17 Jun 2024			
BH12_0.1-0.2	SE266428.003	LB314526	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	21 Jul 2024	17 Jun 2024			
BH13_0.1-0.2	SE266428.004	LB314526	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	21 Jul 2024	17 Jun 2024			
BH13_0.5-0.7	SE266428.005	LB314526	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	21 Jul 2024	17 Jun 2024			
BH14_0.1-0.2	SE266428.006	LB314526	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	21 Jul 2024	17 Jun 2024			
BH14_0.5-0.6	SE266428.007	LB314526	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	21 Jul 2024	17 Jun 2024			
BH15_0.2-0.3	SE266428.008	LB314526	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	21 Jul 2024	17 Jun 2024			
BH15_0.6-0.7	SE266428.009	LB314526	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	21 Jul 2024	17 Jun 2024			
BH16_0.2-0.3	SE266428.010	LB314526	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	21 Jul 2024	17 Jun 2024			
BH17_0.2-0.3	SE266428.011	LB314526	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	21 Jul 2024	17 Jun 2024			
BH17_0.5-0.6	SE266428.012	LB314526	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	21 Jul 2024	17 Jun 2024			
QD_20240606	SE266428.013	LB314526	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	21 Jul 2024	17 Jun 2024			
TRH (Total Recoverable	Hydrocarbons) in Water						Method:	ME-(AU)-[ENV]AN403			

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
QR_20240606	SE266428.014	LB314744	06 Jun 2024	07 Jun 2024	13 Jun 2024	13 Jun 2024	23 Jul 2024	17 Jun 2024

VOC's in Soil							Method: I	ME-(AU)-[ENV]AN433
Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH11_0.2-0.3	SE266428.001	LB314534	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	20 Jun 2024	13 Jun 2024
BH11_0.6-0.7	SE266428.002	LB314534	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	20 Jun 2024	13 Jun 2024
BH12_0.1-0.2	SE266428.003	LB314534	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	20 Jun 2024	13 Jun 2024
BH13_0.1-0.2	SE266428.004	LB314534	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	20 Jun 2024	13 Jun 2024
BH13_0.5-0.7	SE266428.005	LB314534	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	20 Jun 2024	13 Jun 2024
BH14_0.1-0.2	SE266428.006	LB314534	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	20 Jun 2024	13 Jun 2024
BH14_0.5-0.6	SE266428.007	LB314534	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	20 Jun 2024	13 Jun 2024
BH15_0.2-0.3	SE266428.008	LB314534	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	20 Jun 2024	13 Jun 2024
BH15_0.6-0.7	SE266428.009	LB314534	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	20 Jun 2024	13 Jun 2024
BH16_0.2-0.3	SE266428.010	LB314534	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	20 Jun 2024	13 Jun 2024
BH17_0.2-0.3	SE266428.011	LB314534	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	20 Jun 2024	13 Jun 2024
BH17_0.5-0.6	SE266428.012	LB314534	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	20 Jun 2024	13 Jun 2024
QD_20240606	SE266428.013	LB314534	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	20 Jun 2024	13 Jun 2024
ТВ	SE266428.015	LB314534	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	20 Jun 2024	13 Jun 2024
TS	SE266428.016	LB314534	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	20 Jun 2024	13 Jun 2024
VOCs in Water							Method: I	ME-(AU)-[ENV]AN433
Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
QR_20240606	SE266428.014	LB314756	06 Jun 2024	07 Jun 2024	20 Jun 2024	13 Jun 2024	20 Jun 2024	14 Jun 2024

#### Volatile Petroleum Hydrocarbons in Soil

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH11_0.2-0.3	SE266428.001	LB314534	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	20 Jun 2024	13 Jun 2024
BH11_0.6-0.7	SE266428.002	LB314534	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	20 Jun 2024	13 Jun 2024
BH12_0.1-0.2	SE266428.003	LB314534	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	20 Jun 2024	13 Jun 2024
BH13_0.1-0.2	SE266428.004	LB314534	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	20 Jun 2024	13 Jun 2024
BH13_0.5-0.7	SE266428.005	LB314534	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	20 Jun 2024	13 Jun 2024
BH14_0.1-0.2	SE266428.006	LB314534	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	20 Jun 2024	13 Jun 2024
BH14_0.5-0.6	SE266428.007	LB314534	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	20 Jun 2024	13 Jun 2024
BH15_0.2-0.3	SE266428.008	LB314534	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	20 Jun 2024	13 Jun 2024
BH15_0.6-0.7	SE266428.009	LB314534	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	20 Jun 2024	13 Jun 2024
BH16_0.2-0.3	SE266428.010	LB314534	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	20 Jun 2024	13 Jun 2024
BH17_0.2-0.3	SE266428.011	LB314534	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	20 Jun 2024	13 Jun 2024
BH17_0.5-0.6	SE266428.012	LB314534	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	20 Jun 2024	13 Jun 2024
QD_20240606	SE266428.013	LB314534	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	20 Jun 2024	13 Jun 2024

Method: ME-(AU)-IENVIAN433



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

Volatile Petroleum Hydrocarbons in Soil (continued) Method: ME-(AU)-[ENV]AN433											
Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed			
тв	SE266428.015	LB314534	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	20 Jun 2024	13 Jun 2024			
TS	SE266428.016	LB314534	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	20 Jun 2024	13 Jun 2024			
Volatile Petroleum Hydrod	arbons in Water						Method:	ME-(AU)-[ENV]AN433			
Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed			
QR_20240606	SE266428.014	LB314756	06 Jun 2024	07 Jun 2024	20 Jun 2024	13 Jun 2024	20 Jun 2024	14 Jun 2024			



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 identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

C Pesticides in Soil				Method: ME	-(AU)-[ENV]AN
Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	BH11_0.2-0.3	SE266428.001	%	60 - 130%	109
	BH12_0.1-0.2	SE266428.003	%	60 - 130%	109
	BH13_0.1-0.2	SE266428.004	%	60 - 130%	102
	BH14_0.1-0.2	SE266428.006	%	60 - 130%	108
	BH15_0.2-0.3	SE266428.008	%	60 - 130%	111
	BH16_0.2-0.3	SE266428.010	%	60 - 130%	109
	BH17_0.2-0.3	SE266428.011	%	60 - 130%	118
P Pesticides in Soil					-(AU)-[ENV]AN
Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	BH11_0.2-0.3	SE266428.001	%	60 - 130%	99
	BH12_0.1-0.2	SE266428.003	%	60 - 130%	90
	BH13_0.1-0.2	SE266428.004	%	60 - 130%	95
	BH14_0.1-0.2	SE266428.006	%	60 - 130%	97
	BH15_0.2-0.3	SE266428.008	%	60 - 130%	96
	BH16_0.2-0.3	SE266428.010	%	60 - 130%	95
	BH17_0.2-0.3	SE266428.011	%	60 - 130%	92
d14-p-terphenyl (Surrogate)	BH11_0.2-0.3	SE266428.001	%	60 - 130%	107
	BH12_0.1-0.2	SE266428.003	%	60 - 130%	103
	BH13_0.1-0.2	SE266428.004	%	60 - 130%	101
	BH14_0.1-0.2	SE266428.006	%	60 - 130%	98
	BH15_0.2-0.3	SE266428.008	%	60 - 130%	107
	BH16_0.2-0.3	SE266428.010	%	60 - 130%	104
	BH17_0.2-0.3	SE266428.011	%	60 - 130%	104
AH (Polynuclear Aromatic Hydrocarbons) in Soil				Method: ME	-(AU)-[ENV]AI
Parameter	Sample Name	Sample Number	Units	Criteria	Recovery
2-fluorobiphenyl (Surrogate)	BH11_0.2-0.3	SE266428.001	%	70 - 130%	99
	BH11_0.6-0.7	SE266428.002	%	70 - 130%	101
	BH12_0.1-0.2	SE266428.003	%	70 - 130%	90
	BH13_0.1-0.2	SE266428.004	%	70 - 130%	95
	BH13_0.5-0.7	SE266428.005	%	70 - 130%	102
	BH14_0.1-0.2	SE266428.006	%	70 - 130%	97
	BH14_0.5-0.6	SE266428.007	%	70 - 130%	91
	BH15_0.2-0.3	SE266428.008	%	70 - 130%	96
	BH15_0.6-0.7	SE266428.009	%	70 - 130%	98
	BH16_0.2-0.3	SE266428.010	%	70 - 130%	95
	BH17_0.2-0.3	SE266428.011	%	70 - 130%	92
	BH17_0.5-0.6	SE266428.012	%	70 - 130%	103
d14-p-terphenyl (Surrogate)	BH11_0.2-0.3	SE266428.001	%	70 - 130%	107
	BH11_0.6-0.7	SE266428.002	%	70 - 130%	102
	BU142 0 4 0 2	000000000000000000000000000000000000000	%	70 - 130%	103
	BH12_0.1-0.2	SE266428.003	70	10 10070	
	BH12_0.1-0.2 BH13_0.1-0.2	SE266428.004	%	70 - 130%	101
					101 105
	BH13_0.1-0.2	SE266428.004	%	70 - 130%	
	BH13_0.1-0.2 BH13_0.5-0.7	SE266428.004 SE266428.005	%	70 - 130% 70 - 130%	105
	BH13_0.1-0.2 BH13_0.5-0.7 BH14_0.1-0.2	SE266428.004 SE266428.005 SE266428.006	%	70 - 130% 70 - 130% 70 - 130%	105 98
	BH13_0.1-0.2 BH13_0.5-0.7 BH14_0.1-0.2 BH14_0.5-0.6	SE266428.004 SE266428.005 SE266428.006 SE266428.007	% % %	70 - 130% 70 - 130% 70 - 130% 70 - 130%	105 98 99
	BH13_0.1-0.2 BH13_0.5-0.7 BH14_0.1-0.2 BH14_0.5-0.6 BH15_0.2-0.3	SE266428.004 SE266428.005 SE266428.006 SE266428.007 SE266428.008	% % % %	70 - 130% 70 - 130% 70 - 130% 70 - 130% 70 - 130%	105 98 99 107
	BH13_0.1-0.2 BH13_0.5-0.7 BH14_0.1-0.2 BH14_0.5-0.6 BH15_0.2-0.3 BH15_0.6-0.7	SE266428.004 SE266428.005 SE266428.006 SE266428.007 SE266428.008 SE266428.009	% % % % %	70 - 130% 70 - 130% 70 - 130% 70 - 130% 70 - 130% 70 - 130% 70 - 130%	105 98 99 107 99
	BH13_0.1-0.2 BH13_0.5-0.7 BH14_0.1-0.2 BH14_0.5-0.6 BH15_0.2-0.3 BH15_0.6-0.7 BH16_0.2-0.3	SE266428.004 SE266428.005 SE266428.006 SE266428.007 SE266428.008 SE266428.009 SE266428.010	% % % % %	70 - 130% 70 - 130% 70 - 130% 70 - 130% 70 - 130% 70 - 130% 70 - 130%	105 98 99 107 99 104
15-nitrobenzene (Surrogate)	BH13_0.1-0.2 BH13_0.5-0.7 BH14_0.1-0.2 BH14_0.5-0.6 BH15_0.2-0.3 BH15_0.6-0.7 BH16_0.2-0.3 BH17_0.2-0.3	SE266428.004 SE266428.005 SE266428.006 SE266428.007 SE266428.008 SE266428.009 SE266428.010 SE266428.011	% % % % %	70 - 130%           70 - 130%           70 - 130%           70 - 130%           70 - 130%           70 - 130%           70 - 130%           70 - 130%           70 - 130%           70 - 130%	105 98 99 107 99 104 104
15-nitrobenzene (Surrogate)	BH13_0.1-0.2 BH13_0.5-0.7 BH14_0.1-0.2 BH14_0.5-0.6 BH15_0.2-0.3 BH15_0.6-0.7 BH16_0.2-0.3 BH17_0.2-0.3 BH17_0.2-0.6	SE266428.004           SE266428.005           SE266428.006           SE266428.007           SE266428.008           SE266428.009           SE266428.010           SE266428.011           SE266428.012	% % % % % %	70 - 130%           70 - 130%           70 - 130%           70 - 130%           70 - 130%           70 - 130%           70 - 130%           70 - 130%           70 - 130%           70 - 130%           70 - 130%           70 - 130%           70 - 130%	105 98 99 107 99 104 104 104
15-nitrobenzene (Surrogate)	BH13_0.1-0.2         BH13_0.5-0.7         BH14_0.1-0.2         BH14_0.5-0.6         BH15_0.2-0.3         BH16_0.2-0.3         BH17_0.2-0.3         BH17_0.5-0.6         BH17_0.5-0.3	SE266428.004           SE266428.005           SE266428.006           SE266428.007           SE266428.008           SE266428.009           SE266428.010           SE266428.011           SE266428.012           SE266428.001	% % % % % % %	70 - 130%           70 - 130%           70 - 130%           70 - 130%           70 - 130%           70 - 130%           70 - 130%           70 - 130%           70 - 130%           70 - 130%           70 - 130%           70 - 130%           70 - 130%           70 - 130%	105 98 99 107 99 104 104 104 104
15-nitrobenzene (Surrogate)	BH13_0.1-0.2           BH13_0.5-0.7           BH14_0.1-0.2           BH14_0.5-0.6           BH15_0.2-0.3           BH16_0.2-0.3           BH17_0.2-0.3           BH17_0.5-0.6           BH17_0.5-0.6           BH1_0.2-0.3	SE266428.004           SE266428.005           SE266428.006           SE266428.007           SE266428.008           SE266428.009           SE266428.010           SE266428.011           SE266428.012           SE266428.001           SE266428.001           SE266428.002	% % % % % % %	70 - 130%           70 - 130%           70 - 130%           70 - 130%           70 - 130%           70 - 130%           70 - 130%           70 - 130%           70 - 130%           70 - 130%           70 - 130%           70 - 130%           70 - 130%           70 - 130%           70 - 130%	105 98 99 107 99 104 104 104 100 98
15-nitrobenzene (Surrogate)	BH13_0.1-0.2 BH13_0.5-0.7 BH14_0.1-0.2 BH14_0.5-0.6 BH15_0.2-0.3 BH15_0.6-0.7 BH16_0.2-0.3 BH17_0.2-0.3 BH17_0.5-0.6 BH11_0.5-0.6 BH11_0.2-0.3 BH11_0.6-0.7 BH12_0.1-0.2 BH13_0.1-0.2	SE266428.004           SE266428.005           SE266428.006           SE266428.007           SE266428.008           SE266428.009           SE266428.010           SE266428.011           SE266428.012           SE266428.001           SE266428.001           SE266428.002           SE266428.003	% % % % % % % %	70 - 130%           70 - 130%	105 98 99 107 99 104 104 104 104 100 98 94
d5-nitrobenzene (Surrogate)	BH13_0.1-0.2 BH13_0.5-0.7 BH14_0.1-0.2 BH14_0.5-0.6 BH15_0.2-0.3 BH15_0.6-0.7 BH16_0.2-0.3 BH17_0.2-0.3 BH17_0.2-0.3 BH17_0.5-0.6 BH11_0.2-0.3 BH11_0.2-0.3 BH11_0.6-0.7 BH12_0.1-0.2 BH13_0.1-0.2 BH13_0.5-0.7	SE266428.004           SE266428.005           SE266428.006           SE266428.007           SE266428.008           SE266428.009           SE266428.010           SE266428.011           SE266428.012           SE266428.001           SE266428.001           SE266428.001           SE266428.001           SE266428.001           SE266428.001           SE266428.001           SE266428.001           SE266428.001           SE266428.002           SE266428.003           SE266428.004           SE266428.005	% % % % % % % % %	70 - 130%           70 - 130%	105 98 99 107 99 104 104 104 104 100 98 94 107 96
d5-nitrobenzene (Surrogate)	BH13_0.1-0.2 BH13_0.5-0.7 BH14_0.1-0.2 BH14_0.5-0.6 BH15_0.2-0.3 BH15_0.6-0.7 BH16_0.2-0.3 BH17_0.2-0.3 BH17_0.2-0.3 BH17_0.5-0.6 BH11_0.2-0.3 BH11_0.2-0.3 BH11_0.2-0.7 BH12_0.1-0.2 BH13_0.5-0.7 BH13_0.5-0.7 BH14_0.1-0.2	SE266428.004           SE266428.005           SE266428.006           SE266428.007           SE266428.009           SE266428.010           SE266428.010           SE266428.011           SE266428.012           SE266428.001           SE266428.002           SE266428.002           SE266428.003           SE266428.004           SE266428.005           SE266428.006	% % % % % % % % % %	70 - 130%           70 - 130%	105 98 99 107 99 104 104 104 104 100 98 94 107 96 96
d5-nitrobenzene (Surrogate)	BH13_0.1-0.2 BH13_0.5-0.7 BH14_0.1-0.2 BH14_0.5-0.6 BH15_0.2-0.3 BH15_0.6-0.7 BH16_0.2-0.3 BH17_0.2-0.3 BH17_0.2-0.3 BH17_0.5-0.6 BH11_0.2-0.3 BH11_0.6-0.7 BH12_0.1-0.2 BH13_0.5-0.7 BH13_0.5-0.7 BH14_0.1-0.2 BH14_0.5-0.6	SE266428.004           SE266428.005           SE266428.006           SE266428.007           SE266428.009           SE266428.010           SE266428.011           SE266428.012           SE266428.001           SE266428.002           SE266428.003           SE266428.004           SE266428.005           SE266428.006           SE266428.007	% % % % % % % % % % %	70 - 130%           70 - 130%	105 98 99 107 99 104 104 104 104 104 100 98 94 107 96 96 90
d5-nitrobenzene (Surrogate)	BH13_0.1-0.2 BH13_0.5-0.7 BH14_0.1-0.2 BH14_0.5-0.6 BH15_0.2-0.3 BH15_0.2-0.3 BH17_0.2-0.3 BH17_0.2-0.3 BH17_0.2-0.3 BH11_0.2-0.3 BH11_0.2-0.3 BH11_0.6-0.7 BH12_0.1-0.2 BH13_0.5-0.7 BH13_0.5-0.7 BH14_0.1-0.2 BH14_0.5-0.6 BH14_0.2-0.3	SE266428.004           SE266428.005           SE266428.006           SE266428.007           SE266428.009           SE266428.010           SE266428.011           SE266428.012           SE266428.001           SE266428.001           SE266428.002           SE266428.003           SE266428.004           SE266428.005           SE266428.006           SE266428.007           SE266428.008	%           %	70 - 130%           70 - 130%	105 98 99 107 99 104 104 104 104 100 98 98 94 107 96 96 90
d5-nitrobenzene (Surrogate)	BH13_0.1-0.2 BH13_0.5-0.7 BH14_0.1-0.2 BH14_0.5-0.6 BH15_0.2-0.3 BH15_0.6-0.7 BH16_0.2-0.3 BH17_0.2-0.3 BH17_0.2-0.3 BH17_0.5-0.6 BH11_0.2-0.3 BH11_0.6-0.7 BH12_0.1-0.2 BH13_0.5-0.7 BH13_0.5-0.7 BH14_0.1-0.2 BH14_0.5-0.6	SE266428.004           SE266428.005           SE266428.006           SE266428.007           SE266428.009           SE266428.010           SE266428.011           SE266428.012           SE266428.001           SE266428.002           SE266428.003           SE266428.004           SE266428.005           SE266428.006           SE266428.007	% % % % % % % % % % %	70 - 130%           70 - 130%	105 98 99 107 99 104 104 104 104 100 98 98 94 107 96 96 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 identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

AH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)				Method: M	E-(AU)-[ENV]A
arameter	Sample Name	Sample Number	Units	Criteria	Recovery
d5-nitrobenzene (Surrogate)	BH17_0.5-0.6	SE266428.012	%	70 - 130%	104
CBs in Soil				Method: M	E-(AU)-[ENV]A
arameter	Sample Name	Sample Number	Units	Criteria	Recovery
TCMX (Surrogate)	BH11_0.2-0.3	SE266428.001	%	60 - 130%	109
	BH12_0.1-0.2	SE266428.003	%	60 - 130%	109
	BH13_0.1-0.2	SE266428.004	%	60 - 130%	103
	BH14_0.1-0.2	SE266428.006	%	60 - 130%	108
	BH15_0.2-0.3	SE266428.008	%	60 - 130%	112
	BH16_0.2-0.3	SE266428.010	%	60 - 130%	109
	BH17_0.2-0.3	SE266428.011	%	60 - 130%	118
DC's in Soil				Method: M	E-(AU)-[ENV]A
arameter	Sample Name	Sample Number	Units	Criteria	Recovery
Bromofluorobenzene (Surrogate)	BH11_0.2-0.3	SE266428.001	%	60 - 130%	83
	BH11_0.6-0.7	SE266428.002	%	60 - 130%	86
	BH12_0.1-0.2	SE266428.003	%	60 - 130%	94
	BH13_0.1-0.2	SE266428.004	%	60 - 130%	83
	BH13_0.5-0.7	SE266428.005	%	60 - 130%	84
	BH14_0.1-0.2	SE266428.006	%	60 - 130%	84
	BH14_0.5-0.6	SE266428.007	%	60 - 130%	78
	BH15_0.2-0.3	SE266428.008	%	60 - 130%	85
	BH15_0.6-0.7	SE266428.009	%	60 - 130%	72
	BH16_0.2-0.3	SE266428.010	%	60 - 130%	80
	BH17_0.2-0.3	SE266428.011	%	60 - 130%	81
	BH17_0.5-0.6	SE266428.012	%	60 - 130%	85
	QD_20240606	SE266428.013	%	60 - 130%	87
	ТВ	SE266428.015	%	60 - 130%	86
	TS	SE266428.016	%	60 - 130%	91
l4-1,2-dichloroethane (Surrogate)	BH11_0.2-0.3	SE266428.001	%	60 - 130%	84
	BH11_0.6-0.7	SE266428.002	%	60 - 130%	95
	BH12_0.1-0.2	SE266428.003	%	60 - 130%	92
	BH13_0.1-0.2	SE266428.004	%	60 - 130%	85
	BH13_0.5-0.7	SE266428.005	%	60 - 130%	88
	BH14_0.1-0.2	SE266428.006	%	60 - 130%	79
	BH14_0.5-0.6	SE266428.007	%	60 - 130%	83
	BH15_0.2-0.3	SE266428.008	%	60 - 130%	90
	BH15_0.6-0.7	SE266428.009	%	60 - 130%	75
	BH16_0.2-0.3	SE266428.010	%	60 - 130%	84
	BH17_0.2-0.3	SE266428.011	%	60 - 130%	83
	BH17_0.5-0.6	SE266428.012	%	60 - 130%	88
	QD_20240606	SE266428.013	%	60 - 130%	82
	ТВ	SE266428.015	%	60 - 130%	84
	TS	SE266428.016	%	60 - 130%	86
I8-toluene (Surrogate)	BH11_0.2-0.3	SE266428.001	%	60 - 130%	87
	BH11_0.6-0.7	SE266428.002	%	60 - 130%	95
	BH12_0.1-0.2	SE266428.003	%	60 - 130%	93
	BH13_0.1-0.2	SE266428.004	%	60 - 130%	88
	BH13_0.5-0.7	SE266428.005	%	60 - 130%	90
	BH14_0.1-0.2	SE266428.006	%	60 - 130%	92
	BH14_0.5-0.6	SE266428.007	%	60 - 130%	84
	BH15_0.2-0.3	SE266428.008	%	60 - 130%	90
	BH15_0.6-0.7	SE266428.009	%	60 - 130%	76
	BH16_0.2-0.3	SE266428.010	%	60 - 130%	85
	BH17_0.2-0.3	SE266428.011	%	60 - 130%	88
	BH17_0.5-0.6	SE266428.012	%	60 - 130%	90
	QD_20240606	SE266428.013	%	60 - 130%	89
	TB	SE266428.015	%	60 - 130%	89
	TS	SE266428.016	%	60 - 130%	89

17/6/2024



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 identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

arameter	Sample Name	Sample Number	Units	Criteria	Recovery S
Bromofluorobenzene (Surrogate)	QR_20240606	SE266428.014	%	40 - 130%	98
d4-1,2-dichloroethane (Surrogate)	QR_20240606	SE266428.014	%	40 - 130%	110
d8-toluene (Surrogate)	QR_20240606	SE266428.014	%	40 - 130%	99
platile Petroleum Hydrocarbons in Soil				Method: ME	E-(AU)-[ENV]AI
arameter	Sample Name	Sample Number	Units	Criteria	Recovery
Bromofluorobenzene (Surrogate)	BH11_0.2-0.3	SE266428.001	%	60 - 130%	83
	BH11_0.6-0.7	SE266428.002	%	60 - 130%	86
	BH12_0.1-0.2	SE266428.003	%	60 - 130%	94
	BH13_0.1-0.2	SE266428.004	%	60 - 130%	83
	BH13_0.5-0.7	SE266428.005	%	60 - 130%	84
	BH14_0.1-0.2	SE266428.006	%	60 - 130%	84
	BH14_0.5-0.6	SE266428.007	%	60 - 130%	78
	BH15_0.2-0.3	SE266428.008	%	60 - 130%	85
	BH15_0.6-0.7	SE266428.009	%	60 - 130%	72
	BH16_0.2-0.3	SE266428.010	%	60 - 130%	80
	BH17_0.2-0.3	SE266428.011	%	60 - 130%	81
	BH17_0.5-0.6	SE266428.012	%	60 - 130%	85
	QD_20240606	SE266428.013	%	60 - 130%	87
4-1,2-dichloroethane (Surrogate)	BH11_0.2-0.3	SE266428.001	%	60 - 130%	84
	BH11 0.6-0.7	SE266428.002	%	60 - 130%	95
		SE266428.003	%	60 - 130%	92
	BH13_0.1-0.2	SE266428.004	%	60 - 130%	85
	BH13_0.5-0.7	SE266428.005	%	60 - 130%	88
	BH14_0.1-0.2	SE266428.006	%	60 - 130%	79
	BH14 0.5-0.6	SE266428.007	%	60 - 130%	83
	BH15_0.2-0.3	SE266428.008	%	60 - 130%	90
	BH15 0.6-0.7	SE266428.009	%	60 - 130%	75
	BH16_0.2-0.3	SE266428.010	%	60 - 130%	84
	BH17 0.2-0.3	SE266428.011	%	60 - 130%	83
	BH17 0.5-0.6	SE266428.012	%	60 - 130%	88
	QD_20240606	SE266428.013	%	60 - 130%	82
B-toluene (Surrogate)	BH11 0.2-0.3	SE266428.001	%	60 - 130%	87
		SE266428.002	%	60 - 130%	95
	BH12_0.1-0.2	SE266428.003	%	60 - 130%	93
	BH13 0.1-0.2	SE266428.004	%	60 - 130%	88
	BH13_0.5-0.7	SE266428.005	%	60 - 130%	90
	BH14 0.1-0.2	SE266428.006	%	60 - 130%	92
	 BH14_0.5-0.6	SE266428.007	%	60 - 130%	84
	BH15_0.2-0.3	SE266428.008	%	60 - 130%	90
	 BH15_0.6-0.7	SE266428.009	%	60 - 130%	76
	BH16_0.2-0.3	SE266428.010	%	60 - 130%	85
	BH17 0.2-0.3	SE266428.011	%	60 - 130%	88
	BH17_0.5-0.6	SE266428.012	%	60 - 130%	90
	QD_20240606	SE266428.013	%	60 - 130%	89
latile Petroleum Hydrocarbons in Water	~				E-(AU)-[ENV]A
arameter	Sample Name	Sample Number	Units	Criteria	Recovery
Bromofluorobenzene (Surrogate)	QR_20240606	SE266428.014	%	40 - 130%	98
14-1,2-dichloroethane (Surrogate)	QR_20240606	SE266428.014	%	60 - 130%	110
18-toluene (Surrogate)	QR 20240606	SE266428.014	%	40 - 130%	99



### SE266428 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.

Mercury (dissolved) in Water			Method: ME-(AU	)-[ENV]AN311(Perth)/AN312
Sample Number	Parameter	Units	LOR	Result
LB314636.001	Mercury	mg/L	0.0001	<0.0001

#### Mercury in Soil

Mercury in Soil				Method: ME-(AU)-[ENV]AN312
Sample Number	Parameter	Units	LOR	Result
LB314542.001	Mercury	mg/kg	0.05	<0.05

### OC Pesticides in Soil

OC Pesticides in Soil			Meth	od: ME-(AU)-[ENV]AN42
Sample Number	Parameter	Units	LOR	Result
LB314526.001	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)	%	-	109
OP Pesticides in Soil			Meth	od: ME-(AU)-[ENV]AN42
Sample Number	Parameter	Units	LOR	Result

Sample Number		Parameter	Units	LOR	Result
LB314526.001		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
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	99
		d14-p-terphenyl (Surrogate)	%	-	106
PAH (Polynuclear Aroma	tic Hydrocarbons) in Soi	I		Meth	od: ME-(AU)-[ENV]AN42
Sample Number		Parameter	Units	LOR	Result
LB314526.001		Naphthalene	mg/kg	0.1	<0.1
		2-methylnaphthalene	mg/kg	0.1	<0.1
		1-methylnaphthalene	mg/kg	0.1	<0.1

Acenaphthylene

Acenaphthene

Phenanthrene

Anthracene

Fluorene

<0.1

<0.1

<0.1

<0.1

<0.1

0.1

0.1

0.1

0.1

0.1

mg/kg

mg/kg

mg/kg

mg/kg

mg/kg



### SE266428 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.

#### PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued) Method: ME-(AU)-[ENV]AN420 Result Sample Number Parameter Units LOR LB314526.001 Fluoranthene 0.1 <0.1 mg/kg Pyrene mg/kg 0.1 < 0.1 0.1 <0.1 Benzo(a)anthracene mg/kg Chrysene 0.1 <0.1 mg/kg Benzo(a)pyrene mg/kg 01 <0.1 Indeno(1,2,3-cd)pyrene mg/kg 0.1 <0.1 <0.1 Dibenzo(ah)anthracene 0.1 ma/ka Benzo(ghi)perylene mg/kg 0.1 < 0.1 Total PAH (18) 0.8 <0.8 mg/kg Surrogates d5-nitrobenzene (Surrogate) 101 % -2-fluorobiphenyl (Surrogate) % 99 d14-p-terphenyl (Surrogate) % 106 PCBs in Soil Method: ME-(AU)-[ENV]AN420 Sample Numb Units LOR Result Parameter LB314526.001 Arochlor 1016 mg/kg 0.2 < 0.2 Arochlor 1221 0.2 <0.2 mg/kg Arochlor 1232 mg/kg 0.2 < 0.2 Arochlor 1242 0.2 < 0.2 mg/kg Arochlor 1248 0.2 <0.2 mg/kg Arochlor 1254 mg/kg 0.2 < 0.2 Arochlor 1260 0.2 <0.2 mg/kg Arochlor 1262 0.2 <0.2 mg/kg Arochlor 1268 mg/kg 0.2 <0.2 Total PCBs (Arochlors) mg/kg 1 <1 Surrogates TCMX (Surrogate) 109 % Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES Method: ME-(AU)-[ENV]AN040/AN320 Sample Number Parameter LOR Result LB314539.001 Arsenic, As mg/kg 1 <1 Cadmium, Cd 0.3 <0.3 mg/kg Chromium, Cr mg/kg 0.5 < 0.5 Copper, Cu mg/kg 0.5 <0.5 <0.5 Nickel, Ni 0.5 mg/kg Lead, Pb mg/kg 1 <1 <2.0 Zinc, Zn 2 mg/kg Trace Metals (Dissolved) in Water by ICPMS Method: ME-(AU)-[ENV]AN318 Sample Number Units Result Paramet LOR LB314475.001 Arsenic µg/L 1 <1 Cadmium µg/L 0.1 <0.1 Chromium µg/L 1 <1 Copper µg/L 1 <1 Lead <1 µg/L 1 Nickel µg/L 1 <1 Zinc µg/L 5 <5 TRH (Total Recoverable Hydrocarbons) in Soil Method: ME-(AU)-[ENV]AN403 Sample Number Units LOR Result Parameter LB314526.001 TRH C10-C14 mg/kg 20 <20 TRH C15-C28 45 <45 mg/kg TRH C29-C36 45 <45 mg/kg TRH C37-C40 mg/kg 100 <100 TRH C10-C36 Total 110 <110 mg/kg TRH (Total Recoverable Hydrocarbons) in Water Method: ME-(AU)-[ENV]AN403 Sample Number Units Result Parameter I B314744 001 TRH C10-C14 µg/L 50 <50 TRH C15-C28 200 <200 µg/L TRH C29-C36 200 <200 µg/L TRH C37-C40 µg/L 200 <200 VOC's in Soil Method: ME-(AU)-[ENV]AN433

Sample Numbe

Parameter

Units

LOR



### SE266428 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)

Sample Number		Parameter	Units	LOR	Result
_B314534.001	Monocyclic Aromatic	Benzene	mg/kg	0.1	<0.1
	Hydrocarbons	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)	%	-	112
		d8-toluene (Surrogate)	%	-	116
		Bromofluorobenzene (Surrogate)	%	-	83
	Totals	Total BTEX*	mg/kg	0.6	<0.6
OCs in Water				Meth	od: ME-(AU)-[ENV]AI
Sample Number		Parameter	Units	LOR	Result
B314756.001	Monocyclic Aromatic	Benzene	µg/L	0.5	<0.5
	Hydrocarbons	Toluene	µg/L	0.5	<0.5
		Ethylbenzene	μg/L	0.5	<0.5
		m/p-xylene	μg/L	1	<1
		o-xylene	μg/L	0.5	<0.5
	Polycyclic VOCs	Naphthalene (VOC)*	μg/L	0.5	<0.5
			%	-	100
	Surrogates	d4-1,2-dichloroethane (Surrogate)			
	Surrogates	d4-1,2-dichloroethane (Surrogate) d8-toluene (Surrogate)	%	-	105

### atile Petroleum Hydrocarbons in Soil

Sample Number		Parameter	Units	LOR	Result
LB314534.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	112

### Volatile Petroleum Hydrocarbons in Water

Volatile Petroleum Hydrocarbons in Water			Meth	Method: ME-(AU)-[ENV]AN433		
Sample Number		Parameter	Units	LOR	Result	
LB314756.001		TRH C6-C9	μg/L	40	<40	
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	100	
		d8-toluene (Surrogate)	%	-	105	
		Bromofluorobenzene (Surrogate)	%	-	81	



Method: ME-(AU)-IENVIAN002

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 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 x 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 identifer 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

Mercury in Soil Method: ME-					od: ME-(AU)-	ENVJAN312	
Original	Duplicate	Parameter	Units LOR	Original	Duplicate	Criteria %	RPD %
SE266428.003	LB314542.014	Mercury	mg/kg 0.05	<0.05	<0.05	200	0

#### Moisture Content

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE266428.002	LB314535.011	% Moisture	%w/w	1	20.2	19.4	35	4
SE266428.012	LB314535.022	% Moisture	%w/w	1	17.0	16.7	36	2

#### **OC Pesticides in Soil**

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE266428.003	LB314526.014		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	
			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	-	0.16	0.16	30	0
SE266428.011	LB314526.027		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	0.2	<0.2	<0.2	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0



Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 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 x 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 identifer 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

OC Pesticides in S	Soil (continued)						Meth	od: ME-(AU)-	[ENV]AN42
Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE266428.011	LB314526.027		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		0.1	<0.1	<0.1	200	0
				mg/kg				200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1		
			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	-	0.18	0.16	30	9
OP Pesticides in S	ioil						Meth	od: ME-(AU)-	[ENV]AN4
Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE266428.003	LB314526.014		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		0.2	<0.2	<0.2	200	0
			Malathion	mg/kg				200	0
				mg/kg	0.5	<0.5	<0.5		
			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	0
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	1
SE266428.011	LB314526.027		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		0.2	<0.2	<0.2	200	0
			Mathion	mg/kg	0.2	<0.2	<0.2	200	0
				mg/kg					0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	
		-	Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.4	30	3
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	5
PAH (Polynuclear)	Aromatic Hydrocarbo	ons) in Soil					Meth	od: ME-(AU)-	[ENV]AN4
Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE266428.003	LB314526.014		Naphthalene	mg/kg	0.1	0.2	0.2	92	1
			2-methylnaphthalene	mg/kg	0.1	0.1	0.1	101	2
			1-methylnaphthalene	mg/kg	0.1	0.3	0.3	69	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	0.2	0.1	95	4
			Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
					0.1	<0.1	<0.1	200	0
			Pyrene	mg/kg					
			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



Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 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 x 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 identifer 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

#### PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Driginal	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
E266428.003	LB314526.014		Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
			Carcinogenic PAHs, BaP TEQ <lor=0*< td=""><td>mg/kg</td><td>0.2</td><td>&lt;0.2</td><td>&lt;0.2</td><td>200</td><td>0</td></lor=0*<>	mg/kg	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <lor=lor 2*<="" td=""><td>mg/kg</td><td>0.2</td><td>&lt;0.2</td><td>&lt;0.2</td><td>175</td><td>0</td></lor=lor>	mg/kg	0.2	<0.2	<0.2	175	0
			Carcinogenic PAHs, BaP TEQ <lor=lor*< td=""><td>mg/kg</td><td>0.3</td><td>&lt;0.3</td><td>&lt;0.3</td><td>134</td><td>0</td></lor=lor*<>	mg/kg	0.3	<0.3	<0.3	134	0
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	44	1
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	30	3
		-	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	0
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	1
E266428.011	LB314526.027		Naphthalene	mg/kg	0.1	<0.1	<0.1	171	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	198	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	0.2	107	52
			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	158	2
			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*< td=""><td>mg/kg</td><td>0.2</td><td>&lt;0.2</td><td>&lt;0.2</td><td>200</td><td>0</td></lor=0*<>	mg/kg	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <lor=lor 2*<="" td=""><td>mg/kg</td><td>0.2</td><td>&lt;0.2</td><td>&lt;0.2</td><td>175</td><td>0</td></lor=lor>	mg/kg	0.2	<0.2	<0.2	175	0
			Carcinogenic PAHs, BaP TEQ <lor=lor*< td=""><td>mg/kg</td><td>0.3</td><td>&lt;0.3</td><td>&lt;0.3</td><td>134</td><td>0</td></lor=lor*<>	mg/kg	0.3	<0.3	<0.3	134	0
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	104	92
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	30	4
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.4	30	3
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	5

Original Duplicate Criteria % RPD % Units LOR Original Duplicate Parameter SE266428.003 LB314526.014 Arochlor 1016 0.2 <0.2 <0.2 200 0 mg/kg Arochlor 1221 0.2 <0.2 <0.2 200 0 mg/kg 200 0 Arochlor 1232 mg/kg 0.2 < 0.2 < 0.2 Arochlor 1242 0.2 <0.2 <0.2 200 0 mg/kg Arochlor 1248 0.2 <0.2 <0.2 200 0 mg/kg 0.2 < 0.2 < 0.2 200 0 Arochlor 1254 mg/kg Arochlor 1260 0.2 <0.2 <0.2 200 0 mg/kg Arochlor 1262 0.2 <0.2 <0.2 200 0 mg/kg 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) 30 0 0 0 mg/kg SE266428.011 LB314526.028 Arochlor 1016 mg/kg 0.2 < 0.2 < 0.2 200 0 Arochlor 1221 0.2 <0.2 <0.2 200 0 mg/kg 0.2 <0.2 <0.2 200 Arochlor 1232 0 mg/kg Arochlor 1242 mg/kg 0.2 < 0.2 < 0.2 200 0 Arochlor 1248 0.2 <0.2 <0.2 200 0 mg/kg Arochlor 1254 0.2 <0.2 <0.2 200 0 mg/kg 200 Arochlor 1260 mg/kg 0.2 < 0.2 < 0.2 0 Arochlor 1262 0.2 <0.2 <0.2 200 0 mg/kg Arochlor 1268 0.2 <0.2 <0.2 200 0 mg/kg Total PCBs (Arochlors) 200 0 mg/kg 1 <1 <1 Surrogates TCMX (Surrogate) 0 0 30 9 mg/kg Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES Method: ME-(AU)-[ENV]AN040/AN320

Original Duplicate Units LOR Parameter



### **DUPLICATES**

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 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 x 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 identifer 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

			by ICPOES (continued)		1.00			(AU)-[ENV]A	
Original	Duplicate		Parameter	Units	LOR			Criteria %	
SE266428.003	LB314539.014		Arsenic, As	mg/kg	1	3	3	64	17
			Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
			Chromium, Cr	mg/kg	0.5	72	89	31	21
			Copper, Cu	mg/kg	0.5	31	22	32	31
			Nickel, Ni	mg/kg	0.5	73	89	31	19
			Lead, Pb	mg/kg	1	3	4	58	26
			Zinc, Zn	mg/kg	2	47	55	34	15
race Metals (Diss	olved) in Water by I	CPMS					Meth	od: ME-(AU)-	[ENV]AN3
Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE266424.003	LB314475.014		Arsenic	μg/L	1	13	13	23	0
			Chromium	μg/L	1	<1	<1	200	0
			Copper	μg/L	1	5	5	35	6
			Lead	μg/L	1	290	290	15	1
			Zinc	μg/L	5	1600	1500	15	5
RH (Total Recove	erable Hydrocarbons	) in Soil					Meth	od: ME-(AU)-	
	-	,	Paramatar	Units	LOR	Original		Criteria %	
Original SE266428.003	Duplicate LB314526.014		Parameter			-	-		RPD %
JL200420.003	LDJ 14320.U14		_TRH C10-C14 TRH C15-C28	mg/kg	20 45	<20 <45	<20 <45	200 200	0
			TRH C15-C28 TRH C29-C36	mg/kg mg/kg	45	<45	<45	200	0
			TRH C23-C30 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	210	<25	<25	200	0
		Intern Danas	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
SE266428.011	LB314526.027		TRH C10-C14	mg/kg	20	<20	<20	200	0
022001201011	20011020.021		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
DU (Tetel Decen	angle Lindre oorborne								
	erable Hydrocarbons	) in water						od: ME-(AU)-	
Original	Duplicate		Parameter	Units	LOR		Duplicate		RPD %
SE266430.028	LB314744.025		TRH C10-C14	μg/L	50	0	0	200	0
			TRH C15-C28	µg/L	200	0	0	200	0
			TRH C29-C36	μg/L	200	0	0	200	0
			TRH C37-C40	μg/L	200	0	0	200	0
			TRH C10-C40	μg/L	320	0	0	200	0
		TRH F Bands	TRH >C10-C16	μg/L	60	0	0	200	0
			TRH >C10-C16 - Naphthalene (F2)	μg/L	60	-0.1815467076	0	200	0
			TRH >C16-C34 (F3)	μg/L	500	0	0	200	0
			TRH >C34-C40 (F4)	μg/L	500	0	0	200	0
SE266505.024	LB314744.026		TRH C10-C14	μg/L	50	<50	<50	200	0
			TRH C15-C28	μg/L	200	<200	<200	200	0
			TRH C29-C36	μg/L	200	<200	<200	200	0
			TRH C37-C40	μg/L	200	<200	<200	200	0
			TRH C10-C40	μg/L	320	<320	<320	200	0
		TRH F Bands	TRH >C10-C16	μg/L	60	<60	<60	200	0
			TRH >C10-C16 - Naphthalene (F2)	μg/L	60	<60	<60	200	0
			TRH >C16-C34 (F3)	μg/L	500	<500	<500	200	0
			TRH >C34-C40 (F4)	μg/L	500	<500	<500	200	0
SE266629.004	LB314744.024		TRH C10-C14	μg/L	50	<50	<50	200	0
			TRH C15-C28	µg/L	200	<200	<200	200	0
			TRH C29-C36	μg/L	200	<200	<200	200	0



Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 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 x 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 identifer 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

#### TRH (Total Recoverable Hydrocarbons) in Water (continued)

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	PDD #
Original SE266629.004	Duplicate LB314744.024		Parameter TRH C37-C40		200	Original <200	<pre>&gt;Duplicate &lt;200</pre>	200	RPD %
SE266629.004	LB314744.024			μg/L					
			TRH C10-C40	μg/L	320	<320	<320	200	0
		TRH F Bands	TRH >C10-C16	μg/L	60	<60	<60	200	0
			TRH >C10-C16 - Naphthalene (F2)	μg/L	60	<60	<60	200	0
			TRH >C16-C34 (F3)	μg/L	500	<500	<500	200	0
			TRH >C34-C40 (F4)	μg/L	500	<500	<500	200	0
/OC's in Soil							Meth	od: ME-(AU)	-[ENV]AN
Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE266428.001	LB314534.015	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	0.1	<0.2	<0.1	200	0
									0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	
		Polycyclic	Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.4	9.3	50	10
			d8-toluene (Surrogate)	mg/kg	-	8.7	9.3	50	7
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.3	8.9	50	8
		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
SE266428.011	LB314534.027	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
			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		8.3	7.1	50	16
		Gunogates	d8-toluene (Surrogate)	mg/kg		8.8	7.3	50	20
								50	17
		T-4-1-	Bromofluorobenzene (Surrogate)	mg/kg		8.1	6.8		
		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
OCs in Water							Meth	od: ME-(AU)	-[ENV]AN
Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE266518.001	LB314756.025	Monocyclic	Benzene	µg/L	0.5	<0.0005	<0.0005	200	0
		Aromatic	Toluene	µg/L	0.5	<0.0005	<0.0005	200	0
			Ethylbenzene	μg/L	0.5	<0.0005	<0.0005	200	0
			m/p-xylene	μg/L	1	< 0.001	<0.001	200	0
			o-xylene	μg/L	0.5	<0.0005	<0.0005	200	0
		Dahusuelie							0
		Polycyclic	Naphthalene (VOC)*	μg/L	0.5	<0.0005	<0.0005	200	
		Surrogates	d4-1,2-dichloroethane (Surrogate)	μg/L	-	0.0	0.0	30	12
			d8-toluene (Surrogate)	μg/L	-	0.0	0.0	30	25
			Bromofluorobenzene (Surrogate)	μg/L	-	0.0	0.0	30	16
		Totals	Total BTEX	μg/L	3	<0.003	<0.003	200	0
olatile Petroleum	Hydrocarbons in Soi	I					Meth	od: ME-(AU)	-[ENV]AN
Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE266428.001	LB314534.015		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		8.4	9.3	50	10
		Sunogates	d8-toluene (Surrogate)			8.7	9.3	50	7
				mg/kg					8
		VPH F Bands	Bromofluorobenzene (Surrogate)	mg/kg	-	8.3	8.9	50	
			Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
		VIIII Danas							
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE266428.011	LB314534.027		TRH C6-C10 minus BTEX (F1) TRH C6-C10	mg/kg	25	<25	<25	200	0
SE266428.011	LB314534.027		TRH C6-C10 minus BTEX (F1) TRH C6-C10 TRH C6-C9						
SE266428.011	LB314534.027	Surrogates	TRH C6-C10 minus BTEX (F1) TRH C6-C10	mg/kg	25	<25	<25	200	0
SE266428.011	LB314534.027		TRH C6-C10 minus BTEX (F1) TRH C6-C10 TRH C6-C9	mg/kg mg/kg	25 20	<25 <20	<25 <20	200 200	0
SE266428.011	LB314534.027		TRH C6-C10 minus BTEX (F1) TRH C6-C10 TRH C6-C9 d4-1,2-dichloroethane (Surrogate)	mg/kg mg/kg mg/kg	25 20 -	<25 <20 8.3	<25 <20 7.1	200 200 50	0 0 16
SE266428.011	LB314534.027		TRH C6-C10 minus BTEX (F1) TRH C6-C10 TRH C6-C9 d4-1,2-dichloroethane (Surrogate) d8-toluene (Surrogate)	mg/kg mg/kg mg/kg mg/kg	25 20 - -	<25 <20 8.3 8.8	<25 <20 7.1 7.3	200 200 50 50	0 0 16 20

mg/kg

25

<25

<25

200

TRH C6-C10 minus BTEX (F1)

0



Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 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 x 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 identifer 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

### Volatile Petroleum Hydrocarbons in Water

Volatile Petroleun	atile Petroleum Hydrocarbons in Water						Meth	od: ME-(AU)-	(ENVJAN43
Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE266492.001	LB314756.024		TRH C6-C10	µg/L	50	<50	<50	200	0
			TRH C6-C9	µg/L	40	<50	<40	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	μg/L	-	10.4	12.1	30	15
			d8-toluene (Surrogate)	µg/L	-	10.2	10.0	30	2
			Bromofluorobenzene (Surrogate)	µg/L	-	8.6	9.9	30	14
		VPH F Bands	Benzene (F0)	µg/L	0.5	<0.5	<0.5	200	0
			TRH C6-C10 minus BTEX (F1)	µg/L	50	<50	<50	200	0
SE266518.001	LB314756.025		TRH C6-C10	µg/L	50	<50	<50	200	0
			TRH C6-C9	µg/L	40	<40	<40	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	12.9	11.4	30	12
			d8-toluene (Surrogate)	µg/L	-	7.7	9.8	30	25
			Bromofluorobenzene (Surrogate)	µg/L	-	8.0	9.4	30	16
		VPH F Bands	Benzene (F0)	µg/L	0.5	<0.5	<0.5	200	0
			TRH C6-C10 minus BTEX (F1)	µg/L	50	<50	<50	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					N	Aethod: ME-(A	U)-[ENV]AN312
Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB314542.002	Mercury	mg/kg	0.05	0.21	0.2	80 - 120	105

OC Pesticides in So	oil					N	lethod: ME-(A	U)-[ENV]AN42
Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB314526.002		Delta BHC	mg/kg	0.1	0.2	0.2	60 - 140	97
		Heptachlor	mg/kg	0.1	0.2	0.2	60 - 140	93
		Aldrin	mg/kg	0.1	0.2	0.2	60 - 140	98
		Dieldrin	mg/kg	0.2	<0.2	0.2	60 - 140	96
		Endrin	mg/kg	0.2	0.2	0.2	60 - 140	106
		p,p'-DDT	mg/kg	0.1	0.2	0.2	60 - 140	106
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.16	0.15	40 - 130	105
P Pesticides in So	bil					N	lethod: ME-(A	U)-[ENV]AN4
Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB314526.002		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	1.8	2	60 - 140	91
		Diazinon (Dimpylate)	mg/kg	0.5	1.8	2	60 - 140	92
		Dichlorvos	mg/kg	0.5	1.4	2	60 - 140	71
		Ethion	mg/kg	0.2	1.5	2	60 - 140	76
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	98
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	105
AH (Polynuclear A	Aromatic Hydroca	arbons) in Soil				N	lethod: ME-(A	U)-[ENV]AN4
Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery 9
LB314526.002		Naphthalene	mg/kg	0.1	4.2	4	60 - 140	106
		Acenaphthylene	mg/kg	0.1	4.0	4	60 - 140	101
		Acenaphthene	mg/kg	0.1	4.4	4	60 - 140	110
		Phenanthrene	mg/kg	0.1	4.3	4	60 - 140	108
		Anthracene	mg/kg	0.1	4.7	4	60 - 140	118
		Fluoranthene	mg/kg	0.1	4.5	4	60 - 140	111
		Pyrene	mg/kg	0.1	4.6	4	60 - 140	115
								440
		Benzo(a)pyrene	mg/kg	0.1	4.5	4	60 - 140	112

	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	98
	d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	105
PCBs in Soil					N	Nethod: ME-(A	U)-[ENV]AN420
Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB314526.002	Arochlor 1260	mg/kg	0.2	0.5	0.4	60 - 140	115

#### Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Total Recoverable Elements i	n Soil/Waste Solids/Materials by ICPOES				Method:	ME-(AU)-[EN	/JAN040/AN320
Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB314539.002	Arsenic, As	mg/kg	1	350	318.22	80 - 120	109
	Cadmium, Cd	mg/kg	0.3	4.0	4.81	70 - 130	82
	Chromium, Cr	mg/kg	0.5	42	38.31	80 - 120	110
	Copper, Cu	mg/kg	0.5	310	290	80 - 120	109
	Nickel, Ni	mg/kg	0.5	200	187	80 - 120	107
	Lead, Pb	mg/kg	1	99	89.9	80 - 120	110
	Zinc, Zn	mg/kg	2	290	273	80 - 120	106
Trace Metals (Dissolved) in W	ater by ICPMS				I	Nethod: ME-(A	U)-[ENV]AN318
Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB314475.002	Arsenic	µg/L	1	19	20	80 - 120	95
	Cadmium	μg/L	0.1	20	20	80 - 120	100
	Chromium	μg/L	1	20	20	80 - 120	102
	Copper	μg/L	1	21	20	80 - 120	106
	Lead	μg/L	1	21	20	80 - 120	107
	Nickel	µg/L	1	21	20	80 - 120	103
	Zinc	μg/L	5	21	20	80 - 120	107



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.

Sample Number	erable Hydrocarboi	Parameter	Units	LOR	Result	Expected	Method: ME-(A Criteria %	· · ·
Sample Number LB314526.002		Parameter TRH C10-C14		20	36	Expected 40	60 - 140	Recovery 90
LB314520.002		TRH C15-C28	mg/kg mg/kg	45	<45	40	60 - 140	86
		TRH C13-C28	mg/kg	45	<45	40	60 - 140	76
	TRH F Bands	TRH >C10-C16		25	36	40	60 - 140	91
	TRH F Ballus	TRH >C10-C10 TRH >C10-C34 (F3)	mg/kg mg/kg	90	<90	40	60 - 140	79
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	81
			nigikg	120	\$120			
	erable Hydrocarbo						Method: ME-(A	
Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	
LB314744.002		TRH C10-C14	μg/L	50	1300	1200	60 - 140	108
		TRH C15-C28	μg/L	200	1400	1200	60 - 140	117
		TRH C29-C36	μg/L	200	1400	1200	60 - 140	114
	TRH F Bands	TRH >C10-C16	μg/L	60	1400	1200	60 - 140	116
		TRH >C16-C34 (F3)	μg/L	500	1400	1200	60 - 140	113
		TRH >C34-C40 (F4)	μg/L	500	720	600	60 - 140	119
'OC's in Soil							Method: ME-(A	U)-[ENV]Al
Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recover
LB314534.002	Monocyclic	Benzene	mg/kg	0.1	4.2	5	60 - 140	84
	Aromatic	Toluene	mg/kg	0.1	4.3	5	60 - 140	86
		Ethylbenzene	mg/kg	0.1	4.4	5	60 - 140	88
		m/p-xylene	mg/kg	0.2	8.9	10	60 - 140	89
		o-xylene	mg/kg	0.1	4.5	5	60 - 140	89
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.4	10	70 - 130	94
		d8-toluene (Surrogate)	mg/kg	-	9.2	10	70 - 130	92
		Bromofluorobenzene (Surrogate)	mg/kg	-	9.7	10	70 - 130	97
OCs in Water							Method: ME-(A	U)-[ENV]AI
Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recover
LB314756.002	Monocyclic	Benzene	μg/L	0.5	53	45.45	60 - 140	117
	Aromatic	Toluene	μg/L	0.5	54	45.45	60 - 140	119
		Ethylbenzene	μg/L	0.5	49	45.45	60 - 140	108
		m/p-xylene	μg/L	1	99	90.9	60 - 140	109
		o-xylene	μg/L	0.5	49	45.45	60 - 140	109
		o xjisho		0.0				105
	Surrogates	d4-1 2-dichloroethane (Surrogate)		-	10.5	10		
	Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	10.5	10	60 - 140 70 - 130	112
	Surrogates	d8-toluene (Surrogate)	μg/L μg/L		11.2	10	70 - 130	112
alatila Dataslavas		d8-toluene (Surrogate) Bromofluorobenzene (Surrogate)	µg/L	-		10 10	70 - 130 70 - 130	101
	Hydrocarbons in S	d8-toluene (Surrogate) Bromofluorobenzene (Surrogate)	μg/L μg/L μg/L	-	11.2 10.1	10 10	70 - 130 70 - 130 Method: ME-(A	101 <b>U)-[ENV]A</b>
Sample Number	Hydrocarbons in S	d8-toluene (Surrogate) Bromofluorobenzene (Surrogate) toll Parameter	μg/L μg/L μg/L Units	LOR	11.2 10.1 Result	10 10 Expected	70 - 130 70 - 130 Method: ME-(A Criteria %	101 U)-[ENV]A Recover
Sample Number	Hydrocarbons in S	d8-toluene (Surrogate) Bromofluorobenzene (Surrogate) toll Parameter TRH C6-C10	μg/L μg/L μg/L Units mg/kg	LOR 25	11.2 10.1 Result 64	10 10 Expected 92.5	70 - 130 70 - 130 Method: ME-(A Criteria % 60 - 140	101 <b>U)-[ENV]A</b> Recover 69
Sample Number	Hydrocarbons in S	d8-toluene (Surrogate) Bromofluorobenzene (Surrogate) toll Parameter TRH C6-C10 TRH C6-C9	μg/L μg/L μg/L Units mg/kg mg/kg	LOR 25 20	11.2 10.1 Result 64 56	10 10 Expected 92.5 80	70 - 130 70 - 130 Method: ME-(A <sup>1</sup> Criteria % 60 - 140 60 - 140	101 U)-[ENV]A Recover 69 70
Sample Number	Hydrocarbons in S	d8-toluene (Surrogate) Bromofluorobenzene (Surrogate) toll Parameter TRH C6-C10 TRH C6-C9 d4-1,2-dichloroethane (Surrogate)	μg/L μg/L μg/L Units mg/kg mg/kg mg/kg	LOR 25	11.2 10.1 <b>Result</b> 64 56 9.4	10 10 Expected 92.5 80 10	70 - 130 70 - 130 Method: ME-(A <sup>1</sup> Criteria % 60 - 140 60 - 140 70 - 130	101 <b>U)-[ENV]A</b> Recover 69 70 94
Sample Number	Hydrocarbons in S	d8-toluene (Surrogate) Bromofluorobenzene (Surrogate) ioil Parameter TRH C6-C10 TRH C6-C9 d4-1,2-dichloroethane (Surrogate) Bromofluorobenzene (Surrogate)	μg/L μg/L μg/L μg/L Units mg/kg mg/kg mg/kg mg/kg	LOR 25 20 -	11.2 10.1 <b>Result</b> 64 56 9.4 9.7	10 10 Expected 92.5 80 10 10	70 - 130 70 - 130 Method: ME-(A) Criteria % 60 - 140 60 - 140 70 - 130 70 - 130	101 <b>U)-[ENV]A</b> Recover 69 70 94 97
Sample Number	Hydrocarbons in S	d8-toluene (Surrogate) Bromofluorobenzene (Surrogate) toll Parameter TRH C6-C10 TRH C6-C9 d4-1,2-dichloroethane (Surrogate)	μg/L μg/L μg/L Units mg/kg mg/kg mg/kg	LOR 25 20	11.2 10.1 <b>Result</b> 64 56 9.4	10 10 Expected 92.5 80 10	70 - 130 70 - 130 Method: ME-(A <sup>1</sup> Criteria % 60 - 140 60 - 140 70 - 130	101 <b>U)-[ENV]A</b> Recover 69 70 94
Sample Number .B314534.002	Hydrocarbons in S	d8-toluene (Surrogate)         Bromofluorobenzene (Surrogate)         ioil         Parameter         TRH C6-C10         TRH C6-C9         d4-1,2-dichloroethane (Surrogate)         Bromofluorobenzene (Surrogate)         TRH C6-C10 minus BTEX (F1)	μg/L μg/L μg/L μg/L Units mg/kg mg/kg mg/kg mg/kg	LOR 25 20 -	11.2 10.1 <b>Result</b> 64 56 9.4 9.7	10 10 Expected 92.5 80 10 10 62.5	70 - 130 70 - 130 Method: ME-(A) Criteria % 60 - 140 60 - 140 70 - 130 70 - 130	101 U)-[ENV]A Recover 69 70 94 97 60
Sample Number LB314534.002 /olatile Petroleum	Hydrocarbons in S Surrogates VPH F Bands Hydrocarbons in V	d8-toluene (Surrogate)         Bromofluorobenzene (Surrogate)         ioil         Parameter         TRH C6-C10         TRH C6-C9         d4-1,2-dichloroethane (Surrogate)         Bromofluorobenzene (Surrogate)         TRH C6-C10 minus BTEX (F1)	μg/L μg/L μg/L μg/L Units mg/kg mg/kg mg/kg mg/kg	LOR 25 20 -	11.2 10.1 <b>Result</b> 64 56 9.4 9.7	10 10 Expected 92.5 80 10 10 62.5	70 - 130           70 - 130           Wethod: ME-(A)           Criteria %           60 - 140           60 - 140           70 - 130           70 - 130           60 - 140	101 U)-[ENV]A Recover 69 70 94 97 60 U)-[ENV]A
Sample Number LB314534.002	Hydrocarbons in S Surrogates VPH F Bands Hydrocarbons in V	d8-toluene (Surrogate)         Bromofluorobenzene (Surrogate)         ioil         Parameter         TRH C6-C10         TRH C6-C9         d4-1,2-dichloroethane (Surrogate)         Bromofluorobenzene (Surrogate)         TRH C6-C10 minus BTEX (F1)         Vater	μg/L μg/L μg/L Units mg/kg mg/kg mg/kg mg/kg mg/kg	- 25 20 - - 25	11.2 10.1 <b>Result</b> 64 56 9.4 9.7 38	10 10 Expected 92.5 80 10 10 10 62.5	70 - 130           70 - 130           Wethod: ME-(A)           Criteria %           60 - 140           60 - 140           70 - 130           70 - 130           60 - 140	101 U)-[ENV]A Recover 69 70 94 97 60 U)-[ENV]A
Sample Number LB314534.002 <sup>/</sup> olatile Petroleum Sample Number	Hydrocarbons in S Surrogates VPH F Bands Hydrocarbons in V	d8-toluene (Surrogate)         Bromofluorobenzene (Surrogate)         ioil         Parameter         TRH C6-C10         TRH C6-C9         d4-1,2-dichloroethane (Surrogate)         Bromofluorobenzene (Surrogate)         TRH C6-C10 minus BTEX (F1)         Vater         Parameter	μg/L μg/L μg/L	- 25 20 - 25 25 LOR	11.2 10.1 Result 64 56 9.4 9.7 38 Result	10 10 Expected 92.5 80 10 10 62.5 Expected	70 - 130           70 - 130           Wethod: ME-(A)           Criteria %           60 - 140           60 - 140           70 - 130           70 - 130           60 - 140           Kethod: ME-(A)           70 - 130           60 - 140           Criteria %           Kethod: ME-(A)           Criteria %	101 <b>Recover</b> 69 70 94 97 60 <b>U)-[ENV]A</b> <b>Recover</b>
Sample Number LB314534.002 <mark>'olatile Petroleum</mark> Sample Number	Hydrocarbons in S Surrogates VPH F Bands Hydrocarbons in V	d8-toluene (Surrogate) Bromofluorobenzene (Surrogate) toil Parameter TRH C6-C10 TRH C6-C9 d4-1,2-dichloroethane (Surrogate) Bromofluorobenzene (Surrogate) TRH C6-C10 minus BTEX (F1) Vater Parameter TRH C6-C10	μg/L μg/L μg/L <b>Units</b> mg/kg mg/kg mg/kg mg/kg <b>Units</b> μg/L	- 25 20 - 25 25 LOR 50	11.2 10.1 64 56 9.4 9.7 38 <b>Result</b> 930	10 10 Expected 92.5 80 10 10 62.5 Expected 946.63	70 - 130 70 - 130 Wethod: ME-(A) Criteria % 60 - 140 60 - 140 70 - 130 70 - 130 60 - 140 Wethod: ME-(A) Criteria % 60 - 140	101 <b>Recover</b> 69 70 94 97 60 <b>U)-[ENV]A</b> <b>Recover</b> 98
Sample Number LB314534.002 <sup>/</sup> olatile Petroleum Sample Number	Hydrocarbons in S Surrogates VPH F Bands Hydrocarbons in V	d8-toluene (Surrogate) Bromofluorobenzene (Surrogate) tiol Parameter TRH C6-C10 TRH C6-C9 d4-1,2-dichloroethane (Surrogate) Bromofluorobenzene (Surrogate) TRH C6-C10 minus BTEX (F1) Vater Parameter TRH C6-C10 TRH C6-C10 TRH C6-C9	μg/L μg/L μg/L	- 25 20 - 25 25 LOR 50 40	11.2 10.1 64 56 9.4 9.7 38 <b>Result</b> 930 820	10 10 Expected 92.5 80 10 10 62.5 Expected 946.63 818.71	70 - 130 70 - 130 Wethod: ME-(Al 60 - 140 60 - 140 70 - 130 70 - 130 60 - 140 Wethod: ME-(Al Criteria % 60 - 140 60 - 140	101 U)-[ENV]AI Recover 69 70 94 97 60 97 60 U)-[ENV]AI Recover 98 100
Sample Number .B314534.002 olatile Petroleum Sample Number	Hydrocarbons in S Surrogates VPH F Bands Hydrocarbons in V	d8-toluene (Surrogate) Bromofluorobenzene (Surrogate) ioil Parameter TRH C6-C10 TRH C6-C9 d4-1,2-dichloroethane (Surrogate) Bromofluorobenzene (Surrogate) TRH C6-C10 minus BTEX (F1) Vater Parameter TRH C6-C10 TRH C6-C9 d4-1,2-dichloroethane (Surrogate)	μg/L μg/L μg/L	- 25 20 - - 25 LOR 50 40 -	11.2 10.1 64 56 9.4 9.7 38 <b>Result</b> 930 820 10.5	10 10 Expected 92.5 80 10 10 62.5 Expected 946.63 818.71 10	70 - 130 70 - 130 Wethod: ME-(Al 60 - 140 60 - 140 70 - 130 70 - 130 60 - 140 Wethod: ME-(Al Criteria % 60 - 140 60 - 140 60 - 140	101 U)-[ENV]A Recover 69 70 94 97 60 U)-[ENV]A Recover 98 100 105



### **MATRIX SPIKES**

### SE266428 R0

Method: ME-(AU)-[ENV]AN312

Method: ME-(AU)-[ENV]AN420

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.

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Mercury (dissolved) in Water Method: ME-(AU)-[ENV]AN311(Perth)/AU							(Perth)/AN312	
QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE266428.014	LB314636.004	Mercury	mg/L	0.0001	0.0019	<0.0001	0.008	99

### Mercury in Soil

•							· · · · ·	· · ·
QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE266475.003	LB314542.004	Mercury	mg/kg	0.05	0.26	<0.05	0.2	119

#### **OC Pesticides in Soil**

							Mou	100. ML-(/10	A-free a bera
QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recover
SE266475.003	LB314526.004		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	96
			Heptachlor	mg/kg	0.1	0.2	<0.1	0.2	98
			Aldrin	mg/kg	0.1	0.2	<0.1	0.2	96
			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	0.1	<0.1	<0.2	0.2	86
			Endrin	mg/kg	0.2	0.2	<0.2	0.2	96
			Beta Endosulfan		0.2	<0.2	<0.2	-	
			o,p'-DDD*	mg/kg	0.2	<0.2	<0.2	-	-
				mg/kg					
			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	108
			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	-	0.16	0.17	-	110
Pesticides in	1 Soil						Met	hod: ME-(AL	)-[ENV]AN
C Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recove
E266475.003	LB314526.004		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	1.8	<0.2	2	90
			Diazinon (Dimpylate)	mg/kg	0.5	1.9	<0.5	2	93
			Dichlorvos	mg/kg	0.5	1.2	<0.5	2	62
			Dimethoate	mg/kg	0.5	<0.5	<0.5	-	
			Ethion	mg/kg	0.2	1.6	<0.2	2	81
			Fenitrothion		0.2	<0.2	<0.2	-	
			Malathion	mg/kg	0.2	<0.2	<0.2	-	
			Matathion	mg/kg	0.2	<0.2	<0.2	-	-
				mg/kg				-	-
			Parathion-ethyl (Parathion) Total OP Pesticides*	mg/kg	0.2	<0.2	<0.2	-	-
			LORI OF PESTICIOES"	mg/kg	1.7	6.5	<1.7	-	-
		Pume t		···· ·· ·· ·· ··		0 5	0.4		
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.4	-	95
				mg/kg mg/kg	-	0.5 0.5	0.5	-	101
H (Polynucles	ar Aromatic Hydrocarb		2-fluorobiphenyl (Surrogate)				0.5		101



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.

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QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery
SE266475.003	LB314526.004		Naphthalene	mg/kg	0.1	4.1	<0.1	4	102
			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	4.0	<0.1	4	99
			Acenaphthene	mg/kg	0.1	4.1	<0.1	4	104
			Fluorene	mg/kg	0.1	<0.1	<0.1	-	-
			Phenanthrene	mg/kg	0.1	4.1	<0.1	4	101
			Anthracene	mg/kg	0.1	4.4	<0.1	4	108
			Fluoranthene	mg/kg	0.1	4.3	<0.1	4	106
			Pyrene	mg/kg	0.1	4.3	0.1	4	104
			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	4.3	<0.1	4	107
			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*< td=""><td>TEQ (mg/kg)</td><td>0.2</td><td>4.3</td><td>&lt;0.2</td><td>-</td><td></td></lor=0*<>	TEQ (mg/kg)	0.2	4.3	<0.2	-	
			Carcinogenic PAHs, BaP TEQ <lor=lor 2*<="" td=""><td>TEQ (mg/kg)</td><td>0.2</td><td>4.4</td><td>&lt;0.2</td><td>-</td><td>-</td></lor=lor>	TEQ (mg/kg)	0.2	4.4	<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <lor=lor*< td=""><td>TEQ (mg/kg)</td><td>0.3</td><td>4.5</td><td>&lt;0.3</td><td>-</td><td>-</td></lor=lor*<>	TEQ (mg/kg)	0.3	4.5	<0.3	-	-
			Total PAH (18)	mg/kg	0.8	34	<0.8	-	
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.4	-	95
		eunogutoo	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.4	-	95
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	-	101
CBs in Soil			2 p. (0. p. (2 5 (0.0.)						J)-[ENV]AN4
	O I - Ni I		Demonster	11-24-		Dervik			
QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery
E266475.003	LB314526.004		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	0.5	<0.2	0.4	118
			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	-	110
tal Recoverab	le Elements in Soil/Wa	ste Solids/Mate	rials by ICPOES				Method: ME	-(AU)-[ENV	JAN040/AN3
QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recover
E266475.003	LB314539.004		Arsenic, As	mg/kg	1	53	6	50	95
			Cadmium, Cd	mg/kg	0.3	46	<0.3	50	91
			Chromium, Cr	mg/kg	0.5	58	13	50	91
			Copper, Cu	mg/kg	0.5	56	8.9	50	94
			Nickel, Ni	mg/kg	0.5	50	4.0	50	92
			Lood Dh	mg/kg	1	61	15	50	91
			Lead, Pb						
			Zinc, Zn	mg/kg	2	70	30	50	80
ace Metals (Di	ssolved) in Water by I	CPMS			2	70			
<mark>ace Metals (Di</mark> QC Sample	ssolved) in Water by IG Sample Number	CPMS			2 LOR	70 Result		50 <b>nod: ME-(AL</b> Spike	

### TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-	(AU)-	[ENV]	AN403
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QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE266475.003	LB314526.004	TRH C10-C14	mg/kg	20	54	<20	40	125
		TRH C15-C28	mg/kg	45	56	<45	40	119
		TRH C29-C36	mg/kg	45	<45	<45	40	94
		TRH C37-C40	mg/kg	100	<100	<100	-	-



### **MATRIX SPIKES**

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OC Samula	Somple Number		Baramatar	Units	LOP	Docult	Original	Spiles	Dooor
QC Sample	Sample Number		Parameter		LOR	Result	Original	Spike	Recove
SE266475.003	LB314526.004		TRH C10-C36 Total	mg/kg	110	110	<110	-	-
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	-	-
		TRH F	TRH >C10-C16	mg/kg	25	56	<25	40	128
		Bands	TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	56	<25	-	-
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	40	100
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	-	-
OC's in Soil							Me	thod: ME-(AU	)-[ENV]A
C Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recov
E266475.003	LB314534.004	Monocyclic	Benzene	mg/kg	0.1	4.5	<0.1	5	89
		Aromatic	Toluene	mg/kg	0.1	4.6	<0.1	5	92
			Ethylbenzene	mg/kg	0.1	4.7	<0.1	5	94
			m/p-xylene	mg/kg	0.2	9.7	<0.2	10	96
			o-xylene	mg/kg	0.1	4.9	<0.1	5	98
		Polycyclic	Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	_	8.3	7.5	10	83
			d8-toluene (Surrogate)	mg/kg	_	8.0	7.1	10	80
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.0	7.9	10	90
		Totals	Total BTEX*	mg/kg	0.6	28	<0.6	-	-
		Totals	Total Xylenes*	mg/kg	0.3	15	<0.3	-	
				iiig/kg	0.5	15			-
OCs in Water								thod: ME-(AU	-
C Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%	ó
E266401.001	LB314756.023	Monocyclic	Benzene	µg/L	0.5	0	45.45	110	_
		Aromatic	Toluene	μg/L	0.5	0	45.45	104	_
			Ethylbenzene	μg/L	0.5	0.00314819241	45.45	110	
			m/p-xylene	μg/L	1	0.01044067269	90.9	113	
			o-xylene	μg/L	0.5	0.00358202461	45.45	113	
		Polycyclic	Naphthalene (VOC)*	μg/L	0.5	0.12768179646	-	-	
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	11.8903090157§	-	88	
			d8-toluene (Surrogate)	µg/L	-	10.34179522713	-	87	
			Bromofluorobenzene (Surrogate)	µg/L	-	8.84816025023	-	103	
		Totals	Total BTEX	µg/L	3	0	-	-	
latile Petroleu	m Hydrocarbons in S	oil					Me	thod: ME-(AU	
	-		Demonster	1114-	100	Desult			
QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recov
E266475.003	LB314534.005		TRH C6-C10	mg/kg	25	67	<25	92.5	72
			TRH C6-C9	mg/kg	20	59	<20	80	73
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.3	7.5	10	83
			d8-toluene (Surrogate)	mg/kg	-	8.0	7.1	10	80
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.0	7.9	-	90
		VPH F	Benzene (F0)	mg/kg	0.1	4.5	<0.1	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	39	<25	62.5	61
latile Petroleu	m Hydrocarbons in W	/ater					Me	thod: ME-(AU	)-[ENV]/
C Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%	/ 0
E266401.001	LB314756.023		TRH C6-C10	μg/L	50	0.03261141467	946.63	91	
	20014/00.020		TRH C6-C9		40	0.03444886689	818.71	92	-
		Surreastas		µg/L					-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	11.89030901579	-	88	-
			d8-toluene (Surrogate)	μg/L	-	10.34179522713	-	87	-
			Bromofluorobenzene (Surrogate)	μg/L	-	8.84816025023	-	103	-
		VPH F	Benzene (F0)	μg/L	0.5	0	-	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	µg/L	50	0.03261141467	639.67	88	1



Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 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 x 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 identifer when outside suggested criteria. Refer to the footnotes section at the

QC Sample Sample Number Parameter

Units LOR



#### 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: <a href="https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf">https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf</a>

- \* 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.
- 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.
- <sup>(7)</sup> LOR was raised due to dilution of significantly high concentration of analyte in sample.
- Image: Image:
- Recovery failed acceptance criteria due to sample heterogeneity.
- <sup>®</sup> LOR was raised due to high conductivity of the sample (required dilution).
- t Refer to relevant report comments for further information.

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# STATEMENT OF QA/QC PERFORMANCE

CLIENT DETAILS		LABORATORY DETAI	LS
Contact Client Address	Sean Nolan EI AUSTRALIA SUITE 6.01 55 MILLER STREET PYRMONT NSW 2009	Manager Laboratory Address	Shane McDermott SGS Alexandria Environmental Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	61 2 95160722	Telephone	+61 2 8594 0400
Facsimile	(Not specified)	Facsimile	+61 2 8594 0499
Email	sean.nolan@eiaustralia.com.au	Email	au.environmental.sydney@sgs.com
Project	E26160 1 Veno St, Heathcote-Additional	SGS Reference	<b>SE266428A R0</b>
Order Number	E26160	Date Received	18 Jun 2024
Samples	16	Date Reported	20 Jun 2024

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 counts by matrix	2 Soil	Type of documentation received	Email	
Date documentation received	18/6/2024@1:29pm	Samples received in good order	Yes	
Samples received without headspace	Yes	Sample temperature upon receipt	15.5°C	
Sample container provider	SGS	Turnaround time requested	Two Days	
Samples received in correct containers	Yes	Sufficient sample for analysis	Yes	
Sample cooling method	Ice Bricks	Samples clearly labelled	Yes	
Complete documentation received	Yes			

SGS Australia Pty Ltd ABN 44 000 964 278

SAMPLE SUMMARY

Environment, Health and Safety Unit 16 33 Maddox St PO Box 6432 Bourke Rd Alexandria NSW 2015 Alexandria NSW 2015 t +61 2 8594 0400 f +61 2 8594 0499

Australia

Australia

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www.sgs.com.au



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

Metals in TCLP Extract 1	y ICPOES						Method:	ME-(AU)-[ENV]AN3
Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH12_0.1-0.2	SE266428A.003	LB315499	06 Jun 2024	18 Jun 2024	03 Dec 2024	20 Jun 2024	03 Dec 2024	20 Jun 2024
BH14_0.1-0.2	SE266428A.006	LB315499	06 Jun 2024	18 Jun 2024	03 Dec 2024	20 Jun 2024	03 Dec 2024	20 Jun 2024
CLP (Toyleity Character	istic Leaching Procedure) fo	r Metals				Method:	ME-(AU)-[ENV]AN(	
CLF (TOXICILY CHaracter	iono couorning i roooduro) io							( ( ) [
	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
Sample Name BH12_0.1-0.2	- ·		Sampled 06 Jun 2024	Received 18 Jun 2024	Extraction Due 03 Dec 2024	Extracted 19 Jun 2024	Analysis Due 23 Jun 2024	



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 identifer 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.



### SE266428A 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.

Metals in TCLP Extract by ICPOES	Metals in TCLP Extract by ICPOES				
Sample Number	Parameter	Units	LOR	Result	
LB315499.001	Nickel, Ni	mg/L	0.005	<0.005	



### **DUPLICATES**

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 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 x 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

No duplicates were required for this job.



# LABORATORY CONTROL SAMPLES

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.

Metals in TCLP Extract by ICPOE	ES				N	Method: ME-(A	U)-[ENV]AN320
Sample Number	Parameter	Uni	s LOR	Result	Expected	Criteria %	Recovery %
LB315499.002	Nickel, Ni	mg/L	0.005	0.51	0.5	80 - 120	101



### **MATRIX SPIKES**

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 identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spikes were required for this job.



Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 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 x 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 identifer when outside suggested criteria. Refer to the footnotes section at the

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: <a href="https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf">https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf</a>

- \* 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.
- 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.
- <sup>(7)</sup> LOR was raised due to dilution of significantly high concentration of analyte in sample.
- Image: Image:
- Recovery failed acceptance criteria due to sample heterogeneity.
- <sup>®</sup> LOR was raised due to high conductivity of the sample (required dilution).
- t Refer to relevant report comments for further information.

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# STATEMENT OF QA/QC PERFORMANCE

CLIENT DETAILS		LABORATORY DETAILS	
Contact Client Address	Sean Nolan EI AUSTRALIA SUITE 6.01 55 MILLER STREET PYRMONT NSW 2009	Manager Laboratory Address	Shane McDermott SGS Alexandria Environmental Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	61 2 95160722	Telephone	+61 2 8594 0400
Facsimile	(Not specified)	Facsimile	+61 2 8594 0499
Email	sean.nolan@eiaustralia.com.au	Email	au.environmental.sydney@sgs.com
Project	E26160 1 Veno St Heathcote	SGS Reference	<b>SE266429 R0</b>
Order Number	E26160	Date Received	07 Jun 2024
Samples	3	Date Reported	17 Jun 2024

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

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

1 item

Sample counts by matrix	3 Soil	Type of documentation received	COC	
Date documentation received	7/6/2024	Samples received in good order	Yes	
Samples received without headspace	Yes	Sample temperature upon receipt	15.5°C	
Sample container provider	SGS	Turnaround time requested	Standard	
Samples received in correct containers	Yes	Sufficient sample for analysis	Yes	
Sample cooling method Ice Bricks		Samples clearly labelled Yes		
Complete documentation received	Yes			
•				

SGS Australia Pty Ltd ABN 44 000 964 278

SAMPLE SUMMARY

Environment, Health and Safety

Unit 16 33 Maddox St PO Box 6432 Bourke Rd Alexandria NSW 2015 Alexandria NSW 2015

t +61 2 8594 0400 Australia Australia

www.sgs.com.au f +61 2 8594 0499



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

							Method: ME-(AU)	-[ENV]AS4964/AN6
Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH7M_DL1_0.1-0.2	SE266429.001	LB314834	06 Jun 2024	07 Jun 2024	06 Jun 2025	13 Jun 2024	06 Jun 2025	17 Jun 2024
BH7M_DL2_0.2-0.3	SE266429.002	LB314834	06 Jun 2024	07 Jun 2024	06 Jun 2025	13 Jun 2024	06 Jun 2025	17 Jun 2024
BH7M_DL3_0.1-0.2	SE266429.003	LB314834	06 Jun 2024	07 Jun 2024	06 Jun 2025	13 Jun 2024	06 Jun 2025	17 Jun 2024
fercury in Soil							Method: I	ME-(AU)-[ENV]AN3
Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH7M_DL1_0.1-0.2	SE266429.001	LB314567	06 Jun 2024	07 Jun 2024	04 Jul 2024	11 Jun 2024	04 Jul 2024	13 Jun 2024
BH7M_DL2_0.2-0.3	SE266429.002	LB314567	06 Jun 2024	07 Jun 2024	04 Jul 2024	11 Jun 2024	04 Jul 2024	13 Jun 2024
BH7M_DL3_0.1-0.2	SE266429.003	LB314567	06 Jun 2024	07 Jun 2024	04 Jul 2024	11 Jun 2024	04 Jul 2024	13 Jun 2024
Noisture Content							Method: I	ME-(AU)-[ENV]AN0
Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH7M_DL1_0.1-0.2	SE266429.001	LB314565	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	16 Jun 2024	12 Jun 2024
BH7M_DL2_0.2-0.3	SE266429.002	LB314565	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	16 Jun 2024	12 Jun 2024
BH7M_DL3_0.1-0.2	SE266429.003	LB314565	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	16 Jun 2024	12 Jun 2024
OC Pesticides in Soil							Method: I	ME-(AU)-[ENV]AN4
Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH7M_DL1_0.1-0.2	SE266429.001	LB314511	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	21 Jul 2024	13 Jun 2024
BH7M_DL2_0.2-0.3	SE266429.002	LB314511	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	21 Jul 2024	13 Jun 2024
BH7M_DL3_0.1-0.2	SE266429.003	LB314511	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	21 Jul 2024	13 Jun 2024
P Pesticides in Soil							Method: I	ME-(AU)-[ENV]AN4
Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH7M_DL1_0.1-0.2	SE266429.001	LB314511	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	21 Jul 2024	13 Jun 2024
BH7M DL2 0.2-0.3	SE266429.002	LB314511	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	21 Jul 2024	13 Jun 2024
BH7M DL3 0.1-0.2	SE266429.003	LB314511	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	21 Jul 2024	13 Jun 2024
AH (Polynuclear Aromatic	Hvdrocarbons) in Soil						Method:	ME-(AU)-[ENV]AN4
Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH7M DL1 0.1-0.2	SE266429.001	LB314511	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	21 Jul 2024	13 Jun 2024
BH7M_DL2_0.2-0.3	SE266429.002	LB314511	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	21 Jul 2024	13 Jun 2024
BH7M_DL3_0.1-0.2	SE266429.003	LB314511	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	21 Jul 2024	13 Jun 2024
CBs in Soil							Method: I	ME-(AU)-[ENV]AN4
Sample Name		QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
	Sample No.		Jailipieu				Analysis Due	
BH7M_DL1_0.1-0.2	Sample No. SE266429.001	LB314511	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	Analysis Due 21 Jul 2024	13 Jun 2024
BH7M_DL2_0.2-0.3	SE266429.001	LB314511	06 Jun 2024	07 Jun 2024	20 Jun 2024	11 Jun 2024	21 Jul 2024	13 Jun 2024
BH7M_DL2_0.2-0.3 BH7M_DL3_0.1-0.2	SE266429.001 SE266429.002 SE266429.003	LB314511 LB314511 LB314511	06 Jun 2024 06 Jun 2024	07 Jun 2024 07 Jun 2024	20 Jun 2024 20 Jun 2024	11 Jun 2024 11 Jun 2024	21 Jul 2024 21 Jul 2024 21 Jul 2024 21 Jul 2024	13 Jun 2024 13 Jun 2024 13 Jun 2024
BH7M_DL2_0.2-0.3 BH7M_DL3_0.1-0.2 otal Recoverable Element:	SE266429.001 SE266429.002 SE266429.003 s in Soil/Waste Solids/Ma	LB314511 LB314511 LB314511 LB314511 terials by ICPOES	06 Jun 2024 06 Jun 2024 06 Jun 2024	07 Jun 2024 07 Jun 2024 07 Jun 2024	20 Jun 2024 20 Jun 2024 20 Jun 2024	11 Jun 2024 11 Jun 2024	21 Jul 2024 21 Jul 2024 21 Jul 2024 21 Jul 2024 Method: ME-(AU	13 Jun 2024 13 Jun 2024 13 Jun 2024 <b>)-[ENV]AN040/AN</b>
BH7M_DL2_0.2-0.3 BH7M_DL3_0.1-0.2 iotal Recoverable Element: Sample Name	SE266429.001 SE266429.002 SE266429.003	LB314511 LB314511 LB314511	06 Jun 2024 06 Jun 2024	07 Jun 2024 07 Jun 2024	20 Jun 2024 20 Jun 2024	11 Jun 2024 11 Jun 2024 11 Jun 2024	21 Jul 2024 21 Jul 2024 21 Jul 2024 21 Jul 2024	13 Jun 2024 13 Jun 2024 13 Jun 2024
BH7M_DL2_0.2-0.3 BH7M_DL3_0.1-0.2 iotal Recoverable Element Sample Name BH7M_DL1_0.1-0.2	SE266429.001 SE266429.002 SE266429.003 s in Soil/Waste Solids/Ma Sample No.	LB314511 LB314511 LB314511 terials by ICPOES QC Ref	06 Jun 2024 06 Jun 2024 06 Jun 2024 Sampled	07 Jun 2024 07 Jun 2024 07 Jun 2024 Received	20 Jun 2024 20 Jun 2024 20 Jun 2024 Extraction Due	11 Jun 2024 11 Jun 2024 11 Jun 2024 Extracted	21 Jul 2024 21 Jul 2024 21 Jul 2024 21 Jul 2024 Method: ME-(AU Analysis Due	13 Jun 2024 13 Jun 2024 13 Jun 2024 )-[ENV]AN040/AN Analysed
BH7M_DL2_0.2-0.3 BH7M_DL3_0.1-0.2 iotal Recoverable Elements Sample Name BH7M_DL1_0.1-0.2 BH7M_DL2_0.2-0.3	SE266429.001 SE266429.002 SE266429.003 s in Soil/Waste Solids/Mat Sample No. SE266429.001	LB314511 LB314511 LB314511 terials by ICPOES QC Ref LB314566	06 Jun 2024 06 Jun 2024 06 Jun 2024 Sampled 06 Jun 2024	07 Jun 2024 07 Jun 2024 07 Jun 2024 07 Jun 2024 Received 07 Jun 2024	20 Jun 2024 20 Jun 2024 20 Jun 2024 Extraction Due 03 Dec 2024	11 Jun 2024 11 Jun 2024 11 Jun 2024 <b>Extracted</b> 11 Jun 2024	21 Jul 2024 21 Jul 2024 21 Jul 2024 Method: ME-(AU Analysis Due 03 Dec 2024	13 Jun 2024 13 Jun 2024 13 Jun 2024 )-[ENV]AN040/AN: Analysed 12 Jun 2024
BH7M_DL2_0.2-0.3 BH7M_DL3_0.1-0.2 <b>iotal Recoverable Element:</b> Sample Name BH7M_DL1_0.1-0.2 BH7M_DL2_0.2-0.3 BH7M_DL3_0.1-0.2	SE266429.001 SE266429.002 SE266429.003 s in Soil/Waste Solids/Mat Sample No. SE266429.001 SE266429.002 SE266429.003	LB314511 LB314511 LB314511 terials by ICPOES QC Ref LB314566 LB314566	06 Jun 2024 06 Jun 2024 06 Jun 2024 <b>Sampled</b> 06 Jun 2024 06 Jun 2024 06 Jun 2024	07 Jun 2024 07 Jun 2024 07 Jun 2024 07 Jun 2024 07 Jun 2024 07 Jun 2024 07 Jun 2024	20 Jun 2024 20 Jun 2024 20 Jun 2024 Extraction Due 03 Dec 2024 03 Dec 2024	11 Jun 2024 11 Jun 2024 11 Jun 2024 <b>Extracted</b> 11 Jun 2024 11 Jun 2024 11 Jun 2024	21 Jul 2024 21 Jul 2024 21 Jul 2024 Method: ME-(AU Analysis Due 03 Dec 2024 03 Dec 2024 03 Dec 2024	13 Jun 2024 13 Jun 2024 13 Jun 2024 )-JENVJAN040/AN Analysed 12 Jun 2024 12 Jun 2024 12 Jun 2024
BH7M_DL2_0.2-0.3 BH7M_DL3_0.1-0.2 <b>otal Recoverable Element</b> Sample Name BH7M_DL1_0.1-0.2 BH7M_DL2_0.2-0.3 BH7M_DL3_0.1-0.2 <b>RH (Total Recoverable Hy</b>	SE266429.001 SE266429.002 SE266429.003 s in Soil/Waste Solids/Mat Sample No. SE266429.001 SE266429.002 SE266429.003	LB314511 LB314511 LB314511 terials by ICPOES QC Ref LB314566 LB314566	06 Jun 2024 06 Jun 2024 06 Jun 2024 <b>Sampled</b> 06 Jun 2024 06 Jun 2024 06 Jun 2024	07 Jun 2024 07 Jun 2024 07 Jun 2024 07 Jun 2024 07 Jun 2024 07 Jun 2024 07 Jun 2024	20 Jun 2024 20 Jun 2024 20 Jun 2024 Extraction Due 03 Dec 2024 03 Dec 2024	11 Jun 2024 11 Jun 2024 11 Jun 2024 <b>Extracted</b> 11 Jun 2024 11 Jun 2024 11 Jun 2024	21 Jul 2024 21 Jul 2024 21 Jul 2024 Method: ME-(AU Analysis Due 03 Dec 2024 03 Dec 2024 03 Dec 2024 03 Dec 2024 Method: I	13 Jun 2024 13 Jun 2024 13 Jun 2024 )-JENVJAN040/AN Analysed 12 Jun 2024 12 Jun 2024 12 Jun 2024 12 Jun 2024 ME-(AU)-[ENVJAN
BH7M_DL2_0.2-0.3 BH7M_DL3_0.1-0.2 <b>otal Recoverable Element</b> BH7M_DL1_0.1-0.2 BH7M_DL2_0.2-0.3 BH7M_DL3_0.1-0.2 <b>RH (Total Recoverable Hy</b> Sample Name	SE266429.001 SE266429.002 SE266429.003 s in Soil/Waste Solids/Mar Sample No. SE266429.001 SE266429.002 SE266429.003 drocarbons) in Soll	LB314511 LB314511 LB314511 terials by ICPOES QC Ref LB314566 LB314566 LB314566	06 Jun 2024 06 Jun 2024 06 Jun 2024 <b>Sampled</b> 06 Jun 2024 06 Jun 2024 06 Jun 2024	07 Jun 2024 07 Jun 2024 07 Jun 2024 77 Jun 2024 07 Jun 2024 07 Jun 2024 07 Jun 2024	20 Jun 2024 20 Jun 2024 20 Jun 2024 <b>Extraction Due</b> 03 Dec 2024 03 Dec 2024 03 Dec 2024	11 Jun 2024 11 Jun 2024 11 Jun 2024 <b>Extracted</b> 11 Jun 2024 11 Jun 2024 11 Jun 2024 11 Jun 2024	21 Jul 2024 21 Jul 2024 21 Jul 2024 Method: ME-(AU Analysis Due 03 Dec 2024 03 Dec 2024 03 Dec 2024	13 Jun 2024 13 Jun 2024 13 Jun 2024 )-[ENV]AN040/AN: Analysed 12 Jun 2024 12 Jun 2024 12 Jun 2024
BH7M_DL2_0.2-0.3           BH7M_DL3_0.1-0.2 <b>'otal Recoverable Element:</b> Sample Name           BH7M_DL1_0.1-0.2           BH7M_DL3_0.1-0.2           RH (Total Recoverable Hy           Sample Name           BH7M_DL3_0.1-0.2           RH (Total Recoverable Hy           Sample Name           BH7M_DL1_0.1-0.2	SE266429.001 SE266429.002 SE266429.003 s in Soll/Waste Solids/Mar Sample No. SE266429.001 SE266429.002 SE266429.003 drocarbons) in Soll Sample No.	LB314511 LB314511 LB314511 terials by ICPOES QC Ref LB314566 LB314566 LB314566 LB314566	06 Jun 2024 06 Jun 2024 Sampled	07 Jun 2024 07 Jun 2024 07 Jun 2024 77 Jun 2024 07 Jun 2024 07 Jun 2024 07 Jun 2024 07 Jun 2024 07 Jun 2024	20 Jun 2024 20 Jun 2024 20 Jun 2024 <b>Extraction Due</b> 03 Dec 2024 03 Dec 2024 03 Dec 2024 03 Dec 2024	11 Jun 2024 11 Jun 2024 11 Jun 2024 Extracted 11 Jun 2024 11 Jun 2024 11 Jun 2024 11 Jun 2024 Extracted	21 Jul 2024 21 Jul 2024 21 Jul 2024 Method: ME-(AU Analysis Due 03 Dec 2024 03 Dec 2024 03 Dec 2024 03 Dec 2024 Method: I Analysis Due	13 Jun 2024 13 Jun 2024 13 Jun 2024 )-[ENV]AN040/AN3 Analysed 12 Jun 2024 12 Jun 2024 12 Jun 2024 12 Jun 2024 ME-(AU)-[ENV]AN- Analysed
BH7M_DL1_0.1-0.2 BH7M_DL2_0.2-0.3 BH7M_DL3_0.1-0.2 <b>*otal Recoverable Elements</b> BH7M_DL1_0.1-0.2 BH7M_DL2_0.2-0.3 BH7M_DL3_0.1-0.2 <b>*RH (Total Recoverable Hy</b> Sample Name BH7M_DL1_0.1-0.2 BH7M_DL2_0.2-0.3 BH7M_DL3_0.1-0.2	SE266429.001 SE266429.002 SE266429.003 s in Soil/Waste Solids/Mar Sample No. SE266429.001 SE266429.003 drocarbons) in Soll Sample No. SE266429.001	LB314511 LB314511 LB314511 terials by ICPOES QC Ref LB314566 LB314566 LB314566 QC Ref LB314511	06 Jun 2024 06 Jun 2024 Sampled 06 Jun 2024	07 Jun 2024 07 Jun 2024 07 Jun 2024 77 Jun 2024 07 Jun 2024 07 Jun 2024 07 Jun 2024 07 Jun 2024 Received 07 Jun 2024	20 Jun 2024 20 Jun 2024 20 Jun 2024 <b>Extraction Due</b> 03 Dec 2024 03 Dec 2024 03 Dec 2024 03 Dec 2024 <b>Extraction Due</b> 20 Jun 2024	11 Jun 2024 11 Jun 2024 11 Jun 2024 Extracted 11 Jun 2024 11 Jun 2024 11 Jun 2024 11 Jun 2024 Extracted 11 Jun 2024	21 Jul 2024 21 Jul 2024 21 Jul 2024 Method: ME-(AU Analysis Due 03 Dec 2024 03 Dec 2024 03 Dec 2024 03 Dec 2024 Method: I Analysis Due 21 Jul 2024	13 Jun 2024 13 Jun 2024 13 Jun 2024 13 Jun 2024 <b>)-[ENV]AN040/AN3</b> <b>Analysed</b> 12 Jun 2024 12 Jun 2024 12 Jun 2024 <b>ME-(AU)-[ENV]AN/</b> <b>Analysed</b> 17 Jun 2024
BH7M_DL2_0.2-0.3           BH7M_DL3_0.1-0.2           otal Recoverable Elements           Sample Name           BH7M_DL1_0.1-0.2           BH7M_DL3_0.1-0.2           RH (Total Recoverable Hy Sample Name           BH7M_DL1_0.1-0.2           BH7M_DL1_0.1-0.2           BH7M_DL2_0.2-0.3           BH7M_DL2_0.2-0.3           BH7M_DL3_0.1-0.2	SE266429.001 SE266429.002 SE266429.003 s in Soil/Waste Solids/Mar Sample No. SE266429.001 SE266429.003 drocarbons) in Soll Sample No. SE266429.001 SE266429.002	LB314511 LB314511 LB314511 terials by ICPOES QC Ref LB314566 LB314566 LB314566 QC Ref LB314511 LB314511	06 Jun 2024 06 Jun 2024	07 Jun 2024 07 Jun 2024 07 Jun 2024 <b>Received</b> 07 Jun 2024 07 Jun 2024 07 Jun 2024 07 Jun 2024 07 Jun 2024 07 Jun 2024 07 Jun 2024	20 Jun 2024 20 Jun 2024 20 Jun 2024 <b>Extraction Due</b> 03 Dec 2024 03 Dec 2024 03 Dec 2024 03 Dec 2024 20 Jun 2024 20 Jun 2024	11 Jun 2024 11 Jun 2024 11 Jun 2024 Extracted 11 Jun 2024 11 Jun 2024 11 Jun 2024 11 Jun 2024 Extracted 11 Jun 2024 11 Jun 2024 11 Jun 2024	21 Jul 2024 21 Jul 2024 21 Jul 2024 Method: ME-(AU Analysis Due 03 Dec 2024 03 Dec 2024 03 Dec 2024 03 Dec 2024 Method: I Analysis Due 21 Jul 2024 21 Jul 2024	13 Jun 2024 13 Jun 2024 13 Jun 2024 <b>)-[ENV]AN040/AN</b> <b>Analysed</b> 12 Jun 2024 12 Jun 2024 12 Jun 2024 12 Jun 2024 <b>ME-(AU)-[ENV]AN</b> <b>Analysed</b> 17 Jun 2024 17 Jun 2024 17 Jun 2024
BH7M_DL2_0.2-0.3           BH7M_DL3_0.1-0.2           otal Recoverable Elements           Sample Name           BH7M_DL1_0.1-0.2           BH7M_DL3_0.1-0.2           RH (Total Recoverable Hy           Sample Name           BH7M_DL3_0.1-0.2           BH7M_DL3_0.1-0.2           BH7M_DL3_0.1-0.2           BH7M_DL1_0.1-0.2           BH7M_DL3_0.1-0.2           Why DL3_0.1-0.2           VOC's in Soil	SE266429.001 SE266429.002 SE266429.003 s in Soil/Waste Solids/Mar Sample No. SE266429.001 SE266429.003 drocarbons) in Soll Sample No. SE266429.001 SE266429.002	LB314511 LB314511 LB314511 terials by ICPOES QC Ref LB314566 LB314566 LB314566 QC Ref LB314511 LB314511	06 Jun 2024 06 Jun 2024	07 Jun 2024 07 Jun 2024 07 Jun 2024 <b>Received</b> 07 Jun 2024 07 Jun 2024 07 Jun 2024 07 Jun 2024 07 Jun 2024 07 Jun 2024 07 Jun 2024	20 Jun 2024 20 Jun 2024 20 Jun 2024 <b>Extraction Due</b> 03 Dec 2024 03 Dec 2024 03 Dec 2024 03 Dec 2024 20 Jun 2024 20 Jun 2024	11 Jun 2024 11 Jun 2024 11 Jun 2024 Extracted 11 Jun 2024 11 Jun 2024 11 Jun 2024 11 Jun 2024 Extracted 11 Jun 2024 11 Jun 2024 11 Jun 2024	21 Jul 2024 21 Jul 2024 21 Jul 2024 Method: ME-(AU Analysis Due 03 Dec 2024 03 Dec 2024 03 Dec 2024 03 Dec 2024 Method: I Analysis Due 21 Jul 2024 21 Jul 2024	13 Jun 2024 13 Jun 2024 13 Jun 2024 <b>)-[ENV]AN040/AN</b> <b>Analysed</b> 12 Jun 2024 12 Jun 2024 12 Jun 2024 12 Jun 2024 <b>ME-(AU)-[ENV]AN</b> <b>Analysed</b> 17 Jun 2024 17 Jun 2024 17 Jun 2024
BH7M_DL2_0.2-0.3           BH7M_DL3_0.1-0.2           iotal Recoverable Elements           Sample Name           BH7M_DL1_0.1-0.2           BH7M_DL3_0.1-0.2           'RH (Total Recoverable Hy Sample Name           BH7M_DL1_0.1-0.2           BH7M_DL2_0.2-0.3           BH7M_DL1_0.1-0.2           BH7M_DL2_0.2-0.3           BH7M_DL3_0.1-0.2           'OC's in Soll           Sample Name	SE266429.001 SE266429.002 SE266429.003 s in Soll/Waste Solids/Mar Sample No. SE266429.001 SE266429.003 drocarbons) in Soll Sample No. SE266429.001 SE266429.001 SE266429.002 SE266429.003	LB314511 LB314511 LB314511 terials by ICPOES QC Ref LB314566 LB314566 LB314566 LB314566 LB314511 LB314511 LB314511	06 Jun 2024 06 Jun 2024	07 Jun 2024 07 Jun 2024	20 Jun 2024 20 Jun 2024 20 Jun 2024 <b>Extraction Due</b> 03 Dec 2024 03 Dec 2024 03 Dec 2024 03 Dec 2024 20 Jun 2024 20 Jun 2024 20 Jun 2024	11 Jun 2024 11 Jun 2024 11 Jun 2024 Extracted 11 Jun 2024 11 Jun 2024	21 Jul 2024 21 Jul 2024 21 Jul 2024 Method: ME-(AU 03 Dec 2024 03 Dec 2024 03 Dec 2024 03 Dec 2024 03 Dec 2024 21 Jul 2024 21 Jul 2024 21 Jul 2024 21 Jul 2024 21 Jul 2024	13 Jun 2024 13 Jun 2024 13 Jun 2024 <b>)-[ENV]AN040/AN:</b> <b>Analysed</b> 12 Jun 2024 12 Jun 2024 12 Jun 2024 <b>ME-(AU)-[ENV]AN</b> <b>Analysed</b> 17 Jun 2024 17 Jun 2024 17 Jun 2024 <b>ME-(AU)-[ENV]AN</b>
BH7M_DL2_0.2-0.3 BH7M_DL3_0.1-0.2 otal Recoverable Elements Sample Name BH7M_DL1_0.1-0.2 BH7M_DL2_0.2-0.3 BH7M_DL3_0.1-0.2 <b>RH (Total Recoverable Hy</b> Sample Name BH7M_DL1_0.1-0.2 BH7M_DL3_0.1-0.2 VOC's in Soll Sample Name BH7M_DL1_0.1-0.2	SE266429.001 SE266429.002 SE266429.003 s in Soll/Waste Solids/Mar Sample No. SE266429.001 SE266429.003 drocarbons) in Soll Sample No. SE266429.001 SE266429.001 SE266429.003 SE266429.003	LB314511 LB314511 terials by ICPOES QC Ref LB314566 LB314566 LB314566 LB314566 LB314511 LB314511 LB314511 LB314511	06 Jun 2024 06 Jun 2024	07 Jun 2024 07 Jun 2024	20 Jun 2024 20 Jun 2024 20 Jun 2024 Extraction Due 03 Dec 2024 03 Dec 2024 03 Dec 2024 03 Dec 2024 20 Jun 2024 20 Jun 2024 20 Jun 2024 20 Jun 2024	11 Jun 2024 11 Jun 2024 11 Jun 2024 Extracted 11 Jun 2024 11 Jun 2024	21 Jul 2024 21 Jul 2024 21 Jul 2024 Method: ME-(AU 03 Dec 2024 03 Dec 2024 03 Dec 2024 03 Dec 2024 03 Dec 2024 03 Dec 2024 21 Jul 2024 21 Jul 2024 21 Jul 2024 21 Jul 2024 Method: I Analysis Due	13 Jun 2024 13 Jun 2024 13 Jun 2024 <b>)-[ENV]AN040/AN</b> <b>Analysed</b> 12 Jun 2024 12 Jun 2024 12 Jun 2024 <b>ME-(AU)-[ENV]AN</b> <b>Analysed</b> 17 Jun 2024 17 Jun 2024 17 Jun 2024 ME-(AU)-[ENV]AN <b>Analysed</b>
BH7M_DL2_0.2-0.3 BH7M_DL3_0.1-0.2 otal Recoverable Element BH7M_DL1_0.1-0.2 BH7M_DL2_0.2-0.3 BH7M_DL3_0.1-0.2 <b>RH (Total Recoverable Hy</b> Sample Name BH7M_DL1_0.1-0.2 BH7M_DL3_0.1-0.2 VOC's in Soll Sample Name BH7M_DL1_0.1-0.2 BH7M_DL3_0.2 Sample Name BH7M_DL1_0.1-0.2 BH7M_DL3_0.2-0.3	SE266429.001 SE266429.002 SE266429.003 s in Soll/Waste Solids/Mar Sample No. SE266429.001 SE266429.003 drocarbons) in Soll Sample No. SE266429.001 SE266429.003 SE266429.003	LB314511 LB314511 tertals by ICPOES QC Ref LB314566 LB314566 LB314566 QC Ref LB314511 LB314511 LB314511 LB314511 LB314511	06 Jun 2024 06 Jun 2024	07 Jun 2024 07 Jun 2024	20 Jun 2024 20 Jun 2024 20 Jun 2024 Extraction Due 03 Dec 2024 03 Dec 2024 03 Dec 2024 03 Dec 2024 20 Jun 2024 20 Jun 2024 20 Jun 2024 Extraction Due 20 Jun 2024	11 Jun 2024 11 Jun 2024 11 Jun 2024 Extracted 11 Jun 2024 11 Jun 2024 11 Jun 2024 11 Jun 2024 Extracted 11 Jun 2024 11 Jun 2024 11 Jun 2024 11 Jun 2024 11 Jun 2024 11 Jun 2024	21 Jul 2024 21 Jul 2024 21 Jul 2024 Method: ME-(AU 03 Dec 2024 03 Dec 2024 03 Dec 2024 03 Dec 2024 03 Dec 2024 03 Dec 2024 21 Jul 2024 21 Jul 2024 21 Jul 2024 21 Jul 2024 21 Jul 2024 21 Jul 2024	13 Jun 2024 13 Jun 2024 13 Jun 2024 <b>)-[ENV]AN040/AN</b> <b>Analysed</b> 12 Jun 2024 12 Jun 2024 12 Jun 2024 <b>ME-(AU)-[ENV]AN</b> <b>Analysed</b> 17 Jun 2024 17 Jun 2024 <b>ME-(AU)-[ENV]AN</b> <b>ME-(AU)-[ENV]AN</b> <b>Analysed</b> 13 Jun 2024
BH7M_DL2_0.2-0.3 BH7M_DL3_0.1-0.2 otal Recoverable Elements Sample Name BH7M_DL1_0.1-0.2 BH7M_DL2_0.2-0.3 BH7M_DL3_0.1-0.2 RH (Total Recoverable Hy Sample Name BH7M_DL1_0.1-0.2 BH7M_DL3_0.1-0.2 OC's in Soil Sample Name BH7M_DL3_0.1-0.2 BH7M_DL1_0.1-0.2 BH7M_DL1_0.1-0.2 BH7M_DL1_0.1-0.2 BH7M_DL2_0.2-0.3 BH7M_DL2_0.2-0.3 BH7M_DL3_0.1-0.2	SE266429.001 SE266429.002 SE266429.003 s in Soll/Waste Solids/Mar Sample No. SE266429.002 SE266429.003 drocarbons) in Soll Sample No. SE266429.001 SE266429.003 SE266429.003 SE266429.001 SE266429.001 SE266429.002 SE266429.002	LB314511 LB314511 terials by ICPOES QC Ref LB314566 LB314566 LB314566 QC Ref LB314511 LB314511 LB314511 LB314511 QC Ref LB314564 LB314564	06 Jun 2024 06 Jun 2024	07 Jun 2024 07 Jun 2024	20 Jun 2024 20 Jun 2024 20 Jun 2024 <b>Extraction Due</b> 03 Dec 2024 03 Dec 2024 03 Dec 2024 03 Dec 2024 20 Jun 2024 20 Jun 2024 20 Jun 2024 20 Jun 2024 20 Jun 2024 20 Jun 2024	11 Jun 2024 11 Jun 2024 11 Jun 2024 Extracted 11 Jun 2024 11 Jun 2024	21 Jul 2024 21 Jul 2024 21 Jul 2024 Method: ME-(AU 03 Dec 2024 03 Dec 2024 03 Dec 2024 03 Dec 2024 03 Dec 2024 21 Jul 2024 20 Jun 2024 20 Jun 2024	13 Jun 2024 13 Jun 2024 13 Jun 2024 13 Jun 2024 )-[ENV]AN040/AN Analysed 12 Jun 2024 12 Jun 2024 12 Jun 2024 ME-(AU)-[ENV]AN Analysed 17 Jun 2024 17 Jun 2024 17 Jun 2024 13 Jun 2024 13 Jun 2024 13 Jun 2024 13 Jun 2024
BH7M_DL2_0.2-0.3           BH7M_DL3_0.1-0.2           otal Recoverable Elements           Sample Name           BH7M_DL1_0.1-0.2           BH7M_DL2_0.2-0.3           BH7M_DL3_0.1-0.2           RH (Total Recoverable Hy           Sample Name           BH7M_DL1_0.1-0.2           BH7M_DL2_0.2-0.3           BH7M_DL3_0.1-0.2           'OC's in Soil           Sample Name           BH7M_DL3_0.1-0.2           'OC's in Soil           BH7M_DL1_0.1-0.2           BH7M_DL3_0.1-0.2           'OHM_DL3_0.1-0.2           'OL'al Name           BH7M_DL3_0.1-0.2           BH7M_DL3_0.1-0.2	SE266429.001 SE266429.002 SE266429.003 s in Soll/Waste Solids/Mat SE266429.001 SE266429.002 SE266429.003 drocarbons) in Soll SE266429.001 SE266429.002 SE266429.003 SE266429.003 SE266429.001 SE266429.001 SE266429.001 SE266429.003 rbons in Soll	LB314511 LB314511 terials by ICPOES QC Ref LB314566 LB314566 LB314566 QC Ref LB314511 LB314511 LB314511 LB314511 QC Ref LB314564 LB314564	06 Jun 2024 06 Jun 2024	07 Jun 2024 07 Jun 2024	20 Jun 2024 20 Jun 2024 20 Jun 2024 <b>Extraction Due</b> 03 Dec 2024 03 Dec 2024 03 Dec 2024 03 Dec 2024 20 Jun 2024 20 Jun 2024 20 Jun 2024 20 Jun 2024 20 Jun 2024 20 Jun 2024	11 Jun 2024 11 Jun 2024 11 Jun 2024 Extracted 11 Jun 2024 11 Jun 2024	21 Jul 2024 21 Jul 2024 21 Jul 2024 Method: ME-(AU 03 Dec 2024 03 Dec 2024 03 Dec 2024 03 Dec 2024 21 Jul 2024 21 Jul 2024 21 Jul 2024 21 Jul 2024 Method: I Analysis Due 20 Jun 2024 20 Jun 2024 20 Jun 2024	13 Jun 2024 13 Jun 2024 13 Jun 2024 14 Jun 2024 15 Jun 2024 12 Jun 2024 12 Jun 2024 12 Jun 2024 ME-(AU)-[ENV]AN Analysed 17 Jun 2024 17 Jun 2024 17 Jun 2024 13 Jun 2024 13 Jun 2024 13 Jun 2024 13 Jun 2024 ME-(AU)-[ENV]AN
BH7M_DL2_0.2-0.3           BH7M_DL3_0.1-0.2           Sample Name           BH7M_DL1_0.1-0.2           BH7M_DL2_0.2-0.3           BH7M_DL3_0.1-0.2           RH (Total Recoverable Hy           Sample Name           BH7M_DL3_0.1-0.2           RH (Total Recoverable Hy           Sample Name           BH7M_DL3_0.1-0.2           GOC's in Soil           Sample Name           BH7M_DL3_0.1-0.2           'OC's in Soil           BH7M_DL3_0.1-0.2           BH7M_DL3_0.1-0.2           Sample Name           BH7M_DL3_0.1-0.2           Sample Name           BH7M_DL3_0.1-0.2           BH7M_DL3_0.1-0.2           Sample Name           BH7M_DL3_0.1-0.2	SE266429.001 SE266429.002 SE266429.003 s in Soll/Waste Solids/Mar Sample No. SE266429.002 SE266429.003 drocarbons) in Soll Sample No. SE266429.001 SE266429.003 SE266429.003 SE266429.001 SE266429.001 SE266429.002 SE266429.002	LB314511 LB314511 LB314511 terials by ICPOES QC Ref LB314566 LB314566 LB314566 LB314566 LB314511 LB314511 LB314511 QC Ref LB314511 LB314514 LB314564 LB314564 LB314564	06 Jun 2024 06 Jun 2024	07 Jun 2024 07 Jun 2024	20 Jun 2024 20 Jun 2024 20 Jun 2024 <b>Extraction Due</b> 03 Dec 2024 03 Dec 2024 03 Dec 2024 03 Dec 2024 20 Jun 2024	11 Jun 2024 11 Jun 2024 11 Jun 2024 Extracted 11 Jun 2024 11 Jun 2024	21 Jul 2024 21 Jul 2024 21 Jul 2024 Method: ME-(AU 03 Dec 2024 03 Dec 2024 03 Dec 2024 03 Dec 2024 03 Dec 2024 21 Jul 2024 20 Jun 2024 20 Jun 2024	13 Jun 2024 13 Jun 2024 13 Jun 2024 13 Jun 2024 <b>)-[ENV]AN040/AN:</b> <b>Analysed</b> 12 Jun 2024 12 Jun 2024 12 Jun 2024 <b>ME-(AU)-[ENV]AN:</b> <b>Analysed</b> 17 Jun 2024 17 Jun 2024 17 Jun 2024 13 Jun 2024 13 Jun 2024 13 Jun 2024
BH7M_DL2_0.2-0.3           BH7M_DL3_0.1-0.2 <b>Total Recoverable Element:</b> Sample Name           BH7M_DL1_0.1-0.2           BH7M_DL3_0.1-0.2 <b>The (Total Recoverable Hy</b> )           Sample Name           BH7M_DL3_0.1-0.2 <b>The (Total Recoverable Hy</b> )           Sample Name           BH7M_DL1_0.1-0.2           BH7M_DL2_0.2-0.3	SE266429.001 SE266429.002 SE266429.003 s in Soll/Waste Solids/Mat Sample No. SE266429.001 SE266429.003 drocarbons) in Soll Sample No. SE266429.001 SE266429.003 SE266429.003 SE266429.001 SE266429.001 SE266429.002 SE266429.003 drocarbons in Soll Sample No.	LB314511 LB314511 LB314511 terials by ICPOES QC Ref LB314566 LB314566 LB314566 LB314566 LB314511 LB314511 LB314511 LB314511 QC Ref LB314564 LB314564 LB314564	06 Jun 2024 06 Jun 2024	07 Jun 2024 07 Jun 2024	20 Jun 2024 20 Jun 2024 20 Jun 2024 Extraction Due 03 Dec 2024 03 Dec 2024 03 Dec 2024 03 Dec 2024 20 Jun 2024	11 Jun 2024 11 Jun 2024 11 Jun 2024 Extracted 11 Jun 2024 11 Jun 2024	21 Jul 2024 21 Jul 2024 21 Jul 2024 Method: ME-(AU 03 Dec 2024 03 Dec 2024 03 Dec 2024 03 Dec 2024 03 Dec 2024 21 Jul 2024 21 Jul 2024 21 Jul 2024 21 Jul 2024 21 Jul 2024 21 Jul 2024 20 Jun 2024 20 Jun 2024 20 Jun 2024 20 Jun 2024	13 Jun 2024 13 Jun 2024 13 Jun 2024 13 Jun 2024 14 Jun 2024 12 Jun 2024 12 Jun 2024 12 Jun 2024 ME-(AU)-[ENV]AN- Analysed 17 Jun 2024 17 Jun 2024 17 Jun 2024 17 Jun 2024 13 Jun 2024 13 Jun 2024 13 Jun 2024 13 Jun 2024 13 Jun 2024 ME-(AU)-[ENV]AN- Analysed



# **SURROGATES**

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 identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

C Pesticides in Soil				Method: M	E-(AU)-[ENV]AN
Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	BH7M_DL1_0.1-0.2	SE266429.001	%	60 - 130%	102
	BH7M_DL2_0.2-0.3	SE266429.002	%	60 - 130%	107
	BH7M_DL3_0.1-0.2	SE266429.003	%	60 - 130%	110
P Pesticides in Soil				Method: M	E-(AU)-[ENV]AN
Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	BH7M_DL1_0.1-0.2	SE266429.001	%	60 - 130%	101
	BH7M_DL2_0.2-0.3	SE266429.002	%	60 - 130%	88
	BH7M_DL3_0.1-0.2	SE266429.003	%	60 - 130%	97
d14-p-terphenyl (Surrogate)	BH7M_DL1_0.1-0.2	SE266429.001	%	60 - 130%	105
	BH7M_DL2_0.2-0.3	SE266429.002	%	60 - 130%	100
	BH7M_DL3_0.1-0.2	SE266429.003	%	60 - 130%	99
AH (Polynuclear Aromatic Hydrocarbons) in Soil				Method: M	E-(AU)-[ENV]AN
Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	BH7M_DL1_0.1-0.2	SE266429.001	%	70 - 130%	101
	BH7M_DL2_0.2-0.3	SE266429.002	%	70 - 130%	88
	BH7M_DL3_0.1-0.2	SE266429.003	%	70 - 130%	97
d14-p-terphenyl (Surrogate)	BH7M_DL1_0.1-0.2	SE266429.001	%	70 - 130%	105
	BH7M_DL2_0.2-0.3	SE266429.002	%	70 - 130%	100
	BH7M_DL3_0.1-0.2	SE266429.003	%	70 - 130%	99
d5-nitrobenzene (Surrogate)	BH7M_DL1_0.1-0.2	SE266429.001	%	70 - 130%	103
	BH7M_DL2_0.2-0.3	SE266429.002	%	70 - 130%	81
	BH7M_DL3_0.1-0.2	SE266429.003	%	70 - 130%	98
CBs in Soll				Method: M	E-(AU)-[ENV]AN
Parameter	Sample Name	Sample Number	Units	Criteria	Recovery S
TCMX (Surrogate)	BH7M_DL1_0.1-0.2	SE266429.001	%	60 - 130%	100
	BH7M_DL2_0.2-0.3	SE266429.002	%	60 - 130%	105
	BH7M_DL3_0.1-0.2	SE266429.003	%	60 - 130%	108
DC's in Soli				Method: M	E-(AU)-[ENV]AN
Parameter	Sample Name	Sample Number	Units	Criteria	Recovery <sup>6</sup>
Bromofluorobenzene (Surrogate)	BH7M_DL1_0.1-0.2	SE266429.001	%	60 - 130%	96
	BH7M_DL2_0.2-0.3	SE266429.002	%	60 - 130%	82
	BH7M_DL3_0.1-0.2	SE266429.003	%	60 - 130%	86
d4-1,2-dichloroethane (Surrogate)	BH7M_DL1_0.1-0.2	SE266429.001	%	60 - 130%	89
	BH7M_DL2_0.2-0.3	SE266429.002	%	60 - 130%	72
	BH7M_DL3_0.1-0.2	SE266429.003	%	60 - 130%	81
d8-toluene (Surrogate)	BH7M_DL1_0.1-0.2	SE266429.001	%	60 - 130%	93
	BH7M_DL2_0.2-0.3	SE266429.002	%	60 - 130%	77
	BH7M_DL3_0.1-0.2	SE266429.003	%	60 - 130%	84
platile Petroleum Hydrocarbons in Soil				Method: M	e-(au)-[env]an
· · · · · · · · · · · · · · · · · · ·	Sample Name	Sample Number	Units	Criteria	Recovery
- Parameter					96
arameter	BH7M_DL1_0.1-0.2	SE266429.001	%	60 - 130%	
- Parameter	BH7M_DL2_0.2-0.3	SE266429.002	%	60 - 130%	82
Parameter Bromofluorobenzene (Surrogate)	BH7M_DL2_0.2-0.3 BH7M_DL3_0.1-0.2	SE266429.002 SE266429.003	%	60 - 130% 60 - 130%	82 86
arameter Bromofluorobenzene (Surrogate)	BH7M_DL2_0.2-0.3 BH7M_DL3_0.1-0.2 BH7M_DL1_0.1-0.2	SE266429.002 SE266429.003 SE266429.001	% % %	60 - 130% 60 - 130% 60 - 130%	82 86 89
- Parameter	BH7M_DL2_0.2-0.3 BH7M_DL3_0.1-0.2 BH7M_DL1_0.1-0.2 BH7M_DL2_0.2-0.3	SE266429.002 SE266429.003 SE266429.001 SE266429.002	% % %	60 - 130% 60 - 130% 60 - 130% 60 - 130%	82 86 89 72
Parameter Bromofluorobenzene (Surrogate) d4-1,2-dichloroethane (Surrogate)	BH7M_DL2_0.2-0.3 BH7M_DL3_0.1-0.2 BH7M_DL1_0.1-0.2 BH7M_DL2_0.2-0.3 BH7M_DL3_0.1-0.2	SE266429.002 SE266429.003 SE266429.001 SE266429.002 SE266429.003	% % % %	60 - 130% 60 - 130% 60 - 130% 60 - 130% 60 - 130%	82 86 89 72 81
Parameter Bromofluorobenzene (Surrogate)	BH7M_DL2_0.2-0.3 BH7M_DL3_0.1-0.2 BH7M_DL1_0.1-0.2 BH7M_DL2_0.2-0.3	SE266429.002 SE266429.003 SE266429.001 SE266429.002	% % %	60 - 130% 60 - 130% 60 - 130% 60 - 130%	82 86 89 72



# SE266429 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.

Mercury in Soil Method: ME-(AU)-[ENV]AN3					
Sample Number	Parameter	Units	LOR	Result	
LB314567.001	Mercury	mg/kg	0.05	<0.05	

#### OC Pesticides in Soil

Pesticides in Soil			Meth	od: ME-(AU)-[ENV]/
ample Number	Parameter	Units	LOR	Result
314511.001	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)	%	-	106
Pesticides in Soil			Meth	od: ME-(AU)-[ENV]/
mple Number	Parameter	Units	LOR	Result
14511.001	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
Surrogates	2-fluorobiphenyl (Surrogate)	%	-	103
		/8		100
Surroyates	d14-p-terphenyl (Surrogate)	%	_	102

Parameter	Units	LOR	Result	
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	
	Parameter         Naphthalene         2-methylnaphthalene         1-methylnaphthalene         Acenaphthylene         Acenaphthene         Fluorene         Phenanthrene         Anthracene         Fluoranthene         Pyrene         Benzo(a)anthracene         Chrysene	ParameterUnitsNaphthalenemg/kg2-methylnaphthalenemg/kg1-methylnaphthalenemg/kgAcenaphthylenemg/kgAcenaphthylenemg/kgFluorenemg/kgPhenanthrenemg/kgPhenanthrenemg/kgFluoranthenemg/kgPioranthenemg/kgBenzo(a)anthracenemg/kgChrysenemg/kg	ParameterUnitsLORNaphthalenemg/kg0.12-methylnaphthalenemg/kg0.11-methylnaphthalenemg/kg0.1Acenaphthylenemg/kg0.1Acenaphthylenemg/kg0.1Fluorenemg/kg0.1Fluorenemg/kg0.1Phenanthrenemg/kg0.1Phenanthrenemg/kg0.1Fluoranthenemg/kg0.1Fluoranthenemg/kg0.1Eluoranthenemg/kg0.1Chrysenemg/kg0.1	



# SE266429 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.

		ntinued)		Meth	Decult
Sample Number LB314511.001		Parameter	Units	LOR	Result
_B314511.001		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)	%	-	89
		2-fluorobiphenyl (Surrogate)	%	-	103
		d14-p-terphenyl (Surrogate)	%	-	102
CBs in Soil				Meth	od: ME-(AU)-[ENV]A
Sample Number		Parameter	Units	LOR	Result
B314511.001		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
		Arochior 1268	mg/kg	0.2	<0.2
		Total PCBs (Arochlors)		1	<1
	Surrogates	TCMX (Surrogate)	mg/kg%	-	104
			/0		
otal Recoverable Ele	ments in Soil/Waste Solids/Mat	enals by ICPOES			(AU)-[ENV]AN040/A
Sample Number		Parameter	Units	LOR	Result
LB314566.001		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
RH (Total Recoverat	ole Hydrocarbons) in Soil	Zinc, Zn	mg/kg		
	ole Hydrocarbons) in Soil			Metho	od: ME-(AU)-[ENV]A
Sample Number	ole Hydrocarbons) in Soil	Parameter	Units	LOR	od: ME-(AU)-[ENV]A Result
Sample Number	ole Hydrocarbons) in Soil	Parameter TRH C10-C14	Units mg/kg	LOR 20	od: ME-(AU)-[ENV]A Result <20
Sample Number	ole Hydrocarbons) in Soll	Parameter TRH C10-C14 TRH C15-C28	Units mg/kg mg/kg	Metho LOR 20 45	od: ME-(AU)-[ENV]A Result <20 <45
Sample Number	ole Hydrocarbons) in Soil	Parameter TRH C10-C14 TRH C15-C28 TRH C29-C36	Units mg/kg mg/kg mg/kg	Meth LOR 20 45 45	od: ME-(AU)-[ENV]A Result <20 <45 <45
Sample Number	ole Hydrocarbons) in Soil	Parameter TRH C10-C14 TRH C15-C28 TRH C29-C36 TRH C37-C40	Units mg/kg mg/kg mg/kg mg/kg	Meth LOR 20 45 45 100	od: ME-(AU)-[ENV]A Result <20 <45 <45 <100
Sample Number B314511.001	ole Hydrocarbons) in Soll	Parameter TRH C10-C14 TRH C15-C28 TRH C29-C36	Units mg/kg mg/kg mg/kg	Meth 20 45 45 100 110	od: ME-(AU)-[ENV]A Result <20 <45 <45 <100 <110
Sample Number B314511.001	ole Hydrocarbons) in Soll	Parameter TRH C10-C14 TRH C15-C28 TRH C29-C36 TRH C37-C40	Units mg/kg mg/kg mg/kg mg/kg	Meth 20 45 45 100 110	od: ME-(AU)-[ENV]A Result <20 <45 <45 <100 <110
Sample Number B314511.001 OC's in Soil	ole Hydrocarbons) in Soll	Parameter TRH C10-C14 TRH C15-C28 TRH C29-C36 TRH C37-C40	Units mg/kg mg/kg mg/kg mg/kg	Meth 20 45 45 100 110	od: ME-(AU)-[ENV]A Result <20 <45 <45 <100 <110
Sample Number .B314511.001 <b>'OC's in Soil</b> Sample Number	Die Hydrocarbons) in Soli	Parameter           TRH C10-C14           TRH C15-C28           TRH C29-C36           TRH C37-C40           TRH C10-C36 Total	Units mg/kg mg/kg mg/kg mg/kg mg/kg	Methy 20 45 45 100 110 Methy	Action         Action<
		Parameter           TRH C10-C14           TRH C15-C28           TRH C29-C36           TRH C37-C40           TRH C10-C36 Total	Units mg/kg mg/kg mg/kg mg/kg mg/kg Units	Methy 20 45 45 100 110 Methy LOR	od: ME-(AU)-[ENV]A Result <20 <45 <100 <110 od: ME-(AU)-[ENV]A Result
Sample Number .B314511.001 <b>'OC's in Soil</b> Sample Number	Monocyclic Aromatic	Parameter           TRH C10-C14           TRH C15-C28           TRH C29-C36           TRH C37-C40           TRH C10-C36 Total           Parameter           Benzene	Units mg/kg mg/kg mg/kg mg/kg Units mg/kg	Methy 20 45 45 100 110 Methy LOR 0.1	Dd:         ME-(AU)-[ENV]A           Result         <20
Sample Number .B314511.001 <b>'OC's in Soil</b> Sample Number	Monocyclic Aromatic	Parameter           TRH C10-C14           TRH C15-C28           TRH C29-C36           TRH C37-C40           TRH C10-C36 Total	Units           mg/kg           mg/kg           mg/kg           mg/kg           Units           mg/kg	Methy 20 45 45 100 110 Methy LOR 0.1	Dd:         ME-(AU)-[ENV]A           Result         <20
Sample Number .B314511.001 <b>'OC's in Soil</b> Sample Number	Monocyclic Aromatic	Parameter         TRH C10-C14         TRH C15-C28         TRH C29-C36         TRH C37-C40         TRH C10-C36 Total	Units           mg/kg           mg/kg           mg/kg           mg/kg           mg/kg           mg/kg           mg/kg           mg/kg	Methy 20 45 45 100 110 Methy LOR 0.1 0.1 0.1	Dd: ME-(AU)-[ENV]A           Result           <20
Sample Number .B314511.001 <b>'OC's in Soil</b> Sample Number	Monocyclic Aromatic	Parameter         TRH C10-C14         TRH C15-C28         TRH C29-C36         TRH C37-C40         TRH C10-C36 Total	Units           mg/kg	Methy 20 45 45 100 110 Methy LOR 0.1 0.1 0.1 0.2	Cod:         ME-(AU)-[ENV]A           Result         <20
Sample Number .B314511.001 <b>'OC's in Soil</b> Sample Number	Monocyclic Aromatic Hydrocarbons	Parameter         TRH C10-C14         TRH C15-C28         TRH C29-C36         TRH C37-C40         TRH C10-C36 Total	Units           mg/kg	Methy 20 45 45 100 110 <b>Methy</b> LOR 0.1 0.1 0.1 0.1 0.1 0.1 0.2 0.1	Action         Action<
Sample Number .B314511.001 <b>'OC's in Soil</b> Sample Number	Monocyclic Aromatic Hydrocarbons Polycyclic VOCs	Parameter           TRH C10-C14           TRH C15-C28           TRH C29-C36           TRH C37-C40           TRH C10-C36 Total             Parameter           Benzene           Toluene           Ethylbenzene           m/p-xylene           o-xylene           Naphthalene (VOC)*           d4-1,2-dichloroethane (Surrogate)	Units           mg/kg	Methy 20 45 45 100 110 <b>Methy</b> LOR 0.1 0.1 0.1 0.1 0.1 0.2 0.1 0.1	Action         Action<
Sample Number .B314511.001 <b>'OC's in Soil</b> Sample Number	Monocyclic Aromatic Hydrocarbons Polycyclic VOCs	Parameter           TRH C10-C14           TRH C15-C28           TRH C29-C36           TRH C37-C40           TRH C10-C36 Total             Parameter           Benzene           Toluene           Ethylbenzene           m/p-xylene           o-xylene           Naphthalene (VOC)*           d4-1,2-dichloroethane (Surrogate)           d8-toluene (Surrogate)	Units mg/kg mg/kg mg/kg mg/kg Units mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	Methy 20 45 45 100 110 <b>Methy</b> LOR 0.1 0.1 0.1 0.1 0.2 0.1 0.1 0.2 0.1	Action         Action<
Sample Number .B314511.001 <b>'OC's in Soil</b> Sample Number	Monocyclic Aromatic Hydrocarbons Polycyclic VOCs Surrogates	Parameter         TRH C10-C14         TRH C15-C28         TRH C29-C36         TRH C37-C40         TRH C10-C36 Total         Parameter         Benzene         Toluene         Ethylbenzene         m/p-xylene         o-xylene         Naphthalene (VOC)*         d4-1,2-dichloroethane (Surrogate)         d8-toluene (Surrogate)         Bromofluorobenzene (Surrogate)	Units mg/kg mg/kg mg/kg mg/kg Units mg/kg mg	Methy 20 45 45 100 110 Methy COR 0.1 0.1 0.1 0.2 0.1 0.1 0.2 0.1 0.1 0.2 0.1 0.1 0.2 0.1 0.1 0.2 0.1 0.1 0.2 0.1 0.1 0.2 0.1 0.1 0.1 0.2 0.1 0.1 0.1 0.1 0.2 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1	Action         Action<
Sample Number .B314511.001 'OC's in Soil Sample Number .B314564.001	Monocyclic Aromatic Hydrocarbons Polycyclic VOCs Surrogates Totals	Parameter           TRH C10-C14           TRH C15-C28           TRH C29-C36           TRH C37-C40           TRH C10-C36 Total             Parameter           Benzene           Toluene           Ethylbenzene           m/p-xylene           o-xylene           Naphthalene (VOC)*           d4-1,2-dichloroethane (Surrogate)           d8-toluene (Surrogate)	Units mg/kg mg/kg mg/kg mg/kg Units mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	Methy 20 45 45 100 110 <b>Methy</b> <b>LOR</b> 0.1 0.1 0.1 0.1 0.2 0.1 0.1 0.1 0.2 0.1 0.1 0.2 0.1 0.1 0.1 0.2 0.1 0.1	Action         Action           <20
Sample Number .B314511.001 'OC's in Soil Sample Number .B314564.001	Monocyclic Aromatic Hydrocarbons Polycyclic VOCs Surrogates Totals	Parameter         TRH C10-C14         TRH C15-C28         TRH C29-C36         TRH C37-C40         TRH C10-C36 Total         Parameter         Benzene         Toluene         Ethylbenzene         m/p-xylene         o-xylene         Naphthalene (VOC)*         d4-1,2-dichloroethane (Surrogate)         d8-toluene (Surrogate)         Bromofluorobenzene (Surrogate)         Total BTEX*	Units           mg/kg           %           %           %           %           mg/kg	Methy 20 45 45 100 110 Methy LOR 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1	Action         Action           <20
Sample Number .B314511.001 <b>'OC's in Soil</b> Sample Number	Monocyclic Aromatic Hydrocarbons Polycyclic VOCs Surrogates Totals	Parameter         TRH C10-C14         TRH C15-C28         TRH C29-C36         TRH C37-C40         TRH C10-C36 Total         Parameter         Benzene         Toluene         Ethylbenzene         m/p-xylene         o-xylene         Naphthalene (VOC)*         d4-1,2-dichloroethane (Surrogate)         d8-toluene (Surrogate)         Bromofluorobenzene (Surrogate)	Units mg/kg mg/kg mg/kg mg/kg Units mg/kg mg	Methy 20 45 45 100 110 <b>Methy</b> <b>LOR</b> 0.1 0.1 0.1 0.1 0.2 0.1 0.1 0.1 0.2 0.1 0.1 0.2 0.1 0.1 0.1 0.2 0.1 0.1	Action         Action           <20



### **DUPLICATES**

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 x 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 identifer 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

Mercury in Soil	Aercury in Soil Method: ME-(AU)-[ENV].						ENVJAN312	
Original	Duplicate	Parameter	Units L	DR I	Original	Duplicate	Criteria %	RPD %
SE266360.008	LB314567.014	Mercury	mg/kg 0	05	<0.05	<0.05	200	0
SE266429.003	LB314567.022	Mercury	mg/kg 0	05	<0.05	<0.05	200	0

#### Moisture Content

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE266360.008	LB314565.011	% Moisture	%w/w	1	13.7	14.6	37	7
SE266429.003	LB314565.020	% Moisture	%w/w	1	13.4	12.7	38	6

#### **OC Pesticides in Soil**

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE266360.008	LB314511.014		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	
			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	-	0.16	0.16	30	2
E266429.003	LB314511.022		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	0.2	<0.1	<0.1	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0

Method: ME-(AU)-[ENV]AN002



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 x 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 identifer 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

	oil (continued)								[ENV]AN4
Original	Duplicate		Parameter	Units	LOR	Original		Criteria %	RPD %
SE266429.003	LB314511.022		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	_	0.17	0.16	30	2
DD Destisides in C	all	Gunogatoo				0.11			
OP Pesticides in So			-					od: ME-(AU)	
Original	Duplicate		Parameter	Units	LOR	Original		Criteria %	RPD %
SE266360.008	LB314511.014		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*		1.7		<1.7	200	0
		0		mg/kg		<1.7			
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	3
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	2
SE266429.003	LB314511.022		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
		Currenetee							6
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	3
PAH (Polynuclear A	Aromatic Hydrocarbo	ns) in Soil					Meth	od: ME-(AU)	[ENV]AN
Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD 9
SE266360.008	LB314511.014		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
			· · · ·		0.1	<0.1	<0.1	200	0
			Fluorene	mg/kg					
			Dhenenthrene						0
			Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	
			Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Anthracene Fluoranthene	mg/kg mg/kg	0.1	<0.1 <0.1	<0.1 <0.1	200 200	0
			Anthracene Fluoranthene Pyrene	mg/kg mg/kg mg/kg	0.1 0.1 0.1	<0.1 <0.1 <0.1	<0.1 <0.1 <0.1	200 200 200	0 0 0
			Anthracene Fluoranthene	mg/kg mg/kg	0.1	<0.1 <0.1	<0.1 <0.1	200 200	0
			Anthracene Fluoranthene Pyrene	mg/kg mg/kg mg/kg	0.1 0.1 0.1	<0.1 <0.1 <0.1	<0.1 <0.1 <0.1	200 200 200	0 0 0
			Anthracene Fluoranthene Pyrene Benzo(a)anthracene	mg/kg mg/kg mg/kg mg/kg	0.1 0.1 0.1 0.1	<0.1 <0.1 <0.1 <0.1	<0.1 <0.1 <0.1 <0.1	200 200 200 200	0 0 0 0
			Anthracene Fluoranthene Pyrene Benzo(a)anthracene Chrysene	mg/kg mg/kg mg/kg mg/kg mg/kg	0.1 0.1 0.1 0.1 0.1	<0.1 <0.1 <0.1 <0.1 <0.1	<0.1 <0.1 <0.1 <0.1 <0.1	200 200 200 200 200 200	0 0 0 0
			Anthracene Fluoranthene Pyrene Benzo(a)anthracene Chrysene Benzo(b&j)fluoranthene	mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	0.1 0.1 0.1 0.1 0.1 0.1 0.1	<0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1	<0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1	200 200 200 200 200 200 200	0 0 0 0 0 0
			Anthracene Fluoranthene Pyrene Benzo(a)anthracene Chrysene Benzo(b&j)fluoranthene Benzo(k)fluoranthene	mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1	<0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1	<0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1	200 200 200 200 200 200 200 200	0 0 0 0 0 0 0



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 x 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 identifer 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

#### rhone) in Soil (contin PAH (Polynuclear A tic Hyd

Priginal	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
E266360.008	LB314511.014		Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
			Carcinogenic PAHs, BaP TEQ <lor=0*< td=""><td>mg/kg</td><td>0.2</td><td>&lt;0.2</td><td>&lt;0.2</td><td>200</td><td>0</td></lor=0*<>	mg/kg	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <lor=lor 2*<="" td=""><td>mg/kg</td><td>0.2</td><td>&lt;0.2</td><td>&lt;0.2</td><td>175</td><td>0</td></lor=lor>	mg/kg	0.2	<0.2	<0.2	175	0
			Carcinogenic PAHs, BaP TEQ <lor=lor*< td=""><td>mg/kg</td><td>0.3</td><td>&lt;0.3</td><td>&lt;0.3</td><td>134</td><td>0</td></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	0.5	30	7
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	3
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	2
266429.003	LB314511.022		Naphthalene	mg/kg	0.1	<0.1	0.1	147	28
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	188	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	0.2	107	61
			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	174	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*< td=""><td>mg/kg</td><td>0.2</td><td>&lt;0.2</td><td>&lt;0.2</td><td>200</td><td>0</td></lor=0*<>	mg/kg	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <lor=lor 2*<="" td=""><td>mg/kg</td><td>0.2</td><td>&lt;0.2</td><td>&lt;0.2</td><td>175</td><td>0</td></lor=lor>	mg/kg	0.2	<0.2	<0.2	175	0
			Carcinogenic PAHs, BaP TEQ <lor=lor*< td=""><td>mg/kg</td><td>0.3</td><td>&lt;0.3</td><td>&lt;0.3</td><td>134</td><td>0</td></lor=lor*<>	mg/kg	0.3	<0.3	<0.3	134	0
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	93	105
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	30	6
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	6
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	3

Original Duplicate Criteria % \_\_\_\_\_ RPD % Units LOR Original Duplicate Parameter SE266360.008 LB314511.014 Arochlor 1016 0.2 <0.2 <0.2 200 0 mg/kg Arochlor 1221 0.2 <0.2 <0.2 200 0 mg/kg 200 0 Arochlor 1232 mg/kg 0.2 < 0.2 < 0.2 Arochlor 1242 0.2 <0.2 <0.2 200 0 mg/kg Arochlor 1248 0.2 <0.2 <0.2 200 0 mg/kg Arochlor 1254 0.2 < 0.2 < 0.2 200 0 mg/kg Arochlor 1260 0.2 <0.2 <0.2 200 0 mg/kg Arochlor 1262 0.2 <0.2 <0.2 200 0 mg/kg Arochlor 1268 mg/kg 0.2 < 0.2 < 0.2 200 0 Total PCBs (Arochlors) mg/kg 1 <1 <1 200 0 TCMX (Surrogate) 30 Surrogates 0 0 2 mg/kg LB314511.022 SE266429.003 Arochlor 1016 mg/kg 0.2 < 0.2 < 0.2 200 0 Arochlor 1221 0.2 <0.2 <0.2 200 0 mg/kg 0.2 <0.2 <0.2 200 Arochlor 1232 0 mg/kg Arochlor 1242 mg/kg 0.2 < 0.2 < 0.2 200 0 Arochlor 1248 0.2 <0.2 <0.2 200 0 mg/kg Arochlor 1254 0.2 <0.2 <0.2 200 0 mg/kg 200 Arochlor 1260 mg/kg 0.2 < 0.2 < 0.2 0 Arochlor 1262 0.2 <0.2 <0.2 200 0 mg/kg Arochlor 1268 0.2 <0.2 <0.2 200 0 mg/kg Total PCBs (Arochlors) 200 0 mg/kg 1 <1 <1 Surrogates TCMX (Surrogate) 0 0 30 2 mg/kg Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES Method: ME-(AU)-[ENV]AN040/AN320

Original Duplicate Units LOR Parameter



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 x 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 identifer 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

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE266360.008	LB314566.014		Arsenic, As	mg/kg	1	3	3	68	6
			Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
			Chromium, Cr	mg/kg	0.5	26	23	32	14
			Copper, Cu	mg/kg	0.5	9.7	8.7	35	11
			Nickel, Ni	mg/kg	0.5	13	11	34	10
			Lead, Pb	mg/kg	1	9	8	42	14
			Zinc, Zn	mg/kg	2	37	35	36	3
SE266429.003	LB314566.022		Arsenic, As	mg/kg	1	4	5	53	14
			Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
			Chromium, Cr	mg/kg	0.5	45	47	31	5
			Copper, Cu	mg/kg	0.5	12	11	34	7
			Nickel, Ni	mg/kg	0.5	44	43	31	2
			Lead, Pb	mg/kg	1	7	8	43	10
			Zinc, Zn	mg/kg	2	29	29	37	2
RH (Total Recove	erable Hydrocarbons	) in Soil					Mett	nod: ME-(AU)-	(ENVJAN
Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD
SE266360.008	LB314511.014		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
SE266429.003	LB314511.022		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

Original Duplicate Criteria % RPD % Units LOR Original Duplicate Parameter SE266360.008 LB314564.014 Monocyclic Benzene mg/kg 0.1 <0.1 <0.1 200 0 Toluene Aromatic 0.1 <0.1 <0.1 200 0 mg/kg Ethylbenzene 0.1 <0.1 <0.1 200 0 mg/kg 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)\* 0.1 <0.1 <0.1 200 0 Polycyclic mg/kg Surrogates d4-1,2-dichloroethane (Surrogate) mg/kg 7.9 8.5 50 7 d8-toluene (Surrogate) 8.0 8.5 50 5 mg/kg 50 Bromofluorobenzene (Surrogate) 8.4 9.2 9 mg/kg 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 SE266429.003 LB314564.024 <0.1 <0.1 200 Monocyclic 0.1 0 Benzene mg/kg Aromatic Toluene mg/kg 01 <0.1 <0.1 200 0 Ethylbenzene 0.1 <0.1 <0.1 200 0 mg/kg 0.2 <0.2 <0.2 200 0 m/p-xylene mg/kg o-xylene mg/kg 0.1 <0.1 <0.1 200 0 Naphthalene (VOC)\* <0.1 <0.1 200 0 Polycyclic mg/kg 0.1 Surrogates d4-1,2-dichloroethane (Surrogate) 8.1 8.6 50 7 mg/kg d8-toluene (Surrogate) mg/kg 8.4 9.1 50 8 Bromofluorobenzene (Surrogate) 50 8.6 9.6 10 mg/kg Totals Total BTEX\* 0.6 <0.6 <0.6 200 0 mg/kg

mg/kg

0.3

< 0.3

< 0.3

200

Total Xylenes\*



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 x 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 identifer 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

#### Volatile Petroleum Hydrocarbons in Soil

Volatile Petroleun	n Hydrocarbons in So	I					Meth	od: ME-(AU)-	ENVJAN43
Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE266360.008	LB314564.014		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	-	7.9	8.5	50	7
			d8-toluene (Surrogate)	mg/kg	-	8.0	8.5	50	5
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.4	9.2	50	9
		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
SE266429.003	LB314564.024		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	-	8.1	8.6	50	7
			d8-toluene (Surrogate)	mg/kg	-	8.4	9.1	50	8
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.6	9.6	50	10
		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					N	lethod: ME-(A	U)-[ENV]AN312
Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB314567.002	Mercury	mg/kg	0.05	0.19	0.2	80 - 120	93

OC Pesticides in S	Soil					N	lethod: ME-(A	U)-[ENV]AN42
Sample Number	•	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB314511.002		Delta BHC	mg/kg	0.1	0.2	0.2	60 - 140	90
		Heptachlor	mg/kg	0.1	0.2	0.2	60 - 140	92
		Aldrin	mg/kg	0.1	0.2	0.2	60 - 140	91
		Dieldrin	mg/kg	0.2	<0.2	0.2	60 - 140	88
		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	100
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.15	40 - 130	98
OP Pesticides in S	ioil					N	lethod: ME-(A	U)-[ENV]AN42
Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB314511.002		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	1.8	2	60 - 140	88
		Diazinon (Dimpylate)	mg/kg	0.5	1.8	2	60 - 140	89
		Dichlorvos	mg/kg	0.5	1.3	2	60 - 140	65
		Ethion	mg/kg	0.2	1.4	2	60 - 140	70
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	101
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	105
PAH (Polynuclear /	Aromatic Hydroca	rbons) in Soil				N	lethod: ME-(A	U)-[ENV]AN42
Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB314511.002		Naphthalene	mg/kg	0.1	4.3	4	60 - 140	107
		Acenaphthylene	mg/kg	0.1	4.1	4	60 - 140	102
		Acenaphthene	mg/kg	0.1	4.3	4	60 - 140	109
		Phenanthrene	mg/kg	0.1	4.2	4	60 - 140	105
		Anthracene	mg/kg	0.1	4.5	4	60 - 140	113
		Fluoranthene	mg/kg	0.1	4.3	4	60 - 140	108
		Pyrene	mg/kg	0.1	4.5	4	60 - 140	112
		Benzo(a)pyrene	mg/kg	0.1	4.4	4	60 - 140	109
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	100
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	101

	d 14-p-terphenyr (Sunogate)	ilig/kg		0.5	0.5	40 - 130	105
PCBs in Soil					N	dethod: ME-(A	U)-[ENV]AN420
Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB314511.002	Arochlor 1260	mg/kg	0.2	0.5	0.4	60 - 140	119

#### Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Total Recoverable I	Elements in Soil/V	aste Solids/Materials by ICPOES				Method:	ME-(AU)-[EN\	/JAN040/AN320
Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB314566.002		Arsenic, As	mg/kg	1	340	318.22	80 - 120	108
		Cadmium, Cd	mg/kg	0.3	4.1	4.81	70 - 130	85
		Chromium, Cr	mg/kg	0.5	43	38.31	80 - 120	112
		Copper, Cu	mg/kg	0.5	310	290	80 - 120	106
		Nickel, Ni	mg/kg	0.5	200	187	80 - 120	105
		Lead, Pb	mg/kg	1	97	89.9	80 - 120	108
		Zinc, Zn	mg/kg	2	280	273	80 - 120	104
TRH (Total Recove	rable Hydrocarbo	ns) in Soll				N	lethod: ME-(A	U)-[ENV]AN40
Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB314511.002		TRH C10-C14	mg/kg	20	40	40	60 - 140	100
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	92
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	84
	TRH F Bands	TRH >C10-C16	mg/kg	25	40	40	60 - 140	99
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	87
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	88
VOC's in Soil						N	lethod: ME-(A	U)-[ENV]AN43

Sample Number

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Units LOR
Parameter
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17/6/2024



VPH F Bands

TRH C6-C10 minus BTEX (F1)

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 LOR Result Expected Criteria % Recovery % Parameter Units LB314564.002 60 - 140 Monocyclic 0.1 4.4 Benzene mg/kg 5 89 Aromatic Toluene mg/kg 0.1 4.6 5 60 - 140 92 Ethylbenzene 0.1 4.5 5 60 - 140 90 mg/kg m/p-xylene mg/kg 0.2 9.1 10 60 - 140 91 o-xylene mg/kg 0.1 46 5 60 - 140 92 Surrogates d4-1,2-dichloroethane (Surrogate) mg/kg 9.8 10 70 - 130 98 70 - 130 102 10.2 d8-toluene (Surrogate) 10 mg/kg Bromofluorobenzene (Surrogate) mg/kg 10.3 10 70 - 130 103 Volatile Petroleum Hydrocarbons in Soil Method: ME-(AU)-[ENV]AN433 Sample Number Parameter Units LOR Result Expected Criteria % Recovery % LB314564.002 TRH C6-C10 mg/kg 25 72 92.5 60 - 140 78 TRH C6-C9 mg/kg 20 63 80 60 - 140 78 d4-1,2-dichloroethane (Surrogate) 70 - 130 98 Surrogates 9.8 10 mg/kg -Bromofluorobenzene (Surrogate) 10.3 10 70 - 130 103 mg/kg

mg/kg

25

44

62.5

60 - 140

71



Method: ME-(AU)-[ENV]AN420

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						Mett	nod: ME-(AU	)-[ENV]AN312
QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE266361.002	LB314567.004	Mercury	mg/kg	0.05	0.22	<0.05	0.2	102

#### OC Pesticides in Soil

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE266361.002	LB314511.004		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	101
			Heptachlor	mg/kg	0.1	0.2	<0.1	0.2	99
			Aldrin	mg/kg	0.1	0.2	<0.1	0.2	97
			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	93
			Endrin	mg/kg	0.2	<0.2	<0.2	0.2	91
			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	105
			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	-	0.16	0.16	-	105
P Pesticides in	Soll						Mett	nod: ME-(AL	J)-[ENV]AN420
QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE266361.002	LB314511.004		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	-	-

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE266361.002	LB314511.004		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	1.8	<0.2	2	87
			Diazinon (Dimpylate)	mg/kg	0.5	1.8	<0.5	2	88
			Dichlorvos	mg/kg	0.5	1.3	<0.5	2	64
			Dimethoate	mg/kg	0.5	<0.5	<0.5	-	-
			Ethion	mg/kg	0.2	1.5	<0.2	2	73
			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	6.3	<1.7	-	-
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	-	96
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	-	101
PAH (Polynuclea	r Aromatic Hydrocarbo	ons) in Soil					Meth	od: ME-(AU	J)-[ENV]AN420
QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE266361.002	LB314511.004		Naphthalene	mg/kg	0.1	4.1	<0.1	4	103
			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	4.0	<0.1	4	100
			Acenaphthene	mg/kg	0.1	4.3	<0.1	4	107
			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 identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

	r Aromatic Hydrocarb				1.07				J)-[ENV]AN4
QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recover
SE266361.002	LB314511.004		Phenanthrene	mg/kg	0.1	4.1	<0.1	4	101
			Anthracene	mg/kg	0.1	4.3	<0.1	4	107
			Fluoranthene	mg/kg	0.1	4.4	0.1	4	107
			Pyrene	mg/kg	0.1	4.4	0.1	4	106
			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	4.3	<0.1	4	107
			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*< td=""><td>TEQ (mg/kg)</td><td>0.2</td><td>4.3</td><td>&lt;0.2</td><td>-</td><td>-</td></lor=0*<>	TEQ (mg/kg)	0.2	4.3	<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <lor=lor 2*<="" td=""><td>TEQ (mg/kg)</td><td>0.2</td><td>4.4</td><td>&lt;0.2</td><td>-</td><td>-</td></lor=lor>	TEQ (mg/kg)	0.2	4.4	<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <lor=lor*< td=""><td>TEQ (mg/kg)</td><td>0.3</td><td>4.5</td><td>&lt;0.3</td><td>-</td><td>-</td></lor=lor*<>	TEQ (mg/kg)	0.3	4.5	<0.3	-	-
			Total PAH (18)	mg/kg	0.8	34	<0.8	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	-	95
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	-	96
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	_	101
						0.0			
CBs in Soil							Metr	nod: ME-(AU	J)-[ENVJAN
QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recove
SE266361.002	LB314511.004		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	0.5	<0.2	0.4	120
			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	-	103
	e Elements in Soil/W	aste Solids/Mate	nais by ICPOES				Method: ME		-
QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recove
SE266361.002	LB314566.004		Arsenic, As	mg/kg	1	46	5	50	81
			Cadmium, Cd	mg/kg	0.3	42	<0.3	50	84
			Chromium, Cr	mg/kg	0.5	64	22	50	84
			Copper, Cu	mg/kg	0.5	56	10	50	91
			Nickel, Ni	mg/kg	0.5	52	8.1	50	88
			Lead, Pb	mg/kg	1	66	24	50	84
			Zinc, Zn	mg/kg	2	73	33	50	80
PH (Total Pace	verable Hydrocarbon						Moth	od: ME-(AL	
		5) 11 301							<u> </u>
	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recove
SE266361.002	LB314511.004		TRH C10-C14	mg/kg	20	48	<20	40	116
			TRH C15-C28	mg/kg	45	47	<45	40	106
			TRH C29-C36	mg/kg	45	<45	<45	40	82
			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	TRH >C10-C16	mg/kg	25	48	<25	40	115
		Bands	TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	48	<25	-	-
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	40	86
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	-	-
OC's in Soil								od: ME /AL	
								nod: ME-(AU	
QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recove
SE266361.002	LB314564.004	Monocyclic	Benzene	mg/kg	0.1	3.6	<0.1	5	73
		Aromatic	Toluene	mg/kg	0.1	3.9	<0.1	5	77
			Ethylbenzene	mg/kg	0.1	4.0	<0.1	5	79



# **MATRIX SPIKES**

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 identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

/OC's in Soil (co	ontinued)						Meth	od: ME-(Al	J)-[ENV]AN43
QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE266361.002	LB314564.004	Monocyclic	o-xylene	mg/kg	0.1	4.2	<0.1	5	84
		Polycyclic	Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.1	8.6	10	91
			d8-toluene (Surrogate)	mg/kg	-	8.9	8.8	10	89
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.7	9.9	10	97
		Totals	Total BTEX*	mg/kg	0.6	24	<0.6	-	-
			Total Xylenes*	mg/kg	0.3	12	<0.3	-	-
/olatile Petroleu	m Hydrocarbons in So	lic					Meth	od: ME-(AL	J)-[ENV]AN43
QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE266361.002	LB314564.004		TRH C6-C10	mg/kg	25	69	<25	92.5	73
			TRH C6-C9	mg/kg	20	61	<20	80	75
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.1	8.6	10	91
			d8-toluene (Surrogate)	mg/kg	-	8.9	8.8	10	89
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.7	9.9	-	97
		VPH F	Benzene (F0)	mg/kg	0.1	3.6	<0.1	-	-



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 x 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 identifer when outside suggested criteria. Refer to the footnotes section at the

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: <a href="https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf">https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf</a>

- \* 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.
- 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.
- <sup>(7)</sup> LOR was raised due to dilution of significantly high concentration of analyte in sample.
- Image: Image:
- Recovery failed acceptance criteria due to sample heterogeneity.
- <sup>®</sup> LOR was raised due to high conductivity of the sample (required dilution).
- t Refer to relevant report comments for further information.

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# STATEMENT OF QA/QC PERFORMANCE

CLIENT DETAILS	ŝ	LABORATORY DETAI	ILS
Contact Client Address	Sean Nolan EI AUSTRALIA SUITE 6.01 55 MILLER STREET PYRMONT NSW 2009	Manager Laboratory Address	Shane McDermott SGS Alexandria Environmental Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	61 2 95160722	Telephone	+61 2 8594 0400
Facsimile	(Not specified)	Facsimile	+61 2 8594 0499
Email	sean.nolan@eiaustralia.com.au	Email	au.environmental.sydney@sgs.com
Project	E26160 1 Veno St Heathcote -Additional	SGS Reference	<b>SE266429A R0</b>
Order Number	E26160	Date Received	18 Jun 2024
Samples	3	Date Reported	20 Jun 2024

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 counts by matrix	1 Soil	Type of documentation received
Date documentation received	18/6/2024@1:25pm	Samples received in good order
Samples received without headspace	Yes	Sample temperature upon receipt
Sample container provider	SGS	Turnaround time requested
Samples received in correct containers	Yes	Sufficient sample for analysis
Sample cooling method	Ice Bricks	Samples clearly labelled
Complete documentation received	Yes	

Email Yes 15.5°C Two Days Yes Yes

SGS Australia Pty Ltd ABN 44 000 964 278

SAMPLE SUMMARY

Environment, Health and Safety Unit 16 33 Maddox St PO Box 6432 Bourke Rd Alexandria NSW 2015 Alexandria NSW 2015 Australia t +61 2 8594 0400 Australia f +61 2 8594 0499

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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

Metals in TCLP Extract by ICPOES Method: ME-(AU)-[ENV]AN3:								
Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH7M_DL2_0.2-0.3	SE266429A.002	LB315499	06 Jun 2024	18 Jun 2024	03 Dec 2024	20 Jun 2024	03 Dec 2024	20 Jun 2024
TCLP (Toxicity Characteris	stic Leaching Procedure) fo	r Metals					Method:	ME-(AU)-[ENV]ANO
Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH7M_DL2_0.2-0.3	SE266429A.002	LB315420	06 Jun 2024	18 Jun 2024	03 Dec 2024	19 Jun 2024	23 Jun 2024	20 Jun 2024



# **SURROGATES**

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 identifer 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.



## SE266429A 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.

Metals in TCLP Extract by ICPOES	P Extract by ICPOES Method: ME-(AU)-[ENV				
Sample Number	Parameter	Units	LOR	Result	
LB315499.001	Nickel, Ni	mg/L	0.005	<0.005	



### **DUPLICATES**

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 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 x 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

No duplicates were required for this job.



# LABORATORY CONTROL SAMPLES

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.

Metals in TCLP Extract by ICPOE	ES				N	Method: ME-(A	U)-[ENV]AN320
Sample Number	Parameter	Uni	s LOR	Result	Expected	Criteria %	Recovery %
LB315499.002	Nickel, Ni	mg/L	0.005	0.51	0.5	80 - 120	101



## **MATRIX SPIKES**

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 identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spikes were required for this job.



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 x 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 identifer when outside suggested criteria. Refer to the footnotes section at the

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: <a href="https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf">https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf</a>

- \* 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.
- 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.
- <sup>(7)</sup> LOR was raised due to dilution of significantly high concentration of analyte in sample.
- Image: Image:
- Recovery failed acceptance criteria due to sample heterogeneity.
- <sup>®</sup> LOR was raised due to high conductivity of the sample (required dilution).
- t Refer to relevant report comments for further information.

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# STATEMENT OF QA/QC PERFORMANCE

CLIENT DETAILS		LABORATORY DETAI	ILS
Contact Client Address	Joel Heininger EI AUSTRALIA SUITE 6.01 55 MILLER STREET PYRMONT NSW 2009	Manager Laboratory Address	Shane McDermott SGS Alexandria Environmental Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	61 2 95160722	Telephone	+61 2 8594 0400
Facsimile	(Not specified)	Facsimile	+61 2 8594 0499
Email	joel.heininger@eiaustralia.com.au	Email	au.environmental.sydney@sgs.com
Project	E26160 1 Veno Street Heathcote NSW	SGS Reference	<b>SE267083 R0</b>
Order Number	E26160	Date Received	20 Jun 2024
Samples	7	Date Reported	25 Jun 2024

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:

Analysis Date	Nitrite in Water	1 item
Duplicate	PAH (Polynuclear Aromatic Hydrocarbons) in Water	11 items
	VOCs in Water	1 item

Type of documentation received	COC	Date documentation received	20/06/2024	
Samples received in good order	Yes	Samples received without headspace	Yes	
Sample temperature upon receipt	8.5°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 Bricks	
Samples clearly labelled	Yes	Complete documentation received	Yes	

SGS Australia Pty Ltd ABN 44 000 964 278 Environment, Health and Safety

Unit 16 33 Maddox St PO Box 6432 Bourke Rd Alexandria NSW 2015 Alexandria NSW 2015 t +61 2 8594 0400 f +61 2 8594 0499

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### SE267083 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

Alkalinity								ME-(AU)-[ENV]AN1
Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH10M-2	SE267083.002	LB315710	20 Jun 2024	20 Jun 2024	04 Jul 2024	21 Jun 2024	04 Jul 2024	24 Jun 2024
mmonia Nitrogen by Di	screte Analyser						Method: I	ME-(AU)-[ENV]AN
Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH10M-2	SE267083.002	LB315611	20 Jun 2024	20 Jun 2024	18 Jul 2024	21 Jun 2024	18 Jul 2024	21 Jun 2024
Anions by Ion Chromatog	graphy in Water						Method:	ME-(AU)-[ENV]AN
Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH10M-2	SE267083.002	LB315616	20 Jun 2024	20 Jun 2024	18 Jul 2024	21 Jun 2024	18 Jul 2024	25 Jun 2024
Conductivity and TDS by	Calculation - Water						Method: I	ME-(AU)-[ENV]AN
Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH2M-2	SE267083.001	LB315737	20 Jun 2024	20 Jun 2024	18 Jul 2024	21 Jun 2024	18 Jul 2024	21 Jun 2024
BH10M-2	SE267083.002	LB315737	20 Jun 2024	20 Jun 2024	18 Jul 2024	21 Jun 2024	18 Jul 2024	21 Jun 2024
BH17M-1	SE267083.003	LB315737	20 Jun 2024	20 Jun 2024	18 Jul 2024	21 Jun 2024	18 Jul 2024	21 Jun 2024
Dissolved Oxygen by Me	mbrane Electrode						Method:	ME-(AU)-[ENV]AN
Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH2M-2	SE267083.001	LB315666	20 Jun 2024	20 Jun 2024	21 Jun 2024	21 Jun 2024	21 Jun 2024	21 Jun 2024
BH10M-2	SE267083.002	LB315666	20 Jun 2024	20 Jun 2024	21 Jun 2024	21 Jun 2024	21 Jun 2024	21 Jun 2024
3H17M-1	SE267083.003	LB315666	20 Jun 2024	20 Jun 2024	21 Jun 2024	21 Jun 2024	21 Jun 2024	21 Jun 2024
ilterable Reactive Phos	phorus (FRP)						Method:	ME-(AU)-[ENV]AN
Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH10M-2	SE267083.002	LB315611	20 Jun 2024	20 Jun 2024	18 Jul 2024	21 Jun 2024	18 Jul 2024	21 Jun 2024
	SE267083.002	LB315611	20 Jun 2024	20 Jun 2024	18 Jul 2024	21 Jun 2024		
forms of Carbon	SE267083.002 Sample No.	LB315611 QC Ref	20 Jun 2024 Sampled	20 Jun 2024 Received	18 Jul 2024 Extraction Due	21 Jun 2024		
orms of Carbon Sample Name							Method:	ME-(AU)-[ENV]AN
<mark>orms of Carbon</mark> Sample Name BH10M-2	Sample No. SE267083.002	QC Ref	Sampled	Received	Extraction Due	Extracted	Method: I Analysis Due 27 Jun 2024	<b>ME-(AU)-[ENV]AN</b> Analysed 25 Jun 2024
i <mark>orms of Carbon</mark> Sample Name BH10M-2 <b>flercury (dissolved) in W</b>	Sample No. SE267083.002 ater	QC Ref LB315788	Sampled 20 Jun 2024	Received 20 Jun 2024	Extraction Due 27 Jun 2024	Extracted 24 Jun 2024	Method: I Analysis Due 27 Jun 2024 Method: ME-(AU)-[ENV	ME-(AU)-[ENV]AN Analysed 25 Jun 2024 ]AN311(Perth)/AN
orms of Carbon Sample Name BH10M-2 Iercury (dissolved) in W Sample Name	Sample No. SE267083.002 ater Sample No.	QC Ref LB315788 QC Ref	Sampled 20 Jun 2024 Sampled	Received 20 Jun 2024 Received	Extraction Due 27 Jun 2024 Extraction Due	Extracted 24 Jun 2024 Extracted	Method: I Analysis Due 27 Jun 2024 Method: ME-(AU)-[ENV Analysis Due	ME-(AU)-[ENV]AN Analysed 25 Jun 2024 ]AN311(Perth)/AN Analysed
orms of Carbon Sample Name BH10M-2 Iercury (dissolved) in W Sample Name BH2M-2	Sample No. SE267083.002 ater Sample No. SE267083.001	QC Ref LB315788 QC Ref LB315651	Sampled 20 Jun 2024 Sampled 20 Jun 2024	Received 20 Jun 2024 Received 20 Jun 2024	Extraction Due 27 Jun 2024 Extraction Due 18 Jul 2024	Extracted 24 Jun 2024 Extracted 21 Jun 2024	Method: I Analysis Due 27 Jun 2024 Method: ME-(AU)-[ENV Analysis Due 18 Jul 2024	ME-(AU)-[ENV]AN Analysed 25 Jun 2024 ]AN311(Perth)/AN Analysed 25 Jun 2024
orms of Carbon Sample Name BH10M-2 Iercury (dissolved) in W Sample Name BH2M-2 BH10M-2	Sample No. SE267083.002 ater Sample No. SE267083.001 SE267083.002	QC Ref LB315788 QC Ref LB315651 LB315651	Sampled 20 Jun 2024 Sampled 20 Jun 2024 20 Jun 2024 20 Jun 2024	Received 20 Jun 2024 Received 20 Jun 2024 20 Jun 2024	Extraction Due 27 Jun 2024 Extraction Due 18 Jul 2024 18 Jul 2024	Extracted 24 Jun 2024 Extracted 21 Jun 2024 21 Jun 2024	Method: I Analysis Due 27 Jun 2024 Method: ME-(AU)-[ENV Analysis Due 18 Jul 2024 18 Jul 2024	ME-(AU)-[ENV]AN Analysed 25 Jun 2024 ]AN311(Perth)/AN Analysed 25 Jun 2024 25 Jun 2024
orms of Carbon Sample Name BH10M-2 Iercury (dissolved) in W Sample Name BH2M-2 BH10M-2 BH10M-2 BH17M-1	Sample No. SE267083.002 ater Sample No. SE267083.001 SE267083.002 SE267083.003	QC Ref LB315788 QC Ref LB315651 LB315651 LB315651	Sampled 20 Jun 2024 Sampled 20 Jun 2024 20 Jun 2024 20 Jun 2024 20 Jun 2024	Received           20 Jun 2024           Received           20 Jun 2024	Extraction Due 27 Jun 2024 Extraction Due 18 Jul 2024 18 Jul 2024 18 Jul 2024	Extracted 24 Jun 2024 Extracted 21 Jun 2024 21 Jun 2024 21 Jun 2024 21 Jun 2024	Method: I Analysis Due 27 Jun 2024 Method: ME-(AU)-[ENV Analysis Due 18 Jul 2024 18 Jul 2024 18 Jul 2024	ME-(AU)-[ENV]AN Analysed 25 Jun 2024 [ANI311(Perth)/AN Analysed 25 Jun 2024 25 Jun 2024 25 Jun 2024
orms of Carbon Sample Name BH10M-2 Iercury (dissolved) in W Sample Name BH2M-2 BH10M-2 BH10M-2 BH17M-1 QD240620	Sample No. SE267083.002 ater Sample No. SE267083.001 SE267083.002	QC Ref LB315788 QC Ref LB315651 LB315651	Sampled 20 Jun 2024 Sampled 20 Jun 2024 20 Jun 2024 20 Jun 2024	Received 20 Jun 2024 Received 20 Jun 2024 20 Jun 2024	Extraction Due 27 Jun 2024 Extraction Due 18 Jul 2024 18 Jul 2024	Extracted 24 Jun 2024 Extracted 21 Jun 2024 21 Jun 2024	Method: I Analysis Due 27 Jun 2024 Method: ME-(AU)-[ENV Analysis Due 18 Jul 2024 18 Jul 2024	ME-(AU)-[ENV]AN Analysed 25 Jun 2024 ]AN311(Perth)/AN Analysed 25 Jun 2024 25 Jun 2024
orms of Carbon Sample Name BH10M-2 Iercury (dissolved) in W Sample Name BH2M-2 BH10M-2 BH10M-2 BH17M-1 QD240620 QR240620	Sample No. SE267083.002 ater Sample No. SE267083.001 SE267083.002 SE267083.003 SE267083.004 SE267083.005	QC Ref LB315788 QC Ref LB315651 LB315651 LB315651 LB315651	Sampled 20 Jun 2024 Sampled 20 Jun 2024 20 Jun 2024 20 Jun 2024 20 Jun 2024 20 Jun 2024	Received           20 Jun 2024           Received           20 Jun 2024	Extraction Due 27 Jun 2024 Extraction Due 18 Jul 2024 18 Jul 2024 18 Jul 2024 18 Jul 2024	Extracted 24 Jun 2024 Extracted 21 Jun 2024 21 Jun 2024 21 Jun 2024 21 Jun 2024 21 Jun 2024	Method: I Analysis Due 27 Jun 2024 Method: ME-(AU)-[ENV Analysis Due 18 Jul 2024 18 Jul 2024 18 Jul 2024 18 Jul 2024 18 Jul 2024	ME-(AU)-[ENV]AN Analysed 25 Jun 2024 [AN311(Perth)/AN Analysed 25 Jun 2024 25 Jun 2024 25 Jun 2024 25 Jun 2024 25 Jun 2024
Forms of Carbon Sample Name BH10M-2 Aercury (dissolved) in W Sample Name BH2M-2 BH10M-2 BH17M-1 QD240620 QR240620 Aletais in Water (Dissolve	Sample No. SE267083.002 ater Sample No. SE267083.001 SE267083.002 SE267083.003 SE267083.004 SE267083.005	QC Ref LB315788 QC Ref LB315651 LB315651 LB315651 LB315651	Sampled 20 Jun 2024 Sampled 20 Jun 2024 20 Jun 2024 20 Jun 2024 20 Jun 2024 20 Jun 2024	Received           20 Jun 2024           Received           20 Jun 2024	Extraction Due 27 Jun 2024 Extraction Due 18 Jul 2024 18 Jul 2024 18 Jul 2024 18 Jul 2024	Extracted 24 Jun 2024 Extracted 21 Jun 2024 21 Jun 2024 21 Jun 2024 21 Jun 2024 21 Jun 2024	Method: I Analysis Due 27 Jun 2024 Method: ME-(AU)-[ENV Analysis Due 18 Jul 2024 18 Jul 2024 18 Jul 2024 18 Jul 2024 18 Jul 2024	ME-(AU)-[ENV]AN Analysed 25 Jun 2024 [AN311(Perth)/AN Analysed 25 Jun 2024 25 Jun 2024 25 Jun 2024 25 Jun 2024 25 Jun 2024
Forms of Carbon Sample Name BH10M-2 Aercury (dissolved) in W Sample Name BH2M-2 BH10M-2 BH10M-2 BH17M-1 QD240620 QR240620 Aetals in Water (Dissolve Sample Name	Sample No. SE267083.002 ater Sample No. SE267083.001 SE267083.002 SE267083.003 SE267083.004 SE267083.005 SE267083.005 ad) by ICPOES	QC Ref LB315788 QC Ref LB315651 LB315651 LB315651 LB315651 LB315651	Sampled 20 Jun 2024 Sampled 20 Jun 2024 20 Jun 2024 20 Jun 2024 20 Jun 2024 20 Jun 2024 20 Jun 2024	Received           20 Jun 2024           Received           20 Jun 2024	Extraction Due 27 Jun 2024 Extraction Due 18 Jul 2024 18 Jul 2024 18 Jul 2024 18 Jul 2024 18 Jul 2024 18 Jul 2024	Extracted 24 Jun 2024 Extracted 21 Jun 2024 21 Jun 2024 21 Jun 2024 21 Jun 2024 21 Jun 2024 21 Jun 2024	Method:         I           Analysis Due         27 Jun 2024           27 Jun 2024         I           Method:         ME-(AU)-[ENV           Analysis Due         18 Jul 2024           18 Jul 2024         18 Jul 2024	ME-(AU)-[ENV]AN Analysed 25 Jun 2024 [AN311(Perth)/AN Analysed 25 Jun 2024 25 Jun 2024 25 Jun 2024 25 Jun 2024 25 Jun 2024 25 Jun 2024 ME-(AU)-[ENV]AN
Forms of Carbon Sample Name BH10M-2 Aercury (dissolved) in W Sample Name BH2M-2 BH17M-2 BH17M-1 QD240620 QR240620 Aetais in Water (Dissolve Sample Name BH10M-2	Sample No. SE267083.002 ater Sample No. SE267083.001 SE267083.002 SE267083.004 SE267083.004 SE267083.005 od) by ICPOES Sample No.	QC Ref LB315788 QC Ref LB315651 LB315651 LB315651 LB315651 LB315651 LB315651 QC Ref	Sampled 20 Jun 2024 Sampled 20 Jun 2024 20 Jun 2024	Received           20 Jun 2024           Received           20 Jun 2024	Extraction Due           27 Jun 2024           Extraction Due           18 Jul 2024	Extracted 24 Jun 2024 Extracted 21 Jun 2024 21 Jun 2024 21 Jun 2024 21 Jun 2024 21 Jun 2024 21 Jun 2024 21 Jun 2024 Extracted	Method:         I           Analysis Due         27 Jun 2024           27 Jun 2024         I           Method:         ME-(AU)-[ENV           Analysis Due         18 Jul 2024           18 Jul 2024         18 Jul 2024           17 Dec 2024         17 Dec 2024	ME-(AU)-[ENV]AN Analysed 25 Jun 2024 ]AN311(Perth)/AN Analysed 25 Jun 2024 25 Jun 2024 25 Jun 2024 25 Jun 2024 25 Jun 2024 ME-(AU)-[ENV]AN Analysed 24 Jun 2024
Forms of Carbon Sample Name BH10M-2 Aercury (dissolved) in W Sample Name BH2M-2 BH10M-2 BH17M-1 QD240620 QR240620 Aletals in Water (Dissolve Sample Name BH10M-2 BH10M-2	Sample No. SE267083.002 ater Sample No. SE267083.001 SE267083.002 SE267083.003 SE267083.004 SE267083.005 ad) by ICPOES Sample No. SE267083.002	QC Ref LB315788 QC Ref LB315651 LB315651 LB315651 LB315651 LB315651 QC Ref LB315759	Sampled           20 Jun 2024           Sampled           20 Jun 2024           Sampled           20 Jun 2024	Received           20 Jun 2024           Received           20 Jun 2024	Extraction Due           27 Jun 2024           Extraction Due           18 Jul 2024	Extracted 24 Jun 2024 Extracted 21 Jun 2024 21 Jun 2024 21 Jun 2024 21 Jun 2024 21 Jun 2024 21 Jun 2024 Extracted 24 Jun 2024	Method:         I           Analysis Due         27 Jun 2024           27 Jun 2024         I           Method:         ME-(AU)-[ENV           Analysis Due         18 Jul 2024           18 Jul 2024         Method:           18 Jul 2024         I           I8 Jul 2024         I           Method:         I           Analysis Due         I           I7 Dec 2024         I           Method:         I	ME-(AU)-[ENV]AN Analysed 25 Jun 2024 ]AN311(Perth)/AN Analysed 25 Jun 2024 25 Jun 2024 25 Jun 2024 25 Jun 2024 AE-(AU)-[ENV]AN Analysed 24 Jun 2024
Forms of Carbon Sample Name BH10M-2 Aercury (dissolved) in W Sample Name BH2M-2 BH17M-2 BH17M-1 QD240620 QR240620 Aetals in Water (Dissolve Sample Name BH10M-2 BH10M-2 Ilitrite in Water Sample Name	Sample No. SE267083.002 ater Sample No. SE267083.001 SE267083.002 SE267083.004 SE267083.004 SE267083.005 Se267083.005 Seample No.	QC Ref LB315788 QC Ref LB315651 LB315651 LB315651 LB315651 LB315651 LB315651 QC Ref	Sampled 20 Jun 2024 Sampled 20 Jun 2024 20 Jun 2024	Received           20 Jun 2024           Received           20 Jun 2024	Extraction Due           27 Jun 2024           Extraction Due           18 Jul 2024	Extracted 24 Jun 2024 Extracted 21 Jun 2024 21 Jun 2024 21 Jun 2024 21 Jun 2024 21 Jun 2024 21 Jun 2024 21 Jun 2024 Extracted	Method:         I           Analysis Due         27 Jun 2024           27 Jun 2024         I           Method:         ME-(AU)-[ENV           Analysis Due         18 Jul 2024           18 Jul 2024         18 Jul 2024           17 Dec 2024         17 Dec 2024	ME-(AU)-[ENV]AN Analysed 25 Jun 2024 ]AN311(Perth)/AN Analysed 25 Jun 2024 25 Jun 2024 25 Jun 2024 25 Jun 2024 25 Jun 2024 ME-(AU)-[ENV]AN Analysed 24 Jun 2024
Forms of Carbon Sample Name BH10M-2 Aercury (dissolved) in W Sample Name BH2M-2 BH17M-2 BH17M-1 QD240620 QR240620 Aetals in Water (Dissolve Sample Name BH10M-2 BH10M-2 Ilitrite in Water Sample Name	Sample No. SE267083.002 ater Sample No. SE267083.001 SE267083.002 SE267083.004 SE267083.004 SE267083.005 ad) by ICPOES Sample No. SE267083.002	QC Ref LB315788 QC Ref LB315651 LB315651 LB315651 LB315651 LB315651 QC Ref LB315759 QC Ref	Sampled           20 Jun 2024           Sampled           20 Jun 2024           Sampled           20 Jun 2024	Received           20 Jun 2024           Received           20 Jun 2024	Extraction Due 27 Jun 2024 Extraction Due 18 Jul 2024 18 Jul 2024 18 Jul 2024 18 Jul 2024 18 Jul 2024 18 Jul 2024 Extraction Due 17 Dec 2024	Extracted 24 Jun 2024 Extracted 21 Jun 2024 21 Jun 2024 21 Jun 2024 21 Jun 2024 21 Jun 2024 21 Jun 2024 Extracted 24 Jun 2024	Method: I Analysis Due 27 Jun 2024 Method: ME-(AU)-[ENV Analysis Due 18 Jul 2024 18 Jul 2024 19 Jul 2024 19 Jul 2024 10 Jul 20	ME-(AU)-[ENV]AN Analysed 25 Jun 2024 ]AN311(Perth)/AN Analysed 25 Jun 2024 25 Jun 2024 25 Jun 2024 25 Jun 2024 25 Jun 2024 25 Jun 2024 ME-(AU)-[ENV]AN Analysed Analysed
Corms of Carbon Sample Name BH10M-2 Aercury (dissolved) in W Sample Name BH2M-2 BH10M-2 BH17M-1 QD240620 QD240620 QD240620 Aetals in Water (Dissolve Sample Name BH10M-2 Litrite in Water Sample Name BH10M-2 PAH (Polynuclear Aroma	Sample No. SE267083.002 ater Sample No. SE267083.001 SE267083.003 SE267083.003 SE267083.004 SE267083.005 ad) by ICPOES Sample No. SE267083.002 Sample No. SE267083.002 titc Hydrocarbons) in Water	QC Ref LB315788 QC Ref LB315651 LB315651 LB315651 LB315651 LB315651 QC Ref LB315759 QC Ref LB315611	Sampled 20 Jun 2024 20 Jun 2024 20 Jun 2024 20 Jun 2024 20 Jun 2024 20 Jun 2024 20 Jun 2024 Sampled 20 Jun 2024 Sampled 20 Jun 2024	Received           20 Jun 2024           Received           20 Jun 2024           Received           20 Jun 2024	Extraction Due           27 Jun 2024           Extraction Due           18 Jul 2024           Extraction Due           17 Dec 2024           Extraction Due           24 Jun 2024	Extracted 24 Jun 2024 Extracted 21 Jun 2024 21 Jun 2024 21 Jun 2024 21 Jun 2024 21 Jun 2024 21 Jun 2024 Extracted 24 Jun 2024 Extracted 21 Jun 2024	Method: I Analysis Due 27 Jun 2024 Method: ME-(AU)-[ENV Analysis Due 18 Jul 2024 18 Jul 2024 18 Jul 2024 18 Jul 2024 18 Jul 2024 18 Jul 2024 18 Jul 2024 Method: I Analysis Due 17 Dec 2024 Method: I Analysis Due 24 Jun 2024	ME-(AU)-[ENV]AN Analysed 25 Jun 2024 ]AN311(Perth)/AN Analysed 25 Jun 2024 25 Jun 2024 25 Jun 2024 25 Jun 2024 25 Jun 2024 ME-(AU)-[ENV]AN Analysed 25 Jun 2024 ME-(AU)-[ENV]AN
Forms of Carbon Sample Name BH10M-2 Aercury (dissolved) in W Sample Name BH2M-2 BH10M-2 BH17M-1 QD240620 QR240620 Aetals in Water (Dissolve Sample Name BH10M-2 Itirite in Water Sample Name BH10M-2 PAH (Polynuclear Aroma Sample Name	Sample No.           SE267083.002           Seter           Sample No.           SE267083.001           SE267083.002           SE267083.002           SE267083.004           SE267083.005           ad) by ICPOES           Sample No.           SE267083.002           Sample No.           SE267083.002           Sample No.           SE267083.002           Sample No.           SE267083.002           Sample No.           SE267083.002	QC Ref LB315788 QC Ref LB315651 LB315651 LB315651 LB315651 QC Ref LB315759 QC Ref LB315611 QC Ref	Sampled           20 Jun 2024           Sampled           20 Jun 2024           Sampled           20 Jun 2024           Sampled           20 Jun 2024	Received           20 Jun 2024           Received           20 Jun 2024           Received           20 Jun 2024	Extraction Due 27 Jun 2024 Extraction Due 18 Jul 2024 18 Jul 2024 18 Jul 2024 18 Jul 2024 18 Jul 2024 Extraction Due 17 Dec 2024 Extraction Due 24 Jun 2024 Extraction Due	Extracted 24 Jun 2024 21 Jun 2024 Extracted 24 Jun 2024 Extracted 21 Jun 2024	Method: I Analysis Due 27 Jun 2024 Method: ME-(AU)-[ENV Analysis Due 18 Jul 2024 18 Jul 2024 18 Jul 2024 18 Jul 2024 18 Jul 2024 18 Jul 2024 18 Jul 2024 Method: I Analysis Due 24 Jun 2024 Method: I Analysis Due 24 Jun 2024	ME-(AU)-[ENV]AN Analysed 25 Jun 2024 JAN311(Perth)/AN Analysed 25 Jun 2024 25 Jun 2024 25 Jun 2024 25 Jun 2024 25 Jun 2024 ME-(AU)-[ENV]AN Analysed 25 Jun 2024 ME-(AU)-[ENV]AN Analysed
iorms of Carbon Sample Name BH10M-2 Aercury (dissolved) in W Sample Name BH2M-2 BH10M-2 BH17M-1 QD240620 QR240620 Aetals in Water (Dissolve Sample Name BH10M-2 Ilitrite in Water Sample Name BH10M-2 ZAH (Polynuclear Aroma Sample Name BH2M-2	Sample No. SE267083.002 ater Sample No. SE267083.001 SE267083.003 SE267083.004 SE267083.004 SE267083.005 ad) by ICPOES Sample No. SE267083.002 Sample No. SE267083.002 tite Hydrocarbons) in Water Sample No. SE267083.001	QC Ref LB315788 QC Ref LB315651 LB315651 LB315651 LB315651 QC Ref LB315759 QC Ref LB315611 QC Ref LB315600	Sampled           20 Jun 2024           Sampled           20 Jun 2024           Sampled           20 Jun 2024           Sampled           20 Jun 2024           Sampled           20 Jun 2024	Received           20 Jun 2024           Received           20 Jun 2024           Received           20 Jun 2024           Received           20 Jun 2024	Extraction Due 27 Jun 2024 Extraction Due 18 Jul 2024 Extraction Due 17 Dec 2024 Extraction Due 24 Jun 2024 Extraction Due 24 Jun 2024	Extracted 24 Jun 2024 21 Jun 2024 Extracted 24 Jun 2024 Extracted 21 Jun 2024	Method: I Analysis Due 27 Jun 2024 Method: ME-(AU)-[ENV Analysis Due 18 Jul 2024 18 Jul 2024 18 Jul 2024 18 Jul 2024 18 Jul 2024 18 Jul 2024 Method: I Analysis Due 24 Jun 2024 Method: I Analysis Due 24 Jun 2024	ME-(AU)-[ENV]AN Analysed 25 Jun 2024 ]AN311(Perth)/AN Analysed 25 Jun 2024 25 Jun 2024 25 Jun 2024 25 Jun 2024 25 Jun 2024 ME-(AU)-[ENV]AN Analysed 25 Jun 2024 ME-(AU)-[ENV]AN Analysed 25 Jun 2024† ME-(AU)-[ENV]AN Analysed 25 Jun 2024†
Forms of Carbon Sample Name BH10M-2 Aercury (dissolved) in W Sample Name BH2M-2 BH10M-2 BH10M-2 BH17M-1 QD240620 QR240620 Aetals in Water (Dissolve Sample Name BH10M-2 Vitrite in Water Sample Name BH10M-2 Sample Name BH10M-2 BH10M-2 BH10M-2	Sample No. SE267083.002 ater Sample No. SE267083.001 SE267083.002 SE267083.003 SE267083.004 SE267083.005 ad) by ICPOES Sample No. SE267083.002 Sample No. SE267083.002 attic Hydrocarbons) in Water Sample No. SE267083.001 SE267083.001 SE267083.002	QC Ref LB315788 QC Ref LB315651 LB315651 LB315651 LB315651 QC Ref LB315759 QC Ref LB315611 QC Ref LB315601	Sampled           20 Jun 2024           Sampled           20 Jun 2024           Sampled           20 Jun 2024           Sampled           20 Jun 2024           Sampled           20 Jun 2024	Received           20 Jun 2024           Received           20 Jun 2024           Received           20 Jun 2024           Received           20 Jun 2024           Received           20 Jun 2024	Extraction Due           27 Jun 2024           Extraction Due           18 Jul 2024           Extraction Due           17 Dec 2024           Extraction Due           24 Jun 2024           Extraction Due           27 Jun 2024           27 Jun 2024	Extracted 24 Jun 2024 21 Jun 2024 Extracted 24 Jun 2024 Extracted 21 Jun 2024 Extracted 21 Jun 2024	Method: I Analysis Due 27 Jun 2024 Method: ME-(AU)-[ENV Analysis Due 18 Jul 2024 18 Jul 2024 Method: I Analysis Due 24 Jun 2024 Method: I Analysis Due 24 Jun 2024	ME-(AU)-[ENV]AN Analysed 25 Jun 2024 ]AN311(Perth)/AN Analysed 25 Jun 2024 25 Jun 2024 25 Jun 2024 25 Jun 2024 25 Jun 2024 ME-(AU)-[ENV]AN Analysed 25 Jun 2024 ME-(AU)-[ENV]AN Analysed 25 Jun 2024 ME-(AU)-[ENV]AN Analysed 25 Jun 2024
OR240620 Vetals in Water (Dissolve Sample Name BH10M-2 Vitrite in Water Sample Name BH10M-2	Sample No. SE267083.002 ater Sample No. SE267083.001 SE267083.003 SE267083.004 SE267083.004 SE267083.005 ad) by ICPOES Sample No. SE267083.002 Sample No. SE267083.002 tite Hydrocarbons) in Water Sample No. SE267083.001	QC Ref LB315788 QC Ref LB315651 LB315651 LB315651 LB315651 QC Ref LB315759 QC Ref LB315611 QC Ref LB315600	Sampled           20 Jun 2024           Sampled           20 Jun 2024           Sampled           20 Jun 2024           Sampled           20 Jun 2024           Sampled           20 Jun 2024	Received           20 Jun 2024           Received           20 Jun 2024           Received           20 Jun 2024           Received           20 Jun 2024	Extraction Due 27 Jun 2024 Extraction Due 18 Jul 2024 Extraction Due 17 Dec 2024 Extraction Due 24 Jun 2024 Extraction Due 24 Jun 2024	Extracted 24 Jun 2024 21 Jun 2024 Extracted 24 Jun 2024 Extracted 21 Jun 2024	Method: I Analysis Due 27 Jun 2024 Method: ME-(AU)-[ENV Analysis Due 18 Jul 2024 18 Jul 2024 18 Jul 2024 18 Jul 2024 18 Jul 2024 18 Jul 2024 Method: I Analysis Due 24 Jun 2024 Method: I Analysis Due 24 Jun 2024	ME-(AU)-[ENV]AN Analysed 25 Jun 2024 [AN311(Perth)/AN Analysed 25 Jun 2024 25 Jun 2024 25 Jun 2024 25 Jun 2024 25 Jun 2024 ME-(AU)-[ENV]AN Analysed 25 Jun 2024 ME-(AU)-[ENV]AN Analysed 25 Jun 2024 ME-(AU)-[ENV]AN Analysed 25 Jun 2024

pH in water

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH2M-2	SE267083.001	LB315737	20 Jun 2024	20 Jun 2024	21 Jun 2024	21 Jun 2024	21 Jun 2024	21 Jun 2024
BH10M-2	SE267083.002	LB315737	20 Jun 2024	20 Jun 2024	21 Jun 2024	21 Jun 2024	21 Jun 2024	21 Jun 2024

Method: ME-(AU)-[ENV]AN101



### SE267083 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

pH in water (continued)							Method:	ME-(AU)-[ENV]AN101	
Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed	
BH17M-1	SE267083.003	LB315737	20 Jun 2024	20 Jun 2024	21 Jun 2024	21 Jun 2024	21 Jun 2024	21 Jun 2024	
Redox Potential (Eh) in water Method: ME-(AU)-[ENV]AN2									
Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed	
BH2M-2	SE267083.001	LB315735	20 Jun 2024	20 Jun 2024	21 Jun 2024	21 Jun 2024	21 Jun 2024	21 Jun 2024	
BH10M-2	SE267083.002	LB315735	20 Jun 2024	20 Jun 2024	21 Jun 2024	21 Jun 2024	21 Jun 2024	21 Jun 2024	
BH17M-1	SE267083.003	LB315735	20 Jun 2024	20 Jun 2024	21 Jun 2024	21 Jun 2024	21 Jun 2024	21 Jun 2024	
TKN Kjeldahl Digestion by	Discrete Analyser						Method:	ME-(AU)-[ENV]AN292	
Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed	
BH10M-2	SE267083.002	LB315605	20 Jun 2024	20 Jun 2024	18 Jul 2024	21 Jun 2024	18 Jul 2024	25 Jun 2024	

Total and Volatile Suspended Solids (TSS / VSS) Method: ME-(#								ME-(AU)-[ENV]AN114
Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH10M-2	SE267083.002	LB315642	20 Jun 2024	20 Jun 2024	27 Jun 2024	21 Jun 2024	28 Jun 2024	21 Jun 2024

### Total Dissolved Solids (TDS) in water

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH10M-2	SE267083.002	LB315665	20 Jun 2024	20 Jun 2024	27 Jun 2024	21 Jun 2024	27 Jun 2024	24 Jun 2024

<b>Total Phenolics in Water</b>							Method:	ME-(AU)-[ENV]AN295
Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH2M-2	SE267083.001	LB315920	20 Jun 2024	20 Jun 2024	04 Jul 2024	25 Jun 2024	04 Jul 2024	25 Jun 2024
BH10M-2	SE267083.002	LB315920	20 Jun 2024	20 Jun 2024	04 Jul 2024	25 Jun 2024	04 Jul 2024	25 Jun 2024
BH17M-1	SE267083.003	LB315920	20 Jun 2024	20 Jun 2024	04 Jul 2024	25 Jun 2024	04 Jul 2024	25 Jun 2024
Total Phosphorus by Kjel	dahl Digestion DA in Water					Metho	d: ME-(AU)-[ENV]AN27	9/AN293(Sydney only)
Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH10M-2	SE267083.002	LB315605	20 Jun 2024	20 Jun 2024	18 Jul 2024	21 Jun 2024	18 Jul 2024	24 Jun 2024

Trace Metals (Dissolved) in Water by ICPMS						Method:	ME-(AU)-[ENV]AN318	
Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH2M-2	SE267083.001	LB315859	20 Jun 2024	20 Jun 2024	17 Dec 2024	24 Jun 2024	17 Dec 2024	25 Jun 2024
BH10M-2	SE267083.002	LB315859	20 Jun 2024	20 Jun 2024	17 Dec 2024	24 Jun 2024	17 Dec 2024	25 Jun 2024
BH17M-1	SE267083.003	LB315859	20 Jun 2024	20 Jun 2024	17 Dec 2024	24 Jun 2024	17 Dec 2024	25 Jun 2024
QD240620	SE267083.004	LB315859	20 Jun 2024	20 Jun 2024	17 Dec 2024	24 Jun 2024	17 Dec 2024	25 Jun 2024
QR240620	SE267083.005	LB315859	20 Jun 2024	20 Jun 2024	17 Dec 2024	24 Jun 2024	17 Dec 2024	25 Jun 2024
TRH (Total Recoverable Hydrocarbons) in Water Method: ME-(AU)-[ENV]AN403						ME-(AU)-[ENV]AN403		

Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
SE267083.001	LB315600	20 Jun 2024	20 Jun 2024	27 Jun 2024	21 Jun 2024	31 Jul 2024	25 Jun 2024
SE267083.002	LB315600	20 Jun 2024	20 Jun 2024	27 Jun 2024	21 Jun 2024	31 Jul 2024	25 Jun 2024
SE267083.003	LB315600	20 Jun 2024	20 Jun 2024	27 Jun 2024	21 Jun 2024	31 Jul 2024	25 Jun 2024
SE267083.004	LB315600	20 Jun 2024	20 Jun 2024	27 Jun 2024	21 Jun 2024	31 Jul 2024	25 Jun 2024
SE267083.005	LB315600	20 Jun 2024	20 Jun 2024	27 Jun 2024	21 Jun 2024	31 Jul 2024	25 Jun 2024
						Method: I	ME-(AU)-[ENV]AN119
Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
SE267083.002	LB315734	20 Jun 2024	20 Jun 2024	21 Jun 2024	21 Jun 2024	21 Jun 2024	21 Jun 2024
	SE267083.001 SE267083.002 SE267083.003 SE267083.004 SE267083.005 Sample No.	SE267083.001         LB315600           SE267083.002         LB315600           SE267083.003         LB315600           SE267083.004         LB315600           SE267083.005         LB315600           SE267083.005         LB315600           SE267083.005         LB315600	SE267083.001         LB315600         20 Jun 2024           SE267083.002         LB315600         20 Jun 2024           SE267083.003         LB315600         20 Jun 2024           SE267083.004         LB315600         20 Jun 2024           SE267083.005         LB315600         20 Jun 2024           Sexemple No.         QC Ref         Sampled	SE267083.001         LB315600         20 Jun 2024         20 Jun 2024           SE267083.002         LB315600         20 Jun 2024         20 Jun 2024           SE267083.003         LB315600         20 Jun 2024         20 Jun 2024           SE267083.004         LB315600         20 Jun 2024         20 Jun 2024           SE267083.005         LB315600         20 Jun 2024         20 Jun 2024	SE267083.001         LB315600         20 Jun 2024         20 Jun 2024         27 Jun 2024           SE267083.002         LB315600         20 Jun 2024         20 Jun 2024         27 Jun 2024           SE267083.003         LB315600         20 Jun 2024         20 Jun 2024         27 Jun 2024           SE267083.003         LB315600         20 Jun 2024         20 Jun 2024         27 Jun 2024           SE267083.004         LB315600         20 Jun 2024         20 Jun 2024         27 Jun 2024           SE267083.005         LB315600         20 Jun 2024         20 Jun 2024         27 Jun 2024           SE267083.005         LB315600         20 Jun 2024         20 Jun 2024         27 Jun 2024           SE267083.005         LB315600         20 Jun 2024         20 Jun 2024         27 Jun 2024           Sexemple No.         QC Ref         Sampled         Received         Extraction Due	SE267083.001         LB315600         20 Jun 2024         20 Jun 2024         27 Jun 2024         21 Jun 2024           SE267083.002         LB315600         20 Jun 2024         20 Jun 2024         27 Jun 2024         21 Jun 2024           SE267083.003         LB315600         20 Jun 2024         20 Jun 2024         27 Jun 2024         21 Jun 2024           SE267083.003         LB315600         20 Jun 2024         20 Jun 2024         27 Jun 2024         21 Jun 2024           SE267083.004         LB315600         20 Jun 2024         20 Jun 2024         27 Jun 2024         21 Jun 2024           SE267083.005         LB315600         20 Jun 2024         20 Jun 2024         27 Jun 2024         21 Jun 2024           SE267083.005         LB315600         20 Jun 2024         20 Jun 2024         27 Jun 2024         21 Jun 2024           SE267083.005         LB315600         20 Jun 2024         20 Jun 2024         27 Jun 2024         21 Jun 2024           Semple No.         QC Ref         Sampled         Received         Extraction Due         Extracted	SE267083.001         LB315600         20 Jun 2024         20 Jun 2024         27 Jun 2024         21 Jun 2024         31 Jul 2024           SE267083.002         LB315600         20 Jun 2024         20 Jun 2024         27 Jun 2024         21 Jun 2024         31 Jul 2024           SE267083.003         LB315600         20 Jun 2024         20 Jun 2024         27 Jun 2024         21 Jun 2024         31 Jul 2024           SE267083.003         LB315600         20 Jun 2024         20 Jun 2024         27 Jun 2024         21 Jun 2024         31 Jul 2024           SE267083.004         LB315600         20 Jun 2024         20 Jun 2024         27 Jun 2024         21 Jun 2024         31 Jul 2024           SE267083.005         LB315600         20 Jun 2024         20 Jun 2024         27 Jun 2024         21 Jun 2024         31 Jul 2024           SE267083.005         LB315600         20 Jun 2024         20 Jun 2024         27 Jun 2024         21 Jun 2024         31 Jul 2024           SE267083.005         LB315600         20 Jun 2024         20 Jun 2024         27 Jun 2024         21 Jun 2024         31 Jul 2024           Se267083.005         LB315600         20 Jun 2024         20 Jun 2024         27 Jun 2024         21 Jun 2024         31 Jul 2024           Se267083.005         LB315600

#### Method: ME-(AU)-[ENV]AN433

Method: ME-(AU)-[ENV]AN113

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH2M-2	SE267083.001	LB315814	20 Jun 2024	20 Jun 2024	04 Jul 2024	24 Jun 2024	04 Jul 2024	25 Jun 2024
BH10M-2	SE267083.002	LB315814	20 Jun 2024	20 Jun 2024	04 Jul 2024	24 Jun 2024	04 Jul 2024	25 Jun 2024
BH17M-1	SE267083.003	LB315814	20 Jun 2024	20 Jun 2024	04 Jul 2024	24 Jun 2024	04 Jul 2024	25 Jun 2024
QD240620	SE267083.004	LB315814	20 Jun 2024	20 Jun 2024	04 Jul 2024	24 Jun 2024	04 Jul 2024	25 Jun 2024
QR240620	SE267083.005	LB315814	20 Jun 2024	20 Jun 2024	04 Jul 2024	24 Jun 2024	04 Jul 2024	25 Jun 2024
QTS240620	SE267083.006	LB315814	20 Jun 2024	20 Jun 2024	04 Jul 2024	24 Jun 2024	04 Jul 2024	25 Jun 2024
QTB240620	SE267083.007	LB315814	20 Jun 2024	20 Jun 2024	04 Jul 2024	24 Jun 2024	04 Jul 2024	25 Jun 2024

VOCs in Water



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

#### Volatile Petroleum Hydrocarbons in Water Method: ME-(AU)-[ENV]AN433 Sample Name Sample No. QC Ref Sampled Received Extraction Due Extracted Analysis Due Analysed BH2M-2 SE267083.001 LB315814 20 Jun 2024 20 Jun 2024 04 Jul 2024 24 Jun 2024 04 Jul 2024 25 Jun 2024 BH10M-2 SE267083.002 LB315814 20 Jun 2024 20 Jun 2024 04 Jul 2024 24 Jun 2024 04 Jul 2024 25 Jun 2024 BH17M-1 SE267083.003 20 Jun 2024 LB315814 20 Jun 2024 04 Jul 2024 24 Jun 2024 04 Jul 2024 25 Jun 2024 QD240620 SE267083.004 LB315814 20 Jun 2024 20 Jun 2024 04 Jul 2024 24 Jun 2024 04 Jul 2024 25 Jun 2024 QR240620 SE267083.005 LB315814 20 Jun 2024 20 Jun 2024 04 Jul 2024 24 Jun 2024 04 Jul 2024 25 Jun 2024 OTS240620 SE267083.006 LB315814 20 Jun 2024 20 Jun 2024 04 Jul 2024 24 Jun 2024 04 Jul 2024 25 Jun 2024 QTB240620 SE267083.007 LB315814 20 Jun 2024 20 Jun 2024 04 Jul 2024 24 Jun 2024 04 Jul 2024 25 Jun 2024



## **SURROGATES**

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 identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

#### PAH (Polynuclear Aromatic Hydrocarbons) in Water

### Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	BH2M-2	SE267083.001	%	40 - 130%	69
	BH10M-2	SE267083.002	%	40 - 130%	88
	BH17M-1	SE267083.003	%	40 - 130%	81
d14-p-terphenyl (Surrogate)	BH2M-2	SE267083.001	%	40 - 130%	85
	BH10M-2	SE267083.002	%	40 - 130%	101
	BH17M-1	SE267083.003	%	40 - 130%	90
d5-nitrobenzene (Surrogate)	BH2M-2	SE267083.001	%	40 - 130%	83
	BH10M-2	SE267083.002	%	40 - 130%	94
	BH17M-1	SE267083.003	%	40 - 130%	88

#### VOCs in Water Method: ME-(AU)-[ENV]AN433 Parameter Sample Name Sample Number Units Criteria Recovery % Bromofluorobenzene (Surrogate) BH2M-2 SE267083.001 40 - 130% % 80 BH10M-2 SE267083.002 40 - 130% 78 % BH17M-1 SE267083.003 % 40 - 130% 79 QD240620 SE267083.004 % 40 - 130% 78 QR240620 SE267083.005 % 40 - 130% 74 QTS240620 SE267083.006 % 40 - 130% 104 QTB240620 74 SE267083.007 % 40 - 130% d4-1.2-dichloroethane (Surrogate) BH2M-2 SE267083.001 40 - 130% % 99 BH10M-2 SE267083.002 % 40 - 130% 100 BH17M-1 SE267083.003 % 40 - 130% 98 QD240620 SE267083.004 40 - 130% 103 % QR240620 SE267083.005 % 40 - 130% 97 QTS240620 SE267083.006 40 - 130% 84 % QTB240620 SE267083.007 40 - 130% 92 % d8-toluene (Surrogate) BH2M-2 SE267083.001 % 40 - 130% 101 BH10M-2 SE267083.002 40 - 130% 85 % BH17M-1 SE267083.003 40 - 130% 94 % QD240620 SE267083.004 % 40 - 130% 82 QR240620 SE267083.005 % 40 - 130% 91 QTS240620 SE267083.006 % 40 - 130% 82 QTB240620 SE267083.007 % 40 - 130% 95

#### Volatile Petroleum Hydrocarbons in Water

Volatile Petroleum Hydrocarbons in Water				Method: M	E-(AU)-[ENV]AN433
Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	BH2M-2	SE267083.001	%	40 - 130%	80
	BH10M-2	SE267083.002	%	40 - 130%	78
	BH17M-1	SE267083.003	%	40 - 130%	79
	QD240620	SE267083.004	%	40 - 130%	78
	QR240620	SE267083.005	%	40 - 130%	74
d4-1,2-dichloroethane (Surrogate)	BH2M-2	SE267083.001	%	60 - 130%	99
	BH10M-2	SE267083.002	%	60 - 130%	100
	BH17M-1	SE267083.003	%	60 - 130%	98
	QD240620	SE267083.004	%	60 - 130%	103
	QR240620	SE267083.005	%	60 - 130%	97
d8-toluene (Surrogate)	BH2M-2	SE267083.001	%	40 - 130%	101
	BH10M-2	SE267083.002	%	40 - 130%	85
	BH17M-1	SE267083.003	%	40 - 130%	94
	QD240620	SE267083.004	%	40 - 130%	82
	QR240620	SE267083.005	%	40 - 130%	91



### SE267083 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.

### Method: ME-(AU)-[ENV]AN135

Method: ME-(AU)-[ENV]AN190

Method: ME-(AU)-[ENV]AN320

Parameter	Units	LOR	Result
Bicarbonate Alkalinity as CaCO3	mg/L	5	<5
Carbonate Alkalinity as CaCO3	mg/L	1	<1
Total Alkalinity as CaCO3	mg/L	5	<5
		Meth	nod: ME-(AU)-[ENV]AN291
Parameter	Units	LOR	Result
Ammonia Nitrogen, NH₃ as N	mg/L	0.01	<0.01
	Bicarbonate Alkalinity as CaCO3 Carbonate Alkalinity as CaCO3 Total Alkalinity as CaCO3 Parameter	Bicarbonate Alkalinity as CaCO3     mg/L       Carbonate Alkalinity as CaCO3     mg/L       Total Alkalinity as CaCO3     mg/L	Bicarbonate Alkalinity as CaCO3     mg/L     5       Carbonate Alkalinity as CaCO3     mg/L     1       Total Alkalinity as CaCO3     mg/L     5       Method       Parameter     Units     LOR

#### Anions by Ion Chromatography in Water

Alkalinity

Anions by Ion Chromatography in Water			Meth	od: ME-(AU)-[ENV]AN245
Sample Number	Parameter	Units	LOR	Result
LB315616.001	Chloride	mg/L	1	<1.0
	Nitrate Nitrogen, NO3-N	mg/L	0.005	<0.005
	Sulfate, SO4	mg/L	1	<1.0
Conductivity and TDS by Calculation - Water			Meth	od: ME-(AU)-[ENV]AN106
Sample Number	Parameter	Units	LOR	Result
LB315737.001	Conductivity @ 25 C	µS/cm	2	<2
	Total Dissolved Solids (by calculation)	mg/L	10	<10

#### Dissolved Oxygen by Membrane Electrode

Dissolved Oxygen by Membrane Electrode			Meth	od: ME-(AU)-[ENV]AN176
Sample Number	Parameter	Units	LOR	Result
LB315666.001	Dissolved Oxygen**	mg/L	0.5	<0.5

#### Filterable Reactive Phosphorus (FRP)

Filterable Reactive Phosphorus (FRP)			Metho	od: ME-(AU)-[ENV]AN278
Sample Number	Parameter	Units	LOR	Result
LB315611.001	Filterable Reactive Phosphorus as P	mg/L	0.005	<0.005

#### Forms of Carbon

Sample Number	Parameter	Units	LOR	Result
LB315788.001	Total Organic Carbon as NPOC	mg/L	0.2	<0.2

### Mercury (dissolved) in Water

Mercury (dissolved) in Water			Method: ME-(AU)-[E	NV]AN311(Perth)/AN312
Sample Number	Parameter	Units	LOR	Result
LB315651.001	Mercury	mg/L	0.0001	<0.0001

#### Metals in Water (Dissolved) by ICPOES

Sample Number	Parameter	Units	LOR	Result
LB315759.001	Calcium, Ca	mg/L	0.1	<0.1
	Magnesium, Mg	mg/L	0.1	<0.1
	Potassium, K	mg/L	0.1	<0.1
	Sodium, Na	mg/L	0.5	<0.5
Nitrite in Water			Met	hod: ME-(AU)-[ENV]AN277
Sample Number	Parameter	Units	LOR	Result
LB315611.001	Nitrite Nitrogen, NO2 as N	mg/L	0.005	<0.005

### PAH (Polynuclear Aromatic Hydrocarbons) in Water

PAH (Polynuclear Aromatic Hydrocarbons) in Water			Metho	od: ME-(AU)-[ENV]AN420
Sample Number	Parameter	Units	LOR	Result
LB315600.001	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



### SE267083 R0

Method: ME-(AU)-[ENV]AN113

Method: ME-(AU)-[ENV]AN318

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### PAH (Polynuclear Aromatic Hydrocarbons) in Water (continued)

PAH (Polynuclear Aromatic Hydrocarbons) in W		Meth	od: ME-(AU)-[ENV]AN420	
Sample Number	Parameter	Units	LOR	Result
LB315600.001	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(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
Surrogates	d5-nitrobenzene (Surrogate)	%	-	92
	2-fluorobiphenyl (Surrogate)	%	-	90
	d14-p-terphenyl (Surrogate)	%	-	96
otal and Volatile Suspended Solids (TSS / VSS)			Meth	od: ME-(AU)-[ENV]AN114
Sample Number	Parameter	Units	LOR	Result
LB315642.001	Total Suspended Solids Dried at 103-105°C	mg/L	5	<5

# Total Dissolved Solids (TDS) in water

Sample Number	Parameter	Units	LOR	Result
LB315665.001	Total Dissolved Solids Dried at 175-185°C	mg/L	10	<10

#### Total Phenolics in Water

Total Phenolics in Water		Metho	od: ME-(AU)-[ENV]AN295	
Sample Number	Parameter	Units	LOR	Result
LB315920.001	Total Phenols	mg/L	0.05	<0.05

Total Phosphorus by Kjeldahl Digestion DA in Water		Method:	ME-(AU)-[ENV]AN	N279/AN293(Sydney only)
Sample Number	Parameter	Units	LOR	Result
LB315605.001	Total Phosphorus (Kjeldahl Digestion) as P	mg/L	0.02	<0.02

### Trace Metals (Dissolved) in Water by ICPMS

Parameter	Units	LOR	Result
Aluminium	μg/L	5	<5
Antimony	μg/L	1	<1
Arsenic	µg/L	1	<1
Barium	μg/L	1	<1
Beryllium	µg/L	1	<1
Boron	μg/L	5	<5
Cadmium	µg/L	0.1	<0.1
Chromium	µg/L	1	<1
Cobalt	µg/L	1	<1
Copper	µg/L	1	<1
Iron	µg/L	5	<5
Lead	µg/L	1	<1
Manganese	µg/L	1	<1
Molybdenum	μg/L	1	<1
Nickel		1	<1
Selenium		1	<1
Silver		1	<1
Strontium		1	<1
Uranium		1	<1
Vanadium		1	<1
Zinc		5	<5
	Aluminium         Antimony         Arsenic         Barium         Beryllium         Boron         Cadmium         Chromium         Copper         Iron         Lead         Manganese         Molybdenum         Nickel         Selenium         Silver         Strontium         Uranium         Vanadium	Aluminiumµg/LAntimonyµg/LArsenicµg/LBariumµg/LBerylliumµg/LBoronµg/LCadmiumµg/LCadmiumµg/LChromiumµg/LCobaltµg/LCopperµg/LIronµg/LManganeseµg/LNickelµg/LSeleniumµg/LSilverµg/LVanadiumµg/LYuanadiumµg/LYuanadiumµg/LYuanadiumµg/LYuanadiumµg/LYuanadiumµg/L	Aluminiumμg/L5Antimonyμg/L1Arsenicμg/L1Bariumμg/L1Berylliumμg/L1Boronμg/L5Cadmiumμg/L0.1Chromiumμg/L1Cobaltμg/L1Copperμg/L1Ironμg/L1Manganeseμg/L1Nickelμg/L1Silverμg/L1Stontiumμg/L1Nickelμg/L1Silverμg/L1Vanadiumμg/L1Landμg/L1Stontiumμg/L1Lunnμg/L1



### SE267083 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).

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### TRH (Total Recoverable Hydrocarbons) in Water

Sample Number	Parameter	Units	LOR	Result
LB315600.001	TRH C10-C14	μg/L	50	<50
	TRH C15-C28	μg/L	200	<200
	TRH C29-C36	μg/L	200	<200
	TRH C37-C40	μg/L	200	<200
Turbidity			Metho	od: ME-(AU)-[ENV]AN11
Sample Number	Parameter	Units	LOR	Result
LB315734.001	Turbidity	NTU	0.5	<0.5

#### VOCs in Water

DCs in Water					od: ME-(AU)-[ENV
ample Number		Parameter	Units	LOR	Result
B315814.001	Fumigants	2,2-dichloropropane	μg/L	0.5	<0.5
		1,2-dichloropropane	μg/L	0.5	<0.5
		cis-1,3-dichloropropene	μg/L	0.5	<0.5
		trans-1,3-dichloropropene	μg/L	0.5	<0.5
		1,2-dibromoethane (EDB)	μg/L	0.5	<0.5
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	μg/L	5	<5
		Chloromethane	μg/L	5	<5
		Vinyl chloride (Chloroethene)	µg/L	0.3	<0.3
		Bromomethane	µg/L	10	<10
		Chloroethane	µg/L	5	<5
		Trichlorofluoromethane	μg/L	1	<1
		1,1-dichloroethene	μg/L	0.5	<0.5
		lodomethane	µg/L	5	<5
		Dichloromethane (Methylene chloride)	µg/L	5	<5
		Allyl chloride	μg/L	2	<2
		trans-1,2-dichloroethene	μg/L	0.5	<0.5
		1,1-dichloroethane	μg/L	0.5	<0.5
		cis-1,2-dichloroethene	μg/L	0.5	<0.5
		Bromochloromethane	μg/L	0.5	<0.5
		1,2-dichloroethane	μg/L	0.5	<0.5
		1,1,1-trichloroethane	μg/L	0.5	<0.5
		1,1-dichloropropene	μg/L	0.5	<0.5
		Carbon tetrachloride	μg/L	0.5	<0.5
		Dibromomethane	μg/L	0.5	<0.5
		Trichloroethene (Trichloroethylene,TCE)	μg/L	0.5	<0.5
		1,1,2-trichloroethane	μg/L	0.5	<0.5
		1,3-dichloropropane	μg/L	0.5	<0.5
		Tetrachloroethene (Perchloroethylene,PCE)		0.5	<0.5
		1,1,1,2-tetrachloroethane	µg/L	0.5	<0.5
			μg/L		
		1,1,2,2-tetrachloroethane	μg/L	0.5	<0.5
		1,2,3-trichloropropane	μg/L	0.5	<0.5
		trans-1,4-dichloro-2-butene	μg/L	1	<1
		1,2-dibromo-3-chloropropane	μg/L	0.5	<0.5
		Hexachlorobutadiene	μg/L	0.5	<0.5
	Halogenated Aromatics	Chlorobenzene	μg/L	0.5	<0.5
		Bromobenzene	μg/L	0.5	<0.5
		2-chlorotoluene	μg/L	0.5	<0.5
		4-chlorotoluene	μg/L	0.5	<0.5
		1,3-dichlorobenzene	μg/L	0.5	<0.5
		1,4-dichlorobenzene	µg/L	0.3	<0.3
		1,2-dichlorobenzene	μg/L	0.5	<0.5
		1,2,4-trichlorobenzene	μg/L	0.5	<0.5
		1,2,3-trichlorobenzene	μg/L	0.5	<0.5
	Monocyclic Aromatic	Benzene	μg/L	0.5	<0.5
	Hydrocarbons	Toluene	μg/L	0.5	<0.5
		Ethylbenzene	μg/L	0.5	<0.5
		m/p-xylene	µg/L	1	<1
		Styrene (Vinyl benzene)	μg/L	0.5	<0.5
		o-xylene	µg/L	0.5	<0.5

#### Method: ME-(AU)-[ENV]AN403



### SE267083 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.

Bromofluorobenzene (Surrogate)

#### VOCs in Water (continued)

OCs in Water (continu	ed)			Meth	od: ME-(AU)-[ENV]AN
ample Number		Parameter	Units	LOR	Result
B315814.001	Monocyclic Aromatic	Isopropylbenzene (Cumene)	μg/L	0.5	<0.5
	Hydrocarbons	n-propylbenzene	μg/L	0.5	<0.5
		1,3,5-trimethylbenzene	μg/L	0.5	<0.5
		tert-butylbenzene	μg/L	0.5	<0.5
		1,2,4-trimethylbenzene	μg/L	0.5	<0.5
		sec-butylbenzene	μg/L	0.5	<0.5
		p-isopropyltoluene	μg/L	0.5	<0.5
		n-butylbenzene	μg/L	0.5	<0.5
	Nitrogenous Compounds	Acrylonitrile	μg/L	0.5	<0.5
	Oxygenated Compounds	Acetone (2-propanone)	μg/L	10	<10
		MtBE (Methyl-tert-butyl ether)	µg/L	0.5	<0.5
		Vinyl acetate*	μg/L	10	<10
		MEK (2-butanone)	µg/L	10	<10
		MIBK (4-methyl-2-pentanone)	µg/L	5	<5
		2-hexanone (MBK)	µg/L	5	<5
	Polycyclic VOCs	Naphthalene (VOC)*	µg/L	0.5	<0.5
	Sulphonated	Carbon disulfide	μg/L	2	<2
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	110
		d8-toluene (Surrogate)	%	-	96
		Bromofluorobenzene (Surrogate)	%	-	81
	Trihalomethanes	Chloroform (THM)	µg/L	0.5	<0.5
		Bromodichloromethane (THM)	µg/L	0.5	<0.5
		Dibromochloromethane (THM)	µg/L	0.5	<0.5
		Bromoform (THM)	µg/L	0.5	<0.5
latile Petroleum Hydr	ocarbons in Water			Meth	od: ME-(AU)-[ENV]AI
ample Number		Parameter	Units	LOR	Result
3315814.001		TRH C6-C9	μg/L	40	<40
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	110
		d8-toluene (Surrogate)	%	-	96

81

%



### **DUPLICATES**

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 x 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 identifer 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

Alkalinity						Meth	od: ME-(AU)-	ENVJAN135
Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE267117.001	LB315710.022	Bicarbonate Alkalinity as CaCO3	mg/L	5	2500	2400	15	4
		Carbonate Alkalinity as CaCO3	mg/L	1	<1	<1	200	0
		Total Alkalinity as CaCO3	mg/L	5	2500	2400	15	4
Ammonia Nitroger	by Discrete Analyser					Meth	od: ME-(AU)-	ENVJAN291
Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE267065.001	LB315611.027	Ammonia Nitrogen, NH <sub>3</sub> as N	mg/L	0.01	0.56	0.56	17	0
SE267103.001	LB315611.024	Ammonia Nitrogen, NH₃ as N	mg/L	0.01	21	21	15	0

#### Anions by Ion Chromatography in Water

Anions by Ion Chromatography in Water Method: ME-(AU)-[E					ENVJAN24			
Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE266877.042	LB315616.014	Nitrate Nitrogen, NO3-N	mg/L	0.005	0.049	0.048	25	1
SE267025.001	LB315616.025	Nitrate Nitrogen, NO3-N	mg/L	0.005	0.17	0.17	18	1

#### Conductivity and TDS by Calculation - Water

Conductivity and	DS by Calculation - Water					Meth	od: ME-(AU)-	ENVJAN106
Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE267158.001	LB315737.014	Conductivity @ 25 C	µS/cm	2	2900	2900	15	0
		Total Dissolved Solids (by calculation)	mg/L	10	1700	1700	15	0
SE267158.004	LB315737.018	Conductivity @ 25 C	µS/cm	2	6200	6200	15	0
		Total Dissolved Solids (by calculation)	mg/L	10	3700	3700	15	0
Filterable Reactive	e Phosphorus (FRP)					Meth	od: ME-(AU)-	ENVJAN278
Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE267103.001	LB315611.024	Filterable Reactive Phosphorus as P	mg/L	0.005	0.96	0.97	16	1

#### Forms of Carbon

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE267118.006	LB315788.015	Total Organic Carbon as NPOC	mg/L	0.2	6.8	6.7	18	2
SE267158.003	LB315788.025	Total Organic Carbon as NPOC	mg/L	0.2	5.9	6.1	18	4

#### Mercury (dissolved) in Water

Mercury (dissolved) in Water Method: ME-(AU)-[ENV]AN:				ENVJAN311(P	erth)/AN312			
Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE267085.001	LB315651.022	Mercury	μg/L	0.0001	<0.0001	<0.0001	158	0

#### Metals in Water (Dissolved) by ICPOES

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE267085.001	LB315759.014	Calcium, Ca	mg/L	0.1	18	18	16	0
		Magnesium, Mg	mg/L	0.1	8.8	8.5	16	3
SE267158.004	LB315759.019	Calcium, Ca	mg/L	0.1	84	84	15	0
		Magnesium, Mg	mg/L	0.1	160	160	15	1
Nitrite in Water						Meth	od: ME-(AU)-	ENVJAN27
Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE267065.001	LB315611.027	Nitrite Nitrogen, NO2 as N	mg/L	0.005	0.096	0.10	20	4
SE267103.001	LB315611.024	Nitrite Nitrogen, NO2 as N	mg/L	0.005	0.006	0.006	102	9

#### PAH (Polynuclear Aromatic Hydrocarbons) in Water

	Met	hod:	ME-	(AU)-[	ENVJAN	<b>4420</b>

Method: ME-(AU)-[ENV]AN190

Method: ME-(AU)-[ENV]AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE267083.003	LB315600.028	Naphthalene	µg/L	0.1	<0.1	<0.1	200	0
		2-methylnaphthalene	μg/L	0.1	<0.1	<0.1	200	0
		1-methylnaphthalene	µg/L	0.1	<0.1	<0.1	200	0
		Acenaphthylene	µg/L	0.1	<0.1	<0.1	200	0
	Acenaphthene	µg/L	0.1	<0.1	<0.1	200	0	
		Fluorene	µg/L	0.1	<0.1	<0.1	200	0



Method: ME-(AU)-IENVIAN420

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 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 x 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 identifer 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

#### PAH (Polynuclear Aromatic Hydrocarbons) in Water (continued)

		ons) in Water (cont							
Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE267083.003	LB315600.028		Phenanthrene	μg/L	0.1	<0.1	<0.1	200	0
			Anthracene	μg/L	0.1	<0.1	<0.1	<ul> <li>Criteria %</li> <li>200</li> <li>30</li> <li>40</li> </ul>	0
			Fluoranthene	μg/L	0.1	<0.1	<0.1	200	0
			Pyrene	μg/L	Inits         LOR         Original         Duplicate         Criteria           ig/L         0.1         <0.1	200	0		
			Benzo(a)anthracene	μg/L	0.1	<0.1	<0.1	Criteria % 200 200 200 200 200 200 200 20	0
			Chrysene	μg/L	0.1	<0.1	<0.1		0
			Benzo(b&j)fluoranthene	μg/L	0.1	<0.1	<0.1		0
			Benzo(k)fluoranthene	μg/L	0.1	<0.1	<0.1		0
			Benzo(a)pyrene	μg/L	0.1	<0.1	<0.1	200	0
			Indeno(1,2,3-cd)pyrene	μg/L	0.1	<0.1	<0.1	200	0
			Dibenzo(ah)anthracene	µg/L	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	µg/L	0.1	<0.1	<0.1	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	µg/L	-	0.4	0.4	30	2
			2-fluorobiphenyl (Surrogate)	µg/L	-	0.4	0.4	30	3
			d14-p-terphenyl (Surrogate)	µg/L	-	0.4	0.5	30	6
SE267100.004	LB315600.027		Naphthalene	μg/L	0.1	400	290	200 200 200 200 200 200 200 200 200 200	32 (5)
			2-methylnaphthalene	µg/L	0.1	1200	520		78 ⑤
			1-methylnaphthalene	µg/L	0.1	780	340		79 ⑤
			Acenaphthylene	µg/L	0.1	3.7	2.8		28
			Acenaphthene	µg/L	0.1	11	11		0
			Fluorene	µg/L	0.1	37	29		23
			Phenanthrene	µg/L	0.1	220	82		91 ⑤
			Anthracene	µg/L	0.1	7.7	3.6		71 ⑤
			Fluoranthene	µg/L	0.1	3.8	1.1		114 ⑤
			Pyrene	µg/L	0.1	10	2.4		123 ⑤
			Benzo(a)anthracene	µg/L	0.1	0.3	<0.1		94 ⑤
			Chrysene	µg/L	0.1	0.6	0.1		131 ⑤
			Benzo(b&j)fluoranthene	µg/L	0.1	<0.1	<0.1	200	0
			Benzo(k)fluoranthene	µg/L	0.1	<0.1	<0.1	200 200 200 200 200 200 200 200 200 200	0
			Benzo(a)pyrene	µg/L	0.1	<0.1	<0.1		0
			Indeno(1,2,3-cd)pyrene	µg/L	0.1	<0.1	<0.1	200	0
			Dibenzo(ah)anthracene	µg/L	0.1	<0.1	c0.1         <0.1	200	0
			Benzo(ghi)perylene	µg/L	0.1	<0.1		0	
		Surrogates	d5-nitrobenzene (Surrogate)	µg/L	-	0.4		96 ①	
			2-fluorobiphenyl (Surrogate)	µg/L	-	0.4		46 †	
			d14-p-terphenyl (Surrogate)	µg/L	-	0.6	0.6	30	5
H in water							Metho	od: ME-(AU)-	
Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria <u>%</u>	RPD %
SE267158.001	LB315737.014		pH**	pH Units	-	7.2	7.2	16	0
SE267158.004	LB315737.018		рН**	pH Units	-	7.4	7.4	16	1

#### TKN Kjeldahl Digestion by Discrete Analyser

TKN Kjeldahl Digestion by Discrete Analyser Method: ME-(AU)-[EN					ENVJAN292			
Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE267023.001	LB315605.021	Total Kjeldahl Nitrogen	mg/L	0.05	3.8	3.6	16	5
SE267049.001	LB315605.022	Total Kjeldahl Nitrogen	mg/L	0.05	84	76	15	10

#### Total and Volatile Suspended Solids (TSS / VSS)

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE267086.001	LB315642.010	Total Suspended Solids Dried at 103-105°C	mg/L	5	<5	<5	200	0

### Total Phenolics in Water

Method: ME-(AU)-[ENV]AN114

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE267158.002	LB315920.014	Total Phenols	mg/L	0.05	<0.05	<0.05	200	0
SE267199.001	LB315920.025	Total Phenols	mg/L	0.05	<0.05	<0.05	179	0



Method: ME-(AU)-[ENV]AN318

Marthauta MET (ALD, IEAD GANLADO

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 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 x 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 identifer 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

Total Phosphorus by Kjeldahl Digestion DA in Water       Method: ME-(AU)-[ENV]AN279/AN293						N279/AN293(8	3ydney only)	
Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE267023.001	LB315605.021	Total Phosphorus (Kjeldahl Digestion) as P	mg/L	0.02	3.0	3.0	16	0
SE267049.001	LB315605.022	Total Phosphorus (Kjeldahl Digestion) as P	mg/L	0.02	10	10	15	2

### Trace Metals (Dissolved) in Water by ICPMS

TDU (Total Deservershie Undeservers) in Weter

LB315734.012

Turbidity

•								
Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE266923.018	LB315859.012	Arsenic	μg/L	1	<1	<1	200	0
		Cadmium	μg/L	0.1	<0.1	<0.1	200	0
		Chromium	μg/L	1	<1	<1	200	0
		Copper	μg/L	1	<1	<1	200	0
		Lead	μg/L	1	<1	<1	200	0
		Nickel	μg/L	1	<1	<1	200	0
		Zinc	ua/L	5	<5	<5	200	0

RH (Total Recov	erable Hydrocarbons	) in Water					Meth	od: ME-(AU)-	ENVJAN4
Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE267083.003	LB315600.028		TRH C10-C14	μg/L	50	<50	<50	200	0
			TRH C15-C28	μg/L	200	<200	<200	200	0
			TRH C29-C36	μg/L	200	<200	<200	200	0
			TRH C37-C40	μg/L	200	<200	<200	200	0
			TRH C10-C40	μg/L	320	<320	<320	200	0
		TRH F Bands	TRH >C10-C16	µg/L	60	<60	<60	200	0
			TRH >C10-C16 - Naphthalene (F2)	µg/L	60	<60	<60	200	0
			TRH >C16-C34 (F3)	µg/L	500	<500	<500	200	0
			TRH >C34-C40 (F4)	µg/L	500	<500	<500	200	0
SE267100.004	LB315600.027		TRH C10-C14	µg/L	50	70000	77000	30	9
			TRH C15-C28	µg/L	200	85000	91000	30	7
			TRH C29-C36	µg/L	200	400	260	91	43
			TRH C37-C40	µg/L	200	<200	<200	188	0
			TRH C10-C40	µg/L	320	CHK	CHK	СНК	СНК
		TRH F Bands	TRH >C10-C16	µg/L	60	95000	100000	30	8
			TRH >C10-C16 - Naphthalene (F2)	μg/L	60	95000	100000	30	8
			TRH >C16-C34 (F3)	μg/L	500	59000	63000	31	6
			TRH >C34-C40 (F4)	µg/L	500	<500	<500	200	0
urbidity							Meth	od: ME-(AU)-	(ENVJAN
Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %

NTU

0.5

300

300

15

1

SE267158.004

VOCs in Water							Meth	od: ME-(AU)-	(ENVJAN433
Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE266998.003	LB315814.027	Monocyclic	Benzene	μg/L	0.5	1.5	1.7	61	16
		Aromatic	Toluene	μg/L	0.5	<0.5	<0.5	200	0
			Ethylbenzene	μg/L	0.5	1.9	2.5	53	31
			m/p-xylene	µg/L	1	1	1	104	13
			o-xylene	μg/L	0.5	<0.5	<0.5	200	0
		Polycyclic	Naphthalene (VOC)*	μg/L	0.5	7.3	11	36	37 ②
		Surrogates	d4-1,2-dichloroethane (Surrogate)	μg/L	-	7.6	7.6	30	0
			d8-toluene (Surrogate)	μg/L	-	7.8	7.8	30	0
			Bromofluorobenzene (Surrogate)	μg/L	-	10.5	10.4	30	1
		Totals	Total BTEX	μg/L	3	5	6	88	21
SE267083.001	LB315814.024	Fumigants	2,2-dichloropropane	µg/L	0.5	<0.5	<0.5	200	0
			1,2-dichloropropane	µg/L	0.5	<0.5	<0.5	200	0
			cis-1,3-dichloropropene	µg/L	0.5	<0.5	<0.5	200	0
			trans-1,3-dichloropropene	μg/L	0.5	<0.5	<0.5	200	0
			1,2-dibromoethane (EDB)	μg/L	0.5	<0.5	<0.5	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	μg/L	5	<5	<5	200	0
		Aliphatics	Chloromethane	μg/L	5	<5	<5	200	0
			Vinyl chloride (Chloroethene)	μg/L	0.3	<0.3	<0.3	200	0
			Bromomethane	μg/L	10	<10	<10	200	0



Method: ME-(ALI)-JENVJAN433

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 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 x 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 identifer 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

#### VOCs in Water (continued)

Cs in Water (co	onunueu)						Metho	od: ME-(AU)-	(CIAA)-AL
riginal	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD
E267083.001	LB315814.024	Halogenated	Chloroethane	µg/L	5	<5	<5	200	0
		Aliphatics	Trichlorofluoromethane	μg/L	1	<1	<1	200	0
			1,1-dichloroethene	µg/L	0.5	<0.5	<0.5	200	0
			lodomethane	µg/L	5	<5	<5	200	0
			Dichloromethane (Methylene chloride)	μg/L	5	<5	<5	200	0
			Allyl chloride	μg/L	2	<2	<2	200	0
			trans-1,2-dichloroethene	μg/L	0.5	<0.5	<0.5	200	0
					0.5	<0.5	<0.5	200	0
			1,1-dichloroethane	μg/L					
			cis-1,2-dichloroethene	μg/L	0.5	<0.5	<0.5	200	0
			Bromochloromethane	µg/L	0.5	<0.5	<0.5	200	0
			1,2-dichloroethane	µg/L	0.5	<0.5	<0.5	200	0
			1,1,1-trichloroethane	µg/L	0.5	<0.5	<0.5	200	0
			1,1-dichloropropene	μg/L	0.5	<0.5	<0.5	200	C
			Carbon tetrachloride	μg/L	0.5	<0.5	<0.5	200	0
			Dibromomethane	μg/L	0.5	<0.5	<0.5	200	0
			Trichloroethene (Trichloroethylene, TCE)	μg/L	0.5	<0.5	<0.5	200	0
			1,1,2-trichloroethane	μg/L	0.5	<0.5	<0.5	200	0
			1,3-dichloropropane	µg/L	0.5	<0.5	<0.5	200	C
			Tetrachloroethene (Perchloroethylene,PCE)	μg/L	0.5	<0.5	<0.5	200	0
			1,1,1,2-tetrachloroethane	μg/L	0.5	<0.5	<0.5	200	
			1,1,2,2-tetrachloroethane	μg/L	0.5	<0.5	<0.5	200	
			1,2,3-trichloropropane	μg/L	0.5	<0.5	<0.5	200	
			trans-1,4-dichloro-2-butene		1	<1	<1	200	
				µg/L					
			1,2-dibromo-3-chloropropane	μg/L	0.5	<0.5	<0.5	200	(
			Hexachlorobutadiene	µg/L	0.5	<0.5	<0.5	200	0
		Halogenated	Chlorobenzene	µg/L	0.5	0.6	0.6	117	4
		Aromatics	Bromobenzene	μg/L	0.5	<0.5	<0.5	200	0
			2-chlorotoluene	μg/L	0.5	<0.5	<0.5	200	(
			4-chlorotoluene	μg/L	0.5	<0.5	<0.5	200	(
			1,3-dichlorobenzene	μg/L	0.5	<0.5	<0.5	200	0
			1,4-dichlorobenzene	μg/L	0.3	<0.3	<0.3	200	C
			1,2-dichlorobenzene	μg/L	0.5	<0.5	<0.5	200	(
			1,2,4-trichlorobenzene	µg/L	0.5	<0.5	<0.5	200	(
			1,2,3-trichlorobenzene	µg/L	0.5	<0.5	<0.5	200	(
		Monocyclic	Benzene	μg/L	0.5	<0.5	<0.5	200	0
		Aromatic	Toluene	μg/L	0.5	<0.5	<0.5	200	
		, a officiatio	Ethylbenzene	μg/L	0.5	<0.5	<0.5	200	
							<1	200	
			m/p-xylene	μg/L	1	<1			
			Styrene (Vinyl benzene)	μg/L	0.5	<0.5	<0.5	200	(
			o-xylene	µg/L	0.5	<0.5	<0.5	200	(
			Isopropylbenzene (Cumene)	μg/L	0.5	<0.5	<0.5	200	(
			n-propylbenzene	µg/L	0.5	<0.5	<0.5	200	(
			1,3,5-trimethylbenzene	μg/L	0.5	<0.5	<0.5	200	0
			tert-butylbenzene	μg/L	0.5	<0.5	<0.5	200	0
			1,2,4-trimethylbenzene	µg/L	0.5	<0.5	<0.5	200	(
			sec-butylbenzene	µg/L	0.5	<0.5	<0.5	200	C
			p-isopropyltoluene	μg/L	0.5	<0.5	<0.5	200	C
			n-butylbenzene	μg/L	0.5	<0.5	<0.5	200	
		Nitrogenous	Acrylonitrile	μg/L	0.5	<0.5	<0.5	200	
		Compounds	2-nitropropane		100	<100	<100	200	
				µg/L					
		Oxygenated	Acetone (2-propanone)	µg/L	10	<10	<10	200	(
		Compounds	MtBE (Methyl-tert-butyl ether)	µg/L	0.5	<0.5	<0.5	200	0
			Vinyl acetate*	µg/L	10	<10	<10	200	0
			MEK (2-butanone)	µg/L	10	<10	<10	200	C
			MIBK (4-methyl-2-pentanone)	µg/L	5	<5	<5	200	C
			2-hexanone (MBK)	µg/L	5	<5	<5	200	C
		Polycyclic	Naphthalene (VOC)*	µg/L	0.5	<0.5	<0.5	200	C
		Sulphonated	Carbon disulfide	μg/L	2	<2	<2	200	C
		Surrogates	d4-1,2-dichloroethane (Surrogate)	μg/L		9.9	8.9	30	1
		Surroyates							
			d8-toluene (Surrogate)	µg/L		10.1	9.4	30	7
			Bromofluorobenzene (Surrogate)	µg/L	-	8.0	10.1	30	2



### **DUPLICATES**

Method: ME-(ALI)-IENVIAN433

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 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 x 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 identifer 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

#### VOCs in Water (continued)

	nunuea)						Meu	100: ME-(AU)-	[EINV]AIN43
Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE267083.001	LB315814.024	Totals	Total BTEX	μg/L	3	<3	<3	200	0
			Total VOC	μg/L	10	<10	<10	200	0
		Trihalomethan	Chloroform (THM)	μg/L	0.5	<0.5	<0.5	200	0
		es	Bromodichloromethane (THM)	µg/L	0.5	<0.5	<0.5	200	0
			Dibromochloromethane (THM)	µg/L	0.5	<0.5	<0.5	200	0
			Bromoform (THM)	µg/L	0.5	<0.5	<0.5	200	0
/olatile Petroleum	Hydrocarbons in Wa	iter					Meth	od: ME-(AU)-	(ENVJAN43
Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE266998.003	LB315814.027		TRH C6-C10	μg/L	50	500	570	39	12
			TRH C6-C9	µg/L	40	470	540	38	12
		Surrogates	d4-1,2-dichloroethane (Surrogate)	μg/L	-	7.6	7.6	30	0
			d8-toluene (Surrogate)	µg/L	-	7.8	7.8	30	0
			Bromofluorobenzene (Surrogate)	µg/L	-	10.5	10.4	30	1
		VPH F Bands	Benzene (F0)	µg/L	0.5	1.5	1.7	61	16
			TRH C6-C10 minus BTEX (F1)	µg/L	50	500	560	39	12
SE267083.001	LB315814.024		TRH C6-C10	µg/L	50	<50	<50	200	0
			TRH C6-C9	µg/L	40	<40	<40	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	9.9	8.9	30	10
			d8-toluene (Surrogate)	µg/L	-	10.1	9.4	30	7
			Bromofluorobenzene (Surrogate)	µg/L	-	8.0	10.1	30	24
		VPH F Bands	Benzene (F0)	µg/L	0.5	<0.5	<0.5	200	0
			TRH C6-C10 minus BTEX (F1)	µg/L	50	<50	<50	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.

Ammonia Nitrogen by Discrete Analyser Method: ME-(AU)-[ENV]AN:							U)-[ENV]AN291
Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB315611.002	Ammonia Nitrogen, NH₃ as N	mg/L	0.01	2.6	2.5	80 - 120	103

### Anions by Ion Chromatography in Water

Anions by Ion Chromatograph	hy in Water				N	lethod: ME-(A	U)-[ENV]AN245
Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB315616.002	Chloride	mg/L	1	19	20	80 - 120	95
	Nitrate Nitrogen, NO3-N	mg/L	0.005	2.0	2	80 - 120	99
	Sulfate, SO4	mg/L	1	19	20	80 - 120	96
Conductivity and TDS by Cal	culation - Water				N	lethod: ME-(A	U)-[ENV]AN106
Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB315737.002	Conductivity @ 25 C	μS/cm	2	300	303	90 - 110	100
	Total Dissolved Solids (by calculation)	mg/L	10	180	181	85 - 115	100
Filterable Reactive Phosphor	us (FRP)				Ν	fethod: ME-(A	U)-[ENV]AN278

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB315611.002	Filterable Reactive Phosphorus as P	mg/L	0.005	0.099	0.1	80 - 120	99

Forms of Carbon				Method: ME-(AU)-[ENV]				
Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %	
LB315788.002	Total Organic Carbon as NPOC	mg/L	0.2	18	20	80 - 120	92	

#### Metals in Water (Dissolved) by ICPOES

						in the second second second	
Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB315759.002	Calcium, Ca	mg/L	0.1	51	50.5	80 - 120	102
	Lithium, Li	mg/L	0.005	0.10	0.1	80 - 120	103
	Magnesium, Mg	mg/L	0.1	50	50.5	80 - 120	100
	Potassium, K	mg/L	0.1	55	55	80 - 120	100
	Sodium, Na	mg/L	0.5	52	50.5	80 - 120	103
Nitrite in Water					N	Nethod: ME-(A	U)-[ENV]AN277
Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB315611.002	Nitrite Nitrogen, NO2 as N	mg/L	0.005	0.092	0.1	80 - 120	92

#### PAH (Polynuclear Aromatic Hydrocarbons) in Water

PAH (Polynuclear Are	omatic Hydroca	rbons) in Water				N	lethod: ME-(Al	U)-[ENV]AN420
Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB315600.002		Naphthalene	 µg/L	0.1	31	40	60 - 140	77
		Acenaphthylene	 µg/L	0.1	32	40	60 - 140	80
		Acenaphthene	 µg/L	0.1	33	40	60 - 140	82
		Phenanthrene	µg/L	0.1	37	40	60 - 140	92
		Anthracene	 µg/L	0.1	32	40	60 - 140	79
		Fluoranthene	 µg/L	0.1	35	40	60 - 140	88
		Pyrene	 µg/L	0.1	33	40	60 - 140	83
		Benzo(a)pyrene	 µg/L	0.1	35	40	60 - 140	86
	Surrogates	d5-nitrobenzene (Surrogate)	 µg/L	-	0.4	0.5	40 - 130	80
		2-fluorobiphenyl (Surrogate)	 µg/L	-	0.4	0.5	40 - 130	80
		d14-p-terphenyl (Surrogate)	µg/L	-	0.4	0.5	40 - 130	82
pH in water						N	lethod: ME-(Al	U)-[ENV]AN101
Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB315737.003		pH**	No unit	-	7.4	7.415	98 - 102	99

### Redox Potential (Eh) in water

Sample Number	Parameter	Units	LOR

### Method: ME-(AU)-[ENV]AN240

Method: ME-(AU)-IENVIAN320



## LABORATORY CONTROL SAMPLES

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.

							)	
Redox Potential (Eh) in water (continued) Method: ME-(AU)-[ENV]AN240								
Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %	
LB315735.001	Eh of Sample Relative to Standard H+ Electrode***	mV	-500	439	428	90 - 110	103	

#### Total and Volatile Suspended Solids (TSS / VSS)

Total and Volatile Suspended Solids (TSS / VSS) Method: ME-(AU)-[ENV]							
Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB315642.002	Total Suspended Solids Dried at 103-105°C	mg/L	5	94	100	80 - 120	94

Total Phenolics in Water Method: ME-(AU)-							U)-[ENV]AN295
Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB315920.002	Total Phenols	mg/L	0.05	0.19	0.2	80 - 120	97

Total Phosphorus by Kjeldahl Digestion	n DA in Water			Method	I: ME-(AU)-[EN	V]AN279/AN2	93(Sydney only)
Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB315605.002	Total Phosphorus (Kjeldahl Digestion) as P	mg/L	0.02	0.99	1	80 - 120	99

### e Metals (Dissolved) in Water by ICPMS

Trace Metals (Dissolved) in V	Vater by ICPMS				N	/lethod: ME-(A	U)-[ENV]AN318
Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB315859.002	Aluminium	µg/L	5	17	20	80 - 120	87
	Antimony	µg/L	1	21	20	80 - 120	104
	Arsenic	µg/L	1	22	20	80 - 120	108
	Barium	µg/L	1	22	20	80 - 120	108
	Beryllium	µg/L	1	22	20	80 - 120	112
	Boron	µg/L	5	22	20	80 - 120	108
	Cadmium	µg/L	0.1	21	20	80 - 120	103
	Chromium	μg/L	1	21	20	80 - 120	106
	Cobalt	µg/L	1	21	20	80 - 120	103
	Copper	µg/L	1	21	20	80 - 120	103
	Iron	µg/L	5	21	20	80 - 120	107
	Lead	µg/L	1	20	20	80 - 120	101
	Manganese	µg/L	1	23	20	80 - 120	113
	Molybdenum	µg/L	1	22	20	80 - 120	108
	Nickel	µg/L	1	21	20	80 - 120	103
	Selenium	µg/L	1	19	20	80 - 120	96
	Silver	µg/L	1	17	20	80 - 120	86
	Strontium	µg/L	1	21	20	80 - 120	107
	Uranium	µg/L	1	20	20	80 - 120	98
	Vanadium	µg/L	1	22	20	80 - 120	108
	Zinc	µg/L	5	22	20	80 - 120	108
TRH (Total Recoverable Hyd	rocarbons) in Water				N	lethod: ME-(A	U)-[ENV]AN403
Somple Number	Deremeter	Unito	LOP	Beault	Exposted	Critoria %	Booovorry 9/

#### Sample Number Parameter LOR Result Expected Criteria % Recovery % LB315600.002 TRH C10-C14 60 - 140 µg/L 50 1100 1200 93 TRH C15-C28 µg/L 200 1300 1200 60 - 140 106 TRH C29-C36 200 1300 1200 60 - 140 111 µg/L TRH F Bands TRH >C10-C16 60 - 140 60 1200 1200 101 µg/L TRH >C16-C34 (F3) 500 1300 1200 60 - 140 µg/L 109 TRH >C34-C40 (F4) µg/L 500 670 600 60 - 140 112

VOCs in Water						N	lethod: ME-(A	U)-[ENV]AN433
Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB315814.002	Halogenated	1,1-dichloroethene	µg/L	0.5	46	45.45	60 - 140	101
	Aliphatics	1,2-dichloroethane	µg/L	0.5	52	45.45	60 - 140	115
		Trichloroethene (Trichloroethylene, TCE)	µg/L	0.5	55	45.45	60 - 140	121
	Halogenated	Chlorobenzene	µg/L	0.5	64	45.45	60 - 140	140
	Monocyclic	Benzene	µg/L	0.5	47	45.45	60 - 140	103
	Aromatic	Toluene	µg/L	0.5	47	45.45	60 - 140	103
		Ethylbenzene	µg/L	0.5	45	45.45	60 - 140	99



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.

#### VOCs in Water (continued) Method: ME-(AU)-[ENV]AN433 Sample Number Expected Criteria % Recovery % Parameter Units LOR Result LB315814.002 60 - 140 Monocyclic 90.9 m/p-xylene µg/L 88 97 1 Aromatic o-xylene µg/L 0.5 44 45.45 60 - 140 97 Surrogates d4-1,2-dichloroethane (Surrogate) µg/L 8.1 10 60 - 140 81 d8-toluene (Surrogate) µg/L 8.4 10 70 - 130 84 Bromofluorobenzene (Surrogate) µg/L 94 10 70 - 130 94 Trihalomethan Chloroform (THM) µg/L 0.5 49 45.45 60 - 140 108 Volatile Petroleum Hydrocarbons in Water Method: ME-(AU)-[ENV]AN433 Units LOR Expected Criteria % Recovery % Sample Number Result Parameter LB315814.002 TRH C6-C10 µg/L 50 1000 946.63 60 - 140 110 TRH C6-C9 40 910 818.71 60 - 140 111 µg/L d4-1.2-dichloroethane (Surrogate) 81 Surrogates µg/L 8.1 10 60 - 140 d8-toluene (Surrogate) µg/L 8.4 10 70 - 130 84 70 - 130 94 Bromofluorobenzene (Surrogate) 9.4 10 µg/L VPH F Bands TRH C6-C10 minus BTEX (F1) 770 639.67 50 60 - 140 120 µg/L



### **MATRIX SPIKES**

### SE267083 R0

Method: ME-(AU)-[ENV]AN320

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 identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Ammonia Nitroge	Ammonia Nitrogen by Discrete Analyser Method: ME-(AU)-[ENV]AN29							
QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE267033.002	LB315611.026	Ammonia Nitrogen, NH₃ as N	mg/L	0.01	3.5	0.99377	2.5	99

		<b>A 1 1 1 1</b>
Forms	στ	Carbon

Forms of Carbon Method: ME-(AU)-[EN								/)-[ENV]AN190
QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE267083.002	LB315788.026	Total Organic Carbon as NPOC	mg/L	0.2	52	4.3	50	95

#### Mercury (dissolved) in Water

Mercury (dissolved) in Water Method: ME-(AU)-[ENV]AN311(Perth)/							I (Perth)/AN312	
QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE267070.009	LB315651.004	Mercury	mg/L	0.0001	0.0020	<0.0001	0.008	103

### Metals in Water (Dissolved) by ICPOES

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE267117.001	LB315759.004	Calcium, Ca	mg/L	0.1	130	84.6268	50.5	95
		Magnesium, Mg	mg/L	0.1	170	121.708	50.5	94
		Potassium, K	mg/L	0.1	200	155.812	55	78
Nitrite in Water						Meth	nod: ME-(AU	J)-[ENV]AN277
QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE267030.002	LB315611.026	Nitrite Nitrogen, NO2 as N	mg/L	0.005	0.15	0.045	0.1	105

Total Phenolics in	n Water					Met	hod: ME-(Al	J)-[ENV]AN295
QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE267085.001	LB315920.026	Total Phenols	mg/L	0.05	0.19	0.0003	0.2	96

QC Sample	Sample Number		Parameter	U	Jnits	LOR	Result	Original	Spike	Recovery%
SE267117.001	LB315859.004		Aluminium	μμ	µg/L	5	24	0	20	118
			Arsenic	μ	µg/L	1	41	18.593	20	114
			Cadmium	h	µg/L	0.1	19	0.099	20	94
			Cobalt	h	µg/L	1	60	44.049	20	82
			Copper	н	µg/L	1	19	1.254	20	87
			Lead	Ч	µg/L	1	18	0.052	20	92
			Manganese	Ч	µg/L	1	350	327.564	20	112
			Zinc	Ч	µg/L	5	25	4.009	20	105
OCs in Water								Metho	od: ME-(AU	)-[ENV]AN433
QC Sample	Sample Number		Parameter	U	Jnits	LOR	Result	Original	Spike	Recovery%
SE266998.001	LB315814.028	Monocyclic	Benzene	U	µg/L	0.5	53	0.03058253387	45.45	115

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE266998.001	LB315814.028	Monocyclic	Benzene	µg/L	0.5	53	0.03058253387	45.45	115
		Aromatic	Toluene	µg/L	0.5	51	0.00808560813	45.45	112
			Ethylbenzene	µg/L	0.5	49	0.02970438755	45.45	107
			m/p-xylene	µg/L	1	99	0.02872659500	90.9	108
			o-xylene	µg/L	0.5	50	0.02101592751	45.45	109
		Polycyclic	Naphthalene (VOC)*	µg/L	0.5	50	0.14307279277	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	7.8	10.81457030700	-	78
			d8-toluene (Surrogate)	µg/L	-	8.2	9.77865398393	-	82
			Bromofluorobenzene (Surrogate)	µg/L	-	9.8	8.28222555418	-	98
		Totals	Total BTEX	µg/L	3	300	0	-	-
Volatile Petroleur	n Hydrocarbons in W	/ater					Metho	od: ME-(AU	)-[ENV]AN433

QC Sample	Sample Number	Parameter	Units	
QC Sample	Sample Number	Falalletel	- Onits	LOK



### **MATRIX SPIKES**

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 identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

olatile Petroleul	n Hydrocarbons in W	ater (continued)					Meth	DO: ME-(AU	)-[ENV]AN433
QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE266998.001	LB315814.028		TRH C6-C10	μg/L	50	970	0	946.63	103
			TRH C6-C9	µg/L	40	890	0	818.71	108
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	7.8	10.81457030700	-	78
			d8-toluene (Surrogate)	µg/L	-	8.2	9.77865398393	-	82
			Bromofluorobenzene (Surrogate)	µg/L	-	9.8	8.28222555418	-	98
		VPH F	Benzene (F0)	µg/L	0.5		0.03058253387	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	µg/L	50	670	0	639.67	105



Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 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 x 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 identifer when outside suggested criteria. Refer to the footnotes section at the

Anions by Ion Cl	hromatography in Water				
QC Sample	Sample Number	Parameter	Units	LOR	Duplicate
SE266926.001	LB315616.026	Nitrate Nitrogen, NO3-N	mg/L	0.005	1.9

Method: ME-(AU)-[ENV]AN245



#### 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: <a href="https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf">https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf</a>

- \* 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.
- 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.
- <sup>(7)</sup> LOR was raised due to dilution of significantly high concentration of analyte in sample.
- Image: Image:
- Recovery failed acceptance criteria due to sample heterogeneity.
- <sup>®</sup> LOR was raised due to high conductivity of the sample (required dilution).
- t Refer to relevant report comments for further information.

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## STATEMENT OF QA/QC PERFORMANCE

CLIENT DETAILS		LABORATORY DETAIL	LS
Contact Client Address	Sean Nolan EI AUSTRALIA SUITE 6.01 55 MILLER STREET PYRMONT NSW 2009	Manager Laboratory Address	Huong Crawford SGS Alexandria Environmental Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	61 2 95160722	Telephone	+61 2 8594 0400
Facsimile	(Not specified)	Facsimile	+61 2 8594 0499
Email	sean.nolan@eiaustralia.com.au	Email	au.environmental.sydney@sgs.com
Project	<b>E26160 1 Veno St, Heathcote</b>	SGS Reference	<b>SE255412 R0</b>
Order Number	E26160	Date Received	19 Oct 2023
Samples	19	Date Reported	26 Oct 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 PAH (Polynuclear Aromatic Hydrocarbons) in Soil 1 item Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES 1 item

Sample counts by matrix	18 Soil, 1 Water	Type of documentation received	COC	
Date documentation received	19/10/2023	Samples received in good order	Yes	
Samples received without headspace	Yes	Sample temperature upon receipt	13.5°C	
Sample container provider	SGS	Turnaround time requested	Standard	
Samples received in correct containers	Yes	Sufficient sample for analysis	Yes	
Sample cooling method	Ice Bricks	Samples clearly labelled	Yes	
Complete documentation received	Yes			

SGS Australia Pty Ltd ABN 44 000 964 278

Environment, Health and Safety

Unit 16 33 Maddox St PO Box 6432 Bourke Rd Alexandria NSW 2015 Alexandria NSW 2015 t +61 2 8594 0400

Australia

Australia

www.sgs.com.au f +61 2 8594 0499



Method: ME (ALI) JENI/JAS4064/AN602

20 Oct 2023

Method: ME-(AU)-/ENV/AN312

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

18 Oct 2023

LB294073

SE255412.017

#### Fibre Identification in soil

Sample Name         Sample No.         QC Ref         Sampled         Received         Extraction Due         Extracted         Analysis Due           BH1_0.2-0.3         SE255412.001         LB294537         18 Oct 2023         19 Oct 2023         17 Oct 2024         25 Oct 2023         17 Oct 2024           BH2_0.2-0.3         SE255412.002         LB294537         18 Oct 2023         19 Oct 2023         17 Oct 2024         25 Oct 2023         17 Oct 2024           BH3_0.3-0.4         SE255412.003         LB294537         18 Oct 2023         19 Oct 2023         17 Oct 2024         25 Oct 2023         17 Oct 2024           BH4_0.3-0.4         SE255412.005         LB294537         18 Oct 2023         19 Oct 2023         17 Oct 2024         25 Oct 2023         17 Oct 2024           BH5_0.3-0.4         SE255412.007         LB294537         18 Oct 2023         19 Oct 2023         17 Oct 2024         25 Oct 2023         17 Oct 2024           BH6_0.2-0.3         SE255412.007         LB294537         18 Oct 2023         19 Oct 2023         17 Oct 2024         25 Oct 2023         17 Oct 2024           BH6_0.2-0.3         SE255412.010         LB294537         18 Oct 2023         19 Oct 2023         17 Oct 2024         25 Oct 2023         17 Oct 2024           BH6_0.1-0.2         SE255412.01	Jenuncauon in son							Method. ME-(AU)-	[EINV]A34904/AIN002
BH2_0.2-0.3         SE255412.002         LB294537         18 Oct 2023         19 Oct 2023         17 Oct 2024         25 Oct 2023         17 Oct 2024           BH3_0.3-0.4         SE255412.003         LB294537         18 Oct 2023         19 Oct 2023         17 Oct 2024         25 Oct 2023         17 Oct 2024           BH4_0.3-0.4         SE255412.005         LB294537         18 Oct 2023         19 Oct 2023         17 Oct 2024         25 Oct 2023         17 Oct 2024           BH5_0.3-0.4         SE255412.007         LB294537         18 Oct 2023         19 Oct 2023         17 Oct 2024         25 Oct 2023         17 Oct 2024           BH6_0.2-0.3         SE255412.009         LB294537         18 Oct 2023         19 Oct 2023         17 Oct 2024         25 Oct 2023         17 Oct 2024           BH7_0.2-0.3         SE255412.010         LB294537         18 Oct 2023         19 Oct 2023         17 Oct 2024         25 Oct 2023         17 Oct 2024           BH8_0.1-0.2         SE255412.010         LB294537         18 Oct 2023         19 Oct 2023         17 Oct 2024         25 Oct 2023         17 Oct 2024           BH9_0.1-0.2         SE255412.012         LB294537         18 Oct 2023         19 Oct 2023         17 Oct 2024         25 Oct 2023         17 Oct 2024           BH9_0.1-0.2         SE	ole Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH3_0.3-0.4         SE255412.003         LB294537         18 Oct 2023         19 Oct 2023         17 Oct 2024         25 Oct 2023         17 Oct 2024           BH4_0.3-0.4         SE255412.005         LB294537         18 Oct 2023         19 Oct 2023         17 Oct 2024         25 Oct 2023         17 Oct 2024           BH5_0.3-0.4         SE255412.007         LB294537         18 Oct 2023         19 Oct 2023         17 Oct 2024         25 Oct 2023         17 Oct 2024           BH6_0.2-0.3         SE255412.009         LB294537         18 Oct 2023         19 Oct 2023         17 Oct 2024         25 Oct 2023         17 Oct 2024           BH7_0.2-0.3         SE255412.010         LB294537         18 Oct 2023         19 Oct 2023         17 Oct 2024         25 Oct 2023         17 Oct 2024           BH8_0.1-0.2         SE255412.010         LB294537         18 Oct 2023         19 Oct 2023         17 Oct 2024         25 Oct 2023         17 Oct 2024           BH8_0.1-0.2         SE255412.012         LB294537         18 Oct 2023         19 Oct 2023         17 Oct 2024         25 Oct 2023         17 Oct 2024           BH9_0.1-0.2         SE255412.013         LB294537         18 Oct 2023         19 Oct 2023         17 Oct 2024         25 Oct 2023         17 Oct 2024           BH10_0.5-0.6         S	.2-0.3	SE255412.001	LB294537	18 Oct 2023	19 Oct 2023	17 Oct 2024	25 Oct 2023	17 Oct 2024	26 Oct 2023
BH4_0.3-0.4         SE255412.005         LB294537         18 Oct 2023         19 Oct 2023         17 Oct 2024         25 Oct 2023         17 Oct 2024           BH5_0.3-0.4         SE255412.007         LB294537         18 Oct 2023         19 Oct 2023         17 Oct 2024         25 Oct 2023         17 Oct 2024           BH6_0.2-0.3         SE255412.009         LB294537         18 Oct 2023         19 Oct 2023         17 Oct 2024         25 Oct 2023         17 Oct 2024           BH7_0.2-0.3         SE255412.010         LB294537         18 Oct 2023         19 Oct 2023         17 Oct 2024         25 Oct 2023         17 Oct 2024           BH8_0.1-0.2         SE255412.012         LB294537         18 Oct 2023         19 Oct 2023         17 Oct 2024         25 Oct 2023         17 Oct 2024           BH9_0.1-0.2         SE255412.013         LB294537         18 Oct 2023         19 Oct 2023         17 Oct 2024         25 Oct 2023         17 Oct 2024           BH10_0.5-0.6         SE255412.015         LB294537         18 Oct 2023         19 Oct 2023         17 Oct 2024         25 Oct 2023         17 Oct 2024           BH10_0.5-0.6         SE255412.015         LB294537         18 Oct 2023         19 Oct 2023         17 Oct 2024         25 Oct 2023         17 Oct 2024           BH10_0.5-0.6 <td< td=""><td>.2-0.3</td><td>SE255412.002</td><td>LB294537</td><td>18 Oct 2023</td><td>19 Oct 2023</td><td>17 Oct 2024</td><td>25 Oct 2023</td><td>17 Oct 2024</td><td>26 Oct 2023</td></td<>	.2-0.3	SE255412.002	LB294537	18 Oct 2023	19 Oct 2023	17 Oct 2024	25 Oct 2023	17 Oct 2024	26 Oct 2023
BH5_0.3-0.4         SE255412.007         LB294537         18 Oct 2023         19 Oct 2023         17 Oct 2024         25 Oct 2023         17 Oct 2024           BH6_0.2-0.3         SE255412.009         LB294537         18 Oct 2023         19 Oct 2023         17 Oct 2024         25 Oct 2023         17 Oct 2024           BH7_0.2-0.3         SE255412.010         LB294537         18 Oct 2023         19 Oct 2023         17 Oct 2024         25 Oct 2023         17 Oct 2024           BH8_0.1-0.2         SE255412.012         LB294537         18 Oct 2023         19 Oct 2023         17 Oct 2024         25 Oct 2023         17 Oct 2024           BH9_0.1-0.2         SE255412.013         LB294537         18 Oct 2023         19 Oct 2023         17 Oct 2024         25 Oct 2023         17 Oct 2024           BH9_0.1-0.2         SE255412.013         LB294537         18 Oct 2023         19 Oct 2023         17 Oct 2024         25 Oct 2023         17 Oct 2024           BH10_0.5-0.6         SE255412.015         LB294537         18 Oct 2023         19 Oct 2023         17 Oct 2024         25 Oct 2023         17 Oct 2024           BH10_0.5-0.6         SE255412.015         LB294537         18 Oct 2023         19 Oct 2023         17 Oct 2024         25 Oct 2023         17 Oct 2024           BH10_0.5-0.6 <td< td=""><td>.3-0.4</td><td>SE255412.003</td><td>LB294537</td><td>18 Oct 2023</td><td>19 Oct 2023</td><td>17 Oct 2024</td><td>25 Oct 2023</td><td>17 Oct 2024</td><td>26 Oct 2023</td></td<>	.3-0.4	SE255412.003	LB294537	18 Oct 2023	19 Oct 2023	17 Oct 2024	25 Oct 2023	17 Oct 2024	26 Oct 2023
BH6_0.2-0.3         SE255412.009         LB294537         18 Oct 2023         19 Oct 2023         17 Oct 2024         25 Oct 2023         17 Oct 2024           BH7_0.2-0.3         SE255412.010         LB294537         18 Oct 2023         19 Oct 2023         17 Oct 2024         25 Oct 2023         17 Oct 2024           BH8_0.1-0.2         SE255412.012         LB294537         18 Oct 2023         19 Oct 2023         17 Oct 2024         25 Oct 2023         17 Oct 2024           BH9_0.1-0.2         SE255412.013         LB294537         18 Oct 2023         19 Oct 2023         17 Oct 2024         25 Oct 2023         17 Oct 2024           BH10_0.5-0.6         SE255412.015         LB294537         18 Oct 2023         19 Oct 2023         17 Oct 2024         25 Oct 2023         17 Oct 2024           BH10_0.5-0.6         SE255412.015         LB294537         18 Oct 2023         19 Oct 2023         17 Oct 2024         25 Oct 2023         17 Oct 2024           BH10_0.5-0.6         SE255412.015         LB294537         18 Oct 2023         19 Oct 2023         17 Oct 2024         25 Oct 2023         17 Oct 2024           BH10_0.5-0.6         SE255412.015         LB294537         18 Oct 2023         19 Oct 2023         17 Oct 2024         25 Oct 2023         17 Oct 2024           Mercury (dissolved) in Wate	.3-0.4	SE255412.005	LB294537	18 Oct 2023	19 Oct 2023	17 Oct 2024	25 Oct 2023	17 Oct 2024	26 Oct 2023
BH7_0.2-0.3         SE255412.010         LB294537         18 Oct 2023         19 Oct 2023         17 Oct 2024         25 Oct 2023         17 Oct 2024           BH8_0.1-0.2         SE255412.012         LB294537         18 Oct 2023         19 Oct 2023         17 Oct 2024         25 Oct 2023         17 Oct 2024           BH9_0.1-0.2         SE255412.013         LB294537         18 Oct 2023         19 Oct 2023         17 Oct 2024         25 Oct 2023         17 Oct 2024           BH9_0.1-0.2         SE255412.013         LB294537         18 Oct 2023         19 Oct 2023         17 Oct 2024         25 Oct 2023         17 Oct 2024           BH10_0.5-0.6         SE255412.015         LB294537         18 Oct 2023         19 Oct 2023         17 Oct 2024         25 Oct 2023         17 Oct 2024           Mercury (dissolved) in Water         Value	.3-0.4	SE255412.007	LB294537	18 Oct 2023	19 Oct 2023	17 Oct 2024	25 Oct 2023	17 Oct 2024	26 Oct 2023
BH8_0.1-0.2         SE255412.012         LB294537         18 Oct 2023         19 Oct 2023         17 Oct 2024         25 Oct 2023         17 Oct 2024           BH9_0.1-0.2         SE255412.013         LB294537         18 Oct 2023         19 Oct 2023         17 Oct 2024         25 Oct 2023         17 Oct 2024           BH10_0.5-0.6         SE255412.015         LB294537         18 Oct 2023         19 Oct 2023         17 Oct 2024         25 Oct 2023         17 Oct 2024           Mercury (dissolved) in Water         Value	.2-0.3	SE255412.009	LB294537	18 Oct 2023	19 Oct 2023	17 Oct 2024	25 Oct 2023	17 Oct 2024	26 Oct 2023
BH9_0.1-0.2         SE255412.013         LB294537         18 Oct 2023         19 Oct 2023         17 Oct 2024         25 Oct 2023         17 Oct 2024           BH10_0.5-0.6         SE255412.015         LB294537         18 Oct 2023         19 Oct 2023         17 Oct 2024         25 Oct 2023         17 Oct 2024           Mercury (dissolved) in Water         Method: ME-(AU)-[ENV]A         Method: ME-(AU)-[ENV]A	.2-0.3	SE255412.010	LB294537	18 Oct 2023	19 Oct 2023	17 Oct 2024	25 Oct 2023	17 Oct 2024	26 Oct 2023
BH10_0.5-0.6         SE255412.015         LB294537         18 Oct 2023         19 Oct 2023         17 Oct 2024         25 Oct 2023         17 Oct 2024           Mercury (dissolved) in Water         Method: ME-(AU)-[ENV]A	.1-0.2	SE255412.012	LB294537	18 Oct 2023	19 Oct 2023	17 Oct 2024	25 Oct 2023	17 Oct 2024	26 Oct 2023
Mercury (dissolved) in Water Method: ME-(AU)-[ENV]A	.1-0.2	SE255412.013	LB294537	18 Oct 2023	19 Oct 2023	17 Oct 2024	25 Oct 2023	17 Oct 2024	26 Oct 2023
	0.5-0.6	SE255412.015	LB294537	18 Oct 2023	19 Oct 2023	17 Oct 2024	25 Oct 2023	17 Oct 2024	26 Oct 2023
Sample Name Sample No. QC Ref Sampled Received Extraction Due Extracted Analysis Due	y (dissolved) in Water							Method: ME-(AU)-[ENV]	AN311(Perth)/AN312
	ole Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed

19 Oct 2023

15 Nov 2023

20 Oct 2023

15 Nov 2023

Mercury in Soil

QR\_20231017

Morodry in Coll								
Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH1_0.2-0.3	SE255412.001	LB294437	18 Oct 2023	19 Oct 2023	15 Nov 2023	24 Oct 2023	15 Nov 2023	26 Oct 2023
BH2_0.2-0.3	SE255412.002	LB294437	18 Oct 2023	19 Oct 2023	15 Nov 2023	24 Oct 2023	15 Nov 2023	26 Oct 2023
BH3_0.3-0.4	SE255412.003	LB294437	18 Oct 2023	19 Oct 2023	15 Nov 2023	24 Oct 2023	15 Nov 2023	26 Oct 2023
BH3_0.7-0.8	SE255412.004	LB294437	18 Oct 2023	19 Oct 2023	15 Nov 2023	24 Oct 2023	15 Nov 2023	26 Oct 2023
BH4_0.3-0.4	SE255412.005	LB294437	18 Oct 2023	19 Oct 2023	15 Nov 2023	24 Oct 2023	15 Nov 2023	26 Oct 2023
BH4_0.6-0.7	SE255412.006	LB294437	18 Oct 2023	19 Oct 2023	15 Nov 2023	24 Oct 2023	15 Nov 2023	26 Oct 2023
BH5_0.3-0.4	SE255412.007	LB294437	18 Oct 2023	19 Oct 2023	15 Nov 2023	24 Oct 2023	15 Nov 2023	26 Oct 2023
BH5_0.8-0.9	SE255412.008	LB294437	18 Oct 2023	19 Oct 2023	15 Nov 2023	24 Oct 2023	15 Nov 2023	26 Oct 2023
BH6_0.2-0.3	SE255412.009	LB294437	18 Oct 2023	19 Oct 2023	15 Nov 2023	24 Oct 2023	15 Nov 2023	26 Oct 2023
BH7_0.2-0.3	SE255412.010	LB294437	18 Oct 2023	19 Oct 2023	15 Nov 2023	24 Oct 2023	15 Nov 2023	26 Oct 2023
BH7_0.5-0.6	SE255412.011	LB294437	18 Oct 2023	19 Oct 2023	15 Nov 2023	24 Oct 2023	15 Nov 2023	26 Oct 2023
BH8_0.1-0.2	SE255412.012	LB294437	18 Oct 2023	19 Oct 2023	15 Nov 2023	24 Oct 2023	15 Nov 2023	26 Oct 2023
BH9_0.1-0.2	SE255412.013	LB294437	18 Oct 2023	19 Oct 2023	15 Nov 2023	24 Oct 2023	15 Nov 2023	26 Oct 2023
BH10_0.2-0.3	SE255412.014	LB294437	18 Oct 2023	19 Oct 2023	15 Nov 2023	24 Oct 2023	15 Nov 2023	26 Oct 2023
BH10_0.5-0.6	SE255412.015	LB294437	18 Oct 2023	19 Oct 2023	15 Nov 2023	24 Oct 2023	15 Nov 2023	26 Oct 2023
QD 20231017	SE255412.016	LB294437	18 Oct 2023	19 Oct 2023	15 Nov 2023	24 Oct 2023	15 Nov 2023	26 Oct 2023

Sample Name Sample No. QC Ref Sampled Received Extraction Due Extracted Analysis Due Analysed BH1 0.2-0.3 LB294413 19 Oct 2023 29 Oct 2023 SE255412.001 18 Oct 2023 01 Nov 2023 24 Oct 2023 26 Oct 2023 BH2 0.2-0.3 SE255412.002 LB294413 18 Oct 2023 19 Oct 2023 01 Nov 2023 24 Oct 2023 29 Oct 2023 26 Oct 2023 BH3 0.3-0.4 SE255412.003 LB294413 18 Oct 2023 19 Oct 2023 01 Nov 2023 24 Oct 2023 29 Oct 2023 26 Oct 2023 BH3\_0.7-0.8 SE255412.004 LB294413 18 Oct 2023 19 Oct 2023 01 Nov 2023 24 Oct 2023 29 Oct 2023 26 Oct 2023 BH4 0.3-0.4 SE255412.005 LB294413 18 Oct 2023 19 Oct 2023 01 Nov 2023 24 Oct 2023 29 Oct 2023 26 Oct 2023 BH4\_0.6-0.7 SE255412.006 LB294413 18 Oct 2023 19 Oct 2023 01 Nov 2023 24 Oct 2023 29 Oct 2023 26 Oct 2023 BH5\_0.3-0.4 SE255412.007 LB294413 18 Oct 2023 19 Oct 2023 01 Nov 2023 24 Oct 2023 29 Oct 2023 26 Oct 2023 BH5 0.8-0.9 SE255412 008 I B294413 18 Oct 2023 19 Oct 2023 01 Nov 2023 24 Oct 2023 29 Oct 2023 26 Oct 2023 BH6\_0.2-0.3 SE255412.009 LB294413 18 Oct 2023 19 Oct 2023 01 Nov 2023 24 Oct 2023 29 Oct 2023 26 Oct 2023 BH7 0.2-0.3 29 Oct 2023 SE255412.010 LB294413 18 Oct 2023 19 Oct 2023 01 Nov 2023 24 Oct 2023 26 Oct 2023 BH7\_0.5-0.6 SE255412.011 LB294413 18 Oct 2023 19 Oct 2023 29 Oct 2023 01 Nov 2023 24 Oct 2023 26 Oct 2023 BH8\_0.1-0.2 SE255412.012 LB294413 18 Oct 2023 19 Oct 2023 01 Nov 2023 24 Oct 2023 29 Oct 2023 26 Oct 2023 BH9 0.1-0.2 SE255412.013 LB294413 18 Oct 2023 19 Oct 2023 01 Nov 2023 24 Oct 2023 29 Oct 2023 26 Oct 2023 BH10\_0.2-0.3 SE255412.014 LB294413 18 Oct 2023 19 Oct 2023 01 Nov 2023 24 Oct 2023 29 Oct 2023 26 Oct 2023 BH10 0.5-0.6 SE255412.015 LB294413 19 Oct 2023 01 Nov 2023 26 Oct 2023 18 Oct 2023 24 Oct 2023 29 Oct 2023 QD 20231017 SE255412.016 LB294413 18 Oct 2023 19 Oct 2023 01 Nov 2023 24 Oct 2023 29 Oct 2023 26 Oct 2023 QTB1 SE255412.018 LB294413 18 Oct 2023 19 Oct 2023 01 Nov 2023 24 Oct 2023 29 Oct 2023 26 Oct 2023 **OC Pesticides in Soil** Method: ME-(AU)-/ENVIAN420 Sample Name Sample No. QC Ref Sampled Received Extraction Due Extracted Analysis Due Analysed

BH1\_0.2-0.3 SE255412.001 LB294377 18 Oct 2023 19 Oct 2023 01 Nov 2023 24 Oct 2023 03 Dec 2023 26 Oct 2023 BH2 0.2-0.3 SE255412.002 LB294377 18 Oct 2023 19 Oct 2023 01 Nov 2023 24 Oct 2023 03 Dec 2023 26 Oct 2023 BH3\_0.3-0.4 SE255412.003 LB294377 18 Oct 2023 19 Oct 2023 01 Nov 2023 24 Oct 2023 03 Dec 2023 26 Oct 2023 BH3 0.7-0.8 SE255412.004 LB294377 18 Oct 2023 19 Oct 2023 01 Nov 2023 24 Oct 2023 03 Dec 2023 26 Oct 2023 BH4 0.3-0.4 SE255412.005 LB294377 18 Oct 2023 19 Oct 2023 01 Nov 2023 24 Oct 2023 03 Dec 2023 26 Oct 2023



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

#### OC Pesticides in Soil (continued)

OC Pesticides in Soil (contir	nued)						Method:	ME-(AU)-[ENV]AN420
Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH4_0.6-0.7	SE255412.006	LB294377	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	03 Dec 2023	26 Oct 2023
BH5_0.3-0.4	SE255412.007	LB294377	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	03 Dec 2023	26 Oct 2023
BH5_0.8-0.9	SE255412.008	LB294377	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	03 Dec 2023	26 Oct 2023
BH6_0.2-0.3	SE255412.009	LB294377	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	03 Dec 2023	26 Oct 2023
BH7_0.2-0.3	SE255412.010	LB294377	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	03 Dec 2023	26 Oct 2023
BH7_0.5-0.6	SE255412.011	LB294377	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	03 Dec 2023	26 Oct 2023
BH8_0.1-0.2	SE255412.012	LB294377	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	03 Dec 2023	26 Oct 2023
BH9_0.1-0.2	SE255412.013	LB294377	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	03 Dec 2023	26 Oct 2023
BH10_0.2-0.3	SE255412.014	LB294377	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	03 Dec 2023	26 Oct 2023
BH10_0.5-0.6	SE255412.015	LB294377	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	03 Dec 2023	26 Oct 2023
QD_20231017	SE255412.016	LB294377	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	03 Dec 2023	26 Oct 2023
OP Pesticides in Soil							Method:	ME-(AU)-[ENV]AN420
Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH1_0.2-0.3	SE255412.001	LB294377	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	03 Dec 2023	26 Oct 2023
BH2_0.2-0.3	SE255412.002	LB294377	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	03 Dec 2023	26 Oct 2023
BH3_0.3-0.4	SE255412.003	LB294377	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	03 Dec 2023	26 Oct 2023
BH3_0.7-0.8	SE255412.004	LB294377	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	03 Dec 2023	26 Oct 2023
BH4_0.3-0.4	SE255412.005	LB294377	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	03 Dec 2023	26 Oct 2023
BH4_0.6-0.7	SE255412.006	LB294377	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	03 Dec 2023	26 Oct 2023
BH5 0.3-0.4	SE255412.007	LB294377	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	03 Dec 2023	26 Oct 2023
BH5_0.8-0.9	SE255412.008	LB294377	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	03 Dec 2023	26 Oct 2023
BH6 0.2-0.3	SE255412.009	LB294377	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	03 Dec 2023	26 Oct 2023
BH7_0.2-0.3	SE255412.010	LB294377	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	03 Dec 2023	26 Oct 2023
BH7_0.5-0.6	SE255412.011	LB294377	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	03 Dec 2023	26 Oct 2023
BH8_0.1-0.2	SE255412.012	LB294377	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	03 Dec 2023	26 Oct 2023
BH9_0.1-0.2	SE255412.013	LB294377	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	03 Dec 2023	26 Oct 2023
BH10_0.2-0.3	SE255412.014	LB294377	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	03 Dec 2023	26 Oct 2023
BH10_0.5-0.6	SE255412.015	LB294377	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	03 Dec 2023	26 Oct 2023
QD_20231017	SE255412.016	LB294377	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	03 Dec 2023	26 Oct 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
BH1_0.2-0.3	Sample No. SE255412.001	QC Ref LB294377	Sampled 18 Oct 2023	Received 19 Oct 2023	Extraction Due 01 Nov 2023	Extracted 24 Oct 2023	Analysis Due 03 Dec 2023	Analysed 26 Oct 2023
							-	
BH1_0.2-0.3	SE255412.001	LB294377	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	03 Dec 2023	26 Oct 2023
BH1_0.2-0.3 BH2_0.2-0.3	SE255412.001 SE255412.002	LB294377 LB294377	18 Oct 2023 18 Oct 2023	19 Oct 2023 19 Oct 2023	01 Nov 2023 01 Nov 2023	24 Oct 2023 24 Oct 2023	03 Dec 2023 03 Dec 2023	26 Oct 2023 26 Oct 2023
BH1_0.2-0.3 BH2_0.2-0.3 BH3_0.3-0.4	SE255412.001 SE255412.002 SE255412.003	LB294377 LB294377 LB294377	18 Oct 2023 18 Oct 2023 18 Oct 2023	19 Oct 2023 19 Oct 2023 19 Oct 2023	01 Nov 2023 01 Nov 2023 01 Nov 2023	24 Oct 2023 24 Oct 2023 24 Oct 2023	03 Dec 2023 03 Dec 2023 03 Dec 2023	26 Oct 2023 26 Oct 2023 26 Oct 2023
BH1_0.2-0.3 BH2_0.2-0.3 BH3_0.3-0.4 BH3_0.7-0.8	SE255412.001 SE255412.002 SE255412.003 SE255412.004	LB294377 LB294377 LB294377 LB294377 LB294377	18 Oct 2023 18 Oct 2023 18 Oct 2023 18 Oct 2023 18 Oct 2023	19 Oct 2023 19 Oct 2023 19 Oct 2023 19 Oct 2023 19 Oct 2023	01 Nov 2023 01 Nov 2023 01 Nov 2023 01 Nov 2023 01 Nov 2023	24 Oct 2023 24 Oct 2023 24 Oct 2023 24 Oct 2023 24 Oct 2023	03 Dec 2023 03 Dec 2023 03 Dec 2023 03 Dec 2023 03 Dec 2023	26 Oct 2023 26 Oct 2023 26 Oct 2023 26 Oct 2023 26 Oct 2023
BH1_0.2-0.3 BH2_0.2-0.3 BH3_0.3-0.4 BH3_0.7-0.8 BH4_0.3-0.4	SE255412.001 SE255412.002 SE255412.003 SE255412.004 SE255412.005	LB294377 LB294377 LB294377 LB294377 LB294377 LB294377	18 Oct 2023	19 Oct 2023 19 Oct 2023 19 Oct 2023 19 Oct 2023 19 Oct 2023 19 Oct 2023	01 Nov 2023 01 Nov 2023 01 Nov 2023 01 Nov 2023 01 Nov 2023 01 Nov 2023	24 Oct 2023 24 Oct 2023 24 Oct 2023 24 Oct 2023 24 Oct 2023 24 Oct 2023	03 Dec 2023 03 Dec 2023 03 Dec 2023 03 Dec 2023 03 Dec 2023 03 Dec 2023	26 Oct 2023 26 Oct 2023 26 Oct 2023 26 Oct 2023 26 Oct 2023
BH1_0.2-0.3 BH2_0.2-0.3 BH3_0.3-0.4 BH3_0.7-0.8 BH4_0.3-0.4 BH4_0.6-0.7	SE255412.001 SE255412.002 SE255412.003 SE255412.004 SE255412.005 SE255412.006	LB294377 LB294377 LB294377 LB294377 LB294377 LB294377 LB294377	18 Oct 2023 18 Oct 2023 18 Oct 2023 18 Oct 2023 18 Oct 2023 18 Oct 2023 18 Oct 2023	19 Oct 2023 19 Oct 2023 19 Oct 2023 19 Oct 2023 19 Oct 2023 19 Oct 2023 19 Oct 2023	01 Nov 2023 01 Nov 2023 01 Nov 2023 01 Nov 2023 01 Nov 2023 01 Nov 2023 01 Nov 2023	24 Oct 2023 24 Oct 2023	03 Dec 2023 03 Dec 2023 03 Dec 2023 03 Dec 2023 03 Dec 2023 03 Dec 2023 03 Dec 2023	26 Oct 2023 26 Oct 2023 26 Oct 2023 26 Oct 2023 26 Oct 2023 26 Oct 2023 26 Oct 2023
BH1_0.2-0.3 BH2_0.2-0.3 BH3_0.3-0.4 BH3_0.7-0.8 BH4_0.3-0.4 BH4_0.6-0.7 BH5_0.3-0.4	SE255412.001 SE255412.002 SE255412.003 SE255412.004 SE255412.005 SE255412.006 SE255412.007	LB294377 LB294377 LB294377 LB294377 LB294377 LB294377 LB294377 LB294377	18 Oct 2023 18 Oct 2023	19 Oct 2023 19 Oct 2023	01 Nov 2023 01 Nov 2023	24 Oct 2023 24 Oct 2023	03 Dec 2023 03 Dec 2023	26 Oct 2023 26 Oct 2023
BH1_0.2-0.3 BH2_0.2-0.3 BH3_0.3-0.4 BH3_0.7-0.8 BH4_0.3-0.4 BH4_0.6-0.7 BH5_0.3-0.4 BH5_0.8-0.9	SE255412.001 SE255412.002 SE255412.003 SE255412.004 SE255412.005 SE255412.006 SE255412.007 SE255412.008	LB294377 LB294377 LB294377 LB294377 LB294377 LB294377 LB294377 LB294377	18 Oct 2023	19 Oct 2023 19 Oct 2023	01 Nov 2023 01 Nov 2023	24 Oct 2023 24 Oct 2023	03 Dec 2023 03 Dec 2023	26 Oct 2023 26 Oct 2023
BH1_0.2-0.3 BH2_0.2-0.3 BH3_0.3-0.4 BH3_0.7-0.8 BH4_0.3-0.4 BH4_0.6-0.7 BH5_0.3-0.4 BH5_0.8-0.9 BH6_0.2-0.3	SE255412.001 SE255412.002 SE255412.003 SE255412.004 SE255412.005 SE255412.006 SE255412.007 SE255412.008 SE255412.009	LB294377 LB294377 LB294377 LB294377 LB294377 LB294377 LB294377 LB294377 LB294377	18 Oct 2023	19 Oct 2023 19 Oct 2023	01 Nov 2023 01 Nov 2023	24 Oct 2023 24 Oct 2023	03 Dec 2023	26 Oct 2023 26 Oct 2023
BH1_0.2-0.3 BH2_0.2-0.3 BH3_0.3-0.4 BH3_0.7-0.8 BH4_0.3-0.4 BH4_0.6-0.7 BH5_0.3-0.4 BH5_0.3-0.4 BH5_0.8-0.9 BH6_0.2-0.3 BH7_0.2-0.3	SE255412.001           SE255412.002           SE255412.003           SE255412.004           SE255412.005           SE255412.006           SE255412.007           SE255412.008           SE255412.009           SE255412.010	LB294377 LB294377 LB294377 LB294377 LB294377 LB294377 LB294377 LB294377 LB294377 LB294377	18 Oct 2023	19 Oct 2023 19 Oct 2023	01 Nov 2023 01 Nov 2023	24 Oct 2023 24 Oct 2023	03 Dec 2023	26 Oct 2023 26 Oct 2023
BH1_0.2-0.3 BH2_0.2-0.3 BH3_0.3-0.4 BH3_0.7-0.8 BH4_0.3-0.4 BH4_0.6-0.7 BH5_0.3-0.4 BH5_0.3-0.4 BH5_0.8-0.9 BH6_0.2-0.3 BH7_0.2-0.3 BH7_0.5-0.6	SE255412.001           SE255412.002           SE255412.003           SE255412.004           SE255412.005           SE255412.006           SE255412.007           SE255412.008           SE255412.009           SE255412.010           SE255412.011	LB294377 LB294377 LB294377 LB294377 LB294377 LB294377 LB294377 LB294377 LB294377 LB294377 LB294377	18 Oct 2023	19 Oct 2023 19 Oct 2023	01 Nov 2023 01 Nov 2023	24 Oct 2023 24 Oct 2023	03 Dec 2023	26 Oct 2023 26 Oct 2023
BH1_0.2-0.3 BH2_0.2-0.3 BH3_0.3-0.4 BH3_0.7-0.8 BH4_0.3-0.4 BH4_0.6-0.7 BH5_0.3-0.4 BH5_0.3-0.4 BH5_0.8-0.9 BH6_0.2-0.3 BH7_0.2-0.3 BH7_0.5-0.6 BH8_0.1-0.2	SE255412.001 SE255412.002 SE255412.003 SE255412.004 SE255412.006 SE255412.006 SE255412.007 SE255412.008 SE255412.009 SE255412.010 SE255412.011 SE255412.012	LB294377 LB294377 LB294377 LB294377 LB294377 LB294377 LB294377 LB294377 LB294377 LB294377 LB294377 LB294377 LB294377	18 Oct 2023	19 Oct 2023 19 Oct 2023	01 Nov 2023 01 Nov 2023	24 Oct 2023 24 Oct 2023	03 Dec 2023 03 Dec 2023	26 Oct 2023 26 Oct 2023
BH1_0.2-0.3 BH2_0.2-0.3 BH3_0.3-0.4 BH3_0.7-0.8 BH4_0.3-0.4 BH4_0.6-0.7 BH5_0.3-0.4 BH5_0.3-0.4 BH5_0.8-0.9 BH6_0.2-0.3 BH7_0.2-0.3 BH7_0.2-0.3 BH7_0.2-0.6 BH8_0.1-0.2 BH9_0.1-0.2	SE255412.001           SE255412.002           SE255412.003           SE255412.004           SE255412.005           SE255412.006           SE255412.007           SE255412.008           SE255412.009           SE255412.009           SE255412.010           SE255412.011           SE255412.012           SE255412.012           SE255412.013	LB294377	18 Oct 2023	19 Oct 2023 19 Oct 2023	01 Nov 2023 01 Nov 2023	24 Oct 2023 24 Oct 2023	03 Dec 2023	26 Oct 2023 26 Oct 2023
BH1_0.2-0.3 BH2_0.2-0.3 BH3_0.3-0.4 BH3_0.7-0.8 BH4_0.3-0.4 BH4_0.6-0.7 BH5_0.3-0.4 BH5_0.3-0.4 BH5_0.3-0.4 BH6_0.2-0.3 BH7_0.2-0.3 BH7_0.2-0.3 BH7_0.5-0.6 BH8_0.1-0.2 BH9_0.1-0.2 BH10_0.2-0.3	SE255412.001           SE255412.002           SE255412.003           SE255412.004           SE255412.005           SE255412.006           SE255412.007           SE255412.008           SE255412.009           SE255412.009           SE255412.010           SE255412.011           SE255412.012           SE255412.013           SE255412.014	LB294377	18 Oct 2023	19 Oct 2023 19 Oct 2023	01 Nov 2023 01 Nov 2023	24 Oct 2023 24 Oct 2023	03 Dec 2023 03 Dec 2023	26 Oct 2023 26 Oct 2023
BH1_0.2-0.3 BH2_0.2-0.3 BH3_0.3-0.4 BH3_0.7-0.8 BH4_0.3-0.4 BH4_0.6-0.7 BH5_0.3-0.4 BH5_0.3-0.4 BH5_0.8-0.9 BH6_0.2-0.3 BH7_0.2-0.3 BH7_0.2-0.3 BH7_0.2-0.6 BH8_0.1-0.2 BH9_0.1-0.2 BH9_0.1-0.2 BH1_0.2-0.3 BH1_0.2-0.3 BH1_0.2-0.6 QD_20231017	SE255412.001           SE255412.002           SE255412.003           SE255412.004           SE255412.005           SE255412.006           SE255412.007           SE255412.008           SE255412.009           SE255412.009           SE255412.010           SE255412.011           SE255412.012           SE255412.013           SE255412.014           SE255412.015	LB294377	18 Oct 2023	19 Oct 2023 19 Oct 2023	01 Nov 2023 01 Nov 2023	24 Oct 2023 24 Oct 2023	03 Dec 2023 03 Dec 2023	26 Oct 2023 26 Oct 2023
BH1_0.2-0.3 BH2_0.2-0.3 BH3_0.3-0.4 BH3_0.7-0.8 BH4_0.3-0.4 BH4_0.6-0.7 BH5_0.3-0.4 BH5_0.3-0.4 BH5_0.8-0.9 BH6_0.2-0.3 BH7_0.2-0.3 BH7_0.2-0.3 BH7_0.5-0.6 BH8_0.1-0.2 BH9_0.1-0.2 BH10_0.2-0.3 BH10_0.5-0.6 QD_20231017 PCBs in Soil	SE255412.001           SE255412.002           SE255412.003           SE255412.004           SE255412.005           SE255412.006           SE255412.007           SE255412.008           SE255412.009           SE255412.009           SE255412.010           SE255412.011           SE255412.012           SE255412.013           SE255412.014           SE255412.015	LB294377	18 Oct 2023	19 Oct 2023 19 Oct 2023	01 Nov 2023 01 Nov 2023	24 Oct 2023 24 Oct 2023	03 Dec 2023 03 Dec 2023	26 Oct 2023 26 Oct 2023
BH1_0.2-0.3 BH2_0.2-0.3 BH3_0.3-0.4 BH3_0.7-0.8 BH4_0.3-0.4 BH4_0.6-0.7 BH5_0.3-0.4 BH5_0.3-0.4 BH5_0.8-0.9 BH6_0.2-0.3 BH7_0.2-0.3 BH7_0.2-0.3 BH7_0.5-0.6 BH8_0.1-0.2 BH9_0.1-0.2 BH10_0.2-0.3 BH10_0.5-0.6 QD_20231017 PCBs in Soil	SE255412.001 SE255412.002 SE255412.003 SE255412.004 SE255412.006 SE255412.006 SE255412.007 SE255412.008 SE255412.009 SE255412.010 SE255412.010 SE255412.011 SE255412.012 SE255412.013 SE255412.014 SE255412.015 SE255412.016	LB294377 LB294377 LB294377 LB294377 LB294377 LB294377 LB294377 LB294377 LB294377 LB294377 LB294377 LB294377 LB294377 LB294377 LB294377	18 Oct 2023	19 Oct 2023 19 Oct 2023	01 Nov 2023 01 Nov 2023	24 Oct 2023 24 Oct 2023	03 Dec 2023 03 Dec 2023	26 Oct 2023 26 Oct 2023
BH1_0.2-0.3 BH2_0.2-0.3 BH3_0.3-0.4 BH3_0.7-0.8 BH4_0.3-0.4 BH4_0.6-0.7 BH5_0.3-0.4 BH5_0.3-0.4 BH5_0.8-0.9 BH6_0.2-0.3 BH7_0.2-0.3 BH7_0.2-0.3 BH7_0.5-0.6 BH8_0.1-0.2 BH9_0.1-0.2 BH10_0.2-0.3 BH10_0.5-0.6 QD_20231017 PCBs in Soil Sample Name	SE255412.001           SE255412.002           SE255412.003           SE255412.004           SE255412.005           SE255412.006           SE255412.007           SE255412.008           SE255412.009           SE255412.010           SE255412.010           SE255412.011           SE255412.012           SE255412.013           SE255412.014           SE255412.015           SE255412.016	LB294377 LB294377 LB294377 LB294377 LB294377 LB294377 LB294377 LB294377 LB294377 LB294377 LB294377 LB294377 LB294377 LB294377 LB294377 LB294377 LB294377 LB294377 LB294377	18 Oct 2023	19 Oct 2023	01 Nov 2023 01 Nov 2023	24 Oct 2023 24 Oct 2023	03 Dec 2023           Datectore           Datectore	26 Oct 2023 26 Oct 2023 27 Oc
BH1_0.2-0.3 BH2_0.2-0.3 BH3_0.3-0.4 BH3_0.7-0.8 BH4_0.3-0.4 BH4_0.6-0.7 BH5_0.3-0.4 BH5_0.3-0.4 BH5_0.8-0.9 BH6_0.2-0.3 BH7_0.2-0.3 BH7_0.2-0.3 BH7_0.2-0.3 BH10_0.2-0.3 BH10_0.5-0.6 QD_20231017 PCBs in Soll Sample Name BH1_0.2-0.3	SE255412.001           SE255412.002           SE255412.003           SE255412.004           SE255412.005           SE255412.006           SE255412.007           SE255412.008           SE255412.009           SE255412.009           SE255412.010           SE255412.010           SE255412.011           SE255412.012           SE255412.013           SE255412.014           SE255412.015           SE255412.016           Sample No.           SE255412.001	LB294377	18 Oct 2023	19 Oct 2023	01 Nov 2023 01 Nov 2023	24 Oct 2023 24 Oct 2023	03 Dec 2023 03 Dec 2023	26 Oct 2023 26 Oct 2023 27 Oc
BH1_0.2-0.3 BH2_0.2-0.3 BH3_0.3-0.4 BH3_0.7-0.8 BH4_0.3-0.4 BH4_0.6-0.7 BH5_0.3-0.4 BH5_0.3-0.4 BH5_0.3-0.4 BH5_0.2-0.3 BH7_0.2-0.3 BH7_0.2-0.3 BH7_0.2-0.3 BH10_0.2-0.3 BH10_0.2-0.3 BH10_0.2-0.3 BH10_0.5-0.6 QD_20231017 PCBs in Soll Sample Name BH1_0.2-0.3 BH2_0.2-0.3	SE255412.001 SE255412.002 SE255412.003 SE255412.004 SE255412.006 SE255412.006 SE255412.007 SE255412.009 SE255412.010 SE255412.010 SE255412.011 SE255412.013 SE255412.014 SE255412.015 SE255412.016 SE255412.016	LB294377 LB2947	18 Oct 2023	19 Oct 2023	01 Nov 2023 01 No	24 Oct 2023 24 Oct 2023	03 Dec 2023 03 Dec 2023	26 Oct 2023 26 Oct 2023 27 Oc
BH1_0.2-0.3 BH2_0.2-0.3 BH3_0.3-0.4 BH3_0.7-0.8 BH4_0.3-0.4 BH4_0.8-0.7 BH5_0.3-0.4 BH5_0.3-0.4 BH5_0.3-0.4 BH5_0.3-0.4 BH7_0.2-0.3 BH7_0.2-0.3 BH7_0.2-0.3 BH7_0.2-0.3 BH10_0.2-0.3 BH10_0.2-0.3 BH10_0.2-0.3 BH10_0.2-0.3 BH10_0.2-0.3 BH1_0.2-0.3 BH1_0.2-0.3 BH1_0.2-0.3 BH2_0.2-0.3 BH3_0.3-0.4 BH3_0.7-0.8	SE255412.001 SE255412.002 SE255412.003 SE255412.004 SE255412.005 SE255412.006 SE255412.007 SE255412.009 SE255412.010 SE255412.010 SE255412.011 SE255412.011 SE255412.014 SE255412.015 SE255412.016 SE255412.016	LB294377 LB2947	18 Oct 2023	19 Oct 2023           19 Oct	01 Nov 2023 01 No	24 Oct 2023 24 Oct 2023	03 Dec 2023 03 Dec 2023	26 Oct 2023 26 Oct 2023 <b>ME-(AU)-[ENV]AN42C</b> <b>Analysed</b> 26 Oct 2023 26 Oct 2023 27 Oct 202
BH1_0.2-0.3 BH2_0.2-0.3 BH3_0.3-0.4 BH3_0.3-0.4 BH4_0.3-0.4 BH4_0.3-0.4 BH5_0.8-0.7 BH5_0.8-0.9 BH6_0.2-0.3 BH7_0.2-0.3 BH7_0.2-0.3 BH7_0.2-0.3 BH10_0.2-0.3 BH10_0.2-0.3 BH10_0.2-0.3 BH10_0.5-0.6 QD_20231017 PCBs in Soil Sample Name BH1_0.2-0.3 BH2_0.2-0.3 BH3_0.3-0.4 BH3_0.7-0.8 BH4_0.3-0.4	SE255412.001 SE255412.002 SE255412.003 SE255412.004 SE255412.005 SE255412.006 SE255412.007 SE255412.009 SE255412.010 SE255412.010 SE255412.011 SE255412.011 SE255412.013 SE255412.014 SE255412.015 SE255412.016 SE255412.001 SE255412.001 SE255412.002 SE255412.003 SE255412.004	LB294377 LB2947	18 Oct 2023         18 Oct 2023	19 Oct 2023	01 Nov 2023 01 No	24 Oct 2023 24 Oct 2023	03 Dec 2023 03 Dec 2023	26 Oct 2023 26 Oct 2023 27 Oc
BH1_0.2-0.3 BH2_0.2-0.3 BH3_0.3-0.4 BH3_0.7-0.8 BH4_0.3-0.4 BH4_0.8-0.7 BH5_0.3-0.4 BH5_0.3-0.4 BH5_0.3-0.4 BH5_0.2-0.3 BH7_0.2-0.3 BH7_0.2-0.3 BH7_0.2-0.3 BH10_0.2-0.3 BH10_0.2-0.3 BH10_0.5-0.6 QD_20231017 <b>PCBs in Soil</b> <b>Sample Name</b> BH1_0.2-0.3 BH2_0.2-0.3 BH2_0.2-0.3 BH3_0.3-0.4 BH3_0.3-0.4 BH4_0.3-0.4 BH4_0.8-0.7	SE255412.001 SE255412.002 SE255412.003 SE255412.004 SE255412.005 SE255412.006 SE255412.007 SE255412.008 SE255412.009 SE255412.010 SE255412.010 SE255412.011 SE255412.011 SE255412.013 SE255412.014 SE255412.016 SE255412.001 SE255412.001 SE255412.002 SE255412.002 SE255412.004 SE255412.004	LB294377 LB2947	18 Oct 2023         18 Oct 2023	19 Oct 2023	01 Nov 2023 01 No	24 Oct 2023 24 Oct 2023	03 Dec 2023 03 Dec 2023	26 Oct 2023 26 Oct 2023 27 Oc
BH1_0.2-0.3 BH2_0.2-0.3 BH3_0.3-0.4 BH3_0.7-0.8 BH4_0.3-0.4 BH4_0.6-0.7 BH5_0.3-0.4 BH5_0.3-0.4 BH5_0.2-0.3 BH7_0.2-0.3 BH7_0.2-0.3 BH7_0.2-0.3 BH10_0.2-0.3 BH10_0.2-0.3 BH10_0.2-0.3 BH10_0.2-0.3 BH2_0.2-0.3 BH2_0.2-0.3 BH3_0.3-0.4 BH3_0.3-0.4 BH4_0.6-0.7 BH5_0.3-0.4	SE255412.001 SE255412.002 SE255412.003 SE255412.004 SE255412.005 SE255412.006 SE255412.007 SE255412.008 SE255412.008 SE255412.010 SE255412.010 SE255412.011 SE255412.011 SE255412.013 SE255412.014 SE255412.016 SE255412.001 SE255412.002 SE255412.000 SE255412.004 SE255412.006 SE255412.006	LB294377 LB2947	18 Oct 2023         18 Oct 2023	19 Oct 2023	01 Nov 2023 01 No	24 Oct 2023 24 Oct 2023	03 Dec 2023 03 Dec 2023	26 Oct 2023 26 Oct 2023 27 Oc
BH1_0.2-0.3 BH2_0.2-0.3 BH3_0.3-0.4 BH3_0.7-0.8 BH4_0.3-0.4 BH4_0.8-0.7 BH5_0.3-0.4 BH5_0.3-0.4 BH5_0.3-0.4 BH5_0.2-0.3 BH7_0.2-0.3 BH7_0.2-0.3 BH10_0.2-0.3 BH10_0.2-0.3 BH10_0.2-0.3 BH10_0.2-0.3 BH1_0.2-0.3 BH1_0.2-0.3 BH1_0.2-0.3 BH2_0.2-0.3 BH3_0.3-0.4 BH3_0.3-0.4 BH4_0.3-0.4 BH4_0.8-0.7	SE255412.001 SE255412.002 SE255412.003 SE255412.004 SE255412.005 SE255412.006 SE255412.007 SE255412.008 SE255412.009 SE255412.010 SE255412.010 SE255412.011 SE255412.011 SE255412.013 SE255412.014 SE255412.016 SE255412.001 SE255412.001 SE255412.002 SE255412.002 SE255412.004 SE255412.004	LB294377 LB2947	18 Oct 2023         18 Oct 2023	19 Oct 2023	01 Nov 2023 01 No	24 Oct 2023 24 Oct 2023	03 Dec 2023 03 Dec 2023	26 Oct 2023 26 Oct 2023 27 Oc



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

### PCBs in Soil (continued)

PCBs in Soil (continued)	CBs in Soil (continued)									
Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed		
BH7_0.2-0.3	SE255412.010	LB294377	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	03 Dec 2023	26 Oct 2023		
BH7_0.5-0.6	SE255412.011	LB294377	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	03 Dec 2023	26 Oct 2023		
BH8_0.1-0.2	SE255412.012	LB294377	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	03 Dec 2023	26 Oct 2023		
BH9_0.1-0.2	SE255412.013	LB294377	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	03 Dec 2023	26 Oct 2023		
BH10_0.2-0.3	SE255412.014	LB294377	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	03 Dec 2023	26 Oct 2023		
BH10_0.5-0.6	SE255412.015	LB294377	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	03 Dec 2023	26 Oct 2023		
QD_20231017	SE255412.016	LB294377	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	03 Dec 2023	26 Oct 2023		
otal Recoverable Eleme	nts in Soil/Waste Solids/Ma	terials by ICPOES					Method: ME-(AU	)-[ENV]AN040/AN32		

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH1_0.2-0.3	SE255412.001	LB294426	18 Oct 2023	19 Oct 2023	15 Apr 2024	24 Oct 2023	15 Apr 2024	26 Oct 2023
BH2_0.2-0.3	SE255412.002	LB294426	18 Oct 2023	19 Oct 2023	15 Apr 2024	24 Oct 2023	15 Apr 2024	26 Oct 2023
BH3_0.3-0.4	SE255412.003	LB294426	18 Oct 2023	19 Oct 2023	15 Apr 2024	24 Oct 2023	15 Apr 2024	26 Oct 2023
BH3_0.7-0.8	SE255412.004	LB294426	18 Oct 2023	19 Oct 2023	15 Apr 2024	24 Oct 2023	15 Apr 2024	26 Oct 2023
BH4_0.3-0.4	SE255412.005	LB294426	18 Oct 2023	19 Oct 2023	15 Apr 2024	24 Oct 2023	15 Apr 2024	26 Oct 2023
BH4_0.6-0.7	SE255412.006	LB294426	18 Oct 2023	19 Oct 2023	15 Apr 2024	24 Oct 2023	15 Apr 2024	26 Oct 2023
BH5_0.3-0.4	SE255412.007	LB294426	18 Oct 2023	19 Oct 2023	15 Apr 2024	24 Oct 2023	15 Apr 2024	26 Oct 2023
BH5_0.8-0.9	SE255412.008	LB294426	18 Oct 2023	19 Oct 2023	15 Apr 2024	24 Oct 2023	15 Apr 2024	26 Oct 2023
BH6_0.2-0.3	SE255412.009	LB294426	18 Oct 2023	19 Oct 2023	15 Apr 2024	24 Oct 2023	15 Apr 2024	26 Oct 2023
BH7_0.2-0.3	SE255412.010	LB294426	18 Oct 2023	19 Oct 2023	15 Apr 2024	24 Oct 2023	15 Apr 2024	26 Oct 2023
BH7_0.5-0.6	SE255412.011	LB294426	18 Oct 2023	19 Oct 2023	15 Apr 2024	24 Oct 2023	15 Apr 2024	26 Oct 2023
BH8_0.1-0.2	SE255412.012	LB294426	18 Oct 2023	19 Oct 2023	15 Apr 2024	24 Oct 2023	15 Apr 2024	26 Oct 2023
BH9_0.1-0.2	SE255412.013	LB294426	18 Oct 2023	19 Oct 2023	15 Apr 2024	24 Oct 2023	15 Apr 2024	26 Oct 2023
BH10_0.2-0.3	SE255412.014	LB294426	18 Oct 2023	19 Oct 2023	15 Apr 2024	24 Oct 2023	15 Apr 2024	26 Oct 2023
BH10_0.5-0.6	SE255412.015	LB294426	18 Oct 2023	19 Oct 2023	15 Apr 2024	24 Oct 2023	15 Apr 2024	26 Oct 2023
QD_20231017	SE255412.016	LB294426	18 Oct 2023	19 Oct 2023	15 Apr 2024	24 Oct 2023	15 Apr 2024	26 Oct 2023
Trace Metals (Dissolved)	in Water by ICPMS						Method: I	ME-(AU)-[ENV]AN3
Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analvsis Due	Analysed

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
QR_20231017	SE255412.017	LB294209	18 Oct 2023	19 Oct 2023	15 Apr 2024	23 Oct 2023	15 Apr 2024	23 Oct 2023

### TRH (Total Recoverable Hydrocarbons) in Soil

# Method: ME-(ALI)-JENVIAN403

TRH (Total Recoverable I	Hydrocarbons) in Soil						Method: I	ME-(AU)-[ENV]AN403
Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH1_0.2-0.3	SE255412.001	LB294377	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	03 Dec 2023	26 Oct 2023
BH2_0.2-0.3	SE255412.002	LB294377	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	03 Dec 2023	26 Oct 2023
BH3_0.3-0.4	SE255412.003	LB294377	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	03 Dec 2023	26 Oct 2023
BH3_0.7-0.8	SE255412.004	LB294377	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	03 Dec 2023	26 Oct 2023
BH4_0.3-0.4	SE255412.005	LB294377	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	03 Dec 2023	26 Oct 2023
BH4_0.6-0.7	SE255412.006	LB294377	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	03 Dec 2023	26 Oct 2023
BH5_0.3-0.4	SE255412.007	LB294377	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	03 Dec 2023	26 Oct 2023
BH5_0.8-0.9	SE255412.008	LB294377	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	03 Dec 2023	26 Oct 2023
BH6_0.2-0.3	SE255412.009	LB294377	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	03 Dec 2023	26 Oct 2023
BH7_0.2-0.3	SE255412.010	LB294377	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	03 Dec 2023	26 Oct 2023
BH7_0.5-0.6	SE255412.011	LB294377	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	03 Dec 2023	26 Oct 2023
BH8_0.1-0.2	SE255412.012	LB294377	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	03 Dec 2023	26 Oct 2023
BH9_0.1-0.2	SE255412.013	LB294377	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	03 Dec 2023	26 Oct 2023
BH10_0.2-0.3	SE255412.014	LB294377	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	03 Dec 2023	26 Oct 2023
BH10_0.5-0.6	SE255412.015	LB294377	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	03 Dec 2023	26 Oct 2023
QD_20231017	SE255412.016	LB294377	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	03 Dec 2023	26 Oct 2023
TRH (Total Recoverable Hydrocarbons) in Water Method: ME-(AU)-[E							ME-(AU)-[ENV]AN403	
Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
QR_20231017	SE255412.017	LB294104	18 Oct 2023	19 Oct 2023	25 Oct 2023	20 Oct 2023	29 Nov 2023	26 Oct 2023

### Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH1_0.2-0.3	SE255412.001	LB294407	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	01 Nov 2023	26 Oct 2023
BH2_0.2-0.3	SE255412.002	LB294407	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	01 Nov 2023	26 Oct 2023
BH3_0.3-0.4	SE255412.003	LB294407	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	01 Nov 2023	26 Oct 2023
BH3_0.7-0.8	SE255412.004	LB294407	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	01 Nov 2023	26 Oct 2023

VOC's in Soil



Method: ME (ALI) JENVIANA22

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

### VOC's in Soil (continued)

						Meulou. I	VE-(AU)-[ENV]AN433	
Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed	
SE255412.005	LB294407	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	01 Nov 2023	26 Oct 2023	
SE255412.006	LB294407	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	01 Nov 2023	26 Oct 2023	
SE255412.007	LB294407	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	01 Nov 2023	26 Oct 2023	
SE255412.008	LB294407	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	01 Nov 2023	26 Oct 2023	
SE255412.009	LB294407	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	01 Nov 2023	26 Oct 2023	
SE255412.010	LB294407	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	01 Nov 2023	26 Oct 2023	
SE255412.011	LB294407	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	01 Nov 2023	26 Oct 2023	
SE255412.012	LB294407	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	01 Nov 2023	26 Oct 2023	
SE255412.013	LB294407	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	01 Nov 2023	26 Oct 2023	
SE255412.014	LB294407	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	01 Nov 2023	26 Oct 2023	
SE255412.015	LB294407	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	01 Nov 2023	26 Oct 2023	
SE255412.016	LB294407	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	01 Nov 2023	26 Oct 2023	
SE255412.018	LB294407	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	01 Nov 2023	26 Oct 2023	
SE255412.019	LB294407	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	01 Nov 2023	26 Oct 2023	
OCs In Water Method: ME-(AU)-[ENV]AN43								
Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed	
SE255412.017	LB294253	18 Oct 2023	19 Oct 2023	01 Nov 2023	23 Oct 2023	01 Nov 2023	24 Oct 2023	
	SE255412.005           SE255412.006           SE255412.007           SE255412.008           SE255412.009           SE255412.010           SE255412.011           SE255412.012           SE255412.013           SE255412.014           SE255412.015           SE255412.016           SE255412.018           SE255412.019           SE255412.019           SE255412.019	SE255412.005         LB294407           SE255412.006         LB294407           SE255412.007         LB294407           SE255412.008         LB294407           SE255412.009         LB294407           SE255412.010         LB294407           SE255412.011         LB294407           SE255412.012         LB294407           SE255412.013         LB294407           SE255412.014         LB294407           SE255412.015         LB294407           SE255412.016         LB294407           SE255412.018         LB294407           SE255412.019         LB294407           SE255412.019         LB294407           SE255412.018         LB294407           SE255412.019         LB294407           SE255412.019         LB294407	SE255412.005         LB294407         18 Oct 2023           SE255412.006         LB294407         18 Oct 2023           SE255412.007         LB294407         18 Oct 2023           SE255412.008         LB294407         18 Oct 2023           SE255412.009         LB294407         18 Oct 2023           SE255412.010         LB294407         18 Oct 2023           SE255412.010         LB294407         18 Oct 2023           SE255412.011         LB294407         18 Oct 2023           SE255412.012         LB294407         18 Oct 2023           SE255412.013         LB294407         18 Oct 2023           SE255412.014         LB294407         18 Oct 2023           SE255412.015         LB294407         18 Oct 2023           SE255412.016         LB294407         18 Oct 2023           SE255412.018         LB294407         18 Oct 2023           SE255412.019         LB294407	SE255412.005         LB294407         18 Oct 2023         19 Oct 2023           SE255412.006         LB294407         18 Oct 2023         19 Oct 2023           SE255412.007         LB294407         18 Oct 2023         19 Oct 2023           SE255412.007         LB294407         18 Oct 2023         19 Oct 2023           SE255412.008         LB294407         18 Oct 2023         19 Oct 2023           SE255412.009         LB294407         18 Oct 2023         19 Oct 2023           SE255412.010         LB294407         18 Oct 2023         19 Oct 2023           SE255412.011         LB294407         18 Oct 2023         19 Oct 2023           SE255412.012         LB294407         18 Oct 2023         19 Oct 2023           SE255412.013         LB294407         18 Oct 2023         19 Oct 2023           SE255412.014         LB294407         18 Oct 2023         19 Oct 2023           SE255412.015         LB294407         18 Oct 2023         19 Oct 2023           SE255412.016         LB294407         18 Oct 2023         19 Oct 2023           SE255412.018         LB294407         18 Oct 2023         19 Oct 2023           SE255412.018         LB294407         18 Oct 2023         19 Oct 2023           SE255412.018 <t< td=""><td>SE255412.005         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023           SE255412.006         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023           SE255412.007         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023           SE255412.007         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023           SE255412.008         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023           SE255412.009         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023           SE255412.010         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023           SE255412.011         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023           SE255412.012         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023           SE255412.013         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023           SE255412.014         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023           SE255412.015         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023           SE255412.016         LB294407         18 Oct 2023</td><td>SE255412.005         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023         24 Oct 2023           SE255412.006         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023         24 Oct 2023           SE255412.007         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023         24 Oct 2023           SE255412.007         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023         24 Oct 2023           SE255412.008         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023         24 Oct 2023           SE255412.009         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023         24 Oct 2023           SE255412.010         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023         24 Oct 2023           SE255412.011         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023         24 Oct 2023           SE255412.013         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023         24 Oct 2023           SE255412.014         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023         24 Oct 2023           SE255412.015         LB294407         18 Oct 2023         19 Oct 2023         <td< td=""><td>Sample No.         QC Ref         Sampled         Received         Extraction Due         Extracted         Analysis Due           SE255412.005         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023         24 Oct 2023         01 Nov 2023           SE255412.006         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023         24 Oct 2023         01 Nov 2023           SE255412.007         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023         24 Oct 2023         01 Nov 2023           SE255412.008         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023         24 Oct 2023         01 Nov 2023           SE255412.009         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023         24 Oct 2023         01 Nov 2023           SE255412.010         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023         24 Oct 2023         01 Nov 2023           SE255412.010         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023         24 Oct 2023         01 Nov 2023           SE255412.011         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023         24 Oct 2023         01 Nov 2023           SE255412.013         LB294407</td></td<></td></t<>	SE255412.005         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023           SE255412.006         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023           SE255412.007         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023           SE255412.007         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023           SE255412.008         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023           SE255412.009         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023           SE255412.010         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023           SE255412.011         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023           SE255412.012         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023           SE255412.013         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023           SE255412.014         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023           SE255412.015         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023           SE255412.016         LB294407         18 Oct 2023	SE255412.005         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023         24 Oct 2023           SE255412.006         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023         24 Oct 2023           SE255412.007         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023         24 Oct 2023           SE255412.007         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023         24 Oct 2023           SE255412.008         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023         24 Oct 2023           SE255412.009         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023         24 Oct 2023           SE255412.010         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023         24 Oct 2023           SE255412.011         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023         24 Oct 2023           SE255412.013         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023         24 Oct 2023           SE255412.014         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023         24 Oct 2023           SE255412.015         LB294407         18 Oct 2023         19 Oct 2023 <td< td=""><td>Sample No.         QC Ref         Sampled         Received         Extraction Due         Extracted         Analysis Due           SE255412.005         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023         24 Oct 2023         01 Nov 2023           SE255412.006         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023         24 Oct 2023         01 Nov 2023           SE255412.007         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023         24 Oct 2023         01 Nov 2023           SE255412.008         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023         24 Oct 2023         01 Nov 2023           SE255412.009         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023         24 Oct 2023         01 Nov 2023           SE255412.010         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023         24 Oct 2023         01 Nov 2023           SE255412.010         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023         24 Oct 2023         01 Nov 2023           SE255412.011         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023         24 Oct 2023         01 Nov 2023           SE255412.013         LB294407</td></td<>	Sample No.         QC Ref         Sampled         Received         Extraction Due         Extracted         Analysis Due           SE255412.005         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023         24 Oct 2023         01 Nov 2023           SE255412.006         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023         24 Oct 2023         01 Nov 2023           SE255412.007         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023         24 Oct 2023         01 Nov 2023           SE255412.008         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023         24 Oct 2023         01 Nov 2023           SE255412.009         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023         24 Oct 2023         01 Nov 2023           SE255412.010         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023         24 Oct 2023         01 Nov 2023           SE255412.010         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023         24 Oct 2023         01 Nov 2023           SE255412.011         LB294407         18 Oct 2023         19 Oct 2023         01 Nov 2023         24 Oct 2023         01 Nov 2023           SE255412.013         LB294407	

#### Volatile Petroleum Hydrocarbons in Soil

Volatile Petroleum Hydrod	carbons in Soil						Method: I	ME-(AU)-[ENV]AN43
Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH1_0.2-0.3	SE255412.001	LB294407	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	01 Nov 2023	26 Oct 2023
BH2_0.2-0.3	SE255412.002	LB294407	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	01 Nov 2023	26 Oct 2023
BH3_0.3-0.4	SE255412.003	LB294407	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	01 Nov 2023	26 Oct 2023
BH3_0.7-0.8	SE255412.004	LB294407	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	01 Nov 2023	26 Oct 2023
BH4_0.3-0.4	SE255412.005	LB294407	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	01 Nov 2023	26 Oct 2023
BH4_0.6-0.7	SE255412.006	LB294407	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	01 Nov 2023	26 Oct 2023
BH5_0.3-0.4	SE255412.007	LB294407	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	01 Nov 2023	26 Oct 2023
BH5_0.8-0.9	SE255412.008	LB294407	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	01 Nov 2023	26 Oct 2023
BH6_0.2-0.3	SE255412.009	LB294407	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	01 Nov 2023	26 Oct 2023
BH7_0.2-0.3	SE255412.010	LB294407	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	01 Nov 2023	26 Oct 2023
BH7_0.5-0.6	SE255412.011	LB294407	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	01 Nov 2023	26 Oct 2023
BH8_0.1-0.2	SE255412.012	LB294407	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	01 Nov 2023	26 Oct 2023
BH9_0.1-0.2	SE255412.013	LB294407	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	01 Nov 2023	26 Oct 2023
BH10_0.2-0.3	SE255412.014	LB294407	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	01 Nov 2023	26 Oct 2023
BH10_0.5-0.6	SE255412.015	LB294407	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	01 Nov 2023	26 Oct 2023
QD_20231017	SE255412.016	LB294407	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	01 Nov 2023	26 Oct 2023
QTB1	SE255412.018	LB294407	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	01 Nov 2023	26 Oct 2023
QTS1	SE255412.019	LB294407	18 Oct 2023	19 Oct 2023	01 Nov 2023	24 Oct 2023	01 Nov 2023	26 Oct 2023
Volatile Petroleum Hydrod	carbons in Water						Method: I	ME-(AU)-[ENV]AN43
Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
QR_20231017	SE255412.017	LB294253	18 Oct 2023	19 Oct 2023	01 Nov 2023	23 Oct 2023	01 Nov 2023	24 Oct 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 identifer 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]AN4
Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	BH1_0.2-0.3	SE255412.001	%	60 - 130%	71
	BH2_0.2-0.3	SE255412.002	%	60 - 130%	71
	BH3_0.3-0.4	SE255412.003	%	60 - 130%	71
	BH4_0.3-0.4	SE255412.005	%	60 - 130%	71
	BH5_0.3-0.4	SE255412.007	%	60 - 130%	72
	BH6_0.2-0.3	SE255412.009	%	60 - 130%	71
	BH7_0.2-0.3	SE255412.010	%	60 - 130%	72
	BH8_0.1-0.2	SE255412.012	%	60 - 130%	73
	BH9_0.1-0.2	SE255412.013	%	60 - 130%	71
	BH10_0.5-0.6	SE255412.015	%	60 - 130%	71
OP Pesticides in Soil				Method: ME-	(AU)-[ENV]AN4
Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	BH1_0.2-0.3	SE255412.001	%	60 - 130%	92
2-inditibilitienin (Sunogate)	BH2_0.2-0.3	SE255412.002	%	60 - 130%	102
			%		
	BH3_0.3-0.4	SE255412.003		60 - 130%	98
	BH4_0.3-0.4	SE255412.005	%	60 - 130%	99
	BH5_0.3-0.4	SE255412.007	%	60 - 130%	99
	BH6_0.2-0.3	SE255412.009	%	60 - 130%	101
	BH7_0.2-0.3	SE255412.010	%	60 - 130%	97
	BH8_0.1-0.2	SE255412.012	%	60 - 130%	101
	BH9_0.1-0.2	SE255412.013	%	60 - 130%	97
	BH10_0.5-0.6	SE255412.015	%	60 - 130%	91
d14-p-terphenyl (Surrogate)	BH1_0.2-0.3	SE255412.001	%	60 - 130%	98
	BH2_0.2-0.3	SE255412.002	%	60 - 130%	107
	BH3_0.3-0.4	SE255412.003	%	60 - 130%	106
	BH4_0.3-0.4	SE255412.005	%	60 - 130%	106
	BH5_0.3-0.4	SE255412.007	%	60 - 130%	105
	BH6_0.2-0.3	SE255412.009	%	60 - 130%	108
	BH7_0.2-0.3	SE255412.010	%	60 - 130%	106
	BH8_0.1-0.2	SE255412.012	%	60 - 130%	110
	BH9_0.1-0.2	SE255412.013	%	60 - 130%	104
	BH10_0.5-0.6	SE255412.015	%	60 - 130%	93
PAH (Polynuclear Aromatic Hydrocarbons) in Soil				Method: ME-	(AU)-[ENV]AN4
Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	BH1_0.2-0.3	SE255412.001	%	70 - 130%	92
	BH2_0.2-0.3	SE255412.002	%	70 - 130%	102
	BH3_0.3-0.4	SE255412.003	%	70 - 130%	98
	BH3_0.7-0.8	SE255412.004	%	70 - 130%	99
	BH4_0.3-0.4	SE255412.005	%	70 - 130%	99
	BH4_0.6-0.7	SE255412.006	%	70 - 130%	101
	BH5 0.3-0.4	SE255412.007	%	70 - 130%	99
	BH5_0.8-0.9	SE255412.008	%	70 - 130%	101
	BH6_0.2-0.3	SE255412.009	%	70 - 130%	101
	BH7_0.2-0.3	SE255412.010	%	70 - 130%	97
	BH7_0.5-0.6	SE255412.011 SE255412.012	%	70 - 130%	103
	BH8_0.1-0.2		%		101
	BH9_0.1-0.2	SE255412.013	%	70 - 130%	97
	BH10_0.2-0.3	SE255412.014	%	70 - 130%	113
	BH10_0.5-0.6	SE255412.015	%	70 - 130%	91
d14-p-terphenyl (Surrogate)	BH1_0.2-0.3	SE255412.001	%	70 - 130%	98
	BH2_0.2-0.3	SE255412.002	%	70 - 130%	107
	BH3_0.3-0.4	SE255412.003	%	70 - 130%	106
	BH3_0.7-0.8	SE255412.004	%	70 - 130%	101
	BH4_0.3-0.4	SE255412.005	%	70 - 130%	106
	BH4_0.6-0.7	SE255412.006	%	70 - 130%	107
	BH5_0.3-0.4	SE255412.007	%	70 - 130%	105
	BH5_0.8-0.9	SE255412.008	%	70 - 130%	107
					100
	BH6_0.2-0.3	SE255412.009	%	70 - 130%	108
	BH6_0.2-0.3 BH7_0.2-0.3	SE255412.009 SE255412.010	%	70 - 130% 70 - 130%	108



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 identifer 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 Recovery % Sample Nam Sample Numb Units Criteria d14-p-terphenvl (Surrogate) BH8 0.1-0.2 SE255412.012 % 70 - 130% 110 BH9\_0.1-0.2 SE255412.013 % 70 - 130% 104 BH10\_0.2-0.3 SE255412.014 120 % 70 - 130% BH10 0.5-0.6 SE255412.015 % 70 - 130% 93 d5-nitrobenzene (Surrogate) BH1\_0.2-0.3 SE255412.001 70 - 130% 97 % 104 BH2 0.2-0.3 SE255412.002 70 - 130% % BH3 0 3-0 4 SE255412 003 % 70 - 130% 104 BH3\_0.7-0.8 SE255412.004 70 - 130% 102 % 106 BH4\_0.3-0.4 SE255412.005 70 - 130% % BH4 0.6-0.7 SE255412.006 % 70 - 130% 103 BH5\_0.3-0.4 SE255412.007 70 - 130% % 107 BH5 0.8-0.9 SE255412.008 70 - 130% 104 % BH6 0 2-0 3 SE255412 009 % 70 - 130% 107 BH7 0.2-0.3 SE255412.010 % 70 - 130% 104 SE255412.011 105 BH7 0.5-0.6 % 70 - 130% BH8 0.1-0.2 SE255412.012 % 70 - 130% 102 BH9\_0.1-0.2 SE255412.013 70 - 130% 102 % BH10\_0.2-0.3 SE255412.014 70 - 130% 116 % BH10 0.5-0.6 SE255412.015 % 70 - 130% 88 PCBs in Soil Method: ME-(AU)-[ENV]AN420 Recovery % Parameter Sample Name Sample Numl Units Criteria TCMX (Surrogate) BH1 0.2-0.3 SE255412.001 % 60 - 130% 72 BH2 0.2-0.3 SE255412 002 % 60 - 130% 74 77 BH3 0.3-0.4 SE255412.003 % 60 - 130% BH4 0.3-0.4 SE255412.005 60 - 130% 76 % BH5 0.3-0.4 SE255412.007 % 60 - 130% 77 BH6 0.2-0.3 SE255412.009 % 60 - 130% 76 BH7 0.2-0.3 SE255412.010 60 - 130% % 75 BH8\_0.1-0.2 SE255412.012 % 60 - 130% 78 BH9\_0.1-0.2 SE255412.013 % 60 - 130% 77 BH10 0.5-0.6 SE255412.015 % 60 - 130% 77 VOC's in Soll Method: ME-(AU)-[ENVIAN433 Parameter Sample Name Sample Numb Units Criteria Recovery % SE255412.001 Bromofluorobenzene (Surrogate) BH1\_0.2-0.3 % 60 - 130% 100 BH2 0.2-0.3 SE255412.002 % 60 - 130% 94 60 - 130% BH3\_0.3-0.4 SE255412.003 101 % BH3\_0.7-0.8 60 - 130% SE255412.004 90 % BH4 0.3-0.4 SE255412.005 % 60 - 130% 98 BH4\_0.6-0.7 SE255412.006 % 60 - 130% 92 BH5\_0.3-0.4 SE255412.007 % 60 - 130% 85 BH5 0.8-0.9 SE255412.008 % 60 - 130% 94 BH6\_0.2-0.3 SE255412.009 % 60 - 130% 96 BH7\_0.2-0.3 SE255412.010 60 - 130% 96 % BH7 0.5-0.6 SE255412.011 % 60 - 130% 90 BH8\_0.1-0.2 SE255412.012 60 - 130% 93 % BH9\_0.1-0.2 SE255412.013 60 - 130% 98 % BH10 0.2-0.3 SE255412.014 % 60 - 130% 87 BH10\_0.5-0.6 SE255412.015 60 - 130% 100 % QD\_20231017 SE255412.016 % 60 - 130% 97 QTB1 SE255412.018 % 60 - 130% 82 QTS1 104 SE255412.019 % 60 - 130% d4-1,2-dichloroethane (Surrogate) BH1\_0.2-0.3 SE255412.001 60 - 130% 110 % BH2 0.2-0.3 SE255412.002 % 60 - 130% 105 BH3\_0.3-0.4 SE255412.003 % 60 - 130% 116 BH3\_0.7-0.8 60 - 130% SE255412.004 109 % BH4 0.3-0.4 SE255412.005 % 60 - 130% 119 BH4\_0.6-0.7 SE255412.006 % 60 - 130% 109 BH5 0.3-0.4 SE255412.007 % 60 - 130% 102 BH5 0.8-0.9 SE255412.008 % 60 - 130% 114 BH6\_0.2-0.3 SE255412.009 60 - 130% 120 %



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 identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

'OC's in Soil (continued)				Method: ME	-(AU)-[ENV]A
Parameter	Sample Name	Sample Number	Units	Criteria	Recovery
d4-1,2-dichloroethane (Surrogate)	BH7_0.2-0.3	SE255412.010	%	60 - 130%	112
	BH7_0.5-0.6	SE255412.011	%	60 - 130%	113
	BH8_0.1-0.2	SE255412.012	%	60 - 130%	120
	BH9_0.1-0.2	SE255412.013	%	60 - 130%	119
	BH10_0.2-0.3	SE255412.014	%	60 - 130%	105
	BH10_0.5-0.6	SE255412.015	%	60 - 130%	115
	QD_20231017	SE255412.016	%	60 - 130%	122
	QTB1	SE255412.018	%	60 - 130%	105
	QTS1	SE255412.019	%	60 - 130%	112
d8-toluene (Surrogate)	BH1_0.2-0.3	SE255412.001	%	60 - 130%	91
	BH2_0.2-0.3	SE255412.002	%	60 - 130%	90
	BH3_0.3-0.4	SE255412.003	%	60 - 130%	94
	BH3_0.7-0.8	SE255412.004	%	60 - 130%	92
	BH4_0.3-0.4	SE255412.005	%	60 - 130%	99
	BH4_0.6-0.7	SE255412.006	%	60 - 130%	93
	BH5_0.3-0.4	SE255412.007	%	60 - 130%	87
	BH5_0.8-0.9	SE255412.008	%	60 - 130%	98
	BH6_0.2-0.3	SE255412.009	%	60 - 130%	99
	BH7_0.2-0.3	SE255412.010	%	60 - 130%	92
	BH7_0.5-0.6	SE255412.011	%	60 - 130%	91
	BH8_0.1-0.2	SE255412.012	%	60 - 130%	94
	BH9_0.1-0.2	SE255412.013	%	60 - 130%	97
	BH10_0.2-0.3	SE255412.014	%	60 - 130%	85
	BH10_0.5-0.6	SE255412.015	%	60 - 130%	92
	QD_20231017	SE255412.016	%	60 - 130%	98
	QTB1	SE255412.018	%	60 - 130%	87
	QTS1	SE255412.019	%	60 - 130%	97
Cs in Water				Method: ME	-(AU)-[ENV]/
Parameter	Sample Name	Sample Number	Units	Criteria	Recovery
Bromofluorobenzene (Surrogate)	QR_20231017	SE255412.017	%	40 - 130%	99
d4-1,2-dichloroethane (Surrogate)	QR_20231017	SE255412.017	%	40 - 130%	92
d8-toluene (Surrogate)	QR_20231017	SE255412.017	%	40 - 130%	86
olatile Petroleum Hydrocarbons in Soil					-(AU)-[ENV]
Parameter	Sample Name	Sample Number	Units	Criteria	Recovery
Bromofluorobenzene (Surrogate)	BH1_0.2-0.3	SE255412.001	%	60 - 130%	100
	BH2_0.2-0.3	SE255412.002	%	60 - 130%	94
	BH3_0.3-0.4	SE255412.003	%	60 - 130%	101
	BH3_0.7-0.8	SE255412.004	%	60 - 130%	90
	BH4_0.3-0.4	SE255412.005	%	60 - 130%	98
	BH4_0.6-0.7	SE255412.006	%	60 - 130%	92
	BH5_0.3-0.4	SE255412.007	%	60 - 130%	85
	BH5_0.8-0.9	SE255412.008	%	60 - 130%	94
	BH6_0.2-0.3	SE255412.009	%	60 - 130%	96
	BH7_0.2-0.3	SE255412.010	%	60 - 130%	96
	BH7_0.5-0.6	SE255412.011	%	60 - 130%	90
	BH8_0.1-0.2	SE255412.012	%	60 - 130%	93
	BH9_0.1-0.2	SE255412.013	%	60 - 130%	98
	BH10_0.2-0.3	SE255412.014	%	60 - 130%	87
	BH10_0.5-0.6	SE255412.015	%	60 - 130%	100
	QD_20231017	SE255412.016	%	60 - 130%	97
14-1,2-dichloroethane (Surrogate)	BH1_0.2-0.3	SE255412.001	%	60 - 130%	110
	BH2_0.2-0.3	SE255412.002	%	60 - 130%	105
	BH3_0.3-0.4	SE255412.003	%	60 - 130%	116
	BH3_0.7-0.8	SE255412.004	%	60 - 130%	109
	BH4_0.3-0.4	SE255412.005	%	60 - 130%	119
	BH4_0.6-0.7	SE255412.006	%	60 - 130%	109
		SE255412.007	%	60 - 130%	102
	BH5_0.3-0.4	02200412.001			
	BH5_0.3-0.4 BH5_0.8-0.9	SE255412.008	%	60 - 130%	114



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 identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d4-1,2-dichloroethane (Surrogate)	BH7 0.5-0.6	SE255412.011	%	60 - 130%	113
	BH8 0.1-0.2	SE255412.012	%	60 - 130%	120
	BH9 0.1-0.2	SE255412.013	%	60 - 130%	119
	BH10 0.2-0.3	SE255412.014	%	60 - 130%	105
	BH10 0.5-0.6	SE255412.015	%	60 - 130%	115
	QD 20231017	SE255412.016	%	60 - 130%	122
d8-toluene (Surrogate)	BH1_0.2-0.3	SE255412.001	%	60 - 130%	91
	BH2_0.2-0.3	SE255412.002	%	60 - 130%	90
	BH3_0.3-0.4	SE255412.003	%	60 - 130%	94
	BH3_0.7-0.8	SE255412.004	%	60 - 130%	92
	BH4_0.3-0.4	SE255412.005	%	60 - 130%	99
	BH4_0.6-0.7	SE255412.006	%	60 - 130%	93
	BH5_0.3-0.4	SE255412.007	%	60 - 130%	87
	BH5_0.8-0.9	SE255412.008	%	60 - 130%	98
	BH6_0.2-0.3	SE255412.009	%	60 - 130%	99
	BH7_0.2-0.3	SE255412.010	%	60 - 130%	92
	BH7_0.5-0.6	SE255412.011	%	60 - 130%	91
	BH8_0.1-0.2	SE255412.012	%	60 - 130%	94
	BH9_0.1-0.2	SE255412.013	%	60 - 130%	97
	BH10_0.2-0.3	SE255412.014	%	60 - 130%	85
	BH10_0.5-0.6	SE255412.015	%	60 - 130%	92
	QD_20231017	SE255412.016	%	60 - 130%	98
latile Petroleum Hydrocarbons in Water				Method: M	E-(AU)-[ENV]AI
arameter	Sample Name	Sample Number	Units	Criteria	Recovery <sup>o</sup>
Bromofluorobenzene (Surrogate)	QR_20231017	SE255412.017	%	40 - 130%	99
d4-1,2-dichloroethane (Surrogate)	QR_20231017	SE255412.017	%	60 - 130%	92
d8-toluene (Surrogate)	QR 20231017	SE255412.017	%	40 - 130%	86



### **METHOD BLANKS**

### SE255412 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.

Mercury (dissolved) in Water Method: ME-(AU)-[ENV]AN311(F					
Sample Number	Parameter	Units	LOR	Result	
LB294073.001	Mercury	mg/L	0.0001	<0.0001	

### Mercury in Soil

Mercury in Soil			I	Method: ME-(AU)-[ENV]AN312
Sample Number	Parameter	Units	LOR	Result
LB294437.001	Mercury	mg/kg	0.05	<0.05

### OC Pesticides in Soil

OC Pesticides in Soil			Meth	od: ME-(AU)-[ENV]AN4
Sample Number	Parameter	Units	LOR	Result
LB294377.001	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
Surrogate	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	72
OP Pesticides in Soil			Meth	od: ME-(AU)-[ENV]AN4
Sample Number	Parameter	Units	LOR	Result
LB294377.001	Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Bromophos Ethyl		0.2	<0.2

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Sample Number		Parameter	Units	LOR	Result
LB294377.001		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
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	91
		d14-p-terphenyl (Surrogate)	%	-	96
PAH (Polynuclear Aron	natic Hydrocarbons) in Soil			Meth	od: ME-(AU)-[ENV]AN420
Sample Number		Parameter	Units	LOR	Result
LB294377.001		Naphthalene	mg/kg	0.1	<0.1

ounipie manipel		••••••		
LB294377.001	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



### **METHOD BLANKS**

### SE255412 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.

#### PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued) Method: ME-(AU)-[ENV]AN420 Result Sample Number Parameter Units LOR LB294377.001 Fluoranthene 0.1 <0.1 mg/kg Pyrene mg/kg 0.1 < 0.1 0.1 <0.1 Benzo(a)anthracene mg/kg Chrysene 0.1 <0.1 mg/kg Benzo(a)pyrene mg/kg 01 <0.1 Indeno(1,2,3-cd)pyrene mg/kg 0.1 <0.1 <0.1 Dibenzo(ah)anthracene 0.1 ma/ka Benzo(ghi)perylene mg/kg 0.1 < 0.1 Total PAH (18) 0.8 <0.8 mg/kg Surrogates d5-nitrobenzene (Surrogate) 93 % -2-fluorobiphenyl (Surrogate) % 91 d14-p-terphenyl (Surrogate) % 96 PCBs in Soil Method: ME-(AU)-[ENV]AN420 Sample Numb Units LOR Result Parameter LB294377.001 Arochlor 1016 mg/kg 0.2 < 0.2 Arochlor 1221 0.2 <0.2 mg/kg Arochlor 1232 mg/kg 0.2 < 0.2 Arochlor 1242 0.2 <0.2 mg/kg Arochlor 1248 0.2 <0.2 mg/kg Arochlor 1254 mg/kg 0.2 < 0.2 Arochlor 1260 0.2 <0.2 mg/kg Arochlor 1262 0.2 <0.2 mg/kg Arochlor 1268 mg/kg 0.2 <0.2 Total PCBs (Arochlors) mg/kg 1 <1 Surrogates TCMX (Surrogate) 72 % Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES Method: ME-(AU)-[ENV]AN040/AN320 Sample Number Parameter LOR Result LB294426.001 Arsenic, As mg/kg 1 <1 Cadmium, Cd 0.3 <0.3 mg/kg Chromium, Cr mg/kg 0.5 < 0.5 Copper, Cu mg/kg 0.5 <0.5 Nickel, Ni 0.5 <0.5 mg/kg Lead, Pb mg/kg 1 <1 Zinc, Zn 2 <2.0 mg/kg Trace Metals (Dissolved) in Water by ICPMS Method: ME-(AU)-[ENV]AN318 Sample Number Units Result Paramete LOR LB294209.001 Arsenic µg/L 1 <1 Cadmium 0.1 <0.1 µg/L Chromium µg/L 1 <1 Copper µg/L 1 <1 Lead <1 µg/L 1 Nickel µg/L 1 <1 Zinc µg/L 5 <5 LB294209.025 <1 Arsenic µg/L 1 Cadmium µg/L 0.1 < 0.1 Chromium µg/L 1 <1 Copper <1 1 µg/L Lead µg/L 1 <1 Nickel µg/L 1 <1 Zinc µg/L 5 <5 TRH (Total Recoverable Hydrocarbons) in Soil Method: ME-(AU)-[ENV]AN403 Sample Number Units Result Parameter LOR LB294377.001 TRH C10-C14 20 <20 mg/kg

TRH C15-C28

TRH C29-C36

TRH C37-C40

TRH C10-C36 Total

<45

<45

<100

<110

45

45

100

110

mg/kg

mg/kg

mg/kg

mg/kg



## **METHOD BLANKS**

### SE255412 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.

Sample Number		Parameter	Units	LOR	Result
LB294104.001		TRH C10-C14	µg/L	50	<50
102.04104.001		TRH C15-C28	μg/L	200	<200
		TRH C29-C36	μg/L	200	<200
		TRH C37-C40	μg/L	200	<200
OC's in Soil			P3,2		nod: ME-(AU)-[ENV]AN
Sample Number		Parameter	Units	LOR	Result
.B294407.001	Monocyclic Aromatic	Benzene	mg/kg	0.1	<0.1
	Hydrocarbons	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)	%	-	122
	Ū	d8-toluene (Surrogate)	%	-	105
		Bromofluorobenzene (Surrogate)	%	-	108
	Totals	Total BTEX*	mg/kg	0.6	<0.6
OCs in Water				Meth	nod: ME-(AU)-[ENV]AN
Sample Number		Parameter	Units	LOR	Result
B294253.001	Monocyclic Aromatic	Benzene	µg/L	0.5	<0.5
	Hydrocarbons	Toluene	µg/L	0.5	<0.5
		Ethylbenzene	µg/L	0.5	<0.5
		m/p-xylene	µg/L	1	<1
		o-xylene	μg/L	0.5	<0.5
	Polycyclic VOCs	Naphthalene (VOC)*	μg/L	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	90
		d8-toluene (Surrogate)	%	-	83
		Bromofluorobenzene (Surrogate)	%	-	98
olatile Petroleum Hyd	rocarbons in Soil			Meth	nod: ME-(AU)-[ENV]A
Sample Number		Parameter	Units	LOR	Result
B294407.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	_	122

### Volatile Petroleum Hydrocarbons in Water

Sample Number		Parameter	Units	LOR	Result
LB294253.001		TRH C6-C9	µg/L	40	<40
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	90
		d8-toluene (Surrogate)	%	-	83
		Bromofluorobenzene (Surrogate)	%	-	98

Method: ME-(AU)-[ENV]AN433



### **DUPLICATES**

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 x 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 identifer 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

### Mercury (dissolved) in Water

Mercury (dissolved) in Water Method: ME-(AU)-[ENV]AN311(Perth)					erth)/AN312			
Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE255395.001	LB294073.014	Mercury	μg/L	0.0001	<0.0001	<0.0001	200	26
SE255431.014	LB294073.023	Mercury	µg/L	0.0001	<0.0001	<0.0001	200	40

#### Mercury in Soil

Original	Duplicate	Parameter	Units LC	DR	Original	Duplicate	Criteria %	RPD %
SE255412.010	LB294437.014	Mercury	mg/kg 0.	05	<0.05	<0.05	200	0
SE255599.003	LB294437.023	Mercury	mg/kg 0.	05	0.1080521196	0.1157409	75	7

#### Moisture Content

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE255412.010	LB294413.011	% Moisture	%w/w	1	13.3	12.3	38	8
SE255599.003	LB294413.021	% Moisture	%w/w	1		<b>1</b> 3.6166522116		6

#### OC Peeticidee in Soil

C Pesticides in So	211					Metho	d: ME-(AU)-	ENVIAN
Driginal	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
255599.001	LB294377.025	Alpha BHC	mg/kg	0.1	0	0	200	0
		Hexachlorobenzene (HCB)	mg/kg	0.1	0.0009532032	0.0009929228	200	0
		Beta BHC	mg/kg	0.1	0.0028733630	0.0031720177	200	0
		Lindane (gamma BHC)	mg/kg	0.1	0.0012758924	0.0006940632	200	0
		Delta BHC	mg/kg	0.1	0.0020227194	0.0009541845	200	0
		Heptachlor	mg/kg	0.1	0.0120215011	0.0138450684	200	0
		Aldrin	mg/kg	0.1	0.0138052664	0.0146423347	200	0
		Isodrin	mg/kg	0.1	0.0002525484	0.0002697494	200	0
		Heptachlor epoxide	mg/kg	0.1	0.0013380000	0.0003497317	200	0
		Gamma Chlordane	mg/kg	0.1	0.0161915119	0.0178110006	200	0
		Alpha Chlordane	mg/kg	0.1	0.0082218442	0.0091135823	200	0
		Alpha Endosulfan	mg/kg	0.2	0.0004041949	0.0003222025	200	0
		o,p'-DDE*	mg/kg	0.1	0.0004041949	0.0003222025	200	0
		p,p'-DDE	mg/kg	0.1	0.0011921659	0.0010151320	200	0
		Dieldrin	mg/kg	0.2	0.0300650054	0.0313353908	200	0
		Endrin	mg/kg	0.2	0.0008988854	0.0016170652	200	0
		Beta Endosulfan	mg/kg	0.2	0.0004534219	0.0001752738	200	0
		o,p'-DDD*	mg/kg	0.1	0.0157517636	0.0199116032	200	0
		p,p'-DDD	mg/kg	0.1	0.0003613540	0.0002436680	200	0
		Endrin aldehyde	mg/kg	0.1	0.0005075691	0.0027827991	200	0
		Endosulfan sulphate	mg/kg	0.1	0.0008730746	0.0019906074	200	0
		o,p'-DDT*	mg/kg	0.1	0.0003590620	0.0002421224	200	0
		p,p'-DDT	mg/kg	0.1	0.0005903951	0.0004200261	200	0
		Endrin ketone	mg/kg	0.1	0.0031416949	0.0014253224	200	0
		Methoxychlor	mg/kg	0.1	0.0007309441	0.0034135822	200	0
		Mirex	mg/kg	0.1	0.0060056006	0.0021553427	200	0
		trans-Nonachlor	mg/kg	0.1	0.0059614871	0.0064586953	200	0
		Total CLP OC Pesticides	mg/kg	1	0	0	200	0
		Total OC VIC EPA	mg/kg	1	0	0	200	0
	Surroga	es Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.1057367647	0.1071840956	30	1
Pesticides in So	- il					Metho	d: ME-(AU)-	[ENV]#

#### **OP Pesticides in Soil**

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE255412.010	LB294377.014	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

Method: ME-(AU)-[ENV]AN312

Method: ME-(AU)-[ENV]AN002

Method: ME\_(ALI)\_IENI/JAN//20



Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 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 x 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 identifer 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

#### **OP Pesticides in Soil (continued)** Method: ME-(AU)-[ENV]AN420 Original Duplicate LOR Original Duplicate Criteria % RPD % Parameter Units SE255412.010 LB294377.014 Total OP Pesticides\* <1.7 200 1.7 <1.7 0 mg/kg Surrogates 2-fluorobiphenyl (Surrogate) mg/kg 0.5 0.5 30 0 d14-p-terphenyl (Surrogate) 0.5 0.5 30 3 mg/kg SE255599.001 LB294377.025 Azinphos-methyl (Guthion) 0.2 0.00945261700.0011675627 200 0 mg/kg 0.2 Bromophos Ethyl mg/kg 0 00192999010 0003788815 200 0 Chlorpyrifos (Chlorpyrifos Ethyl) 0.2 0.00845453270.0058916950 200 0 mg/kg Diazinon (Dimpylate) 0.5 200 0 0 0 ma/ka Dichlorvos mg/kg 0.5 0 0 200 0 Dimethoate 0.5 0.00129148220.0086071879 200 0 mg/kg Ethion 0.2 0 0 200 0 mg/kg 0.2 Fenitrothion mg/kg 0.0012200729 0 200 0 Malathion 0.2 0.00037639010.0004860219 200 0 mg/kg 0.00020920230.0017328736 Methidathion 0.5 200 0 mg/kg Parathion-ethyl (Parathion) 0.2 0.01071017150.0109826937 200 0 mg/kg 200 0 Total OP Pesticides 1.7 0 0 mg/kg Surrogates 0.51249564230.4980452994 2-fluorobiphenyl (Surrogate) 30 3 mg/kg -0.53620205530.5200324111 d14-p-terphenyl (Surrogate) mg/kg 30 3

PAH (Polynuclear)	Aromatic Hydrocarbo	ons) in Soil					Meth	od: ME-(AU)-	[ENV]AN420
Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE255412.010	LB294377.014		Naphthalene	mg/kg	0.1	<0.1	<0.1	188	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	177	0
			1-methylnaphthalene	mg/kg	0.1	0.1	<0.1	134	5
			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	131	9
			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*< td=""><td>mg/kg</td><td>0.2</td><td>&lt;0.2</td><td>&lt;0.2</td><td>200</td><td>0</td></lor=0*<>	mg/kg	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <lor=lor 2*<="" td=""><td>mg/kg</td><td>0.2</td><td>&lt;0.2</td><td>&lt;0.2</td><td>175</td><td>0</td></lor=lor>	mg/kg	0.2	<0.2	<0.2	175	0
			Carcinogenic PAHs, BaP TEQ <lor=lor*< td=""><td>mg/kg</td><td>0.3</td><td>&lt;0.3</td><td>&lt;0.3</td><td>134</td><td>0</td></lor=lor*<>	mg/kg	0.3	<0.3	<0.3	134	0
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	123	73
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	30	0
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	0
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	3
SE255599.001	LB294377.025		Naphthalene	mg/kg	0.1	0.006767137	10.0053260365	5 200	0
			2-methylnaphthalene	mg/kg	0.1	0.005501130	90.0039196584	200	0
			1-methylnaphthalene	mg/kg	0.1	0.005109974	90.0045724298	3 200	0
			Acenaphthylene	mg/kg	0.1	0.025887355	20.0146660413	3 200	0
			Acenaphthene	mg/kg	0.1	0.001903438	50.0019971168	3 200	0
			Fluorene	mg/kg	0.1	0.008849691	00.0069137623	3 200	0
			Phenanthrene	mg/kg	0.1	0.120592334	70.0784900676	5 130	19
			Anthracene	mg/kg	0.1	0.059410790	60.0358303984	200	0
			Fluoranthene	mg/kg	0.1	0.275184720	90.1759164541	74	44
			Pyrene	mg/kg	0.1	0.251970249	20.1667919135	5 78	41
			Benzo(a)anthracene	mg/kg	0.1	0.150720527	00.0920843363	3 112	40
			Chrysene	mg/kg	0.1	0.165590732	20.0999681838	3 105	49
			Benzo(b&j)fluoranthene	mg/kg	0.1	0.153185528	80.1016319143	3 108	40
			Benzo(k)fluoranthene	mg/kg	0.1	0.077579323	80.0545552216	6 181	0
			Benzo(a)pyrene	mg/kg	0.1	0.152548592	20.1004937361	109	41
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	0.091478465	60.0667420379	9 156	0



Method: ME-(AU)-[ENV]AN420

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 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 x 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 identifer 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

#### PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE255599.001	LB294377.025		Dibenzo(ah)anthracene	mg/kg	0.1	0.0201548968	0.0133651470	200	0
			Benzo(ghi)perylene	mg/kg	0.1	0.0868743685	0.0641409584	162	0
			Carcinogenic PAHs, BaP TEQ <lor=0*< td=""><td>mg/kg</td><td>0.2</td><td>0.1923530375</td><td>0.1004937361</td><td>147</td><td>0</td></lor=0*<>	mg/kg	0.2	0.1923530375	0.1004937361	147	0
			Carcinogenic PAHs, BaP TEQ <lor=lor 2*<="" td=""><td>mg/kg</td><td>0.2</td><td>0.2478530375</td><td>0.1714937361</td><td>105</td><td>21</td></lor=lor>	mg/kg	0.2	0.2478530375	0.1714937361	105	21
			Carcinogenic PAHs, BaP TEQ <lor=lor*< td=""><td>mg/kg</td><td>0.3</td><td>0.3033530375</td><td>0.2424937361</td><td>120</td><td>1</td></lor=lor*<>	mg/kg	0.3	0.3033530375	0.2424937361	120	1
			Total PAH (18)	mg/kg	0.8	1.3473720092	0.4432021039	41	101 @
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5310697483	0.5258408345	30	1
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5124956423	0.4980452994	30	3
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5362020553	0.5200324111	30	3
CBs in Soil								od: ME-(AU)-	
Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	۶ RPD
SE255599.001	LB294377.025		Arochlor 1016	mg/kg	0.2	0	0	200	0
			Arochlor 1221	mg/kg	0.2	0	0	200	0
			Arochlor 1232	mg/kg	0.2	0	0	200	0
			Arochlor 1242	mg/kg	0.2	0	0	200	0
			Arochlor 1248						0
			Arochior 1248	mg/kg	0.2	0	0	200	0
			Arochior 1248 Arochior 1254	mg/kg mg/kg	0.2	0	0	200	0
			Arochior 1254	mg/kg	0.2	0	0	200	0
			Arochlor 1254 Arochlor 1260	mg/kg	0.2	0	0	200 200	0
			Arochlor 1254 Arochlor 1260 Arochlor 1262	mg/kg mg/kg mg/kg	0.2 0.2 0.2	0 0 0	0 0 0 0	200 200 200	0 0 0

#### Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Total Recoverable	e Elements in Soil/Waste Solids/Ma	terials by ICPOES				Method: ME-	-(AU)-[ENV]A	N040/AN3
Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE255412.010	LB294426.014	Arsenic, As	mg/kg	1	4	5	52	12
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	47	42	31	10
		Copper, Cu	mg/kg	0.5	11	9.7	35	12
		Nickel, Ni	mg/kg	0.5	40	38	31	7
		Lead, Pb	mg/kg	1	25	13	35	60 ②
		Zinc, Zn	mg/kg	2	32	28	37	15
SE255599.003	LB294426.023	Arsenic, As	mg/kg	1	3.446894557	83.5231115983	59	2
		Cadmium, Cd	mg/kg	0.3	0.126970678	00.0924738934	200	0
		Chromium, Cr	mg/kg	0.5	11.636742858	\$9.8046284016	35	17
		Copper, Cu	mg/kg	0.5	26.854537973	44.4270029098	32	9
		Nickel, Ni	mg/kg	0.5	24.796654719	82.4045557377	7 32	10
		Lead, Pb	mg/kg	1	36.872820884	87.1900721311	1 32	16
		Zinc, Zn	mg/kg	2	01.63403859	008.898790163	32	7
race Metals (Dis	solved) in Water by ICPMS					Meth	od: ME-(AU)-	(ENVJAN3
Original	Duplicato	Paramotor	Unite	LOP	Original	Duplicato	Critorio 9/	

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE255427.001	LB294209.014	Lead	µg/L	1	<1	<1	200	0

#### TRH (Total Recoverable Hydrocarbons) in Soil

TRH (Total Recov	erable Hydrocarbons	) in Soil					Meth	od: ME-(AU)-	(ENVJAN403
Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE255412.010	LB294377.014		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
SE255599.001	LB294377.025		TRH C10-C14	mg/kg	20	1.4509607351	0	200	0
			TRH C15-C28	mg/kg	45	17.8828738512	0	200	0
			TRH C29-C36	mg/kg	45	7.3959899749	0	200	0



### **DUPLICATES**

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 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 x 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 identifer 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

#### TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD <sup>o</sup>
SE255599.001	LB294377.025		TRH C37-C40	mg/kg	100	1.5769423558	0	200	0
JE200000	LD234377.023		TRH C10-C36 Total	mg/kg	110	0	0	200	0
			TRH >C10-C40 Total (F bands)			0	0	200	0
		TOULS Davids		mg/kg	210				
		TRH F Bands	TRH >C10-C16	mg/kg	25	1.6095238095	0	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	0	0	200	0
			TRH >C16-C34 (F3)	mg/kg	90	23.5563909774	0	200	0
			TRH >C34-C40 (F4)	mg/kg	120	3.1386800334	0	200	0
RH (Total Recov	erable Hydrocarbons	) in Water					Metho	d: ME-(AU)	-[ENV]A
Driginal	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD
SE255367.002	LB294104.028		TRH C10-C14	μg/L	50	<50	<50	200	0
			TRH C15-C28	μg/L	200	<200	<200	200	0
			TRH C29-C36	µg/L	200	<200	<200	200	0
			TRH C37-C40	µg/L	200	<200	<200	200	0
			TRH C10-C40	µg/L	320	<320	<320	200	0
		TRH F Bands	TRH >C10-C16	μg/L	60	<60	<60	200	0
			TRH >C10-C16 - Naphthalene (F2)	μg/L	60	<60	<60	200	0
			TRH >C16-C34 (F3)	μg/L	500	<500	<500	200	0
			TRH >C34-C40 (F4)		500	<500	<500	200	0
5055440.004	1 000 440 4 000			µg/L					
SE255419.001	LB294104.029		TRH C10-C14	μg/L	50	184.725	170.075	58	8
			TRH C15-C28	µg/L	200	1044.55	950.125	50	9
			TRH C29-C36	μg/L	200	2.675	7	200	0
			TRH C37-C40	μg/L	200	1.375	0	200	0
			TRH C10-C40	µg/L	320	1233.325	1127.2	57	9
		TRH F Bands	TRH >C10-C16	µg/L	60	305.2	279.85	51	9
			TRH >C10-C16 - Naphthalene (F2)	μg/L	60	05.156860296	279.85	51	9
			TRH >C16-C34 (F3)	µg/L	500	924.825	843.875	87	9
			TRH >C34-C40 (F4)	µg/L	500	1.375	1.325	200	0
'OC's in Soil							Metho	d: ME-(AU)	-[ENV]A
Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD
SE255412.010	LB294407.014	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
			o-xylene		0.2	<0.2	<0.1	200	0
		Delever	· · ·	mg/kg					
		Polycyclic	Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	11.2	9.4	50	18
			d8-toluene (Surrogate)	mg/kg	-	9.2	8.0	50	14
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.6	7.8	50	20
		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
SE255599.003	LB294407.025	Monocyclic	Benzene	mg/kg	0.1	0.0028959887	0	200	0
		Aromatic	Toluene	mg/kg	0.1	0.00586939590	.0055144900	200	0
			Ethylbenzene	mg/kg	0.1	0.00307355530		200	0
			m/p-xylene	mg/kg	0.2	0.01017377070		200	0
			o-xylene	mg/kg	0.2	0.00615957240		200	0
		Polycyclic	Naphthalene (VOC)*		0.1			200	0
				mg/kg		0.00659970670			
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	11.9231821977		50	3
			d8-toluene (Surrogate)	mg/kg	-	9.71917356421		50	4
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.28387733569		50	6
		Totals	Total BTEX*	mg/kg	0.6	0	0	200	0
			Total Xylenes*	mg/kg	0.3	0.01633334320	.0170558306	200	0
DCs in Water							Metho	d: ME-(AU)	-[ENV]
	Duplicate		Parameter	Units	LOR	Original		d: ME-(AU)· Criteria %	
<b>OCs in Water</b> Original SE255412.017	Duplicate LB294253.027	Monocyclic	Parameter Benzene	Units μg/L	LOR 0.5	Original <0.5			

µg/L

µg/L

µg/L

µg/L

µg/L

0.5

0.5

1

0.5

0.5

0.6

<0.5

<1

<0.5

<0.5

0.7

<0.5

<1

<0.5

<0.5

111

200

200

200

200

Aromatic

Polycyclic

Toluene

Ethylbenzene

Naphthalene (VOC)\*

m/p-xylene

o-xylene

16

0

0

0

0



Method: ME-(AU)-[ENV]AN433

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 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 x 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 identifer 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

#### VOCs in Water (continued)

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Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE255412.017	LB294253.027	Surrogates	d4-1,2-dichloroethane (Surrogate)	μg/L	-	9.2	10	30	9
			d8-toluene (Surrogate)	μg/L	-	8.6	10	30	18
			Bromofluorobenzene (Surrogate)	μg/L	-	9.9	9.0	30	9
		Totals	Total BTEX	μg/L	3	<3	<3	200	0
SE255525.005	LB294253.028	Monocyclic	Benzene	μg/L	0.5	<0.5	<0.5	200	0
		Aromatic	Toluene	μg/L	0.5	<0.5	<0.5	200	0
			Ethylbenzene	μg/L	0.5	<0.5	<0.5	200	0
			m/p-xylene	μg/L	1	<1	<1	200	0
			o-xylene	μg/L	0.5	<0.5	<0.5	200	0
		Polycyclic	Naphthalene (VOC)*	μg/L	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	μg/L	-	9.2	11	30	16
			d8-toluene (Surrogate)	µg/L	-	9.1	11	30	18
			Bromofluorobenzene (Surrogate)	µg/L	-	10	9.1	30	13
		Totals	Total BTEX	µg/L	3	<3	<3	200	0
Volatile Petroleum	Hydrocarbons in Soi	1					Meth	od: ME-(AU)-	ENVJAN433
Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE255412.010	LB294407.014		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	_	11.2	9.4	50	18
			d8-toluene (Surrogate)	mg/kg	_	9.2	8.0	50	14
			Bromofluorobenzene (Surrogate)	mg/kg	_	9.6	7.8	50	20
		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
SE255599.003	LB294407.025		TRH C6-C10	mg/kg	25	0	0	200	0
			TRH C6-C9	mg/kg	20	0	0	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg			72.3345342432		3
			d8-toluene (Surrogate)	mg/kg	-		210.0961774345		4
			Bromofluorobenzene (Surrogate)	mg/kg	_		39.8397440713		6
		VPH F Bands	Benzene (F0)	mg/kg	0.1	0.0028959887		200	0
		VIIII Dalida	TRH C6-C10 minus BTEX (F1)	mg/kg	25	0	0	200	0
Volatila Patroloum	Hydrocarbons in Wa	tor			20			od: ME-(AU)-	
	-		Devenanter	linite		Original			
Original	Duplicate		Parameter	Units	LOR	Original		Criteria %	
SE255412.017	LB294253.027		TRH C6-C10	μg/L	50	<50	<50	200	0
			TRH C6-C9	μg/L	40	<40	<40	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	μg/L	-	9.2	10	30	9
			d8-toluene (Surrogate)	μg/L	-	8.6	10	30	18
			Bromofluorobenzene (Surrogate)	μg/L	-	9.9	9.0	30	9
		VPH F Bands	Benzene (F0)	μg/L	0.5	<0.5	<0.5	200	0
			TRH C6-C10 minus BTEX (F1)	μg/L	50	<50	<50	200	0
SE255525.005	LB294253.028		TRH C6-C10	μg/L	50	<50	<50	200	0
			TRH C6-C9	μg/L	40	<40	<40	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	μg/L	-	9.2	11	30	16
			d8-toluene (Surrogate)	µg/L	-	9.1	11	30	18
			Bromofluorobenzene (Surrogate)	µg/L	-	10	9.1	30	13
		VPH F Bands	Benzene (F0)	µg/L	0.5	<0.5	<0.5	200	0
			TRH C6-C10 minus BTEX (F1)	μg/L	50	<50	<50	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	ercury in Soil Method: ME-(AU)-[ENV]AN312						
Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB294437.002	Mercury	mg/kg	0.05	0.21	0.2	80 - 120	103

OC Pesticides in S	Soil					N	/lethod: ME-(A	U)-[ENV]AN42
Sample Number	r	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB294377.002		Delta BHC	mg/kg	0.1	0.1	0.2	60 - 140	66
		Heptachlor	mg/kg	0.1	0.1	0.2	60 - 140	71
		Aldrin	mg/kg	0.1	0.1	0.2	60 - 140	67
		Dieldrin	mg/kg	0.2	<0.2	0.2	60 - 140	69
		Endrin	mg/kg	0.2	<0.2	0.2	60 - 140	66
		p,p'-DDT	mg/kg	0.1	0.2	0.2	60 - 140	87
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.11	0.15	40 - 130	72
OP Pesticides in S	Soil					N	/lethod: ME-(A	U)-[ENV]AN4
Sample Number	r	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB294377.002		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	1.8	2	60 - 140	91
		Diazinon (Dimpylate)	mg/kg	0.5	1.8	2	60 - 140	92
_		Dichlorvos	mg/kg	0.5	1.4	2	60 - 140	71
		Ethion	mg/kg	0.2	1.8	2	60 - 140	89
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	95
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	101
AH (Polynuclear	Aromatic Hydroca	rbons) in Soil				N	/lethod: ME-(A	U)-[ENV]AN4
Sample Number	r	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery 9
LB294377.002		Naphthalene	mg/kg	0.1	3.5	4	60 - 140	88
		Acenaphthylene	mg/kg	0.1	3.5	4	60 - 140	87
		Acenaphthene	mg/kg	0.1	3.8	4	60 - 140	94
		Phenanthrene	mg/kg	0.1	3.8	4	60 - 140	95
		Anthracene	mg/kg	0.1	3.8	4	60 - 140	96
		Fluoranthene	mg/kg	0.1	3.7	4	60 - 140	92
		Pyrene	mg/kg	0.1	3.8	4	60 - 140	94
		Benzo(a)pyrene	mg/kg	0.1	3.5	4	60 - 140	88
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	95
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	95

	d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	101
PCBs in Soil					N	/lethod: ME-(A	U)-[ENV]AN420
Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB294377.002	Arochlor 1260	mg/kg	0.2	0.4	0.4	60 - 140	103

### Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB294426.002	Arsenic, As	mg/kg	1	340	318.22	80 - 120	108
	Cadmium, Cd	mg/kg	0.3	4.3	4.81	70 - 130	89
	Chromium, Cr	mg/kg	0.5	41	38.31	80 - 120	108
	Copper, Cu	mg/kg	0.5	330	290	80 - 120	113
	Nickel, Ni	mg/kg	0.5	190	187	80 - 120	102
	Lead, Pb	mg/kg	1	92	89.9	80 - 120	102
	Zinc, Zn	mg/kg	2	290	273	80 - 120	105
Trace Metals (Dissolved) in W	/ater by ICPMS				N	lethod: ME-(A	U)-[ENV]AN318
Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB294209.002	Arsenic	μg/L	1	21	20	80 - 120	103
	Cadmium	μg/L	0.1	20	20	80 - 120	101
	Chromium	μg/L	1	20	20	80 - 120	98
	Copper	µg/L	1	19	20	80 - 120	96
					20	80 - 120	103
	Lead	µg/L	1	21	20	80 - 120	
	Lead Nickel	μg/L μg/L	1	21 20	20	80 - 120	102
			1 1 5				
LB294209.026	Nickel	µg/L	1 1 5 1	20	20	80 - 120	102

Method: ME-(AU)-[ENV]AN040/AN320



Recovery is shown in Green when within suggested criteria or Red with an appended dagger symbol (†) when outside suggested criteria.

		ICPMS (continued)					Method: ME-(AU	· ·
Sample Number		Parameter	Units	LOR	Result	Expected		Recovery
LB294209.026		Chromium	µg/L	11	20	20	80 - 120	100
		Copper	µg/L	1	19	20	80 - 120	97
		Lead	µg/L	1	20	20	80 - 120	102
		Nickel	µg/L	1	20	20	80 - 120	99
		Zinc	µg/L	5	19	20	80 - 120	96
RH (Total Recove	rable Hydrocarbor	s) in Soil					Method: ME-(AU	J)-[ENV]AN
Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery
LB294377.002		TRH C10-C14	mg/kg	20	40	40	60 - 140	100
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	95
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	101
	TRH F Bands	TRH >C10-C16	mg/kg	25	40	40	60 - 140	99
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	96
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	108
-	rable Hydrocarbor	s) in water					Nethod: ME-(AU	
Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery
LB294104.002		TRH C10-C14	μg/L	50	1000	1200	60 - 140	84
		TRH C15-C28	μg/L	200	1200	1200	60 - 140	104
		TRH C29-C36	μg/L	200	1200	1200	60 - 140	101
	TRH F Bands	TRH >C10-C16	μg/L	60	1100	1200	60 - 140	92
		TRH >C16-C34 (F3)	μg/L	500	1300	1200	60 - 140	106
		TRH >C34-C40 (F4)	μg/L	500	660	600	60 - 140	110
OC's in Soil							Method: ME-(AU	J)-[ENV]AN
Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery
LB294407.002	Monocyclic	Benzene	mg/kg	0.1	5.1	5	60 - 140	102
LD234407.002	Aromatic	Toluene	mg/kg	0.1	5.2	5	60 - 140	102
	/ ironauc	Ethylbenzene		0.1	5.1	5	60 - 140	104
			mg/kg	0.1	10	10	60 - 140	101
		m/p-xylene	mg/kg	0.2	5.2	5	60 - 140	101
	Surragatas	o-xylene	mg/kg	0.1	11.0	10	70 - 130	110
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg					
		d8-toluene (Surrogate)	mg/kg		10.7	10 10	70 - 130	107 112
		Bromofluorobenzene (Surrogate)	mg/kg		11.2		70 - 130	
OCs in Water							Method: ME-(AU	J)-[ENV]AN
Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery
LB294253.002	Monocyclic	Benzene	µg/L	0.5	54	45.45	60 - 140	119
	Aromatic	Toluene	µg/L	0.5	53	45.45	60 - 140	116
		Ethylbenzene	µg/L	0.5	51	45.45	60 - 140	113
		m/p-xylene	µg/L	1	100	90.9	60 - 140	112
		o-xylene	µg/L	0.5	51	45.45	60 - 140	111
	Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	10.1	10	60 - 140	101
		d8-toluene (Surrogate)	µg/L	-	9.9	10	70 - 130	99
		Bromofluorobenzene (Surrogate)	µg/L	-	9.2	10	70 - 130	92
olatile Petroleum	Hydrocarbons in S	oil					Method: ME-(AU	
cidale i cacicaliti	·			1.00				
<u> </u>		Parameter	Units	LOR	Result	Expected		Recovery
Sample Number			mg/kg	25	81	92.5	60 - 140	88
		TRH C6-C10					60 - 140	88
		TRH C6-C9	mg/kg	20	70	80		
	Surrogates	TRH C6-C9 d4-1,2-dichloroethane (Surrogate)	mg/kg mg/kg	-	11.0	10	70 - 130	110
	Surrogates	TRH C6-C9 d4-1,2-dichloroethane (Surrogate) Bromofluorobenzene (Surrogate)	mg/kg mg/kg mg/kg	-	11.0 11.2	10 10	70 - 130 70 - 130	112
		TRH C6-C9 d4-1,2-dichloroethane (Surrogate)	mg/kg mg/kg	-	11.0	10	70 - 130	
LB294407.002	Surrogates	TRH C6-C9         d4-1,2-dichloroethane (Surrogate)         Bromofluorobenzene (Surrogate)         TRH C6-C10 minus BTEX (F1)	mg/kg mg/kg mg/kg	-	11.0 11.2	10 10 62.5	70 - 130 70 - 130	112 81
LB294407.002	Surrogates VPH F Bands Hydrocarbons in W	TRH C6-C9 d4-1,2-dichloroethane (Surrogate) Bromofluorobenzene (Surrogate) TRH C6-C10 minus BTEX (F1) fater	mg/kg mg/kg mg/kg mg/kg	- - 25	11.0 11.2 51	10 10 62.5	70 - 130 70 - 130 60 - 140 <b>Method: ME-(A</b> U	112 81 <b>J)-[ENV]AN</b>
LB294407.002 /olatile Petroleum Sample Number	Surrogates VPH F Bands Hydrocarbons in W	TRH C6-C9         d4-1,2-dichloroethane (Surrogate)         Bromofluorobenzene (Surrogate)         TRH C6-C10 minus BTEX (F1)         /ater         Parameter	mg/kg mg/kg mg/kg mg/kg Units	- 25 LOR	11.0 11.2 51 Result	10 10 62.5 Expected	70 - 130 70 - 130 60 - 140 Method: ME-(AU Criteria %	112 81 J)-[ENV]AN Recovery
LB294407.002	Surrogates VPH F Bands Hydrocarbons in W	TRH C6-C9         d4-1,2-dichloroethane (Surrogate)         Bromofluorobenzene (Surrogate)         TRH C6-C10 minus BTEX (F1)         fater         Parameter         TRH C6-C10	mg/kg mg/kg mg/kg mg/kg Units μg/L	- 25 LOR 50	11.0 11.2 51 Result 830	10 10 62.5 Expected 946.63	70 - 130 70 - 130 60 - 140 Method: ME-(AU Criteria % 60 - 140	112 81 J)-[ENV]AN Recovery 88
LB294407.002 /olatile Petroleum Sample Number	Surrogates VPH F Bands Hydrocarbons in V	TRH C6-C9 d4-1,2-dichloroethane (Surrogate) Bromofluorobenzene (Surrogate) TRH C6-C10 minus BTEX (F1) fater Parameter TRH C6-C10 TRH C6-C9	mg/kg mg/kg mg/kg mg/kg Units μg/L μg/L	- 25 LOR 50 40	11.0 11.2 51 Result 830 710	10 10 62.5 Expected 946.63 818.71	70 - 130 70 - 130 60 - 140 <b>Vethod: ME-(AU</b> <b>Criteria %</b> 60 - 140 60 - 140	112 81 J)-[ENV]AN Recovery 88 87
LB294407.002 /olatile Petroleum Sample Number	Surrogates VPH F Bands Hydrocarbons in W	TRH C6-C9 d4-1,2-dichloroethane (Surrogate) Bromofluorobenzene (Surrogate) TRH C6-C10 minus BTEX (F1) fater Parameter TRH C6-C10 TRH C6-C9 d4-1,2-dichloroethane (Surrogate)	mg/kg mg/kg mg/kg mg/kg Units μg/L μg/L μg/L	- 25 LOR 50 40	11.0 11.2 51 <b>Result</b> 830 710 10.1	10 10 62.5 Expected 946.63 818.71 10	70 - 130 70 - 130 60 - 140 <b>Vethod: ME-(AU</b> <b>Criteria %</b> 60 - 140 60 - 140 60 - 140	112 81 J)-[ENV]AN Recovery 88 87 101
LB294407.002 /olatile Petroleum Sample Number	Surrogates VPH F Bands Hydrocarbons in V	TRH C6-C9 d4-1,2-dichloroethane (Surrogate) Bromofluorobenzene (Surrogate) TRH C6-C10 minus BTEX (F1) fater Parameter TRH C6-C10 TRH C6-C9	mg/kg mg/kg mg/kg mg/kg Units μg/L μg/L	- 25 LOR 50 40	11.0 11.2 51 Result 830 710	10 10 62.5 Expected 946.63 818.71	70 - 130 70 - 130 60 - 140 <b>Vethod: ME-(AU</b> <b>Criteria %</b> 60 - 140 60 - 140	112 81 J)-[ENV]AN Recovery 88 87



Method: ME-(AU)-[ENV]AN420

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	Mercury in Soil Method: ME-(AU)-[ENV]AN312							
QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE255412.001	LB294437.004	Mercury	mg/kg	0.05	0.19	<0.05	0.2	89

### OC Pesticides in Soil

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE255412.001	LB294377.004		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	0.1	<0.1	0.2	73
			Heptachlor	mg/kg	0.1	0.2	<0.1	0.2	78
			Aldrin	mg/kg	0.1	0.1	<0.1	0.2	73
			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	75
			Endrin	mg/kg	0.2	<0.2	<0.2	0.2	71
			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	90
			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	-	0.11	0.11	-	71
P Pesticides in	Soil							od: ME-(Al	J)-[ENV]AN42(
QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE255412.001	LB294377.004		Azinphos-methyl (Guthion)	mg/kg	0.2	2.0	<0.2	-	-
			Bernerker Filed		0.0	-0.0	-0.0		

QC Sample Sample N	umber	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE255412.001 LB294377.0	04	Azinphos-methyl (Guthion)	mg/kg	0.2	2.0	<0.2	-	-
		Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	-	-
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	1.9	<0.2	2	95
		Diazinon (Dimpylate)	mg/kg	0.5	1.9	<0.5	2	96
		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	1.9	<0.2	2	95
		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	9.1	<1.7	-	-
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	-	98
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	-	102
PAH (Polynuclear Aromatic Hy	drocarbons) in Soil					Meth	iod: ME-(AL	J)-[ENV]AN420
QC Sample Sample N	umber	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE255412.001 LB294377.0	04	Naphthalene	mg/kg	0.1	3.7	<0.1	4	91
		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	3.8	<0.1	4	95



### **MATRIX SPIKES**

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.

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-AH (Polynuclea	r Aromatic Hydrocarb	ons) in Soil (con	tinued)				Met	hod: ME-(AU	)-[ENV]AN4
QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recover
SE255412.001	LB294377.004		Phenanthrene	mg/kg	0.1	4.0	<0.1	4	98
			Anthracene	mg/kg	0.1	4.0	<0.1	4	99
			Fluoranthene	mg/kg	0.1	3.8	<0.1	4	94
			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	-	
					0.1	3.7	<0.1	4	92
			Benzo(a)pyrene	mg/kg				-	- 52
			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*< td=""><td>TEQ (mg/kg)</td><td>0.2</td><td>3.7</td><td>&lt;0.2</td><td>-</td><td>-</td></lor=0*<>	TEQ (mg/kg)	0.2	3.7	<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <lor=lor 2*<="" td=""><td>TEQ (mg/kg)</td><td>0.2</td><td>3.8</td><td>&lt;0.2</td><td>-</td><td>-</td></lor=lor>	TEQ (mg/kg)	0.2	3.8	<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <lor=lor*< td=""><td>TEQ (mg/kg)</td><td>0.3</td><td>3.8</td><td>&lt;0.3</td><td>-</td><td>-</td></lor=lor*<>	TEQ (mg/kg)	0.3	3.8	<0.3	-	-
			Total PAH (18)	mg/kg	0.8	30	<0.8	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	-	99
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	-	98
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	-	102
CBs in Soil							Met	hod: ME-(AU	)-IENVIAN
	Completion		Davamatar	11		Desult			
QC Sample SE255412.001	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recove
	LB294377.004		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	108
			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	-	77
otal Recoverabl	e Elements in Soil/Wa	ete Solide/Mate					Method: ME	E-(AU)-[ENV]	
		iste Colica/Mate				_			
QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recove
SE255412.001	LB294426.004		Arsenic, As	mg/kg	1	51	6	50	92
			Cadmium, Cd	mg/kg	0.3	46	<0.3	50	93
			Chromium, Cr	mg/kg	0.5	86	37	50	100
			Copper, Cu	mg/kg	0.5	63	8.8	50	108
			Nickel, Ni	mg/kg	0.5	84	30	50	109
			Lead, Pb	mg/kg	1	52	9	50	87
			Zinc, Zn	mg/kg	2	79	26	50	105
race Metals (Di	ssolved) in Water by I	CPMS					Met	hod: ME-(AU	
	<u> </u>				1.05				
	Sample Number		Parameter	Units	LOR	Result	Original		Recove
SE255269A.017	LB294209.004		Arsenic	μg/L	1	21	-0.005	20	104
			Cadmium	µg/L	0.1	20	0.009	20	101
			Chromium	µg/L	1	20	0.064	20	99
			Copper	μg/L	1	20	0.104	20	99
			Lead	µg/L	1	21	0.004	20	107
			Nickel	µg/L	1	20	0.049	20	102
			Zinc	µg/L	5	21	3.04	20	88
RH (Total Reco	verable Hydrocarbons	) in Soil					Met	hod: ME-(AU	
	-	,			1.000				
QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recove
SE255412.001	LB294377.004		TRH C10-C14	mg/kg	20	46	<20	40	105
			TRH C15-C28	mg/kg	45	45	<45	40	105
			TRH C29-C36	mg/kg	45	50	<45	40	101
			TRH C37-C40	mg/kg	100	<100	<100	-	-
			TRH C10-C36 Total	mg/kg	110	140	<110	-	
				mg/kg mg/kg	210	140 <210	<110	-	-



### **MATRIX SPIKES**

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.

<u> </u>	overable Hydrocarbo	<u> </u>	uea)					nod: ME-(AU	)-[ENVJAN4
QC Sample	Sample Number	1	Parameter	Units	LOR	Result	Original	Spike	Recover
SE255412.001	LB294377.004	TRH F	TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	46	<25	-	-
		Bands	TRH >C16-C34 (F3)	mg/kg	90	<90	<90	40	100
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	-	-
OC's in Soil							Met	nod: ME-(AU	)-[ENV]AN4
QC Sample	Sample Number	r	Parameter	Units	LOR	Result	Original	Spike	Recove
SE255412.001	LB294407.004	Monocyclic	Benzene	mg/kg	0.1	4.4	<0.1	5	88
		Aromatic	Toluene	mg/kg	0.1	4.8	<0.1	5	96
			Ethylbenzene	mg/kg	0.1	4.7	<0.1	5	94
			m/p-xylene	mg/kg	0.2	9.6	<0.2	10	96
			o-xylene	mg/kg	0.1	4.9	<0.1	5	97
		Polycyclic	Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.1	11.0	10	91
			d8-toluene (Surrogate)	mg/kg	-	8.8	9.1	10	88
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.7	10.0	10	97
		Totals	Total BTEX*	mg/kg	0.6	28	<0.6	-	-
			Total Xylenes*	mg/kg	0.3	15	<0.3	-	-
OCs in Water								nod: ME-(AU	-IENVIAN
QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recove
E255418.031	LB294253.026	Monocyclic	Benzene	µg/L	0.5	51	0	45.45	113
2200110.001	2020 1200.020	Aromatic	Toluene	μg/L	0.5	50	0.22887587533	45.45	109
		, a officialo	Ethylbenzene	μg/L	0.5	48	0.01189440008	45.45	105
			m/p-xylene	μg/L	1	97	0.01843686479	90.9	100
			o-xylene	μg/L	0.5	48	0.00859336004	45.45	107
		Polycyclic	Naphthalene (VOC)*	μg/L	0.5	46	0.07923229888		107
		Surrogates	d4-1,2-dichloroethane (Surrogate)	μg/L		8.9	9.31249414851	-	- 89
		Sunogales	d8-toluene (Surrogate)			9.7	8.44531088856	-	97
			Bromofluorobenzene (Surrogate)	μg/L μg/L		10.8	9.91045784869	-	108
		Totals	Total BTEX		- 3	290	0	-	106
- Letter De testes			TOTALDIEA	µg/L	3	290			
	m Hydrocarbons in S				100			nod: ME-(AU	
QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recove
SE255412.001	LB294407.004		TRH C6-C10	mg/kg	25	73	<25	92.5	78
			TRH C6-C9	mg/kg	20	63	<20	80	78
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.1	11.0	10	91
			d8-toluene (Surrogate)	mg/kg	-	8.8	9.1	10	88
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.7	10.0	-	97
		VPH F	Benzene (F0)	mg/kg	0.1	4.4	<0.1	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	44	<25	62.5	70
olatile Petroleu	m Hydrocarbons in V	Vater					Met	nod: ME-(AU	)-[ENV]AN
QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%	
SE255418.031	LB294253.026		TRH C6-C10	μg/L	50	0	946.63	87	_
02200410.001			TRH C6-C9	μg/L	40	0	818.71	87	
		Surrogates	d4-1,2-dichloroethane (Surrogate)	μg/L	-	9.3124941485	1 -	89	
			d8-toluene (Surrogate)	µg/L	-	8.44531088856	<u> -</u>	97	
			do-toldene (Sunogate)	P9, -					
			Bromofluorobenzene (Surrogate)	μg/L	-	9.91045784869		108	-
		VPH F			- 0.5				



Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 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 x 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 identifer when outside suggested criteria. Refer to the footnotes section at the

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: <a href="https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf">https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf</a>

- \* 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.
- 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.
- <sup>(7)</sup> LOR was raised due to dilution of significantly high concentration of analyte in sample.
- Image: Image:
- Recovery failed acceptance criteria due to sample heterogeneity.
- <sup>®</sup> LOR was raised due to high conductivity of the sample (required dilution).
- t Refer to relevant report comments for further information.

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## STATEMENT OF QA/QC PERFORMANCE

CLIENT DETAILS	·	LABORATORY DETAI	ILS
Contact Client Address	Sean Nolan EI AUSTRALIA SUITE 6.01 55 MILLER STREET PYRMONT NSW 2009	Manager Laboratory Address	Huong Crawford SGS Alexandria Environmental Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	61 2 95160722	Telephone	+61 2 8594 0400
Facsimile	(Not specified)	Facsimile	+61 2 8594 0499
Email	sean.nolan@eiaustralia.com.au	Email	au.environmental.sydney@sgs.com
Project	E26160 1 Veno St, Heathcote -Addtional	SGS Reference	<b>SE255412A R0</b>
Order Number	E26160	Date Received	01 Nov 2023
Samples	19	Date Reported	06 Nov 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 Moisture Content 3 items pH in soil (1:5) 3 items

SAMPLE SUMMARY Sample counts by matrix 3 Soil Type of documentation received Email 1/11/2023@11:06an Date documentation received Samples received in good order Yes 13.5°C Samples received without headspace Sample temperature upon receipt Yes SGS Turnaround time requested Three Days Sample container provider Samples received in correct containers Yes Sufficient sample for analysis Yes Sample cooling method Ice Bricks Samples clearly labelled Yes Complete documentation received Yes

SGS Australia Pty Ltd ABN 44 000 964 278 Environment, Health and Safety

Unit 16 33 Maddox St PO Box 6432 Bourke Rd Alexandria NSW 2015 Alexandria NSW 2015 t +61 2 8594 0400 f +61 2 8594 0499

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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

Exchangeable Cations an	d Cation Exchange Capacity	(CEC/ESP/SAR)					Method: I	ME-(AU)-[ENV]AN122	
Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed	
BH2_0.2-0.3	SE255412A.002	LB295608	18 Oct 2023	01 Nov 2023	15 Nov 2023	06 Nov 2023	15 Nov 2023	06 Nov 2023	
BH5_0.3-0.4	SE255412A.007	LB295608	18 Oct 2023	01 Nov 2023	15 Nov 2023	06 Nov 2023	15 Nov 2023	06 Nov 2023	
BH9_0.1-0.2	SE255412A.013	LB295608	18 Oct 2023	01 Nov 2023	15 Nov 2023	06 Nov 2023	15 Nov 2023	06 Nov 2023	
Moisture Content	oisture Content Method: ME-(AU)-[ENV]ANC								
Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed	
BH2_0.2-0.3	SE255412A.002	LB295383	18 Oct 2023	01 Nov 2023	01 Nov 2023	02 Nov 2023†	07 Nov 2023	06 Nov 2023	
BH5_0.3-0.4	SE255412A.007	LB295383	18 Oct 2023	01 Nov 2023	01 Nov 2023	02 Nov 2023†	07 Nov 2023	06 Nov 2023	
BH9_0.1-0.2	SE255412A.013	LB295383	18 Oct 2023	01 Nov 2023	01 Nov 2023	02 Nov 2023†	07 Nov 2023	06 Nov 2023	
pH in soil (1:5)							Method: I	ME-(AU)-[ENV]AN10 <sup>-</sup>	
Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed	
BH2_0.2-0.3	SE255412A.002	LB295505	18 Oct 2023	01 Nov 2023	25 Oct 2023	03 Nov 2023†	04 Nov 2023	03 Nov 2023	
BH5_0.3-0.4	SE255412A.007	LB295505	18 Oct 2023	01 Nov 2023	25 Oct 2023	03 Nov 2023†	04 Nov 2023	03 Nov 2023	
BH9_0.1-0.2	SE255412A.013	LB295505	18 Oct 2023	01 Nov 2023	25 Oct 2023	03 Nov 2023†	04 Nov 2023	03 Nov 2023	



### **SURROGATES**

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 identifer 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.



### SE255412A R0

Method: ME-(AU)-[ENV]AN122

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)

Sample Number	Parameter	Units	LOR	Result
LB295608.001	Exchangeable Sodium, Na	mg/kg	2	-0.3812
	Exchangeable Potassium, K	mg/kg	2	0.5551
	Exchangeable Calcium, Ca	mg/kg	2	0.1289
	Exchangeable Magnesium, Mg	mg/kg	2	-0.0567

6/11/2023



Method: ME-(AU)-[ENV]AN101

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 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 x 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 identifer 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

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Moisture Content					Meth	od: ME-(AU)-	[ENV]AN002
Original	Duplicate	Parameter	Units LOR	Original	Duplicate	Criteria %	RPD %
SE255890.001	LB295383.011	% Moisture	%w/w 1	4.545454545	44.6280991735	52	2
SE255890.006	LB295383.017	% Moisture	%w/w 1	13.367942894	25.7188498402	37	16

#### pH in soil (1:5)

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE255890.001	LB295505.014	рН	pH Units	0.1	5.426	5.359	32	1
SE255890.006	LB295505.020	pН	pH Units	0.1	5.974	5.994	32	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.

xchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)					L. L	Nethod: ME-(A	U)-[ENV]AN12
Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB295608.002	Exchangeable Sodium, Na	meq/100g	0.01	0.20	0.194	80 - 120	102
	Exchangeable Potassium, K	meq/100g	0.01	0.61	0.63	80 - 120	97
	Exchangeable Calcium, Ca	meq/100g	0.01	6.7	6.3	80 - 120	107
	Exchangeable Magnesium, Mg	meq/100g	0.02	1.0	1.11	80 - 120	93
pH in soil (1:5)					I	Nethod: ME-(A	U)-[ENV]AN10
Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB295505.003	рН	pH Units	0.1	7.4	7.415	98 - 102	100



### **MATRIX SPIKES**

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 identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spikes were required for this job.



Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 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 x 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 identifer when outside suggested criteria. Refer to the footnotes section at the

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: <a href="https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf">https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf</a>

- \* 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.
- 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.
- <sup>(7)</sup> LOR was raised due to dilution of significantly high concentration of analyte in sample.
- Image: Image:
- Recovery failed acceptance criteria due to sample heterogeneity.
- <sup>®</sup> LOR was raised due to high conductivity of the sample (required dilution).
- t Refer to relevant report comments for further information.

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## STATEMENT OF QA/QC PERFORMANCE

CLIENT DETAILS		LABORATORY DETAIL	LS
Contact Client Address	Joel Heininger EI AUSTRALIA SUITE 6.01 55 MILLER STREET PYRMONT NSW 2009	Manager Laboratory Address	Huong Crawford SGS Alexandria Environmental Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	61 2 95160722	Telephone	+61 2 8594 0400
Facsimile	(Not specified)	Facsimile	+61 2 8594 0499
Email	joel.heininger@eiaustralia.com.au	Email	au.environmental.sydney@sgs.com
Project	E26160 1 Veno St, Heathcote	SGS Reference	<b>SE255779 R1</b>
Order Number	E26160	Date Received	27 Oct 2023
Samples	7	Date Reported	03 Nov 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).

7 Water	Type of documentation received	COC	
27/10/2023	Samples received in good order	Yes	
Yes	Sample temperature upon receipt	15.6°C	
SGS	Turnaround time requested	Standard	
Yes	Sufficient sample for analysis	Yes	
Ice Bricks	Samples clearly labelled	Yes	
Yes			
	27/10/2023 Yes SGS Yes Ice Bricks	27/10/2023Samples received in good orderYesSample temperature upon receiptSGSTurnaround time requestedYesSufficient sample for analysisIce BricksSamples clearly labelled	27/10/2023Samples received in good orderYesYesSample temperature upon receipt15.6°CSGSTurnaround time requestedStandardYesSufficient sample for analysisYesIce BricksSamples clearly labelledYes

SGS Australia Pty Ltd ABN 44 000 964 278

SAMPLE SUMMARY

Environment, Health and Safety Unit 16 33 Maddox St PO Box 6432 Bourke Rd Alexandria NSW 2015 Alexandria NSW 2015 Australia t +61 2 8594 0400

Australia

t +61 2 8594 0400 www.sgs.com.au f +61 2 8594 0499



### HOLDING TIME SUMMARY

### SE255779 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

Mercury (dissolved) in Wat	er						Method: ME-(AU)-[ENV	AN311(Perth)/AN31
Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH2M-1	SE255779.001	LB294905	26 Oct 2023	27 Oct 2023	23 Nov 2023	30 Oct 2023	23 Nov 2023	31 Oct 2023
BH7M-1	SE255779.002	LB294905	26 Oct 2023	27 Oct 2023	23 Nov 2023	30 Oct 2023	23 Nov 2023	31 Oct 2023
BH10M-1	SE255779.003	LB294905	26 Oct 2023	27 Oct 2023	23 Nov 2023	30 Oct 2023	23 Nov 2023	31 Oct 2023
GWQD_20231026	SE255779.004	LB294905	26 Oct 2023	27 Oct 2023	23 Nov 2023	30 Oct 2023	23 Nov 2023	31 Oct 2023
GWQR_20231026	SE255779.005	LB294905	26 Oct 2023	27 Oct 2023	23 Nov 2023	30 Oct 2023	23 Nov 2023	31 Oct 2023
AH (Polynuclear Aromatic	c Hydrocarbons) in Water						Method:	ME-(AU)-[ENV]AN42
Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH2M-1	SE255779.001	LB295019	26 Oct 2023	27 Oct 2023	02 Nov 2023	31 Oct 2023	10 Dec 2023	02 Nov 2023
BH7M-1	SE255779.002	LB295019	26 Oct 2023	27 Oct 2023	02 Nov 2023	31 Oct 2023	10 Dec 2023	02 Nov 2023
BH10M-1	SE255779.003	LB295019	26 Oct 2023	27 Oct 2023	02 Nov 2023	31 Oct 2023	10 Dec 2023	02 Nov 2023
GWQD_20231026	SE255779.004	LB295019	26 Oct 2023	27 Oct 2023	02 Nov 2023	31 Oct 2023	10 Dec 2023	02 Nov 2023
GWQR 20231026	SE255779.005	LB295019	26 Oct 2023	27 Oct 2023	02 Nov 2023	31 Oct 2023	10 Dec 2023	02 Nov 2023
otal Phenolics in Water	02200770.000	LB200010	20 000 2020	27 00(2020	02 1107 2020	01 001 2020		ME-(AU)-[ENV]AN29
	O-mula Na	00 0-6	O a manufacial	Dessiond	Esturation Due	Estus stad		
Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH2M-1	SE255779.001	LB295023	26 Oct 2023	27 Oct 2023	09 Nov 2023	31 Oct 2023	09 Nov 2023	31 Oct 2023
BH7M-1	SE255779.002	LB295023	26 Oct 2023	27 Oct 2023	09 Nov 2023	31 Oct 2023	09 Nov 2023	31 Oct 2023
BH10M-1	SE255779.003	LB295023	26 Oct 2023	27 Oct 2023	09 Nov 2023	31 Oct 2023	09 Nov 2023	31 Oct 2023
race Metals (Dissolved) ir	-							ME-(AU)-[ENV]AN31
Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH2M-1	SE255779.001	LB294903	26 Oct 2023	27 Oct 2023	23 Apr 2024	30 Oct 2023	23 Apr 2024	30 Oct 2023
BH7M-1	SE255779.002	LB294903	26 Oct 2023	27 Oct 2023	23 Apr 2024	30 Oct 2023	23 Apr 2024	30 Oct 2023
BH10M-1	SE255779.003	LB294903	26 Oct 2023	27 Oct 2023	23 Apr 2024	30 Oct 2023	23 Apr 2024	30 Oct 2023
GWQD_20231026	SE255779.004	LB294903	26 Oct 2023	27 Oct 2023	23 Apr 2024	30 Oct 2023	23 Apr 2024	30 Oct 2023
GWQR_20231026	SE255779.005	LB294903	26 Oct 2023	27 Oct 2023	23 Apr 2024	30 Oct 2023	23 Apr 2024	30 Oct 2023
RH (Total Recoverable H	ydrocarbons) in Water						Method:	ME-(AU)-[ENV]AN40
Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH2M-1	SE255779.001	LB295019	26 Oct 2023	27 Oct 2023	02 Nov 2023	31 Oct 2023	10 Dec 2023	02 Nov 2023
BH7M-1	SE255779.002	LB295019	26 Oct 2023	27 Oct 2023	02 Nov 2023	31 Oct 2023	10 Dec 2023	02 Nov 2023
BH10M-1	SE255779.003	LB295019	26 Oct 2023	27 Oct 2023	02 Nov 2023	31 Oct 2023	10 Dec 2023	02 Nov 2023
GWQD_20231026	SE255779.004	LB295019	26 Oct 2023	27 Oct 2023	02 Nov 2023	31 Oct 2023	10 Dec 2023	02 Nov 2023
GWQR_20231026	SE255779.005	LB295019	26 Oct 2023	27 Oct 2023	02 Nov 2023	31 Oct 2023	10 Dec 2023	02 Nov 2023
OCs in Water							Method:	ME-(AU)-[ENV]AN43
Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH2M-1	SE255779.001	LB295069	26 Oct 2023	27 Oct 2023	09 Nov 2023	31 Oct 2023	09 Nov 2023	01 Nov 2023
BH7M-1	SE255779.002	LB295069	26 Oct 2023	27 Oct 2023	09 Nov 2023	31 Oct 2023	09 Nov 2023	01 Nov 2023
BH10M-1	SE255779.003	LB295069	26 Oct 2023	27 Oct 2023	09 Nov 2023	31 Oct 2023	09 Nov 2023	01 Nov 2023
GWQD_20231026	SE255779.004	LB295069	26 Oct 2023	27 Oct 2023	09 Nov 2023	31 Oct 2023	09 Nov 2023	01 Nov 2023
GWQR_20231026	SE255779.005	LB295069	26 Oct 2023	27 Oct 2023	09 Nov 2023	31 Oct 2023	09 Nov 2023	01 Nov 2023
QTB1	SE255779.006	LB295069	26 Oct 2023	27 Oct 2023	09 Nov 2023	31 Oct 2023	09 Nov 2023	01 Nov 2023
QTS1	SE255779.007	LB295069	26 Oct 2023	27 Oct 2023	09 Nov 2023	31 Oct 2023	09 Nov 2023	01 Nov 2023
/olatile Petroleum Hvdroca	arbons in Water						Method:	ME-(AU)-[ENV]AN43
Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH2M-1	SE255779.001	LB295069	26 Oct 2023	27 Oct 2023	09 Nov 2023	31 Oct 2023	09 Nov 2023	01 Nov 2023
BH7M-1	SE255779.002	LB295069	26 Oct 2023	27 Oct 2023	09 Nov 2023	31 Oct 2023	09 Nov 2023	01 Nov 2023
BH10M-1	SE255779.003	LB295069	26 Oct 2023	27 Oct 2023	09 Nov 2023	31 Oct 2023	09 Nov 2023	01 Nov 2023
							09 Nov 2023	01 Nov 2023
GWQD 20231026	SE255779.004	LB295069	26 Oct 2023	27 Oct 2023	09 NOV 2023			
GWQD_20231026 GWQR_20231026		LB295069 LB295069		27 Oct 2023 27 Oct 2023	09 Nov 2023 09 Nov 2023	31 Oct 2023 31 Oct 2023		
GWQD_20231026 GWQR_20231026 QTB1	SE255779.004 SE255779.005 SE255779.006	LB295069 LB295069 LB295069	26 Oct 2023 26 Oct 2023 26 Oct 2023	27 Oct 2023 27 Oct 2023 27 Oct 2023	09 Nov 2023 09 Nov 2023 09 Nov 2023	31 Oct 2023 31 Oct 2023 31 Oct 2023	09 Nov 2023 09 Nov 2023 09 Nov 2023	01 Nov 2023 01 Nov 2023 01 Nov 2023



### **SURROGATES**

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 identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

#### PAH (Polynuclear Aromatic Hydrocarbons) in Water

#### Method: ME-(AU)-[ENV]AN420

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	BH2M-1	SE255779.001	%	40 - 130%	58
	BH7M-1	SE255779.002	%	40 - 130%	74
	BH10M-1	SE255779.003	%	40 - 130%	67
d14-p-terphenyl (Surrogate)	BH2M-1	SE255779.001	%	40 - 130%	57
	BH7M-1	SE255779.002	%	40 - 130%	80
	BH10M-1	SE255779.003	%	40 - 130%	75
d5-nitrobenzene (Surrogate)	BH2M-1	SE255779.001	%	40 - 130%	58
	BH7M-1	SE255779.002	%	40 - 130%	73
	BH10M-1	SE255779.003	%	40 - 130%	66

OCs in Water Method: ME-(AU)-[ENV]AN433						
Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %	
Bromofluorobenzene (Surrogate)	BH2M-1	SE255779.001	%	40 - 130%	99	
	BH7M-1	SE255779.002	%	40 - 130%	103	
	BH10M-1	SE255779.003	%	40 - 130%	102	
	GWQD_20231026	SE255779.004	%	40 - 130%	101	
	GWQR_20231026	SE255779.005	%	40 - 130%	90	
	QTB1	SE255779.006	%	40 - 130%	89	
	QTS1	SE255779.007	%	40 - 130%	105	
d4-1,2-dichloroethane (Surrogate)	BH2M-1	SE255779.001	%	40 - 130%	97	
	BH7M-1	SE255779.002	%	40 - 130%	96	
	BH10M-1	SE255779.003	%	40 - 130%	98	
	GWQD_20231026	SE255779.004	%	40 - 130%	107	
	GWQR_20231026	SE255779.005	%	40 - 130%	103	
	QTB1	SE255779.006	%	40 - 130%	103	
	QTS1	SE255779.007	%	40 - 130%	96	
d8-toluene (Surrogate)	BH2M-1	SE255779.001	%	40 - 130%	92	
	BH7M-1	SE255779.002	%	40 - 130%	99	
	BH10M-1	SE255779.003	%	40 - 130%	97	
	GWQD_20231026	SE255779.004	%	40 - 130%	104	
	GWQR_20231026	SE255779.005	%	40 - 130%	103	
	QTB1	SE255779.006	%	40 - 130%	105	
	QTS1	SE255779.007	%	40 - 130%	101	

#### Volatile Petroleum Hydrocarbons in Water

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	BH2M-1	SE255779.001	%	40 - 130%	99
	BH7M-1	SE255779.002	%	40 - 130%	103
	BH10M-1	SE255779.003	%	40 - 130%	102
	GWQD_20231026	SE255779.004	%	40 - 130%	101
	GWQR_20231026	SE255779.005	%	40 - 130%	90
d4-1,2-dichloroethane (Surrogate)	BH2M-1	SE255779.001	%	60 - 130%	97
	BH7M-1	SE255779.002	%	60 - 130%	96
	BH10M-1	SE255779.003	%	60 - 130%	98
	GWQD_20231026	SE255779.004	%	60 - 130%	107
	GWQR_20231026	SE255779.005	%	60 - 130%	103
d8-toluene (Surrogate)	BH2M-1	SE255779.001	%	40 - 130%	92
	BH7M-1	SE255779.002	%	40 - 130%	99
	BH10M-1	SE255779.003	%	40 - 130%	97
	GWQD_20231026	SE255779.004	%	40 - 130%	104
	GWQR_20231026	SE255779.005	%	40 - 130%	103



### SE255779 R1

Method: ME-(AU)-[ENV]AN420

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 (dissolved) in Water Method: ME-(AU)-[ENV]AN311(Perth)/AN3							
Sample Number	Parameter	Units	LOR	Result			
LB294905.001	Mercury	mg/L	0.0001	<0.0001			

#### PAH (Polynuclear Aromatic Hydrocarbons) in Water

Sample Number		Parameter	Units	LOR	Result
LB295019.001		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(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
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	44
		2-fluorobiphenyl (Surrogate)	%	-	48
		d14-p-terphenyl (Surrogate)	%	-	52
otal Phenolics in Water	r			Meth	od: ME-(AU)-[ENV]AN
Sample Number		Parameter	Units	LOR	Result

Sample Number	Parameter	Units	LOR	Result
LB295023.001	Total Phenois	mg/L	0.05	<0.05

Trace Metals (Dissolv	ved) in Water by ICPMS			Meth	od: ME-(AU)-[ENV]AN3
Sample Number		Parameter	Units	LOR	Result
LB294903.001		Arsenic	μg/L	1	<1
		Cadmium	μg/L	0.1	<0.1
		Chromium	μg/L	1	<1
		Copper	μg/L	1	<1
		Lead	μg/L	1	<1
		Nickel	μg/L	1	<1
		Zinc	μg/L	5	<5
TRH (Total Recoveral	ble Hydrocarbons) in Water			Meth	od: ME-(AU)-[ENV]AN4
Sample Number		Parameter	Units	LOR	Result
LB295019.001		TRH C10-C14	µg/L	50	<50
		TRH C15-C28	μg/L	200	<200
		TRH C29-C36	μg/L	200	<200
		TRH C37-C40	μg/L	200	<200
VOCs in Water				Meth	od: ME-(AU)-[ENV]AN4
Sample Number		Parameter	Units	LOR	Result
LB295069.001	Fumigants	2,2-dichloropropane	μg/L	0.5	<0.5
		1,2-dichloropropane	μg/L	0.5	<0.5
		cis-1,3-dichloropropene	μg/L	0.5	<0.5
		trans-1,3-dichloropropene	μg/L	0.5	<0.5
		1,2-dibromoethane (EDB)	μg/L	0.5	<0.5
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	μg/L	5	<5
		Chloromethane	μg/L	5	<5
		Vinyl chloride (Chloroethene)	μg/L	0.3	<0.3
		Bromomethane	μg/L	10	<10
		Chloroethane	μg/L	5	<5
		Trichlorofluoromethane	μg/L	1	<1
		1,1-dichloroethene	μg/L	0.5	<0.5



### SE255779 R1

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#### Method: ME-(AU)-[ENV]AN433 VOCs in Water (continued) Result Sample Number Parameter Units LOR LB295069.001 Halogenated Aliphatics 5 lodomethane µg/L <5 Dichloromethane (Methylene chloride) µg/L 5 <5 2 <2 Allyl chloride µg/L trans-1,2-dichloroethene 0.5 <0.5 µg/L 1.1-dichloroethane µg/L 0.5 <0.5 cis-1,2-dichloroethene 0.5 <0.5 µg/L <0.5 Bromochloromethane 0.5 ua/L 1,2-dichloroethane µg/L 0.5 < 0.5 0.5 <0.5 1,1,1-trichloroethane µg/L 1,1-dichloropropene 0.5 <0.5 µg/L Carbon tetrachloride µg/L 0.5 < 0.5 Dibromomethane 0.5 <0.5 µg/L Trichloroethene (Trichloroethylene,TCE) 0.5 <0.5 µg/L 1,1,2-trichloroethane µg/L 0.5 < 0.5 0.5 <0.5 1,3-dichloropropane µg/L Tetrachloroethene (Perchloroethylene,PCE) 0.5 <0.5 µg/L 1,1,1,2-tetrachloroethane µg/L 0.5 < 0.5 0.5 <0.5 1,1,2,2-tetrachloroethane µg/L 1,2,3-trichloropropane 0.5 <0.5 µg/L trans-1,4-dichloro-2-butene µg/L 1 <1 0.5 <0.5 1,2-dibromo-3-chloropropane µg/L Hexachlorobutadiene 0.5 < 0.5 ua/L Halogenated Aromatics Chlorobenzene µg/L 0.5 < 0.5 <0.5 Bromobenzene µg/L 0.5 2-chlorotoluene 0.5 <0.5 µg/L 4-chlorotoluene µg/L 0.5 < 0.5 <0.5 1,3-dichlorobenzene 0.5 µg/L 1.4-dichlorobenzene 0.3 < 0.3 µg/L 1,2-dichlorobenzene 0.5 <0.5 µg/L 1,2,4-trichlorobenzene 0.5 <0.5 µg/L 1,2,3-trichlorobenzene <0.5 µg/L 0.5 Monocyclic Aromatic Benzene µg/L 0.5 < 0.5 Hydrocarbons 0.5 <0.5 Toluene µg/L Ethylbenzene µg/L 0.5 <0.5 m/p-xylene µg/L <1 1 <0.5 Styrene (Vinyl benzene) µg/L 0.5 0.5 <0.5 o-xvlene µg/L Isopropylbenzene (Cumene) µg/L 0.5 <0.5 0.5 <0.5 n-propylbenzene µg/L 1,3,5-trimethylbenzene µg/L 0.5 <0.5 tert-butylbenzene µg/L 0.5 < 0.5 1,2,4-trimethylbenzene µg/L 0.5 <0.5 < 0.5 sec-butvlbenzene µg/L 0.5 p-isopropyltoluene µg/L 0.5 <0.5 n-butylbenzene 0.5 <0.5 µg/L Nitrogenous Compounds Acrylonitrile µg/L 0.5 <0.5 Oxygenated Compounds Acetone (2-propanone) µg/L 10 <10 MtBE (Methyl-tert-butyl ether) 2 <1 µg/L Vinyl acetate\* 10 <10 µg/L MEK (2-butanone) µg/L 10 <10 MIBK (4-methyl-2-pentanone) <5 5 µg/L 2-hexanone (MBK) µg/L 5 <5 Polycyclic VOCs Naphthalene (VOC)\* µg/L 0.5 <0.5 Sulphonated Carbon disulfide 2 <2 µg/L Surrogates 110 d4-1,2-dichloroethane (Surrogate) % d8-toluene (Surrogate) % 109 -Bromofluorobenzene (Surrogate) % 93 Trihalomethanes Chloroform (THM) µg/L 0.5 < 0.5 Bromodichloromethane (THM) 0.5 <0.5 µg/L Dibromochloromethane (THM) 0.5 <0.5 µg/L Bromoform (THM) µg/L 0.5 <0.5



### SE255779 R1

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### Volatile Petroleum Hydrocarbons in Water

Sample Number		Parameter	Units	LOR	Result
LB295069.001		TRH C6-C9	μg/L	40	<40
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	110
		d8-toluene (Surrogate)	%	-	109
		Bromofluorobenzene (Surrogate)	%	-	93

#### 3/11/2023

#### Method: ME-(AU)-[ENV]AN433



Method: ME-(AU)-IENVIAN420

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 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 x 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 identifer 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

Mercury (dissolved		Meth	od: ME-(AU)-[	ENVJAN311(P	erth)/AN312		
Original	Duplicate	Parameter	Units LC	R Original	Duplicate	Criteria %	RPD %
SE255833.014	LB294905.013	Mercury	μg/L 0.0	001 <0.0001	<0.0001	167	0

#### PAH (Polynuclear Aromatic Hydrocarbons) in Water

An (Polynucleal	Alomatic Hydrocan	Jons) in Water					Meur	0u. ME-(A0)-	CIAN IMIAA
Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE255848.001	LB295019.025		Naphthalene	µg/L	0.1	0.1	<0.1	147	38
			2-methylnaphthalene	μg/L	0.1	0.2	<0.1	109	51
			1-methylnaphthalene	μg/L	0.1	0.1	<0.1	162	7
			Acenaphthylene	μg/L	0.1	<0.1	<0.1	200	0
			Acenaphthene	μg/L	0.1	<0.1	<0.1	200	0
			Fluorene	µg/L	0.1	<0.1	<0.1	200	0
			Phenanthrene	µg/L	0.1	<0.1	<0.1	159	0
			Anthracene	µg/L	0.1	<0.1	<0.1	200	0
			Fluoranthene	µg/L	0.1	<0.1	<0.1	200	0
			Pyrene	µg/L	0.1	<0.1	<0.1	200	0
			Benzo(a)anthracene	µg/L	0.1	<0.1	<0.1	200	0
			Chrysene	µg/L	0.1	<0.1	<0.1	200	0
			Benzo(b&j)fluoranthene	µg/L	0.1	<0.1	<0.1	200	0
			Benzo(k)fluoranthene	µg/L	0.1	<0.1	<0.1	200	0
			Benzo(a)pyrene	µg/L	0.1	<0.1	<0.1	200	0
			Indeno(1,2,3-cd)pyrene	µg/L	0.1	<0.1	<0.1	200	0
			Dibenzo(ah)anthracene	µg/L	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	µg/L	0.1	<0.1	<0.1	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	µg/L	-	0.36	0.36	30	1
			2-fluorobiphenyl (Surrogate)	µg/L	-	0.37	0.37	30	1
			d14-p-terphenyl (Surrogate)	µg/L	-	0.37	0.39	30	5
tal Phenolics in	Water						Meth	od: ME-(AU)-	<b>ENVJA</b> N
Driginal	Duplicate		Parameter	Units	LOR	Original	Duplica <u>te</u>	Criteria %	RPD %

 SE255899.001
 LB295023.012
 Total Phenols
 mg/L
 0.05
 0.10
 0.11
 65
 8

### Trace Metals (Dissolved) in Water by ICPMS

	·····							· ·
Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE255779.004	LB294903.014	Arsenic	µg/L	1	4	4	39	0
		Cadmium	µg/L	0.1	<0.1	<0.1	200	0
		Chromium	µg/L	1	1	1	88	3
		Copper	µg/L	1	<1	<1	147	0
		Lead	µg/L	1	<1	<1	200	0
		Nickel	µg/L	1	2	2	78	0
		Zinc	µg/L	5	7	6	95	16
SE255833.014	LB294903.023	Arsenic	µg/L	1	<1	<1	200	0
		Cadmium	µg/L	0.1	<0.1	<0.1	200	0
		Chromium	µg/L	1	<1	<1	200	0
		Copper	µg/L	1	<1	<1	200	0
		Lead	µg/L	1	<1	<1	200	0
		Nickel	µg/L	1	<1	<1	200	0
		Zinc	µg/L	5	<5	<5	200	0
TRH (Total Recove	rable Hydrocarbons) in Water					Meth	nod: ME-(AU)-	ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE255779.005	LB295019.024		TRH C10-C14	µg/L	50	<50	<50	200	0
			TRH C15-C28	µg/L	200	<200	<200	200	0
			TRH C29-C36	µg/L	200	<200	<200	200	0
			TRH C37-C40	µg/L	200	<200	<200	200	0
			TRH C10-C40	µg/L	320	<320	<320	200	0
		TRH F Bands	TRH >C10-C16	µg/L	60	<60	<60	200	0
			TRH >C10-C16 - Naphthalene (F2)	µg/L	60	<60	<60	200	0
			TRH >C16-C34 (F3)	µg/L	500	<500	<500	200	0
			TRH >C34-C40 (F4)	µg/L	500	<500	<500	200	0

#### Method: ME-(AU)-[ENV]AN318



Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 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 x 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 identifer 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

Original	Dunlieste		Devementer	11	LOD	Original	Dunlingt	Cuitouis Of	DDD 44
Original	Duplicate		Parameter TRH C10-C14	Units	LOR	Original		Criteria %	
SE255848.001	LB295019.025			μg/L	50	<0.05	<0.05	200	0
			TRH C15-C28	μg/L	200	<0.2	<0.2	200	0
			TRH C29-C36	µg/L	200	<0.2	<0.2	200	0
			TRH C37-C40	µg/L	200	<200	<200	200	0
			TRH C10-C40	µg/L	320	<0.32	<0.32	200	0
		TRH F Bands	TRH >C10-C16	µg/L	60	<0.06	<0.06	200	0
			TRH >C10-C16 - Naphthalene (F2)	µg/L	60	<0.06	<0.06	200	0
			TRH >C16-C34 (F3)	µg/L	500	<0.5	<0.5	200	0
			TRH >C34-C40 (F4)	µg/L	500	<0.5	<0.5	200	0
OCs in Water							Meth	od: ME-(AU)-	
	Dunillanta		Demonstern	1124		Onininal			
Original	Duplicate	- · ·	Parameter	Units	LOR	Original		Criteria %	RPD %
SE255779.003	LB295069.026	Fumigants	2,2-dichloropropane	µg/L	0.5	<0.5	<0.5	200	0
			1,2-dichloropropane	µg/L	0.5	<0.5	<0.5	200	0
			cis-1,3-dichloropropene	µg/L	0.5	<0.5	<0.5	200	0
			trans-1,3-dichloropropene	µg/L	0.5	<0.5	<0.5	200	0
			1,2-dibromoethane (EDB)	µg/L	0.5	<0.5	<0.5	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	μg/L	5	<5	<5	200	0
		Aliphatics	Chloromethane	μg/L	5	<5	<5	200	0
			Vinyl chloride (Chloroethene)	µg/L	0.3	<0.3	<0.3	200	0
			Bromomethane	μg/L	10	<10	<10	200	0
			Chloroethane	μg/L	5	<5	<5	200	0
			Trichlorofluoromethane	μg/L	1	<1	<1	200	0
			1,1-dichloroethene	μg/L	0.5	<0.5	<0.5	200	0
			lodomethane	μg/L	5	<5	<5	200	0
			Dichloromethane (Methylene chloride)	μg/L	5	<5	<5	200	0
			Allyl chloride	µg/L	2	<2	<2	200	0
			trans-1,2-dichloroethene	μg/L	0.5	<0.5	<0.5	200	0
			1,1-dichloroethane	µg/L	0.5	<0.5	<0.5	200	0
			cis-1,2-dichloroethene	µg/L	0.5	<0.5	<0.5	200	0
			Bromochloromethane	µg/L	0.5	<0.5	<0.5	200	0
			1,2-dichloroethane	µg/L	0.5	<0.5	<0.5	200	0
			1,1,1-trichloroethane	µg/L	0.5	<0.5	<0.5	200	0
			1,1-dichloropropene	µg/L	0.5	<0.5	<0.5	200	0
			Carbon tetrachloride	µg/L	0.5	<0.5	<0.5	200	0
			Dibromomethane	µg/L	0.5	<0.5	<0.5	200	0
			Trichloroethene (Trichloroethylene,TCE)	μg/L	0.5	<0.5	<0.5	200	0
			1,1,2-trichloroethane	μg/L	0.5	<0.5	<0.5	200	0
			1,3-dichloropropane	μg/L	0.5	<0.5	<0.5	200	0
								200	0
			Tetrachloroethene (Perchloroethylene,PCE)	μg/L	0.5	<0.5	<0.5		
			1,1,1,2-tetrachloroethane	µg/L	0.5	< 0.5	<0.5	200	0
			1,1,2,2-tetrachloroethane	μg/L	0.5	<0.5	<0.5	200	0
			1,2,3-trichloropropane	µg/L	0.5	<0.5	<0.5	200	0
			trans-1,4-dichloro-2-butene	µg/L	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	µg/L	0.5	<0.5	<0.5	200	0
			Hexachlorobutadiene	μg/L	0.5	<0.5	<0.5	200	0
		Halogenated	Chlorobenzene	μg/L	0.5	<0.5	<0.5	200	0
		Aromatics	Bromobenzene	μg/L	0.5	<0.5	<0.5	200	0
			2-chlorotoluene	µg/L	0.5	<0.5	<0.5	200	0
			4-chlorotoluene	μg/L	0.5	<0.5	<0.5	200	0
			1,3-dichlorobenzene	μg/L	0.5	<0.5	<0.5	200	0
			1,4-dichlorobenzene	μg/L	0.3	<0.3	<0.3	200	0
			1,2-dichlorobenzene		0.5	<0.5	<0.5	200	0
			1,2-dichlorobenzene	µg/L					
				μg/L	0.5	<0.5	<0.5	200	0
			1,2,3-trichlorobenzene	µg/L	0.5	<0.5	<0.5	200	0
		Monocyclic	Benzene	µg/L	0.5	<0.5	<0.5	200	0
		Aromatic	Toluene	µg/L	0.5	0.8	0.8	93	3
			Ethylbenzene	μg/L	0.5	<0.5	<0.5	200	0
			m/p-xylene	µg/L	1	<1	<1	200	0
			Styrene (Vinyl benzene)	μg/L	0.5	<0.5	<0.5	200	0
				ro-					-



Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 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 x SDL / Mean + LR

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RPD is shown in Green when within suggested criteria or Red with an appended reason identifer 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

Driginal	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD
E255779.003	LB295069.026	Monocyclic	Isopropylbenzene (Cumene)	µg/L	0.5	<0.5	<0.5	200	0
		Aromatic	n-propylbenzene	μg/L	0.5	<0.5	<0.5	200	0
			1,3,5-trimethylbenzene	µg/L	0.5	<0.5	<0.5	200	0
			tert-butylbenzene	µg/L	0.5	<0.5	<0.5	200	0
			1,2,4-trimethylbenzene	μg/L	0.5	<0.5	<0.5	200	0
			sec-butylbenzene	μg/L	0.5	<0.5	<0.5	200	0
			p-isopropyltoluene	μg/L	0.5	<0.5	<0.5	200	0
			n-butylbenzene	μg/L	0.5	<0.5	<0.5	200	0
		Nitrogenous	Acrylonitrile	μg/L	0.5	<0.5	<0.5	200	0
		Compounds	2-nitropropane	μg/L	100	<100	<100	200	C
		Oxygenated	Acetone (2-propanone)	μg/L	10	<10	<10	200	C
		Compounds	MtBE (Methyl-tert-butyl ether)	μg/L	2	<2	<2	200	
			Vinyl acetate*	μg/L	10	<10	<10	200	
			MEK (2-butanone)	μg/L	10	<10	<10	200	(
			MIBK (4-methyl-2-pentanone)	μg/L	5	<5	<5	200	
			2-hexanone (MBK)	μg/L	5	<5	<5	200	(
		Polycyclic	Naphthalene (VOC)*	μg/L	0.5	<0.5	<0.5	200	
		Sulphonated	Carbon disulfide	μg/L	2	5	9	57	5
		Surrogates	d4-1,2-dichloroethane (Surrogate)	μg/L	-	9.8	9.4	30	
		Sunogatos	d8-toluene (Surrogate)	μg/L		9.7	9.6	30	
			Bromofluorobenzene (Surrogate)	μg/L	_	10.2	10	30	
		Totals	Total BTEX	μg/L	3	<3	<3	200	
		10(0)3	Total VOC	μg/L	10	<10	13	121	2
		Trihalomethan	Chloroform (THM)	μg/L	0.5	2.4	2.9	49	1
		es	Bromodichloromethane (THM)	μg/L	0.5	<0.5	<0.5	200	
			Dibromochloromethane (THM)	μg/L	0.5	<0.5	<0.5	200	
			Bromoform (THM)	μg/L	0.5	<0.5	<0.5	200	
255871.001	LB295069.027	Monocyclic	Benzene	μg/L	0.5	<0.5	<0.5	200	(
2000/1.001	LD233003.021	Aromatic	Toluene	μg/L	0.5	<0.5	<0.5	200	
		, noniatio	Ethylbenzene	μg/L	0.5	<0.5	<0.5	200	
					1	<1	<1	200	
			m/p-xylene o-xylene	μg/L μg/L	0.5	<0.5	<0.5	200	
		Polycyclic	Naphthalene (VOC)*	μg/L	0.5	<0.5	<0.5	184	
		Surrogates	d4-1,2-dichloroethane (Surrogate)	μg/L	-	11	10	30	
		Sunogates	d8-toluene (Surrogate)	μg/L		11	9.9	30	
							11	30	1
		Totals	Bromofluorobenzene (Surrogate) Total BTEX	μg/L μg/L	3	9.4	<3	200	
			TOTAL DIEX	μ9/τ	5	-5			
atile Petroleum	Hydrocarbons in Wa	ter					Meth	od: ME-(AU)-	[ENV]
riginal	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RP
255779.003	LB295069.026		TRH C6-C10	μg/L	50	<50	<50	200	
			TRH C6-C9	μg/L	40	<40	<40	200	
		Surrogates	d4-1,2-dichloroethane (Surrogate)	μg/L	-	9.8	9.4	30	
			d8-toluene (Surrogate)	μg/L	-	9.7	9.6	30	
			Bromofluorobenzene (Surrogate)	μg/L	-	10.2	10	30	
		VPH F Bands	Benzene (F0)	μg/L	0.5	<0.5	<0.5	200	
			TRH C6-C10 minus BTEX (F1)	μg/L	50	<50	<50	200	
255871.001	LB295069.027		TRH C6-C10	μg/L	50	<50	<50	200	
			TRH C6-C9	μg/L	40	<40	<40	200	
		Surrogates	d4-1,2-dichloroethane (Surrogate)	μg/L	-	11	10	30	
			d8-toluene (Surrogate)	μg/L	-	11	9.9	30	
			Bromofluorobenzene (Surrogate)	μg/L	-	9.4	11	30	1
		VPH F Bands	Benzene (F0)	µg/L	0.5	<0.5	<0.5	200	



SE255779 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.

#### PAH (Polynuclear Aromatic Hydrocarbons) in Water

PAH (Polynuclear An	omatic Hydroca	rbons) in Water					N	lethod: ME-(A	U)-[ENV]AN420
Sample Number		Parameter		Units	LOR	Result	Expected	Criteria %	Recovery %
LB295019.002		Naphthalene		µg/L	0.1	31	40	60 - 140	78
		Acenaphthylene		µg/L	0.1	34	40	60 - 140	85
		Acenaphthene		µg/L	0.1	34	40	60 - 140	86
		Phenanthrene		µg/L	0.1	35	40	60 - 140	86
		Anthracene		µg/L	0.1	34	40	60 - 140	85
		Fluoranthene		µg/L	0.1	34	40	60 - 140	86
		Pyrene		µg/L	0.1	32	40	60 - 140	79
		Benzo(a)pyrene		µg/L	0.1	36	40	60 - 140	90
	Surrogates	d5-nitrobenzene (Surrogate)		µg/L	-	0.2	0.5	40 - 130	44
		2-fluorobiphenyl (Surrogate)		µg/L	-	0.3	0.5	40 - 130	50
		d14-p-terphenyl (Surrogate)		µg/L	-	0.2	0.5	40 - 130	46
Total Phenolics in Wa	ater						N	lethod: ME-(A	U)-[ENV]AN295
Sample Number		Parameter		Units	LOR	Result	Expected	Criteria %	Recovery %
LB295023.002		Total Phenols	I	mg/L	0.05	0.20	0.2	80 - 120	102

#### Trace Metals (Dissolved) in Water by ICPMS

Trace Metals (Dissolved) in V	Trace Metals (Dissolved) in Water by ICPMS					N	Aethod: ME-(A	U)-[ENV]AN318
Sample Number	Parameter		Units	LOR	Result	Expected	Criteria %	Recovery %
LB294903.002	Arsenic		µg/L	1	21	20	80 - 120	103
	Cadmium		µg/L	0.1	20	20	80 - 120	100
	Chromium		µg/L	1	20	20	80 - 120	100
	Copper		µg/L	1	20	20	80 - 120	98
	Lead		µg/L	1	21	20	80 - 120	105
	Nickel		µg/L	1	20	20	80 - 120	101
	Zinc		µg/L	5	20	20	80 - 120	99
TRH (Total Recoverable Hydrocarbons) in Water						N	lethod: ME-(A	U)-IENVIAN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB295019.002		TRH C10-C14	μg/L	50	970	1200	60 - 140	81
		TRH C15-C28	μg/L	200	1200	1200	60 - 140	98
		TRH C29-C36	μg/L	200	1300	1200	60 - 140	105
	TRH F Bands	TRH >C10-C16	μg/L	60	1100	1200	60 - 140	88
		TRH >C16-C34 (F3)	μg/L	500	1200	1200	60 - 140	104
		TRH >C34-C40 (F4)	μg/L	500	660	600	60 - 140	109

VOCs in Water Method: ME-(AU)-IENVIAN433 Sample Number Expected Criteria % Recovery % Parameter Units LOR Result LB295069.002 Halogenated 1,1-dichloroethene 0.5 64 45.45 60 - 140 140 μg/L Aliphatics 1.2-dichloroethane 0.5 61 45.45 60 - 140 134 µg/L Trichloroethene (Trichloroethylene,TCE) µg/L 0.5 62 45.45 60 - 140 137 Halogenated Chlorobenzene 0.5 59 45.45 60 - 140 130 µg/L 45.45 Monocyclic Benzene µg/L 0.5 48 60 - 140 107 Aromatic Toluene µg/L 0.5 51 45.45 60 - 140 113 Ethylbenzene 0.5 50 45.45 60 - 140 109 µg/L 100 90.9 110 m/p-xvlene 60 - 140 µg/L 1 o-xylene µg/L 0.5 50 45.45 60 - 140 111 Surrogates d4-1,2-dichloroethane (Surrogate) 60 - 140 8.8 10 88 µg/L d8-toluene (Surrogate) 9.8 10 70 - 130 98 μg/L Bromofluorobenzene (Surrogate) µg/L 11.1 10 70 - 130 111 Trihalomethan Chloroform (THM) 0.5 63 45.45 60 - 140 140 µg/L Volatile Petroleum Hydrocarbons in Water Method: ME-(AU)-[ENV]AN433 Sample Number Units Expected Criteria % Recovery % Parameter LOR Result LB295069.002 TRH C6-C10 µg/L 50 870 946.63 60 - 140 92 TRH C6-C9 40 750 818.71 60 - 140 92 µg/L Surrogates d4-1,2-dichloroethane (Surrogate) µg/L 8.8 10 60 - 140 88 d8-toluene (Surrogate) µg/L 9.8 10 70 - 130 98 10 70 - 130 111 Bromofluorobenzene (Surrogate) µg/L 11.1

µg/L

50

570

639.67

60 - 140

VPH F Bands

TRH C6-C10 minus BTEX (F1)

89



### **MATRIX SPIKES**

### SE255779 R1

Method: ME-(AU)-[ENV]AN433

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 identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury (dissolve	od) in Water				Met	hod: ME-(AU)-	[ENV]AN311	1(Perth)/AN312
QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE255777.024	LB294905.004	Mercury	mg/L	0.0001	0.0020	-0.02	0.008	102

#### Total Phenolics in Water

Total Phenolics in	Water					Met	hod: ME-(AU	J)-[ENV]AN295
QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE255779.001	LB295023.004	Total Phenols	mg/L	0.05	0.19	<0.05	0.2	97

#### Trace Metals (Dissolved) in Water by ICPMS

Trace Metals (Dis	solved) in Water by ICPMS					Meth	od: ME-(AL	<b>)-[ENV]AN318</b>
QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE255710.001	LB294903.004	Copper	μg/L	1	22	2.726	20	95

#### **VOCs in Water**

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery
SE255777.024	LB295069.028	Monocyclic	Benzene	μg/L	0.5	51	0	45.45	111
		Aromatic	Toluene	µg/L	0.5	55	0.43755361751	45.45	119
			Ethylbenzene	µg/L	0.5	53	0.01237648249	45.45	116
			m/p-xylene	µg/L	1	110	0.03177879740	90.9	116
			o-xylene	µg/L	0.5	54	0.01484108129	45.45	118
		Polycyclic	Naphthalene (VOC)*	µg/L	0.5	48	0.03546256821	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	10.8	10.62795473878	-	108
			d8-toluene (Surrogate)	µg/L	-	10.9	10.57578437829	-	109
			Bromofluorobenzene (Surrogate)	μg/L	-	10.1	9.38745183882	-	101
		Totals	Total BTEX	µg/L	3	320	0	-	-
olatile Petroleu	m Hydrocarbons in V	Vater					Met	hod: ME-(AU	)-[ENV]AN
QC Sample	Sample Number	•	Parameter	Units	LOR	Original	Spike	Recovery%	D
E255777.024	LB295069.028		TRH C6-C10	µg/L	50	0	946.63	78	
			TRH C6-C9	µg/L	40	0	818.71	77	
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	10.6279547387	E -	108	
			d8-toluene (Surrogate)	μg/L	-	10.5757843782	£ -	109	
			Bromofluorobenzene (Surrogate)	µg/L	-	9.38745183882	- 2	101	
		VPH F	Benzene (F0)	µg/L	0.5	0	-	-	
		Bands	TRH C6-C10 minus BTEX (F1)	µg/L	50	0	639.67	66	



Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 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 x 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 identifer when outside suggested criteria. Refer to the footnotes section at the

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: <a href="https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf">https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf</a>

- \* 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.
- 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.
- <sup>(7)</sup> LOR was raised due to dilution of significantly high concentration of analyte in sample.
- Image: Image:
- Recovery failed acceptance criteria due to sample heterogeneity.
- <sup>®</sup> LOR was raised due to high conductivity of the sample (required dilution).
- t Refer to relevant report comments for further information.

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Appendix K – Service Locator Report

PROPOSED W	OPK	- 1100	ERCR		CEDUIC	S LOCATING / DETECTION
Address /	V	EN	D	CNOC	T	HATHCON
Cross street, L	andm	ark	HEA	THE	077	Horre Document / Permit / PO # Start & OS Finish 10 -0, S
DBYD confirma	tion	*	7/1	R	0	OF PLANS OBTAINED
			oee	200	SUMN	ARY OF ACTIVITIES Private Property / Blind Search
YD YD	+	(0)	MOL	10 0	c ts	
Plans received as per DBYD	Current	dates)	Plans show assets in	cinity	Client on site whils locating	VMS wMS
Y N A		N		-	N (Y	
ASSET SUMMARY -	COLO	12				Y     N     Y     N
UTILITIES		1	Assets in		A\$5488	UNDERGROUND SERVICES DETECTION AT THE ABOVE LOCATION IN AREAS AS SHOWN BY CHENT
	Cod	e Plan	Vicinity	Locate	QL	WEATHER - FIRE / RAINING & GROUND CONDITIONS - DRY / WET / OVERGROWN / UNDULATING / SATURATED
Power / Elect. Cables	E	1	V		9	ASSET OWNERS DUTY OF CARE CHECKLIST - #1 - PLAN / #2 - PREPARE / #3 - POTHOLE / #4 - PROTECT / #5 - PROCEED METHODS USED - GPR / EMF LOCATOR - PASSIVE / INDUCTION / CLAMP / DIRECT CONNECT
(Orange PINK	4		-	V	V	SITE VISUAL INSPECTION / CUES - SUB STATION / POWER POLES / ELECT. PILLARS / ELEVATED JOINTS / PITS / GAS METERS / WATER METERS / TAPS / VALVES / MANHOLES / DRAINS / DOWN PIPES / SEWER / IP's
Communication /		1	10.00	-	hun	
Data Cables ( White )	C	V	X	-	10.00	SCOPE OF WORK - CHECK PROPOSED
	-	1			10-1	PORE HOLE LOCATIONS FOR U/C SERVIC
Gas main	G	1	X	-		IN VICINITY ALL NOMINATED ASTAS
(Yellow)		V	-			CHECKED + CLEARED SOME BSITTEN
Water main	1	1	1		1-10	
(Blue)	w	V	X	111		MOVED ACCORDINGLY MARKS ON GROUN
			1	110	1. fal	AS PER ASSET SUMMARY AVOID DRILLI
Sewer	s	1	X	-	-	IN VICINITY OF MARKS OR KNOWN
(Cream)		V			5	
Fine Parents		1		0/11	15610	OR VISIBLE SERVICES SOME PITS
Fire Service ( Red )	F	×	X	-	-	SIGHTED ADJACENT DO AREAS, UNABLE
			R.L.	11		TO OPEN AT TIME OF INSPECTION
Drains	D	~	1	~	0 11	ALSO BLOCKED PRAINS OPTACENT TO
(Green)	-	$\wedge$	V	X	-	AREA'S POSSIBLE UST MARKED NOT
Petroleum			ma de		1000	
Products	Р	X	X	-	- al	WITH PURPLE PAINT NEXT TO UNKNOW
(Brown)			D.	10.74		PIT. UST APPROX. 1. 8m × 1.6m SIZE
EMF Locator Unconfirmed	U		,1	1	n	+ AMPROX. 1. On DEEP PIPES IN VISINITE
(Pink)		-	V	V	~	
GPR Unit			1	1	1	a la source and source &
(Purple)	U		V	V	D	EAST/WEST NO DRAWINGS PROVIDED
Unconfirmed	_		10110	1.1	10.5 0	REGARDING UST
Other		10.00			U-R1-	(1) In ADDA 1987 (2) This is a Proceeding of the University of the second se Second second s Second second seco
		1			100	Which is a second second memory of the second se
Note: Depths given	are a	oproxi	nate on	ly. Prio	r to excav	ation, refer to the DRVD asset owners quidolines / Duty of Care Volid the other and the
reasonably be expe	ected	to occ	ur whet	her loc	ated or n	NDERGROUND ASSETS. Due caution should also be exercised during any excavation activity, in places where utilities may at. PTO for Disclaimer
amo / Drinta	1			APL	Locato	
ame ( Print ) – nail address –		Brown	-	nato -		Name (Print) - SEAN NOCANI HENINGER
		48 4	@a1loo 8 28	Jale.C	Jin.au	Business name - EL AUSTRALLA Email address - CEANLAND FLA PROPERTY COL
ate assets check		6	1	61	20	Contact # 0 470 1/8 5 8 0417492020
gned:	1	-	1			Date received asset checks - 6 16 120204
	K	21	5	-		Signed:
	REDI					

Appendix L – PID Calibration Certificate



The world leader

in serving science

# SERVICE OR REPAIR: PID MINIRAE LITE

COMPANY	EI Australia				
CONTACT	Andrew Ibrahim				
SERIAL NO.	590-913507	CALL NO.	SV2402220025	RECEIVED	11th March 2024

### **REQUEST/PROBLEM DESCRIPTION**

Routine Calibration

This equipment has been calibrated to the manufacturer's specifications, using the standards shown below:

ISOBUTYLENE STANDARD (ppm)	TRACEABILITY LOT NO.	PRE CALIBRATION READING	POST CALIBRATION READING
0 ppm	302-402539709-26	0.0 ppm	0.0 ppm
100 ppm	WO247538-3	99.6 ppm	100 ppm

### COMMENTS/ADDITIONAL REPAIRS/SERVICES PERFORMED

Verified flow.

Cleaned sensor assembly and lamp.

Checked battery condition.

Field calibration performed as per manufacturer's specifications.

SERVICED BY	Martin Slapp	COMPLETED	11 <sup>th</sup> March 2024
SIGNATURE	M.Slapp		