Detailed Site Investigation

158 Gorman Road, Goulburn

13 May 2024

Author	Chris Gunton	
Reviewer	Kelly Lee	
Approver	Chris Gunton	

Report Reference	P24065_DSI_20240513
Date	13/05/2024
Revision Text	R02

This report has been prepared for B Hoskins in accordance with the terms and conditions of appointment for Q24022 (17 February 2024). Lanterra Consulting Pty Ltd cannot accept any responsibility for any use of or reliance on the contents of this report by any third party.

REVISIONS

Revision	Date	Description	Prepared	Approved
R00	9/05/2024	Draft for Review	CG	CG
R01	10/05/2024	Final	CG	CG
R02	13/5/2024	Revised Final	CG	CG

Lanterra Consulting Pty Limited

Unit 13/71 Leichhardt Street, Kingston ACT 2604

ABN: 30 629 182 823

Table of Contents

List of Tables

Appendices

Executive Summary

Lanterra Consulting Pty Ltd was engaged by JH and EM Hoskins to undertake a detailed site investigation (DSI) of 158 Gorman Road, Goulburn, NSW (herein referred to as the site).

The site of the investigation has an approximate area of 4.74 hectares (Ha). Historically, the site has predominantly been used for agricultural purposes, including an orchard, while more recently the site has been a rural residential property.

Based on the results of the investigation by Douglas Partners, the following areas of environmental concern were identified and assessed as part of this investigation:

- **AEC 1:** Fill associated with a topsoil stockpile, fill around current and former dams on the site, the drainage line through the centre of the site and fill areas. No significant volume of fill was identified across the site and concentrations of contaminants of potential concern were below the adopted assessment criteria.
  Soil located in the stockpile was understood to have been sourced from sediment in the dam. The physical properties of the soil are consistent with this and the concentrations of contaminants of potential concern were below the adopted site assessment criteria.

- **AEC 2:** Historical agricultural uses and chemicals associated with the former use of the site as an orchard. Only three of the former fruit trees from the orchard remain on the site and no indications of chemical contaminants were present. The concentrations of contaminants of potential concern form soil samples collected across the site were below the adopted assessment criteria.

In addition to sampling of the areas of environmental concern, samples were collected from the drainage channel located in the centre of the site and water and sediment from the agricultural dam located in the northwestern section of the site. These features are likely to be receptors of contaminants from the catchment area and may assist with identifying the presence of contamination across a larger area.

Results of the sampling of the dam sediment and the drainage channel indicated that contaminants of potential concern were below the adopted assessment criteria. The sample of water from the dam indicated that concentrations of arsenic, copper, nickel and zinc were above the drinking water guidelines. These concentrations were attributed to natural concentrations and do not affect the suitability of the site for the proposed subdivision.

Based on the history of the site and the results of this detailed site investigation, concentrations of contaminants of potential concern were below the adopted health based criteria for low density residential use and ecological receptors for urban residential and public open space.

Based on the results this investigation, the site is considered suitable for the proposed subdivision and rural residential use from a contamination perspective.

1. Introduction

Lanterra was engaged by JH and EM Hoskins to undertake a detailed site investigation (DSI) of 158 Gorman Road, Goulburn, NSW (herein referred to as the site). The location and layout of the site is illustrated on **Figure 1** and **Figure 2, Appendix A**.

The DSI Report has been prepared to accompany an application that seeks to re-zone the western portion of the site to permit a minimum lot size of 2 hectares (instead of the 10 hectares that currently applies to the RU6 Zone). This will enable a future two (2) lot subdivision for the site with the intent that the larger allotment would be developed with a dwelling house within the western portion of the site.

No residential development is envisaged for the eastern portion of the site within the C3 Environmental Management Zone, where a minimum lot size of 100 hectares applies.

Douglas Partners Pty Ltd completed a preliminary site investigation in February 2024 where the following areas of environmental concern were identified:

1. Fill material that was associated with a topsoil stockpile and material that may have been associated with an agricultural dam and drainage line through the site
2. Historical agricultural use and the potential for chemicals to have been applied to a former orchard.
3. Hazardous building materials associated with historical site structures. It is understood that these structures were not within the area of the proposed subdivision and were therefore not included as a part of this investigation.

While Douglas Partners concluded that the potential for contamination was not considered to be a constraint that would preclude the proposed subdivision, it was recommended that a detailed site investigation for contamination be completed to support any future development application.

This DSI report presents the results of soil sampling and water sampling of the dam across the site as recommended by Douglas Partners.

1.1 Objectives

The objective of the project was to assess the suitability of the site for the proposed sub-division and construction of new residential dwellings.

1.2 Scope of Work

The scope of work for the investigation was as follows:

- Review of the environmental investigations by Douglas Partners.
- Mobilise a suitably qualified environmental scientist with appropriate equipment for collecting soil samples.
- Samples would be collected from the near surface with the aid of a hand auger.
- Sampling would target likely receptors of contaminants including the dams and creeks across the site as well as discrete soil samples using a broad square grid sampling pattern. The following samples would be collected:
    - Three (3) samples were collected from the topsoil stockpile located in the northwestern corner of the site.

    - One (1) water and one (1) sediment sample was collected from the dam located in the northwestern corner of the site.
    - Two (2) sediment samples were collected from drainage channel on the site.
    - Eighteen (18) soil samples were collected from hand auger holes from across the site.
    - Two (2) duplicate, two (2) triplicate and two (2) equipment rinsate samples were collected for quality assurance / quality control (QA/QC) purposes in accordance with Australian Standard AS4482.1-2005.
- Samples were be submitted to a National Association of Testing Authorities (NATA) accredited laboratory.
- Twenty-seven (27) samples were analysed for the following contaminants of potential concern:
    - Total recoverable hydrocarbons (TRH)
    - Benzene, toluene, ethylbenzene and xylenes (BTEX)
    - Polycyclic aromatic hydrocarbons (PAH)
    - Organochlorine and organophosphate pesticides (OCP/OPP)
    - Polychlorinated biphenyls (PCB);
    - Phenols
    - 8 Heavy Metals (arsenic, cadmium, chromium, copper, lead, mercury, nickel and zinc).
- The results of sampling would are presented in this detailed site investigation report.

1.3 Limitations

The findings of the report are based on the Scope of Work outlined above. Lanterra has perform services in a manner consistent with the normal level of care and expertise exercised by members of the environmental assessment profession. No warranties express or implied, are made.

The assessment was limited strictly to identifying typical environmental conditions associated with the subject property area and does not include evaluation of any other issues.

The absence of any identified hazardous or toxic materials on the subject property should not be interpreted as a guarantee that such materials do not exist on the site.

The results of this assessment are based upon the site inspection and the sampling specified above conducted by Lanterra personnel and information from the Client or regulatory agencies. All conclusions and recommendations regarding the property area will be the professional opinions of the Lanterra personnel involved with the project, subject to the qualifications made above.

While normal assessments of data reliability are made, Lanterra will not assume responsibility or liability for errors in any data obtained from regulatory agencies, statements from sources outside of Lanterra, or developments resulting from situations outside the scope of this project.

2. Site Characteristics

2.1 Site Location

The site location and a detailed site plan are presented in **Appendix A**: **Figure 1** and **Figure 2**.

Table 1: *Summary of Site Details*

Site Characteristics	Detail
Street Address	158 Gorman Road, Goulburn
Approximate Easting and Northing (centre of site – MGA GDA 2020 Coordinate System)	**Easting:** 752,559 **Northing:** 6,153,143
Approximate Elevation (m AHD)	570–575 m
Legal Description	Lot 11 DP1044967
Land Zoning – see Appendix A: Block maps	RU6 – Transition C3 – Environmental
Current Land Use	Rural Residential
Proposed Use	Subdivision with rural residential
Site Area **Investigation Area**	101,100 m^2 47,400 m^2

2.2 Site Description

Site observations made at the time of sampling on 23 April 2024 were as follows:

- The majority of the site was grassed paddock with a residential house located in the southern portion of the site. The house was accessed via an unsealed driveway from Gorman Road.
- A dam was present in the north-western corner of the site and at the time of the investigation the dam was full.
- A stockpile comprising of a sandy silt material was located approximately 20 m east of the dam. The estimated volume of the stockpile was approximately 50 cubic metres (m^3) and the surface of the stockpile was vegetated with grass. Evidence of burrowing animals was also observed.
- A linear drainage line was located in the centre of the site. These had raised embankments along the edges while the centre of the drain was heavily vegetated.
- Three (3) fruit trees were located in the south eastern portion of the site.

2.3 Surrounding Land Uses

A summary of the land uses that surround the site are as follows:

- **North:** Rural residential properties with agricultural dams
- **South:** Rural residential properties with agricultural dams
- **East:** Native bushland.
- **West:** Rural residential properties with agricultural dams

2.4 Sensitive Environments

The nearest sensitive environment are the residential properties located to the north, south and west.

2.5 Proposed Land Use

The site will be subdivided into two (2) lots and a new residential dwelling is proposed to be constructed in the eastern section of the site.

3. Site History

The history of the site was based on the findings of Douglas Partners as presented in their investigation titled 'Report on Preliminary Site Investigation for Contaminated Land Proposed Subdivision, 158 Gorman Road, Goulburn'.

The scope of work completed was as follows:

- Review of site information, comprising published maps of acid sulfate soil (ASS) potential, geological and topographical maps/drawings and groundwater bores registered with WaterNSW.
- Review of readily available site history information including current and historic titles and deposited plans, available historical and recent aerial photographs, public databases held under the Contaminated Land Management Act 1997, the Protection of the Environment Operations Act 1997, the Section 10.7 (2) and (5) planning certificate and Records held in the SafeWork Stored Chemical Information Database (SCID).
- A preliminary site walkover inspection to observe conditions/situations that may indicate a potential for contamination and identify environmental receptors; and
- Preparation of this PSI report detailing the findings of the desktop-based study and walkover.

A review of the site history by Douglas Partners indicated the following:

- The site was historically used for agricultural purposes between 1926 and 1997 and had an orchard during a portion of this time.
- Based on anecdotal information from Douglas Partners, the site was acquired by the current owners in 1994 and has been used for rural residential purposes since 2006.

Based on the results of the PSI, Douglas Partners made the following conclusions and recommendations:

- Potential sources of contamination were generally considered typical for a rural residential property in the region. As such, the identified potential for contamination is not considered to be a constraint that would preclude the proposed subdivision. The site was therefore considered to be suitable for the proposed subdivision from a contaminated land perspective.
- It was recommended that a DSI be completed as part of any future development application (DA) where there was an actual change in the potential for exposure to contamination.

4. Site Condition and Environmental Setting

4.1 Topography

The topography of the site, as described by Douglas Partners, slopes in a general north / north easterly direction with an approximate change in elevation of 10 m. The highest point of 668 m relative to the Australian Height Datum (AHD) is located in the south-eastern corner of the site and the lowest point of 658 m AHD is located the north-western corner of the site.

4.2 Visible Signs of Contamination

No visible indications of contamination were noted during the sampling conducted on 23/4/2024.

4.3 Geology

Based on the NSW Government's geographical information system (GIS) www.minview.nsw.gov.au, the geology beneath the site comprises of Quaternary aged colluvium with poorly sorted, weakly cemented to unconsolidated colluvial lenses of polymictic conglomerate with medium- to very coarse-grained sand matrix; interspersed with unconsolidated clayey and silty red-brown (aeolian) sand layers, modified by pedogenesis.

4.4 Hydrogeology

Three (3) registered groundwater bores are located within a 500 m radius of the site. Based on the elevation of the site and its proximity to the Wollondilly River (located approximately 850 m to the northwest), the depth of groundwater is estimated to be 15-20 m below ground level and flow in a northerly direction.

4.5 Hydrology

An agricultural dam is located in the northwestern section of the site. The nearest natural surface water body is the Wollondilly River located approximately 850 m to the northwest.

4.6 Acid Sulfate Soil Risk

A review of the Australian Soil Resource Information System (ASRIS) map shows the subject site to be situated in an area of 'extremely low probability for acid sulfate soil'.

5. Preliminary Conceptual Site Model

Conceptual site models (CSM) are a method of presenting site contamination information and the relationships between sources of contamination, how it may have been introduced to the site, possible pathways for contaminant migration and exposure and the receptors that may be affected by contaminants.

Douglas Partners prepared a conceptual site model as a part of the PSI which is presented in the sections below.

5.1 Areas of Environmental Concern

Three potential sources of contamination were identified by Douglas Partners:

- **AEC 1:** Fill associated with a topsoil stockpile, fill around current and former dams on the site, the drainage line through the centre of the site and fill areas.
- **AEC 2:** Historical agricultural uses and chemicals associated with the former use of the site as an orchard.
- **AEC 3:** Hazardous building materials associated with historic site structures (i.e. the cottage ruins and shed structure in the centre of the site). It is noted that this potential source of contamination was not directly assessed as the buildings were located outside of the investigation area.

The location of each AEC is shown on **Figure 3, Appendix A**.

5.2 Contaminants of Potential Concern

Based on the activities associated with each AEC, the following contaminants of potential concern (COPC) were identified:

AEC 1

Contaminants that may be associated with presence of fill, particularly if it was imported are as follows:

- Total recoverable hydrocarbons (TRH);
- Benzene, toluene, ethylbenzene, xylene (BTEX);
- Polycyclic aromatic hydrocarbons (PAH);
- Organochlorine and organophosphate pesticides (OCP/OPP);
- Polychlorinated biphenyls (PCBs);
- Heavy metals (arsenic, cadmium, chromium, copper, lead, mercury, nickel and zinc);
- Anthropogenic material including asbestos containing materials (ACM).

AEC 2

Contaminants that may be associated with agricultural activities are as follows:

- TRH;
- BTEX;
- OCP/OPP;
- Heavy metals.

AEC 3

The contaminants of concern that were associated with the hazardous building materials includes:

- Asbestos;
- Synthetic mineral fibres;
- Lead paint;
- PCBs.

5.3 Exposure Pathways and Receptors

For a contaminant to pose a risk to either human health and/or the environment, there must be a complete or potentially complete pathway that links the contaminant with the receptor. Identified receptors at the site are as follows:

- Current residents of the site
- Future construction workers
- Future residents of the site.
- Adjacent site users (predominantly residential).
- Surface water both onsite and adjacent dams.
- Groundwater.
- Terrestrial ecosystems.

Common pathways for contaminants to migrate through the environment and result in exposure to receptors are summarised in **Table 2** below.

Table 2: *Summary of Exposure Pathways*

Pathway	Contaminants of Concern	Exposure Pathway Complete or Potentially Complete (Yes/No)	Comments
Direct Contact with Soil including dermal contact and ingestion	TRH, BTEX, PAH, OCP/OPP, PCB, Phenols, Heavy metals	Potentially Complete	Should any of the contaminants of potential concern be present at concentrations that may pose a risk to human and/or environmental receptors, then the exposure pathway may be complete.
Direct Contact with Groundwater including dermal contact and ingestion	TRH, BTEX, PAH, OCP/OPP, PCB, Phenols Heavy metals,	No	No abstraction bores are located on or near the site and therefore exposure to groundwater is not possible.
Direct Contact with surface water including dermal contact and ingestion	TRH, BTEX, PAH, OCP/OPP, PCB, Phenols Heavy metals,	Potentially Complete	Should any of the contaminants of potential concern be present at concentrations in water that may pose a risk to human and/or environmental receptors, then the exposure pathway may be complete.
Inhalation of Asbestos Fibres	Asbestos	No	No evidence of asbestos was identified during initial site visits. The absence of the contaminant results in the exposure pathway being incomplete.

Pathway	Contaminants of Concern	Exposure Pathway Complete or Potentially Complete (Yes/No)	Comments
Inhalation of gasses and vapour	TRH, BTEX	No	No sources of volatile contaminants at concentrations and volumes that could pose a vapour inhalation risk.

6. Data Quality Objectives

This section outlines the data quality objectives (DQOs) applied to the investigation.

The DQO process is planning tool that relies on scientific methods for establishing criteria for data quality and for designing data collection programs. The DQO defines the experimental process required to test a hypothesis. The DQO process aims to ensure that efforts relating to data collection are cost effective, by eliminating unnecessary, duplicative or overly precise data whilst at the same time, ensuring the data collected is of sufficient quality and quantity to support defensible decision making.

The DQO process consists of seven steps, which are designed to clarify the study objectives, define the appropriate type of data and specify tolerable levels of potential decision errors. The seven-step DQO process adopted for this DSI is as follows:

Step 1: State the Problem – concisely describe the problem to be studied. Review prior studies and existing information to gain a sufficient understanding to define the problem;

Step 2: Identify the Decision – identify what questions the study will attempt to resolve, and what actions may result;

Step 3: Identify the Inputs to the Decision – identify the information that needs to be obtained and the measurements that need to be taken to resolve the decision statement;

Step 4: Define the Study Boundaries – specify the time periods and spatial area to which decisions will apply. Determine when and where data should be collected;

Step 5: Develop a Decision Rule – define the statistical parameter of interest, specify the action level, and integrate the previous DQO outputs into a single statement that describes the logical basis for choosing among alternative actions;

Step 6: Specify Tolerable Limits on Decision Errors – define the decision maker's tolerable decision error rates based on a consideration of the consequences of making an incorrect decision; and

Step 7: Optimise the Design –evaluate information from the previous steps and generate alternative data collection designs. Choose the most resource-effective design that meets all DQOs.

The DQOs derived for the investigation are presented in **Table 3**.

Table 3: *DQOs derived for DSI*

Step	Details
Step 1: State the Problem	The site has been used primarily for agricultural and rural residential use. Activities particularly associated with agricultural use may introduce contamination into the environment. Therefore the purpose of the investigation is to assess whether the site is suitable for ongoing rural residential use.
Step 2: Identify the Decision	Should COPCs be identified at concentrations that exceeded the adopted assessment criteria, then management and /or options for remediation to make the site suitable for future rural residential use may be necessary.
Step 3: Identify the Inputs into the Decision	The COPCs selected are based on the previous site activities as described in Section 5.2. As the proposed site use is for ongoing rural residential use, the following assessment criteria from the National Environment Protection Council (NEPC) '*National Environment Protection (Assessment of Site Contamination) Measure 1999*' (revised in 2013; ASC NEPM 2013) has been selected: • Health Based Investigation Levels for standard residential use (HIL A)

Step	Details
	• Health Based Screening Levels for standard residential use (HSL A) • Ecological Investigation Levels (EIL) for urban residential and public open space • Ecological Screening Levels (ESL) for urban residential and public open space. Values for each criteria are presented in Section 8 below.
Step 4: Define the Site Boundaries	The site boundary was restricted to the western side of Lot 11 DP1044967 as shown on **Figure 2, Appendix A**. The vertical boundary of the site was up to 0.9 m below ground level which was the maximum sampling depth. It is also noted that the results of the assessment are limited to the condition of the site as of 23 April 2024 when sampling was completed.
Step 5: Develop a Decision Rule	If analytical results for COPCs are below the adopted criteria for standard residential sites, then the site would be considered suitable for the proposed subdivision and new residential property and no further management or remediation would be required. However, should the concentration of one or more COPC exceed the adopted criteria value then further investigation may be required to delineate the lateral and vertical extent of the impact and/or recommendations for the remediation/management of contamination may be required.
Step 6: Specify Tolerable Limits	The tolerable limits for the investigation adopted for quality assurance/quality control (QA/QC) purposes are as follows: • The relative percentage difference (RPD) for laboratory duplicates is as per the laboratory's quality assurance targets accepted under their NATA accreditation. • Recovery of matrix spikes and surrogate spikes is as per the laboratory's Quality Assurance targets accepted under their NATA accreditation. The tolerable limits for field QA/QC and duplicates data are as follows: RPD criteria of 30% or less, for concentrations > or = 5 times PQL.
Step 7: Optimise the Design	The investigation program for this assessment is detailed in Section 7 to adequately characterise the identified risks of contamination across the site and in general accordance with the NSW EPA (2022) 'Contaminated Land Guidelines – Sampling Design Part 1 - Application 'Sampling Design Guidelines'.

7. Sampling and Analysis Quality

Details of the sampling and analytical plan adopted to meet the project objectives are presented in the following sections.

7.1 Chronology of Events

The chronology of key project events is summarised in Table 4.

Table 4: *Summary of the Chronology of Works*

Date	Event
23 April 2024	Drilling of hand auger holes
24 April 2024	Dispatch of samples to SGS A
2 May 2024	Receipt of laboratory results
10 May 2024	Issue of DSI report

7.2 Sampling Plan

Sampling across the site comprised of the following:

- 17 Hand auger holes for collection of soil samples from between 0.5 m and 0.9 m below ground level;
- 2 sample locations from the central drainage channel;
- 1 sediment sample from the dam
- 1 surface water sample from the dam
- 3 soil samples from the stockpiled soil in the northern section of the site.

The rationale for each sample location is summarised in Table 6 below.

Table 5: *Rationale for sample locations advanced as a part of the DSI*

Sample Location	Target Location	Rationale
HA1-HA17	AEC 1 and AEC 2	General screening of soil for contaminants of potential concern associated with possible imported fill and use of chemicals for agricultural purposes.
SP1-SP3	AEC1	Assessment of the stockpiled soil located in the northern section of the site. The volume of material was estimated to be 50 m^3
D1	-	Surface water sample from the dam. As the dam is considered a receiving point for water from across the site, surface water may provide an indication of contaminants from the catchment area.
Sed 1	-	Sediment sample from the base of the dam. As the dam is considered a receiving point for water from across the site, surface water may provide an indication of contaminants from the catchment area. It is noted that the sediment sample was collected from the southern edge of the dam.
Drain 1 and Drain 2	AEC 1	The drainage channel through the centre of the site may receive water and sediment from across the site and any contaminants may indicate a source from upgradient.

For an investigation area of approximately 4.74 hectares (Ha), the NSW EPA '*Sampling Design – Part 1: Application*' recommends 52 sample locations, however based on the site history, potential contamination risk, and the likely homogeneity of the possible contamination associated with the use of chemicals for agricultural purposes, the sampling completed was considered appropriate for the purposes of the DSI.

Should indications of contamination have been identified in the soil bores or sediment samples, then further sampling would have been undertaken to characterise and locate the source of contaminants.

The locations of samples collected from across the site are shown on **Figure 3**, while a detailed plan of the stockpile samples is presented in **Figure 4**.

7.2.1 Quality Assurance / Quality Control

For quality assurance / quality control (QA/QC) purposes, the following samples were collected in accordance with AS4482.1 (2005).

- Two (2) field duplicate samples were analysed by the primary laboratory to assess the precision of the results;
- Two (2) field triplicate samples were analysed by a secondary laboratory to assess the accuracy of the primary laboratory.

7.3 Analytical Plan

From the samples collected across the site, the analytical plan presented in Table 6 was executed to assess the identified COPCs.

Table 6: *Analytical Plan Completed for the DSI*

Sample Type	TRH	BTEX	PAH	OCP/OPP	PCB	Heavy Metals	Asbestos
Primary Soil	22	22	22	22	22	22	0
Primary Sediment	1	1	1	1	1	1	0
Primary Surface Water	1	1	1	0	1	1	0
Duplicate	2	2	2	2	2	2	0
Triplicate	2	2	2	2	2	2	0

8. Assessment Criteria

The assessment criteria for the investigation considers the future low density residential land uses that is proposed.

The adopted criteria have been sourced from *NEPC (1999) National Environment Protection Assessment of Site Contamination Measure 1999' as amended 2013* (ASC NEPM 2013) and include the following:

- Health Based Investigation Levels for Residential Sites (HIL A)
- Health Based Screening Levels for Residential Sites (HSL A) for a clay lithology and a depth of 0 m to <1 m below ground level. This assumption is considered appropriate based on the predominant soil observed on site.
- Ecological Investigation Levels (EIL) for aged contaminants in Urban Residential and Public Open Space.
- Ecological Screening Levels (ESL) for Urban Residential and Public Open Space for fine soil based on fine texture.
- Management Limits for residential, parkland and public open space – Table 1B(7) of ASC NEPM 2013.

To calculate the EIL criteria, the following physicochemical properties have been adopted as a conservative approach:

Table 7: *Adopted physicochemical properties*

Physicochemical Property	Unit	Value
pH	pH Unit	6
CEC	meq / 100g	10
% Clay	%w / w	10

The EIL criteria were calculated using the ASC NEPM 2013 EIL Interactive (Excel) Calculation Spreadsheet using values for aged contaminants. Results of the EIL calculations are presented in **Appendix F**.

The adopted criteria are presented in Table 8 below.

Table 8: *Soil assessment criteria*

Contaminant Group	HIL/HSL – A (mg/kg)	Management Limits – Residential, Parkland and Open Space (mg/kg)	ESL/EIL- Urban Residential and Public Open Space (mg/kg)
Heavy Metals			
Arsenic	100	-	100
Cadmium	20	-	-
Chromium (VI)	100[1]	-	410[2]
Copper	6,000	-	210
Lead	300	-	1,100
Nickel	400	-	170

Contaminant Group	HIL/HSL – A (mg/kg)	Management Limits – Residential, Parkland and Open Space (mg/kg)	ESL/EIL- Urban Residential and Public Open Space (mg/kg)
Zinc	7,400	-	480
Mercury	40	-	-
TRH/BTEX/PAH			
TRH C_6-C_{10} – BTEX (F1)	40	800	180
TRH >C_{10}-C_{16} – Naphthalene (F2)	230	1,000	120
TRH >C_{16}-C_{34} (F3)	-	3,500	1,300
TRH >C_{34}-C_{40} (F4)	-	10,000	5,600
Benzene	0.6	-	65
Toluene	390	-	105
Ethylbenzene	NL	-	125
Xylene	95	-	45
Naphthalene	4	-	170
Benzo(a)pyrene	-	-	0.7
Carcinogenic PAHs (as BaP TEQ)	3	-	0.7
Total PAHs	300	-	-
OCP/OPP			
DDT+DDE+DDD	240	-	180
Aldrin and Dieldrin	6	-	-
Chlordane	50	-	-
Endosulfan	270	-	-
Endrin	10	-	-
Heptachlor	6	-	-
HCB	10	-	-
Methoxychlor	300	-	-
Mirex	10	-	-
Toxaphene	20	-	-
Atrazine	320	-	-
Chlorpyrifos	160	-	-
Bifenthrin	600	-	-
Phenols and PCBs			
Phenol	3,000	-	-
Pentachlorophenol	100	-	-

Contaminant Group	HIL/HSL – A (mg/kg)	Management Limits – Residential, Parkland and Open Space (mg/kg)	ESL/EIL- Urban Residential and Public Open Space (mg/kg)
Cresols	400	-	-
PCBs	1	-	-
Asbestos			
All forms of asbestos	No trace asbestos detected	-	-
AF and FA (friable asbestos)	0.001%	-	-
Bonded ACM	0.01%	-	-

Notes:

[1]Chromium criterion value is for hexavalent chromium, while chromium measured by the laboratory is total chromium (total of Cr III and CrVI). Should the total chromium concentration exceed the criterion value, then the sample would be speciated for Cr VI only.

[2]EIL for chromium is based on Cr III concentrations.

NL: Non Limiting.

9. Methods

A suitably qualified environmental scientist from Lanterra was present on site on 23 April 2024 for the collection of soil, sediment and water samples from across the site. The sampling methods are outlined below.

Soil Sampling

- Boreholes were advanced by the environmental scientist with the aid of a hand auger.
- The target depth of each borehole was 0.5 m with the aim of advancing each hole into natural soil.
- Soil samples were collected at the surface and 0.5 m, at changes in lithology or lenses of gross contamination, if applicable.
- Each sample was collected directly from the auger flights with a new, clean pair of nitrile gloves.
- Each soil sample was described in general accordance with the Unified Soil Classification System (USCS) and details of any discolouration, staining, odours or other indicators of contamination noted.
- A subsample was placed into a low-density polyethylene zip-lock bag and field screened with a calibrated photoionisation detector (PID). A copy of the calibration certificate is presented in **Appendix E**.
- Three (3) duplicate and three (3) triplicate QA/QC samples were collected in general accordance with Australian Standard AS4482.1-2005.
- Soil samples were placed into a laboratory prepared 250 mL glass jar for the analysis of TRH, BTEX, PAH, OCP/OPP, PCB, phenols and heavy metals.
- Each sample was labelled with the details of the sample, including the sample name, the job number, the date of sample and the sample depth.
- During the collection of QA/QC samples, the primary, duplicate and triplicate sample containers were filled to approximate 70%, before the final 30% of soil was placed in each jar to minimise heterogeneity without physically mixing the soil.
- All samples were immediately placed and stored in an ice-filled esky to keep them chilled. Samples were transported to a NATA accredited laboratory with the signed chain of custody (COC) form with the required analysis.
- Each borehole was backfilled once sampling was completed, before moving to the next sample location.

Sediment Samples

- The sediment sample was collected from the dam with the aid of a shovel.
- The sample was collected beneath the water level.
- Sediment samples collected from the drainage channels/creeks were obtained with the hand auger with samples collected from the surface and then at 0.5 m bgl.
- Samples were placed directly into a 250 mL glass jar with a screw top lid.
- Each soil sample was described in general accordance with the Unified Soil Classification System (USCS) and details of any discolouration, staining, odours or other indicators of contamination noted.
- Samples were placed into an ice-filled esky and sent to a NATA accredited laboratory for analysis.

Water Samples

- The water sample was collected from the dam from approximately 10 cm below the water level.
- Water samples were transferred into clean laboratory supplied containers and labelled with the project number, sample name and date of sampling.
- Samples were placed into an ice-filled esky and sent to a NATA accredited laboratory for analysis.

9.1 Decontamination Procedures

The following methods were adopted to minimise the potential for cross-contamination between samples:

- A clean new pair of nitrile gloves and samples were placed directly into the laboratory supplied containers.
- When collecting samples from the auger flights, care was taken to collect samples from soil not touching the flights.
- The auger flights were brushed clean between samples.
- Where water samples were collected, the sample bottle was used to collect the sample directly.

10. Results

Visual and laboratory results of the investigation are presented in the following sections.

10.1 Observations

Soil Samples

At the time of sampling, the site was used for rural residential purposes. No stock or crops were present on the site.

Soil across the site was natural comprising of the following:

- Topsoil primarily comprised of silty clay to gravelly clayey silt that was brown, moist and soft. The depth of topsoil was generally 0.2 to 0.3 m in thickness.
- Lower soils comprised of gravelly to sandy silty clay that was brown to orange brown in colour, soft to firm and dry to moist.

PID screening of soil samples indicated a low potential for ionisable volatile compounds with a maximum of PID measurement of 0.0 ppm across the site.

Copies of the borehole logs are presented in **Appendix D**.

Sediment Samples

The sediment sample collected from the dam was dark brown, sandy silt that was saturated.

Sediment samples from the drainage channel comprised of sandy silt that was brown in colour and moist to wet. The drainage channels were heavily vegetated with aquatic plants.

Water samples

The water sample was slightly turbid and pale brown in colour. No odour or sheen was noted during sampling.

10.2 Analytical Results

A summary of the analytical results is presented in **Table 1** and **Table 2, Appendix B,** while copies of the laboratory reports, sample receipt and COCs are presented in **Appendix C**. A summary of the results are presented in the sections below.

Soil and Sediment Results

TRH, BTEX and PAH

Concentrations of TRH, BTEX and PAH were generally below the laboratory limit of reporting (LOR) with the exception of the following:

- Toluene in sample Sed 1 which had a concentration of 1.1 mg/kg which was below the HSL and ESL criteria.
- TRH >C16-C34 (F3) in samples HA6 0.0-0.1 (100 mg/kg) and HA16 0.0-0.1 (160 mg/kg) which were below the adopted HSL A and ESL criteria.
- Fluoranthene and anthracene in samples HA7 0.0-0.1 and SP3. The measured concentrations of 0.1 mg/kg are equal to the laboratory limit of reporting and therefore do not pose a risk to human health or environmental receptors.

These concentrations were significantly lower than the applicable site assessment criteria and were attributed to decomposed organic material in the soil as opposed to fuel related hydrocarbons.

OCP/OPP, PCB, and Phenols

Concentrations of OCP/OPP, PCB and Phenols were below the laboratory LOR and therefore below the adopted criteria.

Heavy Metals

Concentration of heavy metals in analysed soil sample are summarised as follows:

- Concentrations of arsenic, chromium, copper, lead, nickel and zinc were above the laboratory LOR, but each concentration was below the adopted HIL A for the protection of the human health and EIL criteria for the protection of the environment.
- The maximum concentrations for each metal were as follows:
  - Arsenic: 12 mg/kg (SP1)
  - Chromium: 14 mg/kg (HA17 0.0-0.1)
  - Copper: 42 mg/kg (HA17 0.0-0.1)
  - Lead: 28 mg/kg (HA17 0.0-0.1)
  - Nickel: 4 mg/kg (SP1)
  - Zinc: 190 mg/kg (HA1 0.0-0.1)
  - Mercury: 0.11 mg/kg (HA1 0.0-0.1 and SP1).

Overall, the concentrations of metals measured in soil were below the adopted HIL A and EIL criteria.

Water

TRH, BTEX, PAH, PCB, and Phenols

Concentrations of TRH, BTEX, PAH, PCB and phenols were below the laboratory limit of reporting (LOR) and therefore below the adopted water criteria.

Heavy Metals

Concentration of heavy metals in analysed soil sample are summarised as follows:

- The concentration of mercury and cadmium were below the laboratory LOR.
- Concentrations of arsenic, chromium, copper, lead, nickel and zinc were above the laboratory LOR. Of these, arsenic, copper, nickel and zinc were above the ANZG (2018) drinking water guidelines, but below the ANZECC (2000) long term irrigation and recreational water quality and aesthetic guideline levels.

Overall, the measured concentrations of arsenic, copper, chromium, lead, nickel and zinc were attributed to natural metal concentrations associated with the soil rather than anthropogenic sources. As the dam water is not used as a potable water supply, these concentrations do not pose a risk to the human receptors.

11. Quality Assurance / Quality Control

11.1 Field QA/QC

Field duplicate and field triplicate samples were collected for calculating the relative percent difference (RPD) and assess the precision and accuracy of the laboratory. An RPD of less than 30% is considered acceptable where the analyte concentration is greater than five (5) times the laboratory LOR. Should the RPD be greater than 30%, then further investigation as to the reason for high RPD would occur.

The duplicate and triplicate samples collected are presented in **Table 9** below:

Table 9: *Summary of Field Duplicate and Triplicate Samples Collected and Analysed*

Sampling Date	Primary Sample	Duplicate	Triplicate
23/4/2024	HA7 0.0-0.1	QC1	QC2
23/4/2024	HA15 0.0-0.1	QC3	QC4

A summary of field duplicate and triplicate analytical results is provided in T**able 3, Appendix B**. The RPD values between the primary and QA/QC samples were within the tolerable limit for each analyte.

RPD comparisons for the primary and secondary laboratories were not considered where either one or both results were below the LOR given that all LORs were below the adopted health based and ecological criteria.

The QA/QC compliance with the DQOs for soil is presented in **Table 10** below. Samples QC3 and QC4 were not analysed.

Table 10: *Summary of QA/QC sample results for Soil*

Sample Type	Number of samples	Target	Actual	Criteria Met (Yes/No)
Primary samples	23			
Duplicate (QA/QC)	2	> 5 %	8.6 %	Yes
Triplicate (QA/QC)	2	> 5 %	8.6 %	Yes
Total RPDs	348			
Total RPDs > 5x LOR & > 30%	0	≤ 5%	0 %	Yes

11.2 Laboratory Quality Assurance/Quality Control

A review of the laboratory QA/QC data is summarised in the table below (see **Appendix B**).

Laboratory Accreditation

All analysis was performed in NATA accredited laboratory as follow:

- **Primary Laboratory:** SGS Australia Pty Ltd (NATA accreditation No. 2562)
- **Secondary Laboratory:** Envirolab Services Pty Ltd (NATA accreditation No. 2901)

Holding Times

All samples were extracted for each analyte within the required holding time.

Surrogate and Spike Recoveries

All surrogate recoveries were within the tolerable limits for soil, water and sediment samples with the exception of the following:

Parameter	Sample Name	Sample Number	Recovery (%)
D14-p-terphenyl	HA1 0.0-0.1	SE264243.001	147[1]
	HA14 0.0-0.1	SE264243.014	144[1]
	D1	SE264243.024	26[2]
2 fluorobiphenyl	D1	SE264243.024	28[2]
D5-nitrobenzene	D1	SE264243.024	30[2]
2,4,6-tribromophenol	D1	SE264243.024	24[2]

[1] Exceedance was considered acceptable as 2 of the 3 surrogate samples were within tolerable limits
[2] Recovery exceeded tolerable limits due to matrix interference.

Matrix Spike

All matrix spike recoveries were within tolerable limits with the exception of the following:

QC Sample	Sample Number	Parameter	Recovery
SE264243.001	LB310806.004	Zinc	69[1]

[1] Recovery exceeded tolerable limits due to matrix interference.

The above exceedances were attributed to sample heterogeneity and based on the analytical results of samples being below the adopted criteria, these exceedances do not alter the outcome of the investigation.

Laboratory Control Sample Results

All laboratory control sample results were within the tolerable limits.

Laboratory Duplicate Results

All laboratory duplicate sample results were within the tolerable limits with the exception of the following:

Original Sample	Duplicate Sample	Parameter	Recovery
SE264251.011	LB310795.029	Phenanthrene	96[1]
		Anthracene	84[1]
		Fluoranthene	93[1]
		Pyrene	81[1]
		Benzo(a)anthracene	83[1]
		Chrysene	72[1]
		Benzo(b&j)fluoranthene	70[1]

Original Sample	Duplicate Sample	Parameter	Recovery
		Benzo(k)fluoranthene	66[1]
		Benzo(a)pyrene	70[1]
		Indeno(1,2,30cd)pyrene	58[1]
		Benzo(ghi)perylene	49[1]
SE264243.010	LB310806.014	Chromium	52[2]

[1] Recovery exceeded tolerable limits due to matrix interference.
[2] Sample failed acceptance criteria due to sample heterogeneity.

Based on notes provided by the laboratory, the exceedance of the recovery for duplicate samples was attributed to sample heterogeneity.

Laboratory Blank Results

All method laboratory blanks were below the laboratory LOR and therefore within tolerable limits.

12. Revised Conceptual Site Model

Based on the results of the intrusive investigation, the CSM has been revised to reflect information obtained from drilling.

11.3 Summary of Site Condition

Based on the review of the site history and the observations made during sampling, the site has only been used for agricultural and rural residential uses.

Soil encountered across the site was indicative of the colluvial deposits outlined on the geological map.

No visual or olfactory indicators of contamination were noted during the site visit completed on 23 April 2024.

Based on the results of soil sampling, no contamination issues were identified on the site. A summary of the site conditions encountered during the investigation:

- Concentrations of TRH, BTEX, PAH, OCP/OPP, PCB, Phenols, and Heavy Metals in each soil sediment and water sample analysed recorded COPCs concentrations below the adopted assessment criteria for residential land use and urban open space land use.
- While concentrations of arsenic, copper, nickel and zinc were above the ANZG (2018) drinking water guidelines, these were considered to reflect natural concentrations, while the fact that the dam is not used as a potable water supply, the exposure pathway for human receptors is considered incomplete.

11.4 Potential Receptors and Exposure Pathways

Based on the results of the investigation, the revised CSM is presented in Table 11 below.

Table 11: *Revised Conceptual Site Model*

Pathway	Potential Receptor			
	On-site andOff-site Residents	Construction Workers	Ecological Receptors	Groundwater
Direct Dermal Contact with Soil and Ingestion	**Incomplete** Concentrations of COPCs were below the adopted criteria			
Direct Dermal Contact with Groundwater	**Incomplete** The pathway is incomplete as there is no potential exposure to groundwater while the risk of COPCs migrating to groundwater is low.			
Exposure to respirable Asbestos	**Incomplete** Exposure pathway is incomplete as no asbestos has been detected on the site			
Inhalation of Vapour or Gas	**Incomplete** Exposure pathway is incomplete due to the absence of volatile compounds in soil that may pose a vapour risk.			

13. Summary and Conclusions

JH and EM Hoskins engaged Lanterra to undertake a detailed site investigation (DSI) of 158 Gorman Road, Goulburn, NSW.

The site of the investigation has an approximate area of 4.74 hectares (Ha). Historically, the site has predominantly been used for agricultural purposes, including an orchard, while more recently the site has been a rural residential property.

Based on the results of the investigation by Douglas Partners, the following areas of environmental concern were assessed:

- **AEC 1:** Fill associated with a topsoil stockpile, fill around current and former dams on the site, the drainage line through the centre of the site and fill areas. No significant volume of fill was identified across the site and concentrations of contaminants of potential concern were below the adopted assessment criteria.
  Soil located in the stockpile was understood to have been sourced from sediment in the dam. The physical properties of the soil are consistent with this and the concentrations of contaminants of potential concern were below the adopted site assessment criteria.

- **AEC 2:** Historical agricultural uses and chemicals associated with the former use of the site as an orchard. Only three of the former fruit trees from the orchard remain on the site and no indications of chemical contaminants were present. The concentrations of contaminants of potential concern form soil samples collected across the site were below the adopted assessment criteria.

In addition to sampling of the areas of environmental concern, samples were collected from the drainage channel located in the centre of the site and water and sediment from the agricultural dam located in the northwestern section of the site. These features are likely to be receptors of contaminants from the catchment area and may assist with identifying the presence of contamination across a large area. Results of the sampling of the dam sediment and the drainage channel indicated that contaminants of potential concern were below the adopted assessment criteria. The sample of water from the dam indicated that concentrations of arsenic, copper, nickel and zinc were above the ANZG (2018) drinking water guidelines. These concentrations were attributed to natural concentrations and do not affect the suitability of the site for the proposed subdivision.

Based on the history of the site and the results of this detailed site investigation, concentrations of contaminants of potential concern were below the adopted health based criteria for low density residential use and EIL/ESL values for urban residential and public open space. Therefore the site is considered suitable for the proposed subdivision for rural residential use from a contamination perspective.

14. References

Douglas Partners Pty Ltd 'Report on Preliminary Site Investigation for Contaminated Land Proposed Subdivision, 158 Gorman Road, Goulburn'

National Environmental Protection Council (NEPC) (2013). National Environment Protection (Assessment of Site Contamination) Measure 1999 (as amended April 2013)

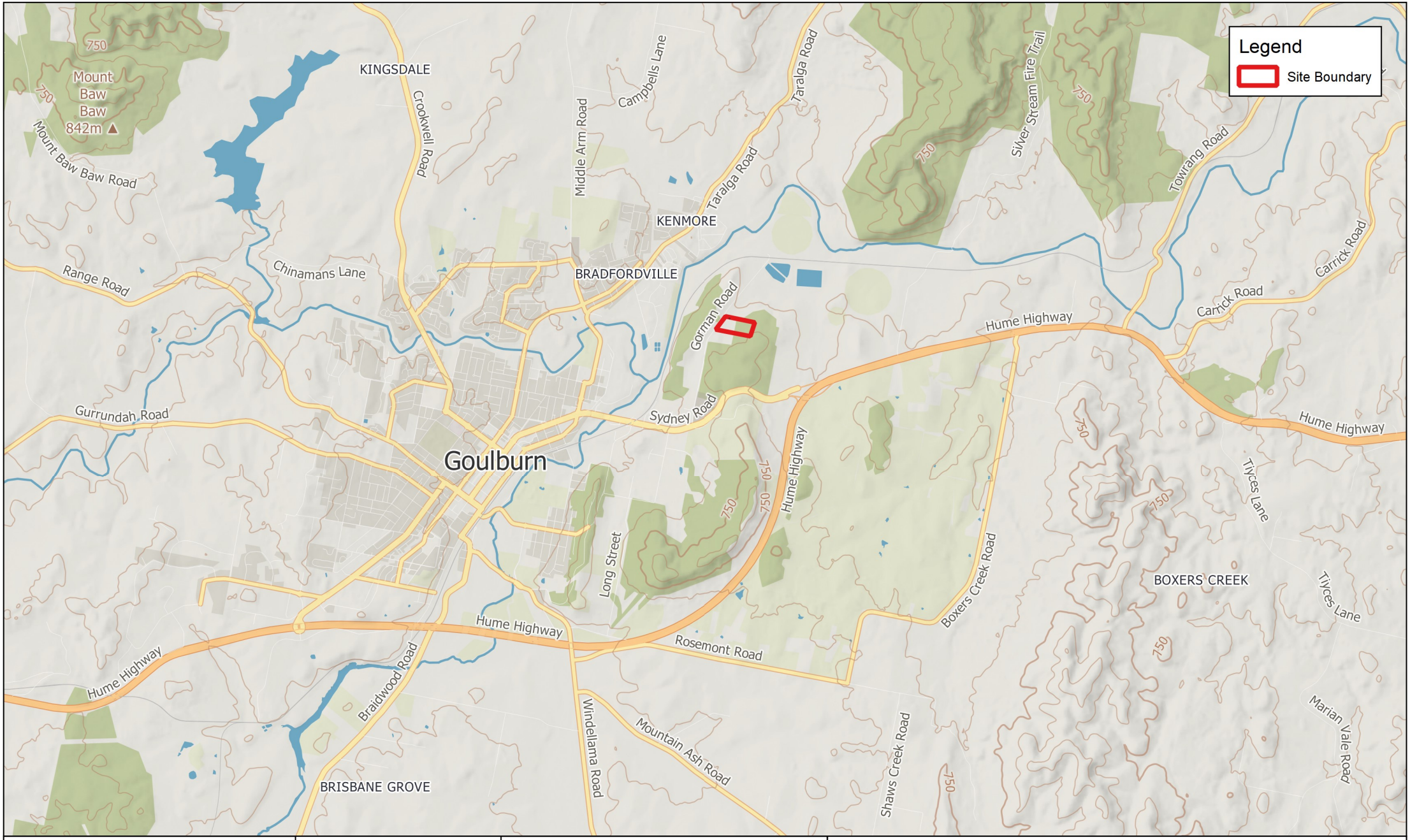
NSW EPA (2017) Guidelines for the NSW Site Auditor Scheme (3rd Ed.) (2017)

NSW EPA (2020) Contaminated Land Guidelines - Consultants Reporting on Contaminated Land

NSW EPA (2022) Contaminated Land Guidelines – Sampling Design Part 1: Application.

Appendix A

Figures



0 1 2 km

N

Image Source: Nearmap March 2024

Coordinate System: GDA 2020 MGA Zone 55

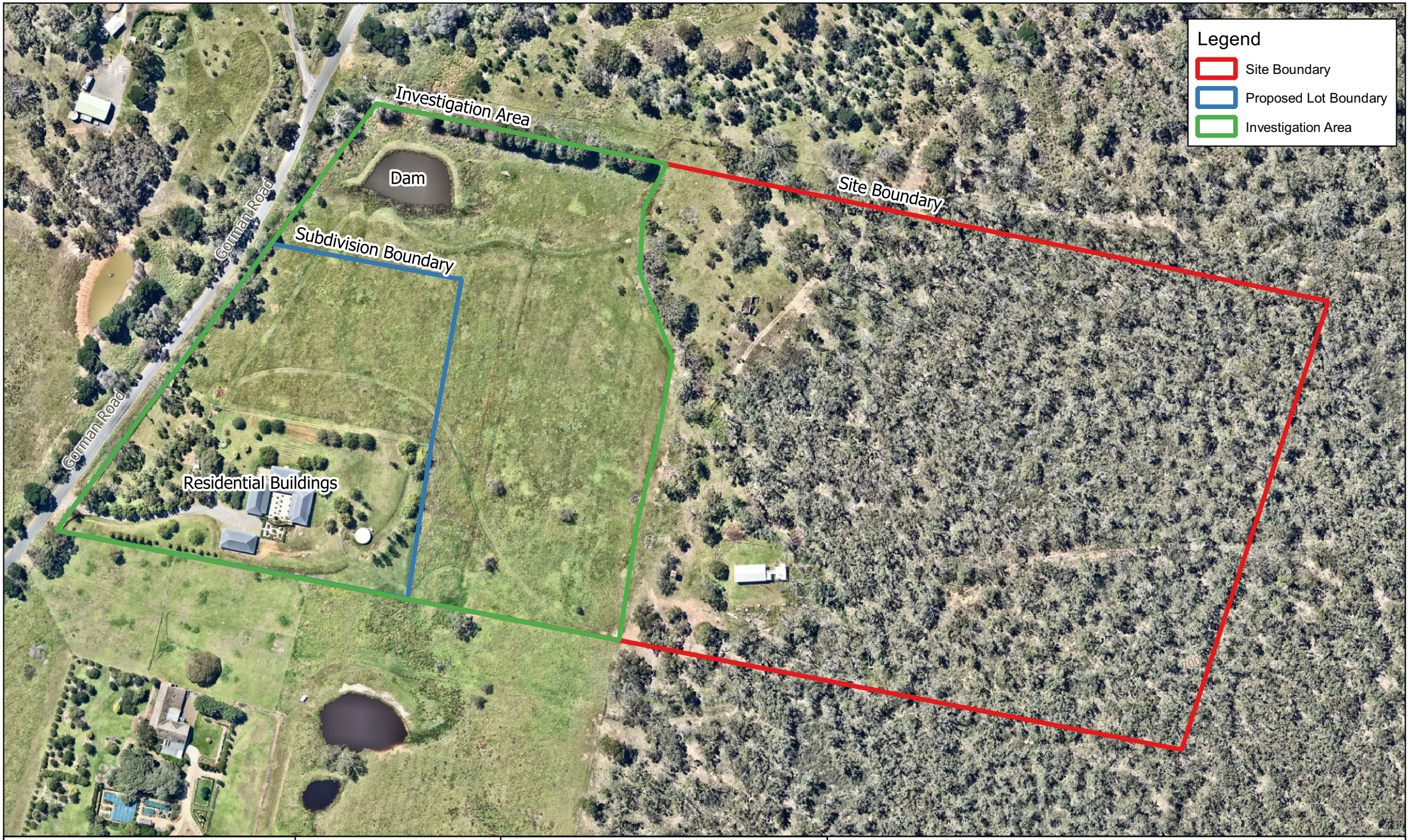
lanterra consulting

Unit 13/71 Leichhardt Street, Kingston, ACT2604

ABN 30 629 182 823

FIGURE 1: Site Location Plan

PROJECT No:	P24065
PROJECT:	Detailed Site Investigation
LOCATION:	158 Gorman Road, Goulburn
CLIENT:	J & B Hoskins



0 40 80 m

N

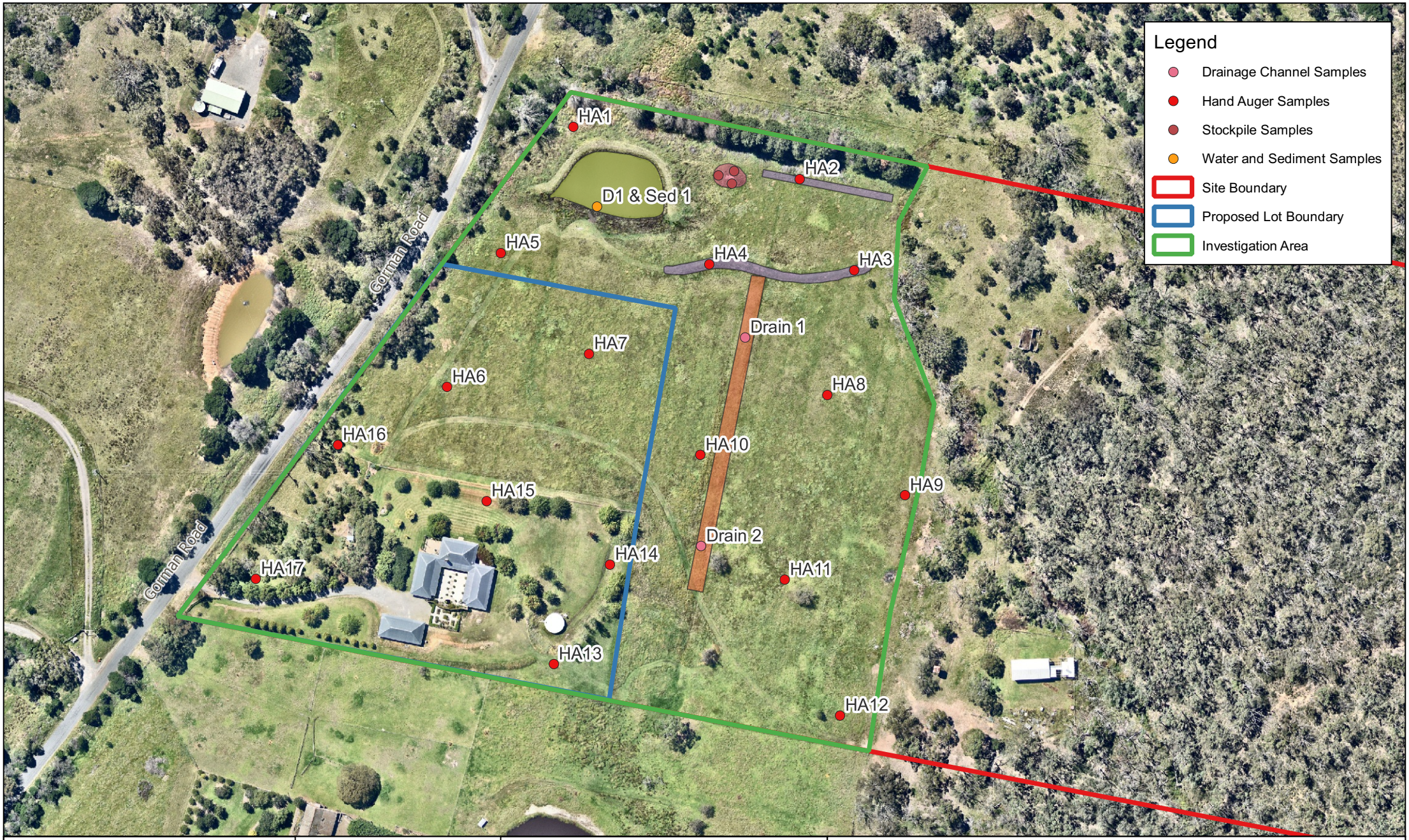
Image Source: Nearmap March 2024

Coordinate System: GDA 2020 MGA Zone 55

lanterra consulting
Unit 13/71 Leichhardt Street, Kingston, ACT2604
ABN 30 629 182 823

FIGURE 2: Detailed Site Plan

PROJECT No:	P24605
PROJECT:	Detailed Site Investigation
LOCATION:	158 Gorman Road, Goulburn
CLIENT:	J & B Hoskins



0 40 80 m

Image Source: Nearmap March 2024

Coordinate System: GDA 2020 MGA Zone 55

N

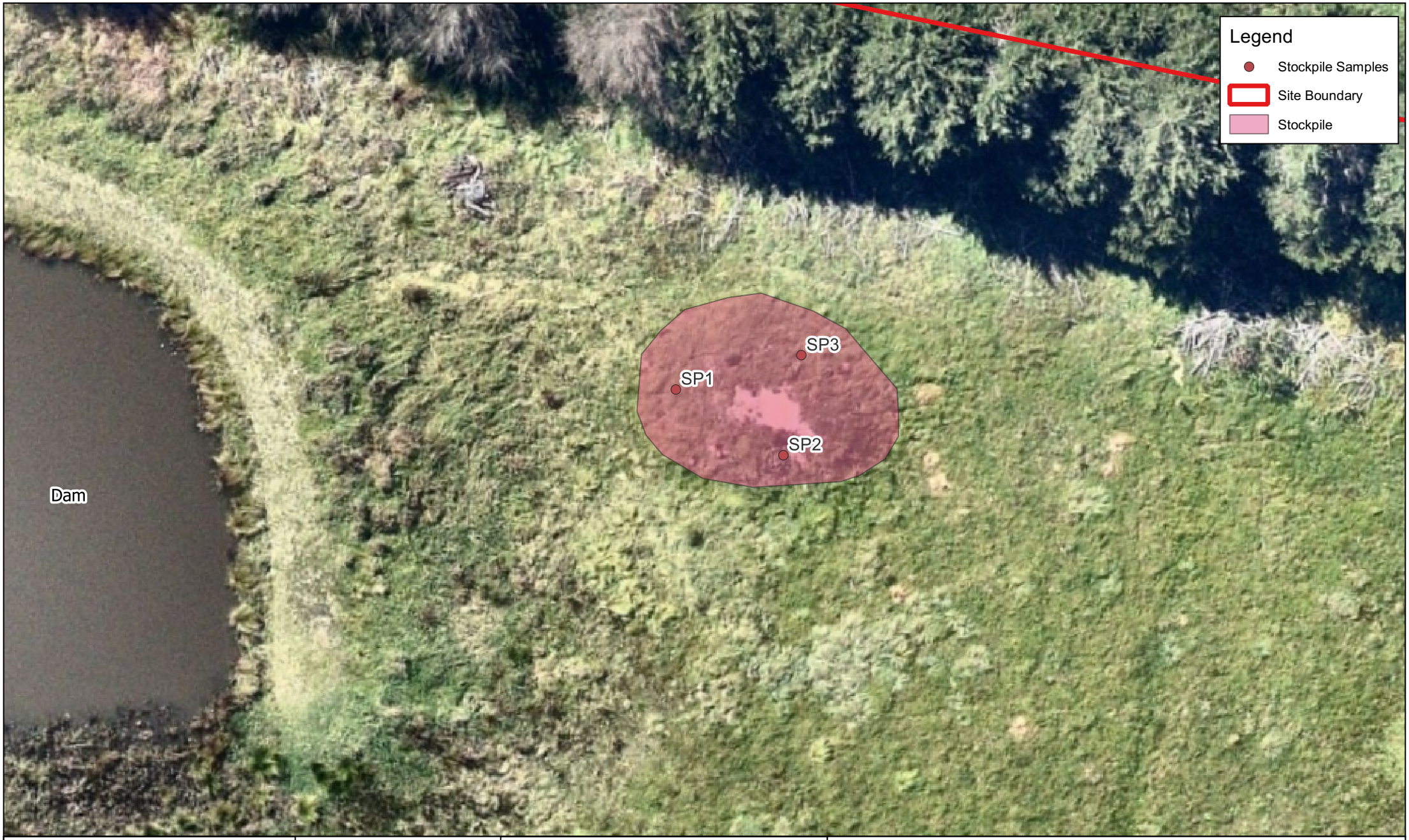
lanterra consulting

Unit 13/71 Leichhardt Street, Kingston, ACT2604

ABN 30 629 182 823

FIGURE 3: AECs and Sample Plan

PROJECT No:	P24605
PROJECT:	Detailed Site Investigation
LOCATION:	158 Gorman Road, Goulburn
CLIENT:	J & B Hoskins



0 5 10 m

Image Source: Nearmap March 2024

Coordinate System: GDA 2020 MGA Zone 55

N

lanterra consulting

Unit 13/71 Leichhardt Street, Kingston, ACT2604

ABN 30 629 182 823

FIGURE 4: Stockpile Sample Plan

PROJECT No:	P24605
PROJECT:	Detailed Site Investigation
LOCATION:	158 Gorman Road, Goulburn
CLIENT:	J & B Hoskins

Appendix B

Laboratory Data Summary Table

P24065 - Detailed Site Investigation, Gorman Road, Goulburn

Table 1: Analytical Results

						Field_ID	HA1 0.0-0.1	HA2 0.0-0.1	HA3 0.0-0.1	HA4 0.0-0.1	HA5 0.0-0.1	HA6 0.0-0.1	HA7 0.0-0.1	HA8 0.0-0.1	HA9 0.0-0.1	HA10 0.0-0.1	HA11 0.0-0.1
						Depth m											
						Sampled-date	23/04/2024	23/4/2024	23/4/2024	23/4/2024	23/4/2024	23/4/2024	23/4/2024	23/4/2024	23/4/2024	23/4/2024	23/4/2024
						Fill/Natural											
				ASC NEPM (2013) EIL/ESL Urban Residential and Public Open Space	ASC NEPM (2013) HSL A (mg/kg) 0.0-1.0m/1.0-2.0m/2.0-4.0m	ASC NEPM (2013) HIL A											
Method_Type	**ChemName**	**Units**	**EQL**														
Metals in soil	Arsenic, As	mg/kg	1	100		100	**5**	**6**	**4**	**2**	**10**	**4**	**2**	**9**	**6**	**6**	**5**
	Cadmium, Cd	mg/kg	0.3			20	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
	Chromium, Cr	mg/kg	0.3	490		100	**12**	**4.8**	**4.6**	**4.6**	**7.6**	**11**	**5.6**	**3.5**	**3.2**	**9.8**	**3.8**
	Copper, Cu	mg/kg	0.5	180		6000	**21**	**14**	**11**	**7**	**18**	**20**	**17**	**13**	**7.1**	**12**	**7**
	Lead, Pb	mg/kg	1	1100		300	**38**	**31**	**27**	**18**	**59**	**21**	**26**	**48**	**37**	**59**	**26**
	Nickel, Ni	mg/kg	0.5	120		400	**2.5**	**1**	**0.8**	**0.7**	**1.7**	**1.7**	**1.1**	**0.9**	**0.6**	**1.3**	**0.6**
	Zinc, Zn	mg/kg	2	430		7400	**190**	**6.9**	**11**	**9.3**	**15**	**17**	**9.4**	**7.5**	**3.8**	**18**	**8.5**
	Mercury	mg/kg	0.05			40	**0.11**	**0.07**	**0.06**	<0.05	**0.07**	<0.05	<0.05	<0.05	<0.05	**0.07**	<0.05
Organochlorine Pesticides	Hexachlorobenzene (HCB)	mg/kg	0.1			10	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Lindane	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
	Heptachlor	mg/kg	0.1			6	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Aldrin	mg/kg	0.1			6	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<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	<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	<0.1	<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	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Alpha Endosulfan	mg/kg	0.2			270	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Gamma Chlordane	mg/kg	0.1			50	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Alpha Chlordane	mg/kg	0.1			50	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<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	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Dieldrin	mg/kg	0.2			6	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Endrin	mg/kg	0.2			10	<0.2	<0.2	<0.2	<0.2	<0.2	<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	<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	<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	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	p,p'-DDD	mg/kg	0.1			240	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	p,p'-DDT	mg/kg	0.1	180		240	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Endrin Aldehyde	mg/kg	0.1			10	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Methoxychlor	mg/kg	0.1			300	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<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	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Mirex	mg/kg	0.1			10	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Organophosphorus Pesticides	Dichlorvos	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Dimethoate	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Diazinon (Dimpylate)	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Fenitrothion	mg/kg	0.2				<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Malathion	mg/kg	0.2				<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2			160	<0.2	<0.2	<0.2	<0.2	<0.2	<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	<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	<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	<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	<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	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
PAHs in Soil	Naphthalene	mg/kg	0.1	170	S/NL/NL		<0.1	<0.1	<0.1	<0.1	<0.1	<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	<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	<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	<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	<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	<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	<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	<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	<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	<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	<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	<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	<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	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Benzo(a)pyrene	mg/kg	0.1	0.7			<0.1	<0.1	<0.1	<0.1	<0.1	<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	<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	<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	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2			3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3			3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
	Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2			3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Total PAH (18)	mg/kg	0.8			300	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8

P24065 - Detailed Site Investigation, Gorman Road, Goulburn

Table 1: Analytical Results

						Field_ID	HA1 0.0-0.1	HA2 0.0-0.1	HA3 0.0-0.1	HA4 0.0-0.1	HA5 0.0-0.1	HA6 0.0-0.1	HA7 0.0-0.1	HA8 0.0-0.1	HA9 0.0-0.1	HA10 0.0-0.1	HA11 0.0-0.1
						Depth m											
						Sampled-date	23/04/2024	23/04/2024	23/04/2024	23/04/2024	23/04/2024	23/04/2024	23/04/2024	23/04/2024	23/04/2024	23/04/2024	23/04/2024
						Fill/Natural											
				ASC NEPM (2013) EIL/ESL Urban Residential and Public Open Space	ASC NEPM (2013) HSL A (mg/kg) 0.0-1.0m/1.0-2.0m/2.0-4.0m	ASC NEPM (2013) HIL A											
Method_Type	**ChemName**	**Units**	**EQL**														
PCBs in Soil	Arochlor 1016	mg/kg	0.2				<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Arochlor 1221	mg/kg	0.2				<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Arochlor 1232	mg/kg	0.2				<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Arochlor 1242	mg/kg	0.2				<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Arochlor 1248	mg/kg	0.2				<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Arochlor 1254	mg/kg	0.2				<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Arochlor 1260	mg/kg	0.2				<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Arochlor 1262	mg/kg	0.2				<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Arochlor 1268	mg/kg	0.2				<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Total PCBs (Arochlors)	mg/kg	1			1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
TRH Soil C10-C40 NEPM	TRH C10-C14	mg/kg	20				<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
	TRH C15-C28	mg/kg	45				<45	<45	<45	<45	<45	<45	<45	<45	<45	<45	<45
	TRH C29-C36	mg/kg	45				<45	<45	**57**	<45	<45	**84**	<45	<45	<45	<45	<45
	TRH C37-C40	mg/kg	100				<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
	TRH >C10-C16	mg/kg	25				<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25
	TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	120	280/NL/NL		<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25
	TRH >C16-C34 (F3)	mg/kg	90	1300			<90	<90	<90	<90	<90	**100**	<90	<90	<90	<90	<90
	TRH >C34-C40 (F4)	mg/kg	120	5600			<120	<120	<120	<120	<120	<120	<120	<120	<120	<120	<120
	TRH C10-C36 Total	mg/kg	110				<110	<110	<110	<110	<110	<110	<110	<110	<110	<110	<110
	TRH >C10-C40 Total (F bands)	mg/kg	210				<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210
BTEX + VOC	Benzene	mg/kg	0.1	65	0.7/1/2		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Toluene	mg/kg	0.1	105	480/NL/NL/NL		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Ethylbenzene	mg/kg	0.1	125	NL/NL/NL		<0.1	<0.1	<0.1	<0.1	<0.1	<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	<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	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Total Xylenes	mg/kg	0.3	45	110/310/NL		<0.3	<0.3	<0.3	<0.3	<0.3	<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	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
	Benzene (F0)	mg/kg	20		0.7/1/2		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	TRH C6-C9	mg/kg	0.1				<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
	TRH C6-C10	mg/kg	25				<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25
	TRH C6-C10 minus BTEX (F1)	mg/kg	25	180	50/90/150		<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25
Speciated Phenol	Phenol	mg/kg	0.5			3000	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	2-methyl phenol (o-cresol)	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	3/4-methyl phenol (m/p-cresol)	mg/kg	1				<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Total Cresol	mg/kg	1.5			400	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
	2-chlorophenol	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	2,4-dimethylphenol	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	2,6-dichlorophenol	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	2,4-dichlorophenol	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	2,4,6-trichlorophenol	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	2-nitrophenol	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	4-nitrophenol	mg/kg	1				<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	2,4,5-trichlorophenol	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1				<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Pentachlorophenol	mg/kg	0.5			100	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	2,4-dinitrophenol	mg/kg	2				<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
	4-chloro-3-methylphenol	mg/kg	2				<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2

P24065 - Detailed Site Investigation, Gorman Road, Goulburn

Table 1: Analytical Results

							Field_ID	HA12 0.0-0.1	HA13 0.0-0.1	HA14 0.0-0.1	HA15 0.0-0.1	HA16 0.0-0.1	HA17 0.0-0.1	SP1	SP2	SP3	Drain 1	Drain 2	Sed 1
							Depth m												
							Sampled-date	23/4/2024	23/4/2024	23/4/2024	23/4/2024	23/4/2024	23/4/2024	23/4/2024	23/4/2024	23/4/2024	23/4/2024	23/4/2024	23/4/2024
							Fill/Natural												
					ASC NEPM (2013) EIL/ESL Urban Residential and Public Open Space	ASC NEPM (2013) HSL A (mg/kg) 0.0-1.0m/1.0-2.0m/2.0-4.0m	ASC NEPM (2013) HIL A													
Method_Type	**ChemName**	**Units**	**EQL**																
Metals in soil	Arsenic, As	mg/kg	1		100		100	**2**	**3**	**6**	**2**	**4**	**5**	**12**	**4**	**7**	**4**	**4**	**2**
	Cadmium, Cd	mg/kg	0.3				20	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
	Chromium, Cr	mg/kg	0.3		490		100	**5.3**	**4.7**	**6.3**	**4.9**	**13**	**14**	**6.3**	**5.2**	**7**	**6.6**	**6.6**	**4.1**
	Copper, Cu	mg/kg	0.5		180		6000	**8**	**15**	**17**	**26**	**29**	**42**	**20**	**17**	**16**	**6.5**	**14**	**10**
	Lead, Pb	mg/kg	1		1100		300	**17**	**32**	**53**	**25**	**23**	**28**	**55**	**32**	**43**	**26**	**40**	**22**
	Nickel, Ni	mg/kg	0.5		120		400	**0.9**	**1**	**1.6**	**1**	**2.1**	**2.1**	**4**	**1.2**	**1.7**	**1.5**	**1.8**	**1.1**
	Zinc, Zn	mg/kg	2		430		7400	**18**	**22**	**13**	**8.3**	**22**	**40**	**13**	**13**	**9.2**	**15**	**31**	**18**
	Mercury	mg/kg	0.05				40	<0.05	**0.08**	**0.1**	<0.05	**0.07**	**0.05**	**0.11**	**0.08**	**0.09**	<0.05	**0.13**	<0.05
Organochlorine Pesticides	Hexachlorobenzene (HCB)	mg/kg	0.1				10	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Alpha BHC	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
	Lindane	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
	Heptachlor	mg/kg	0.1				6	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Aldrin	mg/kg	0.1				6	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Beta BHC	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
	Delta BHC	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
	Heptachlor epoxide	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
	o,p'-DDE	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
	Alpha Endosulfan	mg/kg	0.2				270	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Gamma Chlordane	mg/kg	0.1				50	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Alpha Chlordane	mg/kg	0.1				50	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.1	<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	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Dieldrin	mg/kg	0.2				6	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Endrin	mg/kg	0.2				10	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<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	<0.1	<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	<0.1	<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	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	p,p'-DDD	mg/kg	0.1				240	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	p,p'-DDT	mg/kg	0.1		180		240	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Endrin Aldehyde	mg/kg	0.1				10	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Methoxychlor	mg/kg	0.1				300	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.1	<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	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Mirex	mg/kg	0.1				10	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Organophosphorus Pesticides	Dichlorvos	mg/kg	0.5					<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Dimethoate	mg/kg	0.5					<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Diazinon (Dimpylate)	mg/kg	0.5					<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Fenitrothion	mg/kg	0.2					<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Malathion	mg/kg	0.2					<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2				160	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<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	<0.2	<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	<0.2	<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	<0.5	<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	<0.2	<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	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
PAHs in Soil	Naphthalene	mg/kg	0.1		170	5/NL/NL		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.1	<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	<0.1	<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	<0.1	<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	<0.1	<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	<0.1	<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	<0.1	<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	<0.1	<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	<0.1	<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	<0.1	<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	<0.1	<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	<0.1	<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	<0.1	<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	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Benzo(a)pyrene	mg/kg	0.1		0.7			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Indeno(1,2,3-cd)pyrene	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
	Dibenzo(ah)anthracene	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
	Benzo(ghi)perylene	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
	Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2				3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3				3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
	Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2				3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Total PAH (18)	mg/kg	0.8				300	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8

P24065 - Detailed Site Investigation, Gorman Road, Goulburn

Table 1: Analytical Results

							Field_ID	HA12 0.0-0.1	HA13 0.0-0.1	HA14 0.0-0.1	HA15 0.0-0.1	HA16 0.0-0.1	HA17 0.0-0.1	SP1	SP2	SP3	Drain 1	Drain 2	Sed 1
							Depth m												
							Sampled-date	23/4/2024	23/4/2024	23/4/2024	23/4/2024	23/4/2024	23/4/2024	23/4/2024	23/4/2024	23/4/2024	23/4/2024	23/4/2024	23/4/2024
							Fill/Natural												
				ASC NEPM (2013) EIL/ESL Urban Residential and Public Open Space	ASC NEPM (2013) HSL A (mg/kg) 0.0-1.0m/1.0-2.0m/2.0-4.0m	ASC NEPM (2013) HIL A													
Method_Type	**ChemName**	**Units**	**EQL**																
PCBs in Soil	Arochlor 1016	mg/kg	0.2				<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Arochlor 1221	mg/kg	0.2				<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Arochlor 1232	mg/kg	0.2				<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Arochlor 1242	mg/kg	0.2				<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Arochlor 1248	mg/kg	0.2				<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Arochlor 1254	mg/kg	0.2				<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Arochlor 1260	mg/kg	0.2				<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Arochlor 1262	mg/kg	0.2				<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Arochlor 1268	mg/kg	0.2				<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Total PCBs (Arochlors)	mg/kg	1			1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
TRH Soil C10-C40 NEPM	TRH C10-C14	mg/kg	20				<20	<20	<20	<20	**30**	<20	<20	<20	<20	<20	<20	<20	<20
	TRH C15-C28	mg/kg	45				<45	<45	<45	<45	**72**	<45	<45	<45	<45	<45	<45	<45	<45
	TRH C29-C36	mg/kg	45				<45	<45	<45	<45	**110**	<45	<45	<45	**50**	<45	<45	<45	<45
	TRH C37-C40	mg/kg	100				<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
	TRH >C10-C16	mg/kg	25				<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25
	TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	120	280/NL/NL		<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25
	TRH >C16-C34 (F3)	mg/kg	90	1300			<90	<90	<90	<90	**160**	<90	<90	<90	<90	<90	<90	<90	<90
	TRH >C34-C40 (F4)	mg/kg	120	5600			<120	<120	<120	<120	<120	<120	<120	<120	<120	<120	<120	<120	<120
	TRH C10-C36 Total	mg/kg	110				<110	<110	<110	<110	**210**	<110	<110	<110	<110	<110	<110	<110	<110
	TRH >C10-C40 Total (F bands)	mg/kg	210				<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210
BTEX + VOC	Benzene	mg/kg	0.1	65	0.7/1/2		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Toluene	mg/kg	0.1	105	480/NL/NL/NL		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	**1.1**
	Ethylbenzene	mg/kg	0.1	125	NL/NL/NL		<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
	m/p-xylene	mg/kg	0.2				<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	o-xylene	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
	Total Xylenes	mg/kg	0.3	45	110/310/NL		<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<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	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	**1.1**
	Benzene (F0)	mg/kg	20		0.7/1/2		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	TRH C6-C9	mg/kg	0.1				<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
	TRH C6-C10	mg/kg	25				<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25
	TRH C6-C10 minus BTEX (F1)	mg/kg	25	180	50/90/150		<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25
Speciated Phenol	Phenol	mg/kg	0.5			3000	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	2-methyl phenol (o-cresol)	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	3/4-methyl phenol (m/p-cresol)	mg/kg	1				<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Total Cresol	mg/kg	1.5			400	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
	2-chlorophenol	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	2,4-dimethylphenol	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	2,6-dichlorophenol	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	2,4-dichlorophenol	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	2,4,6-trichlorophenol	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	2-nitrophenol	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	4-nitrophenol	mg/kg	1				<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	2,4,5-trichlorophenol	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1				<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Pentachlorophenol	mg/kg	0.5			100	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	2,4-dinitrophenol	mg/kg	2				<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
	4-chloro-3-methylphenol	mg/kg	2				<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2

P24065 - Detailed Site Investigation, Gorman Road, Goulburn

Table 2: Water Analytical Results

							Field_ID	D1
							Depth m	-
							Sampled-date	23/4/2024
							Type	Water
				ANZEC 2000 Recreational Water Quality and Aesthetics (mg/L)	ANZECC 2000 Long Term Irrigation Levels (mg/L)	ANZG 2018 Drinking Water Guidelines (mg/L)		
Method_Type	**ChemName**	**Units**	**EQL**					
Metals	Arsenic, As	µg/L	1	50	100	1	**2**	
	Cadmium, Cd	µg/L	0.1	5	10	0.1	<0.0001	
	Chromium, Cr	µg/L	1	50	100	-	**4**	
	Copper, Cu	µg/L	1	1000	200	1.4	**7**	
	Lead, Pb	µg/L	1	50	2000	3.4	**3**	
	Nickel, Ni	µg/L	1	100	200	1	**2**	
	Zinc, Zn	µg/L	5	5000	2000	5	**14**	
	Mercury	mg/L	0	1	2	0.1	<0.0001	
PAHs	Naphthalene	µg/L	0.1			16	<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			2	<0.1	
	Anthracene	µg/L	0.1			0.4	<0.1	
	Fluoranthene	µg/L	0.1				<0.1	
	Pyrene	µg/L	0.1				<0.1	
	Benzo(a)anthracene	µg/L	0.1				<0.1	
	Chrysene	µg/L	0.1				<0.1	
	Benzo(b&j)fluoranthene	µg/L	0.1				<0.1	
	Benzo(k)fluoranthene	µg/L	0.1				<0.1	
	Benzo(a)pyrene	µg/L	0.1			0.2	<0.1	
	Indeno(1,2,3-cd)pyrene	µg/L	0.1				<0.1	
	Dibenzo(ah)anthracene	µg/L	0.1				<0.1	
	Benzo(ghi)perylene	µg/L	0.1				<0.1	
	Total PAHs	µg/L	1				<1	
PCBs	Arochlor 1016	µg/L	1				<1	
	Arochlor 1221	µg/L	1				<1	
	Arochlor 1232	µg/L	1				<1	
	Arochlor 1242	µg/L	1				<1	
	Arochlor 1248	µg/L	1				<1	
	Arochlor 1254	µg/L	1				<1	
	Arochlor 1260	µg/L	1				<1	
	Arochlor 1262	µg/L	1				<1	
	Arochlor 1268	µg/L	1				<1	
	Total PCBs (Arochlors)	µg/L	5				<5	
TRH C10-C40 NEPM	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-C36 Total	µg/L	320				<320	
BTEX + VOC	Benzene	µg/L	0.5	10		950	<0.5	
	Toluene	µg/L	0.5			180	<0.5	
	Ethylbenzene	µg/L	0.5			80	<0.5	
	m/p-xylene	µg/L	1			80	<1	
	o-xylene	µg/L	0.5			350	<0.5	
	Total Xylenes	µg/L	1.5				<1.5	
	Total BTEX	µg/L	3				<3	
	Benzene (F0)	µg/L	0.5				<0.5	
	TRH C6-C9	µg/L	40				<40	
	TRH C6-C10	µg/L	50				<50	
	TRH C6-C10 minus BTEX (F1)	µg/L	50				<50	
Speciated Phenol	Phenol	µg/L	0.5				<0.5	
	2-methyl phenol (o-cresol)	µg/L	0.5				<0.5	
	3/4-methyl phenol (m/p-cresol)	µg/L	1				<1	
	Total Cresol	µg/L	1.5				<1.5	
	2-chlorophenol	µg/L	0.5				<0.5	
	2,4-dimethylphenol	µg/L	0.5				<0.5	
	2,6-dichlorophenol	µg/L	0.5				<0.5	
	2,4-dichlorophenol	µg/L	0.5				<0.5	
	2,4,6-trichlorophenol	µg/L	0.5				<0.5	
	2-nitrophenol	µg/L	0.5				<0.5	
	4-nitrophenol	µg/L	1				<1	
	2,4,5-trichlorophenol	µg/L	0.5				<0.5	
	2,3,4,6/2,3,5,6-tetrachlorophenol	µg/L	1				<1	
	Pentachlorophenol	µg/L	0.5				<0.5	
	2,4-dinitrophenol	µg/L	2				<2	
	4-chloro-3-methylphenol	µg/L	2				<2	

		Sample Name		HA7 0.0-0.1	QC1	RPD	HA15 0.0-0.1	QC3	RPD
		Depth (m)		0.0-0.1			0.0-0.1		
		Sampled Date		23/4/2024	23/4/2024		23/4/2024	23/4/2024	
		Sample Type		Soil	Soil		Soil	Soil	
Method_Type	**ChemName**	**Units**	**EQL**						
Heavy Metals in Soil	Arsenic, As	mg/kg	1	**2**	**2**	**0%**	**2**	**2**	**0%**
	Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	**0%**	<0.3	<0.3	-
	Chromium, Cr	mg/kg	0.5	**5.6**	**5.4**	**4%**	**4.9**	**4.8**	**2%**
	Copper, Cu	mg/kg	0.5	**17**	**17**	**0%**	**26**	**23**	**12%**
	Lead, Pb	mg/kg	1	**26**	**22**	**17%**	**25**	**24**	**4%**
	Nickel, Ni	mg/kg	0.5	**1.1**	**1**	**10%**	**1**	**1**	**0%**
	Zinc, Zn	mg/kg	2	**9.4**	**7.2**	**27%**	**8.3**	**8.7**	**5%**
	Mercury	mg/kg	0.05	<0.05	<0.05	**0%**	<0.05	<0.05	-
OCP (Organochlorine Pesticides) in Soil	Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	**N.A.**	<0.1	<0.1	**N.A.**
	Alpha BHC	mg/kg	0.1	<0.1	<0.1	**N.A.**	<0.1	<0.1	**N.A.**
	Lindane (gamma BHC)	mg/kg	0.1	<0.1	<0.1	**N.A.**	<0.1	<0.1	**N.A.**
	Heptachlor	mg/kg	0.1	<0.1	<0.1	**N.A.**	<0.1	<0.1	**N.A.**
	Aldrin	mg/kg	0.1	<0.1	<0.1	**N.A.**	<0.1	<0.1	**N.A.**
	Beta BHC	mg/kg	0.1	<0.1	<0.1	**N.A.**	<0.1	<0.1	**N.A.**
	Delta BHC	mg/kg	0.1	<0.1	<0.1	**N.A.**	<0.1	<0.1	**N.A.**
	Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	**N.A.**	<0.1	<0.1	**N.A.**
	o,p'-DDE	mg/kg	0.1	<0.1	<0.1	**N.A.**	<0.1	<0.1	**N.A.**
	Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	**N.A.**	<0.2	<0.2	**N.A.**
	Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	**N.A.**	<0.1	<0.1	**N.A.**
	Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	**N.A.**	<0.1	<0.1	**N.A.**
	trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	**N.A.**	<0.1	<0.1	**N.A.**
	p,p'-DDE	mg/kg	0.1	<0.1	<0.1	**N.A.**	<0.1	<0.1	**N.A.**
	Dieldrin	mg/kg	0.2	<0.2	<0.2	**N.A.**	<0.2	<0.2	**N.A.**
	Endrin	mg/kg	0.2	<0.2	<0.2	**N.A.**	<0.2	<0.2	**N.A.**
	o,p'-DDD	mg/kg	0.1	<0.1	<0.1	**N.A.**	<0.1	<0.1	**N.A.**
	o,p'-DDT	mg/kg	0.1	<0.1	<0.1	**N.A.**	<0.1	<0.1	**N.A.**
	Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	**N.A.**	<0.2	<0.2	**N.A.**
	p,p'-DDD	mg/kg	0.1	<0.1	<0.1	**N.A.**	<0.1	<0.1	**N.A.**
	p,p'-DDT	mg/kg	0.1	<0.1	<0.1	**N.A.**	<0.1	<0.1	**N.A.**
	Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	**N.A.**	<0.1	<0.1	**N.A.**
	Endrin aldehyde	mg/kg	0.1	<0.1	<0.1	**N.A.**	<0.1	<0.1	**N.A.**
	Methoxychlor	mg/kg	0.1	<0.1	<0.1	**N.A.**	<0.1	<0.1	**N.A.**
	Endrin ketone	mg/kg	0.1	<0.1	<0.1	**N.A.**	<0.1	<0.1	**N.A.**
	Isodrin	mg/kg	0.1	<0.1	<0.1	**N.A.**	<0.1	<0.1	**N.A.**
	Mirex	mg/kg	0.1	<0.1	<0.1	**N.A.**	<0.1	<0.1	**N.A.**
	Total CLP OC Pesticides	mg/kg	1	<0.1	<0.1	**N.A.**	<1	<0.1	**N.A.**
OPP (Organophosphorus Pesticides) in Soil	Dichlorvos	mg/kg	0.5	<0.5	<0.5	**N.A.**	<0.5	<0.5	**N.A.**
	Dimethoate	mg/kg	0.5	<0.5	<0.5	**N.A.**	<0.5	<0.5	**N.A.**
	Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	**N.A.**	<0.5	<0.5	**N.A.**
	Fenitrothion	mg/kg	0.2	<0.2	<0.2	**N.A.**	<0.2	<0.2	**N.A.**
	Malathion	mg/kg	0.2	<0.2	<0.2	**N.A.**	<0.2	<0.2	**N.A.**
	Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	**N.A.**	<0.2	<0.2	**N.A.**
	Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	**N.A.**	<0.2	<0.2	**N.A.**
	Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	**N.A.**	<0.2	<0.2	**N.A.**
	Methidathion	mg/kg	0.5	<0.5	<0.5	**N.A.**	<0.5	<0.5	**N.A.**
	Ethion	mg/kg	0.2	<0.2	<0.2	**N.A.**	<0.2	<0.2	**N.A.**
	Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	**N.A.**	<0.2	<0.2	**N.A.**
	Total OP Pesticides	mg/kg	1.7	<1.7	<1.7	**N.A.**	<1.7	<1.7	**N.A.**
PAHs (Polynuclear Aromatic Hydrocarbons) in Soil	Naphthalene	mg/kg	0.1	<0.1	<0.1	**0%**	<0.1	<0.1	**0%**
	2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	**0%**	<0.1	<0.1	**0%**
	1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	**0%**	<0.1	<0.1	**0%**
	Acenaphthylene	mg/kg	0.1	<0.1	<0.1	**N.A.**	<0.1	<0.1	**N.A.**
	Acenaphthene	mg/kg	0.1	<0.1	<0.1	**0%**	<0.1	<0.1	**0%**
	Fluorene	mg/kg	0.1	<0.1	<0.1	**0%**	<0.1	<0.1	**0%**
	Phenanthrene	mg/kg	0.1	<0.1	<0.1	**#VALUE!**	<0.1	<0.1	**#VALUE!**
	Anthracene	mg/kg	0.1	<0.1	<0.1	**0%**	<0.1	<0.1	**0%**
	Fluoranthene	mg/kg	0.1	<0.1	<0.1	**#VALUE!**	<0.1	<0.1	**#VALUE!**
	Pyrene	mg/kg	0.1	<0.1	<0.1	**#VALUE!**	<0.1	<0.1	**#VALUE!**
	Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	**#VALUE!**	<0.1	<0.1	**#VALUE!**
	Chrysene	mg/kg	0.1	<0.1	<0.1	**#VALUE!**	<0.1	<0.1	**#VALUE!**
	Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	**#VALUE!**	<0.1	<0.1	**#VALUE!**
	Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	**0%**	<0.1	<0.1	**0%**
	Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	**#VALUE!**	<0.1	<0.1	**#VALUE!**
	Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	**#VALUE!**	<0.1	<0.1	**#VALUE!**
	Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	**0%**	<0.1	<0.1	**0%**
	Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	**#VALUE!**	<0.1	<0.1	**#VALUE!**
	Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	**#VALUE!**	<0.2	<0.2	**#VALUE!**
	Carcinogenic PAHs, BaP TEQ <LOR=L	TEQ (mg/kg)	0.3	<0.3	<0.3	**#VALUE!**	<0.3	<0.3	**#VALUE!**
	Carcinogenic PAHs, BaP TEQ <LOR=L	TEQ (mg/kg)	0.2	<0.2	<0.2	**#VALUE!**	<0.2	<0.2	**#VALUE!**
	Total PAH (18)	mg/kg	0.8	<0.8	<0.8	**#VALUE!**	<0.8	<0.8	**#VALUE!**
PCBs in Soil	Arochlor 1016	mg/kg	0.2	<0.2	<0.2	**N.A.**	<0.2	<0.2	**N.A.**
	Arochlor 1221	mg/kg	0.2	<0.2	<0.2	**N.A.**	<0.2	<0.2	**N.A.**
	Arochlor 1232	mg/kg	0.2	<0.2	<0.2	**N.A.**	<0.2	<0.2	**N.A.**
	Arochlor 1242	mg/kg	0.2	<0.2	<0.2	**N.A.**	<0.2	<0.2	**N.A.**
	Arochlor 1248	mg/kg	0.2	<0.2	<0.2	**N.A.**	<0.2	<0.2	**N.A.**
	Arochlor 1254	mg/kg	0.2	<0.2	<0.2	**N.A.**	<0.2	<0.2	**N.A.**
	Arochlor 1260	mg/kg	0.2	<0.2	<0.2	**N.A.**	<0.2	<0.2	**N.A.**
	Arochlor 1262	mg/kg	0.2	<0.2	<0.2	**N.A.**	<0.2	<0.2	**N.A.**
	Arochlor 1268	mg/kg	0.2	<0.2	<0.2	**N.A.**	<0.2	<0.2	**N.A.**
	Total PCBs (Arochlors)	mg/kg	1	<1	<1	**N.A.**	<1	<1	**N.A.**
TRH (Total Recoverable Hydrocarbons) in Soil	TRH C10-C14	mg/kg	20	<20	<20	**0%**	<20	<20	**0%**
	TRH C15-C28	mg/kg	45	<45	<45	**0%**	<45	<45	**0%**
	TRH C29-C36	mg/kg	45	<45	<45	**0%**	<45	<45	**0%**
	TRH >C10-C16	mg/kg	25	<25	<25	**0%**	<25	<25	**0%**
	TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	**0%**	<25	<25	**0%**
	TRH >C16-C34 (F3)	mg/kg	90	<90	<90	**0%**	<90	<90	**0%**
	TRH >C34-C40 (F4)	mg/kg	120	<120	<120	**0%**	<120	<120	**0%**
	TRH C10-C36 Total	mg/kg	110	<110	<110	**0%**	<110	<110	**0%**
	TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	**0%**	<210	<210	**0%**
BTEX + VOC	Benzene	mg/kg	0.1	<0.1	<0.1	**0%**	<0.1	<0.1	**0%**
	Toluene	mg/kg	0.1	<0.1	<0.1	**0%**	<0.1	<0.1	**0%**
	Ethylbenzene	mg/kg	0.1	<0.1	<0.1	**0%**	<0.1	<0.1	**0%**
	m/p-xylene	mg/kg	0.2	<0.2	<0.2	**0%**	<0.2	<0.2	**0%**
	o-xylene	mg/kg	0.1	<0.1	<0.1	**0%**	<0.1	<0.1	**0%**
	Total Xylenes	mg/kg	0.3	<0.3	<0.3	**0%**	<0.3	<0.3	**0%**
	Total BTEX	mg/kg	0.6	<0.6	<0.6	**0%**	<0.6	<0.6	**0%**
	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	**0%**	<0.1	<0.1	**0%**
	TRH C6-C9	mg/kg	20	<20	<20	**0%**	<20	<20	**0%**
	TRH C6-C10	mg/kg	25	<25	<25	**0%**	<25	<25	**0%**
	TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	**0%**	<25	<25	**0%**
Speciated Phenols in Soil	Phenol	mg/kg	0.5	<0.5	<0.5	**N.A.**	<0.5	<0.5	**N.A.**
	2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	**N.A.**	<0.5	<0.5	**N.A.**
	3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	**N.A.**	<1	<1	**N.A.**
	Total Cresol	mg/kg	1.5	<1.5	<1.5	**N.A.**	<1.5	<1.5	**N.A.**
	2-chlorophenol	mg/kg	0.5	<0.5	<0.5	**N.A.**	<0.5	<0.5	**N.A.**
	2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	**N.A.**	<0.5	<0.5	**N.A.**
	2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	**N.A.**	<0.5	<0.5	**N.A.**
	2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	**N.A.**	<0.5	<0.5	**N.A.**
	2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	**N.A.**	<0.5	<0.5	**N.A.**
	2-nitrophenol	mg/kg	0.5	<0.5	<0.5	**N.A.**	<0.5	<0.5	**N.A.**
	4-nitrophenol	mg/kg	1	<1	<1	**N.A.**	<1	<1	**N.A.**
	2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	**N.A.**	<0.5	<0.5	**N.A.**
	2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	**N.A.**	<1	<1	**N.A.**
	Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	**N.A.**	<0.5	<0.5	**N.A.**
	2,4-dinitrophenol	mg/kg	2	<2	<2	**N.A.**	<2	<2	**N.A.**
	4-chloro-3-methylphenol	mg/kg	2	<2	<2	**N.A.**	<2	<2	**N.A.**

Appendix C

Laboratory Reports, Sample Receipt and COC

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	CHRIS GUNTON
Client	LANTERRA CONSULTING PTY LTD
Address	UNIT 13 71 LEICHHARDT STREET KINGSTON ACT 2604
Telephone	0432 324 348
Facsimile	(Not specified)
Email	chris@lanterra.com.au
Project	**P24065 - Gorman Road, Goulburn**
Order Number	**P24065**
Samples	26

LABORATORY DETAILS

Manager	Huong Crawford
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE264243 R0**
Date Received	24/4/2024
Date Reported	2/5/2024

COMMENTS

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

SIGNATORIES

Akheeqar BENIAMEEN
Chemist

Bennet LO
Senior Chemist

Dong LIANG
Metals/Inorganics Team Leader

Ly Kim HA
Organic Section Head

Shane MCDERMOTT
Inorganic/Metals Chemist

Teresa NGUYEN
Organic Chemist

VOC's in Soil [AN433] Tested: 26/4/2024

PARAMETER	UOM	LOR	HA1 0.0-0.1 SOIL - 23/4/2024 SE264243.001	HA2 0.0-0.1 SOIL - 23/4/2024 SE264243.002	HA3 0.0-0.1 SOIL - 23/4/2024 SE264243.003	HA4 0.0-0.1 SOIL - 23/4/2024 SE264243.004	HA5 0.0-0.1 SOIL - 23/4/2024 SE264243.005
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
Naphthalene (VOC)*	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

PARAMETER	UOM	LOR	HA6 0.0-0.1 SOIL - 23/4/2024 SE264243.006	HA7 0.0-0.1 SOIL - 23/4/2024 SE264243.007	HA8 0.0-0.1 SOIL - 23/4/2024 SE264243.008	HA9 0.0-0.1 SOIL - 23/4/2024 SE264243.009	HA10 0.0-0.1 SOIL - 23/4/2024 SE264243.010
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
Naphthalene (VOC)*	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

PARAMETER	UOM	LOR	HA11 0.0-0.1 SOIL - 23/4/2024 SE264243.011	HA12 0.0-0.1 SOIL - 23/4/2024 SE264243.012	HA13 0.0-0.1 SOIL - 23/4/2024 SE264243.013	HA14 0.0-0.1 SOIL - 23/4/2024 SE264243.014	HA15 0.0-0.1 SOIL - 23/4/2024 SE264243.015
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
Naphthalene (VOC)*	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

PARAMETER	UOM	LOR	HA16 0.0-0.1 SOIL - 23/4/2024 SE264243.016	HA17 0.0-0.1 SOIL - 23/4/2024 SE264243.017	SP1 SOIL - 23/4/2024 SE264243.018	SP2 SOIL - 23/4/2024 SE264243.019	SP3 SOIL - 23/4/2024 SE264243.020
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene (VOC)*	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

VOC's in Soil [AN433] Tested: 26/4/2024 (continued)

PARAMETER	UOM	LOR	Drain 1 SOIL - 23/4/2024 SE264243.021	Drain 2 SOIL - 23/4/2024 SE264243.022	Sed 1 SOIL - 23/4/2024 SE264243.023	QC1 SOIL - 23/4/2024 SE264243.025	QC3 SOIL - 23/4/2024 SE264243.026
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	**1.1**	<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
Naphthalene (VOC)*	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	**1.1**	<0.6	<0.6

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 26/4/2024

PARAMETER	UOM	LOR	HA1 0.0-0.1 SOIL - 23/4/2024 SE264243.001	HA2 0.0-0.1 SOIL - 23/4/2024 SE264243.002	HA3 0.0-0.1 SOIL - 23/4/2024 SE264243.003	HA4 0.0-0.1 SOIL - 23/4/2024 SE264243.004	HA5 0.0-0.1 SOIL - 23/4/2024 SE264243.005
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	HA6 0.0-0.1 SOIL - 23/4/2024 SE264243.006	HA7 0.0-0.1 SOIL - 23/4/2024 SE264243.007	HA8 0.0-0.1 SOIL - 23/4/2024 SE264243.008	HA9 0.0-0.1 SOIL - 23/4/2024 SE264243.009	HA10 0.0-0.1 SOIL - 23/4/2024 SE264243.010
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	HA11 0.0-0.1 SOIL - 23/4/2024 SE264243.011	HA12 0.0-0.1 SOIL - 23/4/2024 SE264243.012	HA13 0.0-0.1 SOIL - 23/4/2024 SE264243.013	HA14 0.0-0.1 SOIL - 23/4/2024 SE264243.014	HA15 0.0-0.1 SOIL - 23/4/2024 SE264243.015
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	HA16 0.0-0.1 SOIL - 23/4/2024 SE264243.016	HA17 0.0-0.1 SOIL - 23/4/2024 SE264243.017	SP1 SOIL - 23/4/2024 SE264243.018	SP2 SOIL - 23/4/2024 SE264243.019	SP3 SOIL - 23/4/2024 SE264243.020
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	Drain 1 SOIL - 23/4/2024 SE264243.021	Drain 2 SOIL - 23/4/2024 SE264243.022	Sed 1 SOIL - 23/4/2024 SE264243.023	QC1 SOIL - 23/4/2024 SE264243.025	QC3 SOIL - 23/4/2024 SE264243.026
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
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

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 26/4/2024

PARAMETER	UOM	LOR	HA1 0.0-0.1 SOIL - 23/4/2024 SE264243.001	HA2 0.0-0.1 SOIL - 23/4/2024 SE264243.002	HA3 0.0-0.1 SOIL - 23/4/2024 SE264243.003	HA4 0.0-0.1 SOIL - 23/4/2024 SE264243.004	HA5 0.0-0.1 SOIL - 23/4/2024 SE264243.005
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	**57**	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	HA6 0.0-0.1 SOIL - 23/4/2024 SE264243.006	HA7 0.0-0.1 SOIL - 23/4/2024 SE264243.007	HA8 0.0-0.1 SOIL - 23/4/2024 SE264243.008	HA9 0.0-0.1 SOIL - 23/4/2024 SE264243.009	HA10 0.0-0.1 SOIL - 23/4/2024 SE264243.010
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	**84**	<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	**100**	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	HA11 0.0-0.1 SOIL - 23/4/2024 SE264243.011	HA12 0.0-0.1 SOIL - 23/4/2024 SE264243.012	HA13 0.0-0.1 SOIL - 23/4/2024 SE264243.013	HA14 0.0-0.1 SOIL - 23/4/2024 SE264243.014	HA15 0.0-0.1 SOIL - 23/4/2024 SE264243.015
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: 26/4/2024 (continued)

PARAMETER	UOM	LOR	HA16 0.0-0.1 SOIL - 23/4/2024 SE264243.016	HA17 0.0-0.1 SOIL - 23/4/2024 SE264243.017	SP1 SOIL - 23/4/2024 SE264243.018	SP2 SOIL - 23/4/2024 SE264243.019	SP3 SOIL - 23/4/2024 SE264243.020
TRH C10-C14	mg/kg	20	**30**	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	**72**	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	**110**	<45	<45	**50**	<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	**160**	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	**210**	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	Drain 1 SOIL - 23/4/2024 SE264243.021	Drain 2 SOIL - 23/4/2024 SE264243.022	Sed 1 SOIL - 23/4/2024 SE264243.023	QC1 SOIL - 23/4/2024 SE264243.025	QC3 SOIL - 23/4/2024 SE264243.026
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

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 26/4/2024

PARAMETER	UOM	LOR	HA1 0.0-0.1 SOIL - 23/4/2024 SE264243.001	HA2 0.0-0.1 SOIL - 23/4/2024 SE264243.002	HA3 0.0-0.1 SOIL - 23/4/2024 SE264243.003	HA4 0.0-0.1 SOIL - 23/4/2024 SE264243.004	HA5 0.0-0.1 SOIL - 23/4/2024 SE264243.005
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PARAMETER	UOM	LOR	HA6 0.0-0.1 SOIL - 23/4/2024 SE264243.006	HA7 0.0-0.1 SOIL - 23/4/2024 SE264243.007	HA8 0.0-0.1 SOIL - 23/4/2024 SE264243.008	HA9 0.0-0.1 SOIL - 23/4/2024 SE264243.009	HA10 0.0-0.1 SOIL - 23/4/2024 SE264243.010
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	**0.1**	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	**0.1**	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 26/4/2024 (continued)

PARAMETER	UOM	LOR	HA11 0.0-0.1 SOIL - 23/4/2024 SE264243.011	HA12 0.0-0.1 SOIL - 23/4/2024 SE264243.012	HA13 0.0-0.1 SOIL - 23/4/2024 SE264243.013	HA14 0.0-0.1 SOIL - 23/4/2024 SE264243.014	HA15 0.0-0.1 SOIL - 23/4/2024 SE264243.015
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*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PARAMETER	UOM	LOR	HA16 0.0-0.1 SOIL - 23/4/2024 SE264243.016	HA17 0.0-0.1 SOIL - 23/4/2024 SE264243.017	SP1 SOIL - 23/4/2024 SE264243.018	SP2 SOIL - 23/4/2024 SE264243.019	SP3 SOIL - 23/4/2024 SE264243.020
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	**0.1**
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	**0.1**
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 26/4/2024 (continued)

PARAMETER	UOM	LOR	Drain 1 SOIL - 23/4/2024 SE264243.021	Drain 2 SOIL - 23/4/2024 SE264243.022	Sed 1 SOIL - 23/4/2024 SE264243.023	QC1 SOIL - 23/4/2024 SE264243.025	QC3 SOIL - 23/4/2024 SE264243.026
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

Speciated Phenols in Soil [AN420] Tested: 24/4/2024

PARAMETER	UOM	LOR	HA1 0.0-0.1 SOIL - 23/4/2024 SE264243.001	HA2 0.0-0.1 SOIL - 23/4/2024 SE264243.002	HA3 0.0-0.1 SOIL - 23/4/2024 SE264243.003	HA4 0.0-0.1 SOIL - 23/4/2024 SE264243.004	HA5 0.0-0.1 SOIL - 23/4/2024 SE264243.005
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

PARAMETER	UOM	LOR	HA6 0.0-0.1 SOIL - 23/4/2024 SE264243.006	HA7 0.0-0.1 SOIL - 23/4/2024 SE264243.007	HA8 0.0-0.1 SOIL - 23/4/2024 SE264243.008	HA9 0.0-0.1 SOIL - 23/4/2024 SE264243.009	HA10 0.0-0.1 SOIL - 23/4/2024 SE264243.010
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

Speciated Phenols in Soil [AN420] Tested: 24/4/2024 (continued)

PARAMETER	UOM	LOR	HA11 0.0-0.1 SOIL - 23/4/2024 SE264243.011	HA12 0.0-0.1 SOIL - 23/4/2024 SE264243.012	HA13 0.0-0.1 SOIL - 23/4/2024 SE264243.013	HA14 0.0-0.1 SOIL - 23/4/2024 SE264243.014	HA15 0.0-0.1 SOIL - 23/4/2024 SE264243.015
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

PARAMETER	UOM	LOR	HA16 0.0-0.1 SOIL - 23/4/2024 SE264243.016	HA17 0.0-0.1 SOIL - 23/4/2024 SE264243.017	SP1 SOIL - 23/4/2024 SE264243.018	SP2 SOIL - 23/4/2024 SE264243.019	SP3 SOIL - 23/4/2024 SE264243.020
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

Speciated Phenols in Soil [AN420] Tested: 24/4/2024 (continued)

PARAMETER	UOM	LOR	Drain 1 SOIL - 23/4/2024 SE264243.021	Drain 2 SOIL - 23/4/2024 SE264243.022	Sed 1 SOIL - 23/4/2024 SE264243.023
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2

OC Pesticides in Soil [AN420] Tested: 26/4/2024

PARAMETER	UOM	LOR	HA1 0.0-0.1 SOIL - 23/4/2024 SE264243.001	HA2 0.0-0.1 SOIL - 23/4/2024 SE264243.002	HA3 0.0-0.1 SOIL - 23/4/2024 SE264243.003	HA4 0.0-0.1 SOIL - 23/4/2024 SE264243.004	HA5 0.0-0.1 SOIL - 23/4/2024 SE264243.005
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: 26/4/2024 (continued)

PARAMETER	UOM	LOR	HA6 0.0-0.1 SOIL - 23/4/2024 SE264243.006	HA7 0.0-0.1 SOIL - 23/4/2024 SE264243.007	HA8 0.0-0.1 SOIL - 23/4/2024 SE264243.008	HA9 0.0-0.1 SOIL - 23/4/2024 SE264243.009	HA10 0.0-0.1 SOIL - 23/4/2024 SE264243.010
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: 26/4/2024 (continued)

PARAMETER	UOM	LOR	HA11 0.0-0.1 SOIL - 23/4/2024 SE264243.011	HA12 0.0-0.1 SOIL - 23/4/2024 SE264243.012	HA13 0.0-0.1 SOIL - 23/4/2024 SE264243.013	HA14 0.0-0.1 SOIL - 23/4/2024 SE264243.014	HA15 0.0-0.1 SOIL - 23/4/2024 SE264243.015
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

OC Pesticides in Soil [AN420] Tested: 26/4/2024 (continued)

PARAMETER	UOM	LOR	HA16 0.0-0.1 SOIL - 23/4/2024 SE264243.016	HA17 0.0-0.1 SOIL - 23/4/2024 SE264243.017	SP1 SOIL - 23/4/2024 SE264243.018	SP2 SOIL - 23/4/2024 SE264243.019	SP3 SOIL - 23/4/2024 SE264243.020
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: 26/4/2024 (continued)

PARAMETER	UOM	LOR	Drain 1 SOIL - 23/4/2024 SE264243.021	Drain 2 SOIL - 23/4/2024 SE264243.022	Sed 1 SOIL - 23/4/2024 SE264243.023
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: 26/4/2024

PARAMETER	UOM	LOR	HA1 0.0-0.1 SOIL - 23/4/2024 SE264243.001	HA2 0.0-0.1 SOIL - 23/4/2024 SE264243.002	HA3 0.0-0.1 SOIL - 23/4/2024 SE264243.003	HA4 0.0-0.1 SOIL - 23/4/2024 SE264243.004	HA5 0.0-0.1 SOIL - 23/4/2024 SE264243.005
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

PARAMETER	UOM	LOR	HA6 0.0-0.1 SOIL - 23/4/2024 SE264243.006	HA7 0.0-0.1 SOIL - 23/4/2024 SE264243.007	HA8 0.0-0.1 SOIL - 23/4/2024 SE264243.008	HA9 0.0-0.1 SOIL - 23/4/2024 SE264243.009	HA10 0.0-0.1 SOIL - 23/4/2024 SE264243.010
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

PARAMETER	UOM	LOR	HA11 0.0-0.1 SOIL - 23/4/2024 SE264243.011	HA12 0.0-0.1 SOIL - 23/4/2024 SE264243.012	HA13 0.0-0.1 SOIL - 23/4/2024 SE264243.013	HA14 0.0-0.1 SOIL - 23/4/2024 SE264243.014	HA15 0.0-0.1 SOIL - 23/4/2024 SE264243.015
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

OP Pesticides in Soil [AN420] Tested: 26/4/2024 (continued)

PARAMETER	UOM	LOR	HA16 0.0-0.1 SOIL - 23/4/2024 SE264243.016	HA17 0.0-0.1 SOIL - 23/4/2024 SE264243.017	SP1 SOIL - 23/4/2024 SE264243.018	SP2 SOIL - 23/4/2024 SE264243.019	SP3 SOIL - 23/4/2024 SE264243.020
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

PARAMETER	UOM	LOR	Drain 1 SOIL - 23/4/2024 SE264243.021	Drain 2 SOIL - 23/4/2024 SE264243.022	Sed 1 SOIL - 23/4/2024 SE264243.023
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: 26/4/2024

PARAMETER	UOM	LOR	HA1 0.0-0.1 SOIL - 23/4/2024 SE264243.001	HA2 0.0-0.1 SOIL - 23/4/2024 SE264243.002	HA3 0.0-0.1 SOIL - 23/4/2024 SE264243.003	HA4 0.0-0.1 SOIL - 23/4/2024 SE264243.004	HA5 0.0-0.1 SOIL - 23/4/2024 SE264243.005
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

PARAMETER	UOM	LOR	HA6 0.0-0.1 SOIL - 23/4/2024 SE264243.006	HA7 0.0-0.1 SOIL - 23/4/2024 SE264243.007	HA8 0.0-0.1 SOIL - 23/4/2024 SE264243.008	HA9 0.0-0.1 SOIL - 23/4/2024 SE264243.009	HA10 0.0-0.1 SOIL - 23/4/2024 SE264243.010
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

PARAMETER	UOM	LOR	HA11 0.0-0.1 SOIL - 23/4/2024 SE264243.011	HA12 0.0-0.1 SOIL - 23/4/2024 SE264243.012	HA13 0.0-0.1 SOIL - 23/4/2024 SE264243.013	HA14 0.0-0.1 SOIL - 23/4/2024 SE264243.014	HA15 0.0-0.1 SOIL - 23/4/2024 SE264243.015
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

PCBs in Soil [AN420] Tested: 26/4/2024 (continued)

PARAMETER	UOM	LOR	HA16 0.0-0.1 SOIL - 23/4/2024 SE264243.016	HA17 0.0-0.1 SOIL - 23/4/2024 SE264243.017	SP1 SOIL - 23/4/2024 SE264243.018	SP2 SOIL - 23/4/2024 SE264243.019	SP3 SOIL - 23/4/2024 SE264243.020
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

PARAMETER	UOM	LOR	Drain 1 SOIL - 23/4/2024 SE264243.021	Drain 2 SOIL - 23/4/2024 SE264243.022	Sed 1 SOIL - 23/4/2024 SE264243.023
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: 26/4/2024

PARAMETER	UOM	LOR	HA1 0.0-0.1 SOIL - 23/4/2024 SE264243.001	HA2 0.0-0.1 SOIL - 23/4/2024 SE264243.002	HA3 0.0-0.1 SOIL - 23/4/2024 SE264243.003	HA4 0.0-0.1 SOIL - 23/4/2024 SE264243.004	HA5 0.0-0.1 SOIL - 23/4/2024 SE264243.005
Arsenic, As	mg/kg	1	5	6	4	2	10
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	12	4.8	4.6	4.6	7.6
Copper, Cu	mg/kg	0.5	21	14	11	7.0	18
Lead, Pb	mg/kg	1	38	31	27	18	59
Nickel, Ni	mg/kg	0.5	2.5	1.0	0.8	0.7	1.7
Zinc, Zn	mg/kg	2	190	6.9	11	9.3	15

PARAMETER	UOM	LOR	HA6 0.0-0.1 SOIL - 23/4/2024 SE264243.006	HA7 0.0-0.1 SOIL - 23/4/2024 SE264243.007	HA8 0.0-0.1 SOIL - 23/4/2024 SE264243.008	HA9 0.0-0.1 SOIL - 23/4/2024 SE264243.009	HA10 0.0-0.1 SOIL - 23/4/2024 SE264243.010
Arsenic, As	mg/kg	1	4	2	9	6	6
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	11	5.6	3.5	3.2	9.8
Copper, Cu	mg/kg	0.5	20	17	13	7.1	12
Lead, Pb	mg/kg	1	21	26	48	37	59
Nickel, Ni	mg/kg	0.5	1.7	1.1	0.9	0.6	1.3
Zinc, Zn	mg/kg	2	17	9.4	7.5	3.8	18

PARAMETER	UOM	LOR	HA11 0.0-0.1 SOIL - 23/4/2024 SE264243.011	HA12 0.0-0.1 SOIL - 23/4/2024 SE264243.012	HA13 0.0-0.1 SOIL - 23/4/2024 SE264243.013	HA14 0.0-0.1 SOIL - 23/4/2024 SE264243.014	HA15 0.0-0.1 SOIL - 23/4/2024 SE264243.015
Arsenic, As	mg/kg	1	5	2	3	6	2
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	3.8	5.3	4.7	6.3	4.9
Copper, Cu	mg/kg	0.5	7.0	8.0	15	17	26
Lead, Pb	mg/kg	1	26	17	32	53	25
Nickel, Ni	mg/kg	0.5	0.6	0.9	1.0	1.6	1.0
Zinc, Zn	mg/kg	2	8.5	18	22	13	8.3

PARAMETER	UOM	LOR	HA16 0.0-0.1 SOIL - 23/4/2024 SE264243.016	HA17 0.0-0.1 SOIL - 23/4/2024 SE264243.017	SP1 SOIL - 23/4/2024 SE264243.018	SP2 SOIL - 23/4/2024 SE264243.019	SP3 SOIL - 23/4/2024 SE264243.020
Arsenic, As	mg/kg	1	4	5	12	4	7
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	13	14	6.3	5.2	7.0
Copper, Cu	mg/kg	0.5	29	42	20	17	16
Lead, Pb	mg/kg	1	23	28	55	32	43
Nickel, Ni	mg/kg	0.5	2.1	2.1	4.0	1.2	1.7
Zinc, Zn	mg/kg	2	22	40	13	13	9.2

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 26/4/2024

(continued)

PARAMETER	UOM	LOR	Drain 1 SOIL - 23/4/2024 SE264243.021	Drain 2 SOIL - 23/4/2024 SE264243.022	Sed 1 SOIL - 23/4/2024 SE264243.023	QC1 SOIL - 23/4/2024 SE264243.025	QC3 SOIL - 23/4/2024 SE264243.026
Arsenic, As	mg/kg	1	4	4	2	2	2
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	6.6	6.6	4.1	5.4	4.8
Copper, Cu	mg/kg	0.5	6.5	14	10	17	23
Lead, Pb	mg/kg	1	26	40	22	22	24
Nickel, Ni	mg/kg	0.5	1.5	1.8	1.1	1.0	1.0
Zinc, Zn	mg/kg	2	15	31	18	7.2	8.7

Mercury in Soil [AN312] Tested: 26/4/2024

PARAMETER	UOM	LOR	HA1 0.0-0.1 SOIL - 23/4/2024 SE264243.001	HA2 0.0-0.1 SOIL - 23/4/2024 SE264243.002	HA3 0.0-0.1 SOIL - 23/4/2024 SE264243.003	HA4 0.0-0.1 SOIL - 23/4/2024 SE264243.004	HA5 0.0-0.1 SOIL - 23/4/2024 SE264243.005
Mercury	mg/kg	0.05	**0.11**	**0.07**	**0.06**	<0.05	**0.07**

PARAMETER	UOM	LOR	HA6 0.0-0.1 SOIL - 23/4/2024 SE264243.006	HA7 0.0-0.1 SOIL - 23/4/2024 SE264243.007	HA8 0.0-0.1 SOIL - 23/4/2024 SE264243.008	HA9 0.0-0.1 SOIL - 23/4/2024 SE264243.009	HA10 0.0-0.1 SOIL - 23/4/2024 SE264243.010
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	**0.07**

PARAMETER	UOM	LOR	HA11 0.0-0.1 SOIL - 23/4/2024 SE264243.011	HA12 0.0-0.1 SOIL - 23/4/2024 SE264243.012	HA13 0.0-0.1 SOIL - 23/4/2024 SE264243.013	HA14 0.0-0.1 SOIL - 23/4/2024 SE264243.014	HA15 0.0-0.1 SOIL - 23/4/2024 SE264243.015
Mercury	mg/kg	0.05	<0.05	<0.05	**0.08**	**0.10**	<0.05

PARAMETER	UOM	LOR	HA16 0.0-0.1 SOIL - 23/4/2024 SE264243.016	HA17 0.0-0.1 SOIL - 23/4/2024 SE264243.017	SP1 SOIL - 23/4/2024 SE264243.018	SP2 SOIL - 23/4/2024 SE264243.019	SP3 SOIL - 23/4/2024 SE264243.020
Mercury	mg/kg	0.05	**0.07**	**0.05**	**0.11**	**0.08**	**0.09**

PARAMETER	UOM	LOR	Drain 1 SOIL - 23/4/2024 SE264243.021	Drain 2 SOIL - 23/4/2024 SE264243.022	Sed 1 SOIL - 23/4/2024 SE264243.023	QC1 SOIL - 23/4/2024 SE264243.025	QC3 SOIL - 23/4/2024 SE264243.026
Mercury	mg/kg	0.05	<0.05	**0.13**	<0.05	<0.05	<0.05

Moisture Content [AN002] Tested: 26/4/2024

PARAMETER	UOM	LOR	HA1 0.0-0.1 SOIL - 23/4/2024 SE264243.001	HA2 0.0-0.1 SOIL - 23/4/2024 SE264243.002	HA3 0.0-0.1 SOIL - 23/4/2024 SE264243.003	HA4 0.0-0.1 SOIL - 23/4/2024 SE264243.004	HA5 0.0-0.1 SOIL - 23/4/2024 SE264243.005
% Moisture	%w/w	1	26.5	13.0	10.2	17.7	19.8

PARAMETER	UOM	LOR	HA6 0.0-0.1 SOIL - 23/4/2024 SE264243.006	HA7 0.0-0.1 SOIL - 23/4/2024 SE264243.007	HA8 0.0-0.1 SOIL - 23/4/2024 SE264243.008	HA9 0.0-0.1 SOIL - 23/4/2024 SE264243.009	HA10 0.0-0.1 SOIL - 23/4/2024 SE264243.010
% Moisture	%w/w	1	11.0	17.3	11.3	18.1	19.0

PARAMETER	UOM	LOR	HA11 0.0-0.1 SOIL - 23/4/2024 SE264243.011	HA12 0.0-0.1 SOIL - 23/4/2024 SE264243.012	HA13 0.0-0.1 SOIL - 23/4/2024 SE264243.013	HA14 0.0-0.1 SOIL - 23/4/2024 SE264243.014	HA15 0.0-0.1 SOIL - 23/4/2024 SE264243.015
% Moisture	%w/w	1	14.3	18.0	19.8	20.6	10.1

PARAMETER	UOM	LOR	HA16 0.0-0.1 SOIL - 23/4/2024 SE264243.016	HA17 0.0-0.1 SOIL - 23/4/2024 SE264243.017	SP1 SOIL - 23/4/2024 SE264243.018	SP2 SOIL - 23/4/2024 SE264243.019	SP3 SOIL - 23/4/2024 SE264243.020
% Moisture	%w/w	1	9.2	18.0	11.5	8.5	10.1

PARAMETER	UOM	LOR	Drain 1 SOIL - 23/4/2024 SE264243.021	Drain 2 SOIL - 23/4/2024 SE264243.022	Sed 1 SOIL - 23/4/2024 SE264243.023	QC1 SOIL - 23/4/2024 SE264243.025	QC3 SOIL - 23/4/2024 SE264243.026
% Moisture	%w/w	1	17.7	23.0	28.6	17.9	10.7

VOCs in Water [AN433] Tested: 30/4/2024

PARAMETER	UOM	LOR	D1 WATER - 23/4/2024 SE264243.024
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
Naphthalene (VOC)*	µg/L	0.5	<0.5
Total Xylenes	µg/L	1.5	<1.5
Total BTEX	µg/L	3	<3

Volatile Petroleum Hydrocarbons in Water [AN433] Tested: 30/4/2024

PARAMETER	UOM	LOR	D1 WATER - 23/4/2024 SE264243.024
Benzene (F0)	µg/L	0.5	<0.5
TRH C6-C9	µg/L	40	<40
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: 29/4/2024

PARAMETER	UOM	LOR	D1 WATER - 23/4/2024 SE264243.024
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

PAH (Polynuclear Aromatic Hydrocarbons) in Water [AN420] Tested: 29/4/2024

PARAMETER	UOM	LOR	D1 WATER - 23/4/2024 SE264243.024
Naphthalene	µg/L	0.1	<0.1
2-methylnaphthalene	µg/L	0.1	<0.1
1-methylnaphthalene	µg/L	0.1	<0.1
Acenaphthylene	µg/L	0.1	<0.1
Acenaphthene	µg/L	0.1	<0.1
Fluorene	µg/L	0.1	<0.1
Phenanthrene	µg/L	0.1	<0.1
Anthracene	µg/L	0.1	<0.1
Fluoranthene	µg/L	0.1	<0.1
Pyrene	µg/L	0.1	<0.1
Benzo(a)anthracene	µg/L	0.1	<0.1
Chrysene	µg/L	0.1	<0.1
Benzo(b&j)fluoranthene	µg/L	0.1	<0.1
Benzo(k)fluoranthene	µg/L	0.1	<0.1
Benzo(a)pyrene	µg/L	0.1	<0.1
Indeno(1,2,3-cd)pyrene	µg/L	0.1	<0.1
Dibenzo(ah)anthracene	µg/L	0.1	<0.1
Benzo(ghi)perylene	µg/L	0.1	<0.1
Total PAH (18)	µg/L	1	<1

Speciated Phenols in Water [AN420] Tested: 29/4/2024

PARAMETER	UOM	LOR	D1 WATER - 23/4/2024 SE264243.024
Phenol	µg/L	0.5	<0.5
2-methyl phenol (o-cresol)	µg/L	0.5	<0.5
3/4-methyl phenol (m/p-cresol)	µg/L	1	<1
Total Cresol	µg/L	1.5	<1.5
2-chlorophenol	µg/L	0.5	<0.5
2,4-dimethylphenol	µg/L	0.5	<0.5
2,6-dichlorophenol	µg/L	0.5	<0.5
2,4-dichlorophenol	µg/L	0.5	<0.5
2,4,6-trichlorophenol	µg/L	0.5	<0.5
2-nitrophenol	µg/L	0.5	<0.5
4-nitrophenol	µg/L	1	<1
2,4,5-trichlorophenol	µg/L	0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	µg/L	1	<1
Pentachlorophenol	µg/L	0.5	<0.5
2,4-dinitrophenol	µg/L	2	<2
4-chloro-3-methylphenol	µg/L	2	<2

OC Pesticides in Water [AN420] Tested: 29/4/2024

PARAMETER	UOM	LOR	D1 WATER - 23/4/2024 SE264243.024
Alpha BHC	µg/L	0.1	<0.1
Hexachlorobenzene (HCB)	µg/L	0.1	<0.1
Beta BHC	µg/L	0.1	<0.1
Lindane (gamma BHC)	µg/L	0.1	<0.1
Delta BHC	µg/L	0.1	<0.1
Heptachlor	µg/L	0.1	<0.1
Aldrin	µg/L	0.1	<0.1
Heptachlor epoxide	µg/L	0.1	<0.1
Gamma Chlordane	µg/L	0.1	<0.1
Alpha Chlordane	µg/L	0.1	<0.1
Alpha Endosulfan	µg/L	0.1	<0.1
o,p'-DDE	µg/L	0.1	<0.1
p,p'-DDE	µg/L	0.1	<0.1
Dieldrin	µg/L	0.1	<0.1
Endrin	µg/L	0.1	<0.1
Beta Endosulfan	µg/L	0.1	<0.1
o,p'-DDD	µg/L	0.1	<0.1
p,p'-DDD	µg/L	0.1	<0.1
Endosulfan sulphate	µg/L	0.1	<0.1
o,p'-DDT	µg/L	0.1	<0.1
p,p'-DDT	µg/L	0.1	<0.1
Endrin ketone	µg/L	0.1	<0.1
Methoxychlor	µg/L	0.1	<0.1
trans-Nonachlor	µg/L	0.1	<0.1
Endrin aldehyde	µg/L	0.1	<0.1
Isodrin	µg/L	0.1	<0.1
Mirex	µg/L	0.1	<0.1
Total OC	µg/L	1	<1
Total OC	µg/L	1	<1

OP Pesticides in Water [AN420] Tested: 29/4/2024

PARAMETER	UOM	LOR	D1 WATER - 23/4/2024 SE264243.024
Dichlorvos	µg/L	0.5	<0.5
Dimethoate	µg/L	0.5	<0.5
Diazinon (Dimpylate)	µg/L	0.5	<0.5
Fenitrothion	µg/L	0.2	<0.2
Malathion	µg/L	0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	µg/L	0.2	<0.2
Parathion-ethyl (Parathion)	µg/L	0.2	<0.2
Bromophos Ethyl	µg/L	0.2	<0.2
Methidathion	µg/L	0.5	<0.5
Ethion	µg/L	0.2	<0.2
Azinphos-methyl	µg/L	0.2	<0.2

PCBs in Water [AN420] Tested: 29/4/2024

PARAMETER	UOM	LOR	D1 WATER - 23/4/2024 SE264243.024
Arochlor 1016	µg/L	1	<1
Arochlor 1221	µg/L	1	<1
Arochlor 1232	µg/L	1	<1
Arochlor 1242	µg/L	1	<1
Arochlor 1248	µg/L	1	<1
Arochlor 1254	µg/L	1	<1
Arochlor 1260	µg/L	1	<1
Arochlor 1262	µg/L	1	<1
Arochlor 1268	µg/L	1	<1
Total Arochlors*	µg/L	5	<5

Trace Metals (Dissolved) in Water by ICPMS [AN318] Tested: 26/4/2024

PARAMETER	UOM	LOR	D1 WATER - 23/4/2024 SE264243.024
Arsenic	µg/L	1	**2**
Cadmium	µg/L	0.1	<0.1
Chromium	µg/L	1	**4**
Copper	µg/L	1	**7**
Lead	µg/L	1	**3**
Nickel	µg/L	1	**2**
Zinc	µg/L	5	**14**

Mercury (dissolved) in Water [AN311(Perth)/AN312] Tested: 26/4/2024

PARAMETER	UOM	LOR	D1 WATER - 23/4/2024 SE264243.024
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).
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.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		
***	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.sgs.com.au/en-gb/environment-health-and-safety.

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

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client only. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law .

This report must not be reproduced, except in full.

STATEMENT OF QA/QC PERFORMANCE

SE264243 R0

CLIENT DETAILS

Contact	CHRIS GUNTON
Client	LANTERRA CONSULTING PTY LTD
Address	UNIT 13 71 LEICHHARDT STREET KINGSTON ACT 2604
Telephone	0432 324 348
Facsimile	(Not specified)
Email	chris@lanterra.com.au
Project	**P24065 - Gorman Road, Goulburn**
Order Number	**P24065**
Samples	26

LABORATORY DETAILS

Manager	Huong Crawford
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE264243 R0**
Date Received	24 Apr 2024
Date Reported	02 May 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:

Surrogate	OP Pesticides in Soil	2 items
	OP Pesticides in Water	2 items
	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	2 items
	PAH (Polynuclear Aromatic Hydrocarbons) in Water	3 items
	Speciated Phenols in Water	1 item
Duplicate	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	15 items
	Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES	1 item
Matrix Spike	Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES	1 item

SAMPLE SUMMARY

Sample counts by matrix	25 Soil, 1 Water	Type of documentation received	COC
Date documentation received	24/4/2024	Samples received in good order	Yes
Samples received without headspace	Yes	Sample temperature upon receipt	16.3°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		

HOLDING TIME SUMMARY

SE264243 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

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311(Perth)/AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
D1	SE264243.024	LB310734	23 Apr 2024	24 Apr 2024	21 May 2024	26 Apr 2024	21 May 2024	26 Apr 2024

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
HA1 0.0-0.1	SE264243.001	LB310808	23 Apr 2024	24 Apr 2024	21 May 2024	26 Apr 2024	21 May 2024	30 Apr 2024
HA2 0.0-0.1	SE264243.002	LB310808	23 Apr 2024	24 Apr 2024	21 May 2024	26 Apr 2024	21 May 2024	30 Apr 2024
HA3 0.0-0.1	SE264243.003	LB310808	23 Apr 2024	24 Apr 2024	21 May 2024	26 Apr 2024	21 May 2024	30 Apr 2024
HA4 0.0-0.1	SE264243.004	LB310808	23 Apr 2024	24 Apr 2024	21 May 2024	26 Apr 2024	21 May 2024	30 Apr 2024
HA5 0.0-0.1	SE264243.005	LB310808	23 Apr 2024	24 Apr 2024	21 May 2024	26 Apr 2024	21 May 2024	30 Apr 2024
HA6 0.0-0.1	SE264243.006	LB310808	23 Apr 2024	24 Apr 2024	21 May 2024	26 Apr 2024	21 May 2024	30 Apr 2024
HA7 0.0-0.1	SE264243.007	LB310808	23 Apr 2024	24 Apr 2024	21 May 2024	26 Apr 2024	21 May 2024	30 Apr 2024
HA8 0.0-0.1	SE264243.008	LB310808	23 Apr 2024	24 Apr 2024	21 May 2024	26 Apr 2024	21 May 2024	30 Apr 2024
HA9 0.0-0.1	SE264243.009	LB310808	23 Apr 2024	24 Apr 2024	21 May 2024	26 Apr 2024	21 May 2024	30 Apr 2024
HA10 0.0-0.1	SE264243.010	LB310808	23 Apr 2024	24 Apr 2024	21 May 2024	26 Apr 2024	21 May 2024	30 Apr 2024
HA11 0.0-0.1	SE264243.011	LB310808	23 Apr 2024	24 Apr 2024	21 May 2024	26 Apr 2024	21 May 2024	30 Apr 2024
HA12 0.0-0.1	SE264243.012	LB310808	23 Apr 2024	24 Apr 2024	21 May 2024	26 Apr 2024	21 May 2024	30 Apr 2024
HA13 0.0-0.1	SE264243.013	LB310808	23 Apr 2024	24 Apr 2024	21 May 2024	26 Apr 2024	21 May 2024	30 Apr 2024
HA14 0.0-0.1	SE264243.014	LB310808	23 Apr 2024	24 Apr 2024	21 May 2024	26 Apr 2024	21 May 2024	30 Apr 2024
HA15 0.0-0.1	SE264243.015	LB310808	23 Apr 2024	24 Apr 2024	21 May 2024	26 Apr 2024	21 May 2024	30 Apr 2024
HA16 0.0-0.1	SE264243.016	LB310808	23 Apr 2024	24 Apr 2024	21 May 2024	26 Apr 2024	21 May 2024	30 Apr 2024
HA17 0.0-0.1	SE264243.017	LB310808	23 Apr 2024	24 Apr 2024	21 May 2024	26 Apr 2024	21 May 2024	30 Apr 2024
SP1	SE264243.018	LB310808	23 Apr 2024	24 Apr 2024	21 May 2024	26 Apr 2024	21 May 2024	30 Apr 2024
SP2	SE264243.019	LB310808	23 Apr 2024	24 Apr 2024	21 May 2024	26 Apr 2024	21 May 2024	30 Apr 2024
SP3	SE264243.020	LB310809	23 Apr 2024	24 Apr 2024	21 May 2024	26 Apr 2024	21 May 2024	30 Apr 2024
Drain 1	SE264243.021	LB310809	23 Apr 2024	24 Apr 2024	21 May 2024	26 Apr 2024	21 May 2024	30 Apr 2024
Drain 2	SE264243.022	LB310809	23 Apr 2024	24 Apr 2024	21 May 2024	26 Apr 2024	21 May 2024	30 Apr 2024
Sed 1	SE264243.023	LB310809	23 Apr 2024	24 Apr 2024	21 May 2024	26 Apr 2024	21 May 2024	30 Apr 2024
QC1	SE264243.025	LB310809	23 Apr 2024	24 Apr 2024	21 May 2024	26 Apr 2024	21 May 2024	30 Apr 2024
QC3	SE264243.026	LB310809	23 Apr 2024	24 Apr 2024	21 May 2024	26 Apr 2024	21 May 2024	30 Apr 2024

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
HA1 0.0-0.1	SE264243.001	LB310803	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	01 May 2024	30 Apr 2024
HA2 0.0-0.1	SE264243.002	LB310803	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	01 May 2024	30 Apr 2024
HA3 0.0-0.1	SE264243.003	LB310803	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	01 May 2024	30 Apr 2024
HA4 0.0-0.1	SE264243.004	LB310803	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	01 May 2024	30 Apr 2024
HA5 0.0-0.1	SE264243.005	LB310803	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	01 May 2024	30 Apr 2024
HA6 0.0-0.1	SE264243.006	LB310803	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	01 May 2024	30 Apr 2024
HA7 0.0-0.1	SE264243.007	LB310803	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	01 May 2024	30 Apr 2024
HA8 0.0-0.1	SE264243.008	LB310803	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	01 May 2024	30 Apr 2024
HA9 0.0-0.1	SE264243.009	LB310803	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	01 May 2024	30 Apr 2024
HA10 0.0-0.1	SE264243.010	LB310803	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	01 May 2024	30 Apr 2024
HA11 0.0-0.1	SE264243.011	LB310803	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	01 May 2024	30 Apr 2024
HA12 0.0-0.1	SE264243.012	LB310803	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	01 May 2024	30 Apr 2024
HA13 0.0-0.1	SE264243.013	LB310803	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	01 May 2024	30 Apr 2024
HA14 0.0-0.1	SE264243.014	LB310803	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	01 May 2024	30 Apr 2024
HA15 0.0-0.1	SE264243.015	LB310803	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	01 May 2024	30 Apr 2024
HA16 0.0-0.1	SE264243.016	LB310803	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	01 May 2024	30 Apr 2024
HA17 0.0-0.1	SE264243.017	LB310803	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	01 May 2024	30 Apr 2024
SP1	SE264243.018	LB310803	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	01 May 2024	30 Apr 2024
SP2	SE264243.019	LB310803	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	01 May 2024	30 Apr 2024
SP3	SE264243.020	LB310804	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	01 May 2024	30 Apr 2024
Drain 1	SE264243.021	LB310804	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	01 May 2024	30 Apr 2024
Drain 2	SE264243.022	LB310804	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	01 May 2024	30 Apr 2024
Sed 1	SE264243.023	LB310804	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	01 May 2024	30 Apr 2024
QC1	SE264243.025	LB310804	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	01 May 2024	30 Apr 2024
QC3	SE264243.026	LB310804	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	01 May 2024	30 Apr 2024

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref

HOLDING TIME SUMMARY

SE264243 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

OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
HA1 0.0-0.1	SE264243.001	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA2 0.0-0.1	SE264243.002	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA3 0.0-0.1	SE264243.003	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA4 0.0-0.1	SE264243.004	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA5 0.0-0.1	SE264243.005	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA6 0.0-0.1	SE264243.006	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA7 0.0-0.1	SE264243.007	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA8 0.0-0.1	SE264243.008	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA9 0.0-0.1	SE264243.009	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA10 0.0-0.1	SE264243.010	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA11 0.0-0.1	SE264243.011	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA12 0.0-0.1	SE264243.012	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA13 0.0-0.1	SE264243.013	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA14 0.0-0.1	SE264243.014	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA15 0.0-0.1	SE264243.015	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA16 0.0-0.1	SE264243.016	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA17 0.0-0.1	SE264243.017	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
SP1	SE264243.018	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
SP2	SE264243.019	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
SP3	SE264243.020	LB310795	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
Drain 1	SE264243.021	LB310795	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
Drain 2	SE264243.022	LB310795	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
Sed 1	SE264243.023	LB310795	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
QC1	SE264243.025	LB310795	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	02 May 2024
QC3	SE264243.026	LB310795	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	02 May 2024

OC Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
D1	SE264243.024	LB310838	23 Apr 2024	24 Apr 2024	30 Apr 2024	29 Apr 2024	08 Jun 2024	01 May 2024

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
HA1 0.0-0.1	SE264243.001	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA2 0.0-0.1	SE264243.002	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA3 0.0-0.1	SE264243.003	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA4 0.0-0.1	SE264243.004	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA5 0.0-0.1	SE264243.005	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA6 0.0-0.1	SE264243.006	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA7 0.0-0.1	SE264243.007	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA8 0.0-0.1	SE264243.008	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA9 0.0-0.1	SE264243.009	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA10 0.0-0.1	SE264243.010	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA11 0.0-0.1	SE264243.011	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA12 0.0-0.1	SE264243.012	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA13 0.0-0.1	SE264243.013	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA14 0.0-0.1	SE264243.014	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA15 0.0-0.1	SE264243.015	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA16 0.0-0.1	SE264243.016	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA17 0.0-0.1	SE264243.017	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
SP1	SE264243.018	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
SP2	SE264243.019	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
SP3	SE264243.020	LB310795	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
Drain 1	SE264243.021	LB310795	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
Drain 2	SE264243.022	LB310795	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
Sed 1	SE264243.023	LB310795	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
QC1	SE264243.025	LB310795	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	02 May 2024
QC3	SE264243.026	LB310795	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	02 May 2024

OP Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref

HOLDING TIME SUMMARY

SE264243 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

OP Pesticides in Water (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
D1	SE264243.024	LB310838	23 Apr 2024	24 Apr 2024	30 Apr 2024	29 Apr 2024	08 Jun 2024	02 May 2024

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
HA1 0.0-0.1	SE264243.001	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA2 0.0-0.1	SE264243.002	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA3 0.0-0.1	SE264243.003	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA4 0.0-0.1	SE264243.004	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA5 0.0-0.1	SE264243.005	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA6 0.0-0.1	SE264243.006	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA7 0.0-0.1	SE264243.007	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA8 0.0-0.1	SE264243.008	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA9 0.0-0.1	SE264243.009	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA10 0.0-0.1	SE264243.010	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA11 0.0-0.1	SE264243.011	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA12 0.0-0.1	SE264243.012	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA13 0.0-0.1	SE264243.013	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA14 0.0-0.1	SE264243.014	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA15 0.0-0.1	SE264243.015	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA16 0.0-0.1	SE264243.016	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA17 0.0-0.1	SE264243.017	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
SP1	SE264243.018	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
SP2	SE264243.019	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
SP3	SE264243.020	LB310795	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
Drain 1	SE264243.021	LB310795	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
Drain 2	SE264243.022	LB310795	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
Sed 1	SE264243.023	LB310795	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
QC1	SE264243.025	LB310795	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
QC3	SE264243.026	LB310795	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024

PAH (Polynuclear Aromatic Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
D1	SE264243.024	LB310838	23 Apr 2024	24 Apr 2024	30 Apr 2024	29 Apr 2024	08 Jun 2024	02 May 2024

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
HA1 0.0-0.1	SE264243.001	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA2 0.0-0.1	SE264243.002	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA3 0.0-0.1	SE264243.003	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA4 0.0-0.1	SE264243.004	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA5 0.0-0.1	SE264243.005	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA6 0.0-0.1	SE264243.006	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA7 0.0-0.1	SE264243.007	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA8 0.0-0.1	SE264243.008	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA9 0.0-0.1	SE264243.009	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA10 0.0-0.1	SE264243.010	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA11 0.0-0.1	SE264243.011	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA12 0.0-0.1	SE264243.012	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA13 0.0-0.1	SE264243.013	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA14 0.0-0.1	SE264243.014	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA15 0.0-0.1	SE264243.015	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA16 0.0-0.1	SE264243.016	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA17 0.0-0.1	SE264243.017	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
SP1	SE264243.018	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
SP2	SE264243.019	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
SP3	SE264243.020	LB310795	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	02 May 2024
Drain 1	SE264243.021	LB310795	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	02 May 2024
Drain 2	SE264243.022	LB310795	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	02 May 2024
Sed 1	SE264243.023	LB310795	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	02 May 2024

HOLDING TIME SUMMARY

SE264243 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

PCBs in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
QC1	SE264243.025	LB310795	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	02 May 2024
QC3	SE264243.026	LB310795	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	02 May 2024

PCBs in Water

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
D1	SE264243.024	LB310838	23 Apr 2024	24 Apr 2024	30 Apr 2024	29 Apr 2024	08 Jun 2024	01 May 2024

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
HA1 0.0-0.1	SE264243.001	LB310704	23 Apr 2024	24 Apr 2024	07 May 2024	24 Apr 2024	03 Jun 2024	02 May 2024
HA2 0.0-0.1	SE264243.002	LB310704	23 Apr 2024	24 Apr 2024	07 May 2024	24 Apr 2024	03 Jun 2024	02 May 2024
HA3 0.0-0.1	SE264243.003	LB310704	23 Apr 2024	24 Apr 2024	07 May 2024	24 Apr 2024	03 Jun 2024	02 May 2024
HA4 0.0-0.1	SE264243.004	LB310704	23 Apr 2024	24 Apr 2024	07 May 2024	24 Apr 2024	03 Jun 2024	02 May 2024
HA5 0.0-0.1	SE264243.005	LB310704	23 Apr 2024	24 Apr 2024	07 May 2024	24 Apr 2024	03 Jun 2024	02 May 2024
HA6 0.0-0.1	SE264243.006	LB310704	23 Apr 2024	24 Apr 2024	07 May 2024	24 Apr 2024	03 Jun 2024	02 May 2024
HA7 0.0-0.1	SE264243.007	LB310704	23 Apr 2024	24 Apr 2024	07 May 2024	24 Apr 2024	03 Jun 2024	02 May 2024
HA8 0.0-0.1	SE264243.008	LB310704	23 Apr 2024	24 Apr 2024	07 May 2024	24 Apr 2024	03 Jun 2024	02 May 2024
HA9 0.0-0.1	SE264243.009	LB310704	23 Apr 2024	24 Apr 2024	07 May 2024	24 Apr 2024	03 Jun 2024	02 May 2024
HA10 0.0-0.1	SE264243.010	LB310704	23 Apr 2024	24 Apr 2024	07 May 2024	24 Apr 2024	03 Jun 2024	02 May 2024
HA11 0.0-0.1	SE264243.011	LB310704	23 Apr 2024	24 Apr 2024	07 May 2024	24 Apr 2024	03 Jun 2024	02 May 2024
HA12 0.0-0.1	SE264243.012	LB310704	23 Apr 2024	24 Apr 2024	07 May 2024	24 Apr 2024	03 Jun 2024	02 May 2024
HA13 0.0-0.1	SE264243.013	LB310704	23 Apr 2024	24 Apr 2024	07 May 2024	24 Apr 2024	03 Jun 2024	02 May 2024
HA14 0.0-0.1	SE264243.014	LB310704	23 Apr 2024	24 Apr 2024	07 May 2024	24 Apr 2024	03 Jun 2024	02 May 2024
HA15 0.0-0.1	SE264243.015	LB310704	23 Apr 2024	24 Apr 2024	07 May 2024	24 Apr 2024	03 Jun 2024	02 May 2024
HA16 0.0-0.1	SE264243.016	LB310704	23 Apr 2024	24 Apr 2024	07 May 2024	24 Apr 2024	03 Jun 2024	02 May 2024
HA17 0.0-0.1	SE264243.017	LB310704	23 Apr 2024	24 Apr 2024	07 May 2024	24 Apr 2024	03 Jun 2024	02 May 2024
SP1	SE264243.018	LB310704	23 Apr 2024	24 Apr 2024	07 May 2024	24 Apr 2024	03 Jun 2024	02 May 2024
SP2	SE264243.019	LB310704	23 Apr 2024	24 Apr 2024	07 May 2024	24 Apr 2024	03 Jun 2024	02 May 2024
SP3	SE264243.020	LB310704	23 Apr 2024	24 Apr 2024	07 May 2024	24 Apr 2024	03 Jun 2024	02 May 2024
Drain 1	SE264243.021	LB310704	23 Apr 2024	24 Apr 2024	07 May 2024	24 Apr 2024	03 Jun 2024	02 May 2024
Drain 2	SE264243.022	LB310704	23 Apr 2024	24 Apr 2024	07 May 2024	24 Apr 2024	03 Jun 2024	02 May 2024
Sed 1	SE264243.023	LB310704	23 Apr 2024	24 Apr 2024	07 May 2024	24 Apr 2024	03 Jun 2024	02 May 2024

Speciated Phenols in Water

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
D1	SE264243.024	LB310838	23 Apr 2024	24 Apr 2024	14 May 2024	29 Apr 2024	08 Jun 2024	02 May 2024

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
HA1 0.0-0.1	SE264243.001	LB310806	23 Apr 2024	24 Apr 2024	20 Oct 2024	26 Apr 2024	20 Oct 2024	30 Apr 2024
HA2 0.0-0.1	SE264243.002	LB310806	23 Apr 2024	24 Apr 2024	20 Oct 2024	26 Apr 2024	20 Oct 2024	30 Apr 2024
HA3 0.0-0.1	SE264243.003	LB310806	23 Apr 2024	24 Apr 2024	20 Oct 2024	26 Apr 2024	20 Oct 2024	30 Apr 2024
HA4 0.0-0.1	SE264243.004	LB310806	23 Apr 2024	24 Apr 2024	20 Oct 2024	26 Apr 2024	20 Oct 2024	30 Apr 2024
HA5 0.0-0.1	SE264243.005	LB310806	23 Apr 2024	24 Apr 2024	20 Oct 2024	26 Apr 2024	20 Oct 2024	30 Apr 2024
HA6 0.0-0.1	SE264243.006	LB310806	23 Apr 2024	24 Apr 2024	20 Oct 2024	26 Apr 2024	20 Oct 2024	30 Apr 2024
HA7 0.0-0.1	SE264243.007	LB310806	23 Apr 2024	24 Apr 2024	20 Oct 2024	26 Apr 2024	20 Oct 2024	30 Apr 2024
HA8 0.0-0.1	SE264243.008	LB310806	23 Apr 2024	24 Apr 2024	20 Oct 2024	26 Apr 2024	20 Oct 2024	30 Apr 2024
HA9 0.0-0.1	SE264243.009	LB310806	23 Apr 2024	24 Apr 2024	20 Oct 2024	26 Apr 2024	20 Oct 2024	30 Apr 2024
HA10 0.0-0.1	SE264243.010	LB310806	23 Apr 2024	24 Apr 2024	20 Oct 2024	26 Apr 2024	20 Oct 2024	30 Apr 2024
HA11 0.0-0.1	SE264243.011	LB310806	23 Apr 2024	24 Apr 2024	20 Oct 2024	26 Apr 2024	20 Oct 2024	30 Apr 2024
HA12 0.0-0.1	SE264243.012	LB310806	23 Apr 2024	24 Apr 2024	20 Oct 2024	26 Apr 2024	20 Oct 2024	30 Apr 2024
HA13 0.0-0.1	SE264243.013	LB310806	23 Apr 2024	24 Apr 2024	20 Oct 2024	26 Apr 2024	20 Oct 2024	30 Apr 2024
HA14 0.0-0.1	SE264243.014	LB310806	23 Apr 2024	24 Apr 2024	20 Oct 2024	26 Apr 2024	20 Oct 2024	30 Apr 2024
HA15 0.0-0.1	SE264243.015	LB310806	23 Apr 2024	24 Apr 2024	20 Oct 2024	26 Apr 2024	20 Oct 2024	30 Apr 2024
HA16 0.0-0.1	SE264243.016	LB310806	23 Apr 2024	24 Apr 2024	20 Oct 2024	26 Apr 2024	20 Oct 2024	30 Apr 2024
HA17 0.0-0.1	SE264243.017	LB310806	23 Apr 2024	24 Apr 2024	20 Oct 2024	26 Apr 2024	20 Oct 2024	30 Apr 2024
SP1	SE264243.018	LB310806	23 Apr 2024	24 Apr 2024	20 Oct 2024	26 Apr 2024	20 Oct 2024	30 Apr 2024
SP2	SE264243.019	LB310806	23 Apr 2024	24 Apr 2024	20 Oct 2024	26 Apr 2024	20 Oct 2024	30 Apr 2024
SP3	SE264243.020	LB310807	23 Apr 2024	24 Apr 2024	20 Oct 2024	26 Apr 2024	20 Oct 2024	30 Apr 2024
Drain 1	SE264243.021	LB310807	23 Apr 2024	24 Apr 2024	20 Oct 2024	26 Apr 2024	20 Oct 2024	30 Apr 2024

HOLDING TIME SUMMARY

SE264243 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

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
Drain 2	SE264243.022	LB310807	23 Apr 2024	24 Apr 2024	20 Oct 2024	26 Apr 2024	20 Oct 2024	30 Apr 2024
Sed 1	SE264243.023	LB310807	23 Apr 2024	24 Apr 2024	20 Oct 2024	26 Apr 2024	20 Oct 2024	30 Apr 2024
QC1	SE264243.025	LB310807	23 Apr 2024	24 Apr 2024	20 Oct 2024	26 Apr 2024	20 Oct 2024	30 Apr 2024
QC3	SE264243.026	LB310807	23 Apr 2024	24 Apr 2024	20 Oct 2024	26 Apr 2024	20 Oct 2024	30 Apr 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
D1	SE264243.024	LB310714	23 Apr 2024	24 Apr 2024	20 Oct 2024	26 Apr 2024	20 Oct 2024	26 Apr 2024

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
HA1 0.0-0.1	SE264243.001	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA2 0.0-0.1	SE264243.002	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA3 0.0-0.1	SE264243.003	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA4 0.0-0.1	SE264243.004	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA5 0.0-0.1	SE264243.005	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA6 0.0-0.1	SE264243.006	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA7 0.0-0.1	SE264243.007	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA8 0.0-0.1	SE264243.008	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA9 0.0-0.1	SE264243.009	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA10 0.0-0.1	SE264243.010	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA11 0.0-0.1	SE264243.011	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA12 0.0-0.1	SE264243.012	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA13 0.0-0.1	SE264243.013	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA14 0.0-0.1	SE264243.014	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA15 0.0-0.1	SE264243.015	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA16 0.0-0.1	SE264243.016	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
HA17 0.0-0.1	SE264243.017	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
SP1	SE264243.018	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
SP2	SE264243.019	LB310794	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
SP3	SE264243.020	LB310795	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
Drain 1	SE264243.021	LB310795	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
Drain 2	SE264243.022	LB310795	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
Sed 1	SE264243.023	LB310795	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
QC1	SE264243.025	LB310795	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 2024
QC3	SE264243.026	LB310795	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	05 Jun 2024	30 Apr 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
D1	SE264243.024	LB310838	23 Apr 2024	24 Apr 2024	30 Apr 2024	29 Apr 2024	08 Jun 2024	01 May 2024

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
HA1 0.0-0.1	SE264243.001	LB310798	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	07 May 2024	30 Apr 2024
HA2 0.0-0.1	SE264243.002	LB310798	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	07 May 2024	30 Apr 2024
HA3 0.0-0.1	SE264243.003	LB310798	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	07 May 2024	30 Apr 2024
HA4 0.0-0.1	SE264243.004	LB310798	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	07 May 2024	30 Apr 2024
HA5 0.0-0.1	SE264243.005	LB310798	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	07 May 2024	30 Apr 2024
HA6 0.0-0.1	SE264243.006	LB310798	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	07 May 2024	30 Apr 2024
HA7 0.0-0.1	SE264243.007	LB310798	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	07 May 2024	30 Apr 2024
HA8 0.0-0.1	SE264243.008	LB310798	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	07 May 2024	30 Apr 2024
HA9 0.0-0.1	SE264243.009	LB310798	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	07 May 2024	30 Apr 2024
HA10 0.0-0.1	SE264243.010	LB310798	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	07 May 2024	30 Apr 2024
HA11 0.0-0.1	SE264243.011	LB310798	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	07 May 2024	30 Apr 2024
HA12 0.0-0.1	SE264243.012	LB310798	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	07 May 2024	30 Apr 2024
HA13 0.0-0.1	SE264243.013	LB310798	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	07 May 2024	30 Apr 2024
HA14 0.0-0.1	SE264243.014	LB310798	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	07 May 2024	30 Apr 2024
HA15 0.0-0.1	SE264243.015	LB310798	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	07 May 2024	30 Apr 2024
HA16 0.0-0.1	SE264243.016	LB310798	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	07 May 2024	30 Apr 2024
HA17 0.0-0.1	SE264243.017	LB310798	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	07 May 2024	30 Apr 2024

HOLDING TIME SUMMARY

SE264243 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

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
SP1	SE264243.018	LB310798	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	07 May 2024	30 Apr 2024
SP2	SE264243.019	LB310798	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	07 May 2024	30 Apr 2024
SP3	SE264243.020	LB310801	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	07 May 2024	30 Apr 2024
Drain 1	SE264243.021	LB310801	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	07 May 2024	30 Apr 2024
Drain 2	SE264243.022	LB310801	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	07 May 2024	30 Apr 2024
Sed 1	SE264243.023	LB310801	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	07 May 2024	30 Apr 2024
QC1	SE264243.025	LB310801	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	07 May 2024	30 Apr 2024
QC3	SE264243.026	LB310801	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	07 May 2024	30 Apr 2024

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
D1	SE264243.024	LB310996	23 Apr 2024	24 Apr 2024	07 May 2024	30 Apr 2024	07 May 2024	01 May 2024

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
HA1 0.0-0.1	SE264243.001	LB310798	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	07 May 2024	30 Apr 2024
HA2 0.0-0.1	SE264243.002	LB310798	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	07 May 2024	30 Apr 2024
HA3 0.0-0.1	SE264243.003	LB310798	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	07 May 2024	30 Apr 2024
HA4 0.0-0.1	SE264243.004	LB310798	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	07 May 2024	30 Apr 2024
HA5 0.0-0.1	SE264243.005	LB310798	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	07 May 2024	30 Apr 2024
HA6 0.0-0.1	SE264243.006	LB310798	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	07 May 2024	30 Apr 2024
HA7 0.0-0.1	SE264243.007	LB310798	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	07 May 2024	30 Apr 2024
HA8 0.0-0.1	SE264243.008	LB310798	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	07 May 2024	30 Apr 2024
HA9 0.0-0.1	SE264243.009	LB310798	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	07 May 2024	30 Apr 2024
HA10 0.0-0.1	SE264243.010	LB310798	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	07 May 2024	30 Apr 2024
HA11 0.0-0.1	SE264243.011	LB310798	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	07 May 2024	30 Apr 2024
HA12 0.0-0.1	SE264243.012	LB310798	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	07 May 2024	30 Apr 2024
HA13 0.0-0.1	SE264243.013	LB310798	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	07 May 2024	30 Apr 2024
HA14 0.0-0.1	SE264243.014	LB310798	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	07 May 2024	30 Apr 2024
HA15 0.0-0.1	SE264243.015	LB310798	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	07 May 2024	30 Apr 2024
HA16 0.0-0.1	SE264243.016	LB310798	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	07 May 2024	30 Apr 2024
HA17 0.0-0.1	SE264243.017	LB310798	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	07 May 2024	30 Apr 2024
SP1	SE264243.018	LB310798	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	07 May 2024	30 Apr 2024
SP2	SE264243.019	LB310798	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	07 May 2024	30 Apr 2024
SP3	SE264243.020	LB310801	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	07 May 2024	30 Apr 2024
Drain 1	SE264243.021	LB310801	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	07 May 2024	30 Apr 2024
Drain 2	SE264243.022	LB310801	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	07 May 2024	30 Apr 2024
Sed 1	SE264243.023	LB310801	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	07 May 2024	30 Apr 2024
QC1	SE264243.025	LB310801	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	07 May 2024	30 Apr 2024
QC3	SE264243.026	LB310801	23 Apr 2024	24 Apr 2024	07 May 2024	26 Apr 2024	07 May 2024	30 Apr 2024

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
D1	SE264243.024	LB310996	23 Apr 2024	24 Apr 2024	07 May 2024	30 Apr 2024	07 May 2024	01 May 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.

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	HA1 0.0-0.1	SE264243.001	%	60 - 130%	97
	HA2 0.0-0.1	SE264243.002	%	60 - 130%	93
	HA3 0.0-0.1	SE264243.003	%	60 - 130%	96
	HA4 0.0-0.1	SE264243.004	%	60 - 130%	96
	HA5 0.0-0.1	SE264243.005	%	60 - 130%	101
	HA6 0.0-0.1	SE264243.006	%	60 - 130%	93
	HA7 0.0-0.1	SE264243.007	%	60 - 130%	96
	HA8 0.0-0.1	SE264243.008	%	60 - 130%	95
	HA9 0.0-0.1	SE264243.009	%	60 - 130%	97
	HA10 0.0-0.1	SE264243.010	%	60 - 130%	102
	HA11 0.0-0.1	SE264243.011	%	60 - 130%	95
	HA12 0.0-0.1	SE264243.012	%	60 - 130%	95
	HA13 0.0-0.1	SE264243.013	%	60 - 130%	99
	HA14 0.0-0.1	SE264243.014	%	60 - 130%	94
	HA15 0.0-0.1	SE264243.015	%	60 - 130%	95
	HA16 0.0-0.1	SE264243.016	%	60 - 130%	92
	HA17 0.0-0.1	SE264243.017	%	60 - 130%	97
	SP1	SE264243.018	%	60 - 130%	89
	SP2	SE264243.019	%	60 - 130%	90
	SP3	SE264243.020	%	60 - 130%	86
	Drain 1	SE264243.021	%	60 - 130%	89
	Drain 2	SE264243.022	%	60 - 130%	92
	Sed 1	SE264243.023	%	60 - 130%	89

OC Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	D1	SE264243.024	%	40 - 130%	41

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	HA1 0.0-0.1	SE264243.001	%	60 - 130%	121
	HA2 0.0-0.1	SE264243.002	%	60 - 130%	98
	HA3 0.0-0.1	SE264243.003	%	60 - 130%	117
	HA4 0.0-0.1	SE264243.004	%	60 - 130%	108
	HA5 0.0-0.1	SE264243.005	%	60 - 130%	113
	HA6 0.0-0.1	SE264243.006	%	60 - 130%	118
	HA7 0.0-0.1	SE264243.007	%	60 - 130%	100
	HA8 0.0-0.1	SE264243.008	%	60 - 130%	112
	HA9 0.0-0.1	SE264243.009	%	60 - 130%	111
	HA10 0.0-0.1	SE264243.010	%	60 - 130%	107
	HA11 0.0-0.1	SE264243.011	%	60 - 130%	110
	HA12 0.0-0.1	SE264243.012	%	60 - 130%	113
	HA13 0.0-0.1	SE264243.013	%	60 - 130%	110
	HA14 0.0-0.1	SE264243.014	%	60 - 130%	120
	HA15 0.0-0.1	SE264243.015	%	60 - 130%	106
	HA16 0.0-0.1	SE264243.016	%	60 - 130%	113
	HA17 0.0-0.1	SE264243.017	%	60 - 130%	100
	SP1	SE264243.018	%	60 - 130%	111
	SP2	SE264243.019	%	60 - 130%	107
	SP3	SE264243.020	%	60 - 130%	98
	Drain 1	SE264243.021	%	60 - 130%	110
	Drain 2	SE264243.022	%	60 - 130%	94
	Sed 1	SE264243.023	%	60 - 130%	100
d14-p-terphenyl (Surrogate)	HA1 0.0-0.1	SE264243.001	%	60 - 130%	147 ⓘ
	HA2 0.0-0.1	SE264243.002	%	60 - 130%	126
	HA3 0.0-0.1	SE264243.003	%	60 - 130%	118
	HA4 0.0-0.1	SE264243.004	%	60 - 130%	112
	HA5 0.0-0.1	SE264243.005	%	60 - 130%	127
	HA6 0.0-0.1	SE264243.006	%	60 - 130%	122
	HA7 0.0-0.1	SE264243.007	%	60 - 130%	113

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.

OP Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d14-p-terphenyl (Surrogate)	HA8 0.0-0.1	SE264243.008	%	60 - 130%	120
	HA9 0.0-0.1	SE264243.009	%	60 - 130%	122
	HA10 0.0-0.1	SE264243.010	%	60 - 130%	116
	HA11 0.0-0.1	SE264243.011	%	60 - 130%	119
	HA12 0.0-0.1	SE264243.012	%	60 - 130%	121
	HA13 0.0-0.1	SE264243.013	%	60 - 130%	127
	HA14 0.0-0.1	SE264243.014	%	60 - 130%	144 ①
	HA15 0.0-0.1	SE264243.015	%	60 - 130%	122
	HA16 0.0-0.1	SE264243.016	%	60 - 130%	125
	HA17 0.0-0.1	SE264243.017	%	60 - 130%	119
	SP1	SE264243.018	%	60 - 130%	107
	SP2	SE264243.019	%	60 - 130%	112
	SP3	SE264243.020	%	60 - 130%	106
	Drain 1	SE264243.021	%	60 - 130%	108
	Drain 2	SE264243.022	%	60 - 130%	106
	Sed 1	SE264243.023	%	60 - 130%	100

OP Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	D1	SE264243.024	%	40 - 130%	26 ④
d14-p-terphenyl (Surrogate)	D1	SE264243.024	%	40 - 130%	28 ④

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	HA1 0.0-0.1	SE264243.001	%	70 - 130%	120
	HA2 0.0-0.1	SE264243.002	%	70 - 130%	98
	HA3 0.0-0.1	SE264243.003	%	70 - 130%	117
	HA4 0.0-0.1	SE264243.004	%	70 - 130%	108
	HA5 0.0-0.1	SE264243.005	%	70 - 130%	113
	HA6 0.0-0.1	SE264243.006	%	70 - 130%	118
	HA7 0.0-0.1	SE264243.007	%	70 - 130%	100
	HA8 0.0-0.1	SE264243.008	%	70 - 130%	112
	HA9 0.0-0.1	SE264243.009	%	70 - 130%	111
	HA10 0.0-0.1	SE264243.010	%	70 - 130%	107
	HA11 0.0-0.1	SE264243.011	%	70 - 130%	110
	HA12 0.0-0.1	SE264243.012	%	70 - 130%	113
	HA13 0.0-0.1	SE264243.013	%	70 - 130%	110
	HA14 0.0-0.1	SE264243.014	%	70 - 130%	120
	HA15 0.0-0.1	SE264243.015	%	70 - 130%	106
	HA16 0.0-0.1	SE264243.016	%	70 - 130%	113
	HA17 0.0-0.1	SE264243.017	%	70 - 130%	100
	SP1	SE264243.018	%	70 - 130%	111
	SP2	SE264243.019	%	70 - 130%	107
	SP3	SE264243.020	%	70 - 130%	98
	Drain 1	SE264243.021	%	70 - 130%	110
	Drain 2	SE264243.022	%	70 - 130%	94
	Sed 1	SE264243.023	%	70 - 130%	100
	QC1	SE264243.025	%	70 - 130%	106
	QC3	SE264243.026	%	70 - 130%	96
d14-p-terphenyl (Surrogate)	HA1 0.0-0.1	SE264243.001	%	70 - 130%	140 ①
	HA2 0.0-0.1	SE264243.002	%	70 - 130%	126
	HA3 0.0-0.1	SE264243.003	%	70 - 130%	118
	HA4 0.0-0.1	SE264243.004	%	70 - 130%	112
	HA5 0.0-0.1	SE264243.005	%	70 - 130%	127
	HA6 0.0-0.1	SE264243.006	%	70 - 130%	122
	HA7 0.0-0.1	SE264243.007	%	70 - 130%	113
	HA8 0.0-0.1	SE264243.008	%	70 - 130%	120
	HA9 0.0-0.1	SE264243.009	%	70 - 130%	122
	HA10 0.0-0.1	SE264243.010	%	70 - 130%	116
	HA11 0.0-0.1	SE264243.011	%	70 - 130%	119
	HA12 0.0-0.1	SE264243.012	%	70 - 130%	121

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	Sample Name	Sample Number	Units	Criteria	Recovery %
d14-p-terphenyl (Surrogate)	HA13 0.0-0.1	SE264243.013	%	70 - 130%	127
	HA14 0.0-0.1	SE264243.014	%	70 - 130%	144 ①
	HA15 0.0-0.1	SE264243.015	%	70 - 130%	122
	HA16 0.0-0.1	SE264243.016	%	70 - 130%	125
	HA17 0.0-0.1	SE264243.017	%	70 - 130%	119
	SP1	SE264243.018	%	70 - 130%	107
	SP2	SE264243.019	%	70 - 130%	112
	SP3	SE264243.020	%	70 - 130%	106
	Drain 1	SE264243.021	%	70 - 130%	108
	Drain 2	SE264243.022	%	70 - 130%	106
	Sed 1	SE264243.023	%	70 - 130%	100
	QC1	SE264243.025	%	70 - 130%	114
	QC3	SE264243.026	%	70 - 130%	109
d5-nitrobenzene (Surrogate)	HA1 0.0-0.1	SE264243.001	%	70 - 130%	130
	HA2 0.0-0.1	SE264243.002	%	70 - 130%	120
	HA3 0.0-0.1	SE264243.003	%	70 - 130%	121
	HA4 0.0-0.1	SE264243.004	%	70 - 130%	119
	HA5 0.0-0.1	SE264243.005	%	70 - 130%	113
	HA6 0.0-0.1	SE264243.006	%	70 - 130%	123
	HA7 0.0-0.1	SE264243.007	%	70 - 130%	115
	HA8 0.0-0.1	SE264243.008	%	70 - 130%	119
	HA9 0.0-0.1	SE264243.009	%	70 - 130%	120
	HA10 0.0-0.1	SE264243.010	%	70 - 130%	119
	HA11 0.0-0.1	SE264243.011	%	70 - 130%	118
	HA12 0.0-0.1	SE264243.012	%	70 - 130%	120
	HA13 0.0-0.1	SE264243.013	%	70 - 130%	119
	HA14 0.0-0.1	SE264243.014	%	70 - 130%	126
	HA15 0.0-0.1	SE264243.015	%	70 - 130%	119
	HA16 0.0-0.1	SE264243.016	%	70 - 130%	122
	HA17 0.0-0.1	SE264243.017	%	70 - 130%	116
	SP1	SE264243.018	%	70 - 130%	118
	SP2	SE264243.019	%	70 - 130%	122
	SP3	SE264243.020	%	70 - 130%	83
	Drain 1	SE264243.021	%	70 - 130%	94
	Drain 2	SE264243.022	%	70 - 130%	88
	Sed 1	SE264243.023	%	70 - 130%	99
	QC1	SE264243.025	%	70 - 130%	94
	QC3	SE264243.026	%	70 - 130%	93

PAH (Polynuclear Aromatic Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	D1	SE264243.024	%	40 - 130%	26 ④
d14-p-terphenyl (Surrogate)	D1	SE264243.024	%	40 - 130%	28 ④
d5-nitrobenzene (Surrogate)	D1	SE264243.024	%	40 - 130%	30 ④

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
TCMX (Surrogate)	HA1 0.0-0.1	SE264243.001	%	60 - 130%	98
	HA2 0.0-0.1	SE264243.002	%	60 - 130%	95
	HA3 0.0-0.1	SE264243.003	%	60 - 130%	98
	HA4 0.0-0.1	SE264243.004	%	60 - 130%	98
	HA5 0.0-0.1	SE264243.005	%	60 - 130%	103
	HA6 0.0-0.1	SE264243.006	%	60 - 130%	95
	HA7 0.0-0.1	SE264243.007	%	60 - 130%	98
	HA8 0.0-0.1	SE264243.008	%	60 - 130%	97
	HA9 0.0-0.1	SE264243.009	%	60 - 130%	98
	HA10 0.0-0.1	SE264243.010	%	60 - 130%	103
	HA11 0.0-0.1	SE264243.011	%	60 - 130%	96
	HA12 0.0-0.1	SE264243.012	%	60 - 130%	97
	HA13 0.0-0.1	SE264243.013	%	60 - 130%	101
	HA14 0.0-0.1	SE264243.014	%	60 - 130%	96
	HA15 0.0-0.1	SE264243.015	%	60 - 130%	97

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.

PCBs in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
TCMX (Surrogate)	HA16 0.0-0.1	SE264243.016	%	60 - 130%	94
	HA17 0.0-0.1	SE264243.017	%	60 - 130%	98
	SP1	SE264243.018	%	60 - 130%	91
	SP2	SE264243.019	%	60 - 130%	92
	SP3	SE264243.020	%	60 - 130%	87
	Drain 1	SE264243.021	%	60 - 130%	89
	Drain 2	SE264243.022	%	60 - 130%	91
	Sed 1	SE264243.023	%	60 - 130%	89

PCBs in Water

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
TCMX (Surrogate)	D1	SE264243.024	%	40 - 130%	41

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2,4,6-Tribromophenol (Surrogate)	HA1 0.0-0.1	SE264243.001	%	70 - 130%	105
	HA2 0.0-0.1	SE264243.002	%	70 - 130%	100
	HA3 0.0-0.1	SE264243.003	%	70 - 130%	100
	HA4 0.0-0.1	SE264243.004	%	70 - 130%	105
	HA5 0.0-0.1	SE264243.005	%	70 - 130%	102
	HA6 0.0-0.1	SE264243.006	%	70 - 130%	99
	HA7 0.0-0.1	SE264243.007	%	70 - 130%	104
	HA8 0.0-0.1	SE264243.008	%	70 - 130%	99
	HA9 0.0-0.1	SE264243.009	%	70 - 130%	101
	HA10 0.0-0.1	SE264243.010	%	70 - 130%	99
	HA11 0.0-0.1	SE264243.011	%	70 - 130%	100
	HA12 0.0-0.1	SE264243.012	%	70 - 130%	101
	HA13 0.0-0.1	SE264243.013	%	70 - 130%	99
	HA14 0.0-0.1	SE264243.014	%	70 - 130%	96
	HA15 0.0-0.1	SE264243.015	%	70 - 130%	95
	HA16 0.0-0.1	SE264243.016	%	70 - 130%	105
	HA17 0.0-0.1	SE264243.017	%	70 - 130%	98
	SP1	SE264243.018	%	70 - 130%	98
	SP2	SE264243.019	%	70 - 130%	98
	SP3	SE264243.020	%	70 - 130%	91
	Drain 1	SE264243.021	%	70 - 130%	102
	Drain 2	SE264243.022	%	70 - 130%	101
	Sed 1	SE264243.023	%	70 - 130%	87
d5-phenol (Surrogate)	HA1 0.0-0.1	SE264243.001	%	50 - 130%	114
	HA2 0.0-0.1	SE264243.002	%	50 - 130%	111
	HA3 0.0-0.1	SE264243.003	%	50 - 130%	109
	HA4 0.0-0.1	SE264243.004	%	50 - 130%	114
	HA5 0.0-0.1	SE264243.005	%	50 - 130%	110
	HA6 0.0-0.1	SE264243.006	%	50 - 130%	109
	HA7 0.0-0.1	SE264243.007	%	50 - 130%	114
	HA8 0.0-0.1	SE264243.008	%	50 - 130%	110
	HA9 0.0-0.1	SE264243.009	%	50 - 130%	113
	HA10 0.0-0.1	SE264243.010	%	50 - 130%	110
	HA11 0.0-0.1	SE264243.011	%	50 - 130%	111
	HA12 0.0-0.1	SE264243.012	%	50 - 130%	111
	HA13 0.0-0.1	SE264243.013	%	50 - 130%	111
	HA14 0.0-0.1	SE264243.014	%	50 - 130%	109
	HA15 0.0-0.1	SE264243.015	%	50 - 130%	105
	HA16 0.0-0.1	SE264243.016	%	50 - 130%	113
	HA17 0.0-0.1	SE264243.017	%	50 - 130%	109
	SP1	SE264243.018	%	50 - 130%	112
	SP2	SE264243.019	%	50 - 130%	112
	SP3	SE264243.020	%	50 - 130%	96
	Drain 1	SE264243.021	%	50 - 130%	112
	Drain 2	SE264243.022	%	50 - 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.

Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d5-phenol (Surrogate)	Sed 1	SE264243.023	%	50 - 130%	101

Speciated Phenols in Water

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2,4,6-Tribromophenol (Surrogate)	D1	SE264243.024	%	40 - 130%	24 ④
d5-phenol (Surrogate)	D1	SE264243.024	%	20 - 90%	35

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	HA1 0.0-0.1	SE264243.001	%	60 - 130%	87
	HA2 0.0-0.1	SE264243.002	%	60 - 130%	93
	HA3 0.0-0.1	SE264243.003	%	60 - 130%	75
	HA4 0.0-0.1	SE264243.004	%	60 - 130%	82
	HA5 0.0-0.1	SE264243.005	%	60 - 130%	87
	HA6 0.0-0.1	SE264243.006	%	60 - 130%	88
	HA7 0.0-0.1	SE264243.007	%	60 - 130%	102
	HA8 0.0-0.1	SE264243.008	%	60 - 130%	86
	HA9 0.0-0.1	SE264243.009	%	60 - 130%	103
	HA10 0.0-0.1	SE264243.010	%	60 - 130%	86
	HA11 0.0-0.1	SE264243.011	%	60 - 130%	87
	HA12 0.0-0.1	SE264243.012	%	60 - 130%	85
	HA13 0.0-0.1	SE264243.013	%	60 - 130%	102
	HA14 0.0-0.1	SE264243.014	%	60 - 130%	89
	HA15 0.0-0.1	SE264243.015	%	60 - 130%	104
	HA16 0.0-0.1	SE264243.016	%	60 - 130%	91
	HA17 0.0-0.1	SE264243.017	%	60 - 130%	104
	SP1	SE264243.018	%	60 - 130%	112
	SP2	SE264243.019	%	60 - 130%	106
	SP3	SE264243.020	%	60 - 130%	84
	Drain 1	SE264243.021	%	60 - 130%	93
	Drain 2	SE264243.022	%	60 - 130%	77
	Sed 1	SE264243.023	%	60 - 130%	78
	QC1	SE264243.025	%	60 - 130%	73
	QC3	SE264243.026	%	60 - 130%	88
d4-1,2-dichloroethane (Surrogate)	HA1 0.0-0.1	SE264243.001	%	60 - 130%	86
	HA2 0.0-0.1	SE264243.002	%	60 - 130%	92
	HA3 0.0-0.1	SE264243.003	%	60 - 130%	85
	HA4 0.0-0.1	SE264243.004	%	60 - 130%	86
	HA5 0.0-0.1	SE264243.005	%	60 - 130%	96
	HA6 0.0-0.1	SE264243.006	%	60 - 130%	100
	HA7 0.0-0.1	SE264243.007	%	60 - 130%	112
	HA8 0.0-0.1	SE264243.008	%	60 - 130%	100
	HA9 0.0-0.1	SE264243.009	%	60 - 130%	106
	HA10 0.0-0.1	SE264243.010	%	60 - 130%	102
	HA11 0.0-0.1	SE264243.011	%	60 - 130%	95
	HA12 0.0-0.1	SE264243.012	%	60 - 130%	89
	HA13 0.0-0.1	SE264243.013	%	60 - 130%	104
	HA14 0.0-0.1	SE264243.014	%	60 - 130%	103
	HA15 0.0-0.1	SE264243.015	%	60 - 130%	111
	HA16 0.0-0.1	SE264243.016	%	60 - 130%	95
	HA17 0.0-0.1	SE264243.017	%	60 - 130%	102
	SP1	SE264243.018	%	60 - 130%	112
	SP2	SE264243.019	%	60 - 130%	105
	SP3	SE264243.020	%	60 - 130%	74
	Drain 1	SE264243.021	%	60 - 130%	88
	Drain 2	SE264243.022	%	60 - 130%	71
	Sed 1	SE264243.023	%	60 - 130%	75
	QC1	SE264243.025	%	60 - 130%	73
	QC3	SE264243.026	%	60 - 130%	88
d8-toluene (Surrogate)	HA1 0.0-0.1	SE264243.001	%	60 - 130%	87
	HA2 0.0-0.1	SE264243.002	%	60 - 130%	89

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d8-toluene (Surrogate)	HA3 0.0-0.1	SE264243.003	%	60 - 130%	82
	HA4 0.0-0.1	SE264243.004	%	60 - 130%	81
	HA5 0.0-0.1	SE264243.005	%	60 - 130%	88
	HA6 0.0-0.1	SE264243.006	%	60 - 130%	94
	HA7 0.0-0.1	SE264243.007	%	60 - 130%	100
	HA8 0.0-0.1	SE264243.008	%	60 - 130%	91
	HA9 0.0-0.1	SE264243.009	%	60 - 130%	102
	HA10 0.0-0.1	SE264243.010	%	60 - 130%	94
	HA11 0.0-0.1	SE264243.011	%	60 - 130%	93
	HA12 0.0-0.1	SE264243.012	%	60 - 130%	86
	HA13 0.0-0.1	SE264243.013	%	60 - 130%	105
	HA14 0.0-0.1	SE264243.014	%	60 - 130%	99
	HA15 0.0-0.1	SE264243.015	%	60 - 130%	106
	HA16 0.0-0.1	SE264243.016	%	60 - 130%	94
	HA17 0.0-0.1	SE264243.017	%	60 - 130%	107
	SP1	SE264243.018	%	60 - 130%	114
	SP2	SE264243.019	%	60 - 130%	120
	SP3	SE264243.020	%	60 - 130%	73
	Drain 1	SE264243.021	%	60 - 130%	91
	Drain 2	SE264243.022	%	60 - 130%	73
	Sed 1	SE264243.023	%	60 - 130%	78
	QC1	SE264243.025	%	60 - 130%	76
	QC3	SE264243.026	%	60 - 130%	91

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	D1	SE264243.024	%	40 - 130%	98
d4-1,2-dichloroethane (Surrogate)	D1	SE264243.024	%	40 - 130%	103
d8-toluene (Surrogate)	D1	SE264243.024	%	40 - 130%	93

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	HA1 0.0-0.1	SE264243.001	%	60 - 130%	87
	HA2 0.0-0.1	SE264243.002	%	60 - 130%	93
	HA3 0.0-0.1	SE264243.003	%	60 - 130%	75
	HA4 0.0-0.1	SE264243.004	%	60 - 130%	82
	HA5 0.0-0.1	SE264243.005	%	60 - 130%	87
	HA6 0.0-0.1	SE264243.006	%	60 - 130%	88
	HA7 0.0-0.1	SE264243.007	%	60 - 130%	102
	HA8 0.0-0.1	SE264243.008	%	60 - 130%	86
	HA9 0.0-0.1	SE264243.009	%	60 - 130%	103
	HA10 0.0-0.1	SE264243.010	%	60 - 130%	86
	HA11 0.0-0.1	SE264243.011	%	60 - 130%	87
	HA12 0.0-0.1	SE264243.012	%	60 - 130%	85
	HA13 0.0-0.1	SE264243.013	%	60 - 130%	102
	HA14 0.0-0.1	SE264243.014	%	60 - 130%	89
	HA15 0.0-0.1	SE264243.015	%	60 - 130%	104
	HA16 0.0-0.1	SE264243.016	%	60 - 130%	91
	HA17 0.0-0.1	SE264243.017	%	60 - 130%	104
	SP1	SE264243.018	%	60 - 130%	112
	SP2	SE264243.019	%	60 - 130%	106
	SP3	SE264243.020	%	60 - 130%	84
	Drain 1	SE264243.021	%	60 - 130%	93
	Drain 2	SE264243.022	%	60 - 130%	77
	Sed 1	SE264243.023	%	60 - 130%	78
	QC1	SE264243.025	%	60 - 130%	73
	QC3	SE264243.026	%	60 - 130%	88
d4-1,2-dichloroethane (Surrogate)	HA1 0.0-0.1	SE264243.001	%	60 - 130%	86
	HA2 0.0-0.1	SE264243.002	%	60 - 130%	92
	HA3 0.0-0.1	SE264243.003	%	60 - 130%	85
	HA4 0.0-0.1	SE264243.004	%	60 - 130%	86
	HA5 0.0-0.1	SE264243.005	%	60 - 130%	96

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d4-1,2-dichloroethane (Surrogate)	HA6 0.0-0.1	SE264243.006	%	60 - 130%	100
	HA7 0.0-0.1	SE264243.007	%	60 - 130%	112
	HA8 0.0-0.1	SE264243.008	%	60 - 130%	100
	HA9 0.0-0.1	SE264243.009	%	60 - 130%	106
	HA10 0.0-0.1	SE264243.010	%	60 - 130%	102
	HA11 0.0-0.1	SE264243.011	%	60 - 130%	95
	HA12 0.0-0.1	SE264243.012	%	60 - 130%	89
	HA13 0.0-0.1	SE264243.013	%	60 - 130%	104
	HA14 0.0-0.1	SE264243.014	%	60 - 130%	103
	HA15 0.0-0.1	SE264243.015	%	60 - 130%	111
	HA16 0.0-0.1	SE264243.016	%	60 - 130%	95
	HA17 0.0-0.1	SE264243.017	%	60 - 130%	102
	SP1	SE264243.018	%	60 - 130%	112
	SP2	SE264243.019	%	60 - 130%	105
	SP3	SE264243.020	%	60 - 130%	74
	Drain 1	SE264243.021	%	60 - 130%	88
	Drain 2	SE264243.022	%	60 - 130%	71
	Sed 1	SE264243.023	%	60 - 130%	75
	QC1	SE264243.025	%	60 - 130%	73
	QC3	SE264243.026	%	60 - 130%	88
d8-toluene (Surrogate)	HA1 0.0-0.1	SE264243.001	%	60 - 130%	87
	HA2 0.0-0.1	SE264243.002	%	60 - 130%	89
	HA3 0.0-0.1	SE264243.003	%	60 - 130%	82
	HA4 0.0-0.1	SE264243.004	%	60 - 130%	81
	HA5 0.0-0.1	SE264243.005	%	60 - 130%	88
	HA6 0.0-0.1	SE264243.006	%	60 - 130%	94
	HA7 0.0-0.1	SE264243.007	%	60 - 130%	100
	HA8 0.0-0.1	SE264243.008	%	60 - 130%	91
	HA9 0.0-0.1	SE264243.009	%	60 - 130%	102
	HA10 0.0-0.1	SE264243.010	%	60 - 130%	94
	HA11 0.0-0.1	SE264243.011	%	60 - 130%	93
	HA12 0.0-0.1	SE264243.012	%	60 - 130%	86
	HA13 0.0-0.1	SE264243.013	%	60 - 130%	105
	HA14 0.0-0.1	SE264243.014	%	60 - 130%	99
	HA15 0.0-0.1	SE264243.015	%	60 - 130%	106
	HA16 0.0-0.1	SE264243.016	%	60 - 130%	94
	HA17 0.0-0.1	SE264243.017	%	60 - 130%	107
	SP1	SE264243.018	%	60 - 130%	114
	SP2	SE264243.019	%	60 - 130%	120
	SP3	SE264243.020	%	60 - 130%	73
	Drain 1	SE264243.021	%	60 - 130%	91
	Drain 2	SE264243.022	%	60 - 130%	73
	Sed 1	SE264243.023	%	60 - 130%	78
	QC1	SE264243.025	%	60 - 130%	76
	QC3	SE264243.026	%	60 - 130%	91

Volatile Petroleum Hydrocarbons in Water — **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	D1	SE264243.024	%	40 - 130%	98
d4-1,2-dichloroethane (Surrogate)	D1	SE264243.024	%	60 - 130%	103
d8-toluene (Surrogate)	D1	SE264243.024	%	40 - 130%	93

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
LB310734.001	Mercury	mg/L	0.0001	<0.0001

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result
LB310808.001	Mercury	mg/kg	0.05	<0.05
LB310809.001	Mercury	mg/kg	0.05	<0.05

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB310794.001		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)	%	-	91
LB310795.001		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)	%	-	79

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.

OC Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB310838.001		Alpha BHC	µg/L	0.1	<0.1
		Hexachlorobenzene (HCB)	µg/L	0.1	<0.1
		Beta BHC	µg/L	0.1	<0.1
		Lindane (gamma BHC)	µg/L	0.1	<0.1
		Delta BHC	µg/L	0.1	<0.1
		Heptachlor	µg/L	0.1	<0.1
		Aldrin	µg/L	0.1	<0.1
		Isodrin	µg/L	0.1	<0.1
		Heptachlor epoxide	µg/L	0.1	<0.1
		Gamma Chlordane	µg/L	0.1	<0.1
		Alpha Chlordane	µg/L	0.1	<0.1
		Alpha Endosulfan	µg/L	0.1	<0.1
		p,p'-DDE	µg/L	0.1	<0.1
		Dieldrin	µg/L	0.1	<0.1
		Endrin	µg/L	0.1	<0.1
		Beta Endosulfan	µg/L	0.1	<0.1
		p,p'-DDD	µg/L	0.1	<0.1
		Endrin aldehyde	µg/L	0.1	<0.1
		Endosulfan sulphate	µg/L	0.1	<0.1
		p,p'-DDT	µg/L	0.1	<0.1
		Endrin ketone	µg/L	0.1	<0.1
		Methoxychlor	µg/L	0.1	<0.1
		Mirex	µg/L	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	75

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB310794.001		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)	%	-	109
		d14-p-terphenyl (Surrogate)	%	-	125
LB310795.001		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)	%	-	102
		d14-p-terphenyl (Surrogate)	%	-	94

OP Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB310838.001	Azinphos-methyl	µg/L	0.2	<0.2
	Bromophos Ethyl	µg/L	0.2	<0.2
	Chlorpyrifos (Chlorpyrifos Ethyl)	µg/L	0.2	<0.2
	Diazinon (Dimpylate)	µg/L	0.5	<0.5
	Dichlorvos	µg/L	0.5	<0.5
	Dimethoate	µg/L	0.5	<0.5

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.

OP Pesticides in Water (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB310838.001		Ethion	µg/L	0.2	<0.2
		Fenitrothion	µg/L	0.2	<0.2
		Malathion	µg/L	0.2	<0.2
		Methidathion	µg/L	0.5	<0.5
		Parathion-ethyl (Parathion)	µg/L	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	64
		d14-p-terphenyl (Surrogate)	%	-	72

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB310794.001		Naphthalene	mg/kg	0.1	<0.1
		2-methylnaphthalene	mg/kg	0.1	<0.1
		1-methylnaphthalene	mg/kg	0.1	<0.1
		Acenaphthylene	mg/kg	0.1	<0.1
		Acenaphthene	mg/kg	0.1	<0.1
		Fluorene	mg/kg	0.1	<0.1
		Phenanthrene	mg/kg	0.1	<0.1
		Anthracene	mg/kg	0.1	<0.1
		Fluoranthene	mg/kg	0.1	<0.1
		Pyrene	mg/kg	0.1	<0.1
		Benzo(a)anthracene	mg/kg	0.1	<0.1
		Chrysene	mg/kg	0.1	<0.1
		Benzo(a)pyrene	mg/kg	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	117
		2-fluorobiphenyl (Surrogate)	%	-	109
		d14-p-terphenyl (Surrogate)	%	-	125
LB310795.001		Naphthalene	mg/kg	0.1	<0.1
		2-methylnaphthalene	mg/kg	0.1	<0.1
		1-methylnaphthalene	mg/kg	0.1	<0.1
		Acenaphthylene	mg/kg	0.1	<0.1
		Acenaphthene	mg/kg	0.1	<0.1
		Fluorene	mg/kg	0.1	<0.1
		Phenanthrene	mg/kg	0.1	<0.1
		Anthracene	mg/kg	0.1	<0.1
		Fluoranthene	mg/kg	0.1	<0.1
		Pyrene	mg/kg	0.1	<0.1
		Benzo(a)anthracene	mg/kg	0.1	<0.1
		Chrysene	mg/kg	0.1	<0.1
		Benzo(a)pyrene	mg/kg	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	90
		2-fluorobiphenyl (Surrogate)	%	-	102
		d14-p-terphenyl (Surrogate)	%	-	94

PAH (Polynuclear Aromatic Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB310838.001	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

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 Water (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB310838.001		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)	%	-	80
		2-fluorobiphenyl (Surrogate)	%	-	78
		d14-p-terphenyl (Surrogate)	%	-	88

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB310794.001		Arochlor 1016	mg/kg	0.2	<0.2
		Arochlor 1221	mg/kg	0.2	<0.2
		Arochlor 1232	mg/kg	0.2	<0.2
		Arochlor 1242	mg/kg	0.2	<0.2
		Arochlor 1248	mg/kg	0.2	<0.2
		Arochlor 1254	mg/kg	0.2	<0.2
		Arochlor 1260	mg/kg	0.2	<0.2
		Arochlor 1262	mg/kg	0.2	<0.2
		Arochlor 1268	mg/kg	0.2	<0.2
		Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates	TCMX (Surrogate)	%	-	92
LB310795.001		Arochlor 1016	mg/kg	0.2	<0.2
		Arochlor 1221	mg/kg	0.2	<0.2
		Arochlor 1232	mg/kg	0.2	<0.2
		Arochlor 1242	mg/kg	0.2	<0.2
		Arochlor 1248	mg/kg	0.2	<0.2
		Arochlor 1254	mg/kg	0.2	<0.2
		Arochlor 1260	mg/kg	0.2	<0.2
		Arochlor 1262	mg/kg	0.2	<0.2
		Arochlor 1268	mg/kg	0.2	<0.2
		Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates	TCMX (Surrogate)	%	-	79

PCBs in Water

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB310838.001	Arochlor 1016	µg/L	1	<1
	Arochlor 1221	µg/L	1	<1
	Arochlor 1232	µg/L	1	<1
	Arochlor 1242	µg/L	1	<1
	Arochlor 1248	µg/L	1	<1
	Arochlor 1254	µg/L	1	<1
	Arochlor 1260	µg/L	1	<1
	Arochlor 1262	µg/L	1	<1
	Arochlor 1268	µg/L	1	<1

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB310704.001	Phenol	mg/kg	0.5	<0.5
	2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5
	3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
	2-chlorophenol	mg/kg	0.5	<0.5
	2,4-dimethylphenol	mg/kg	0.5	<0.5
	2,6-dichlorophenol	mg/kg	0.5	<0.5
	2,4-dichlorophenol	mg/kg	0.5	<0.5
	4-chloro-3-methylphenol	mg/kg	2	<2
	2,4,6-trichlorophenol	mg/kg	0.5	<0.5
	2-nitrophenol	mg/kg	0.5	<0.5
	4-nitrophenol	mg/kg	1	<1
	2,4,5-trichlorophenol	mg/kg	0.5	<0.5

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.

Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB310704.001		2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1
		Pentachlorophenol	mg/kg	0.5	<0.5
		2,4-dinitrophenol	mg/kg	2	<2
	Surrogates	2,4,6-Tribromophenol (Surrogate)	%	-	104
		d5-phenol (Surrogate)	%	-	117

Speciated Phenols in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB310838.001		Phenol	µg/L	0.5	<0.5
		2-methyl phenol (o-cresol)	µg/L	0.5	<0.5
		3/4-methyl phenol (m/p-cresol)	µg/L	1	<1
		2-chlorophenol	µg/L	0.5	<0.5
		2,4-dimethylphenol	µg/L	0.5	<0.5
		2,6-dichlorophenol	µg/L	0.5	<0.5
		2,4-dichlorophenol	µg/L	0.5	<0.5
		4-chloro-3-methylphenol	µg/L	2	<2
		2,4,6-trichlorophenol	µg/L	0.5	<0.5
		2-nitrophenol	µg/L	0.5	<0.5
		4-nitrophenol	µg/L	1	<1
		2,4,5-trichlorophenol	µg/L	0.5	<0.5
		2,3,4,6/2,3,5,6-tetrachlorophenol	µg/L	1	<1
		Pentachlorophenol	µg/L	0.5	<0.5
		2,4-dinitrophenol	µg/L	2	<2
	Surrogates	2,4,6-Tribromophenol (Surrogate)	%	-	117
		d5-phenol (Surrogate)	%	-	104

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result
LB310806.001	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
LB310807.001	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

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

Sample Number	Parameter	Units	LOR	Result
LB310714.001	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 Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB310794.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110
LB310795.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45

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.

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB310795.001	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110

TRH (Total Recoverable Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB310838.001	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

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB310798.001	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
	Polycyclic VOCs	Naphthalene (VOC)*	mg/kg	0.1	<0.1
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	114
		d8-toluene (Surrogate)	%	-	116
		Bromofluorobenzene (Surrogate)	%	-	111
	Totals	Total BTEX*	mg/kg	0.6	<0.6
LB310801.001	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
	Polycyclic VOCs	Naphthalene (VOC)*	mg/kg	0.1	<0.1
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	88
		d8-toluene (Surrogate)	%	-	92
		Bromofluorobenzene (Surrogate)	%	-	93
	Totals	Total BTEX*	mg/kg	0.6	<0.6

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB310996.001	Monocyclic Aromatic Hydrocarbons	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
	Polycyclic VOCs	Naphthalene (VOC)*	µg/L	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	103
		d8-toluene (Surrogate)	%	-	94
		Bromofluorobenzene (Surrogate)	%	-	98

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB310798.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	114
LB310801.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	88

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB310996.001		TRH C6-C9	µg/L	40	<40
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	103
		d8-toluene (Surrogate)	%	-	94
		Bromofluorobenzene (Surrogate)	%	-	98

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-(AU)-[ENV]AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE264243.010	LB310808.014	Mercury	mg/kg	0.05	0.07	0.09	92	26
SE264243.019	LB310808.024	Mercury	mg/kg	0.05	0.08	0.10	85	17
SE264251.004	LB310809.014	Mercury	mg/kg	0.05	0.072293185	20.0461746128	114	36
SE264251.013	LB310809.024	Mercury	mg/kg	0.05	0.011983929	00.0130017145	200	0

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE264243.010	LB310803.011	% Moisture	%w/w	1	19.0	18.7	35	2
SE264243.019	LB310803.021	% Moisture	%w/w	1	8.5	8.1	42	5
SE264251.004	LB310804.011	% Moisture	%w/w	1	3.6891679748	4.4827586206	54	19
SE264251.013	LB310804.021	% Moisture	%w/w	1	1.2704174228	1.9493177387	92	42

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE264243.010	LB310794.014		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	0
			Lindane (gamma BHC)	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDE*	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDD*	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDT*	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
			Total OC VIC EPA	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.14	30	7
SE264243.019	LB310794.024		Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane (gamma BHC)	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDE*	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDD*	mg/kg	0.1	<0.1	<0.1	200	0

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 Soil (continued) — **Method: ME-(AU)-[ENV]AN420**

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE264243.019	LB310794.024		p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDT*	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
			Total OC VIC EPA	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.13	0.14	30	6
SE264251.004	LB310795.014		Alpha BHC	mg/kg	0.1	0.00021959673	.5771007521	200	0
			Hexachlorobenzene (HCB)	mg/kg	0.1	0	0	200	0
			Beta BHC	mg/kg	0.1	0.00221131070	.0053494494	200	0
			Lindane (gamma BHC)	mg/kg	0.1	0.0086521317	0	200	0
			Delta BHC	mg/kg	0.1	0.00247402500	.0059712913	200	0
			Heptachlor	mg/kg	0.1	0.00150512010	.0068418645	200	0
			Aldrin	mg/kg	0.1	0.00060210930	.0005283391	200	0
			Isodrin	mg/kg	0.1	0.00023722600	.0008195462	200	0
			Heptachlor epoxide	mg/kg	0.1	0.00293187970	.0055946486	200	0
			Gamma Chlordane	mg/kg	0.1	0.0129089936	0	200	0
			Alpha Chlordane	mg/kg	0.1	0.00172012780	.0027085443	200	0
			Alpha Endosulfan	mg/kg	0.2	0.00047997950	.0009075209	200	0
			o,p'-DDE*	mg/kg	0.1	0.00047997950	.0009075209	200	0
			p,p'-DDE	mg/kg	0.1	0	0.0169565880	200	0
			Dieldrin	mg/kg	0.2	0.0290288648	0	200	0
			Endrin	mg/kg	0.2	0	0	200	0
			Beta Endosulfan	mg/kg	0.2	0.00422180700	.0132614589	200	0
			o,p'-DDD*	mg/kg	0.1	0.0087339595	0	200	0
			p,p'-DDD	mg/kg	0.1	0.00108146980	.0088078770	200	0
			Endrin aldehyde	mg/kg	0.1	3.27244542322	.6656248536	200	0
			Endosulfan sulphate	mg/kg	0.1	0	0	200	0
			o,p'-DDT*	mg/kg	0.1	0.00108146980	.0088078770	200	0
			p,p'-DDT	mg/kg	0.1	0.00394535690	.0014064309	200	0
			Endrin ketone	mg/kg	0.1	0.0092875851	0	200	0
			Methoxychlor	mg/kg	0.1	0	0	200	0
			Mirex	mg/kg	0.1	0.0186499939	0	200	0
			trans-Nonachlor	mg/kg	0.1	0.0054279765	0	200	0
			Total CLP OC Pesticides	mg/kg	1	0	0	200	0
			Total OC VIC EPA	mg/kg	1	0	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.13203955590	.1343410390	30	2
SE264251.011	LB310795.026		Alpha BHC	mg/kg	0.1	2.78195674146	.6094568794	200	0
			Hexachlorobenzene (HCB)	mg/kg	0.1	0	0	200	0
			Beta BHC	mg/kg	0.1	0.01382677130	.0001864185	200	0
			Lindane (gamma BHC)	mg/kg	0.1	0.00018799756	.8090971952	200	0
			Delta BHC	mg/kg	0.1	0.00080163197	.7571582923	200	0
			Heptachlor	mg/kg	0.1	0.00667530930	.0013960923	200	0
			Aldrin	mg/kg	0.1	1.92969248260	.0006193265	200	0
			Isodrin	mg/kg	0.1	0.00029717820	.0001176533	200	0
			Heptachlor epoxide	mg/kg	0.1	0.00069573200	.0045749255	200	0
			Gamma Chlordane	mg/kg	0.1	0	0.0188771571	200	0
			Alpha Chlordane	mg/kg	0.1	1.10215676600	.0009936739	200	0
			Alpha Endosulfan	mg/kg	0.2	0.01432535660	.0014334708	200	0
			o,p'-DDE*	mg/kg	0.1	0.01432535660	.0014334708	200	0
			p,p'-DDE	mg/kg	0.1	0.00157979230	.0059061913	200	0
			Dieldrin	mg/kg	0.2	0.01889161550	.0244093855	200	0
			Endrin	mg/kg	0.2	0.0138306885	0	200	0
			Beta Endosulfan	mg/kg	0.2	0.00130851760	.0012026533	200	0
			o,p'-DDD*	mg/kg	0.1	0.02306341190	.0091445220	200	0
			p,p'-DDD	mg/kg	0.1	0.00614961550	.0231167466	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 Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE264251.011	LB310795.026		Endrin aldehyde	mg/kg	0.1	0	5.7951023772	200	0
			Endosulfan sulphate	mg/kg	0.1	0.0370463788	0	200	0
			o,p'-DDT*	mg/kg	0.1	0.00614961550.0231167466		200	0
			p,p'-DDT	mg/kg	0.1	0	0	200	0
			Endrin ketone	mg/kg	0.1	0	0.0072179217	200	0
			Methoxychlor	mg/kg	0.1	0	0.0162759319	200	0
			Mirex	mg/kg	0.1	0	0.0166673954	200	0
			trans-Nonachlor	mg/kg	0.1	0	0.0171871842	200	0
			Total CLP OC Pesticides	mg/kg	1	0	0	200	0
			Total OC VIC EPA	mg/kg	1	0	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.13142164600.1363123716		30	4

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE264243.010	LB310794.014		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*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	0
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.6	0.6	30	3
SE264243.019	LB310794.024		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.6	30	13
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.6	0.6	30	13
SE264251.004	LB310795.014		Azinphos-methyl (Guthion)	mg/kg	0.2	0.0032285738	0	200	0
			Bromophos Ethyl	mg/kg	0.2	0.0001210665	0	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	0	0	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	0.0067542042	0	200	0
			Dichlorvos	mg/kg	0.5	0	0.0009457002	200	0
			Dimethoate	mg/kg	0.5	0	0.0091505885	200	0
			Ethion	mg/kg	0.2	0	0	200	0
			Fenitrothion	mg/kg	0.2	0.00072224800.0006777352		200	0
			Malathion	mg/kg	0.2	0	0	200	0
			Methidathion	mg/kg	0.5	0.00334263660.0018717063		200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	0	0.0007443105	200	0
			Total OP Pesticides*	mg/kg	1.7	0	0	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.51483127670.5178144628		30	1
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.56845710930.5623090131		30	1
SE264251.011	LB310795.029		Azinphos-methyl (Guthion)	mg/kg	0.2	0	0	200	0
			Bromophos Ethyl	mg/kg	0.2	0	0	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	0	0	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	0	0	200	0
			Dichlorvos	mg/kg	0.5	0.0095499493	0	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

OP Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE264251.011	LB310795.029		Dimethoate	mg/kg	0.5	0.0034738129	0	200	0
			Ethion	mg/kg	0.2	0	0	200	0
			Fenitrothion	mg/kg	0.2	0.0009310859	0.0013619788	200	0
			Malathion	mg/kg	0.2	0.0092598221	0.0123548372	200	0
			Methidathion	mg/kg	0.5	0.0006020818	0.0014812198	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	0	0	200	0
			Total OP Pesticides*	mg/kg	1.7	0	0	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4931592061	0.4901806495	30	1
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5664451185	0.5350079227	30	6

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE264243.010	LB310794.014		Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
			Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
			Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0*	mg/kg	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	mg/kg	0.2	<0.2	<0.2	175	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR*	mg/kg	0.3	<0.3	<0.3	134	0
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.6	0.6	30	1
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	0
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.6	0.6	30	3
SE264243.019	LB310794.024		Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
			Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
			Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluoranthene	mg/kg	0.1	<0.1	<0.1	195	0
			Pyrene	mg/kg	0.1	<0.1	<0.1	177	0
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0*	mg/kg	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	mg/kg	0.2	<0.2	<0.2	175	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR*	mg/kg	0.3	<0.3	<0.3	134	0
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.6	0.7	30	7
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.6	30	13

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)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE264243.019	LB310794.024	Surrogates	d14-p-terphenyl (Surrogate)	mg/kg	-	0.6	0.6	30	13
SE264251.004	LB310795.014		Naphthalene	mg/kg	0.1	0.777404534	20.7141169639	43	8
			2-methylnaphthalene	mg/kg	0.1	0.350986649	70.3195556117	60	9
			1-methylnaphthalene	mg/kg	0.1	0.360693479	30.3294627875	59	9
			Acenaphthylene	mg/kg	0.1	0.475138575	00.5777386444	49	19
			Acenaphthene	mg/kg	0.1	0.565832303	70.5064380216	49	11
			Fluorene	mg/kg	0.1	0.630860044	80.6156867481	46	2
			Phenanthrene	mg/kg	0.1	4.075966696	04.8269606142	32	17
			Anthracene	mg/kg	0.1	1.529004260	71.5662499984	36	2
			Fluoranthene	mg/kg	0.1	6.461781567	37.1601674730	31	10
			Pyrene	mg/kg	0.1	8.345068696	98.6080297253	31	3
			Benzo(a)anthracene	mg/kg	0.1	3.244050362	43.6919673345	33	13
			Chrysene	mg/kg	0.1	3.459575504	63.8655040338	33	11
			Benzo(b&j)fluoranthene	mg/kg	0.1	4.068738572	24.6265927656	32	13
			Benzo(k)fluoranthene	mg/kg	0.1	1.443833432	21.6271049567	37	12
			Benzo(a)pyrene	mg/kg	0.1	4.509360927	44.7419341381	32	5
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	2.405611806	72.8540517802	34	17
			Dibenzo(ah)anthracene	mg/kg	0.1	0.506264566	40.5570966802	49	10
			Benzo(ghi)perylene	mg/kg	0.1	2.678038979	23.1233097529	33	15
			Carcinogenic PAHs, BaP TEQ <LOR=0*	mg/kg	0.2	6.193225056	16.6488906399	13	7
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	mg/kg	0.2	6.193225056	16.6488906399	13	7
			Carcinogenic PAHs, BaP TEQ <LOR=LOR*	mg/kg	0.3	6.193225056	16.6488906399	15	7
			Total PAH (18)	mg/kg	0.8	15.88821095	950.3119680309	30	9
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.496789503	40.5181274468	30	4
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.514831276	70.5178144628	30	1
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.568457109	30.5623090131	30	1
SE264251.011	LB310795.029		Naphthalene	mg/kg	0.1	0.042308771	40.0533439592	200	0
			2-methylnaphthalene	mg/kg	0.1	0.039247091	30.0408391865	200	0
			1-methylnaphthalene	mg/kg	0.1	0.049585190	70.0557497653	200	0
			Acenaphthylene	mg/kg	0.1	0.200223321	10.3235964740	68	47
			Acenaphthene	mg/kg	0.1	0.015352337	00.0267972605	200	0
			Fluorene	mg/kg	0.1	0.068474974	50.1369777553	127	31
			Phenanthrene	mg/kg	0.1	0.731057326	52.0824018628	37	96 ④
			Anthracene	mg/kg	0.1	0.226113898	60.5567200622	56	84 ④
			Fluoranthene	mg/kg	0.1	1.184494706	33.2320887632	35	93 ④
			Pyrene	mg/kg	0.1	1.261091730	62.9931097398	35	81 ④
			Benzo(a)anthracene	mg/kg	0.1	0.568282361	31.3722210141	40	83 ④
			Chrysene	mg/kg	0.1	0.633559018	11.3407587403	40	72 ④
			Benzo(b&j)fluoranthene	mg/kg	0.1	0.744081412	51.5442299646	39	70 ④
			Benzo(k)fluoranthene	mg/kg	0.1	0.312487080	00.6234701267	51	66 ④
			Benzo(a)pyrene	mg/kg	0.1	0.700570092	61.4473342593	39	70 ④
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	0.426524184	70.7723624111	47	58 ④
			Dibenzo(ah)anthracene	mg/kg	0.1	0.091651251	90.1753257784	105	55
			Benzo(ghi)perylene	mg/kg	0.1	0.487554401	00.7970212116	46	48 ④
			Carcinogenic PAHs, BaP TEQ <LOR=0*	mg/kg	0.2	0.916918730	72.0752661889	23	77 ④
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	mg/kg	0.2	0.966918730	72.0752661889	23	73 ④
			Carcinogenic PAHs, BaP TEQ <LOR=LOR*	mg/kg	0.3	1.016918730	72.0752661889	29	68 ④
			Total PAH (18)	mg/kg	0.8	7.476039533	917.3976181641	31	80 ④
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.494025473	40.5076357590	30	3
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.493159206	10.4901806495	30	1
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.566445118	50.5350079227	30	6

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE264243.010	LB310794.014	Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0

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

PCBs in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE264243.010	LB310794.014		Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates	TCMX (Surrogate)	mg/kg	-	0	0	30	6
SE264243.019	LB310794.024		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates	TCMX (Surrogate)	mg/kg	-	0	0	30	6
SE264251.004	LB310795.014		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	mg/kg	0.2	0	0	200	0
			Arochlor 1254	mg/kg	0.2	0	0	200	0
			Arochlor 1260	mg/kg	0.2	0	0	200	0
			Arochlor 1262	mg/kg	0.2	0	0	200	0
			Arochlor 1268	mg/kg	0.2	0	0	200	0
			Total PCBs (Arochlors)	mg/kg	1	0	0	200	0
		Surrogates	TCMX (Surrogate)	mg/kg	-	0.132	0.134	30	2
SE264251.011	LB310795.026		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	mg/kg	0.2	0	0	200	0
			Arochlor 1254	mg/kg	0.2	0	0	200	0
			Arochlor 1260	mg/kg	0.2	0	0	200	0
			Arochlor 1262	mg/kg	0.2	0	0	200	0
			Arochlor 1268	mg/kg	0.2	0	0	200	0
			Total PCBs (Arochlors)	mg/kg	1	0	0	200	0
		Surrogates	TCMX (Surrogate)	mg/kg	-	0.131	0.136	30	4

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE264243.010	LB310704.014		Phenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	200	0
			Total Cresol	mg/kg	1.5	<1.5	<1.5	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	<0.5	200	0
			4-nitrophenol	mg/kg	1	<1	<1	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dinitrophenol	mg/kg	2	<2	<2	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.9	4.9	30	1
			d5-phenol (Surrogate)	mg/kg	-	2.2	2.2	30	0
SE264243.023	LB310704.028		Phenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<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

Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE264243.023	LB310704.028	Total Cresol	mg/kg	1.5	<1.5	<1.5	200	0
		2-chlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
		2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	200	0
		2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
		2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
		4-chloro-3-methylphenol	mg/kg	2	<2	<2	200	0
		2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
		2-nitrophenol	mg/kg	0.5	<0.5	<0.5	200	0
		4-nitrophenol	mg/kg	1	<1	<1	200	0
		2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
		2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	200	0
		Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
		2,4-dinitrophenol	mg/kg	2	<2	<2	200	0
	Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.4	4.6	30	5
		d5-phenol (Surrogate)	mg/kg	-	2.0	2.1	30	6

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE264243.010	LB310806.014	Arsenic, As	mg/kg	1	6	6	47	3
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	9.8	5.8	36	52 ②
		Copper, Cu	mg/kg	0.5	12	13	34	3
		Nickel, Ni	mg/kg	0.5	1.3	1.2	70	11
		Lead, Pb	mg/kg	1	59	62	32	6
		Zinc, Zn	mg/kg	2	18	19	41	7
SE264243.019	LB310806.024	Arsenic, As	mg/kg	1	4	5	53	12
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	5.2	6.4	39	22
		Copper, Cu	mg/kg	0.5	17	18	33	7
		Nickel, Ni	mg/kg	0.5	1.2	1.3	69	12
		Lead, Pb	mg/kg	1	32	36	33	12
		Zinc, Zn	mg/kg	2	13	15	44	11
SE264251.004	LB310807.014	Arsenic, As	mg/kg	1	3.7650716941	3.15560136	59	18
		Cadmium, Cd	mg/kg	0.3	2.4347436583	3.24531048	41	29
		Chromium, Cr	mg/kg	0.5	11.7462287337	13.8883008	34	17
		Copper, Cu	mg/kg	0.5	95.9620772208	78.433182	31	20
		Nickel, Ni	mg/kg	0.5	68.1144177872	79.1475324	31	15
		Lead, Pb	mg/kg	1	109.257245823	135.4690776	31	21
		Zinc, Zn	mg/kg	2	148.595208078	179.9955348	31	19
SE264251.013	LB310807.024	Arsenic, As	mg/kg	1	0.8846765854	0.70011648	156	0
		Cadmium, Cd	mg/kg	0.3	-0.0193869198	-0.01296512	200	0
		Chromium, Cr	mg/kg	0.5	6.2259708180	5.01142404	39	22
		Copper, Cu	mg/kg	0.5	5.7199326459	4.78656024	40	18
		Nickel, Ni	mg/kg	0.5	2.9729248046	2.92687584	47	2
		Lead, Pb	mg/kg	1	11.1300702263	9.36284244	40	17
		Zinc, Zn	mg/kg	2	7.1826559627	6.13047596	60	16

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE264269.011	LB310714.013	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	144	0

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE264243.010	LB310794.014	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

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)

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE264243.010	LB310794.014		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
SE264243.019	LB310794.024		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	182	0
			TRH C29-C36	mg/kg	45	50	46	125	8
			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	161	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE264251.004	LB310795.014		TRH C10-C14	mg/kg	20	13.06127287	543.6940060754	180	0
			TRH C15-C28	mg/kg	45	23.68674520	247.2368674526	49	10
			TRH C29-C36	mg/kg	45	91.75965029	222.7635770911	52	15
			TRH C37-C40	mg/kg	100	37.18856042	089.1980440097	137	0
			TRH C10-C36 Total	mg/kg	110	15.44639549	570.0004445433	55	12
			TRH >C10-C40 Total (F bands)	mg/kg	210	97.30754982	563.6055419722	70	12
		TRH F Bands	TRH >C10-C16	mg/kg	25	18.28702674	689.1355115951	164	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	-1.1378671697	0	200	0
			TRH >C16-C34 (F3)	mg/kg	90	38.75290805	382.7703934207	55	12
			TRH >C34-C40 (F4)	mg/kg	120	58.55464177	280.8351485511	101	13
SE264251.011	LB310795.026		TRH C10-C14	mg/kg	20	7.29359302	336.5837793158	200	0
			TRH C15-C28	mg/kg	45	31.09878786	9202.614372930	79	23
			TRH C29-C36	mg/kg	45	32.33324649	097.4408190383	83	6
			TRH C37-C40	mg/kg	100	30.63000455	133.4075364502	200	0
			TRH C10-C36 Total	mg/kg	110	63.43203436	090.0551919680	92	15
			TRH >C10-C40 Total (F bands)	mg/kg	210	34.07506526	259.7260867066	173	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	8.96782752	908.6412103520	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	0	0	200	0
			TRH >C16-C34 (F3)	mg/kg	90	34.07506526	259.7260867066	91	17
			TRH >C34-C40 (F4)	mg/kg	120	58.13785750	532.2372888449	200	0

TRH (Total Recoverable Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE264191.001	LB310838.028		TRH C10-C14	µg/L	50	550	440	40	21
			TRH C15-C28	µg/L	200	750	640	59	16
			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	1300	1100	57	18
		TRH F Bands	TRH >C10-C16	µg/L	60	730	610	39	18
			TRH >C10-C16 - Naphthalene (F2)	µg/L	60	730	610	39	18
			TRH >C16-C34 (F3)	µg/L	500	580	<500	124	15
			TRH >C34-C40 (F4)	µg/L	500	<500	<500	200	0
SE264319.002	LB310838.027		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

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate	Parameter	Units	LOR

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

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE264243.010	LB310798.014	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	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	-	10.2	10.8	50	6
			d8-toluene (Surrogate)	mg/kg	-	9.4	9.5	50	1
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.6	9.8	50	13
		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
SE264243.019	LB310798.024	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	-	10.5	9.2	50	14
			d8-toluene (Surrogate)	mg/kg	-	12.0	9.8	50	20
			Bromofluorobenzene (Surrogate)	mg/kg	-	10.6	8.9	50	18
		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
SE264251.004	LB310801.014	Monocyclic	Benzene	mg/kg	0.1	0.006706303	8 0.0047002966	200	0
		Aromatic	Toluene	mg/kg	0.1	0	0	200	0
			Ethylbenzene	mg/kg	0.1	0.007782132	8 0.0054394676	200	0
			m/p-xylene	mg/kg	0.2	0.038895258	0 0.0330500643	200	0
			o-xylene	mg/kg	0.1	0.015682750	8 0.0132347290	200	0
		Polycyclic	Naphthalene (VOC)*	mg/kg	0.1	0.540678937	3 0.5587835638	48	3
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.156455862	8 8.3455775732	50	9
			d8-toluene (Surrogate)	mg/kg	-	9.425409511	7 8.2551268992	50	13
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.237723626	6 8.1961371867	50	12
		Totals	Total BTEX*	mg/kg	0.6	0	0	200	0
			Total Xylenes*	mg/kg	0.3	0.054578008	8 0.0462847934	200	0
SE264251.013	LB310801.024	Monocyclic	Benzene	mg/kg	0.1	0.000715556	4 0.0006409551	200	0
		Aromatic	Toluene	mg/kg	0.1	0	0.0042659798	200	0
			Ethylbenzene	mg/kg	0.1	0.000742398	1 0.0009457968	200	0
			m/p-xylene	mg/kg	0.2	0.002798764	9 0.0032555636	200	0
			o-xylene	mg/kg	0.1	0.001009617	1 0.0011568786	200	0
		Polycyclic	Naphthalene (VOC)*	mg/kg	0.1	0.002929111	6 0.0028485610	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	7.823534317	4 8.2083210377	50	5
			d8-toluene (Surrogate)	mg/kg	-	8.548067835	3 9.3774332170	50	9
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.670338115	4 8.5008736194	50	10
		Totals	Total BTEX*	mg/kg	0.6	0	0	200	0
			Total Xylenes*	mg/kg	0.3	0.003808382	0 0.0044124423	200	0

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE264304.001	LB310996.029	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	-	10.8	10.6	30	3
			d8-toluene (Surrogate)	µg/L	-	11.5	10.6	30	8
			Bromofluorobenzene (Surrogate)	µg/L	-	9.5	8.5	30	11
		Totals	Total BTEX	µg/L	3	<3	<3	200	0
SE264327.001	LB310996.027	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

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)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE264327.001	LB310996.027	Monocyclic	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	-	10.8	10.6	30	2
			d8-toluene (Surrogate)	µg/L	-	9.8	10.3	30	5
			Bromofluorobenzene (Surrogate)	µg/L	-	9.8	8.7	30	12
		Totals	Total BTEX	µg/L	3	<3	<3	200	0

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE264243.010	LB310798.014		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	-	10.2	10.8	50	6
			d8-toluene (Surrogate)	mg/kg	-	9.4	9.5	50	1
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.6	9.8	50	13
		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
SE264243.019	LB310798.024		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	-	10.5	9.2	50	14
			d8-toluene (Surrogate)	mg/kg	-	12.0	9.8	50	20
			Bromofluorobenzene (Surrogate)	mg/kg	-	10.6	8.9	50	18
		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
SE264251.004	LB310801.014		TRH C6-C10	mg/kg	25	9.212453382	09.5559854209	200	0
			TRH C6-C9	mg/kg	20	8.621353777	888.9737237225	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.156455862	888.3455775732	50	9
			d8-toluene (Surrogate)	mg/kg	-	9.425409511	78.2551268992	50	13
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.237723626	68.1961371867	50	12
		VPH F Bands	Benzene (F0)	mg/kg	0.1	0.006706303	80.0047002966	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	9.212453382	09.5559854209	200	0
SE264251.013	LB310801.024		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	-	7.823534317	48.2083210377	50	5
			d8-toluene (Surrogate)	mg/kg	-	8.548067835	39.3774332170	50	9
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.670338115	48.5008736194	50	10
		VPH F Bands	Benzene (F0)	mg/kg	0.1	0.000715556	40.0006409551	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	0	0	200	0

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE264304.001	LB310996.026		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	-	10.8	10.6	30	3
			d8-toluene (Surrogate)	µg/L	-	11.5	10.6	30	8
			Bromofluorobenzene (Surrogate)	µg/L	-	9.5	8.5	30	11
		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
SE264327.001	LB310996.027		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	-	10.8	10.6	30	2
			d8-toluene (Surrogate)	µg/L	-	9.8	10.3	30	5
			Bromofluorobenzene (Surrogate)	µg/L	-	9.8	8.7	30	12
		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

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB310808.002	Mercury	mg/kg	0.05	0.21	0.2	80 - 120	107
LB310809.002	Mercury	mg/kg	0.05	0.20	0.2	80 - 120	102

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB310794.002		Delta BHC	mg/kg	0.1	0.2	0.2	60 - 140	79
		Heptachlor	mg/kg	0.1	0.2	0.2	60 - 140	84
		Aldrin	mg/kg	0.1	0.2	0.2	60 - 140	85
		Dieldrin	mg/kg	0.2	<0.2	0.2	60 - 140	78
		Endrin	mg/kg	0.2	<0.2	0.2	60 - 140	72
		p,p'-DDT	mg/kg	0.1	0.2	0.2	60 - 140	85
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.14	0.15	40 - 130	91
LB310795.002		Delta BHC	mg/kg	0.1	0.1	0.2	60 - 140	64
		Heptachlor	mg/kg	0.1	0.1	0.2	60 - 140	66
		Aldrin	mg/kg	0.1	0.1	0.2	60 - 140	65
		Dieldrin	mg/kg	0.2	<0.2	0.2	60 - 140	64
		Endrin	mg/kg	0.2	<0.2	0.2	60 - 140	70
		p,p'-DDT	mg/kg	0.1	0.2	0.2	60 - 140	83
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.12	0.15	40 - 130	79

OC Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB310838.002		Delta BHC	µg/L	0.1	0.2	0.2	60 - 140	90
		Heptachlor	µg/L	0.1	0.2	0.2	60 - 140	91
		Aldrin	µg/L	0.1	0.2	0.2	60 - 140	92
		Dieldrin	µg/L	0.1	0.2	0.2	60 - 140	92
		Endrin	µg/L	0.1	0.2	0.2	60 - 140	91
		p,p'-DDT	µg/L	0.1	0.2	0.2	60 - 140	85
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	µg/L	-	0.13	0.15	40 - 130	85

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB310794.002		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	2.0	2	60 - 140	100
		Diazinon (Dimpylate)	mg/kg	0.5	2.1	2	60 - 140	106
		Dichlorvos	mg/kg	0.5	1.5	2	60 - 140	75
		Ethion	mg/kg	0.2	1.9	2	60 - 140	97
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	109
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.6	0.5	40 - 130	120
LB310795.002		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	2.0	2	60 - 140	98
		Diazinon (Dimpylate)	mg/kg	0.5	2.0	2	60 - 140	101
		Dichlorvos	mg/kg	0.5	1.5	2	60 - 140	74
		Ethion	mg/kg	0.2	2.0	2	60 - 140	100
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	101
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.6	0.5	40 - 130	111

OP Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB310838.002		Chlorpyrifos (Chlorpyrifos Ethyl)	µg/L	0.2	8.0	8	60 - 140	100
		Diazinon (Dimpylate)	µg/L	0.5	8.3	8	60 - 140	103
		Dichlorvos	µg/L	0.5	6.8	8	60 - 140	85
		Ethion	µg/L	0.2	8.2	8	60 - 140	103
	Surrogates	2-fluorobiphenyl (Surrogate)	µg/L	-	0.4	0.5	40 - 130	74
		d14-p-terphenyl (Surrogate)	µg/L	-	0.4	0.5	40 - 130	72

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB310794.002	Naphthalene	mg/kg	0.1	4.4	4	60 - 140	110
	Acenaphthylene	mg/kg	0.1	4.4	4	60 - 140	110
	Acenaphthene	mg/kg	0.1	4.6	4	60 - 140	115
	Phenanthrene	mg/kg	0.1	4.5	4	60 - 140	113
	Anthracene	mg/kg	0.1	4.5	4	60 - 140	113
	Fluoranthene	mg/kg	0.1	4.5	4	60 - 140	113

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 Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB310794.002		Pyrene	mg/kg	0.1	4.8	4	60 - 140	119
		Benzo(a)pyrene	mg/kg	0.1	4.7	4	60 - 140	117
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.6	0.5	40 - 130	118
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	109
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.6	0.5	40 - 130	120
LB310795.002		Naphthalene	mg/kg	0.1	4.3	4	60 - 140	108
		Acenaphthylene	mg/kg	0.1	4.3	4	60 - 140	106
		Acenaphthene	mg/kg	0.1	4.5	4	60 - 140	112
		Phenanthrene	mg/kg	0.1	4.4	4	60 - 140	111
		Anthracene	mg/kg	0.1	4.3	4	60 - 140	109
		Fluoranthene	mg/kg	0.1	4.4	4	60 - 140	110
		Pyrene	mg/kg	0.1	5.0	4	60 - 140	124
		Benzo(a)pyrene	mg/kg	0.1	4.7	4	60 - 140	117
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	94
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	101
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.6	0.5	40 - 130	111

PAH (Polynuclear Aromatic Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB310838.002		Naphthalene	µg/L	0.1	31	40	60 - 140	78
		Acenaphthylene	µg/L	0.1	32	40	60 - 140	81
		Acenaphthene	µg/L	0.1	32	40	60 - 140	79
		Phenanthrene	µg/L	0.1	31	40	60 - 140	76
		Anthracene	µg/L	0.1	24	40	60 - 140	60
		Fluoranthene	µg/L	0.1	30	40	60 - 140	76
		Pyrene	µg/L	0.1	27	40	60 - 140	69
		Benzo(a)pyrene	µg/L	0.1	32	40	60 - 140	79
	Surrogates	d5-nitrobenzene (Surrogate)	µg/L	-	0.4	0.5	40 - 130	70
		2-fluorobiphenyl (Surrogate)	µg/L	-	0.4	0.5	40 - 130	84
		d14-p-terphenyl (Surrogate)	µg/L	-	0.3	0.5	40 - 130	66

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB310794.002	Arochlor 1260	mg/kg	0.2	0.4	0.4	60 - 140	88
LB310795.002	Arochlor 1260	mg/kg	0.2	0.4	0.4	60 - 140	95

PCBs in Water

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB310838.002	Arochlor 1260	µg/L	1	<1	0.4	60 - 140	69

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB310704.002		Phenol	mg/kg	0.5	1.2	1	70 - 130	124
		2,4-dichlorophenol	mg/kg	0.5	1.0	1	70 - 130	96
		2,4,6-trichlorophenol	mg/kg	0.5	1.0	1	70 - 130	104
		Pentachlorophenol	mg/kg	0.5	0.9	1	70 - 130	92
	Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	5.4	5	40 - 130	108
		d5-phenol (Surrogate)	mg/kg	-	2.3	2	40 - 130	117

Speciated Phenols in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB310838.002		Phenol	µg/L	0.5	44	40	60 - 140	111
		2,4-dichlorophenol	µg/L	0.5	43	40	60 - 140	108
		2,4,6-trichlorophenol	µg/L	0.5	50	40	60 - 140	126
		Pentachlorophenol	µg/L	0.5	54	40	60 - 140	135
	Surrogates	2,4,6-Tribromophenol (Surrogate)	µg/L	-	5.7	5	40 - 130	114
		d5-phenol (Surrogate)	µg/L	-	2.1	2	40 - 130	105

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB310806.002	Arsenic, As	mg/kg	1	320	318.22	80 - 120	100
	Cadmium, Cd	mg/kg	0.3	4.7	4.81	70 - 130	98
	Chromium, Cr	mg/kg	0.5	42	38.31	80 - 120	110
	Copper, Cu	mg/kg	0.5	300	290	80 - 120	102
	Nickel, Ni	mg/kg	0.5	180	187	80 - 120	98
	Lead, Pb	mg/kg	1	90	89.9	80 - 120	101
	Zinc, Zn	mg/kg	2	270	273	80 - 120	99
LB310807.002	Arsenic, As	mg/kg	1	290	318.22	80 - 120	92
	Cadmium, Cd	mg/kg	0.3	4.2	4.81	70 - 130	88
	Chromium, Cr	mg/kg	0.5	39	38.31	80 - 120	101
	Copper, Cu	mg/kg	0.5	270	290	80 - 120	93
	Nickel, Ni	mg/kg	0.5	170	187	80 - 120	90
	Lead, Pb	mg/kg	1	83	89.9	80 - 120	92
	Zinc, Zn	mg/kg	2	250	273	80 - 120	91

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB310714.002	Arsenic	µg/L	1	20	20	80 - 120	101
	Cadmium	µg/L	0.1	21	20	80 - 120	103
	Chromium	µg/L	1	21	20	80 - 120	103
	Copper	µg/L	1	21	20	80 - 120	106
	Lead	µg/L	1	21	20	80 - 120	106
	Nickel	µg/L	1	21	20	80 - 120	104
	Zinc	µg/L	5	22	20	80 - 120	109

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB310794.002		TRH C10-C14	mg/kg	20	49	40	60 - 140	123
		TRH C15-C28	mg/kg	45	54	40	60 - 140	135
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	103
	TRH F Bands	TRH >C10-C16	mg/kg	25	50	40	60 - 140	125
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	131
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	102
LB310795.002		TRH C10-C14	mg/kg	20	47	40	60 - 140	117
		TRH C15-C28	mg/kg	45	50	40	60 - 140	125
		TRH C29-C36	mg/kg	45	47	40	60 - 140	117
	TRH F Bands	TRH >C10-C16	mg/kg	25	48	40	60 - 140	120
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	121
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	107

TRH (Total Recoverable Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB310838.002		TRH C10-C14	µg/L	50	1100	1200	60 - 140	93
		TRH C15-C28	µg/L	200	1400	1200	60 - 140	113
		TRH C29-C36	µg/L	200	1400	1200	60 - 140	121
	TRH F Bands	TRH >C10-C16	µg/L	60	1200	1200	60 - 140	104
		TRH >C16-C34 (F3)	µg/L	500	1400	1200	60 - 140	117
		TRH >C34-C40 (F4)	µg/L	500	730	600	60 - 140	122

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB310798.002	Monocyclic Aromatic	Benzene	mg/kg	0.1	4.7	5	60 - 140	94
		Toluene	mg/kg	0.1	5.2	5	60 - 140	104
		Ethylbenzene	mg/kg	0.1	4.7	5	60 - 140	93
		m/p-xylene	mg/kg	0.2	9.8	10	60 - 140	98
		o-xylene	mg/kg	0.1	5.0	5	60 - 140	100
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	12.2	10	70 - 130	122
		d8-toluene (Surrogate)	mg/kg	-	10.6	10	70 - 130	106
		Bromofluorobenzene (Surrogate)	mg/kg	-	11.6	10	70 - 130	116
LB310801.002	Monocyclic Aromatic	Benzene	mg/kg	0.1	4.7	5	60 - 140	94
		Toluene	mg/kg	0.1	4.7	5	60 - 140	94
		Ethylbenzene	mg/kg	0.1	4.6	5	60 - 140	93
		m/p-xylene	mg/kg	0.2	9.4	10	60 - 140	94

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB310801.002	Monocyclic	o-xylene	mg/kg	0.1	4.7	5	60 - 140	93
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.1	10	70 - 130	101
		d8-toluene (Surrogate)	mg/kg	-	9.9	10	70 - 130	99
		Bromofluorobenzene (Surrogate)	mg/kg	-	9.7	10	70 - 130	97

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB310996.002	Monocyclic	Benzene	µg/L	0.5	52	45.45	60 - 140	115
	Aromatic	Toluene	µg/L	0.5	44	45.45	60 - 140	98
		Ethylbenzene	µg/L	0.5	49	45.45	60 - 140	108
		m/p-xylene	µg/L	1	97	90.9	60 - 140	107
		o-xylene	µg/L	0.5	49	45.45	60 - 140	108

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB310798.002		TRH C6-C10	mg/kg	25	84	92.5	60 - 140	91
		TRH C6-C9	mg/kg	20	75	80	60 - 140	93
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	12.2	10	70 - 130	122
		Bromofluorobenzene (Surrogate)	mg/kg	-	11.6	10	70 - 130	116
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	55	62.5	60 - 140	87
LB310801.002		TRH C6-C10	mg/kg	25	88	92.5	60 - 140	95
		TRH C6-C9	mg/kg	20	76	80	60 - 140	95
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.1	10	70 - 130	101
		Bromofluorobenzene (Surrogate)	mg/kg	-	9.7	10	70 - 130	97
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	60	62.5	60 - 140	96

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB310996.002		TRH C6-C10	µg/L	50	1100	946.63	60 - 140	112
		TRH C6-C9	µg/L	40	940	818.71	60 - 140	114
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	µg/L	50	770	639.67	60 - 140	120

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 in Soil

Method: ME-(AU)-[ENV]AN312

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE264243.020	LB310809.004	Mercury	mg/kg	0.05	0.24	0.09	0.2	75

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE264243.001	LB310794.004		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	68
			Heptachlor	mg/kg	0.1	0.2	<0.1	0.2	86
			Aldrin	mg/kg	0.1	0.2	<0.1	0.2	87
			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	77
			Endrin	mg/kg	0.2	<0.2	<0.2	0.2	76
			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	76
			Endrin ketone	mg/kg	0.1	<0.1	<0.1	-	-
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	-	-
			Mirex	mg/kg	0.1	<0.1	<0.1	-	-
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	-	-
			Total CLP OC Pesticides	mg/kg	1	<1	<1	-	-
			Total OC VIC EPA	mg/kg	1	<1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.14	0.15	-	96
SE264243.020	LB310795.004		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	67
			Heptachlor	mg/kg	0.1	0.1	<0.1	0.2	70
			Aldrin	mg/kg	0.1	0.1	<0.1	0.2	68
			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	66
			Endrin	mg/kg	0.2	<0.2	<0.2	0.2	73
			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	88
			Endrin ketone	mg/kg	0.1	<0.1	<0.1	-	-
			Methoxychlor	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.

OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE264243.020	LB310795.004		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	-	0.13	0.13	-	84

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE264243.001	LB310794.004		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	2.1	<0.2	2	106
			Diazinon (Dimpylate)	mg/kg	0.5	2.2	<0.5	2	109
			Dichlorvos	mg/kg	0.5	1.6	<0.5	2	81
			Dimethoate	mg/kg	0.5	<0.5	<0.5	-	-
			Ethion	mg/kg	0.2	2.0	<0.2	2	101
			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	8.0	<1.7	-	-
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.6	0.6	-	111
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.6	0.7	-	112
SE264243.020	LB310795.004		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	2.0	<0.2	2	100
			Diazinon (Dimpylate)	mg/kg	0.5	2.1	<0.5	2	103
			Dichlorvos	mg/kg	0.5	1.6	<0.5	2	82
			Dimethoate	mg/kg	0.5	<0.5	<0.5	-	-
			Ethion	mg/kg	0.2	2.0	<0.2	2	100
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	-	-
			Malathion	mg/kg	0.2	<0.2	<0.2	-	-
			Methidathion	mg/kg	0.5	<0.5	<0.5	-	-
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	-	-
			Total OP Pesticides*	mg/kg	1.7	7.7	<1.7	-	-
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	-	107
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	-	105

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE264243.001	LB310794.004		Naphthalene	mg/kg	0.1	4.3	<0.1	4	107
			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	4.4	<0.1	4	111
			Acenaphthene	mg/kg	0.1	4.6	<0.1	4	116
			Fluorene	mg/kg	0.1	<0.1	<0.1	-	-
			Phenanthrene	mg/kg	0.1	4.4	<0.1	4	110
			Anthracene	mg/kg	0.1	4.4	<0.1	4	110
			Fluoranthene	mg/kg	0.1	4.5	<0.1	4	111
			Pyrene	mg/kg	0.1	4.7	<0.1	4	115
			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	4.8	<0.1	4	120
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	4.8	<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	4.9	<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	5.0	<0.3	-	-
			Total PAH (18)	mg/kg	0.8	36	<0.8	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.6	0.7	-	115

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.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE264243.001	LB310794.004	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.6	0.6	-	111
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.6	0.7	-	112
SE264243.020	LB310795.004		Naphthalene	mg/kg	0.1	4.2	<0.1	4	106
			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	4.3	<0.1	4	107
			Acenaphthene	mg/kg	0.1	4.4	<0.1	4	110
			Fluorene	mg/kg	0.1	<0.1	<0.1	-	-
			Phenanthrene	mg/kg	0.1	4.4	<0.1	4	109
			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	4.7	0.1	4	115
			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	5.0	<0.1	4	123
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	5.0	<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	5.1	<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	5.1	<0.3	-	-
			Total PAH (18)	mg/kg	0.8	36	<0.8	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.4	-	102
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	-	107
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	-	105

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE264243.001	LB310794.004		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	105
			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	-	98
SE264243.020	LB310795.004		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	96
			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	-	84

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE264243.001	LB310704.004		Phenol	mg/kg	0.5	1.2	<0.5	1	117
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	-	-
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	-	-
			Total Cresol	mg/kg	1.5	<1.5	<1.5	-	-
			2-chlorophenol	mg/kg	0.5	<0.5	<0.5	-	-
			2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	-	-
			2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	-	-

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.

Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE264243.001	LB310704.004		2,4-dichlorophenol	mg/kg	0.5	0.9	<0.5	1	92
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	-	-
			2,4,6-trichlorophenol	mg/kg	0.5	1.0	<0.5	1	100
			2-nitrophenol	mg/kg	0.5	<0.5	<0.5	-	-
			4-nitrophenol	mg/kg	1	<1	<1	-	-
			2,4,5-trichlorophenol	mg/kg	0.5	0.8	<0.5	-	-
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	-	-
			Pentachlorophenol	mg/kg	0.5	1.3	<0.5	1	126
			2,4-dinitrophenol	mg/kg	2	<2	<2	-	-
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	5.3	5.3	-	106
			d5-phenol (Surrogate)	mg/kg	-	2.2	2.3	-	112

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE264243.001	LB310806.004	Arsenic, As	mg/kg	1	57	5	50	104
		Cadmium, Cd	mg/kg	0.3	47	<0.3	50	93
		Chromium, Cr	mg/kg	0.5	64	12	50	104
		Copper, Cu	mg/kg	0.5	70	21	50	98
		Nickel, Ni	mg/kg	0.5	55	2.5	50	105
		Lead, Pb	mg/kg	1	79	38	50	82
		Zinc, Zn	mg/kg	2	230	190	50	69 ④
SE264243.020	LB310807.004	Arsenic, As	mg/kg	1	53	7	50	93
		Cadmium, Cd	mg/kg	0.3	41	<0.3	50	82
		Chromium, Cr	mg/kg	0.5	55	7.0	50	95
		Copper, Cu	mg/kg	0.5	62	16	50	93
		Nickel, Ni	mg/kg	0.5	48	1.7	50	93
		Lead, Pb	mg/kg	1	88	43	50	89
		Zinc, Zn	mg/kg	2	56	9.2	50	94

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE264198.001	LB310714.004	Arsenic	µg/L	1	22	<1	20	108
		Cadmium	µg/L	0.1	22	1.3	20	104
		Chromium	µg/L	1	21	<1	20	105
		Copper	µg/L	1	21	<1	20	104
		Lead	µg/L	1	21	<1	20	103
		Nickel	µg/L	1	29	9	20	102
		Zinc	µg/L	5	22	<5	20	92

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE264243.001	LB310794.004		TRH C10-C14	mg/kg	20	61	<20	40	112
			TRH C15-C28	mg/kg	45	57	<45	40	95
			TRH C29-C36	mg/kg	45	<45	<45	40	63
			TRH C37-C40	mg/kg	100	<100	<100	-	-
			TRH C10-C36 Total	mg/kg	110	120	<110	-	-
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	-	-
		TRH F Bands	TRH >C10-C16	mg/kg	25	56	<25	40	110
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	56	<25	-	-
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	40	64
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	-	-
SE264243.020	LB310795.004		TRH C10-C14	mg/kg	20	48	<20	40	113
			TRH C15-C28	mg/kg	45	58	<45	40	130
			TRH C29-C36	mg/kg	45	66	<45	40	123
			TRH C37-C40	mg/kg	100	<100	<100	-	-
			TRH C10-C36 Total	mg/kg	110	170	<110	-	-
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	-	-
		TRH F Bands	TRH >C10-C16	mg/kg	25	50	<25	40	116
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	50	<25	-	-
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	40	129
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	-	-

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.

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE264243.001	LB310798.004	Monocyclic Aromatic	Benzene	mg/kg	0.1	4.8	<0.1	5	96
			Toluene	mg/kg	0.1	5.2	<0.1	5	104
			Ethylbenzene	mg/kg	0.1	4.9	<0.1	5	98
			m/p-xylene	mg/kg	0.2	11	<0.2	10	105
			o-xylene	mg/kg	0.1	5.3	<0.1	5	106
		Polycyclic	Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.7	8.6	10	97
			d8-toluene (Surrogate)	mg/kg	-	8.5	8.7	10	85
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.9	8.7	10	99
		Totals	Total BTEX*	mg/kg	0.6	31	<0.6	-	-
			Total Xylenes*	mg/kg	0.3	16	<0.3	-	-
SE264243.020	LB310801.004	Monocyclic Aromatic	Benzene	mg/kg	0.1	4.7	<0.1	5	95
			Toluene	mg/kg	0.1	4.9	<0.1	5	98
			Ethylbenzene	mg/kg	0.1	4.8	<0.1	5	96
			m/p-xylene	mg/kg	0.2	9.8	<0.2	10	97
			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	-	8.8	7.4	10	88
			d8-toluene (Surrogate)	mg/kg	-	8.5	7.3	10	85
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.9	8.4	10	89
		Totals	Total BTEX*	mg/kg	0.6	29	<0.6	-	-
			Total Xylenes*	mg/kg	0.3	15	<0.3	-	-

VOCs in Water

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE264238.001	LB310996.028	Monocyclic Aromatic	Benzene	µg/L	0.5	0.00476905690	45.45	127
			Toluene	µg/L	0.5	0.00612195076	45.45	123
			Ethylbenzene	µg/L	0.5	0.00358127296	45.45	127
			m/p-xylene	µg/L	1	0.01250483813	90.9	128
			o-xylene	µg/L	0.5	0.00438354612	45.45	128
		Polycyclic	Naphthalene (VOC)*	µg/L	0.5	0.21649846485	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/L	-	10.4789954842	-	108
			d8-toluene (Surrogate)	mg/L	-	9.65767448392	-	98
			Bromofluorobenzene (Surrogate)	mg/L	-	9.71799579944	-	94
		Totals	Total BTEX	µg/L	3	0	-	-

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE264243.001	LB310798.004		TRH C6-C10	mg/kg	25	100	<25	92.5	109
			TRH C6-C9	mg/kg	20	88	<20	80	111
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.7	8.6	10	97
			d8-toluene (Surrogate)	mg/kg	-	8.5	8.7	10	85
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.9	8.7	-	99
		VPH F Bands	Benzene (F0)	mg/kg	0.1	4.8	<0.1	-	-
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	70	<25	62.5	112
SE264243.020	LB310801.004		TRH C6-C10	mg/kg	25	87	<25	92.5	93
			TRH C6-C9	mg/kg	20	76	<20	80	95
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.8	7.4	10	88
			d8-toluene (Surrogate)	mg/kg	-	8.5	7.3	10	85
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.9	8.4	-	89
		VPH F Bands	Benzene (F0)	mg/kg	0.1	4.7	<0.1	-	-
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	58	<25	62.5	92

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE264238.001	LB310996.028		TRH C6-C10	µg/L	50	0	946.63	104
			TRH C6-C9	µg/L	40	0	818.71	106
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/L	-	10.4789954842	-	108
			d8-toluene (Surrogate)	mg/L	-	9.65767448392	-	98
			Bromofluorobenzene (Surrogate)	mg/L	-	9.71799579944	-	94
		VPH F Bands	Benzene (F0)	µg/L	0.5	0.00476905690	-	-
			TRH C6-C10 minus BTEX (F1)	µg/L	50	0	639.67	100

MATRIX SPIKE DUPLICATES

SE264243 R0

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: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
***	Indicates that both * and ** apply.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.
①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

CHAIN OF CUSTODY & ANALYSIS REQUEST

SGS Environmental Services
Unit 16, 33 Maddox Street
Alexandria NSW 2015
Telephone No: (02) 85940400
Facsimile No: (02) 85940499
Email: au.samplereceipt.sydney@sgs.com

Company Name:	Lanterra Consulting Pty Limited	Project Name/No:	P24065 – Gorman Road, Goulburn
Address:	Unit 13/ 71 Leichhardt Street, Kingston ACT 2604	Purchase Order No:	P24065
		Results Required By:	Standard TAT
		Telephone:	0432 324 348
Contact Name:	Chris Gunton	Facsimile:	
		Email Results:	chris@lanterra.com.au

Client Sample ID	Date Sampled	Lab Sample ID	LIQUID	SOIL	PRESERVATIVE	NO OF CONTAINERS	CL15
HA1 0.0-0.1	22/04/2024	1		X		1	X
HA1 0.5-0.6	22/04/2024			X		1	
HA2 0.0-0.1	22/04/2024	2		X		1	X
HA2 0.5-0.6	22/04/2024			X		1	
HA3 0.0-0.1	22/04/2024	3		X		1	X
HA3 0.3-0.4	22/04/2024			X		1	
HA4 0.0-0.1	22/04/2024	4		X		1	X
HA4 0.4-0.5	22/04/2024			X		1	
HA5 0.0-0.1	22/04/2024	5		X		1	X
HA5 0.5-0.6	22/04/2024			X		1	

SGS EHS Sydney COC
SE264243

Relinquished By: C Gunton	Date/Time: 23/04/2024	Received By:	Date/Time 24/04/24 @ 11.50
Relinquished By:	Date/Time:	Received By:	Date/Time
Samples Intact: Yes/ No	Temperature: Ambient / Chilled	Sample Cooler Sealed: Yes/ No	Laboratory Quotation No:
	Comments:		

CHAIN OF CUSTODY & ANALYSIS REQUEST

SGS Environmental Services
Unit 16, 33 Maddox Street
Alexandria NSW 2015
Telephone No: (02) 85940400
Facsimile No: (02) 85940499
Email: au.samplereceipt.sydney@sgs.com

Company Name:	Lanterra Consulting Pty Limited	Project Name/No:	P24065 – Gorman Road, Goulburn
Address:	Unit 13/ 71 Leichhardt Street, Kingston ACT 2604	Purchase Order No:	P24065
		Results Required By:	Standard TAT
		Telephone:	0432 324 348
Contact Name:	Chris Gunton	Facsimile:	
		Email Results:	chris@lanterra.com.au

Client Sample ID	Date Sampled	Lab Sample ID	LIQUID	SOIL	PRESERVATIVE	NO OF CONTAINERS	CL15
HA6 0.0-0.1	22/04/2024	6		X		1	X
HA6 0.3-0.4	22/04/2024			X		1	
HA7 0.0-0.1	22/04/2024	7		X		1	X
HA7 0.4-0.5	22/04/2024			X		1	
HA8 0.0-0.1	22/04/2024	8		X		1	X
HA8 0.4-0.5	22/04/2024			X		1	
HA9 0.0-0.1	22/04/2024	9		X		1	X
HA9 0.4-0.5	22/04/2024			X		1	
HA10 0.0-0.1	22/04/2024	10		X		1	X
HA10 0.5-0.6	22/04/2024			X		1	

Relinquished By: C Gunton	Date/Time: 23/04/2024	Received By:	Date/Time 24/04/24 @ 11:50
Relinquished By:	Date/Time:	Received By:	Date/Time
Samples Intact: (Yes)/ No	Temperature: Ambient / (Chilled)	Sample Cooler Sealed: Yes/ No	Laboratory Quotation No:
	Comments:		

CHAIN OF CUSTODY & ANALYSIS REQUEST

SGS Environmental Services
Unit 16, 33 Maddox Street
Alexandria NSW 2015
Telephone No: (02) 85940400
Facsimile No: (02) 85940499
Email: au.samplereceipt.sydney@sgs.com

Company Name:	Lanterra Consulting Pty Limited	Project Name/No:	P24065 – Gorman Road, Goulburn
Address:	Unit 13/ 71 Leichhardt Street, Kingston ACT 2604	Purchase Order No:	P24065
		Results Required By:	Standard TAT
		Telephone:	0432 324 348
Contact Name:	Chris Gunton	Facsimile:	
		Email Results:	chris@lanterra.com.au

Client Sample ID	Date Sampled	Lab Sample ID	LIQUID	SOIL	PRESERVATIVE	NO OF CONTAINERS	CL15
HA11 0.0-0.1	22/04/2024	11		X		1	X
HA11 0.8-0.9	22/04/2024			X		1	
HA12 0.0-0.1	22/04/2024	12		X		1	X
HA12 0.4-0.5	22/04/2024			X		1	
HA13 0.0-0.1	22/04/2024	13		X		1	X
HA13 0.8-0.9	22/04/2024			X		1	
HA14 0.0-0.1	22/04/2024	14		X		1	X
HA14 0.2-0.3	22/04/2024			X		1	
HA15 0.0-0.1	22/04/2024	15		X		1	X
HA15 0.5-0.6	22/04/2024			X		1	

Relinquished By: C Gunton	Date/Time: 23/04/2024	Received By:	Date/Time 24/04/24 @ 11:50
Relinquished By:	Date/Time:	Received By:	Date/Time
Samples Intact: Yes/ No	Temperature: Ambient / Chilled	Sample Cooler Sealed: Yes/ No	Laboratory Quotation No:
	Comments:		

CHAIN OF CUSTODY & ANALYSIS REQUEST

SGS Environmental Services
Unit 16, 33 Maddox Street
Alexandria NSW 2015
Telephone No: (02) 85940400
Facsimile No: (02) 85940499
Email: au.samplereceipt.sydney@sgs.com

Company Name:	Lanterra Consulting Pty Limited	Project Name/No:	P24065 – Gorman Road, Goulburn
Address:	Unit 13/ 71 Leichhardt Street, Kingston ACT 2604	Purchase Order No:	P24065
		Results Required By:	Standard TAT
		Telephone:	0432 324 348
Contact Name:	Chris Gunton	Facsimile:	
		Email Results:	chris@lanterra.com.au

Client Sample ID	Date Sampled	Lab Sample ID	LIQUID	SOIL	PRESERVATIVE	NO OF CONTAINERS	CL15
HA16 0.0-0.1	22/04/2024	16		X		1	X
HA16 0.5-0.6	22/04/2024			X		1	
HA17 0.0-0.1	22/04/2024	17		X		1	X
HA17 0.4-0.5	22/04/2024			X		1	
SP1	22/04/2024	18		X		1	X
SP2	22/04/2024	19		X		1	X
SP3	22/04/2024	20		X		1	X
Drain 1	22/04/2024	21		X		1	X
Drain 2	22/04/2024	22		X		1	X
Sed 1	22/04/2024	23		X		1	X

Relinquished By: C Gunton	Date/Time: 23/04/2024	Received By: S. Subaraj	Date/Time 24/04/24 @ 11:50
Relinquished By:	Date/Time:	Received By:	Date/Time
Samples Intact: (Yes) No	Temperature: Ambient / (Chilled)	Sample Cooler Sealed: Yes/ No	Laboratory Quotation No:
	Comments:		

CHAIN OF CUSTODY & ANALYSIS REQUEST

SGS Environmental Services
Unit 16, 33 Maddox Street
Alexandria NSW 2015
Telephone No: (02) 85940400
Facsimile No: (02) 85940499
Email: au.samplereceipt.sydney@sgs.com

Company Name:	Lanterra Consulting Pty Limited	Project Name/No:	P24065 – Gorman Road, Goulburn
Address:	Unit 13/ 71 Leichhardt Street, Kingston ACT 2604	Purchase Order No:	P24065
		Results Required By:	Standard TAT
		Telephone:	0432 324 348
Contact Name:	Chris Gunton	Facsimile:	
		Email Results:	chris@lanterra.com.au

Client Sample ID	Date Sampled	Lab Sample ID	LIQUID	SOIL	PRESERVATIVE	NO OF CONTAINERS	CL15	CL10	TRH, BTEX, PAH, 8 Metals												
D1	22/04/2024	24	X			5	X														
QC1	22/04/2024	25		X		1		X													
QC2	22/04/2024			X		1			X												**Please Forward to Envirolab**
QC3	22/04/2024	26		X		1		X													
QC4	22/04/2024			X		1			X												**Please Forward to Envirolab**

Relinquished By: C Gunton	Date/Time: 23/04/2024	Received By: P. Subarray	Date/Time 24/04/24 @ 11:50
Relinquished By:	Date/Time:	Received By:	Date/Time
Samples Intact: (Yes)/ No	Temperature: Ambient / (Chilled)	Sample Cooler Sealed: Yes/ No	Laboratory Quotation No:
	Comments:		

SAMPLE RECEIPT ADVICE

SE264243

CLIENT DETAILS

Contact	CHRIS GUNTON
Client	LANTERRA CONSULTING PTY LTD
Address	UNIT 13 71 LEICHHARDT STREET KINGSTON ACT 2604
Telephone	0432 324 348
Facsimile	(Not specified)
Email	chris@lanterra.com.au
Project	**P24065 - Gorman Road, Goulburn**
Order Number	**P24065**
Samples	26

LABORATORY DETAILS

Manager	Huong Crawford
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Wed 24/4/2024
Report Due	Thu 2/5/2024
SGS Reference	**SE264243**

SUBMISSION DETAILS

This is to confirm that 26 samples were received on Wednesday 24/4/2024. Results are expected to be ready by COB Thursday 2/5/2024.
Please quote SGS reference SE264243 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Sample counts by matrix	25 Soil, 1 Water	Type of documentation received	COC
Date documentation received	24/4/2024	Samples received in good order	Yes
Samples received without headspace	Yes	Sample temperature upon receipt	16.3°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		

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

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

SAMPLE RECEIPT ADVICE

SE264243

CLIENT DETAILS

Client LANTERRA CONSULTING PTY LTD

Project P24065 - Gorman Road, Goulburn

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	Speciated Phenols in Soil	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
001	HA1 0.0-0.1	30	14	26	11	18	10	11	7
002	HA2 0.0-0.1	30	14	26	11	18	10	11	7
003	HA3 0.0-0.1	30	14	26	11	18	10	11	7
004	HA4 0.0-0.1	30	14	26	11	18	10	11	7
005	HA5 0.0-0.1	30	14	26	11	18	10	11	7
006	HA6 0.0-0.1	30	14	26	11	18	10	11	7
007	HA7 0.0-0.1	30	14	26	11	18	10	11	7
008	HA8 0.0-0.1	30	14	26	11	18	10	11	7
009	HA9 0.0-0.1	30	14	26	11	18	10	11	7
010	HA10 0.0-0.1	30	14	26	11	18	10	11	7
011	HA11 0.0-0.1	30	14	26	11	18	10	11	7
012	HA12 0.0-0.1	30	14	26	11	18	10	11	7
013	HA13 0.0-0.1	30	14	26	11	18	10	11	7
014	HA14 0.0-0.1	30	14	26	11	18	10	11	7
015	HA15 0.0-0.1	30	14	26	11	18	10	11	7
016	HA16 0.0-0.1	30	14	26	11	18	10	11	7
017	HA17 0.0-0.1	30	14	26	11	18	10	11	7
018	SP1	30	14	26	11	18	10	11	7
019	SP2	30	14	26	11	18	10	11	7
020	SP3	30	14	26	11	18	10	11	7
021	Drain 1	30	14	26	11	18	10	11	7
022	Drain 2	30	14	26	11	18	10	11	7
023	Sed 1	30	14	26	11	18	10	11	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE264243

CLIENT DETAILS

Client LANTERRA CONSULTING PTY LTD

Project P24065 - Gorman Road, Goulburn

SUMMARY OF ANALYSIS

No.	Sample ID	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
025	QC1	26	10	11	7
026	QC3	26	10	11	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE264243

CLIENT DETAILS

Client LANTERRA CONSULTING PTY LTD

Project P24065 - Gorman Road, Goulburn

SUMMARY OF ANALYSIS

No.	Sample ID	Mercury in Soil	Moisture Content	Total Recoverable Elements in Soil/Waste	VOCs in Water	Volatile Petroleum Hydrocarbons in Water
001	HA1 0.0-0.1	1	1	7	-	-
002	HA2 0.0-0.1	1	1	7	-	-
003	HA3 0.0-0.1	1	1	7	-	-
004	HA4 0.0-0.1	1	1	7	-	-
005	HA5 0.0-0.1	1	1	7	-	-
006	HA6 0.0-0.1	1	1	7	-	-
007	HA7 0.0-0.1	1	1	7	-	-
008	HA8 0.0-0.1	1	1	7	-	-
009	HA9 0.0-0.1	1	1	7	-	-
010	HA10 0.0-0.1	1	1	7	-	-
011	HA11 0.0-0.1	1	1	7	-	-
012	HA12 0.0-0.1	1	1	7	-	-
013	HA13 0.0-0.1	1	1	7	-	-
014	HA14 0.0-0.1	1	1	7	-	-
015	HA15 0.0-0.1	1	1	7	-	-
016	HA16 0.0-0.1	1	1	7	-	-
017	HA17 0.0-0.1	1	1	7	-	-
018	SP1	1	1	7	-	-
019	SP2	1	1	7	-	-
020	SP3	1	1	7	-	-
021	Drain 1	1	1	7	-	-
022	Drain 2	1	1	7	-	-
023	Sed 1	1	1	7	-	-
024	D1	-	-	-	11	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE264243

CLIENT DETAILS

Client LANTERRA CONSULTING PTY LTD

Project P24065 - Gorman Road, Goulburn

SUMMARY OF ANALYSIS

No.	Sample ID	Mercury in Soil	Moisture Content	Total Recoverable Elements in Soil/Waste
025	QC1	1	1	7
026	QC3	1	1	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE264243

CLIENT DETAILS

Client LANTERRA CONSULTING PTY LTD

Project P24065 - Gorman Road, Goulburn

SUMMARY OF ANALYSIS

No.	Sample ID	Mercury (dissolved) in Water	OC Pesticides in Water	OP Pesticides in Water	PAH (Polynuclear Aromatic Hydrocarbons) in Water	PCBs in Water	Speciated Phenols in Water	Trace Metals (Dissolved) in Water by ICPMS	TRH (Total Recoverable Hydrocarbons) in Water
024	D1	1	30	13	22	11	18	7	9

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 .

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

CERTIFICATE OF ANALYSIS 349632

Client Details

Client	Lanterra Consulting Pty Ltd
Attention	Chris Gunton.
Address	Unit 4 / 19 Trenerry St, WESTON, ACT, 2611

Sample Details

Your Reference	**P24065 - Gorman Road, Goulburn**
Number of Samples	2 Soil
Date samples received	24/04/2024
Date completed instructions received	24/04/2024

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	01/05/2024
Date of Issue	29/04/2024

NATA Accreditation Number 2901. This document shall not be reproduced except in full.

Accredited for compliance with ISO/IEC 17025 - Testing. **Tests not covered by NATA are denoted with ***

Results Approved By
Dragana Tomas, Senior Chemist
Loren Bardwell, Development Chemist
Timothy Toll, Senior Chemist

Authorised By
Nancy Zhang, Laboratory Manager

vTRH(C6-C10)/BTEXN in Soil			
Our Reference		349632-1	349632-2
Your Reference	UNITS	QC2	QC4
Date Sampled		22/04/2024	22/04/2024
Type of sample		Soil	Soil
Date extracted	-	26/04/2024	26/04/2024
Date analysed	-	29/04/2024	29/04/2024
TRH C_6 - C_9	mg/kg	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25
vTRH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25
Benzene	mg/kg	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1
m+p-xylene	mg/kg	<2	<2
o-Xylene	mg/kg	<1	<1
Naphthalene	mg/kg	<1	<1
Total +ve Xylenes	mg/kg	<1	<1
Surrogate aaa-Trifluorotoluene	%	72	73

svTRH (C10-C40) in Soil			
Our Reference		349632-1	349632-2
Your Reference	UNITS	QC2	QC4
Date Sampled		22/04/2024	22/04/2024
Type of sample		Soil	Soil
Date extracted	-	26/04/2024	26/04/2024
Date analysed	-	27/04/2024	27/04/2024
TRH C_{10} - C_{14}	mg/kg	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100
Total +ve TRH (C10-C36)	mg/kg	<50	<50
TRH >C_{10} -C_{16}	mg/kg	<50	<50
TRH >C_{10} -C_{16} less Naphthalene (F2)	mg/kg	<50	<50
TRH >C_{16} -C_{34}	mg/kg	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50
Surrogate o-Terphenyl	%	85	86

PAHs in Soil			
Our Reference		349632-1	349632-2
Your Reference	UNITS	QC2	QC4
Date Sampled		22/04/2024	22/04/2024
Type of sample		Soil	Soil
Date extracted	-	26/04/2024	26/04/2024
Date analysed	-	26/04/2024	26/04/2024
Naphthalene	mg/kg	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1
Fluoranthene	mg/kg	0.1	0.1
Pyrene	mg/kg	0.1	0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2
Benzo(a)pyrene	mg/kg	0.1	0.08
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1
Total +ve PAH's	mg/kg	0.4	0.3
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	104	102

Acid Extractable metals in soil			
Our Reference		349632-1	349632-2
Your Reference	UNITS	QC2	QC4
Date Sampled		22/04/2024	22/04/2024
Type of sample		Soil	Soil
Date prepared	-	26/04/2024	26/04/2024
Date analysed	-	26/04/2024	26/04/2024
Arsenic	mg/kg	<4	<4
Cadmium	mg/kg	<0.4	<0.4
Chromium	mg/kg	7	6
Copper	mg/kg	18	26
Lead	mg/kg	28	28
Mercury	mg/kg	<0.1	<0.1
Nickel	mg/kg	2	2
Zinc	mg/kg	12	10

Moisture			
Our Reference		349632-1	349632-2
Your Reference	UNITS	QC2	QC4
Date Sampled		22/04/2024	22/04/2024
Type of sample		Soil	Soil
Date prepared	-	26/04/2024	26/04/2024
Date analysed	-	29/04/2024	29/04/2024
Moisture	%	18	11

Method ID	Methodology Summary
Inorg-008	Moisture content determined by heating at 105+/-5 °C for a minimum of 12 hours.
Metals-020	Determination of various metals by ICP-AES.
Metals-021	Determination of Mercury by Cold Vapour AAS.
Org-020	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis.
Org-020	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis. Note, the Total +ve TRH PQL is reflective of the lowest individual PQL and is therefore "Total +ve TRH" is simply a sum of the positive individual TRH fractions (>C10-C40).
Org-022/025	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS and/or GC-MS/MS. Benzo(a)pyrene TEQ as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater - 2013. For soil results:- 1. 'EQ PQL'values are assuming all contributing PAHs reported as <PQL are actually at the PQL. This is the most conservative approach and can give false positive TEQs given that PAHs that contribute to the TEQ calculation may not be present. 2. 'EQ zero'values are assuming all contributing PAHs reported as <PQL are zero. This is the least conservative approach and is more susceptible to false negative TEQs when PAHs that contribute to the TEQ calculation are present but below PQL. 3. 'EQ half PQL'values are assuming all contributing PAHs reported as <PQL are half the stipulated PQL. Hence a mid-point between the most and least conservative approaches above. Note, the Total +ve PAHs PQL is reflective of the lowest individual PQL and is therefore "Total +ve PAHs" is simply a sum of the positive individual PAHs.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater.

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

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-8	[NT]
Date extracted	-			26/04/2024	[NT]	[NT]	[NT]	[NT]	26/04/2024	[NT]
Date analysed	-			29/04/2024	[NT]	[NT]	[NT]	[NT]	29/04/2024	[NT]
TRH C_6 - C_9	mg/kg	25	Org-023	<25	[NT]	[NT]	[NT]	[NT]	104	[NT]
TRH C_6 - C_{10}	mg/kg	25	Org-023	<25	[NT]	[NT]	[NT]	[NT]	104	[NT]
Benzene	mg/kg	0.2	Org-023	<0.2	[NT]	[NT]	[NT]	[NT]	102	[NT]
Toluene	mg/kg	0.5	Org-023	<0.5	[NT]	[NT]	[NT]	[NT]	110	[NT]
Ethylbenzene	mg/kg	1	Org-023	<1	[NT]	[NT]	[NT]	[NT]	102	[NT]
m+p-xylene	mg/kg	2	Org-023	<2	[NT]	[NT]	[NT]	[NT]	104	[NT]
o-Xylene	mg/kg	1	Org-023	<1	[NT]	[NT]	[NT]	[NT]	102	[NT]
Naphthalene	mg/kg	1	Org-023	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-023	79	[NT]	[NT]	[NT]	[NT]	90	[NT]

QUALITY CONTROL: svTRH (C10-C40) in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-8	[NT]
Date extracted	-			26/04/2024	[NT]	[NT]	[NT]	[NT]	26/04/2024	[NT]
Date analysed	-			27/04/2024	[NT]	[NT]	[NT]	[NT]	27/04/2024	[NT]
TRH C_{10} - C_{14}	mg/kg	50	Org-020	<50	[NT]	[NT]	[NT]	[NT]	118	[NT]
TRH C_{15} - C_{28}	mg/kg	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	90	[NT]
TRH C_{29} - C_{36}	mg/kg	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	100	[NT]
TRH >C_{10} -C_{16}	mg/kg	50	Org-020	<50	[NT]	[NT]	[NT]	[NT]	118	[NT]
TRH >C_{16} -C_{34}	mg/kg	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	90	[NT]
TRH >C_{34} -C_{40}	mg/kg	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	100	[NT]
Surrogate o-Terphenyl	%		Org-020	90	[NT]	[NT]	[NT]	[NT]	126	[NT]

QUALITY CONTROL: PAHs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-8	[NT]
Date extracted	-			26/04/2024	[NT]	[NT]	[NT]	[NT]	26/04/2024	[NT]
Date analysed	-			26/04/2024	[NT]	[NT]	[NT]	[NT]	26/04/2024	[NT]
Naphthalene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	94	[NT]
Acenaphthylene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	100	[NT]
Fluorene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	108	[NT]
Phenanthrene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	98	[NT]
Anthracene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	102	[NT]
Pyrene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	108	[NT]
Benzo(a)anthracene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	92	[NT]
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-022/025	<0.2	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-022/025	<0.05	[NT]	[NT]	[NT]	[NT]	96	[NT]
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-022/025	100	[NT]	[NT]	[NT]	[NT]	93	[NT]

QUALITY CONTROL: Acid Extractable metals in soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-8	[NT]
Date prepared	-			26/04/2024	[NT]	[NT]	[NT]	[NT]	26/04/2024	[NT]
Date analysed	-			26/04/2024	[NT]	[NT]	[NT]	[NT]	26/04/2024	[NT]
Arsenic	mg/kg	4	Metals-020	<4	[NT]	[NT]	[NT]	[NT]	116	[NT]
Cadmium	mg/kg	0.4	Metals-020	<0.4	[NT]	[NT]	[NT]	[NT]	111	[NT]
Chromium	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	113	[NT]
Copper	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	111	[NT]
Lead	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	114	[NT]
Mercury	mg/kg	0.1	Metals-021	<0.1	[NT]	[NT]	[NT]	[NT]	124	[NT]
Nickel	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	111	[NT]
Zinc	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	110	[NT]

Result Definitions

NT	Not tested
NA	Test not required
INS	Insufficient sample for this test
PQL	Practical Quantitation Limit
<	Less than
>	Greater than
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
NS	Not specified
NEPM	National Environmental Protection Measure
NR	Not Reported

Quality Control Definitions

Blank	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
Duplicate	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
Matrix Spike	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample)	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
Surrogate Spike	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Australian Drinking Water Guidelines recommend that Thermotolerant Coliform, Faecal Enterococci, & E.Coli levels are less than 1cfu/100mL. The recommended maximums are taken from "Australian Drinking Water Guidelines", published by NHMRC & ARMC 2011.

The recommended maximums for analytes in urine are taken from “2018 TLVs and BEIs”, as published by ACGIH (where available). Limit provided for Nickel is a precautionary guideline as per Position Paper prepared by AIOH Exposure Standards Committee, 2016.

Guideline limits for Rinse Water Quality reported as per analytical requirements and specifications of AS 4187, Amdt 2 2019, Table 7.2

Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.

Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.

Spikes for Physical and Aggregate Tests are not applicable.

For VOCs in water samples, three vials are required for duplicate or spike analysis.

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% – see ELN-P05 QA/QC tables for details; <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals (not SPOCAS); 60-140% for organics/SPOCAS (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

In circumstances where no duplicate and/or sample spike has been reported at 1 in 10 and/or 1 in 20 samples respectively, the sample volume submitted was insufficient in order to satisfy laboratory QA/QC protocols.

When samples are received where certain analytes are outside of recommended technical holding times (THTs), the analysis has proceeded. Where analytes are on the verge of breaching THTs, every effort will be made to analyse within the THT or as soon as practicable.

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached.

Where matrix spike recoveries fall below the lower limit of the acceptance criteria (e.g. for non-labile or standard Organics <60%), positive result(s) in the parent sample will subsequently have a higher than typical estimated uncertainty (MU estimates supplied on request) and in these circumstances the sample result is likely biased significantly low.

Measurement Uncertainty estimates are available for most tests upon request.

Analysis of aqueous samples typically involves the extraction/digestion and/or analysis of the liquid phase only (i.e. NOT any settled sediment phase but inclusive of suspended particles if present), unless stipulated on the Envirolab COC and/or by correspondence. Notable exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, total recoverable metals and PFAS where solids are included by default.

Samples for Microbiological analysis (not Amoeba forms) received outside of the 2-8°C temperature range do not meet the ideal cooling conditions as stated in AS2031-2012.

CHAIN OF CUSTODY & ANALYSIS REQUEST

SGS Environmental Services
Unit 16, 33 Maddox Street
Alexandria NSW 2015
Telephone No: (02) 85940400
Facsimile No: (02) 85940499
Email: au.samplereceipt.sydney@sgs.com

Company Name:	Lanterra Consulting Pty Limited	Project Name/No:	P24065 – Gorman Road, Goulburn
Address:	Unit 13/ 71 Leichhardt Street, Kingston ACT 2604	Purchase Order No:	P24065
		Results Required By:	Standard TAT
		Telephone:	0432 324 348
Contact Name:	Chris Gunton	Facsimile:	
		Email Results:	chris@lanterra.com.au

Client Sample ID	Date Sampled	Lab Sample ID	LIQUID	SOIL	PRESERVATIVE	NO OF CONTAINERS	CL15	CL10	TRH, BTEX, PAH, 8 Metals											
D1	22/04/2024		X			5	X													
QC1	22/04/2024			X		1		X												
QC2	22/04/2024			X		1			X											Please Forward to Envirolab
QC3	22/04/2024			X		1		X												
QC4	22/04/2024			X		1			X											Please Forward to Envirolab

ENVIROLAB
Envirolab Services
12 Ashley St
Chatswood NSW 2067
Ph: (02) 9910 6200
Job No: 349632
Date Received: 24/4/24
Time Received: 1300
Received By: ST
Temp: Cool/Ambient
Cooling: Ice/Icepack
Security: Intact/Broken/None

Relinquished By: C Gunton	Date/Time: 23/04/2024	Received By:	Date/Time
Relinquished By:	Date/Time:	Received By:	Date/Time
Samples Intact: Yes/ No	Temperature: Ambient / Chilled	Sample Cooler Sealed: Yes/ No	Laboratory Quotation No:
	Comments:		

Appendix D

Borelogs

Appendix E

PID Calibration Certificate

Expert Testing Services

ABN: 74 619 717 350
Contact: 02 9730 2019
Email: sales@experttesting.com.au
9/171 Power Street, Glendenning NSW 2761

Calibration and Service Report

Company:	ETS Rentals Department	**Manufacturer:**	Honeywell	**Serial #:**	592-918929
Contact:	Aachal Chand	**Instrument:**	MiniRAE 3000	**Asset #:**	-
Address:	9/171 Power Street, GLENDENNING NSW 2761	**Model:**	PGM7320	**Part #:**	-
		Configuration:	VOC	**Sold:**	-
Phone:	02 9730 2019	**Wireless:**	-	**Last Cal:**	22.03.2024
Fax:		**Network ID:**	-	**Job #:**	
Email:	rentals@experttesting.com.au	**Unit ID:**	-	**Cal Spec:**	Std
				Order #:	EFT

Item	Test	Pass/Fail	Comments	Part Code	S/W
Battery	NiCd, NiMH, Dry cell, Li Ion	✓			
Charger	Charger, Power supply	✓			
	Cradle	✓			
Pump	Flow	✓	>500ml/min		
Filter	Filter, fitting, etc	✓			
Alarms	Audible, visual, vibration	✓			
Display	Operation	✓			
Switches	Operation	✓			
PCB	Operation	✓			
Connectors	Condition	✓			
Firmware	Version	✓	Version: 2.22		
Datalogger	Operation	✓			
Monitor Housing	Condition	✓			
Case	Condition/Type	✓			
Sensors					
PID	Lamp	✓			
PID	Sensor	✓			
THP	Sensor	✓			

Engineer's Report

Checked unit settings and configuration – okay
Unit allowed to stabilize and zero calibration performed as per manufacturers specifications
Calibration procedure written and performed to manufacturers specification using traceable gases.

Calibration Certificate

Sensor	Type	Serial No:	Span Gas	Concentration	Traceability Lot #	CF	Reading	
							Zero	Span
PID	10.6eV	-	Isobutylene	100ppm	12027-1-1	1	0	100ppm

Calibrated/Repaired by: **Milenko Sisic** Date: **22.03.2024** Next Due: **22.09.2024**

Appendix F

EIL Calculation Spreadsheets

Inputs
Select contaminant from list below
As
Below needed to calculate fresh and aged ACLs
Below needed to calculate fresh and aged ABCs
or for fresh ABCs only
or for aged ABCs only

Outputs		
Land use	Arsenic generic EILs (mg contaminant/kg dry soil)	
	Fresh	Aged
National parks and areas of high conservation value	20	40
Urban residential and open public spaces	50	100
Commercial and industrial	80	160

Inputs
Select contaminant from list below
Cr_III
Below needed to calculate fresh and aged ACLs
Enter % clay (values from 0 to 100%)
10
Below needed to calculate fresh and aged ABCs
Measured background concentration (mg/kg). Leave blank if no measured value
or for fresh ABCs only
Enter iron content (aqua regia method) (values from 0 to 50%) to obtain estimate of background concentration
7
or for aged ABCs only
Enter State (or closest State)
NSW
Enter traffic volume (high or low)
low

Outputs		
Land use	Cr III soil-specific EILs (mg contaminant/kg dry soil)	
	Fresh	Aged
National parks and areas of high conservation value	130	140
Urban residential and open public spaces	230	410
Commercial and industrial	340	670

Inputs
Select contaminant from list below
Cu
Below needed to calculate fresh and aged ACLs
Enter cation exchange capacity (silver thiourea method) (values from 0 to 100 cmolc/kg dwt)
10
Enter soil pH (calcium chloride method) (values from 1 to 14)
6
Enter organic carbon content (%OC) (values from 0 to 50%)
1
Below needed to calculate fresh and aged ABCs
Measured background concentration (mg/kg). Leave blank if no measured value
or for fresh ABCs only
Enter iron content (aqua regia method) (values from 0 to 50%) to obtain estimate of background concentration
7
or for aged ABCs only
Enter State (or closest State)
NSW
Enter traffic volume (high or low)
low

Outputs		
Land use	Cu soil-specific EILs (mg contaminant/kg dry soil)	
	Fresh	Aged
National parks and areas of high conservation value	70	80
Urban residential and open public spaces	120	210
Commercial and industrial	170	300

Inputs
Select contaminant from list below
DDT
Below needed to calculate fresh and aged ACLs
Below needed to calculate fresh and aged ABCs
or for fresh ABCs only
or for aged ABCs only

Outputs		
Land use	DDT generic EILs (mg contaminant/kg dry soil)	
	Fresh	Aged
National parks and areas of high conservation value	3	3
Urban residential and open public spaces	180	180
Commercial and industrial	640	640

Inputs
Select contaminant from list below
Naphthalene
Below needed to calculate fresh and aged ACLs
Below needed to calculate fresh and aged ABCs
or for fresh ABCs only
or for aged ABCs only

Outputs		
Land use	Naphthalene generic EILs (mg contaminant/kg dry soil)	
	Fresh	Aged
National parks and areas of high conservation value	10	10
Urban residential and open public spaces	170	170
Commercial and industrial	370	370

Inputs
Select contaminant from list below
Ni
Below needed to calculate fresh and aged ACLs
Enter cation exchange capacity (silver thiourea method) (values from 0 to 100 cmolc/kg dwt)
10
Below needed to calculate fresh and aged ABCs
Measured background concentration (mg/kg). Leave blank if no measured value
or for fresh ABCs only
Enter iron content (aqua regia method) (values from 0 to 50%) to obtain estimate of background concentration
7
or for aged ABCs only
Enter State (or closest State)
NSW
Enter traffic volume (high or low)
low

Outputs		
Land use	Ni soil-specific EILs (mg contaminant/kg dry soil)	
	Fresh	Aged
National parks and areas of high conservation value	35	35
Urban residential and open public spaces	80	170
Commercial and industrial	130	290

Inputs
Select contaminant from list below
Pb
Below needed to calculate fresh and aged ACLs
Below needed to calculate fresh and aged ABCs
or for fresh ABCs only
or for aged ABCs only

Outputs		
Land use	Lead generic EILs (mg contaminant/kg dry soil)	
	Fresh	Aged
National parks and areas of high conservation value	110	470
Urban residential and open public spaces	270	1100
Commercial and industrial	440	1800

Inputs
Select contaminant from list below
Zn
Below needed to calculate fresh and aged ACLs
Enter cation exchange capacity (silver thiourea method) (values from 0 to 100 cmolc/kg dwt)
10
Enter soil pH (calcium chloride method) (values from 1 to 14)
6
Below needed to calculate fresh and aged ABCs
Measured background concentration (mg/kg). Leave blank if no measured value
or for fresh ABCs only
Enter iron content (aqua regia method) (values from 0 to 50%) to obtain estimate of background concentration
7
or for aged ABCs only
Enter State (or closest State)
NSW
Enter traffic volume (high or low)
low

Outputs		
Land use	Zn soil-specific EILs (mg contaminant/kg dry soil)	
	Fresh	Aged
National parks and areas of high conservation value	75	170
Urban residential and open public spaces	190	480
Commercial and industrial	280	700

Appendix B

Laboratory Data Summary Table

Appendix C

Laboratory Reports, Sample Receipt and COC

Appendix D

Borelogs

Appendix E

PID Calibration Certificate

Appendix F

EIL Calculation Spreadsheets

Appendix G

Bore Logs

Appendix H

Laboratory Reports