Detailed Contamination Assessment

39, 39A and 41 Brocklesby Road, Medowie NSW

NEW23P-0009-AB 21 April 2023



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Executive Summary

Qualtest Laboratory NSW Pty Ltd (Qualtest) has carried out a Detailed Contamination Assessment (DCA) for McCloy Project Management Pty Ltd (McCloy), for the site located at 39, 39A and 41 Brocklesby Road, Medowie NSW (the Site). The site location is shown on Figure 1, Appendix A.

The site comprises Lot 2 DP508780, Lot 300 DP625002 and Lot 301 DP625002 and is about 5.1ha in area. The site is currently zoned RU2 Rural Landscape and is proposed to be rezoned to R2 – Low Density Residential.

Qualtest completed a Preliminary Contamination Assessment (PCA) on the site, ref: NEW23P-0009-AAv1, dated 8 February 2023 (Qualtest, 2023). The PCA identified five Areas of Environmental Concern (AECs) for the site relating to: 1. Current and former buildings across the site; 2. Filling and stockpiling on the site; 3. Storage of equipment/waste materials; 4. Septic tanks/effluent disposal; and, 5. Former cropping/orchards.

The Preliminary Conceptual Site Model (CSM) indicated that there was a potential for soil and surface water contamination, to exist on the site and potentially complete exposure pathways could exist to current and future site users and the environment. Based on this, it was recommended that a Detailed Contamination Assessment was carried out.

The purpose of this DCA was to support the DA submission to Port Stephens Council (Council) as part of the rezoning application.

The objectives of the DCA were to:

- Assess the presence of soil contamination (if any) within the AECs previously identified at the site by Qualtest (2023);
- Update the Conceptual Site Model (CSM) for the site based on the findings of the DCA; and
- Provide recommendations on the need for further assessments, remediation and/or management, as required.

In order to achieve the above objectives, Qualtest carried out the following scope:

- Collection of soil samples from 20 test pit locations, and 54 surface soil locations;
- Laboratory analysis of soil samples for identified contaminants of potential concern; and,
- Data assessment and preparation of this Detailed Contamination Assessment Report.

Based on the results of the Detailed Contamination Assessment it is considered the site can be made suitable for the proposed re zoning, with the following recommendations:

- If the septic/infiltration area is proposed to be decommissioned on Lot 301, the septic tank and effluent disposal area will require decommissioning in accordance with relevant guidelines and the area assessed, prior to the proposed development.
- Management of SP1 (20m³), located in the south eastern portion of Lot 301 (39 Brocklesby Road), including:
 - Preparation of an Asbestos management plan (AMP), and placement of SP1 below surface soils, Qualtest recommends placement at depths greater than 0.5m below final site surface levels; or

- Preparation of an Asbestos Removal Plan (ARP) and disposal of SP1 offsite in accordance with the NSW EPA (2014) Waste Classification Guidelines.
- Removal of waste materials for aesthetic purposes and disposal offsite in accordance with the NSW EPA (2014) Waste Classification Guidelines; and/or
- Hazardous materials in buildings (if any) are removed in accordance with relevant laws and guidelines, and clearances provided by appropriately qualified and licensed person/consultant; and,
- An unexpected find procedure is developed and included in the Construction Environmental Management Plan for the subdivision works.

Provided the recommendations made within this report are implemented, it is considered that the site could be rendered suitable, from a contamination point of view, for the proposed residential subdivision.

This report was prepared in general accordance with the relevant sections of the NSW EPA (2020) Guidelines for Consultants Reporting on Contaminated Land and the National Environment Protection (Assessment of Site Contamination) Measure 1999 (April 2013), NEPC 2013, Canberra (referred to as ASC NEPM 2013).

Table of Contents:

1.0		Introduction1
	1.1	Objectives1
	1.2	Scope of Works1
2.0		Site Description
	2.1	Site Identification2
	2.2	Topography and Drainage2
	2.3	Regional Geology
	2.4	Hydrogeology
	2.5	Acid Sulfate Soils
3.0		Previous Reports
4.0		Preliminary Conceptual Site Model4
5.0		Data Quality Objectives
	5.1	Step 1 – State the Problem7
	5.2	Step 2 – Identify the Decision/Goal of the Study
	5.3	Step 3 – Identify the Information Inputs7
	5.4	Step 4 – Define the Boundaries of the Study7
	5.5	Step 5 – Develop the Analytical Approach8
	5.6	Step 6 – Specify Performance or Acceptance Criteria8
	5.7	Step 7 – Develop the Plan for Obtaining Data
6.0		Field and Laboratory Investigations9
	6.1	Sampling Plan
	6.2	Soil Sampling
	6.3	Laboratory Analysis
7.0		Investigation Criteria
	7.1	Soil Investigation Levels
	7.1.1	Health and Ecological Investigation and Screening Levels
	7.1.2	Asbestos Materials in Soil
	7.1.3	Adopted Soil Criteria
8.0		Quality Assurance/Quality Control
9.0		Results16
	9.1	Subsurface Conditions16
	9.2	PID Results

	9.3	Laboratory Results	19
10.0		Discussion of Exceedance	19
11		Conceptual Site Model	19
12		Conclusions and Recommendations	22
13		Limitations	22
14		References	23

Attachments:

Appendix A - Figures:	Figure 1 - Site Location Plan
	Figure 2 – Lot Location Plan
	Figure 3A – Site Features Plan – 39 & 39A Brocklesby Road
	Figure 3B – Site Features Plan – 41 Brocklesby Road
	Figure 3C – Former Site Features Plan
	Figure 4B – Sample Locations – Eastern Portion
	Figure 4C – Sample Locations – Western Portion
Appendix B: - Tables:	Table 1 – Soil Analytical Results – TRH, BETX, PAHs, Metals
	Table 2 – Soil Analytical Results – OCP, OPPs, Herbicides
	Table 3 – Soil Analytical Results – Asbestos
	Table 4 – Soil Analytical Results - Microbiological
	Table 5 - QA/QC Results
Appendix C: Test Pit	Logs
Appendix D: Data	/alidation Report

Appendix E: Laboratory Documentation

1.0 Introduction

Qualtest Laboratory NSW Pty Ltd (Qualtest) has carried out a Detailed Contamination Assessment (DCA) for McCloy Project Management Pty Ltd (McCloy), for the site located at 39, 39A and 41 Brocklesby Road, Medowie NSW (the Site). The site location is shown on Figure 1, Appendix A.

The site comprises Lot 2 DP508780, Lot 300 DP625002 and Lot 301 DP625002 and is about 5.1 ha in area. The site is currently zoned RU2 Rural Landscape and is proposed to be rezoned to R2 – Low Density Residential.

Qualtest completed a Preliminary Contamination Assessment (PCA) on the site, ref: NEW23P-0009-AAv1, dated 8 February 2023 (Qualtest, 2023). The PCA identified five Areas of Environmental Concern (AECs) for the site relating to: 1. Current and former buildings across the site; 2. Filling and stockpiling on the site; 3. Storage of equipment/waste materials; 4. Septic tanks/effluent disposal; and, 5. Former cropping/orchards.

The Preliminary Conceptual Site Model (CSM) indicated that there was a potential for soil and surface water contamination, to exist on the site and potentially complete exposure pathways could exist to current and future site users and the environment. Based on this, it was recommended that a Detailed Contamination Assessment was carried out.

The purpose of this DCA was to support the DA submission to Port Stephens Council (Council) as part of the rezoning application.

This report was prepared in general accordance with the relevant sections of the NSW EPA (2020) Guidelines for Consultants Reporting on Contaminated Land and the National Environment Protection (Assessment of Site Contamination) Measure 1999 (April 2013), NEPC 2013, Canberra (referred to as ASC NEPM 2013). This report comprises a stage 2 detailed site investigation as described in SEPP (Resilience and Hazards) 2021, Chapter 4.

1.1 Objectives

The objectives of the DCA were to:

- Assess the presence of soil contamination (if any) within the AECs previously identified at the site by Qualtest (2023);
- Update the Conceptual Site Model (CSM) for the site based on the findings of the DCA; and
- Provide recommendations on the need for further assessments, remediation and/or management, as required.

1.2 Scope of Works

In order to achieve the above objectives, Qualtest carried out the following scope:

- Collection of soil samples from 20 test pit locations, and 54 surface soil locations;
- Laboratory analysis of soil samples for identified contaminants of potential concern; and,
- Data assessment and preparation of this Detailed Contamination Assessment Report.

2.0 Site Description

2.1 Site Identification

General site information is provided below in Table 2.1. The site location is shown in Figure 1, Appendix A.

Site Address:	39, 39A and 41 Brocklesby Road, Medowie, NSW		
Approximate site area and dimensions:	Approx. 5.1 ha Approx. 135m wide (north to south) by 365m long (east to west) at its widest and longest points		
Title Identification Details:	Lot 2 DP508780, Lot 300 DP625002 and Lot 301 DP625002 within the Port Stephens local government area, Parish of Stowell, County of Gloucester		
Current Zoning	RU2 Rural Landscape		
Current Ownership:	Private Individuals and Brocklesby Road Pty Limited		
Current Occupier:	Residential Landuse		
Previous and Current Landuse:	Farming/Residential Landuse		
Proposed Landuse:	Proposed to be rezoned to R2 - Low Density Residential		
Adjoining Site Uses:	North – rural residential and bushland East – Brocklesby Road, followed by residential South – rural residential and Bushland West – Residential		
Site Coordinates for approx. centre of site:	32°44'44.52"S 151°52'29.17"E		

2.2 Topography and Drainage

Reference to the NSW Land and Property Information Spatial Information Exchange website (<u>https://six.nsw.gov.au/wps/portal/</u>) indicated the elevation of the site was approximately 30m AHD.

The site was observed to be relatively flat, with a slight mound in the centre of the site. Gentle slopes were observed to the east and west from the centre of the site. Rain falling on the site would be expected to infiltrate into the site soils.

Excess surface water which falls on the eastern portion of the site is expected to flow into municipal stormwater drains located on Brocklesby Road, located offsite along the eastern

boundary. Excess surface water which falls on the western portion of the site is expected to flow into a newly constructed open drain located offsite along the western boundary. Both stormwater drains are expected to discharge to Moffats Swamp, located 1.5km to the east of the site.

2.3 Regional Geology

The 1:100,000 Nelson Bay Coastal Quaternary Geological Maps indicates that the site is underlain Permian to Triassic sedimentary rocks, including extensive coal measures (Sydney Basin).

2.4 Hydrogeology

Groundwater beneath the site is anticipated to be present in an unconfined aquifer within residual soils/weathered rock at depths greater than 3m below ground surface (bgs).

Groundwater flow direction is anticipated to flow to the east discharging to Moffats Swamp located 1.5km to the east. Moffats Swamp drains towards Port Stephens located about 6km east of the site.

It should be noted that groundwater conditions can vary due to rainfall and other influences including regional groundwater flow, temperature, permeability, recharge areas, surface condition, and subsoil drainage.

A search of the NSW Department of Primary Industries (Office of Water) registered groundwater bores located within a 500m radius of the site was undertaken. The search revealed that there was one bore located within this radius. A copy of the search is provided in the PCA (Qualtest, 2023).

Bore ID	Installation Date	Purpose	Approx. Distance and Gradient from the site	Final Depth (m)	Water Bearing Zones (m)
GW013016	01/01/1956	General Use	Central southern portion of the site	47.90	-

Table 2.2 – Groundwater Bore Search

2.5 Acid Sulfate Soils

Reference to the Acid Sulfate Soil online database from State of NSW and Department of Planning, Industry and Environment, 2022 (<u>https://espade.environment.nsw.gov.au</u>) the site is located within an area of "no known occurrence" of acid sulfate soils" (ASS).

3.0 **Previous Reports**

Qualtest carried out a Preliminary Contamination Assessment (PCA) for the site (Qualtest 2023).

The objectives of the PCA were to provide an assessment of the likelihood for contamination to be present on the site from past uses and activities, and provide recommendations on the need for further assessment, management and/or remediation (if required).

In order to achieve the above objective, Qualtest carried out the following scope:

• Desktop study and site history review;

- Site walkover;
- Data assessment and preparation of a Preliminary Contamination Assessment Report.

The site history indicated that the majority of the site has been used for large scale cropping/orchards from at least the 1950's to the 1990's. From the 1990's the site has been used as rural residential properties, including agistment of horses and some small areas of gardens/fruit trees.

Materials and equipment were observed stored in and around onsite sheds and dwellings and areas of fill and fill stockpiles were also observed across the site. Buildings constructed of potential ACM were observed on the site, including the eaves of the residential dwelling at 39A Brocklesby Road and/or cladding of residential dwelling at 41 Brockelsby Road.

Five Areas of Environmental Concern (AECs) were identified based on the site history and site observations. The AECs related to: 1. Current and former buildings across the site; 2. Filling and stockpiling on the site; 3. Storage of equipment/waste materials; 4. Septic Tanks; 5. Former cropping/orchards.

The Preliminary Conceptual Site Model (CSM) indicated that there was a potential for soil and surface water contamination, to exist on the site and potentially complete exposure pathways could exist to current and future site users and the environment.

Based on the above, it was recommended that a Detailed Contamination Assessment (DCA), comprising intrusive investigations in the AECs identified be carried out. Given the age of the buildings on site it was also recommended that a Hazardous Materials Survey (HMS) be carried out by a suitably qualified consultant, prior to refurbishment and/or demolition of the structures.

4.0 Preliminary Conceptual Site Model

Based on the results of the PCA, a Preliminary Conceptual Site Model (CSM) was developed, and is shown below in Table 4.1

Table 4.1 – Preliminary Conceptual Site Model

AEC	COPC	Likelihood of Contamination	Mechanism of Contamination	Potentially Affected Media	Human & Ecological Receptors	Potential mechanisms of exposure	Potential & Complete Exposure Pathways	Comments
 Current and former buildings across the site. Weathering of potentially hazardous materials (asbestos, lead paint, galvanised metals) Use of pesticides around building Demolition of structures over time 	Metals, Asbestos, OCPs	Medium to High	 Top-down leaks/spills, flakes/fibres onto soil. Leaching of soil contaminants to surface water and groundwater. 	 Surface Soils Surface water Groundwater Sediments 	 Current site visitors Future construction workers & site users Soil biota/plants and transitory wildlife Surface and ground water depended ecosystems Offsite surface water and groundwater – Moffats swamp, located 1.5km to the east of the site. 	 Direct dermal contact with contaminated soil and/or surface water Ingestion of contaminated soil and/or surface water Inhalation of asbestos fibres, or contaminated soil (as dust) Leaching of soil contaminants to surface water and/or groundwater Surface water and groundwater discharge to Moffats swamp, located 1.5km to the east of the site. 	 Potentially complete exposure pathway for current site visitors, future construction workers and site users. Potentially complete exposure pathway for ecological receptors. Potentially complete exposure pathway for soil contaminants to leach to surface water. Likely incomplete exposure pathway for soil contaminates to leach to groundwater due to depth of 	Exposure pathways would be incomplete if soils are found to not be contaminated via sampling & analysis. It is recommended that a Hazardous Materials Survey is carried out on the existing site building.
 2. Filling and stockpiling on the site Potential use of imported fill of unknown quality and origin. 	TRH, BTEX, PAH, OCPs, Metals, Asbestos	Low to medium	 Importation of potentially contaminated fill. Leaching of soil contaminants to underlying soils, surface water and groundwater. 	 Fill soils Underlying soils Surface water Groundwater Sediments 		 Direct dermal contact with contaminated soil and/or surface water Ingestion of contaminated soil Inhalation of asbestos fibres, or contaminated soil (as dust) Inhalation of hydrocarbon 	groundwater (>3m bgs and likely clayey subsoils.	Exposure pathways would be incomplete if soils are found to not be contaminated via sampling & analysis.
 3. Storage of equipment/waste materials across the site Stored equipment 205L metal and plastic drums (empty), timber, metal, plastic, bricks, tyres, trailers, sheets of corrugated potential ACM, bath tubs and small quantities of paints, fuels, degreasers. 	TRH, BTEX, PAH, Metals, Asbestos, OCPs (CoPCs dependent on material/waste type)	Low to Medium	 Top-down leaks/spills, flakes/fibres onto soil. Leaching of soil contaminants to surface water and groundwater. 	 Aesthetics Surface soils Surface water Groundwater Sediments 		 Leaching of soil contaminants to surface water and/or groundwater Surface water and groundwater discharge to Moffats swamp, located 1.5km to the east of the site. 		
 4. Septic tanks located on the site Septic tank soak aways and adsorption trenches, potential leaks of effluent 	Microbiological, heavy metals, TRH, BTEX and PAH	Low to medium	 Subsurface leaks from tank Subsurface & surface leaks from pipes 	 Soil Surface water Sediment Groundwater 	 Current site visitors Future construction workers & site users 	 Direct dermal contact with contaminated soil and/or surface water Ingestion of contaminated soil and/or surface water 	• Potentially complete exposure pathway for current site visitors, future construction workers and site users.	Exposure pathway would be incomplete if soils and surface water are found to not be contaminated

AEC C	COPC	Likelihood of Contamination	Mechanism of Contamination	Potentially Affected Media	Human & Ecological Receptors	Potential mechanisms of exposure	Potential & Complete Exposure Pathways	Comments
5. Former Cropping/Orchards • Potential for pesticide herbicide and other farming related contamination	IRH, BTEX, PAH, OCPs, OPPs, nerbicides, metals	Low	 and/or trenches Top-down leaks/spills, flakes/fibres onto soil. Leaching of soil contaminants to surface water and groundwater 	 Soils Groundwater Surface water Sediments 	 Soil biota/plants and transitory wildlife Surface and ground water depended ecosystems Offsite surface water and groundwater – Moffats swamp, located 1.5km to the east of the site. 	 Leaching of soil contaminants to surface water and/or groundwater Surface water and groundwater discharge to Moffats Swamp, located 1.5km to the east of the site. 	 Potentially complete exposure pathway for ecological receptors. Potentially complete exposure pathway for soil contaminants to leach to surface water. Likely incomplete exposure pathway for soil contaminates to leach to groundwater due to depth of groundwater (>3m bgs and likely clayey subsoils. 	via sampling & analysis.

5.0 Data Quality Objectives

5.1 Step 1 – State the Problem

There is a potential for soil contamination to exist from past land use with plausible complete exposure pathways to human and ecological receptors. Should contamination exist, the site may not be suitable for the intended use without remediation and/or management.

Five areas of Environmental Concern (AECs) were identified based on the site history and site observations. The AECs are shown in Table 4.1 above.

5.2 Step 2 – Identify the Decision/Goal of the Study

The decisions to be made based on the contamination assessment are:

- Is the site characterisation sufficient to provide adequate confidence to make decisions regarding remediation and or management?
- Are the concentrations of COPCs above the adopted landuse criteria?;
- Do potential risks associated with contamination exist, and if so, what are they?
- Will the site require remediation, and if so, what level and type of remediation will be required to make the site suitable for the proposed land use, from a contamination perspective?

5.3 Step 3 – Identify the Information Inputs

Inputs into the decision are:

- Have samples been collected in the required areas of the site (the identified AECs)?
- Have samples been collected at the required frequencies and adequately represent the conditions on site?
- Is the data set adequate to perform statistical analysis, if required (i.e. calculate 95% UCL)?
- Have the samples been analysed for the COPCs identified?
- Have concentrations exceeding the adopted criteria been reported in the samples?
- If concentrations exceeding adopted criteria have been reported, will these areas require remediation and/or management?

The informational inputs into the decision are:

- Field observations and field screening results;
- Laboratory results (concentrations of contaminants in soil);
- QA/QC documentation and data;
- Adopted assessment criteria (see Section 7); and,
- Relevant NSW EPA endorsed Guidelines.

The media to be sampled and analysed is: Soil.

5.4 Step 4 – Define the Boundaries of the Study

The study boundary is defined laterally as the site boundary, Lot 2 DP508780, Lot 300 DP625002 and Lot 301 DP625002 within the Port Stephens local government area. The site is located at 39,

39A and 41 Brocklesby Road, Medowie NSW, and the site area is about 5.1ha (refer to Figure 1, Appendix A). Vertically, the study boundary will be defined by the depth of soil contamination. It is anticipated the vertical boundary would be a maximum of 2m bgs.

Temporally the study boundary is the date of sampling, 21 to the 22 March 2023.

5.5 Step 5 – Develop the Analytical Approach

The analytical approach can be defined as: -

- If the laboratory quality assurance/ quality control data are within the acceptable ranges, the data will be considered suitable for use;
- If the COPCs are reported above the adopted criteria and/or at elevated levels (where no criteria are available) then it will be considered whether further assessment, remediation and/or management measures are required;
- Where practical and/or appropriate, the 95% Upper Confidence Limit (UCL) of the samples will be calculated. If the 95% UCL is above the adopted criteria, then it will be considered whether further assessment, remediation and/or management measures are required; and,
- Where concentrations are below the assessment criteria, then no further assessment, remediation and/or management of that contaminant, in that area, in that media, is required. This is provided samples have been collected at the required frequencies (as per NSW EPA guidelines) and adequately represent the conditions on site, if not, additional sampling may be required.

5.6 Step 6 – Specify Performance or Acceptance Criteria

There are two types of errors:

- Type 1 finding that the site is contaminated, when it is not;
- Type 2 finding that the site is uncontaminated, when it is.

To reduce the potential for errors, the following will be applied:

- Appropriate field sampling methodologies and collection of field data (including sampling frequency);
- Robust QA/QC assessment of field procedures and laboratory data;
- Appropriate sampling and analytical density;
- Use of statistics (i.e. 95% UCL) to assess arithmetic average of COPCs. Use of statistics will also take into account:
 - No sample should report a concentration more than 250% of the adopted criteria; and,
 - The standard deviation of a sample population should not exceed 50% of the adopted criteria.

The adopted criteria are shown in Section 7.

5.7 Step 7 – Develop the Plan for Obtaining Data

The methodologies presented in this report are designed to meet the nominated DQOs. Optimisation of the data collection process will be achieved by:

• Working closely with the analytical laboratories and sampling equipment suppliers so that appropriate procedures and processes are developed and implemented prior to and during the field work and that sampling, handling, and transport to, and processing by, the analytical laboratories is appropriate.

• Conduct sampling in accordance with industry best practice and Standard Operating Procedures (SOPs) for the type of sampling being conducted.

6.0 Field and Laboratory Investigations

6.1 Sampling Plan

The site is about 5.1ha in area. The NSW EPA (2022) Sampling Design Part 1 – Application, Contaminated Land Guidelines recommend a minimum of 63 sample locations to characterise a site of 5.1ha. Based on the configuration of the site (3 separate lots each with dwellings and sheds), and the AECs identified in the Preliminary Contamination Assessment (Qualtest, 2023), a total of 74 sampling locations were adopted.

As part of the DCA the following sampling activities were completed:

- Soil samples were collected from 20 test pits (TP01-1, TP02-1, TP06-2, TP66-2 to TP74-2, TP03-3, TP04-3, TP07-4 to TP10-4 and TP12-5, TP13-5) excavated in areas targeting the AECs listed in the Preliminary Contamination Assessment (Qualtest, 2023); and,
- Surface soil samples were collected from 54 locations (SS14-1 to SS19-1, SS21-1 to SS46-1, SS75-2 to SS77-2, SS47-3 to SS55-3, SS56-5 to SS65-5) targeting current and former buildings, stockpiling on site, storage of equipment/waste material and former cropping/orchards.

The location of the samples in relation to the identified AECs is shown in Table 6.1 below. The sampling locations are shown on Figure 4A and 4B, Appendix A.

AEC	Samples Collected
1. Current and former buildings across the site	TP01-1 to TP02-1, S\$14-1 to S\$19-1 and S\$21-1 to S\$46-1
2. Filling and stockpiling on the site	TP06-2, TP69-2 to TP71-2 – Collected from SP1 (approx. 20m ³), TP66-2 to TP68-2 – Collected from SP2 to SP7 (approx. 30m ³ total), TP72- 2 to TP74 –2 Collected from SP8 (approx. 6m ³), SS75 -2 to SS77-2 Collected from SP9 footprint (<50m ²).
3. Storage of equipment/waste materials across the site	TP03-3 to TP04-3, and SS47-3 to SS55-3
4. Septic tanks located on the site	TP07-4 to TP10-4. It is noted that no assessment was carried out in the vicinity of the transpiration bed at Lot 301 (39 Brockelsby Road) as the infiltration system was recently installed, still in use and consisted of a number of pipes that could not be damaged.
5. Former cropping/orchards	TP12-5 to TP13-5 and \$\$56-5 to \$\$65-5

Table 6.1 AECs and Sampling Locations

6.2 Soil Sampling

The test pits (TP01-1 to TP02-1, TP03-3 to TP04-3, TP07-4 to TP10-4 and TP12-5 to TP13-5), fill mound/stockpiles (TP06-2, TP66-2 to TP74-2) and surface samples (SS14-1 to SS18-1, SS24-1 to

SS46-1, SS75-2 to SS77-2, SS47-3 to SS55-3, SS56-5 to SS65-5) were excavated across the site using a 2.7 tonne excavator with a 0.45m wide bucket. Surface samples SS19-1, SS21-1 to SS23-1 were collected using hand tools.

The test pits were excavated to 0.5m into natural soils or a maximum depth of 2.0m (or prior refusal). For the majority of test pit locations, soil samples were collected at the surface and then about 0.5m intervals to the base of fill material (i.e. 0.5m, 1.0m, 1.5m etc). Additional samples were collected where there was evidence of potential contamination such as odours, staining, waste materials etc.

The surface samples were collected from surface (0.0m) to approximately 0.2m bgs.

The samples were collected directly from the excavator bucket and/or hand tools, using a clean pair of nitrile gloves per sample. Samples to be tested for asbestos were assessed using the gravimetric method, comprising of collection of a 10L sample, screening through a 6.7mm sieve, and weighing of potential ACM fragments retained on the sieve (if any).

Re-useable sampling equipment was decontaminated between sampling locations using a phosphate free detergent and potable water.

The soil samples were placed into 250mL laboratory supplied glass jars for laboratory analysis and a plastic zip-lock bag for asbestos %w/w analysis. An additional zip-lock bag was collected for headspace screening using a photoionisation detector (PID). Each soil sample was placed directly into an ice-chilled esky and remained chilled during fieldwork and transportation to the laboratory.

6.3 Laboratory Analysis

The samples were dispatched to the NATA-accredited Eurofins MGT laboratory under chain of custody conditions. Soil samples were selected for analysis based on field observations, and providing representative sampling across the site. The samples were analysed for the following:

AEC	Samples	Analysis
1. Current and former buildings across the site	TP01-1 to TP02-1, SS14-1 to SS19-1 and SS21-1 to SS46-1	TRH, BTEX, PAH – 2 primary samples Metals – 33 primary samples Asbestos (gravimetric)– 34 primary samples Asbestos %w/w – 25 primary samples
		OCPs/OPPs – 5 primary samples
2. Filling and stockpiling on the site	TP6-2, TP66-2 to TP74-2 and SS75-2 to SS77-2	TRH, BTEX, PAH – 5 primary samples Metals – 13 primary samples Chromium Speciation – 4 primary samples Asbestos (gravimetric & %w/w)– 13 primary samples

AEC	Samples	Analysis
3. Storage of equipment/waste	TP03-3 to TP04-3, and SS47-3 to SS55-3	TRH, BTEX, PAH – 2 primary samples
materials across the site		Metals – 11 primary samples
		Chromium Speciation – 1 primary samples
		Asbestos (gravimetric & %w/w) – 11 primary samples
4. Septic tanks located on the site	TP07-4 to TP10-4	Asbestos (gravimetric)– 4 primary samples
		Asbestos %w/w – 2 primary samples
		Microbiological – 5 primary samples
5. Former croppina/orchards	TP12-5 to TP13-5 and	TRH, BTEX, PAH – 1 primary sample
	3330-3 10 3363-3	Metals– 12 primary samples
		OCPs/OPPs – 10 primary samples
		Herbicides - 3 primary samples

7.0 Investigation Criteria

7.1 Soil Investigation Levels

7.1.1 Health and Ecological Investigation and Screening Levels

The health and ecological investigation levels for soil, presented in the National Environment Protection (Assessment of Site Contamination) Measure 1999 (April 2013), NEPC 2013, Canberra (referred to as ASC NEPM 2013) are generally used in NSW when selecting investigation levels for chemical contaminants in soil.

The purpose of the ASC NEPM (2013) is to 'establish a nationally consistent approach to the assessment of site contamination to ensure sound environmental management practices by the community which includes regulators, site assessors, environmental auditors, landowners, developers and industry'.

ASC NEPM (2013) provides health and ecological investigation and screening levels for different exposure scenarios based on a proposed land use. Health and ecological investigation and screening levels are applicable to the first stage (Tier 1) of site assessment and are used to assist in the iterative development of a Conceptual Site Model (CSM). They are adopted as concentrations of a contaminant above which either further appropriate investigation and/or evaluation will be required, or development of an appropriate management strategy (including remediation).

Health Investigation Levels (HILs) and Health Screening levels (HSLs) are applicable for assessing human health risk via relevant exposure pathways.

The HILs were developed for a broad range of metals and organic substances. These are generic to all soil types.

The HSLs have been developed for selected petroleum compounds and fractions and are applicable to assessing human health risk via inhalation and direct contact with soil and groundwater. The HSLs depend on specific soil physicochemical properties, building configurations, land use scenarios and the depth that groundwater is encountered.

Ecological Investigation Levels (EILs) and Ecological Screening Levels (ESLs) are applicable for assessing risk to terrestrial ecosystems under residential, open space and commercial/industrial land use scenarios. They apply to the top 2m of soil, which corresponds to the root zone and habitation zone of many species.

The EILs are associated with selected metals and organic compounds. The EILs are site specific and are determined by calculating an Ambient Background Concentration (ABC) and an Added Contaminant Limit (ACL) for the site, which are added together to get the EIL. The EIL's for the site have been calculated using an ABC and site specific pH, Cation Exchange Capacity (CEC) and clay content values. The ABC were obtained from Trace Element Concentrations in Soils from Rural and Urban Areas of Australia (Olszowy et al, 1995) - old suburbs, low traffic, 50 percentile.

The ESLs are associated with petroleum compounds and fractions and are dependent on specific soil physical properties (i.e. coarse and fine-grained soil).

It is noted the ESLs for benzo(a)pyrene (ASC NEPM, 2013) were adopted from Canadian Soil Quality Guidelines (SQGs) presented in Environment Canada (2004), and were noted to have a low-reliability. The ESLs for benzo(a)pyrene in ASC NEPM (2013) were based on a review of Canadian SQGs by Dr Michael Warne, who completed the review in February 2010. Since the completion of Warne (2010) (which are included in the publication of ASC NEPM, 2013), the Canadian SQGs for benzo(a)pyrene were revised later in 2010 (CCME 2010a,b). Therefore, CRC Care Technical Note 39 assesses the benzo(a)pyrene ESL derivation, and derives a higher reliability ESL for benzo(a)pyrene in the Australian setting. The ESLs for benzo(a)pyrene derived by CRC Care (2017) are 33mg/kg for residential and open space land uses, and 172mg/kg for commercial/industrial land uses. These have been considered where benzo(a)pyrene concentrations exceed the ESL, but do not exceed the HIL, to mitigate against unwarranted remediation that is driven by low-reliability ESLs.

Based on the current and proposed site use (residential land use) the following investigation levels have been adopted:

- HIL A & HSL A Residential; and,
- EIL A, ESL A Urban Residential and Public Open Space.

7.1.2 Asbestos Materials in Soil

The assessment of known and suspected asbestos contamination in soil is based on:

- ASC NEPM (2013); and
- WA DoH (2009) Guidelines of the assessment and management of asbestos contaminated sites in Western Australia, WA Department of Health and Department of Environment and Conservation.

Schedule B1, Section 4 ASC NEPM (2013) provides guidance on the assessment of both friable and non-friable forms of asbestos in soil. This guidance is based on the WA DoH (2009) Guidelines that presented risk based screening levels for asbestos in soil under various landuse scenarios.

For the purpose of assessing asbestos impacts in soil, three groups are recognised:

- Asbestos Containing Material (ACM) which is in sound condition although possibly broken or fragmented and the asbestos is bound in a matrix. This is restricted to material that cannot pass through a 7mm x 7mm sieve;
- Fibrous asbestos (FA) friable asbestos material, such as severely weathered ACM, and asbestos in the form of loose fibrous material such as insulation products;
- Asbestos fines (AF) includes free fibres of asbestos, small fibre bundles and also ACM fragments that pass through a 7mm x 7mm sieve.

The health screening levels for asbestos in soil for residential land use have been adopted.

7.1.3 Adopted Soil Criteria

The adopted assessment criteria (for low density residential land use) are listed in Table 7.1.4 below.

Table 7.1.4: Adopted Soil Assessment Criteria

сос	HIL / HSL A (mg/kg) ^{1,2}	EIL / ESL A ³ (mg/kg)
TRH C6-C10 less BTEX (F1)	50	_
TRH >C10-C16 less Naphthalene (F2)	280	-
TRH >C6 - C10	-	180
TRH >C10 - C16	-	120
TRH >C16 - C34	-	1,300
TRH >C34 - C40	-	5,600
Benzo(a)pyrene (CRC Care)*	-	33
Carcinogenic PAH as B(a)p TEQ	3	_
Total PAHs	300	-
Arsenic	100	100
Cadmium	20	-
Chromium (III)	-	640^
Chromium (VI)	100	-
Copper	6,000	180^
Lead	300	1,100
Nickel	400	100^
Mercury	40	-

сос	HIL / HSL A (mg/kg) ^{1,2}	EIL / ESL A ³ (mg/kg)
Zinc	7,400	440^
Naphthalene	5	170
Benzene	0.7	50
Toluene	480	85
Ethylbenzene	NL	70
Total Xylene	110	105
DDT + DDE + DDD	240	180
Aldrin and Dieldrin (Total)*	6	-
Chlordanes - Total	50	_
Endosulfan	270	_
Endrin	10	_
Heptachlor	6	_
НСВ	10	_
Methoxychlor	300	_
Toxaphene	20	_
Chlorpyrifos	160	_
2.4.5-T	600	_
2.4-D	900	-
МСРА	600	-
МСРВ	600	-
Mecoprop	600	-
Asbestos – bonded and FA/AF	No visible asbestos for surface soils	-
Asbestos – FA and AF (Friable asbestos)	0.001%	-
Asbestos – bonded	0.01%	-
E.coli ⁴	100 MPN/g	-
Thermotolerant Coliforms ⁴	1000 MPN/g	-

Notes:

^ Based on an average pH of 7, an average CEC of 8mg/kg, and Clay content 40%, and using Ambient

Background Concentration obtained from Olszowy et al (1995) using urban soils, old suburbs with low traffic, 50% percentile.

1 – ASC NEPM (2013) - Health Investigation Levels- HIL A

2 - ASC NEPM - Soil Health Screening Levels for Vapour Intrusion, Residential, Clay 0m to <1m

3 - ASC NEPM (2013) - Ecological Investigation and Screening Levels, Urban Residential/Public Open Space, Fine textured

4 - NSW EPA (2000) Use and Disposal of Biosolids Products, Table 3.4 Initial Process Verification Standards, Table 3.5 Stabilisation Grade A Microbiological Standards

* – Benzo(a)pyrene ESL derived by CRC CARE (2017)

8.0 Quality Assurance/Quality Control

Sampling activities were undertaken in accordance with normal, industry accepted practices and standards. The assessment of field and laboratory quality assurance / quality control (QA / QC) procedures is provided below, and a data validation report is presented in Appendix D.

QC Sample	Туре	Lab	Analysis
D.21.3.23	Duplicate of TP73-2_0.0-0.2	Eurofins	TRH, BTEX, PAHs, Metals
T.21.3.23	Triplicate of TP73-2_0.0-0.2	SGS	TRH, BTEX, PAHs, Metals
D.22.3.23	Duplicate of \$\$63-5	Eurofins	TRH, BTEX, PAHs, Metals
T.22.3.23	Triplicate of SS63-5	SGS	TRH, BTEX, PAHs, Metals
WB.22.3.23	Equipment wash blank	Eurofins	TRH, BTEX, PAHs, Metals

In order to assess field quality assurance / quality control (QA/QC) procedures, the following quality control samples were collected and analysed:

Primary and intra lab duplicate samples were analysed by the NATA-accredited Eurofins laboratory. Triplicate samples were analysed by the NATA-accredited SGS laboratory.

Table 5, Appendix B, presents the relative percentage differences (RPDs) between the primary, duplicate and triplicate samples. A review of the Qualtest QA / QC results indicates that RPDs were within the acceptable range with the exception of duplicate pair TP73-2_0.0-0.2/ D.21.3.23 for chromium (33%), copper (100%) and nickel (90%) and triplicate pair TP73-2_0.0-0.2/ 0.2/T.21.3.23 for chromium (33%), copper (158%), nickel (172%) and zinc (54%).

These RPDs are considered to be due to the heterogeneous distribution of metal contaminants in surface soils as observed during sampling and are not considered to affect the overall data representativeness and usability. It is noted that low concentrations can exaggerate the percentage differences with respect to small total concentrations, therefore where results for primary and duplicate sample were less than 10 times the LOR, the RPDs have been disregarded.

Table 5, Appendix B, presents the equipment wash blank results. The results show concentrations below the laboratory limit of reporting (LOR).

The laboratory internal QA/QC reports indicated that the appropriate laboratory QA / QC procedures and rates were undertaken for contamination studies, and that:

- Laboratory blank samples were free of contamination;
- Matrix spike recoveries were within the control limits with the exception of the following:
 - MCPA where Eurofins quoted Q08 which states "The matrix spike recovery is outside of the recommended acceptance criteria. An acceptable recovery was obtained for the laboratory control sample indicating a sample matrix interference." ; and
 - TRH analytes where SGS quoted which states "Recovery failed acceptance criteria due to the presence of significant concentration of analytes (i.e. the concentration of analyte exceeds the spike level)."

Based on the above, and as no elevated TRH was reported on the site, the recoveries are considered acceptable.

- Laboratory duplicate RPDs were recorded within the control limits, with the exception of the following:
- Eurofins duplicate RPDs for chromium and zinc RPDs, the laboratory quoted code Q15 which states "The RPD reported passes Eurofins Environment Testing's QC Acceptance Criteria as defined in the Internal Quality Control Review and Glossary page of this report" And Q02 which states "The duplicate %RPD is outside the recommended acceptance criteria. Further analysis indicates sample heterogeneity as the cause".
- SGS duplicate RPDs for nickel, lead and TRH analytes, the laboratory quotes 2 which states "RPD failed acceptance criteria due to sample heterogeneity".

Based on the above, the RPDs are considered acceptable.

• Surrogates and laboratory control samples were within the laboratories acceptable range

Based on the above, and the data validation report in Appendix D, it is considered that the field and laboratory methods for soil sampling are appropriate and that the data obtained is usable and considered to reasonably represent the concentrations at the sampling points at the time of sampling.

9.0 Results

9.1 Subsurface Conditions

The soils observed during excavation are summarised below in Tables 9.1.1 (Test pits), 9.1.2 (Fill Mound and Stockpiles), 9.1.3 (Surface Samples). The borehole logs are presented in Appendix C.

Table 9.1.1 – Summary of Geotechnical Units and Soil Types – Test pits (TP01-1 to TP02-1, TP03-3 to TP04-3, TP07-4 to TP10-4 and TP12-5 to TP13-5)

Soil Type	Description	Depth Range (m bgs)
	CLAY – medium plasticity, brown-dark brown, trace fine grained sand, root affected.	0.0 to 0.4
Fill	CLAY – medium plasticity, orange-brown, trace fine grained sand, root affected.	
	Sandy CLAY – low to medium plasticity, dark grey to dark brown with some brown, fine to medium grained sand, trace concrete, plastic, roof tile, geo fab, root affected.	
	CLAY – medium to high plasticity, orange-brown.	0.3/0.4 to 2.0
soil	CLAY – medium to high plasticity, red-grey with some orange- brown.	

Table 9.1.2 – Summary of Geotechnical Units and Soil Types – Fill Mound and Stockpiles (TP06-2, TP66-2 to TP74-2)

Soil Type	Description	Depth Range (m bgs)
	SAND – fine to medium grained, pale brown to pale grey, root affected.	0.0 to 0.4
	SAND - fine to coarse grained, dark grey to grey, trace glass, brick, concrete, potential asbestos containing material.	
Fill	CLAY – medium plasticity, orange-brown to red-brown, trace fine grained sand.	
	Clayey Gravelly SAND – fine to medium grained, brown to grey, fine to medium grained angular gravel, fines of low plasticity, trace slag, concrete, asphalt.	
Residual	CLAY – medium plasticity, orange-brown, trace fine grained sand.	0.3/0.4 to 0.5/0.6
soil	CLAY – medium to high plasticity, orange-brown to pale brown, becoming red-grey with depth.	

Sample ID	Material Description
SS15-1 to SS19-1, SS21-1 to SS23-1, SS27-1 to SS29-1, SS31-1 to SS46-1,	Sandy CLAY – low plasticity, dark brown, fine to medium grained, root affected.
SS51-3, SS53-3 to SS57-3, SS59-5, SS61-5 to SS65-5	
SS50-3, SS58-5	Clayey SAND – fine to medium grained, brown, fines of low plasticity, root affected.
SS24-1, SS30-1	Gravelly Sandy CLAY – low plasticity, brown to dark brown, fine to medium grained sand, fine to medium grained angular gravel.
SS26-1	SAND – fine to coarse grained, brown to dark brown, fines of low plasticity.
SS47-3 to SS49-3, SS52-3, SS60-5	CLAY – low to medium plasticity, brown, trace fine to medium grained sand.

Table 9.1.3 – Summary of Soils in Surface Samples

No odours or stained soils were observed during sampling. Anthropogenic materials observed while excavating can be summarised below in Table 9.3

Sample ID	Anthropogenic Material Observed
SS75-2 to SS77-2 and TP10-4	Slag, roof tile, concrete and asphalt
TP72-2 to TP74-2 and SS55-3	Slag, concrete and asphalt
TP07-4 and TP10-4	Concrete, plastic, geo fab, roof tile,
TP71-2	Glass, brick, concrete, PACM
SS40-1 and SS45-1	Mulch
SS30-1 and SS36-1	Slag

Potential Asbestos Containing Material (PACM) was observed in TP71-2_0.0-0.2 during gravimetric asbestos testing.

9.2 PID Results

The results of PID screening of samples are included in Appendix E. The screening showed readings between 0.2ppmv and 17.1ppmv, which indicates a very low to low potential for volatile contamination.

9.3 Laboratory Results

Soil analytical results for the contamination assessment are summarised in Tables 1 to 4, Appendix B. The laboratory analytical reports are also included in Appendix E.

The soil laboratory results were compared to the investigation levels described in Section 7.1. The analytical results indicated that concentrations of contaminants were reported below the adopted criteria, with the exception of:

- Concentrations of zinc exceeded the EIL (440mg/kg) in sample \$\$35-1 (960mg/kg); and
- A fragment of asbestos containing material (ACM) was identified (below the HIL of 0.01%) in TP1-71-2_0.0-0.2, collected from SP1.

10.0 Discussion of Exceedance

10.1 Zinc

Sample SS35 showed concentrations of zinc above the adopted ecological criteria (EIL). SS35 was located adjacent to the metal clad shed (Shed 4) in the south western portion of Lot 300 (39A Brocklesby Road), and the source of the zinc is considered to be due to weathering of galvanised metals. No other zinc concentrations above the adopted EIL were identified on the site. Based on this, the zinc exceedance appears to be localised. Therefore, it is considered that the zinc does not pose a risk to ecosystems, and remediation of the zinc would be a net adverse impact on the environment (use of machinery and vehicles to excavate and transport waste, disposal of waste to landfill).

10.2 ACM

A fragment of ACM was identified in TP-71-2_0.0-0.2, collected from SP1, located in the south eastern portion of Lot 301 (39 Brocklesby Road). SP1 was observed to be approximately 20m³ and consisted of gravelly sand, dark brown with some anthropogenic materials including ACM, tyres, terracotta pipe, plastics and bricks.

Concentrations of ACM were reported below the adopted criteria (0.01%) however, ACM cannot be present on the site surface. Based on this, SP1 will require management.

Options for management of SP1, include:

- Preparation of an Asbestos management plan (AMP), and placement of SP1 below surface soils, Qualtest recommends placement at depths greater than 0.5m below final site surface levels; or
- Preparation of an Asbestos Removal Plan (ARP) and disposal of SP1 offsite in accordance with the NSW EPA (2014) Waste Classification Guidelines.

11 Conceptual Site Model

Based on the results of the detailed contamination assessment, including sampling and analysis, carried out on the site, the Conceptual Site Model (CSM) has been updated and presented in Table 11.1.

Table 10.1 – Updated Conceptual Si	ite Model Following Assessment
------------------------------------	--------------------------------

AEC	COPC	Mechanism of Contamination	Potentially Affected Media	Human & Ecological Receptors	Potential mechanisms of exposure	Sampling Completed	Pot
 Current and former buildings across the site. Weathering of potentially hazardous materials (asbestos, lead paint, galvanised metals) Use of pesticides around building Demolition of structures over time 	Metals, Asbestos, OCPs	 Top-down leaks/spills, flakes/fibres onto soil. Leaching of soil contaminants to surface water and groundwater. 	 Surface Soils Surface water Groundwater Sediments 	 Current site visitors Future construction workers & site users Soil biota/plants and transitory wildlife Surface and ground water depended ecosystems Offsite surface water and groundwater – Moffats swamp, located 1.5km to the east of the site. 	 Direct dermal contact with contaminated soil and/or surface water Ingestion of contaminated soil and/or surface water Inhalation of asbestos fibres, or contaminated soil (as dust) Leaching of soil contaminants to surface water and/or groundwater Surface water and groundwater discharge to Moffats swamp, located 1.5km to the east of the site. 	 TP01-1 to TP02- 1, SS14-1 to SS19-1 and SS21-1 to SS46- 1 	•
 2. Filling and stockpiling on the site Potential use of imported fill of unknown quality and origin. 	TRH, BTEX, PAH, OCPs, Metals, Asbestos	 Importation of potentially contaminated fill. Leaching of soil contaminants to underlying soils, surface water and groundwater. 	 Fill soils Underlying soils Surface water Groundwater Sediments 		 Direct dermal contact with contaminated soil and/or surface water Ingestion of contaminated soil Inhalation of asbestos fibres, or contaminated soil (as dust) Inhalation of hydrocarbon vapours Leaching of soil contaminants to surface water and/or groundwater Surface water and 	• TP06-2, TP66-2 to TP74-2 and SS75-2 to SS77- 2	•
 3. Storage of equipment/waste materials across the site Stored equipment 205L metal and plastic drums (empty), timber, metal, plastic, bricks, tyres, trailers, sheets of corrugated potential ACM, bath tubs 	TRH, BTEX, PAH, Metals, Asbestos, OCPs (CoPCs dependent on material/waste type)	 Top-down leaks/spills, flakes/fibres onto soil. Leaching of soil contaminants to surface 	 Aesthetics Surface soils Surface water Groundwater Sediments 		groundwater discharge to Moffats swamp, located 1.5km to the east of the site.	• TP03-3 to TP04- 3, and SS47-3 to SS55-3	• •

tential & Complete Exposure Pathways

Incomplete exposure pathway for current site visitors, future construction workers and site users, as no contamination identified.

Incomplete exposure pathway for ecological receptors. Surface soil in SS35 slightly exceeded the adopted ecological criteria for zinc. The elevated zinc is considered to be localised to adjacent to Shed 4. Due to the localised nature of the elevated zinc, and that the exceedance was slight, the risk to plants and transitory wildlife is considered to be low. Based on this, no further remediation and/or management is considered to be required.

Incomplete exposure pathway for surface water receptor, Moffats swamp, due to localised nature of contamination and distance to Moffats swamp (1.5km).

Incomplete exposure pathway for soil contaminates to leach to groundwater due to depth of groundwater (>3m bgs and likely clayey subsoils.

Incomplete exposure pathway for current site visitors, future construction workers and site users, provided SP1 is managed in accordance with options provided in Section 10.2.

Incomplete exposure pathway for ecological receptors, as no contamination above EILs/ESLs identified.

Incomplete exposure pathway for surface water receptor, Moffats swamp, due to localised nature of contamination and distance to Moffats swamp (1.5km).

Incomplete exposure pathway for soil contaminates to leach to groundwater due to depth of groundwater (>3m bgs and likely clayey subsoils.

Incomplete exposure pathway for current site visitors, future construction workers and site users, as no contamination identified.

Incomplete exposure pathway for ecological receptors, as no contamination identified.

Incomplete exposure pathway for surface water receptor, Moffats swamp, due to

AEC	СОРС	Mechanism of Contamination	Potentially Affected Media	Human & Ecological Receptors	Potential mechanisms of exposure	Sampling Completed	Pot
and small quantities of paints, fuels, degreasers.		water and groundwater.					•
 4. Septic tanks located on the site Septic tank soak aways and adsorption trenches, potential leaks of effluent 	Microbiological, heavy metals, TRH, BTEX and PAH	 Subsurface leaks from tank Subsurface & surface leaks from pipes and/or trenches 	 Soil Surface water Sediment Groundwater 	 Current site visitors Future construction workers & site users Soil biota/plants and transitory wildlife Surface and ground water depended ecosystems Offsite surface water and groundwater – Moffats swamp, located 1.5km to the east of the site. 	 Direct dermal contact with contaminated soil and/or surface water Ingestion of contaminated soil and/or surface water Leaching of soil contaminants to surface water and/or groundwater Surface water and groundwater discharge to Moffats Swamp, located 1.5km to the east of the site. 	• TP07-4 to TP10-4	•
 5. Former Cropping/Orchards Potential for pesticide herbicide and other farming related contamination 	TRH, BTEX, PAH, OCPs, OPPs, herbicides, metals	 Top-down leaks/spills, flakes/fibres onto soil. Leaching of soil contaminants to surface water and groundwater 	 Soils Groundwater Surface water Sediments 			• TP12-5 to TP13- 5 and \$\$56-5 to \$\$65-5	•

ential & Complete Exposure Pathways

- localised nature of contamination and distance to Moffats swamp (1.5km).
- Incomplete exposure pathway for soil contaminates to leach to groundwater due to depth of groundwater (>3m bgs and likely clayey subsoils.
- Potentially complete exposure pathway for site users and future construction workers on Lot 301 as assessment of the septic infiltration area was carried out due to septic being in use and new pipework system. If septic/infiltration area is proposed to be decommissioned, the septic tanks and effluent disposal areas will require assessment and decommissioning in accordance with relevant guidelines.
- Potentially complete exposure pathway for ecological receptors.
- Incomplete exposure pathway for surface water receptor, Moffats swamp, due to localised nature of potential contamination and distance to Moffats swamp (1.5km).
- Incomplete exposure pathway for soil contaminates to leach to groundwater due to depth of groundwater (>3m bgs and likely clayey subsoils.
- Incomplete exposure pathway for current site visitors, future construction workers and site users, as no contamination identified.
- Incomplete exposure pathway for ecological receptors.
- Incomplete exposure pathway for surface water receptor, Moffats swamp, due to localised nature of contamination and distance to Moffats swamp (1.5km).
- Incomplete exposure pathway for soil contaminates to leach to groundwater due to depth of groundwater (>3m bgs and likely clayey subsoils.

12 Conclusions and Recommendations

Based on the results of the Detailed Contamination Assessment it is considered the site can be made suitable for the proposed re zoning, with the following recommendations:

- If the septic/infiltration area is proposed to be decommissioned on Lot 301, the septic tank and effluent disposal area will require decommissioning in accordance with relevant guidelines and the area assessed, prior to the proposed development.
- Management of SP1 (20m³), located in the south eastern portion of Lot 301 (39 Brocklesby Road), including:
 - Preparation of an Asbestos management plan (AMP), and placement of SP1 below surface soils, Qualtest recommends placement at depths greater than 0.5m below final site surface levels; or
 - Preparation of an Asbestos Removal Plan (ARP) and disposal of SP1 offsite in accordance with the NSW EPA (2014) Waste Classification Guidelines.
- Removal of waste materials for aesthetic purposes and disposal offsite in accordance with the NSW EPA (2014) Waste Classification Guidelines; and/or
- Hazardous materials in buildings (if any) are removed in accordance with relevant laws and guidelines, and clearances provided by appropriately qualified and licensed person/consultant; and,
- An unexpected find procedure is developed and included in the Construction Environmental Management Plan for the subdivision works.

Provided the recommendations made within this report are implemented, it is considered that the site could be rendered suitable, from a contamination point of view, for the proposed residential subdivision.

This report was prepared in general accordance with the relevant sections of the NSW EPA (2020) Guidelines for Consultants Reporting on Contaminated Land and the National Environment Protection (Assessment of Site Contamination) Measure 1999 (April 2013), NEPC 2013, Canberra (referred to as ASC NEPM 2013).

13 Limitations

This report has been prepared by Qualtest for McCloy Project Management Pty Ltd based on the objectives and scope of work list in Sections 1.1 and 1.2. No warranty, expressed or implied, is made as to the information and professional advice included in this report. Anyone using this document does so at their own risk and should satisfy themselves concerning its applicability and, where necessary, should seek expert advice in relation to their particular situation.

The opinions, conclusions and recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. Qualtest has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

In preparing this report Qualtest has relied on information contained in searches of government websites and has not independently verified or checked the data contained on these websites.

In preparing this report, current guidelines for assessment and management of contaminated land were followed. The conclusions reached in this report are dependent on the limitations inherent in all subsurface investigations where horizontal and vertical variation in contaminant concentrations can occur. No subsurface assessment can accurately predict the contaminant concentration at all points.

Site conditions may change after the date of this Report. Qualtest does not accept responsibility arising from, or in connection with, any change to the site conditions.

14 References

NSW EPA (2020) Guidelines for Consultants Reporting on Contaminated Land.

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

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

WA DoH (2009) Guidelines for the assessment and management of asbestos contaminated sites in Western Australia, WA Department of Health and Department of Environment and Conservation

WA DoH (2021) Guidelines for the Assessment, Remediation and Management of Asbestos Contaminated Sites in Western Australia, WA Department of Health and Department of Environment and Conservation

ANZECC (2000) Australian and New Zealand Guidelines on Fresh and Marine Water Quality

ANZG (2018) Australian and New Zealand Guidelines on Fresh and Marine Water Quality

SEPP (Resilience and Hazards) 2021, Chapter 4

Qualtest (2023) Preliminary Contamination Assessment, ref: NEW23P-0009-AA dated 8 February 2023

APPENDIX A:

Figures





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Client:	McCloy Group Pty Ltd	Drawing No:	FIGURE 1
Project:	Detailed Contamination Assessment	Project No:	NEW23P-0009-AB
ocation:	39, 39A and 41 Brocklesby Road, Medowie NSW	Scale:	N.T.S.
ïtle:	Site Location Plan	Date:	20/01/2023







tiles

LEGEND:

Approximate Lot Boundary

Image sourced from NearMaps



Client:	McCloy Group Pty Ltd	Drawing No:	FIGURE 3B
Project:	Detailed Contamination Assessment	Project No:	NEW22P-0009-AB
Location:	39, 39A and 41 Brocklesby Road, Medowie	Scale:	N.T.S.
Title:	Site Features Plan - 41 Brocklesby Road, Medowie	Date:	20/01/2023



Approximate Site/Lot Boundary

Image sourced from NearMaps

Client:	McCloy Group Pty Ltd	Drawing No:	FIGURE 3C
Project:	Detailed Contamination Assessment	Project No:	NEW22P-0009-AB
Location:	39, 39A and 41 Brocklesby Road, Medowie	Scale:	N.T.S.
Title:	Former Site Features Plan	Date:	20/01/2023



ualtest	
LABORATORY (NSW) PTY LTD	

ent:	McCloy Group Pty Ltd	Drawing No:	FIGURE 4A
oject:	Detailed Contamination Assessment	Project No:	NEW22P-0009-AB
cation:	39, 39A and 41 Brocklesby Road, Medowie	Scale:	N.T.S.
e:	Sample Locations - Eastern Portion	Date:	30/03/2023


APPENDIX B:

Tables

					51 L L 10	7004 4 0 0 0 0											0005.4		0007.4	6699 A	0000.4
					Field ID	TP01-1_0.0-0.2	TP02-1_0.0-0.2	SS14-1	SS15-1	SS16-1	SS17-1	SS18-1	SS19-1	SS22-1	SS23-1	SS24-1	SS25-1	SS26-1	SS27-1	SS28-1	SS29-1
					Date	21/03/2023	21/03/2023	22/03/2023	22/03/2023	22/03/2023	22/03/2023	22/03/2023	22/03/2023	22/03/2023	22/03/2023	22/03/2023	22/03/2023	22/03/2023	22/03/2023	22/03/2023	22/03/2023
		-			AEC																Current
Analytes		Units	LOR	HIL/HSL A ¹	EIL/ESL A ²																
	Arsenic	mg/kg	2	100	100	< 2	< 2	3.4	3.7	10	18	2.6	3.4	8.9	24	4.8	4.5	5	2.8	6	3.9
	Cadmium	mg/kg	0.4	20		< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	0.7	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
	Chromium (total)	mg/kg	5			23	16	17	18	13	34	19	20	32	24	11	8.3	13	19	16	26
	Chromium (VI)	mg/kg	1	100		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	- 1
Metals	Chromium (III)	mg/kg	5		640*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	- 1
Wietais	Copper	mg/kg	5	6000	180*	< 5	< 5	7.4	12	17	36	11	24	33	26	17	13	10	36	27	30
	Lead	mg/kg	5	300	1100	6.4	11	8.9	12	19	20	19	22	47	44	22	13	77	25	57	27
	Mercury	mg/kg	5	40		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
	Nickel	mg/kg	5	400	100*	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	7.9	< 5	8	< 5	< 5	< 5	< 5	14
	Zinc	mg/kg	5	7400	440*	9.6	15	9.7	93	100	270	71	110	200	120	110	50	140	90	250	190
nH & CEC	pH (1:5 Aqueous extract)	pH units	0.1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
pridecee	Cation Exchage Capacity	meq/100g	0.05			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	- 1
	Acenaphthene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Acenaphthylene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Anthracene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	- 1
	Benz(a)anthracene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	- 1
	Benzo(a)pyrene	mg/kg	0.5		33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	- 1
	Benzo(a)pyrene TEQ (medium bound)	mg/kg	0.6	3		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	- 1
	Benzo(b&j)fluoranthene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Benzo(g.h.i)perylene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PAHs	Benzo(k)fluoranthene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17415	Chrysene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dibenz(a.h)anthracene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Fluoranthene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Fluorene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Indeno(1.2.3-cd)pyrene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Naphthalene	mg/kg	0.5		170	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Phenanthrene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Pyrene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Total PAH	mg/kg	0.5	300		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Benzene	mg/kg	0.1	0.7	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
BTFX	Toluene	mg/kg	0.1	480	85	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Diex	Ethylbenzene	mg/kg	0.1	NL	70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
L	Xylenes - Total	mg/kg	0.3	110	105	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Naphthalene	mg/kg	0.5	5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	TRH C6-C10	mg/kg	20		180	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<u> </u>
TRH	TRH C6-C10 less BTEX (F1)	mg/kg	20	50		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<u> </u>
	TRH >C10-C16	mg/kg	50		120	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	TRH >C10-C16 less Naphthalene (F2)	mg/kg	50	280		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	TRH >C16-C34	mg/kg	100		1300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	TRH >C34-C40	mg/kg	100		5600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	- 1
Notes																					

EIL based on pH of 7 and CEC of 8mg/kg, and Clay content 40%, and using Ambient Background Concentration obtained from Olszowy et al (1995) using urban soils, new

suburbs with low traffic , 50% percentile.

ND Not detected

NL Not limiting

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Result Result Concentration exceeds adopted HIL/HSL A

Concentration exceeds the adopted EIL/ESL A

 $^{\rm 1}$ ASC NEPM (2013) Health Investigation & Screening Levels, Residential, Clay 0m to <1m $\,$

2 NEPC (2013) Soil Ecological Investigation & Screening Levels, Residential, Fine Texture



					Field ID	\$\$30-1	\$\$31-1	\$\$32-1	\$\$33-1	\$\$34-1	\$\$35-1	\$\$36-1	\$\$37-1	\$\$38-1	\$\$39-1	SS40-1	\$\$41-1	\$\$42-1	\$\$43-1	SS44-1	SS45-1	SS46-1
					Date	22/03/2023	22/03/2023	22/03/2023	22/03/2023	22/03/2023	22/03/2023	22/03/2023	22/03/2023	21/03/2023	21/03/2023	21/03/2023	21/03/2023	21/03/2023	21/03/2023	21/03/2023	21/03/2023	21/03/2023
					AEC	t and Former Bui	ildings	22/00/2020	22,00,2020	22/00/2020	22,00,2020	22/00/2020	22/00/2020	21/00/2020	21/00/2020	21/00/2020	21/00/2020	21/00/2020	21/00/2020	21,00,2020	21/00/2020	21/00/2020
Analytes		Units	LOR	HIL/HSL A ¹	EIL/ESL A ²																	
	Arsenic	mg/kg	2	100	100	2.7	2.8	2.4	2	2.6	2.2	2.6	2.2	2.6	< 2	4.5	2.8	3.5	7.6	< 2	< 2	< 2
	Cadmium	mg/kg	0.4	20		< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	0.5	< 0.4	< 0.4	< 0.4	< 0.4
	Chromium (total)	mg/kg	5			10	18	22	26	30	20	26	23	19	24	21	37	17	18	19	16	12
	Chromium (VI)	mg/kg	1	100		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Motals	Chromium (III)	mg/kg	5		640*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
wietais	Copper	mg/kg	5	6000	180*	61	11	10	6.5	21	14	8.8	17	< 5	< 5	10	12	7.4	< 5	< 5	6.1	< 5
	Lead	mg/kg	5	300	1100	29	18	19	22	40	21	17	14	10	5.9	15	21	12	6.9	5.9	9.9	5.5
	Mercury	mg/kg	5	40		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
	Nickel	mg/kg	5	400	100*	< 5	< 5	< 5	< 5	5.9	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	Zinc	mg/kg	5	7400	440*	240	64	120	84	320	960	160	75	29	7.4	47	43	190	24	16	32	25
24 8 CEC	pH (1:5 Aqueous extract)	pH units	0.1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.3
ph & CEC	Cation Exchage Capacity	meq/100g	0.05			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10
	Acenaphthene	mg/kg	0.5			< 0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.5	-
	Acenaphthylene	mg/kg	0.5			< 0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.5	-
	Anthracene	mg/kg	0.5			< 0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.5	-
	Benz(a)anthracene	mg/kg	0.5			1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.5	-
	Benzo(a)pyrene	mg/kg	0.5		33	1.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.5	-
	Benzo(a)pyrene TEQ (medium bound)	mg/kg	0.6	3		< 5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.6	-
	Benzo(b&j)fluoranthene	mg/kg	0.5			0.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.5	-
	Benzo(g.h.i)perylene	mg/kg	0.5			< 5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.5	-
DAHe	Benzo(k)fluoranthene	mg/kg	0.5			0.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.5	-
T AITS	Chrysene	mg/kg	0.5			1.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.5	-
	Dibenz(a.h)anthracene	mg/kg	0.5			< 0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.5	-
	Fluoranthene	mg/kg	0.5			< 0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.5	-
	Fluorene	mg/kg	0.5			< 0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.5	-
	Indeno(1.2.3-cd)pyrene	mg/kg	0.5			1.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.5	-
	Naphthalene	mg/kg	0.5		170	< 0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.5	-
	Phenanthrene	mg/kg	0.5			< 0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.5	-
	Pyrene	mg/kg	0.5			1.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.5	-
	Total PAH	mg/kg	0.5	300		8.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.5	-
	Benzene	mg/kg	0.1	0.7	50	< 0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.1	-
BTEX	Toluene	mg/kg	0.1	480	85	< 0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.1	-
BIEX	Ethylbenzene	mg/kg	0.1	NL	70	< 0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.1	-
	Xylenes - Total	mg/kg	0.3	110	105	< 0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.3	-
	Naphthalene	mg/kg	0.5	5		< 0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.5	-
	TRH C6-C10	mg/kg	20		180	< 20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 20	-
TRH	TRH C6-C10 less BTEX (F1)	mg/kg	20	50		< 20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 20	-
	TRH >C10-C16	mg/kg	50		120	< 50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 50	-
	TRH >C10-C16 less Naphthalene (F2)	mg/kg	50	280		< 50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 50	-
	TRH >C16-C34	mg/kg	100		1300	180	-	-	-	-	-	-	-	-	-	-	-	-	-	-	180	-
	TRH >C34-C40	mg/kg	100		5600	130	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 100	-
Notes																						

EIL based on pH of 7 and CEC of 8mg/kg, and Clay content 40%, and using Ambient Background Concentration obtained from Olszowy et al (1995) using urban soils, new

suburbs with low traffic , 50% percentile.

Not detected ND

Not limiting NL

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Concentration exceeds adopted HIL/HSL A

Result Result Concentration exceeds the adopted EIL/ESL A

ASC NEPM (2013) Health Investigation & Screening Levels, Residential, Clay 0m to <1m
 NEPC (2013) Soil Ecological Investigation & Screening Levels, Residential, Fine
 Texture



					Field IP	TP06-2 0 0-0 2	7 7866-2 0 0-0 2	TP67-2 0 0-0 2	TP68-2 0.0-0 2	TP60-2 0 0-0 2	TP70-2 0 0-0 2	TP71-2 0 0-0 2	TP72-2 0 0-0 2	TP73-2 0 0-0 2	TP74-2 0 0-0 2	\$\$75.2	\$\$76-2	\$\$77_2	TP03-3 0 0-0 2	TP04-3 0 0-0 2	\$\$47-3	\$\$18-3	\$2,0122	\$\$50-3
					Date	21/03/2023	2 1700-2_0.0-0.2	22/03/2023	22/03/2023	22/03/2023	22/03/2023	22/03/2023	21/03/2023	21/03/2023	21/03/2023	21/03/2023	21/03/2023	21/03/2023	22/03/2023	22/03/2023	22/03/2023	22/03/2023	22/03/2023	21/03/2023
						21/03/2023	22/03/2023	22/03/2023	22/03/2023	22/03/2023	22/03/2023	illing and Stocknil	21/03/2023	21/03/2023	21/03/2023	21/03/2023	21/03/2023	21/03/2023	22/03/2023	22/03/2023	22/03/2023	22/03/2023	22/03/2023 Stora	21/03/2023
					ALC						F	ining and Stockpin	ing										31014	ge of Equipment/v
Analytes		Units	LOR	HIL/HSL A ¹	EIL/ESL A ²																			
	Arsenic	mg/kg	2	100	100	< 2	3.2	4.1	3.7	2.8	< 2	2.7	2.5	17	7.7	< 2	2.2	< 2	4.4	3.9	3.3	2.7	2.8	< 2
	Cadmium	mg/kg	0.4	20		< 0.4	< 0.4	< 0.4	< 0.4	0.6	0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
	Chromium (total)	mg/kg	5			< 5	35	49	42	9.9	6.8	< 5	560*	400*	420*	35	410*	37	50	41	30	23	14	19
	Chromium (VI)	mg/kg	1	100		-	-	-	-	-	-	-	<1	<1	<1	-	<1	-	-	-	-	-	-	-
Motals	Chromium (III)	mg/kg	5		640*	-	-	-	-	-	-	-	560	400	420	-	41	-	-	-	-	-	-	-
Wietais	Copper	mg/kg	5	6000	180*	< 5	< 5	< 5	< 5	71	63	43	17	120	23	8.8	35	13	< 5	5.9	< 5	< 5	7	15
	Lead	mg/kg	5	300	1100	< 5	9.3	8.6	8.6	220	180	110	22	16	24	7.1	9.6	7.6	9.7	15	8.5	11	35	7.8
	Mercury	mg/kg	5	40		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
	Nickel	mg/kg	5	400	100*	< 5	< 5	7.3	6.6	6	< 5	< 5	13	74	14	< 5	7.3	< 5	6.6	6	< 5	< 5	< 5	< 5
	Zinc	mg/kg	5	7400	440*	< 5	5.7	10	12	440	330	230	60	45	73	13	56	22	25	98	110	27	55	20
	pH (1:5 Aqueous extract)	pH units	0.1			-	-	-	-	-	-	-	-	-	-	7.7	-	-	-	-	-	-	-	-
PH & CEC	Cation Exchage Capacity	meq/100g	0.05			-	-	-	-	-	-	-	-	-	-	8	-	-	-	-	-	-	-	-
	Acenaphthene	mg/kg	0.5			< 0.5	-	-	< 0.5	-	-	< 0.5	-	< 0.5	-	< 0.5	-	-	-	-	-	-	-	< 0.5
	Acenaphthylene	mg/kg	0.5			< 0.5	-	-	< 0.5	-	-	< 0.5	-	< 0.5	-	< 0.5	-	-	-	-	-	-	-	< 0.5
	Anthracene	mg/kg	0.5			< 0.5	-	-	< 0.5	-	-	< 0.5	-	< 0.5	-	< 0.5	-	-	-	-	-	-	-	< 0.5
	Benz(a)anthracene	mg/kg	0.5			< 0.5	-	-	< 0.5	-	-	< 0.5	-	< 0.5	-	< 0.5	-	-	-	-	-	-	-	< 0.5
	Benzo(a)pyrene	mg/kg	0.5		33	< 0.5	-	-	< 0.5	-	-	< 0.5	-	< 0.5	-	< 0.5	-	-	-	-	-	-	-	< 0.5
	Benzo(a)pyrene TEQ (medium bound)	mg/kg	0.6	3		0.6	-	-	0.6	-	-	0.6	-	0.6	-	0.6	-	-	-	-	-	-	-	0.6
	Benzo(b&j)fluoranthene	mg/kg	0.5			< 0.5	-	-	< 0.5	-	-	< 0.5	-	< 0.5	-	< 0.5	-	-	-	-	-	-	-	< 0.5
	Benzo(g.h.i)perylene	mg/kg	0.5			< 0.5	-	-	< 0.5	-	-	< 0.5	-	< 0.5	-	< 0.5	-	-	-	-	-	-	-	< 0.5
DAHC	Benzo(k)fluoranthene	mg/kg	0.5			< 0.5	-	-	< 0.5	-	-	< 0.5	-	< 0.5	-	< 0.5	-	-	-	-	-	-	-	< 0.5
FAIIS	Chrysene	mg/kg	0.5			< 0.5	-	-	< 0.5	-	-	< 0.5	-	< 0.5	-	< 0.5	-	-	-	-	-	-	-	< 0.5
	Dibenz(a.h)anthracene	mg/kg	0.5			< 0.5	-	-	< 0.5	-	-	< 0.5	-	< 0.5	-	< 0.5	-	-	-	-	-	-	-	< 0.5
	Fluoranthene	mg/kg	0.5			< 0.5	-	-	< 0.5	-	-	0.7	-	< 0.5	-	< 0.5	-	-	-	-	-	-	-	< 0.5
	Fluorene	mg/kg	0.5			< 0.5	-	-	< 0.5	-	-	< 0.5	-	< 0.5	-	< 0.5	-	-	-	-	-	-	-	< 0.5
	Indeno(1.2.3-cd)pyrene	mg/kg	0.5			< 0.5	-	-	< 0.5	-	-	< 0.5	-	< 0.5	-	< 0.5	-	-	-	-	-	-	-	< 0.5
	Naphthalene	mg/kg	0.5		170	< 0.5	-	-	< 0.5	-	-	< 0.5	-	< 0.5	-	< 0.5	-	-	-	-	-	-	-	< 0.5
	Phenanthrene	mg/kg	0.5			< 0.5	-	-	< 0.5	-	-	< 0.5	-	< 0.5	-	< 0.5	-	-	-	-	-	-	-	< 0.5
	Pyrene	mg/kg	0.5			< 0.5	-	-	< 0.5	-	-	0.7	-	< 0.5	-	< 0.5	-	-	-	-	-	-	-	< 0.5
	Total PAH	mg/kg	0.5	300		< 0.5	-	-	< 0.5	-	-	1.4	-	< 0.5	-	< 0.5	-	-	-	-	-	-	-	< 0.5
	Benzene	mg/kg	0.1	0.7	50	< 0.1	-	-	< 0.1	-	-	< 0.1	-	< 0.1	-	< 0.1	-	-	-	-	-	-	-	< 0.1
BTEY	Toluene	mg/kg	0.1	480	85	< 0.1	-	-	< 0.1	-	-	< 0.1	-	< 0.1	-	< 0.1	-	-	-	-	-	-	-	< 0.1
BILA	Ethylbenzene	mg/kg	0.1	NL	70	< 0.1	-	-	< 0.1	-	-	< 0.1	-	< 0.1	-	< 0.1	-	-	-	-	-	-	-	< 0.1
	Xylenes - Total	mg/kg	0.3	110	105	< 0.3	-	-	< 0.3	-	-	< 0.3	-	< 0.3	-	< 0.3	-	-	-	-	-	-	-	< 0.3
	Naphthalene	mg/kg	0.5	5		< 0.5	-	-	< 0.5	-	-	< 0.5	-	< 0.5	-	< 0.5	-	-	-	-	-	-	-	< 0.5
	TRH C6-C10	mg/kg	20		180	< 20	-	-	< 20	-	-	< 20	-	< 20	-	< 20	-	-	-	-	-	-	-	< 20
трн	TRH C6-C10 less BTEX (F1)	mg/kg	20	50		< 20	-	-	< 20	-	-	< 20	-	< 20	-	< 20	-	-	-	-	-	-	-	< 20
(NII	TRH >C10-C16	mg/kg	50		120	< 50	-	-	< 50	-	-	< 50	-	< 50	-	< 50	-	-	-	-	-	-	-	< 50
	TRH >C10-C16 less Naphthalene (F2)	mg/kg	50	280		< 50	-	-	< 50	-	-	< 50	-	< 50	-	< 50	-	-	-	-	-	-	-	< 50
	TRH >C16-C34	mg/kg	100		1300	< 100	-	-	< 100	-	-	< 100	-	< 100	-	< 100	-	-	-	-	-	-	-	< 100
	TRH >C34-C40	mg/kg	100		5600	< 100	-	-	< 100	-	-	< 100	-	< 100	-	< 100	-	-	-	-	-	-	-	< 100
Notes																								

EIL based on pH of 7 and CEC of 8mg/kg, and Clay content 40%, and using Ambient Background Concentration obtained from Olszowy et al (1995) using urban soils, new

suburbs with low traffic , 50% percentile.

Not detected ND

Not limiting NL

*

Result Result Concentration exceeds adopted HIL/HSL A

Concentration exceeds the adopted EIL/ESL A

ASC NEPM (2013) Health Investigation & Screening Levels, Residential, Clay 0m to <1m
 NEPC (2013) Soil Ecological Investigation & Screening Levels, Residential, Fine
 Texture



					Field ID	\$\$51-3	\$\$52-3	\$\$53-3	\$\$54-3	\$\$55-3	TP12-5 0 0-0 2	TP13-5 0 0-0 2	\$\$56-5	\$\$57-5	\$\$58-5	\$\$59-5	\$\$60-5	\$\$61-5	\$\$62-5	\$\$63-5	\$\$64-5	\$\$65-5
					Date	22/03/2023	22/03/2023	22/03/2023	22/03/2023	22/03/2023	21/03/2023	21/03/2023	22/03/2023	21/03/2023	21/03/2023	22/03/2023	22/03/2023	22/03/2023	22/03/2023	22/03/2023	21/03/2023	21/03/2023
					AEC	/aste	,,	,,	,,	,,	,,	,,	,,	,, .	,,	Former	Cropping	,,	,,	,,	,,	,,
Analytes		Units	LOR	HIL/HSL A ¹	EIL/ESL A ²																	
	Arsenic	mg/kg	2	100	100	2.6	4.5	3	2.3	4	3.7	2.9	2.8	2.8	< 2	4.3	2.5	2.2	< 2	< 2	3.1	4
	Cadmium	mg/kg	0.4	20		< 0.4	< 0.4	< 0.4	< 0.4	0.5	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	0.5	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
	Chromium (total)	mg/kg	5			19	31	23	18	410*	24	23	15	16	17	23	22	16	18	13	16	23
	Chromium (VI)	mg/kg	1	100		-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-
Metals	Chromium (III)	mg/kg	5		640*	-	-	-	-	410	-	-	-	-	-	-	-	-	-	-	-	-
metals	Copper	mg/kg	5	6000	180*	9.6	13	19	5.5	38	16	27	78	5.3	11	13	7.5	20	16	14	7.4	8.6
	Lead	mg/kg	5	300	1100	10	20	13	9	23	15	13	5.9	5.1	8.6	16	11	16	8	12	11	15
	Mercury	mg/kg	5	40		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
	Nickel	mg/kg	5	400	100*	< 5	< 5	< 5	< 5	14	< 5	< 5	< 5	< 5	< 5	5.1	< 5	< 5	< 5	< 5	< 5	< 5
	Zinc	mg/kg	5	7400	440*	36	18	19	32	160	10	21	240	14	24	29	29	12	14	14	28	15
pH & CEC	pH (1:5 Aqueous extract)	pH units	0.1			-	-	-	-	7.6	-	-	-	-	-	-	-	-	-	-	-	-
p	Cation Exchage Capacity	meq/100g	0.05			-	-	-	-	45	-	-	-	-	-	-	-	-	-	-	-	-
	Acenaphthene	mg/kg	0.5			-	-	-	-	< 0.5	-	-	-	< 0.5	-	-	-	-	-	-	-	-
	Acenaphthylene	mg/kg	0.5			-	-	-	-	< 0.5	-	-	-	< 0.5	-	-	-	-	-	-	-	-
	Anthracene	mg/kg	0.5			-	-	-	-	< 0.5	-	-	-	< 0.5	-	-	-	-	-	-	-	-
	Benz(a)anthracene	mg/kg	0.5			-	-	-	-	< 0.5	-	-	-	< 0.5	-	-	-	-	-	-	-	-
	Benzo(a)pyrene	mg/kg	0.5		33	-	-	-	-	< 0.5	-	-	-	< 0.5	-	-	-	-	-	-	-	-
	Benzo(a)pyrene TEQ (medium bound)	mg/kg	0.6	3		-	-	-	-	0.6	-	-	-	0.6	-	-	-	-	-	-	-	-
	Benzo(b&j)fluoranthene	mg/kg	0.5			-	-	-	-	< 0.5	-	-	-	< 0.5	-	-	-	-	-	-	-	-
	Benzo(g.h.i)perylene	mg/kg	0.5			-	-	-	-	< 0.5	-	-	-	< 0.5	-	-	-	-	-	-	-	-
PAHs	Benzo(k)fluoranthene	mg/kg	0.5			-	-	-	-	< 0.5	-	-	-	< 0.5	-	-	-	-	-	-	-	-
	Chrysene	mg/kg	0.5			-	-	-	-	< 0.5	-	-	-	< 0.5	-	-	-	-	-	-	-	-
	Dibenz(a.h)anthracene	mg/kg	0.5			-	-	-	-	< 0.5	-	-	-	< 0.5	-	-	-	-	-	-	-	-
	Fluoranthene	mg/kg	0.5			-	-	-	-	< 0.5	-	-	-	< 0.5	-	-	-	-	-	-	-	-
	Fluorene	mg/kg	0.5			-	-	-	-	< 0.5	-	-	-	< 0.5	-	-	-	-	-	-	-	-
	Indeno(1.2.3-cd)pyrene	mg/kg	0.5		170	-	-	-	-	< 0.5	-	-	-	< 0.5	-	-	-	-	-	-	-	-
	Naphthalene	mg/kg	0.5		170	-	-	-	-	< 0.5	-	-	-	< 0.5	-	-	-	-	-	-	-	-
	Phenanthrene	mg/kg	0.5			-	-	-	-	< 0.5	-	-	-	< 0.5	-	-	-	-	-	-	-	-
		mg/kg	0.5	200		-	-	-	-	< 0.5	-	-	-	< 0.5	-	-	-	-	-	-	-	-
	Total PAH	mg/kg	0.5	300	50	-	-	-	-	< 0.5	-	-	-	< 0.5	-	-	-	-	-	-	-	-
	Benzene	mg/kg	0.1	0.7	50	-	-	-	-	< 0.1	-	-	-	< 0.1	-	-	-	-	-	-	-	-
BTEX	Toluene	mg/kg	0.1	480	85	-	-	-	-	< 0.1	-	-	-	< 0.1	-	-	-	-	-	-	-	-
	Etnyibenzene Vulanaa Tatal	mg/kg	0.1	NL 110	/0	-	-	-	-	< 0.1	-	-	-	< 0.1	-	-	-	-	-	-	-	-
	Ayleries - Total	mg/kg	0.3	110	105	-	-	-	-	< 0.3	-	-	-	< 0.3	-	-	-	-	-	-	-	-
		mg/kg	0.5	5	100	-	-	-	-	< 0.5	-	-	-	< 0.5	-	-	-	-	-	-	-	-
		mg/kg	20	50	180	-	-	-	-	< 20	-	-	-	< 20	-	-	-	-	-	-	-	-
TRH	TRH LD-L10 IESS BTEX (F1)	mg/kg	20	50	120	-	-	-	-	< 20	-	-	-	< 20	-	-	-	-	-	-	-	-
	TRH >C10-C16	mg/kg	50	200	120	-	-	-	-	< 50	-	-	-	< 50	-	-	-	-	-	-	-	-
	TRH >C10-C16 less Naphthalene (F2)	mg/kg	50	280	1200	-	-	-	-	< 50	-	-	-	< 50	-	-	-	-	-	-	-	-
	TRH >C16-C34	mg/kg	100		1300	-	-	-	-	< 100	-	-	-	< 100	-	-	-	-	-	-	-	-
	IKH >L34-L4U	mg/kg	100		5600	-	-	-	-	< 100	-	-	-	< 100	-	-	-	-	-	-	-	-

Notes *

EIL based on pH of 7 and CEC of 8mg/kg, and Clay content 40%, and using Ambient Background Concentration obtained from Olszowy et al (1995) using urban soils, new

suburbs with low traffic , 50% percentile.

ND Not detected

Not limiting NL

Concentration exceeds adopted HIL/HSL A Concentration exceeds the adopted EIL/ESL A

Result Result

ASC NEPM (2013) Health Investigation & Screening Levels, Residential, Clay 0m to <1m
 NEPC (2013) Soil Ecological Investigation & Screening Levels, Residential, Fine
 Texture





Image Image <th< th=""><th></th><th></th><th></th><th></th><th></th><th>Field ID</th><th>SS23-1</th><th>SS24-1</th><th>SS29-1</th><th>SS36-1</th><th>SS44-1</th><th>TP12-5_0.0-0.2</th><th>SS56-5</th><th>SS57-5</th><th>SS58-5</th><th>SS59-5</th><th>SS60-5</th><th>SS61-5</th><th>SS62-5</th><th>SS63-5</th><th>SS64-5</th><th>SS65-5</th></th<>						Field ID	SS23-1	SS24-1	SS29-1	SS36-1	SS44-1	TP12-5_0.0-0.2	SS56-5	SS57-5	SS58-5	SS59-5	SS60-5	SS61-5	SS62-5	SS63-5	SS64-5	SS65-5					
Image: marting Image:						Date	22/03/2023	22/03/2023	22/03/2023	22/03/2023	21/03/2023	21/03/2023	22/03/2023	21/03/2023	21/03/2023	22/03/2023	22/03/2023	22/03/2023	22/03/2023	22/03/2023	21/03/2023	21/03/2023					
Image: bit is and bit and bit is and bit is and bit is and bit is and bit i						AEC		AEC1 - Cu	rrent and Forme	r Buildings						AEC 5 - Forr	ner Cropping/Or	chards									
	Analytes		Units	LOR	HIL A ¹	EIL A ²																					
		4.4'-DDD	mg/kg	0.05			< 0.05	< 0.5	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	< 0.05	< 0.05					
		4.4'-DDE	mg/kg	0.05			< 0.05	< 0.5	< 0.05	0.26	< 0.05	-	< 0.05	< 0.05	0.05	0.24	< 0.05	< 0.05	< 0.05	< 0.5	< 0.05	< 0.05					
		4.4'-DDT	mg/kg	0.05		180	< 0.05	< 0.5	< 0.05	0.19	< 0.05	-	< 0.05	< 0.05	< 0.05	0.06	< 0.05	< 0.05	< 0.05	< 0.5	< 0.05	< 0.05					
		a-HCH	mg/kg	0.05			< 0.05	< 0.5	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	< 0.05	< 0.05					
		Aldrin	mg/kg	0.05			< 0.05	< 0.5	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	< 0.05	< 0.05					
		Aldrin and Dieldrin (Total)*	mg/kg	0.05	6		0.07	< 0.5	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	0.08	< 0.05	< 0.05	< 0.05	< 0.5	< 0.05	< 0.05					
		b-HCH	mg/kg	0.05			< 0.05	< 0.5	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	< 0.05	< 0.05					
		Chlordanes - Total	mg/kg	0.1	50		< 0.1	< 1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	0.3	< 0.1	< 0.1	< 0.1	<1	< 0.1	< 0.1					
		DDT + DDE + DDD (Total)	mg/kg	0.05	240		< 0.05	< 0.5	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	< 0.05	< 0.05					
		Dieldrin	mg/kg	0.05			0.07	< 0.5	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	0.08	< 0.05	< 0.05	< 0.05	< 0.5	< 0.05	< 0.05					
	OCPs	Endosulfan I	mg/kg	0.05	070		< 0.05	< 0.5	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	< 0.05	< 0.05					
		Endosulfan II	mg/kg	0.05	270		< 0.05	< 0.5	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	< 0.05	< 0.05					
		Endosulfan sulphate	mg/kg	0.05			< 0.05	< 0.5	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	< 0.05	< 0.05					
		Endrin	mg/kg	0.05	10		< 0.05	< 0.5	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	< 0.05	< 0.05					
		Endrin aldehyde	mg/kg	0.05			< 0.05	< 0.5	0.07	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	< 0.05	< 0.05					
		Endrin ketone	mg/kg	0.05			< 0.05	< 0.5	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	< 0.05	< 0.05					
		g-HCH (Lindane)	mg/kg	0.05			< 0.05	< 0.5	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	< 0.05	< 0.05					
		Heptachlor	mg/kg	0.05	6		< 0.05	< 0.5	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	< 0.05	< 0.05					
		Heptachior epoxide	mg/kg	0.05	10		< 0.05	< 0.5	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	< 0.05	< 0.05					
Implement High Col Col Col Col C		mexactiorODEnZENE (HCB)	mg/kg	0.05	300		< 0.05	< 0.5	< 0.05	< 0.05	< 0.05		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	< 0.05	< 0.05					
Implementify mile 0		Toxanhene	mg/kg	0.05	20		< 0.05	< 10	< 0.05	< 0.05	< 0.05		<0.5	< 0.05	< 0.05	< 0.5	< 0.05	< 0.05	< 0.05	< 10	< 0.05	< 0.03					
		Azinphos-methyl	mg/kg	0.2	20		< 0.2	< 0.5	< 0.2	< 0.2	< 0.2	-	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.5	< 0.2	< 0.2					
Diplemention mpine		Bolstar	mg/kg	0.2			< 0.2	< 0.5	< 0.2	< 0.2	< 0.2		< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.5	< 0.2	< 0.2					
Image: Provision of the set of t		Chlorfenvinphos	mg/kg	0.2			< 0.2	< 0.5	< 0.2	< 0.2	< 0.2	-	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.5	< 0.2	< 0.2					
Implementing number n		Chlorpyrifos	mg/kg	0.2			< 0.2	< 0.5	< 0.2	< 0.2	< 0.2	-	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.5	< 0.2	< 0.2					
Image: mage: mage: <t< td=""><td></td><td>Chlorpyrifos-methyl</td><td>mg/kg</td><td>0.2</td><td>160</td><td></td><td>< 0.2</td><td>< 0.5</td><td>< 0.2</td><td>< 0.2</td><td>< 0.2</td><td>-</td><td>< 0.2</td><td>< 0.2</td><td>< 0.2</td><td>< 0.2</td><td>< 0.2</td><td>< 0.2</td><td>< 0.2</td><td>< 0.5</td><td>< 0.2</td><td>< 0.2</td></t<>		Chlorpyrifos-methyl	mg/kg	0.2	160		< 0.2	< 0.5	< 0.2	< 0.2	< 0.2	-	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.5	< 0.2	< 0.2					
Particle		Cournaphos	mg/kg	2			< 2	< 5	< 2	< 2	< 2	-	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 5	< 2	< 2					
Image mpmin 0.2 - - - -		Demeton-O	mg/kg	0.2			< 0.2	< 0.5	< 0.2	< 0.2	< 0.2	-	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.5	< 0.2	< 0.2					
Deam mph 0.2 0.20 0		Demeton-S	mg/kg	0.2			< 0.2	< 0.5	< 0.2	< 0.2	< 0.2	-	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.5	< 0.2	< 0.2					
philos mail 1 mail		Diazinon	mg/kg	0.2			< 0.2	< 0.5	< 0.2	< 0.2	< 0.2	-	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.5	< 0.2	< 0.2					
Image Image <th< td=""><td></td><td>Dichlorvos</td><td>mg/kg</td><td>0.2</td><td></td><td></td><td>< 0.2</td><td>< 0.5</td><td>< 0.2</td><td>< 0.2</td><td>< 0.2</td><td>-</td><td>< 0.2</td><td>< 0.2</td><td>< 0.2</td><td>< 0.2</td><td>< 0.2</td><td>< 0.2</td><td>< 0.2</td><td>< 0.5</td><td>< 0.2</td><td>< 0.2</td></th<>		Dichlorvos	mg/kg	0.2			< 0.2	< 0.5	< 0.2	< 0.2	< 0.2	-	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.5	< 0.2	< 0.2					
PM PM<		Direufeten	mg/kg	0.2			< 0.2	< 0.5	< 0.2	< 0.2	< 0.2	-	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.5	< 0.2	< 0.2					
imm mg/k 0.2 e 0.2 0.2 0.2 <		EDN	mg/kg	0.2			< 0.2	< 0.5	< 0.2	< 0.2	< 0.2		< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.5	< 0.2	< 0.2					
Image integra		Ethion	mg/kg	0.2			< 0.2	< 0.5	< 0.2	< 0.2	< 0.2	-	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.5	< 0.2	< 0.2					
Phy Implify or maly or		Ethoprop	mg/kg	0.2			< 0.2	< 0.5	< 0.2	< 0.2	< 0.2	-	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.5	< 0.2	< 0.2					
emination might 0.2 edds		Ethyl parathion	mg/kg	0.2			< 0.2	< 0.5	< 0.2	< 0.2	< 0.2	-	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.5	< 0.2	< 0.2					
method mg/s 0.2 web 0.2	000	Fenitrothion	mg/kg	0.2			< 0.2	< 0.5	< 0.2	< 0.2	< 0.2	-	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.5	< 0.2	< 0.2					
Implice mg/m 0.2 0.0 0.02 <t< td=""><td>UPP</td><td>Fensulfothion</td><td>mg/kg</td><td>0.2</td><td></td><td></td><td>< 0.2</td><td>< 0.5</td><td>< 0.2</td><td>< 0.2</td><td>< 0.2</td><td>-</td><td>< 0.2</td><td>< 0.2</td><td>< 0.2</td><td>< 0.2</td><td>< 0.2</td><td>< 0.2</td><td>< 0.2</td><td>< 0.5</td><td>< 0.2</td><td>< 0.2</td></t<>	UPP	Fensulfothion	mg/kg	0.2			< 0.2	< 0.5	< 0.2	< 0.2	< 0.2	-	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.5	< 0.2	< 0.2					
Matchion mg/k 0.2 0.0 0.02 <		Fenthion	mg/kg	0.2			< 0.2	< 0.5	< 0.2	< 0.2	< 0.2	-	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.5	< 0.2	< 0.2					
Merplos mg/g 0.2 < <th><<th><<th><<th><<th><<t< td=""><td></td><td>Malathion</td><td>mg/kg</td><td>0.2</td><td></td><td></td><td>< 0.2</td><td>< 0.5</td><td>< 0.2</td><td>< 0.2</td><td>< 0.2</td><td>-</td><td>< 0.2</td><td>< 0.2</td><td>< 0.2</td><td>< 0.2</td><td>< 0.2</td><td>< 0.2</td><td>< 0.2</td><td>< 0.5</td><td>< 0.2</td><td>< 0.2</td></t<></th></th></th></th></th>	< <th><<th><<th><<th><<t< td=""><td></td><td>Malathion</td><td>mg/kg</td><td>0.2</td><td></td><td></td><td>< 0.2</td><td>< 0.5</td><td>< 0.2</td><td>< 0.2</td><td>< 0.2</td><td>-</td><td>< 0.2</td><td>< 0.2</td><td>< 0.2</td><td>< 0.2</td><td>< 0.2</td><td>< 0.2</td><td>< 0.2</td><td>< 0.5</td><td>< 0.2</td><td>< 0.2</td></t<></th></th></th></th>	< <th><<th><<th><<t< td=""><td></td><td>Malathion</td><td>mg/kg</td><td>0.2</td><td></td><td></td><td>< 0.2</td><td>< 0.5</td><td>< 0.2</td><td>< 0.2</td><td>< 0.2</td><td>-</td><td>< 0.2</td><td>< 0.2</td><td>< 0.2</td><td>< 0.2</td><td>< 0.2</td><td>< 0.2</td><td>< 0.2</td><td>< 0.5</td><td>< 0.2</td><td>< 0.2</td></t<></th></th></th>	< <th><<th><<t< td=""><td></td><td>Malathion</td><td>mg/kg</td><td>0.2</td><td></td><td></td><td>< 0.2</td><td>< 0.5</td><td>< 0.2</td><td>< 0.2</td><td>< 0.2</td><td>-</td><td>< 0.2</td><td>< 0.2</td><td>< 0.2</td><td>< 0.2</td><td>< 0.2</td><td>< 0.2</td><td>< 0.2</td><td>< 0.5</td><td>< 0.2</td><td>< 0.2</td></t<></th></th>	< <th><<t< td=""><td></td><td>Malathion</td><td>mg/kg</td><td>0.2</td><td></td><td></td><td>< 0.2</td><td>< 0.5</td><td>< 0.2</td><td>< 0.2</td><td>< 0.2</td><td>-</td><td>< 0.2</td><td>< 0.2</td><td>< 0.2</td><td>< 0.2</td><td>< 0.2</td><td>< 0.2</td><td>< 0.2</td><td>< 0.5</td><td>< 0.2</td><td>< 0.2</td></t<></th>	< <t< td=""><td></td><td>Malathion</td><td>mg/kg</td><td>0.2</td><td></td><td></td><td>< 0.2</td><td>< 0.5</td><td>< 0.2</td><td>< 0.2</td><td>< 0.2</td><td>-</td><td>< 0.2</td><td>< 0.2</td><td>< 0.2</td><td>< 0.2</td><td>< 0.2</td><td>< 0.2</td><td>< 0.2</td><td>< 0.5</td><td>< 0.2</td><td>< 0.2</td></t<>		Malathion	mg/kg	0.2			< 0.2	< 0.5	< 0.2	< 0.2	< 0.2	-	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.5	< 0.2	< 0.2
Methy paration mg/ng 0.2 -		Merphos	mg/kg	0.2			< 0.2	< 0.5	< 0.2	< 0.2	< 0.2		< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.5	< 0.2	< 0.2					
mempros migrage use coust <		Methyl parathion	mg/kg	0.2			< 0.2	< 0.5	< 0.2	< 0.2	< 0.2	-	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.5	< 0.2	< 0.2					
Minicipant minicip		Managratanhag	mg/kg	0.2			< 0.2	< 0.5	< 0.2	< 0.2	< 0.2	-	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.5	< 0.2	< 0.2					
monate mm mm <th< td=""><td></td><td>Naled</td><td>mg/kg</td><td>0.2</td><td></td><td></td><td>< 0.2</td><td>< 0.5</td><td>< 0.2</td><td>< 0.2</td><td>< 0.2</td><td></td><td>< 0.2</td><td>< 0.2</td><td>< 0.2</td><td>< 0.2</td><td>< 0.2</td><td>< 0.2</td><td>< 0.2</td><td>< 0.5</td><td>< 0.2</td><td>< 0.2</td></th<>		Naled	mg/kg	0.2			< 0.2	< 0.5	< 0.2	< 0.2	< 0.2		< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.5	< 0.2	< 0.2					
Phorate marging 0.2 0.0 <th< td=""><td></td><td>Omethoate</td><td>mg/kg</td><td>2</td><td></td><td></td><td>< 2</td><td>< 5</td><td>< 2</td><td>< 2</td><td>< 2</td><td>-</td><td>< 2</td><td>< 2</td><td>< 2</td><td>< 2</td><td>< 2</td><td>< 2</td><td>< 2</td><td>< 5</td><td>< 2</td><td>< 2</td></th<>		Omethoate	mg/kg	2			< 2	< 5	< 2	< 2	< 2	-	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 5	< 2	< 2					
Primphon-methy mg/kg 0.2 0.0		Phorate	mg/kg	0.2			< 0.2	< 0.5	< 0.2	< 0.2	< 0.2	-	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.5	< 0.2	< 0.2					
Prigraghos mg/kg 0.2 0.2 0.4 0.4 0.60 0.02		Pirimiphos-methyl	mg/kg	0.2			< 0.2	< 0.5	< 0.2	< 0.2	< 0.2	-	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.5	< 0.2	< 0.2					
hend mg/kg 0.2 0.2 0.0		Pyrazophos	mg/kg	0.2			0.4	< 0.5	< 0.2	< 0.2	< 0.2	-	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.5	< 0.2	< 0.2					
Inclués negles 0.2 0.2 0.4 0.4 0.2 0.2 0.4 0.4 0.2 0.2 0.4 0.4 0.2 0.2 0.4 0.4 0.2 0.2 0.4 0.4 0.2 0.2 0.4 0.0 0.2		Ronnel	mg/kg	0.2			< 0.2	< 0.5	< 0.2	< 0.2	< 0.2	-	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.5	< 0.2	< 0.2					
Intractionymps mp/g 0.2 - < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < <		Terbufos	mg/kg	0.2			< 0.2	< 0.5	< 0.2	< 0.2	< 0.2	-	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.5	< 0.2	< 0.2					
Totution mg/ng 0.2 - < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < <		Tetrachlorvinphos	mg/kg	0.2			< 0.2	< 0.5	< 0.2	< 0.2	< 0.2		< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.5	< 0.2	< 0.2					
Incordonate Impage Que Cou		Tokuthion	mg/kg	0.2			< 0.2	< 0.5	< 0.2	< 0.2	< 0.2		< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.5	< 0.2	< 0.2					
Ax-1 mg/kg 0.3 000 - - - CUS CUS CUS CUS <th< td=""><td><u> </u></td><td>iricnioronate</td><td>mg/kg</td><td>0.2</td><td>600</td><td></td><td>< 0.2</td><td>< 0.5</td><td>< 0.2</td><td>< 0.2</td><td>< 0.2</td><td>-</td><td>< 0.2</td><td>< 0.2</td><td>< 0.2</td><td>< 0.2</td><td>< 0.2</td><td>< 0.2</td><td>< 0.2</td><td>< 0.5</td><td>< 0.2</td><td>< 0.2</td></th<>	<u> </u>	iricnioronate	mg/kg	0.2	600		< 0.2	< 0.5	< 0.2	< 0.2	< 0.2	-	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.5	< 0.2	< 0.2					
Activity mg/sg 0.3 <		2.4.3-1 2.4.5 TD	mg/kg	0.5	600		-		-		-	< 0.5		< 0.5	-	< 0.5	-	-		-	-	-					
Artific (lognifi) mg/hg 0.5 Mg/hg Mg/hg Mg/hg<		2.4.D	mg/kg	0.5	900		-				-	< 0.5		< 0.5		< 0.5	-										
Actif (loyni) mg/kg 0.5 mg/kg		2.4-DB	mg/kg	0.5	900				<u> </u>	-		< 0.5		< 0.5		< 0.5		-			-	-					
Branche mg/Rg 0.5 mg/Rg		Actril (loxynil)	mg/kg	0.5			-		-	-	-	< 0.5		< 0.5	-	< 0.5	-	-	-	-	-	-					
Herrores mg/kg 0.5 0.6 0.6 0.7 0.6		Dicamba	mg/kg	0.5						-		< 0.5	- 1	< 0.5		< 0.5					-	-					
Dintro-ortesid mg/kg 0.5	nerbicides	Dichlorprop	mg/kg	0.5			-		-	-	-	< 0.5	-	< 0.5	-	< 0.5	-	-	-	-	-	-					
Dinoseb mg/kg 0.5 MCPA MCPA mg/kg 0.5 MCPA		Dinitro-o-cresol	mg/kg	0.5			-	-	-		-	< 0.5	-	< 0.5	-	< 0.5	-	-	-	-	-	-					
MCPA mg/kg 0.5 edd - - - - CO.5 - CO.5 - - - - - - - - CO.5 - CO.5 - - - - - - - - CO.5 - CO.5 - - - - - - - - - CO.5 - CO.5 - - - - - - - - - - - - - - - CO.5 - CO.5 -		Dinoseb	mg/kg	0.5			-		-			< 0.5	-	< 0.5	-	< 0.5			-		-	-					
MCP8 mg/kg 0.5 600 - - - < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < <t< td=""><td></td><td>MCPA</td><td>mg/kg</td><td>0.5</td><td></td><td></td><td>-</td><td></td><td>-</td><td>-</td><td>-</td><td>< 0.5</td><td></td><td>< 0.5</td><td>-</td><td>< 0.5</td><td></td><td>-</td><td></td><td>-</td><td>-</td><td>-</td></t<>		MCPA	mg/kg	0.5			-		-	-	-	< 0.5		< 0.5	-	< 0.5		-		-	-	-					
Mecoprop mg/kg 0.5 <0.5 - <0.5 - <0.5		MCPB	mg/kg	0.5	600		-		-	-	-	< 0.5	-	< 0.5	-	< 0.5	-	-	-		-	-					
	L	Mecoprop	mg/kg	0.5			-		-		-	< 0.5	-	< 0.5	-	< 0.5	-	· · ·	-	-	<u> </u>	<u> </u>					

Notes Result Concentration exceeds adopted HIL/HSLA Result Concentration exceeds the adopted EIL/ESLA CONCENTRATION FOR CONCENTRATION (Section 2014) CONCENTRATION (Section 2014) 2 NEPC (2013) Soil Ecological Investigation & Screening Levels, residential

								1	1										
	Sample ID	TP01-1_0.0-0.2	TP02-1_0.0-0.2	SS14-1	SS15-1	SS16-1	SS17-1	SS18-1	SS19-1	SS21-1	SS22-1	SS23-1	SS24-1	SS25-1	SS26-1	SS27-1	SS28-1	SS29-1	SS30-1
	Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
	Sample Date	21/03/2023	21/03/2023	22/03/2023	22/03/2023	22/03/2023	22/03/2023	22/03/2023	22/03/2023	22/03/2023	22/03/2023	22/03/2023	22/03/2023	22/03/2023	22/03/2023	22/03/2023	22/03/2023	22/03/2023	22/03/2023
	AEC																	AEC1	
	HIL/HSL A																		
ACM weight (g)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ACM weight (kg)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Soil density (kg/L)		1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
Soil Volume (L)		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Asbestos Content (%)		15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
%w/w ACM in Soil	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
%w/w FA/AF in Soil	0.001	<0.001%	<0.001%	-	-	<0.001%	<0.001%	-	<0.001%	-	-	-	<0.001%	<0.001%	-	-	<0.001%	<0.001%	<0.001%

Notes:

 %w/w asbestos in soil calculated using: % asbestos content x bonded ACM (kg) / soil volume (L) x soil density (kg/L)

 Result
 Exceeds adopted criteria

 Criteria from ASC NEPM (2013) Table 7 - Health Screening Level (HSL) for Asbestos, Residential



	Sample ID	SS31-1	SS32-1	SS33-1	SS34-1	SS35-1	SS36-1	SS37-1	SS38-1	SS39-1	SS40-1	SS41-1	SS42-1	SS43-1	SS44-1	SS45-1	SS46-1	TP06-2_0.0-0.2	TP66-2_0.0-0.2
	Matrix	Soil	Soil																
	Sample Date	22/03/2023	22/03/2023	22/03/2023	22/03/2023	22/03/2023	22/03/2023	22/03/2023	21/03/2023	21/03/2023	21/03/2023	21/03/2023	21/03/2023	21/03/2023	21/03/2023	21/03/2023	21/03/2023	21/03/2023	22/03/2023
	AEC																		
	HIL/HSL A																		
ACM weight (g)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ACM weight (kg)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Soil density (kg/L)		1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
Soil Volume (L)		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Asbestos Content (%)		15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
%w/w ACM in Soil	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
%w/w FA/AF in Soil	0.001	-	<0.001%	<0.001%	<0.001%	<0.001%	<0.001%	<0.001%	<0.001%	<0.001%	<0.001%	<0.001%	<0.001%	<0.001%	<0.001%	<0.001%	<0.001%	<0.001%	<0.001%
letes																			

Notes:

%w/w asbestos in soil calculated using: % asbestos cont

Result Exceeds adopted criteria



	Sample ID	TP67-2_0.0-0.2	TP68-2_0.0-0.2	TP69-2_0.0-0.2	TP70-2-0.0-0.2	TP71-2_0.0-0.2	TP71-2_FRAG	TP72-2_0.0-0.2	TP73-2_0.0-0.2	TP74-2_0.0-0.2	SS75-2	SS76-2	SS77-2	TP03-3_0.0-0.2	TP04-3_0.0-0.3	SS47-3	SS48-3
	Matrix	Soil	Soil	Soil	Soil	Soil	Material	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
	Sample Date	22/03/2023	22/03/2023	22/03/2023	22/03/2023	22/03/2023	22/03/2023	21/03/2023	21/03/2023	21/03/2023	21/03/2023	21/03/2023	21/03/2023	22/03/2023	22/03/2023	22/03/2023	22/03/2023
	AEC					AEC2											
	HIL/HSL A																
ACM weight (g)		0	0	0	0	7	-	0	0	0	0	0	0	0	0	0	0
ACM weight (kg)		0	0	0	0	0.007	-	0	0	0	0	0	0	0	0	0	0
Soil density (kg/L)		1.8	1.8	1.8	1.8	1.8	-	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
Soil Volume (L)		10	10	10	10	10	-	10	10	10	10	10	10	10	10	10	10
Asbestos Content (%)		15	15	15	15	15	-	15	15	15	15	15	15	15	15	15	15
%w/w ACM in Soil	0.01	0.00	0.00	0.00	0.00	0.01	Detected	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
%w/w FA/AF in Soil	0.001	<0.001%	<0.001%	<0.001%	<0.001%	<0.001%	-	<0.001%	<0.001%	<0.001%	<0.001%	<0.001%	<0.001%	<0.001%	<0.001%	<0.001%	<0.001%

Notes:

%w/w asbestos in soil calculated using: % asbestos cont

Result Exceeds adopted criteria



	Sample ID	SS49-3	SS50-3	SS51-3	SS52-3	SS53-3	SS54-3	SS55-3	TP07-4_0.0-0.2	TP08-4_0.0-0.2	TP09-4_0.0-0.2	TP11-4_0.0-0.2	TP12-5_0.0-0.2	TP13-5_0.0-0.2	SS56-5	SS57-5	SS58-5	SS59-5
	Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil							
	Sample Date	22/03/2023	21/03/2023	22/03/2023	22/03/2023	22/03/2023	22/03/2023	22/03/2023	21/03/2023	21/03/2023	21/03/2023	21/03/2023	21/03/2023	21/03/2023	22/03/2023	21/03/2023	21/03/2023	22/03/2023
	AEC		AEC3							AE	C4							AEC5
	HIL/HSL A																	
ACM weight (g)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ACM weight (kg)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Soil density (kg/L)		1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
Soil Volume (L)		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Asbestos Content (%)		15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
%w/w ACM in Soil	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
%w/w FA/AF in Soil	0.001	<0.001%	<0.001%	<0.001%	<0.001%	<0.001%	<0.001%	<0.001%	-	-	-	-	<0.001%	<0.001%	-	-	-	-
Mater																		

Notes:

%w/w asbestos in soil calculated using: % asbestos cont

Result Exceeds adopted criteria



	Sample ID	SS60-5	SS61-5	SS62-5	SS63-5	SS64-5	SS65-5
	Matrix	Soil	Soil	Soil	Soil	Soil	Soil
	Sample Date	22/03/2023	22/03/2023	22/03/2023	22/03/2023	21/03/2023	21/03/2023
	AEC						
	HIL/HSL A						
ACM weight (g)		0	0	0	0	0	0
ACM weight (kg)		0	0	0	0	0	0
Soil density (kg/L)		1.8	1.8	1.8	1.8	1.8	1.8
Soil Volume (L)		10	10	10	10	10	10
Asbestos Content (%)		15	15	15	15	15	15
%w/w ACM in Soil	0.01	0.00	0.00	0.00	0.00	0.00	0.00
%w/w FA/AF in Soil	0.001	-	-	-	-	-	-

Notes:

%w/w asbestos in soil calculated using: % asbestos cont

Result Exceeds adopted criteria





					AEC			AEC 4 - Septic Tar	nks	
					Field ID	TP07-4_0.9-1.0	TP08-4_0.9-1.0	TP09-4_0.9-1.0	TP11-4_0.2-0.3	TP11-4_1.0-1.1
					Date	21/03/2023	21/03/2023	21/03/2023	21/03/2023	21/03/2023
Anal	lytes		Units	LOR	Biosolids ¹					
N46	cro	E.coli	MPN per g soil	0.1	<100	<10	<10	<10	<10	<10
IVII	cio	Thermotolerant Coliforms	MPN per g soil	1	<1000	<10	10	10	350	<10

Notes

Result Concentrations exceeds Microbiological/Pathogen adopted criteria

1 NSW EPA (2000) Use and Disposal of Biosolids Products, Table 3.4 Initial Process Verification Standards, Table 3.5 Stabilisation Grade A Microbiological Standards

Table 5 - Quality Control Results 39, 39A and 41 Brocklesby Road, Medowie NSW NSW

		Sam	ple ID	TP73-2 0.0-0.2	D.21.3.23		TP73-2 0.0-0.2	T.21.3.23		SS63-5	D.22.3.23		SS63-5	T.22.3.23				WB.22.3.23
			Date	21/03/2023	21/03/2023	RPD %	21/03/2023	21/03/2023	RPD %	22/03/2023	22/03/2023	RPD %	22/03/2023	22/03/2023	RPD %			22/03/2023
			Туре	Primary	Duplicate		Primary	Triplicate	1	Primary	Duplicate		Primary	Triplicate				Wash Blank
Analytes		Soil Units	LOR													Water Units	Water LOR	
	Arsenic	mg/kg	2	17	13	27	17	9	62	< 2	< 2	0	< 2	2	0	mg/L	0.001	< 0.001
	Cadmium	mg/kg	0.4	< 0.4	< 0.4	0	< 0.4	<0.3	0	< 0.4	< 0.4	0	< 0.4	<0.3	0	mg/L	0.0002	< 0.0002
	Chromium	mg/kg	5	300	420	33	300	420	33	13	12	8	13	12	8	mg/L	0.001	< 0.001
Matala	Copper	mg/kg	5	120	40	100	120	14	158	14	14	0	14	15	7	mg/L	0.001	< 0.001
Ivietais	Lead	mg/kg	5	16	21	27	16	24	40	12	11	9	12	10	18	mg/L	0.001	< 0.001
	Mercury	mg/kg	5	< 0.1	< 0.1	0	< 0.1	< 0.05	0	< 0.1	< 0.1	0	< 0.1	<0.05	0	mg/L	0.0001	< 0.0001
	Nickel	mg/kg	5	74	28	90	74	5.6	172	< 5	< 5	0	< 5	1.8	94	mg/L	0.001	< 0.001
	Zinc	mg/kg	5	45	57	24	45	78	54	14	12	15	14	13	7	mg/L	0.005	< 0.005
	Acenaphthene	mg/kg	0.5	< 0.5	< 0.5	0	< 0.5	<0.1	0	-	< 0.5	-	-	<0.1	-	mg/L	0.001	< 0.001
	Acenaphthylene	mg/kg	0.5	< 0.5	< 0.5	0	< 0.5	<0.1	0	-	< 0.5	-	-	<0.1	-	mg/L	0.001	< 0.001
	Anthracene	mg/kg	0.5	< 0.5	< 0.5	0	< 0.5	<0.1	0	-	< 0.5	-	-	<0.1	-	mg/L	0.001	< 0.001
	Benz(a)anthracene	mg/kg	0.5	< 0.5	< 0.5	0	< 0.5	<0.1	0	-	< 0.5	-	-	<0.1	-	mg/L	0.001	< 0.001
	Benzo(a)pyrene	mg/kg	0.5	< 0.5	< 0.5	0	< 0.5	<0.1	0	-	< 0.5	-	-	<0.1	-	mg/L	0.001	< 0.001
	Benzo(a)pyrene TEQ (medium bound)	mg/kg	0.6	0.6	0.6	0	0.6	0.36	67	-	0.6	-	-	<0.3	-	-	-	-
	Benzo(b&j)fluoranthene	mg/kg	0.5	< 0.5	< 0.5	0	< 0.5	<0.1	0	-	< 0.5	-	-	<0.1	-	mg/L	0.001	< 0.001
	Benzo(g.h.i)perylene	mg/kg	0.5	< 0.5	< 0.5	0	< 0.5	<0.1	0	-	< 0.5	-	-	<0.1	-	mg/L	0.001	< 0.001
PΔHs	Benzo(k)fluoranthene	mg/kg	0.5	< 0.5	< 0.5	0	< 0.5	<0.1	0	-	< 0.5	-	-	<0.1	-	mg/L	0.001	< 0.001
T ALIS	Chrysene	mg/kg	0.5	< 0.5	< 0.5	0	< 0.5	<0.1	0	-	< 0.5	-	-	<0.1	-	mg/L	0.001	< 0.001
	Dibenz(a.h)anthracene	mg/kg	0.5	< 0.5	< 0.5	0	< 0.5	<0.1	0	-	< 0.5	-	-	<0.1	-	mg/L	0.001	< 0.001
	Fluoranthene	mg/kg	0.5	< 0.5	< 0.5	0	< 0.5	0.2	86	-	< 0.5	-	-	<0.1	-	mg/L	0.001	< 0.001
	Fluorene	mg/kg	0.5	< 0.5	< 0.5	0	< 0.5	<0.1	0	-	< 0.5	-	-	<0.1	-	mg/L	0.001	< 0.001
	Indeno(1.2.3-cd)pyrene	mg/kg	0.5	< 0.5	< 0.5	0	< 0.5	<0.1	0	-	< 0.5	-	-	<0.1	-	mg/L	0.001	< 0.001
	Naphthalene	mg/kg	0.5	< 0.5	< 0.5	0	< 0.5	<0.1	0	-	< 0.5	-	-	<0.1	-	mg/L	0.001	< 0.001
	Phenanthrene	mg/kg	0.5	< 0.5	< 0.5	0	< 0.5	<0.1	0	-	< 0.5	-	-	<0.1	-	mg/L	0.001	< 0.001
	Pyrene	mg/kg	0.5	< 0.5	< 0.5	0	< 0.5	0.2	86	-	< 0.5	-	-	<0.1	-	mg/L	0.001	< 0.001
	Total PAH	mg/kg	0.5	< 0.5	< 0.5	0	< 0.5	<0.8	0	-	< 0.5	-	-	<0.8	-	mg/L	0.001	< 0.001
	Benzene	mg/kg	0.1	< 0.1	< 0.1	0	< 0.1	< 0.1	0	-	< 0.1	-	-	< 0.1	-	mg/L	0.001	< 0.001
BTEX	Toluene	mg/kg	0.1	< 0.1	< 0.1	0	< 0.1	< 0.1	0	-	< 0.1	-	-	< 0.1	-	mg/L	0.001	< 0.001
5.27	Ethylbenzene	mg/kg	0.1	< 0.1	< 0.1	0	< 0.1	< 0.1	0	-	< 0.1	-	-	< 0.1	-	mg/L	0.001	< 0.001
	Xylenes - Total	mg/kg	0.3	< 0.3	< 0.3	0	< 0.3	< 0.3	0	-	< 0.3	-	-	< 0.3	-	mg/L	0.003	< 0.003
	Naphthalene	mg/kg	0.5	< 0.5	< 0.5	0	< 0.5	<0.1	0	-	< 0.5	-	-	<0.1	-	mg/L	0.01	< 0.01
	TRH C6-C10	mg/kg	20	< 20	< 20	0	< 20	<25	0	-	< 20	-	-	<25	-	mg/L	0.02	< 0.02
TRH	TRH C6-C10 less BTEX (F1)	mg/kg	20	< 20	< 20	0	< 20	<25	0	-	< 20	-	-	<25	-	mg/L	0.02	< 0.02
	TRH >C10-C16	mg/kg	50	< 50	< 50	0	< 50	<25	0	-	< 50	-	-	59	-	mg/L	0.05	< 0.05
	TRH >C10-C16 less Naphthalene (F2)	mg/kg	50	< 50	< 50	0	< 50	<25	0	-	< 50	-	-	59	-	mg/L	0.05	< 0.05
	TRH >C16-C34	mg/kg	100	< 100	< 100	0	< 100	<90	0	-	380	-	-	360	-	mg/L	0.1	< 0.1
	TRH >C34-C40	mg/kg	100	< 100	< 100	0	< 100	<120	0	-	130	-	-	<120	-	mg/L	0.1	< 0.1

*RPDs have only been considered where a concentration is greater than 10 times the EQL. **High RPDs are in bold (Acceptable RPD range is 30% (>10 x EQL))



APPENDIX C:

Test Pit Logs



ENGINEERING LOG - TEST PIT

PROJECT: PROPOSED REZONING

CLIENT:

TEST PIT NO:

PAGE:

DATE:

JOB NO:

TP01-1

1 OF 1

ΤН

NEW23P-0009

LOCATION: 39, 39A and 41 BROCKLESBY ROAD, MEDOWIE

McCLOY GROUP PTY LTD

LOGGED BY:

21/3/23

E	TEST PIT LENGTH: 2.0 m WI						or 0.5 m	SURFACE RL: DATUM:					
	Dri	lling and Sar	npling				Material description and profile information	ation			Fiel	d Test	
METHOD	WATER	SAMPLES	RL (m)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION: Soil type, p characteristics,colour,minor com	lasticity/particle ponents	MOISTURE CONDITION	CONSISTENCY DENSITY	Test Type	Result	Structure and additional observations
	ncountered	E 0.20m		-		СІ	FILL: CLAY - medium plasticity, brov trace fine to medium grained sand, r	n to dark brown, oot affected.	м				FILL
	Not El	0.50m E 0.60m		0.5_		СН	CLAY - medium to high plasticity, ora	nge-brown.	M < w _p				RESIDUAL SOIL — — — —
		0.00111			<u> </u>	1	Hole Terminated at 0.60 m						
BOREHOLE - TEST PTT NEW23P-0009 - TESTPTT LOGS.GPJ < <drawingfile≫ 03="" 10.02.00.04="" 13:41="" 2023="" 24="" and="" datgel="" in="" lab="" situ="" th="" tool<=""><td>GEND: tter ² Wa</td><td>ter Level</td><td></td><td></td><td>mples a 50mm Bulk s</td><td>nd Tesi Diame ample f</td><td>S Ter tube sample or CBR testing Learned</td><td>Consiste VS V S S</td><td>ncy (ery Soft</td><td></td><td></td><td><u>CS (kPa</u> 25 5 - 50</td><td>) <u>Moisture Condition</u> D Dry M Moist W Wet</td></drawingfile≫>	GEND: tter ² Wa	ter Level			mples a 50mm Bulk s	nd Tesi Diame ample f	S Ter tube sample or CBR testing Learned	Consiste VS V S S	ncy (ery Soft			<u>CS (kPa</u> 25 5 - 50) <u>Moisture Condition</u> D Dry M Moist W Wet
	(Date and time shown) E Environment (Date and time shown) (Glass jar, sg Water Inflow ASS Acid Sulfate Water Outflow (Plastic bag, ata Changes Gradational or Field Tests					s jar, se Sulfate S ic bag, a Sample	aled and chilled on site) toil Sample air expelled, chilled)	St St VSt V H H Fb F Densitv	Stiff /ery Stiff lard Friable V	V	10 20 >4 ery Lo	00 - 200 00 - 400 400 Dose	Wp, Plastic Limit WL Liquid Limit Density Index <15%
QT LIB 1.1.GLB	tr D s	auauonai or ansitional stra Definitive or dis trata change	ata stict	PID DCP(x-y) HP	Photo Dynar Hand	ionisatio nic pene Penetro	n detector reading (ppm) etrometer test (test depth interval shown) meter test (UCS kPa)		L ME D VC	La D M D D V	oose lediun ense ery D	n Dense ense	Density Index 15 - 35% Density Index 35 - 65% Density Index 65 - 85% Density Index 85 - 100%



PROJECT: PROPOSED REZONING

CLIENT:

TEST PIT NO:

TP02-1

1 OF 1

NEW23P-0009

LOCATION: 39, 39A and 41 BROCKLESBY ROAD, MEDOWIE

McCLOY GROUP PTY LTD

JOB NO: LOGGED BY:

PAGE:

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									DA	TE:			21/3/23
EQ TES	UIPN ST PI	IENT TYP	E: H:	2.7 To 2.0 m	nne E> W	cavat	or S 0.5 m D	URFACE RL: ATUM:					
	Drill	ing and San	npling				Material description and profile informat	ion			Field	d Test	
METHOD	WATER	SAMPLES	RL (m)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION: Soil type, pla characteristics,colour,minor compo	sticity/particle onents	MOISTURE CONDITION	CONSISTENCY DENSITY	Test Type	Result	Structure and additional observations
ш	ot Encountered	E 0.20m		-		CI	FILL: CLAY - medium plasticity, brown trace fine to medium grained sand, roc 0.30m CLAY - medium to high plasticity, oran	to dark brown, t affected. ge-brown.	м				FILL RESIDUAL SOIL
	ž	0.50m E <u>0.60m</u>		0.5_		СН	0.60m		M < w _P				
				- - 1.0_ - - 1.5_ - - - - - - - - - - - -			Hole Terminated at 0.60 m						
LEG	END:	I		Notes, Sa	mples a	nd Test	<u>s</u>	Consiste	ncy	I		CS (kPa) Moisture Condition

NON-CORED BOREHOLE - TEST PIT NEW23P-0009 - TEST PIT LOGS.GPJ << DrawingFile>> 24/03/2023 13:41 10:02:00.04 Datgel Lab and in Situ Tool U₅₀ CBR Dry Moist 50mm Diameter tube sample VS Verv Soft <25 D Water 25 - 50 Bulk sample for CBR testing S Soft Μ Water Level Environmental sample F Firm 50 - 100 Е W Wet (Date and time shown) (Glass jar, sealed and chilled on site) St 100 - 200 Plastic Limit Stiff W_p Water Inflow ▶ Acid Sulfate Soil Sample Very Stiff ASS 200 - 400 Liquid Limit VSt W_{L} (Plastic bag, air expelled, chilled) Water Outflow н Hard >400 В Bulk Sample Fb Friable Strata Changes QT LIB 1.1.GLB Log Density Index <15% Field Tests **Density** V Very Loose Gradational or Density Index 15 - 35% PID Photoionisation detector reading (ppm) L Loose transitional strata DCP(x-y) Dynamic penetrometer test (test depth interval shown) MD Medium Dense Density Index 35 - 65% Definitive or distict HP Hand Penetrometer test (UCS kPa) D Dense Density Index 65 - 85% strata change VD Very Dense Density Index 85 - 100%



ENGINEERING LOG - TEST PIT

PROJECT: PROPOSED REZONING

CLIENT:

TEST PIT NO:

PAGE:

DATE:

JOB NO:

TP03-3

1 OF 1

NEW23P-0009

LOCATION: 39, 39A and 41 BROCKLESBY ROAD, MEDOWIE

McCLOY GROUP PTY LTD

LOGGED BY:

ΤН 22/3/23

	EQUIPMENT TYPE: TEST PIT LENGTH:				2.7 To 2.0 m	nne Ex W	kcavai I DTH ∙	or 0.5 m			ACE RL:					
ŀ		Dril	ling and Sam	nplina	2.0			Material de	scription and profile	information				Field	d Test	
	METHOD	WATER	SAMPLES	RL (m)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL D charae	DESCRIPTION: Soil	type, plasticity/ or components	/particle	MOISTURE CONDITION	CONSISTENCY DENSITY	Test Type	Result	Structure and additional observations
		ncountered	E 0.20m		-		CI	FILL: CLA fine graine	Y - medium plastici d sand, root affect	ty, orange-brov ed.	vn, trace	d M 2				FILL
	Ш	Not E	0.50m E 0.60m		- 0. <u>5</u>		СН	CLAY - m some red-	edium to high plasti grey.	city, orange-bro	own with	×				RESIDUAL SOIL — — — —
Log NON-CORED BOREHOLE , TEST PIT NEW23P-0009 - TEST PIT LOGS GPJ <	LEG Wat Stra	END: er Va Ua Va Va Va Va Va Va	ter Level te and time sh ter Inflow ter Outflow anges	nown)		mples a 50mm Bulk s Enviro (Glass Acid S (Plasti	nd Test Diame ample f ample f i jar, se julfate S c bag, i c bag, i c ample	Bertube sample for CBR testing I sample aled and chilled on oil Sample ir expelled, chilled	site)		Consister VS V S S F Fi St S VSt V H H Fb Fi Density	DCY ery Soft tiff tiff tiff tiff tiff tiff tiff t		UQ <22 500 20 20 20 20 20 20 20 20 20 20 20 20 2	CS (kPa 55 5-50 1-100 00 - 2000 00 - 400) Moisture Condition D Dry M Moist W Wet W Wet Wp_ Plastic Limit WL Liquid Limit
at LIB 1.1.GLB L		Gradational or transitional strata Definitive or distict strata change						n detector reading etrometer test (test meter test (UCS k	ı (ppm) : depth interval shown Pa)	n)	Density	V L ME D VD	Vi La D D Vi Vi	ery Lo bose edium ense ery De	n Dense ense	Density Index <15% Density Index 15 - 35% Density Index 35 - 65% Density Index 65 - 85% Density Index 85 - 100%



PROJECT: PROPOSED REZONING

CLIENT:

TEST PIT NO: PAGE:

JOB NO:

DATE:

TP04-3

1 OF 1

NEW23P-0009

LOCATION: 39, 39A and 41 BROCKLESBY ROAD, MEDOWIE

McCLOY GROUP PTY LTD

LOGGED BY:

TH 22/3/23

	EQUIPMENT TYPE: 2.7 TEST PIT LENGTH: 2.0			2.7 To 2.0 m	nne Ex W	kcava I DTH:	tor 0.5 m	SURF/ DATU	ACE RL: M:						
ľ		Drill	ing and San	npling				Material description an	d profile information				Field	d Test	
-	METHOD	WATER	SAMPLES	RL (m)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTI characteristics,cc	ON: Soil type, plasticity lour,minor components	/particle s	MOISTURE CONDITION	CONSISTENCY DENSITY	Test Type	Result	Structure and additional observations
-	Е	ot Encountered	E 0.20m		-		CI	FILL: CLAY - medium fine grained sand, roo 0.30m CLAY - medium to hig	n plasticity, orange-brow of affected. gh plasticity, orange-bro	wn, trace	M < Wp				FILL RESIDUAL SOIL
-		NG	0.50m E <u>0.60m</u>		- 0. <u>5</u>		СН	0.60m Helo Torminated at 0	60 m						
								Hole Terminated at 0	.ου m						
- TEST PTT NEW23P-0009 - TEST PTT LOGS GPJ << DrawingFie>> 24/03/2023 13:41 10.02:00.04 Daggel Lab and In Situ Tool					- - 1.0 - - - - - - - - - - - - -										
og NON-CORED BOREHOLE	LEGEND: Water Water Level (Date and time shown) Water Inflow Water Outflow Strata Changes			U ₅₀ CBR E ASS	50mm Bulk s Enviro (Glass Acid S (Plasti Bulk S	Diame ample f nmenta jar, se culfate s c bag, a ample	ter tube sample ter tube sample or CBR testing al sample aled and chilled on site) Soil Sample air expelled, chilled)		VS V S S F F St S VSt V H H Fb F	ery Soft oft irm tiff ery Stiff ard riable		<pre><2 25 50 10 20 >4</pre>	25 - 50 - 100 0 - 200 0 - 400 00	Moist United Control C	
QT LIB 1.1.GLB L		Gi tra Do st	radational or ansitional stra efinitive or dis rata change	ta stict	Field Test PID DCP(x-y) HP	<u>s</u> Photoi Dynan Hand I	onisatio nic pen Penetro	on detector reading (ppm) etrometer test (test depth interv meter test (UCS kPa)	ral shown)	<u>Density</u>	V L ME D VD	Ve Lo D De Ve	ery Lo xose ediun ense ery De	iose n Dense ense	Density Index <15% Density Index 15 - 35% Density Index 35 - 65% Density Index 65 - 85% Density Index 85 - 100%



PROJECT: PROPOSED REZONING

CLIENT:

TEST PIT NO: PAGE: TP06-2

1 OF 1

NEW23P-0009

LOCATION: 39, 39A and 41 BROCKLESBY ROAD, MEDOWIE

McCLOY GROUP PTY LTD

Job No: Logged by:

DATE:

TH 21/3/23

	EQUIPMENT TYPE: 2 TEST PIT LENGTH: 2					nne Ex	kcava	tor	SURFACE RL					
╞	IE			- .	2.0 m	vv						Field	d Taat	
┝		Dri	ing and San	npiing			z	Material description and profile in	formation			Fiel		
	METHOD	WATER	SAMPLES	RL (m)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATIOI SYMBOL	MATERIAL DESCRIPTION: Soil ty characteristics,colour,minor	pe, plasticity/particle components	MOISTURE	CONSISTENCY DENSITY	Test Type	Result	Structure and additional observations
		ncountered	E 0.20m		-		SP	FILL: SAND - fine to medium gr pale grey, root affected.	ained, pale brown to	D				FILL
	Β	Not El	0.50m E 0.60m		0.5_		CI	CLAY - medium plasticity, orang grained sand.	ge-brown, trace fine	M < W _P				RESIDUAL SOIL
F			0.0011				1	Hole Terminated at 0.60 m						
E - TEST PIT NEW23P-0009 - TESTPIT LOGS.GPJ < <drawingfile>> 24/03/2023 13:41 10.02.00.04 Datgel Lab and In Situ Tool</drawingfile>	LEG	END:			- - 1.0_ - - 1.5_ - - - - - - - - - - - - - - - - - - -	mples a	nd Test		Consist	PRCV			CS (kPa	Moisture Condition
DREHOI	Wat	er			U ₅₀ CBR	50mm Bulk s	Diame ample f	ter tube sample or CBR testing	VS S	Very Soft Soft	İ	<2 25	25 5 - 50	D Dry M Moist
RED BC	₹	Wa (Da	er Level te and time sl	hown)	Е	Enviro	onmenta	al sample	F	Firm Stiff) - 100	W Wet W Plastic Limit
ON-COF		← Water Inflow ASS Acid Sulfate S ← Water Outflow (Plastic bag, a					Sulfate S ic bag se	Soil Sample air expelled, chilled)	VSt	Very Stiff Hard		20)0 - 400 100	W _L Liquid Limit
Log NC	Stra	A water Outnow (Plastic bag, all rata Changes B Bulk Sample Field Tests							Fb	Friable	14	envia	050	Density Index <15%
1.GLB		G	radational or ansitional stra	ata	PID	Photo	ionisatio	on detector reading (ppm)		L	Lo	DOSE		Density Index < 15 / 35%
QT LIB 1.		— D st	efinitive or dis rata change	stict	HP	Dynar Hand	Penetro	meter test (UCS kPa)		ML D VD	м Б О	ealun ense ery De	i Dense	Density Index 35 - 65% Density Index 65 - 85% Density Index 85 - 100%



PROJECT: PROPOSED REZONING

CLIENT: McCLOY GROUP PTY LTD

TEST PIT NO:

PAGE:

DATE:

JOB NO:

TP07-4

1 OF 1

NEW23P-0009

LOCATION: 39, 39A and 41 BROCKLESBY ROAD, MEDOWIE

LOGGED BY:

TH 21/3/23

E	EQUIPMENT TYPE: TEST PIT LENGTH: Drilling and Samplin			2.7 To	nne Ex	cavai	tor SURF	FACE RL:					
-		illing and Som	• olina	2.0 11	•••		Material description and profile information	JIVI.			Field	Teet	
	Dr	filling and Samp	pling			_	Material description and profile information				Field	1 lest	
METHOD	WATER	SAMPLES	RL (m)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION: Soil type, plasticit characteristics,colour,minor componen	y/particle ts	MOISTURE CONDITION	CONSISTENCY DENSITY	Test Type	Result	Structure and additional observations
		0.20m E 0.30m		-		SC	FILL/TOPSOIL: Sandy CLAY - medium pla dark brown, fine to medium grained sand, t concrete, plastic, geofab, root affected. 0.40m CLAY - medium to high plasticity, orange-b some red.	sticity, trace	D - M				FILL / TOPSOIL
sPJ < <drawingfie>> 24/03/2023 13:41 10.02.00.04 Datgel Lab and In Situ Tool F</drawingfie>	Not Encountered	0.90m E 1.00m		0.5_ - - 1.0_ - - - - - - - - - - - - - - - - - - -		СН	some red.		M < w _p				
'LIB 1.1.GLB Log NON-CORED BOREHOLE - TEST PIT NEW23P-0009 - TEST PIT LOGS.GP. 00 ▼ , S T	EGEND Kater ✓ Wa (Di (Di (Di (Di (Di (Di (Di (Di	1.60m 1.60m 1.90m E 2.00m 2.00m 2.00m 2.00m 2.00m 3.20 3	a ict		mples ar 50mms Bulk s Enviro (Glass Acid S (Plasti Bulk S S Photoi Dynan Hand I	nd Tesi Diame ample f nmenta jar, se ulfate S c bag, a ample onisatio Penetro	2.00m Is Hole Terminated at 2.00 m ter tube sample or CBR testing al sample aled and chilled on site) Soil Sample air expelled, chilled) on detector reading (ppm) etrometer test (test depth interval shown) meter test (UCS kPa)	Consiste VS VS F F St S VSt V H F Fb F Density	ncy /ery Soft Soft Firm Stiff /ery Stiff Hard Friable V L MD	Ve Ld M De	UC <2 25 50 10 20 >4 ery Lo cose edium ense	CS (kPa 5 - 50 - 100 0 - 200 0 - 400 00 - 400 00 - 400 00 - 400 00 - 400 00 - 100 -	Moisture Condition D Dry M Moist W Wet Wp Plastic Limit WL Liquid Limit Density Index <15%



PROJECT: PROPOSED REZONING

McCLOY GROUP PTY LTD

CLIENT:

TEST PIT NO: PAGE:

TP08-4

1 OF 1

NEW23P-0009

JOB NO: LOCATION: 39, 39A and 41 BROCKLESBY ROAD, MEDOWIE LOGGED BY:

DATE:

ΤН 21/3/23

	EQUIPMENT TYPE: 2.7 TEST PIT LENGTH: 2.0 Drilling and Sampling				2.7 To 2.0 m	nne Ex Wi	cavat DTH:	or 0.5 m	SURF. DATU	ACE RL:					
┢		Dril	ing and Sam	oling				Material description ar	nd profile information				Field	d Test	
	METHOD	WATER	SAMPLES	RL (m)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTI characteristics.co	ON: Soil type, plasticity olour,minor component	//particle s	MOISTURE CONDITION	CONSISTENCY DENSITY	Test Type	Result	Structure and additional observations
			0.20m E 0.30m		- - 0.5_		СІ	FILL/TOPSOIL: Sand plasticity, brown-dark sand, root affected. 0.40m CLAY - medium to hi red-brown.	dy CLAY - low to medium brown, fine to medium gh plasticity, pale brow	im n grained	м				FILL / TOPSOIL
3 13:42 10.02.00.04 Datgel Lab and In Situ Tool	Е	Not Encountered	0.90m E 1.00m		- - - 1. <u>0</u> -		СН				M < wp				
- TEST PIT NEW23P-0009 - TESTPIT LOGS.GPJ < <drawingfile>> 24/03/20:</drawingfile>			1.50m E 1.60m 1.90m E 2.00m					becoming red-grey							
NON-CORED BOREHOLE -		END: er (Da (Da Wat	er Level le and time sho er Inflow er Outflow	own)	Notes, Sa U ₅₀ CBR E ASS	mples au 50mm Bulk sa Enviro (Glass Acid S (Plasti Bulk S	nd Test Diame ample f nmenta jar, se ulfate S c bag, a ample	Hole Terminated at 2 ter tube sample or CBR testing I sample aled and chilled on site) toil Sample air expelled, chilled)	2.00 m	Consister VS V S S F F St S VSt V H H	ncy /ery Soft oft irm diff /ery Stiff lard		U <2 25 50 10 20 >4	<u>CS (kPa</u> 5 - 50 5 - 100 00 - 200 00 - 400 400	Moisture Condition D Dry M Moist W Wet W _p Plastic Limit W _L Liquid Limit
QT LIB 1.1.GLB Log	<u>oua</u>	ta Changes B Bulk Sample Gradational or transitional strata Field Tests Definitive or distict strata change PID Photoionisation						n detector reading (ppm) etrometer test (test depth inter meter test (UCS kPa)	val shown)	<u>Density</u>	V L ME D VE	Vi La D M Di Di Vi	ery Lo pose edium ense ery De	oose n Dense ense	Density Index <15% Density Index 15 - 35% Density Index 35 - 65% Density Index 65 - 85% Density Index 85 - 100%



ENGINEERING LOG - TEST PIT

PROJECT: PROPOSED REZONING

CLIENT:

TEST PIT NO:

PAGE:

DATE:

JOB NO:

TP09-4

1 OF 1

NEW23P-0009

LOCATION: 39, 39A and 41 BROCKLESBY ROAD, MEDOWIE

McCLOY GROUP PTY LTD

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ΤН 21/3/23

	Equipment type: Test Pit Length:			:	2.7 To	nne E	cavat	or 0.5 m		SURFA	ACE RL:					
╞	IE			1: 	2.0 m	VV		0.5 m			VI:			F 1		
		Drill	ing and Sam	pling	1		7	Material des	cription and profile infor	mation				Field	d Test	
	METHOD	WATER	SAMPLES	RL (m)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DE charact	ESCRIPTION: Soil type, leristics,colour,minor co	, plasticity/ omponents	particle	MOISTURE CONDITION	CONSISTENCY DENSITY	Test Type	Result	Structure and additional observations
			0.20m E 0.30m		-		CL	FILL/TOPS fine grained	OIL: Sandy CLAY - low I sand, root affected.	/ plasticity,	brown,	D - M				FILL / TOPSOIL
4/03/2023 13:42 10.02.00.04 Datget Lab and In Situ Tool	ш	Not Encountered	0.90m E 1.00m		0. <u>5</u> - - 1. <u>0</u> -		СН	some red.				M < Wp				
DLE - TEST PIT NEW23P-0009 - TESTPIT LOGS.GPJ < <drawingfile>> 2</drawingfile>	LEG	END:	1.50m E 1.60m 1.90m E 2.00m		- 1.5_ - - - - - -	mples a	nd Test	becoming r	ed-grey nated at 2.00 m		Consiste			UO	CS (kPa) <u>Moisture Condition</u>
REHOL	Wate	er				50mm	Diame	er tube sample			VS V	ery Soft		<2	25	D Dry M Moiet
D BOF	ᆂ	Wat	er Level		E	Bulk s Enviro	ample f onmenta	ו sample			5 S F F	irm		25 50	- 50 - 100	W Wet
COREL	▶	(Dat Wat	e and time sh er Inflow	iown)	ASS	(Glass	s jar, sea Sulfate S	aled and chilled on s	site)		St S	tiff erv Stiff		10 20	0 - 200	W _p Plastic Limit
D-NON		Wat	er Outflow		000	(Plast	ic bag, a	ir expelled, chilled)			H H	lard		20 >4	- 400 - 00	
Log ^A	Strata Changes B Bulk Sample					Bulk S	Sample			ŀ	Fb F	riable \/	\/e	ervio	050	Density Index <15%
GLB.		Gradational or <u>FIEID Tests</u> transitional strata PID Photoionisat						n detector reading	(ppm)		Density	Ľ	Lc	ose		Density Index 15 - 35%
B 1.1.		_ D	efinitive or dis	tict	DCP(x-y) HP	Dynar Hand	nic pene	etrometer test (test of meter test (LICS kP	depth interval shown) a)			MD) M	edium	n Dense	Density Index 35 - 65%
QT LI		st	rata change			, iand	. oneuu		~,			VD	Ve	ery De	ense	Density Index 85 - 100%



PROJECT: PROPOSED REZONING

CLIENT: McCLOY GROUP PTY LTD

LOCATION: 39, 39A and 41 BROCKLESBY ROAD, MEDOWIE

TEST PIT NO:

TP11-4 1 OF 1

NEW23P-0009

PAGE: JOB NO:

DATE:

LOGGED BY:

TH 21/3/23

	EQ			:	2.7 To	nne Ex	cava	tor		SURF	ACE RL:					
	TE	STP			2.0 m	WI	DTH:	0.5 m		DATU	M:					
		Dril	ling and Samp	oling	1			Material des	cription and profile i	nformation				Fiel	d Test	
	METHOD	WATER	SAMPLES	RL (m)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL D charac	ESCRIPTION: Soil t teristics,colour,minc	ype, plasticity, r components	/particle s	MOISTURE CONDITION	CONSISTENCY DENSITY	Test Type	Result	Structure and additional observations
= - TEST PT NEW23P-0009 - TESTPTT LOGS/GPJ < <cbrawingfile>> 24/03/2023 13:42 10.02:00.04 Datget Lab and in Situ Tool</cbrawingfile>	ш	Not Encountered	0.20m E 0.30m 1.00m E 1.10m 1.50m E 1.60m 1.90m E 2.00m				CH	ELL/TOPS plasticity, t medium gr affected.	SOIL: Sandy CLAY- rown to dark brown ained sand, trace ro edium to high plastic	low to mediu with grey, fine of tile, concre	m e to tte, root	D - M				RESIDUAL SOIL
NON-CORED BOREHOLE		Notes, Samples and Test Nater Usso Somm Diamet Usso Somm Diamet CBR Bulk sample fc E Environmental (Date and time shown) (Glass jar, sea ✓ Water Inflow ASS ✓ Water Outflow (Plastic bag, a Strata Changes B Bulk Sample				IS Hole Term ter tube sample for CBR testing al sample aled and chilled on Soil Sample air expelled, chilled)	inated at 2.00 m site)		VS V S S F F St S VSt V H H	n cy oft irm tiff ery Stiff lard		25 25 50 10 20 >2	25 5 - 50 0 - 100 00 - 200 00 - 400 400	Moisture Condition D Dry M Moist W Wet W _p Plastic Limit W _L Liquid Limit		
QT LIB 1.1.GLB Log	<u>Stra</u>	trata Changes B Bulk Sample Gradational or transitional strata Field Tests Definitive or distict strata change DCP(x-y) Dynamic pene HP						on detector reading etrometer test (test ometer test (UCS kF	(ppm) depth interval shown) ^p a)		<u>Density</u>	V L MD D VD	Vi Lo D D	ery Lo bose ediun ense ery De	oose n Dense ense	Density Index <15% Density Index 15 - 35% Density Index 35 - 65% Density Index 65 - 85% Density Index 85 - 100%



CLIENT:

TEST PIT NO:

TP12-5 1 OF 1

NEW23P-0009

McCLOY GROUP PTY LTD **PROJECT:** PROPOSED REZONING

LOCATION: 39, 39A and 41 BROCKLESBY ROAD, MEDOWIE

JOB NO: LOGGED BY:

PAGE:

DATE:

ΤН 21/3/23

	EQI			E: u.	2.7 To	nne E: w	kcavai	or 0.5 m		SURF	ACE RL:					
┢			ing and San	nolina	2.0 111			Motorial da	acriation and profile		VI.			Field	d Toot	
-		DIII	ing and San	npiing			7		scription and prom					Field		
	METHOD	WATER	SAMPLES	RL (m)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATIO SYMBOL	MATERIAL D chara	DESCRIPTION: So cteristics,colour,mi	il type, plasticity/ nor components	/particle	MOISTURE CONDITION	CONSISTENCY DENSITY	Test Type	Result	Structure and additional observations
	ш	Encountered	E 0.20m		-		СІ	FILL: CLA trace fine	Y - medium plastic to medium grainec	ity, brown to dai	rk brown, cted.	× Wp				FILL
		Not E	0.50m E		- 0. <u>5</u>		СН	CLAY - m	edium to high plas	ticity, orange-bro	own.	×				RESIDUAL SOIL
┢			0.60m			<u> /////</u>		Hole Terr	ninated at 0.60 m					\vdash		
E - TEST PIT NEW23P-0009 - TESTPIT LOGS.GPJ ≪DrawingFile>> 24/03/2023 13:42 10.02.00.04 Datgel Lab and In Situ Tool	LEG	END:			- - 1.0_ - - 1.5_ - - - - - - - - - - - - - - - - - - -		nd Test	5			Consister				CS (kP#) Moisture Condition
99 NON-CORED BOREHC		Vater U₅₀ 50mm I ✓ Water Level (Date and time shown) CBR Bulk sa ✓ Water Inflow ASS Acid Su ✓ Water Outflow (Plastic trata Changes B				Diame ample f nmenta jar, se sulfate S c bag, a ample	ter tube sample or CBR testing I sample aled and chilled on coil Sample air expelled, chilled	n site) I)		VS V S S F F St S VSt V H H Fb F	ery Soft oft irm tiff ery Stiff lard riable	:	<2 25 50 10 20 >2	25 5 - 50 0 - 100 00 - 200 00 - 400 400	D Dry M Moist W Wet W _p Plastic Limit W _L Liquid Limit	
QT LIB 1.1.GLB Lo		rata Changes B E Gradational or transitional strata PID F Definitive or distict strata change DCP(x-y) L					ionisatio nic pene Penetro	n detector reading etrometer test (tesi meter test (UCS k	g (ppm) t depth interval show Pa)	<i>i</i> n)	<u>Density</u>	V L D VD	V La D D D V	ery Lo bose lediun ense ery De	oose n Dense ense	Density Index <15% Density Index 15 - 35% Density Index 35 - 65% Density Index 65 - 85% Density Index 85 - 100%



PROJECT: PROPOSED REZONING

McCLOY GROUP PTY LTD

LOCATION: 39, 39A and 41 BROCKLESBY ROAD, MEDOWIE

CLIENT:

TEST PIT NO:

PAGE:

DATE:

JOB NO:

TP13-5

1 OF 1 NEW23P-0009

LOGGED BY:

TH 21/3/23

	EQ	UIPN		E:	2.7 To	onne E	xcava	tor SURF	ACE RL:					
ł				1.	2.0 11	1		Material description and profile information	JIVI.			Field	d Toet	
-	METHOD	WATER	SAMPLES	RL (m)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION: Soil type, plasticity characteristics,colour,minor component	y/particle ts	MOISTURE CONDITION	CONSISTENCY DENSITY	Test Type	Result	Structure and additional observations
	Ш	Not Encountered	E 0.20m 0.50m E 0.60m		- - - 0.5_		СІ СН	FILL: CLAY - medium plasticity, brown to da trace fine to medium grained sand, root affe 0.30m CLAY - medium to high plasticity, orange-bi	ark brown, ected.	- M				FILL RESIDUAL SOIL
	LEG Wat Stra	U.b0m Z Image: 1.0 - Image: 1.0 - Image: 1.5 -				- - - - - - - - - - - - - - - - - - -	Ind Tess manple 1 Sample 1 Suffate S ic bag, i Sample	Hole Terminated at 0.60 m	Consiste VS V S S F St St S VSt V H H F Donerit	mcy /ery Soft Soft /ery Stiff /ery Stiff -frade		<u>U</u> <2 25 50 10 20 20	CS (kPa 25 5 - 50 0 - 2000 0 - 2000 100	a) <u>Moisture Condition</u> D Dry M Moist W Wet W _L Plastic Limit W _L Liquid Limit
		tra D st	ansitional stra efinitive or dis trata change	ita stict	PID DCP(x-y) HP	Photo Dynar Hand	ionisatio nic pen Penetro	on detector reading (ppm) etrometer test (test depth interval shown) meter test (UCS kPa)		L ME D	La D M D D	oose ediun ense	n Dense	Density Index 15 - 35% Density Index 35 - 65% Density Index 65 - 85% Density Index 85 - 100%



PROJECT: PROPOSED REZONING

CLIENT:

TEST PIT NO: PAGE: TP66-2

1 OF 1

NEW23P-0009

LOCATION: 39, 39A and 41 BROCKLESBY ROAD, MEDOWIE

McCLOY GROUP PTY LTD

Job No: Logged by:

DATE:

TH 22/3/23

	EQUIPMENT TYPE: 2.7 Tonne E					nne Ex	kcava	tor	SURFACE RL					
	TES	ST PI	T LENGTI	H:	2.0 m	W	IDTH:	0.5 m	DATUM:					
Γ		Drill	ing and San	npling				Material description and profil	e information			Field	d Test	
	METHOD	WATER	SAMPLES	RL (m)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION: So characteristics,colour,mi	il type, plasticity/particle nor components	MOISTURE	CONSISTENCY DENSITY	Test Type	Result	Structure and additional observations
	Ш	Encountered	E 0.20m		-		CI	FILL: CLAY - medium plastic red-brown, trace fine grained	ity, orange-brown to I sand	D - M				
		Not F	0.50m E 0.60m		0. <u>5</u>		СН	CLAY - medium to high plas pale brown.	ticity, orange-brown to	M < w _p				RESIDUAL SOIL
ſ								Hole Terminated at 0.60 m						
- TEST PTT NEW23P-0009 - TESTPTT LOGS.GPJ < <drawingfile>> 24/03/2023 13:42 10:02:00:04 Datgel Lab and In Situ Tool</drawingfile>					- - 1.0_ - - - - - - - - - - - - - - - - - - -									
T LIB 1.1.GLB Log NON-CORED BOREHOLE -	LEG Wate Stra	END: er (Dat (Dat Wat Wat ta Cha tra G tra G	er Level e and time sl er Inflow er Outflow anges radational or ansitional stra efinitive or dis rata change	hown) ata stict	Notes, Sa U ₅₀ CBR E ASS B Field Test PID DCP(x-y) HP	mples a 50mm Bulk s Enviro (Glass Acid S (Plasti Bulk S S Photoi Dynan Hand I	nd Tes Diame ample f nmenta jar, se c bag, s c bag, s c bag, f c b	ts ter tube sample for CBR testing al sample saled and chilled on site) Soil Sample air expelled, chilled) on detector reading (ppm) etrometer test (test depth interval show ometer test (UCS kPa)	/Consist VS S F St VSt H Fb Density	ency Very Soft Soft Stiff Very Stiff Hard Friable V L ME D	Ve Lc D M	22 25 50 10 20 >4 ery Lo pose edium ense	CS (kPa) 25 5 - 50 5 - 100 00 - 200 00 - 200 00 - 400 400 50056 n Dense	Moisture Condition D Dry M Moist W Wet Wp Plastic Limit WL Liquid Limit Density Index <15%



PROJECT: PROPOSED REZONING

CLIENT: McCLOY GROUP PTY LTD TEST PIT NO:

TP67-2 1 OF 1

NEW23P-0009

JOB NO: LOCATION: 39, 39A and 41 BROCKLESBY ROAD, MEDOWIE LOGGED BY:

DATE:

PAGE:

ΤН 22/3/23

E	EQUI FST	IPM F Pl		≣: I•	2.7 T 2 0 m	onne E	xcava /IDTH·	tor 0.5 m			ACE RL: M·						
-		Drilli	ng and Sam	nlina	2.0			Material	description and profile	information				Field	d Test		
METHOD		WATER	SAMPLES	RL (m)	DEPTI (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL	DESCRIPTION: Soi racteristics,colour,mir	l type, plasticity, nor components	/particle s	MOISTURE CONDITION	CONSISTENCY DENSITY	Test Type	Result	Structi c	ure and additional observations
	-	ncountered	E 0.20m				СІ	FILL: Cl red-brov	LAY - medium plastic wn, trace fine grained	ity, orange-brov sand	wn to	D - M				FILL	
		Not Ei	0.50m E 0.60m		0.5		СН	CLAY - pale bro	medium to high plast wn.	icity, orange-bro	own to	M M M				RESIDUA	
			<u></u>					Hole Te	erminated at 0.60 m								
					1.												
L	EGE	ND:			Notes, S	amples a	and Test	t <u>s</u>			Consiste	ncy	I	<u>U</u>	CS (kPa	<u>)</u> <u>Moistu</u>	re Condition
	Vater	Wate	er Level		CBR	Bulk	sample f	or CBR testing			S S	very soπ Soft 		<2 25	5 - 50	M	Moist
	((Dat	e and time sh	own)	E	Envir (Glas	onmenta s jar, se	al sample aled and chilled	on site)		F F St S	-ırm Stiff		50 10) - 100)0 - 200	W W _p	vvet Plastic Limit
		Wate	er Outflow		ASS	Acid (Plas	Sultate S tic bag, a	son Sample air expelled, chil	led)		VSt V	/ery Stiff Hard		20 >4	10 - 400 100	WL	Liquid Limit
<u>s</u>	trata	Cha Gr	i nges adational or		B <u>Field Te</u>	Bulk sts	Sample				Fb F Density	riable V	V	ery Lo	ose	Density	/ Index <15%
		tra De	insitional strat	ta tict	PID DCP(x-y	Photo) Dyna	bionisatio mic pen	on detector read etrometer test (te	ing (ppm) est depth interval show	n)		L ME	Lo D M	oose edium	n Dense	Density Density	/ Index 15 - 35% / Index 35 - 65%
		str	ata change		HP	Hand	Penetro	ometer test (UCS	S kPa)			D VD	D V	ense ery De	ense	Density Density	/ Index 65 - 85% / Index 85 - 100%



PROJECT: PROPOSED REZONING

CLIENT:

TEST PIT NO: PAGE: TP68-2

1 OF 1

NEW23P-0009

LOCATION: 39, 39A and 41 BROCKLESBY ROAD, MEDOWIE

McCLOY GROUP PTY LTD

JOB NO: LOGGED BY:

DATE:

TH 22/3/23

E	EQUIPMENT TYPE:2.7 Tonne ExcavaTEST PIT LENGTH:2.0 mWIDTH					kcavai	or SURFACE RL: 0.5 m DATUM:						
-	Dri		nolina	2.0 11			Material description and profile in	formation			Fial	d Test	
METHOD	WATER	SAMPLES	RL (m)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION: Soil to characteristics,colour,mino	pe, plasticity/particle components	MOISTURE CONDITION	CONSISTENCY DENSITY	Test Type	Result	Structure and additional observations
	ncountered	E 0.20m		-		СІ	FILL: CLAY - medium plasticity red-brown, trace fine grained s	orange-brown to and	D - M				FILL
	Not Er	0.50m E 0.60m		0. <u>5</u>		СН	CLAY - medium to high plastici pale brown.	y, orange-brown to	M < Wp				RESIDUAL SOIL
							Hole Terminated at 0.60 m						
EHOLE - TEST PIT NEW23P-0009 - TESTPIT LOGS GPJ ≪DrawingFie>> 24/03/2023 13:42 10.02.00.04 Datgel Lab and In Situ Tool	EGEND				- - - - - - - - - - - - - - - - - - -	nd Tesi Diame	19 Ter tube sample	Consiste VS	ency Very Soft			CS (kPa)	Moisture Condition
NON-CORED BO	✓ Wa (Da — Wa → Wa	ater Level ate and time s ater Inflow ater Outflow	hown)	E ASS B	Enviro (Glass Acid S (Plasti Bulk S	onmenta s jar, se sulfate S c bag, a sample	al sample aled and chilled on site) Soil Sample air expelled, chilled)	F St VSt H	Firm Stiff Very Stiff Hard Friable		50 10 20 >4) - 100 00 - 200 00 - 400 400	W Wet W _p Plastic Limit W _L Liquid Limit
QT LIB 1.1.GLB Log	<u>uala Cr</u> C ti C s	Gradational or ransitional stra Definitive or dis strata change	ata stict	Field Test PID DCP(x-y) HP	<u>ts</u> Photo Dynar Hand	ionisatio nic pene Penetro	on detector reading (ppm) etrometer test (test depth interval shown) meter test (UCS kPa)	Density	V L ME D VD	Vi La D M D D Vi	ery Lo bose lediun ense ery D	oose n Dense ense	Density Index <15% Density Index 15 - 35% Density Index 35 - 65% Density Index 65 - 85% Density Index 85 - 100%



PROJECT: PROPOSED REZONING

CLIENT:

TEST PIT NO:

PAGE:

DATE:

JOB NO:

TP69-2

1 OF 1

NEW23P-0009

LOCATION: 39, 39A and 41 BROCKLESBY ROAD, MEDOWIE

McCLOY GROUP PTY LTD

LOGGED BY:

ΤН 22/3/23

	EQUIPMENT TYPE:2.7 Tonne ExcavatTEST PIT LENGTH:2.0 mWIDTH:						cavat DTH:	or 0.5 m	SURFACE RL:0.5 mDATUM:						
ŀ		Drill	ing and San	nplina				Material description	on and profile information				Field	d Test	
	METHOD	METHOD WATER W SAMBIES UN (m) METHOD METHOD METHOD (m) METHOD METHOD METHOD					CLASSIFICATION SYMBOL	MATERIAL DESCF characterist	RIPTION: Soil type, plasticit	y/particle ts	MOISTURE CONDITION	CONSISTENCY DENSITY	Test Type	Result	Structure and additional observations
	ш	Not Encountered	E 0.20m 0.40m E 0.50m				SP	FILL: SAND - fir grey, trace glass containing mate	e to coarse grained, dark g s, brick, concrete, potential rial. plasticity, brown-orange.	rey to asbestos	D M < M				FILL RESIDUAL SOIL
B Log NON-CORED BOREHOLE - TEST PIT NEW23P-0009 - TESTPIT LOGS.GPJ < <drawingfile>> 24/03/2023 13:42 10.02 00.04 Daggel Lab and In Situ Tool</drawingfile>	LEG Watu	END: Per Wat (Dat Wat ta Cha G	er Level e and time sl er Inflow er Outflow anges radational or	nown)		mples ar 50mm Bulk sa Enviro (Glass Acid S (Plasti Bulk S	nd Test Diame ample f nmenta jar, se ulfate S c bag, á ample	Hole Terminated	d at 0.50 m	Consiste VS V S S F F St S VSt V Fb F Density	ncy /ery Soft Soft irm Stiff /ery Stiff irable V		UU <2 255 50 10 200 24	CS (kPa 25 5 - 50 5 - 100 00 - 400 400 pose	Moisture Condition D Dry M Moist W Wet Wp Plastic Limit WL Liquid Limit Density Index <15%
QT LIB 1.1.GL	Gradational or transitional strata Definitive or distict strata change					Pnotoi Dynam Hand F	onisatio nic pene Penetro	etrometer test (test depth meter test (UCS kPa)) interval shown)		L ME D VD	D M D D V	oose edium ense ery De	n Dense ense	Density Index 15 - 35% Density Index 35 - 65% Density Index 65 - 85% Density Index 85 - 100%



PROJECT: PROPOSED REZONING

CLIENT:

TEST PIT NO:

PAGE:

DATE:

TP70-2

1 OF 1

NEW23P-0009

LOCATION: 39, 39A and 41 BROCKLESBY ROAD, MEDOWIE

McCLOY GROUP PTY LTD

Job No: Logged by:

22/3/23

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	EQUIPMENT TYPE: 2 TEST PIT LENGTH: 2 Drilling and Sampling				2.7 To	nne E	cavat	r SURFACE RL: 0.5 m DATUM:						
	16		ing and Som	1.	2.0 11	••		U.5 III	DATON:			Field	d Toot	
	METHOD	WATER	SAMPLES	RL (m)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION: Soi characteristics,colour,mir	type, plasticity/particle for components	MOISTURE CONDITION	CONSISTENCY DENSITY	Test Type	Result	Structure and additional observations
	Ш	ot Encountered	E 0.20m		-		SP	FILL: SAND - fine to coarse g grey, trace glass, brick, conc containing material.	grained, dark grey to rete, potential asbestos	D				FILL
		N	0.40m E 0.50m		0.5		CI	CLAY: medium plasticity, bro		[⊿] × ×			-	RESIDUAL SOIL
LE LOG NON-CORED BOREHOLE - LEST PIL NEW23P-JUUG - LESTPIL LUGS.GF7 < CURANDE LOS 10.02.00.04 Dagge Lab and ID SIL 100	LEG Wat Stra	END: er Wat ∪Dat Uat Wat Uat Cat Uat	er Level er and time sh er Inflow er Outflow anges radational or	nown)	Notes, Sa U ₅₀ CBR E ASS B Eield Test PID	mples a 50mm Bulk s Envirc (Glass Acid S (Plasti Bulk S	nd Test Diame ample f inmenta jar, sea c bag, a ample	Be Terminated at 0.50 m Hole Terminated at 0.50 m Second Second	Consis VS S F St VSt H Fb Density	Bency Very Soft Soft Firm Stiff Hard Friable V		UU <22 500 20 20 24	CS (kPa 5 5 - 50 0 - 100 00 - 400 00 - 400 00 - 000	Moisture Condition D Dry M Moist W Wet Wp, Plastic Limit WL Liquid Limit Density Index <15% Density Index <15%
ରୀ LIB 1.1.0		Originational strata F Definitive or distict Strata change F		transitional strata Definitive or distict strata change			nic pene Penetro	etrometer test (test depth interval show meter test (UCS kPa)	n)	MD Medium Dense Density Index 65 - 65% D Dense Density Index 65 - 85% VD Very Dense Density Index 85 - 100				Density Index 10 - 00 % Density Index 35 - 65% Density Index 65 - 85% Density Index 85 - 100%



PROJECT: PROPOSED REZONING

CLIENT:

TEST PIT NO:

TP71-2

1 OF 1

NEW23P-0009

LOCATION: 39, 39A and 41 BROCKLESBY ROAD, MEDOWIE

McCLOY GROUP PTY LTD

LOGGED BY:

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E	QUIF EST	PMENT TYP PIT LENGT	E: H:	2.7 To 2.0 m	nne E: W	xcava [:] IDTH:	tor S 0.5 m D	SURFACE RL: DATUM:					
	D	rilling and Sar	npling				Material description and profile informati	on			Fiel	d Test	
METHOD	WATER	SAMPLES	RL (m)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION: Soil type, pla characteristics,colour,minor compo	sticity/particle onents	MOISTURE CONDITION	CONSISTENCY DENSITY	Test Type	Result	Structure and additional observations
ц	ot Encountered	E 0.20m		-		SP	FILL: SAND - fine to coarse grained, d grey, trace glass, brick, concrete, pote containing material.	ark grey to ntial asbestos	D				FILL
	Ž	0.40m E		-		CI	CLAY: medium plasticity, brown-orang	e.	D - M				RESIDUAL SOIL
		0.50m		0.0		1	Hole Terminated at 0.50 m						
NON-CORED BOREHOLE - TEST PIT NEW23P-0009 - TEST PIT LOGS.GPJ < <drawingfie>> 24/03/2023 13:42 10.02.00.04 Datgel Lab and In Situ Tool</drawingfie>	EGENI Vater (II) W W	D: /ater Level Date and time s /ater Inflow /ater Outflow	hown)		mples a 50mm Bulk s Enviro (Glass Acid S (Plast	nd Tes: D Diame ample f B jar, se Sulfate S is iso, second	ts ter tube sample ter tube sample or CBR testing al sample aled and chilled on site) Soil Sample air expelled, chilled)	Consist VS S F St VSt H	ency Very Soft Soft Firm Stiff Very Stiff Hard		<u>U</u> <2 25 5 10 20 20	CS (kPa) 25 5 - 50 0 - 100 00 - 200 00 - 400 400	t Moisture Condition D Dry M Moist W Wet Wp Plastic Limit Wt_ Liquid Limit
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ENGINEERING LOG - TEST PIT

PROJECT: PROPOSED REZONING

CLIENT: McCLOY GROUP PTY LTD TEST PIT NO:

PAGE:

DATE:

JOB NO:

LOGGED BY:

TP72-2

1 OF 1

NEW23P-0009

LOCATION: 39, 39A and 41 BROCKLESBY ROAD, MEDOWIE

ΤН 21/3/23

EG	EQUIPMENT TYPE:2.7 Tonne ETEST PIT LENGTH:2.0 m						tor	SURF							
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	Dril	ling and San	npling				Material de	scription and profile	e information				Fiel	d Test	
METHOD	WATER	SAMPLES	RL (m)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL I chara	DESCRIPTION: So Icteristics,colour,mi	il type, plasticity, nor components	/particle	MOISTURE CONDITION	CONSISTENCY DENSITY	Test Type	Result	Structure and additional observations
ш	Not Encountered	E 0.20m		-		SP	FILL: Clay grained, t angular g concrete,	/ey Gravelly SAND rown to grey, fine t ravel, fines of low p asphalt.) - fine to mediur to medium grain plasticity, trace s	n ed lag,	D - M				FILL
		0.50m E 0.60m		0.5_		СН	CLAY - m 0.60m	edium to high plas	ticity, orange-bro	own.	M < w _p				RESIDUAL SOIL
							Hole Terr	ninated at 0.60 m							
023 15:42 10.02.00.04 Datgel Lab and In Situ Tool				- - 1. <u>0</u> -											
TEST PIT NEW23P-0009 - TESTPIT LOGS GPJ < <drawingfile>> 24/03/2</drawingfile>				- 1. <u>5</u> - - -											
	L GEND: ter (Da (Da - Wa ■ Wa ■ Wa ■ C tr tr S	ter Level te and time sl ter Inflow ter Outflow anges radational or ansitional stra efinitive or dis rata change	hown) ata stict	I Notes, Sa U ₅₀ CBR E ASS B Field Test PID DCP(x-y) HP	I mples a 50mm Bulk s Envirc (Glass Acid S (Plasti Bulk S Bulk S ts Photo Dynar Hand	nd Tes Diame ample ample sonmenta s jar, se Sulfate S ic bag, Sample ionisationisationis nic pen Penetro	ts ter tube sample for CBR testing al sample aled and chilled or Soil Sample air expelled, chilled on detector reading etrometer test (tes ometer test (UCS F	n site) d) g (ppm) st depth interval shov kPa)	vn)	ConsisterVSVSSFFStSVStVHFFbFDensity	L ncy /ery Soft irm tiff /ery Stiff lard triable V L ME D VD	V L D M D	LU 25 50 10 20 20 20 20 20 20 20 20 20 2	CS (kPa 25 5 - 50 0 - 100 00 - 200 00 - 400 400 pose n Dense ense	Moisture Condition D Dry M Moist W Wet W _p Plastic Limit U Liquid Limit Density Index <15%



PROJECT: PROPOSED REZONING

CLIENT: McCLOY GROUP PTY LTD

LOCATION: 39, 39A and 41 BROCKLESBY ROAD, MEDOWIE

TEST PIT NO:

PAGE:

DATE:

JOB NO:

LOGGED BY:

TP73-2

1 OF 1 NEW23P-0009

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21/3/23

	EQI TES	JIPN ST P	IENT TYP	E: 1:	2.7 To 2.0 m	nne E: W	kcava IDTH:	tor 0.5 m		SURFAC	SURFACE RL: DATUM:					
		Dril	ing and San	npling				Material de	scription and profile in	formation				Fiel	d Test	
	METHOD	WATER	SAMPLES	RL (m)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL D charad	ESCRIPTION: Soil ty cteristics,colour,minor	pe, plasticity/pa components	article	MOISTURE CONDITION	CONSISTENCY DENSITY	Test Type	Result	Structure and additional observations
	ш	Not Encountered	E 0.20m 0.50m E 0.60m		- - 0.5_		SP 	FILL: Clay grained, b angular gr concrete, 0.30m CLAY - m	rey Gravelly SAND - fi rown to grey, fine to n avel, fines of low plas asphalt. edium to high plasticit	ne to medium nedium grained ticity, trace slag	I g, m.	D - M Å V W				FILL RESIDUAL SOIL
SLB Log NON-CORED BOREHOLE - TEST PIT NEW23P-0009 - TESTPIT LOGS.GPJ < <drawingfile>> 24.03/2023 13:42 10.02.00.04 Datgel Lab and In Situ Tool</drawingfile>		END: Wat Wat Wat Char Wat	er Level te and time sl er Inflow er Outflow anges radational or radational or	nown)		mples a 50mm Bulk s Envirc (Glass Acid S (Plast Suk S S Photo	nd Tesi Diame ample f Sjar, se Sulfate S Sample ionisatid	ts ter tube sample for CBR testing al sample aled and chilled on Soil Sample air expelled, chilled	site)	2 \ \ <u>-</u>	Consister VS V S S F Fi St S St S /St V H H Fb Fi Density	ncy ery Soft irm tiff ery Stiff ard riable V L	V.	U 25 50 10 20 24 ery Lo pose	CS (kPe 25 5 - 50 00 - 200 00 - 200 00 - 400 000 00 - 200 00 br>00 - 200 00 00 - 200 00 00 - 200 00 00 - 200 00 00 - 200 00 00 - 200 00 00 00 - 200 00 00 00 00 00 00 00 00 00 00 00 00	1) Moisture Condition D Dry M Moist W Wet Wp Plastic Limit WL Liquid Limit Density Index <15% Density Index 15 - 35%
2T LIB 1.1.GLB Lo	Strata Changes Gradational or transitional strata Definitive or distict strata change				a Changes B Bulk Sample Gradational or transitional strata Field Tests Definitive or distict strata change DCP(x-y) Dynamic per HP				ı (ppm) : depth interval shown) Pa)	<u> </u>	Density	V L ME D VD		ery Lo bose lediun ense ery Do	n Dense ense	Density Index <15% Density Index 15 - 35% Density Index 35 - 65% Density Index 65 - 85% Density Index 85 - 100%



ENGINEERING LOG - TEST PIT

PROJECT: PROPOSED REZONING

McCLOY GROUP PTY LTD

CLIENT:

TEST PIT NO:

TP74-2 1 OF 1

NEW23P-0009

LOCATION: 39, 39A and 41 BROCKLESBY ROAD, MEDOWIE

LOGGED BY:

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JOB NO:

ΤН 21/3/23

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	Dril	ling and San	npling				Material description and profile informat	tion			Fiel	d Test	
METHOD	WATER	SAMPLES	RL (m)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION: Soil type, pla characteristics,colour,minor comp	asticity/particle onents	MOISTURE CONDITION	CONSISTENCY DENSITY	Test Type	Result	Structure and additional observations
	ncountered	E 0.20m		-		SP	FILL: Clayey Gravelly SAND - fine to r grained, brown to grey, fine to mediun angular gravel, fines of low plasticity, t concrete, asphalt.	nedium ı grained race slag,	D - M				FILL
ш	Not Er	0.50m E 0.60m		0.5_		СН	CLAY - medium to high plasticity, orar	ige-brown.	M < wp				RESIDUAL SOIL
		0.000		-	<u> //////</u>	1	Hole Terminated at 0.60 m						
DBOREHOLE - TEST PIT NEW23P-0009 - TESTPIT LOGS.GPJ ≪DrawingFile>> 24/03/2023 13:42 10.02.00.04 Datgel Lab and in Situ Tool ▲ 話 頂	GEND: ter : Wa	ter Level			- - - - - - - - - - - - - - - - - - -	Ind Tess Diame ample f	s er tube sample or CBR testing I sample	Consiste VS VS S F F F	ncy /ery Soft			CS (kPa 25 5 - 50 - 100	Moisture Condition D Dry M Moist W Wet
	(Da - Wa ∎ Wa ata Ch	ter Inflow ter Inflow ter Outflow <u>anges</u> tradational or	nown)	ASS B <u>Field Te</u> st	(Glass Acid S (Plast Bulk S ts	s jar, se Sulfate S ic bag, a Sample	aled and chilled on site) toil Sample air expelled, chilled)	St S VSt V H H Fb F <u>Densi</u> tv	otiff /ery Stiff lard /riable V	V	10 20 >2	00 - 200 00 - 400 100 100	Wp Plastic Limit WL Liquid Limit Density Index <15%
AT LIB 1.1.GLB	tr D si	ansitional stra efinitive or dis trata change	ata stict	PID DCP(x-y) HP	Photo Dynar Hand	ionisatio nic pen Penetro	n detector reading (ppm) etrometer test (test depth interval shown) meter test (UCS kPa)		L ME D VD	Lo D D V	oose lediun ense ery De	n Dense ense	Density Index 15 - 35% Density Index 35 - 65% Density Index 65 - 85% Density Index 85 - 100%

APPENDIX D:

Data Validation Report
QA/QC DATA VALIDATION REPORT Job No: NEW23P-0009AB

Eurofins report: 974150S, 974150-AID, SGS reports: SE245060, SE245327

1. SAMPLE HANDLING

Item		Comments
Were the sample holding times met?	Yes	
Were the samples in proper custody between collection in the field and reaching the laboratory?	Yes	
Were the samples properly and adequately preserved?	Yes	
Were the samples received by the laboratory in good condition?	Yes	

Sampling Handling was:

Satisfactory : \checkmark	Partially Satisfactory:	Unsatisfactory:
-----------------------------	-------------------------	-----------------

2. PRECISION AND ACCURACY ASSESSMENT

Item	Yes/No	Comment
Was a NATA registered laboratory used?	Yes	-
Did the laboratory perform the requested tests?	Yes	-
Were the laboratory methods adopted NATA endorsed?	Yes	-
Were the appropriate test procedures followed?	Yes	-
Were the reporting limits satisfactory?	Yes	-
Was the NATA seal on the reports?	Yes	-
Were the reports signed by an authorised person?	Yes	-

Laboratory Precision and Accuracy was:

	Satisfactory : \checkmark	Partially Satisfactory:	Unsatisfactory:
--	-----------------------------	-------------------------	-----------------

3. FIELD QA/QC

Soil and Water Samples

	Soil
No. Samples Analysed	73
No. of Duplicates	2
No. of Triplicates	2
No. of Wash Blanks	1
No. of Trip Blanks	0
No. of Trip Spikes	0

No. Days Sampling

Item	Soil
Number of Days Sampling	2
Number of Sampling Events	1

Field Duplicates

ltem	Yes/No	Comments
Were an adequate number of field duplicates collected?	Yes	Duplicates collected at a rate of 1 per 20 samples.
Were RPDs within control limits? No Limit for 5-10 x EQL and 30% for >10 x EQL	No	RPDs were within the acceptable range with the exception of duplicate pair TP73-2_0.0-0.2/ D.21.3.23 for chromium (33%), copper (100%) and nickel (90%) and triplicate pair TP73-2_0.0-0.2/T.21.3.23 for chromium (33%), copper (158%), nickel (172%) and zinc (54%). These RPDs are considered to be due to the heterogeneous distribution of metal contaminants in surface soils as observed during sampling and are not considered to affect the overall data representativeness and usability. It is noted that low concentrations can exaggerate the percentage differences with respect to small total concentrations, therefore where results for primary and duplicate sample were less than 10 times the LOR, the RPDs have been disregarded.

Trip Blanks/Trip Spikes

ltem	Yes/No	Comments
Were an adequate number of trip blanks and trip spikes collected?	Yes	Trip blanks and trip spikes were not deemed necessary based on field observations, and primary contaminants of concern for the site. No odours or staining was observed
Were the trip blanks free of contaminants? (If no, comment whether the contaminants present are also detected in the samples and whether they are common laboratory chemicals).	N/A	
Were the trip spikes within recovery limits (between 80% and 120%)	N/A	

Rinsate Samples

Item	Yes/No	Comments
Were an adequate number of rinsate samples used? (1 per day of using reusable sampling equipment – trowel, hand auger etc)	Yes	-
Were the rinsate samples free of contaminants? (If no, comment whether the contaminants present are also detected in the samples and whether they are common laboratory chemicals).	Yes	-

4. LABORATORY INTERNAL QUALITY CONTROL PROCEDURES

A) Type of QA/QC Sample	Yes/No	Comments
Laboratory Blanks/Reagent Blanks (at least 1 per batch)	Yes	-
Laboratory Duplicates (at least 1 per batch or 1 per 10 samples)	Yes	
Matrix Spikes, Matrix Spike Duplicates (1 for each soil type)	Yes	-
Laboratory Control Spike	Yes	-
Surrogate (where appropriate)	Yes	-

Item	Yes/No	Comments
B) Were the laboratory blanks and/or reagent blanks free of contamination?	Yes	-

Item	Yes/No	Comments
		Matrix spike recoveries were within the control limits with the exception of the following:
C) Were the spike recoveries within control limits? I: Organics/inorganics/metals (50% to 150%) II: Phenols (20% to 130%)	Yes	 MCPA where Eurofins quoted Q08 which states "The matrix spike recovery is outside of the recommended acceptance criteria. An acceptable recovery was obtained for the laboratory control sample indicating a sample matrix interference."
		 TRH analytes where SGS quoted 5 which states "Recovery failed acceptance criteria due to the presence of significant concentration of analytes (i.e. the concentration of analyte exceeds the spike level)."
		Based on the above, and as no elevated TRH was reported on the site, the recoveries are considered acceptable.
		Laboratory duplicate RPDs were recorded within the control limits, with the exception of the following:
D) Were the RPDs of the laboratory duplicates within control limits?	Yes	• Eurofins duplicate RPDs for chromium and zinc RPDs, the laboratory quoted code Q15 which states "The RPD reported passes Eurofins Environment Testing's QC – Acceptance Criteria as defined in the Internal Quality Control Review and Glossary page of this report" And Q02 which states "The duplicate %RPD is outside the recommended acceptance criteria. Further analysis indicates sample heterogeneity as the cause".
		 SGS duplicate RPDs for nickel, lead and TRH analytes, the laboratory quotes 2 which states "RPD failed acceptance criteria due to sample heterogeneity".
		Based on this, the RPDs are considered acceptable.
E) Were the surrogate recoveries within control limits?	Yes	-

Laboratory Internal QA/QC was:

Satisfactory : \checkmark	Partially Satisfactory:	Unsatisfactory:

5. DATA USABILITY

Item	Yes/No	Comments
Was the data directly usable?	Yes	

QA/QC DATA VALIDATION REPORT

Was the data usable with the following corrections/modifications? (see comments)	NA	
Was the data not usable?	NA	

APPENDIX E:

Laboratory Documents

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	boratory Use On	od of Shipment													Quote ID Nz	rchase Order	cial Directions	
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Jaids														di D				
in Sloc) [] H		21/03/23	21/03/23	21/03/23	21/03/23	21/03/23	21/03/23	21/03/23	21/03/23	21/03/23	21/03/23	Sampled late/Time				
Sur		and Delivered		Soil	Matrix Solid (S) Water (W)	When	e metals ar SUITE co	Analys e requested, plea de must be used t	ie ie									
PER	PER		2		×		×										M8	
ADL I NO	ADL NTI	D Po	2		×		×									Asb	estos (%w/w)	
DRW	I DRW	stal													B7	(TRH, B	TEX, PAHs, N	le
	and the second s	Na														B14	(OCPs/OPPs)	
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174150	29													ments lazard Warning)	3 days ♦	g by 9am)♦ 1 day♦	

CHAIN OF CUSTODY RECORD Sydney Laboratory Unit F3 Bid F 15 Mars Road Lane Cove West NSW 2055 02 9900 6400 EnvinSampleNSW@eurofins.com NEW23P-0009

Qualtest

Eurofins | Env

ment Testing ABN 50 005 085 521

2 Murray Dwyer Circuit, Mayfield West NSW 2304

Project Name

Medowie Gardens

Contact Name Phone Nº

432189418 Libby Betz

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Brisbane Laboratory
 Unit 1 21 Smallwood Place Muranie QLD 4172
 07 3902 4600 EnviroSampleQLD@eurofins.com

Project Manager EDD Format ESdat EQuIS etc

> Excel Libby Betz

> > Perth Laboratory
> > Unit 2 91 Leach Highway Kewdale WA 6105
> > 08 9251 9600 EnviroSampleWA@eurofins.com

Sampler(s)

Tom Hall

libbybetz@qualtest.com.au billysnow@qualtest.com.au

Required Turnaround Time (TAT)

counts@qualtes

Melbourne Laboratory
 6 Monterey Road Dandenong South VIC 3175
 03 8564 5000 EnviroSampleVic@eurofins.com

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Food Testing

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REPORT CODE	AR-23-NV-003966-01		REPORT DATE 2 Eurofins Environment Tes	2 4/03/2023 ting Australia Pty Ltd
	For th	e attention of	Analytical Reports 6 Monterey Road Dandenong South 3175 Melbourne	
		Phone Email	EnviroReportsau@eurofins.com	
Contact for your orders: Submission Reference:	Ruvini Herath Merged from order cau001-order-974150-2	230323.xml	Order code: Purchase Order Number:	EUAUTWU-00030036 974150
SAMPLE CODE	726-2023-00010510			
Client Reference: Sample described as: Reception Date: Analysis Starting Date: Sampled Date & Time:	23-Ma0051680 TP11-4_0.2-0.3 23/03/2023 23/03/2023 21/03/2023 12:00		Reception temperature: Analysis Ending Date:	5.3 24/03/2023
	RESULTS		LOQ	
VQ239 E.coli Analysis Starting Date: 23/0 E.Coli • VQ255 Thermotolerant	3/2023 14:00 <10 t Coliforms	MPN/g	1	
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Eurofins Food Testing Australia Pty Ltd 6 Monterey Road Dandenong South Melbourne VIC 3175 AUSTRALIA Phone +61385645000

https://www.eurofins.com.au/food-testing

Accredited for compliance with ISO/IEC 17025 - Testing NATA is a signatory to the ILAC Mutual Recognition Arrangement for the mutual recognition of the equivalence of testing, medical testing, calibration, inspection, proficiency testing scheme providers and reference materials producers reports and certificates.



Accreditation Number 20293

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Phone +61385645000 https://www.eurofins.com.au/food-testing 17025 - Testing NATA is a signatory to the ILAC Mutual Recognition Arrangement for the mutual recognition of the equivalence of testing, medical testing, calibration, inspection, proficiency testing scheme providers and reference materials producers reports and certificates. Accreditation Number 20293



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Uthayakumaran Melbourne (AU)

EXPLANATORY NOTE

- Test is not accredited ٠
- Test is subcontracted within Eurofins group and is accredited 0
- Test is subcontracted within Eurofins group and is not accredited •
- Test is subcontracted outside Eurofins group and is accredited
- Test is subcontracted outside Eurofins group and is not accredited

N/A means Not applicable

Not Detected means not detected at or above the Limit of Quantification (LOQ)

LOQ Limit of Quantification

U Measurement Uncertainty

< Less than, ≤ Less than or equal to

> Greater than, ≥ Greater than or equal to

The tests are identified by a 5 digit code, full details can be provided on request.

Information supplied by the client. This information can have an impact on the validity of results.

Samples are tested as received and the results relate only to the sample tested.

Analysis date is reported as the start date of extraction for a method.

The results may not be reproduced except in full, without a written approval from the laboratory.

Eurofins General Terms and Conditions apply.

END OF REPORT

Eurofins Food Testing Australia Pty Ltd 6 Monterey Road **Dandenong South** Melbourne **VIC 3175 AUSTRALIA**

Phone +61385645000 https://www.eurofins.com.au/food-testing Accredited for compliance with ISO/IEC 17025 - Testing NATA is a signatory to the ILAC Mutual

Recognition Arrangement for the mutual recognition of the equivalence of testing, medical testing, calibration, inspection, proficiency testing scheme providers and reference materials producers reports and certificates.



Accreditation Number 20293



Eurofins Environment Testing Australia Pty Ltd

ABN: 50 005 085 521						ABN: 91 05 0159 898
Melbourne	Geelong	Sydney	Canberra	Brisbane	Newcastle	Perth
6 Monterey Road	19/8 Lewalan Street	179 Magowar Road	Unit 1,2 Dacre Street	1/21 Smallwood Place	1/2 Frost Drive	46-48 Banksia Road
Dandenong South	Grovedale	Girraween	Mitchell	Murarrie	Mayfield West NSW 2304	Welshpool
VIC 3175	VIC 3216	NSW 2145	ACT 2911	QLD 4172	Tel: +61 2 4968 8448	WA 6106
Tel: +61 3 8564 5000	Tel: +61 3 8564 5000	Tel: +61 2 9900 8400	Tel: +61 2 6113 8091	Tel: +61 7 3902 4600	NATA# 1261	Tel: +61 8 6253 4444
NATA# 1261 Site# 1254	NATA# 1261 Site# 25403	NATA# 1261 Site# 18217	NATA# 1261 Site# 25466	NATA# 1261 Site# 20794	Site# 25079 & 25289	NATA# 2377 Site# 2370

EnviroSales@eurofins.com

www.eurofins.com.au

Eurofins ARL Pty Ltd Eurofins Environment Testing NZ Ltd ABN: 91 05 0159 898 NZBN: 9429046024954

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Banksia Road	35 O'Rorke Road	43 Detroit Drive										
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06	Auckland 1061	Christchurch 7675										
61 8 6253 4444	Tel: +64 9 526 45 51	Tel: 0800 856 450										
# 2377 Site# 2370	IANZ# 1327	IANZ# 1290										

Sample Receipt Advice

Company name:	Qualtest
Contact name:	Libby Betz
Project name:	MEDOWIE GARDENS
Project ID:	NEW23P-0009
Turnaround time:	5 Day
Date/Time received	Mar 22, 2023 11:10 AM
Eurofins reference	974150

Sample Information

- A detailed list of analytes logged into our LIMS, is included in the attached summary table.
- All samples have been received as described on the above COC.
- COC has been completed correctly.
- Attempt to chill was evident.
- Appropriately preserved sample containers have been used.
- All samples were received in good condition.
- Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.
- Appropriate sample containers have been used.
- Sample containers for volatile analysis received with zero headspace.
- Split sample sent to requested external lab.
- Some samples have been subcontracted.
- N/A Custody Seals intact (if used).

Notes

Extra sample : TP02-1_0.5-0.6

Contact

If you have any questions with respect to these samples, please contact your Analytical Services Manager:

Andrew Black on phone : (+61) 2 9900 8490 or by email: AndrewBlack@eurofins.com Results will be delivered electronically via email to Libby Betz - libbybetz@qualtest.com.au.

Note: A copy of these results will also be delivered to the general Qualtest email address.

Global Leader - Results you can trust



Certificate of Analysis

Environment Testing

Qualtest 2 Murray Dwyer Circuit Mayfield West NSW 2304



NATA Accredited Accreditation Number 1261 Site Number 18217

Accredited for compliance with ISO/IEC 17025–Testing NATA is a signatory to the ILAC Mutual Recognition Arrangement for the mutual recognition of the equivalence of testing, medical testing, calibration, inspection, proficiency testing scheme providers and reference materials producers reports and certificates.

Attention: Report Project Name Project ID Received Date Date Reported	Libby Betz 974150-AID MEDOWIE GARDENS NEW23P-0009 Mar 22, 2023 Apr 03, 2023
Methodology: Asbestos Fibre Identification	Conducted in accordance with the Australian Standard AS 4964 – 2004: Method for the Qualitative Identification of Asbestos in Bulk Samples and in-house Method LTM-ASB-8020 by polarised light microscopy (PLM) and dispersion staining (DS) techniques. NOTE: Positive Trace Analysis results indicate the sample contains detectable respirable fibres.
Unknown Mineral Fibres	Mineral fibres of unknown type, as determined by PLM with DS, may require another analytical technique, such as Electron Microscopy, to confirm unequivocal identity. NOTE: While Actinolite, Anthophyllite and Tremolite asbestos may be detected by PLM with DS, due to variability in the optical properties of these materials, AS4964 requires that these are reported as UMF unless confirmed by an independent technique.
Subsampling Soil Samples	The whole sample submitted is first dried and then passed through a 10mm sieve followed by a 2mm sieve. All fibrous matter greater than 10mm, greater than 2mm as well as the material passing through the 2mm sieve are retained and analysed for the presence of asbestos. If the sub 2mm fraction is greater than approximately 30 to 60g then a sub-sampling routine based on ISO 3082:2009(E) is employed. NOTE: Depending on the nature and size of the soil sample, the sub-2 mm residue material may need to be sub-sampled for trace analysis, in accordance with AS 4964-2004.
Bonded asbestos- containing material (ACM)	The material is first examined and any fibres isolated for identification by PLM and DS. Where required, interfering matrices may be removed by disintegration using a range of heat, chemical or physical treatments, possibly in combination. The resultant material is then further examined in accordance with AS 4964 - 2004. NOTE: Even after disintegration it may be difficult to detect the presence of asbestos in some asbestos-containing bulk materials using PLM and DS. This is due to the low grade or small length or diameter of the asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials. Vinyl/asbestos floor tiles, some asbestos-containing sealants and mastics, asbestos-containing epoxy resins and some ore samples are examples of these types of material, which are difficult to analyse.
Limit of Reporting	The performance limitation of the AS 4964 (2004) method for non-homogeneous samples is around 0.1 g/kg (equivalent to 0.01% (w/w)). Where no asbestos is found by PLM and DS, including Trace Analysis, this is considered to be at the nominal reporting limit of 0.01% (w/w). The NEPM screening level of 0.001% (w/w) is intended as an on-site determination, not a laboratory Limit of Reporting (LOR), per se. Examination of a large sample size (e.g. 500 mL) may improve the likelihood of detecting asbestos, particularly AF, to aid assessment against the NEPM criteria. Gravimetric determinations to this level of accuracy are outside of AS 4964 and hence NATA Accreditation does not cover the performance of this service (non-NATA results shown with an asterisk). NOTE: NATA News March 2014, p.7, states in relation to AS 4964: "This is a qualitative method with a nominal reporting limit of 0.01 % " and that currently in Australia "there is no validated method available for the quantification of asbestos". This report is consistent with the analytical procedures and reporting recommendations in the NEPM and the WA DoH.



MEDOWIE GARDENS
NEW23P-0009
Mar 21, 2023
974150-AID

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
TP12-5_0.0-0.2	23-Ma0051684	Mar 21, 2023	Approximate Sample 685g Sample consisted of: Brown fine-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
TP13-5_0.0-0.2	23-Ma0051686	Mar 21, 2023	Approximate Sample 604g Sample consisted of: Brown fine-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
TP06-2_0.0-0.2	23-Ma0051698	Mar 21, 2023	Approximate Sample 802g Sample consisted of: Brown coarse-grained sandy soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
TP72-2_0.0-0.2	23-Ma0051700	Mar 21, 2023	Approximate Sample 945g Sample consisted of: Brown coarse-grained soil, brick, rocks and debris	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
TP73-2_0.0-0.2	23-Ma0051702	Mar 21, 2023	Approximate Sample 886g Sample consisted of: Brown fine-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
TP74-2_0.0-0.2	23-Ma0051705	Mar 21, 2023	Approximate Sample 855g Sample consisted of: Brown coarse-grained soil, rocks and debris	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
SS41-1	23-Ma0051707	Mar 21, 2023	Approximate Sample 542g Sample consisted of: Brown fine-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
SS40-1	23-Ma0051708	Mar 21, 2023	Approximate Sample 699g Sample consisted of: Brown coarse-grained soil, bitumen, brick, cement, organic debris and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.



Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
SS45-1	23-Ma0051709	Mar 21, 2023	Approximate Sample 656g Sample consisted of: Brown fine-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
SS42-1	23-Ma0051710	Mar 21, 2023	Approximate Sample 649g Sample consisted of: Brown fine-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
SS43-1	23-Ma0051711	Mar 21, 2023	Approximate Sample 715g Sample consisted of: Brown fine-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
SS50-3	23-Ma0051713	Mar 21, 2023	Approximate Sample 674g Sample consisted of: Brown fine-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
TP01-1_0.0-0.2	23-Ma0051714	Mar 21, 2023	Approximate Sample 725g Sample consisted of: Brown fine-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
TP02-1_0.0-0.2	23-Ma0051716	Mar 21, 2023	Approximate Sample 639g Sample consisted of: Brown fine-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
SS75-2	23-Ma0051717	Mar 21, 2023	Approximate Sample 702g Sample consisted of: Brown fine-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
SS76-2	23-Ma0051718	Mar 21, 2023	Approximate Sample 806g Sample consisted of: Brown fine-grained clayey soil, cement and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
SS77-2	23-Ma0051719	Mar 21, 2023	Approximate Sample 753g Sample consisted of: Brown fine-grained clayey soil, cement and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
SS38-1	23-Ma0051722	Mar 21, 2023	Approximate Sample 633g Sample consisted of: Brown fine-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
SS39-1	23-Ma0051724	Mar 21, 2023	Approximate Sample 686g Sample consisted of: Brown fine-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
SS44-1	23-Ma0051725	Mar 21, 2023	Approximate Sample 696g Sample consisted of: Brown fine-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
SS46-1	23-Ma0051726	Mar 21, 2023	Approximate Sample 715g Sample consisted of: Brown fine-grained clayey soil, cement and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.



Sample History

Where samples are submitted/analysed over several days, the last date of extraction is reported.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description

Asbestos - LTM-ASB-8020

Testing SiteExtractedSydneyMar 22, 2023

Holding Time 23 Indefinite

		fine	ting Australia Pty Ltd												Eurofins ARL Pty Ltd ABN: 91 05 0159 898	Eurofins Environm	ent Testing NZ Ltd			
web: w email:	b: www.eurofins.com.au hail: EnviroSales@eurofins.com Company Name: Qualtest		Melbourne Geelong 6 Monterey Road 19/8 Lewalan Street Dandenong South Grovedale VIC 3175 VIC 3216 Tel: +61 3 8564 5000 Tel: +61 3 8564 5000 NATA# 1261 Site# 1254 NATA# 1261 Site# 25403			gowar Ro en 45 2 9900 1261 Site	oad 8400 e# 1821	Canb Unit 1 Mitch ACT 2 Tel: + 7 NATA	erra I,2 Dacr ell 2911 61 2 61 \# 1261	re Stree 13 809 Site# 2	t 1, N C 1 T 25466 N	risbane /21 Sma lurarrie LD 417 el: +61 ATA# 1	e allwood 72 7 3902 4 261 Site	Place 4600 e# 2079	Newo 1/2 Fi Mayfi Tel: + NATA 4 Site#	castle rost Driv eld Wes 61 2 49 4# 1261 25079	ve st NSW 2304 968 8448 & 25289	Perth 46-48 Banksia Road Welshpool WA 6106 Tel: +61 8 6253 4444 NATA# 2377 Site# 2370	Auckland 35 O'Rorke Road Penrose, Auckland 1061 Tel: +64 9 526 45 51 IANZ# 1327	Christchurch 43 Detroit Drive Rolleston, Christchurch 7675 Tel: 0800 856 450 IANZ# 1290
Co Ad	mpany Name: dress:	Qualtest 2 Murray Dv Mayfield We NSW 2304	vyer Circuit est				O Ri Pi Fa	rder N eport hone: ax:	lo.: #:	((97415)2 496)2 496	0 58 446 50 977	68 75					Received: Due: Priority: Contact Name:	Mar 22, 2023 11:10 Mar 29, 2023 5 Day Libby Betz) AM
Pro Pro	oject Name: oject ID:	MEDOWIE NEW23P-00	GARDENS 009														E	urofins Analytical Ser	vices Manager : Ar	ndrew Black
			Asbestos - WA guidelines	E.coli (MPN)	HOLD	HOLD	pH (1:5 Aqueous extract at 25 °C as rec.)	Thermotolerant Coliforms (MPN)	Acid Herbicides	Metals M8	Suite B14: OCP/OPP	Moisture Set	Cation Exchange Capacity	Eurofins Suite B7						
Melb	ourne Laborato	ory - NATA # 12	261 Site # 12	54				Х				Х				Х				
Sydı	ney Laboratory -	- NATA # 1261	Site # 18217	7		X			Х	Х			Х	Х	X		X			
Exte	rnal Laboratory	Sample Date	Sampling	Matrix	LABID	-	X				X									
		Cumple Date	Time	Matrix																
1	TP09-4_1.5- 1.6	Mar 21, 2023		Soil	N23-Ma0051678			Х												
2	TP09-4_1.9- 2.0	Mar 21, 2023		Soil	N23-Ma0051679			x												
3	TP11-4_0.2- 0.3	Mar 21, 2023		Soil	N23-Ma0051680		x				x									
4	TP11-4_1.0- 1.1	Mar 21, 2023		Soil	N23-Ma0051681		x				х									
5	TP11-4_1.5- 1.6	Mar 21, 2023		Soil	N23-Ma0051682	1		x												
6	TP11-4_1.9- 2.0	Mar 21, 2023		Soil	N23-Ma0051683			x												
7	TP12-5_0.0- 0.2	Mar 21, 2023		Soil	N23-Ma0051684	x						x	х		x					

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web: web: web: web: web: web: web: web:	ab: www.eurofins.com.au nail: EnviroSales@eurofins.com Company Name: Qualtest		Melbourne 6 Monterey Road Dandenong South VIC 3175 Tel: +61 3 8564 5000 NATA# 1261 Site# 12	Geelong Sy 19/8 Lewalan Street 17 Grovedale Gi VIC 3216 NS Tel: +61 3 8564 5000 Te 54 NATA# 1261 Site# 25403 NA	ydney 79 Magowa irraween SW 2145 el: +61 2 9 ATA# 126	ar Roa 9900 84 1 Site#	ad 400 # 1821	Canberra d Unit 1,2 Dacre Street Mitchell ACT 2911 200 Tel: +61 2 6113 8091 18217 NATA# 1261 Site# 25			B N Q 1 T 25466 N	risbane /21 Sma lurarrie LD 417 el: +61 ATA# 1	e allwood 72 7 3902 261 Site	Place 4600 e# 2079	Newo 1/2 F Mayfi Tel: + NATA 4 Site#	castle rost Driveld West 61 2 49 44 1261 25079	ve st NSW 2304 968 8448 & 25289	Perth 46-48 Banksia Road Welshpool WA 6106 Tel: +61 8 6253 4444 NATA# 2377 Site# 2370	Auckland 35 O'Rorke Road Penrose, Auckland 1061 Tel: +64 9 526 45 51 IANZ# 1327	Christchurch 43 Detroit Drive Rolleston, Christchurch 7675 Tel: 0800 856 450 IANZ# 1290
Cc Ac	ompany Name: Idress:	Qualtest 2 Murray D Mayfield W NSW 2304	wyer Circuit est				Oi Re Pi Fa	rder N eport none: ax:	lo.: #:	9 ((97415 02 496 02 496	0 58 440 50 977	68 75					Received: Due: Priority: Contact Name:	Mar 22, 2023 11:10 Mar 29, 2023 5 Day Libby Betz	D AM
Pr Pr	oject Name: oject ID:	MEDOWIE NEW23P-0	GARDENS 009														E	urofins Analytical Ser	vices Manager : Ar	ndrew Black
	Sample Detail						E.coli (MPN)	HOLD	HOLD	pH (1:5 Aqueous extract at 25 °C as rec.)	Thermotolerant Coliforms (MPN)	Acid Herbicides	Metals M8	Suite B14: OCP/OPP	Moisture Set	Cation Exchange Capacity	Eurofins Suite B7			
Mell	bourne Laborato	ory - NATA # 1	261 Site # 1254					Х				X				Х				
Syd	ney Laboratory	- NATA # 1261	Site # 18217			Х			Х	Х			х	Х	Х		х			
8	TP12-5_0.5- 0.6	Mar 21, 2023	Soi	I N23-Ma005 ⁴	1685				x											
9	TP13-5_0.0- 0.2	Mar 21, 2023	Soi	I N23-Ma005	1686	х							х		x					
10	TP13-5_0.5- 0.6	Mar 21, 2023	Soi	I N23-Ma005 ⁷	1687				х											
11	TP07-4_0.2- 0.3	Mar 21, 2023	Soi	I N23-Ma005 ⁻	1688			x												
12	TP07-4_0.9- 1.0	Mar 21, 2023	Soi	I N23-Ma005 ⁻	1689		х				x									
13	TP07-4_1.5- 1.6	Mar 21, 2023	Soi	I N23-Ma005 ⁻	1690			х												
14	TP07-4_1.9- 2.0	Mar 21, 2023	Soi	I N23-Ma005	1691			х												
15	TP08-4_0.2- 0.3	Mar 21, 2023	Soi	I N23-Ma005 ⁻	1692			х												
16	TP08-4_0.9- 1.0	Mar 21, 2023	Soi	I N23-Ma005	1693		Х				х									

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web: vehicle	eb: www.eurofins.com.au mail: EnviroSales@eurofins.com Company Name: Qualtest		Melbourne 6 Monterey Road Dandenong South VIC 3175 Tel: +61 3 8564 5000 NATA# 1261 Site# 12	Geelong Sydney 19/8 Lewalan Street 179 Magoo Grovedale Girraween VIC 3216 NSW 2145 Tel: +61 3 8564 5000 Tel: +61 2 54 NATA# 1261 Site# 25403 NATA# 12			oad 8400 e# 1821	Canberra d Unit 1,2 Da Mitchell ACT 2911 400 Tel: +61 2 6 t 18217 NATA# 126			B N C 1 1 25466 N	risbane 21 Sma lurarrie LD 417 el: +61 ATA# 1	allwood 72 7 3902 - 261 Site	Place 4600 e# 2079	Newo 1/2 Fi Mayfi Tel: + NATA NATA	astle rost Driv eld Wes 61 2 49 # 1261 25079	ve st NSW 2304 968 8448 & 25289	Perth 46-48 Banksia Road Welshpool WA 6106 Tel: +61 8 6253 4444 NATA# 2377 Site# 2370	Auckland 35 O'Rorke Road Penrose, Auckland 1061 Tel: +64 9 526 45 51 IANZ# 1327	Christchurch 43 Detroit Drive Rolleston, Christchurch 7675 Tel: 0800 856 450 IANZ# 1290	
Ca Aa	ompany Name: Idress:	Qualtest 2 Murray Dy Mayfield We NSW 2304	wyer Circuit est				O Re Pi Fa	rder N eport hone: ax:	lo.: #:	9	97415 02 490 02 490	0 58 446 50 977	68 75					Received: Due: Priority: Contact Name:	Mar 22, 2023 11:10 Mar 29, 2023 5 Day Libby Betz) AM	
Pr Pr	oject Name: oject ID:	MEDOWIE NEW23P-0	GARDENS 009														E	urofins Analytical Ser	vices Manager : Ar	ndrew Black	
Sample Detail							E.coli (MPN)	HOLD	HOLD	pH (1:5 Aqueous extract at 25 °C as rec.)	Thermotolerant Coliforms (MPN)	Acid Herbicides	Metals M8	Suite B14: OCP/OPP	Moisture Set	Cation Exchange Capacity	Eurofins Suite B7				
Mel	bourne Laborato	ory - NATA # 1	261 Site # 1254					Х				X				Х					
Syd	ney Laboratory	- NATA # 1261	Site # 18217	1		х			Х	Х			Х	Х	X		x				
17	TP08-4_1.5-	Mar 21, 2023	So	I N23-Ma	0051694			х													
18	TP08-4_1.9- 2.0	Mar 21, 2023	So	I N23-Ma	0051695			х													
19	TP09-4_0.2- 0.3	Mar 21, 2023	So	I N23-Ma	0051696		х				х										
20	TP09-4_0.9- 1.0	Mar 21, 2023	So	I N23-Ma	0051697			х													
21	TP06-2_0.0- 0.2	Mar 21, 2023	So	I N23-Ma	0051698	х									x		x				
22	TP06-2_0.5- 0.6	Mar 21, 2023	So	I N23-Ma	0051699				х												
23	TP72-2_0.0- 0.2	Mar 21, 2023	So	N23-Ma	0051700	х							х		x						
24	TP72-2_0.5- 0.6	Mar 21, 2023	So	N23-Ma	0051701				х												
25	TP73-2_0.0- 0.2	Mar 21, 2023	So	N23-Ma	0051702	х									x		x				

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Co Ao	ompany Name: Idress:	Qualtest 2 Murray Dy Mayfield We NSW 2304	wyer Circuit est				O R Pl Fa	rder N eport hone: ax:	lo.: #:	9	97415 02 496 02 496	0 68 446 60 977	68 75					Received: Due: Priority: Contact Name:	Mar 22, 2023 11:10 Mar 29, 2023 5 Day Libby Betz) AM
Pr Pr	oject Name: oject ID:	MEDOWIE NEW23P-00	GARDENS 009															urofins Analytical Ser	vices Manager : Ar	ndrew Black
Sample Detail							E.coli (MPN)	HOLD	HOLD	pH (1:5 Aqueous extract at 25 °C as rec.)	Thermotolerant Coliforms (MPN)	Acid Herbicides	Metals M8	Suite B14: OCP/OPP	Moisture Set	Cation Exchange Capacity	Eurofins Suite B7			
Mel	bourne Laborato	ry - NATA # 1	261 Site # 1254					Х				Х				Х				
Syd	ney Laboratory -	NATA # 1261	Site # 18217			Х			х	X			х	х	x		х			
26	TP73-2_0.5- 0.6	Mar 21, 2023	Soil	N23-Ma00	051703				х											
27	D21.3.23	Mar 21, 2023	Soil	N23-Ma00)51704										X		х			
28	TP74-2_0.0- 0.2	Mar 21, 2023	Soil	N23-Ma00)51705	х							х		х					
29	TP74-2_0.5- 0.6	Mar 21, 2023	Soil	N23-Ma00)51706				х											
30	SS41-1	Mar 21, 2023	Soil	N23-Ma00)51707	Х							Х		X					
31	SS40-1	Mar 21, 2023	Soil	N23-Ma00)51708	Х							Х		X					
32	SS45-1	Mar 21, 2023	Soil	N23-Ma00)51709	Х									X		Х			
33	SS42-1	Mar 21, 2023	Soil	N23-Ma00)51710	Х							Х		X					
34	SS43-1	Mar 21, 2023	Soil	N23-Ma00	051711	Х							Х		X					
35	SS58-5	Mar 21, 2023	Soil	N23-Ma00)51712								Х	Х	X					
36	SS50-3	Mar 21, 2023	Soil	N23-Ma00	051713	Х									х		х			
37	TP01-1_0.0- 0.2	Mar 21, 2023	Soil	N23-Ma00)51714	х							х		x					

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web: w email:	b: www.eurofins.com.au nail: EnviroSales@eurofins.com Company Name: Address: Qualtest 2 Murray [Melbourne 6 Monterey Road Dandenong South VIC 3175 Tel: +61 3 8564 5000 NATA# 1261 Site# 125	Geelong Sydr 19/8 Lewalan Street 179 fl Grovedale Girra VIC 3216 NSW Tel: +61 3 8564 5000 Tel: +61 4 NATA# 1261 Site# 25403	ey Magowar F ween 2145 61 2 9900 # 1261 S	Road) 8400 ite# 182	Canl Unit Mitch ACT Tel: - 17 NAT	berra 1,2 Dac nell 2911 +61 2 6 A# 1261	re Stree 113 809 1 Site# 2	et 1 N C 91 T 25466 N	/21 Sma /21 Sma /urarrie QLD 41 el: +61 IATA# 1	e allwood 72 7 3902 - 261 Site	Place 4600 e# 2079	Newo 1/2 Fi Mayfi Tel: + NATA 4 Site#	castle rost Driv eld Wes 61 2 49 4# 1261 25079	ve st NSW 2304 968 8448 & 25289	Perth 46-48 Banksia Road Welshpool WA 6106 Tel: +61 8 6253 4444 NATA# 2377 Site# 2370	Auckland 35 O'Rorke Road Penrose, Auckland 1061 Tel: +64 9 526 45 51 IANZ# 1327	Christchurch 43 Detroit Drive Rolleston, Christchurch 7675 Tel: 0800 856 450 IANZ# 1290	
Cc Ac	ompany Name: Idress:	Qualtest 2 Murray D Mayfield W NSW 2304	wyer Circuit est			C R F	Order Report Phone Fax:	No.: : #: :	1	97415 02 49 02 49	60 68 44 60 97	68 75					Received: Due: Priority: Contact Name:	Mar 22, 2023 11:10 Mar 29, 2023 5 Day Libby Betz	D AM	
Pr Pr	oject Name: oject ID:	MEDOWIE NEW23P-0	GARDENS 009													E	urofins Analytical Ser	vices Manager : Aı	ndrew Black	
Sample Detail						E.coli (MPN)	HOLD	HOLD	pH (1:5 Aqueous extract at 25 °C as rec.)	Thermotolerant Coliforms (MPN)	Acid Herbicides	Metals M8	Suite B14: OCP/OPP	Moisture Set	Cation Exchange Capacity	Eurofins Suite B7				
Mell	bourne Laborato	ory - NATA # 1	261 Site # 1254				X				X				X					
Syd	ney Laboratory	- NATA # 1261	Site # 18217		Х			Х	Х			Х	Х	X		Х				
38	TP01-1_0.5- 0.6	Mar 21, 2023	Soil	N23-Ma00517	15			x												
39	TP02-1_0.0- 0.2	Mar 21, 2023	Soil	N23-Ma00517	16 _X							x		x						
40	SS75-2	Mar 21, 2023	Soil	N23-Ma00517	17 X				Х					X	Х	Х				
41	SS76-2	Mar 21, 2023	Soil	N23-Ma00517	18 X							х		х						
42	SS77-2	Mar 21, 2023	Soil	N23-Ma00517	19 X							х		x						
43	SS57-5	Mar 21, 2023	Soil	N23-Ma00517	20						х		х	X		х				
44	SS65-5	Mar 21, 2023	Soil	N23-Ma00517	21							х	х	X						
45	SS38-1	Mar 21, 2023	Soil	N23-Ma00517	22 X							х		X						
46	SS64-5	Mar 21, 2023	Soil	N23-Ma00517	23							х	х	x						
47	SS39-1	Mar 21, 2023	Soil	N23-Ma00517	24 X							х		x						
48	SS44-1	Mar 21, 2023	Soil	N23-Ma00517	25 X							х	Х	X						
49	SS46-1	Mar 21, 2023	Soil	N23-Ma00517	26 X				х			х		X	х					
50	TP02-1_0.5- 0.6	Mar 21, 2023	Soil	N23-Ma00518	50			x												

	fins	Eurofins Environme	ent Testing Australia Pt	y Ltd													Eurofins ARL Pty Ltd	Ltd Eurofins Environment Testing NZ Ltd		
web: www.eurofins.com.au email: EnviroSales@eurofins.c	TINS	ABN: 50 005 085 521 Melbourne 6 Monterey Road Dandenong South VIC 3175 Tel: +61 3 8564 5000 NATA# 1261 Site# 1254	Geelong S 19/8 Lewalan Street 1 Grovedale 0 VIC 3216 1 Tel: +61 3 8564 5000 1 NATA# 1261 Site# 25403 1	Sydney 179 Magowar Girraween NSW 2145 Tel: +61 2 99 NATA# 1261	⁻ Road 00 840 Site# 1	10 18217	Canbe Unit 1, Mitche ACT 2 Tel: +6 NATA	erra ,2 Dacr 911 911 61 2 61 # 1261	e Stree 13 809 Site# 2	B 1/ Q 1 T 5466 N	risbane 21 Sma lurarrie LD 417 el: +61 ATA# 1	e allwood 72 7 3902 261 Sit	Place 4600 e# 2079	Newo 1/2 Fi Mayfi Tel: + NATA NATA	castle rost Driv eld Wes 61 2 49 4# 1261 25079 8	ve st NSW 230 68 8448 & 25289	ABN: 91 05 0159 898 Perth 46-48 Banksia Road Welshpool WA 6106 Tel: +61 8 6253 4444 NATA# 2377 Site# 2370	NZEN: 942904602495 Auckland 35 O'Rorke Road Penrose, Auckland 1061 Tel: +64 9 526 45 51 IANZ# 1327	4 Christchurch 43 Detroit Drive Rolleston, Christchurch 7675 Tel: 0800 856 450 IANZ# 1290	
Company Name: Address:	Qualtest 2 Murray D Mayfield W NSW 2304	wyer Circuit est				Oro Rej Pho Fax	der N port a one: x:	lo.: #:	9 () ())7415)2 496)2 496	0 58 446 50 977	68 75					Received: Due: Priority: Contact Name:	Mar 22, 2023 11:1 Mar 29, 2023 5 Day Libby Betz	0 AM	
Project ID:	Project ID: NEW23P-0009				E													vices Manager : A	ndrew Black	
	s	ample Detail		Aspesios - WA guidelines		E.coli (MPN)	HOLD	HOLD	pH (1:5 Aqueous extract at 25 °C as rec.)	Thermotolerant Coliforms (MPN)	Acid Herbicides	Metals M8	Suite B14: OCP/OPP	Moisture Set	Cation Exchange Capacity	Eurofins Suite B7				
Melbourne Laborator	y - NATA # 1	261 Site # 1254					Х				Х				Х					
Sydney Laboratory -	NATA # 1261	Site # 18217		;	<			Х	х			X	х	X		Х				
Test Counts				2	1	5	19	19	2	5	2	19	5	26	2	7				



Internal Quality Control Review and Glossary General

- 1. 2. 3.
- CC data may be available on request. All soil results are reported on a dry basis, unless otherwise stated. Samples were analysed on an 'as received' basis. Information identified on this report with the colour **blue** indicates data provided by customer that may have an impact on the results. This report replaces any interim results previously issued. 4. 5.

Holding Times Please refer to the most recent version of the 'Sample Preservation and Container Guide' for holding times (QS3001).

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported. Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

Units % w/w: F/fld F/mL g, kg g/kg L, mL L, mL L/min min	Percentage weight-for-weight basis, e.g. of asbestos in asbestos-containing finds in soil samples (% w/w) Airborne fibre filter loading as Fibres (N) per Fields counted (n) Airborne fibre reported concentration as Fibres per milliliter of air drawn over the sampler membrane (C) Mass, e.g. of whole sample (M) or asbestos-containing find within the sample (m) Concentration in grams per kilogram Volume, e.g. of air as measured in AFM (V = r x t) Airborne fibre sampling Flowrate as litres per minute of air drawn over the sampler membrane (r) Time (t), e.g. of air sample collection period
Calculations	
Airborne Fibre Concentration:	$C = \left(\frac{n}{a}\right) \times \left(\frac{1}{r}\right) \times \left(\frac{1}{r}\right) = K \times \left(\frac{n}{r}\right) \times \left(\frac{1}{v}\right)$
Asbestos Content (as asbestos):	$\% w/w = \frac{(m \times P_A)}{M}$
Weighted Average (of asbestos):	$\%_{WA} = \sum \frac{(m \times P_A)_X}{x}$
Terms %ashestos	Estimated percentage of ashestos in a given matrix. May be derived from knowledge or experience of the material informed by HSG264 Appendix 2 else
///////////////////////////////////////	assumed to be 15% in accordance with WA DOH Appendix 2 (P_A).
ACM	Asbestos Containing Materials. Asbestos contained within a non-asbestos matrix, typically presented in bonded (non-friable) condition. For the purposes of the NEPM and WA DOH, ACM corresponds to material larger than 7 mm x 7 mm.
AF	Asbestos Fines. Asbestos contamination within a soil sample, as defined by WA DOH. Includes loose fibre bundles and small pieces of friable and non-friable material such as asbestos cement fragments mixed with soil. Considered under the NEPM as equivalent to "non-bonded / friable".
AFM	Airborne Fibre Monitoring, e.g. by the MFM.
Amosite	Amosite Asbestos Detected. Amosite may also refer to Fibrous Grunerite or Brown Asbestos. Identified in accordance with AS 4964-2004.
AS	Australian Standard.
Asbestos Content (as asbestos)	Total % w/w asbestos content in asbestos-containing finds in a soil sample (% w/w).
Chrysotile	Chrysotile Asbestos Detected. Chrysotile may also refer to Fibrous Serpentine or White Asbestos. Identified in accordance with AS 4964-2004.
COC	Chain of Custody.
Crocidolite	Crocidolite Asbestos Detected. Crocidolite may also reter to Fibrous Riebeckite or Blue Asbestos. Identified in accordance with AS 4964-2004.
Dry	Sample is dried by heating prior to analysis.
DS	Dispersion Staining. Technique required for Unequivocal Identification of asbestos fibres by PLM.
FA	Fibrous Asbestos. Asbestos containing material that is wholly or in part friable, including materials with higher asbestos content with a propensity to become friable with handling, and any material that was previously non-friable and in a severely degraded condition. For the purposes of the NEPM and WA DOH, FA generally corresponds to material larger than 7 mm x 7 mm, although FA may be more difficult to visibly distinguish and may be assessed as AF.
Fibre Count	Total of all fibres (whether asbestos or not) meeting the counting criteria set out in the NOHSC:3003
Fibre ID	Fibre Identification. Unequivocal identification of asbestos fibres according to AS 4964-2004. Includes Chrysotile, Amosite (Grunerite) or Crocidolite asbestos.
Friable	Asbestos-containing materials of any size that may be broken or crumbled by hand pressure. For the purposes of the NEPM, this includes both AF and FA. It is outside of the laboratory's remit to assess degree of friability.
HSG248	UK HSE HSG248, Asbestos: The Analysts Guide, 2nd Edition (2021).
HSG264	UK HSE HSG264, Asbestos: The Survey Guide (2012).
ISO (also ISO/IEC)	International Organization for Standardization / International Electrotechnical Commission.
K Factor	Microscope constant (K) as derived from the effective filter area of the given AFM membrane used for collecting the sample (A) and the projected eyepiece graticule area of the specific microscope used for the analysis (a).
LOR	Limit of Reporting.
MFM (also NOHSC:3003)	Membrane Filter Method. As described by the Australian Government National Occupational Health and Safety Commission, Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres, 2nd Edition [NOHSC:3003(2005)].
NEPM (also ASC NEPM)	National Environment Protection (Assessment of Site Contamination) Measure, (2013, as amended).
Organic	Organic Fibres Detected. Organic may refer to Natural or Man-Made Polymeric Fibres. Identified in accordance with AS 4964-2004.
PCM	Phase Contrast Microscopy. As used for Fibre Counting according to the MFM.
PLM	Polarised Light Microscopy. As used for Fibre Identification and Trace Analysis according to AS 4964-2004.
Sampling	Unless otherwise stated Eurofins are not responsible for sampling equipment or the sampling process.
SMF	Synthetic Mineral Fibre Detected. SMF may also refer to Man Made Vitreous Fibres. Identified in accordance with AS 4964-2004.
SRA	Sample Receipt Advice.
Trace Analysis	Analytical procedure used to detect the presence of respirable fibres (particularly asbestos) in a given sample matrix.
UK HSE HSG	United Kingdom, Health and Safety Executive, Health and Safety Guidance, publication.
	Unidentified Mineral Fibre Detected. Fibrous minerals that are detected but have not been unequivocally identified by PLM with DS according the AS 4964-2004 May include (but not limited to) Actinolite, Anthophyllite or Tremolite asbestos.
WA DOH	Reference document for the NEPM. Government of Western Australia, Guidelines for the Assessment, Remediation and Management of Asbestos- Contaminated Sites in Western Australia (updated 2021), including Appendix Four: Laboratory analysis
Weighted Average	Combined average % w/w asbestos content of all asbestos-containing finds in the given aliquot or total soil sample (%wA).



Comments

Sample Integrity	
Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	Yes

Asbestos Counter/Identifier:

Laxman Dias

Senior Analyst-Asbestos

Authorised by:

Chamath JHM Annakkage

Senior Analyst-Asbestos

light-

Glenn Jackson General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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Qualtest 2 Murray Dwyer Circuit Mayfield West NSW 2304





NATA Accredited Accreditation Number 1261 Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing NATA is a signatory to the ILAC Mutual Recognition Arrangement for the mutual recognition of the equivalence of testing, medical testing, calibration, inspection, proficiency testing scheme providers and reference materials producers reports and certificates.

Attention:

Libby Betz

Report
Project name
Project ID
Received Date

974150-S MEDOWIE GARDENS NEW23P-0009 Mar 22, 2023

Client Sample ID			TP11-4_0.2-0.3	TP11-4_1.0-1.1	TP12-5_0.0-0.2	TP13-5_0.0-0.2
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			N23- Ma0051680	N23- Ma0051681	N23- Ma0051684	N23- Ma0051686
Date Sampled			Mar 21 2023	Mar 21 2023	Mar 21 2023	Mar 21 2023
		Linit	11111 21, 2020	indi 21, 2020	indi 21, 2020	1111 21, 2020
Pathogons	LOR	Unit				
	1		and attached	and attached		
E.coli (MPN)	1	MDN/g	see allached	see allached	-	-
Acid Herbisides	I	wiPin/g	see allached	see allached	-	-
Acid Herbicides						
2.4-D	0.5	mg/kg	-	-	< 0.5	-
2.4-DB	0.5	mg/kg	-	-	< 0.5	-
2.4.5-T	0.5	mg/kg	-	-	< 0.5	-
2.4.5-TP	0.5	mg/kg	-	-	< 0.5	-
Actril (loxynil)	0.5	mg/kg	-	-	< 0.5	-
Dicamba	0.5	mg/kg	-	-	< 0.5	-
Dichlorprop	0.5	mg/kg	-	-	< 0.5	-
Dinitro-o-cresol	0.5	mg/kg	-	-	< 0.5	-
Dinoseb	0.5	mg/kg	-	-	< 0.5	-
МСРА	0.5	mg/kg	-	-	< 0.5	-
МСРВ	0.5	mg/kg	-	-	< 0.5	-
Месоргор	0.5	mg/kg	-	-	< 0.5	-
Warfarin (surr.)	1	%	-	-	145	-
Heavy Metals						
Arsenic	2	mg/kg	-	-	3.7	2.9
Cadmium	0.4	mg/kg	-	-	< 0.4	< 0.4
Chromium	5	mg/kg	-	-	24	23
Copper	5	mg/kg	-	-	16	27
Lead	5	mg/kg	-	-	15	13
Mercury	0.1	mg/ka	-	-	< 0.1	< 0.1
Nickel	5	ma/ka	-	-	< 5	< 5
Zinc	5	ma/ka	-	-	10	21
Sample Properties	-					
% Moisture	1	%	-	-	19	12



Client Sample ID			TP07-4 0.9-1.0	TP08-4 0.9-1.0	TP09-4 0.2-0.3	TP06-2 0.0-0.2
Sample Matrix			Soil	Soil	Soil	Soil
			N23-	N23-	N23-	N23-
Eurofins Sample No.			Ma0051689	Ma0051693	Ma0051696	Ma0051698
Date Sampled			Mar 21, 2023	Mar 21, 2023	Mar 21, 2023	Mar 21, 2023
Test/Reference	LOR	Unit				
Pathogens						
E.coli (MPN)	1	MPN/g	see attached	see attached	see attached	-
Thermotolerant Coliforms (MPN)	1	MPN/g	see attached	see attached	see attached	-
Heavy Metals						
Arsenic	2	mg/kg	-	-	-	< 2
Cadmium	0.4	mg/kg	-	-	-	< 0.4
Chromium	5	mg/kg	-	-	-	< 5
Copper	5	mg/kg	-	-	-	< 5
Lead	5	mg/kg	-	-	-	< 5
Mercury	0.1	mg/kg	-	-	-	< 0.1
Nickel	5	mg/kg	-	-	-	< 5
Zinc	5	mg/kg	-	-	-	< 5
Sample Properties						
% Moisture	1	%	-	-	-	1.3
Total Recoverable Hydrocarbons - 1999 NEPM Fract	ions					
TRH C6-C9	20	mg/kg	-	-	-	< 20
TRH C10-C14	20	mg/kg	-	-	-	< 20
TRH C15-C28	50	mg/kg	-	-	-	< 50
TRH C29-C36	50	mg/kg	-	-	-	51
TRH C10-C36 (Total)	50	mg/kg	-	-	-	51
втех						
Benzene	0.1	mg/kg	-	-	-	< 0.1
Toluene	0.1	mg/kg	-	-	-	< 0.1
Ethylbenzene	0.1	mg/kg	-	-	-	< 0.1
m&p-Xylenes	0.2	mg/kg	-	-	-	< 0.2
o-Xylene	0.1	mg/kg	-	-	-	< 0.1
Xylenes - Total*	0.3	mg/kg	-	-	-	< 0.3
4-Bromofluorobenzene (surr.)	1	%	-	-	-	89
Total Recoverable Hydrocarbons - 2013 NEPM Fract	ions					
Naphthalene ^{N02}	0.5	mg/kg	-	-	-	< 0.5
TRH >C10-C16 less Naphthalene (F2) ^{N01}	50	mg/kg	-	-	-	< 50
TRH C6-C10	20	mg/kg	-	-	-	< 20
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	-	-	-	< 20
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	-	-	-	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	-	-	-	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	-	-	-	1.2
Acenaphthene	0.5	mg/kg	-	-	-	< 0.5
Acenaphthylene	0.5	mg/kg	-	-	-	< 0.5
Anthracene	0.5	mg/kg	-	-	-	< 0.5
Benz(a)anthracene	0.5	mg/kg	-	-	-	< 0.5
Benzo(a)pyrene	0.5	mg/kg	-	-	-	< 0.5
Benzo(b&j)fluoranthene ^{N07}	0.5	mg/kg	-	-	-	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	-	-	-	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	-	-	-	< 0.5
Chrysene	0.5	mg/kg	-	-	-	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	-	-	-	< 0.5
Fluoranthene	0.5	mg/kg	-	-	-	< 0.5
Fluorene	0.5	mg/kg	-	-	-	< 0.5



Client Sample ID Sample Matrix Eurofins Sample No.			TP07-4_0.9-1.0 Soil N23- Ma0051689	TP08-4_0.9-1.0 Soil N23- Ma0051693	TP09-4_0.2-0.3 Soil N23- Ma0051696	TP06-2_0.0-0.2 Soil N23- Ma0051698
Test/Reference	LOR	Unit	Widi 21, 2023	Widi 21, 2023	Widi 21, 2023	Widi 21, 2023
Polycyclic Aromatic Hydrocarbons						
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	-	-	-	< 0.5
Naphthalene	0.5	mg/kg	-	-	-	< 0.5
Phenanthrene	0.5	mg/kg	-	-	-	< 0.5
Pyrene	0.5	mg/kg	-	-	-	< 0.5
Total PAH*	0.5	mg/kg	-	-	-	< 0.5
2-Fluorobiphenyl (surr.)	1	%	-	-	-	97
p-Terphenyl-d14 (surr.)	1	%	-	-	-	82
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
TRH >C10-C16	50	mg/kg	-	-	-	< 50
TRH >C16-C34	100	mg/kg	-	-	-	< 100
TRH >C34-C40	100	mg/kg	-	-	-	< 100
TRH >C10-C40 (total)*	100	mg/kg	-	-	-	< 100

		1				
Client Sample ID			TP72-2_0.0-0.2	TP73-2_0.0-0.2	D21.3.23	TP74-2_0.0-0.2
Sample Matrix			Soil	Soil	Soil	Soil
			N23-	N23-	N23-	N23-
Eurofins Sample No.			Ma0051700	Ma0051702	Ma0051704	Ma0051705
Date Sampled			Mar 21, 2023	Mar 21, 2023	Mar 21, 2023	Mar 21, 2023
Test/Reference	LOR	Unit				
Heavy Metals		-				
Arsenic	2	mg/kg	2.5	17	13	7.7
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	640	300	420	600
Copper	5	mg/kg	17	120	40	23
Lead	5	mg/kg	22	16	21	24
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Nickel	5	mg/kg	13	74	28	14
Zinc	5	mg/kg	60	45	57	73
Sample Properties		_				
% Moisture	1	%	7.2	12	8.3	5.1
Total Recoverable Hydrocarbons - 1999 NEPM Fract	ions					
TRH C6-C9	20	mg/kg	-	< 20	< 20	-
TRH C10-C14	20	mg/kg	-	< 20	< 20	-
TRH C15-C28	50	mg/kg	-	< 50	< 50	-
TRH C29-C36	50	mg/kg	-	< 50	< 50	-
TRH C10-C36 (Total)	50	mg/kg	-	< 50	< 50	-
BTEX						
Benzene	0.1	mg/kg	-	< 0.1	< 0.1	-
Toluene	0.1	mg/kg	-	< 0.1	< 0.1	-
Ethylbenzene	0.1	mg/kg	-	< 0.1	< 0.1	-
m&p-Xylenes	0.2	mg/kg	-	< 0.2	< 0.2	-
o-Xylene	0.1	mg/kg	-	< 0.1	< 0.1	-
Xylenes - Total*	0.3	mg/kg	-	< 0.3	< 0.3	-
4-Bromofluorobenzene (surr.)	1	%	-	93	89	-



Client Sample ID Sample Matrix			TP72-2_0.0-0.2 Soil	TP73-2_0.0-0.2 Soil	D21.3.23 Soil	TP74-2_0.0-0.2 Soil
Eurofins Sample No.			N23- Ma0051700	N23- Ma0051702	N23- Ma0051704	N23- Ma0051705
Date Sampled			Mar 21, 2023	Mar 21, 2023	Mar 21, 2023	Mar 21, 2023
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons - 2013 NEPM Fract	ions					
Naphthalene ^{N02}	0.5	mg/kg	-	< 0.5	< 0.5	-
TRH >C10-C16 less Naphthalene (F2) ^{N01}	50	mg/kg	-	< 50	< 50	-
TRH C6-C10	20	mg/kg	-	< 20	< 20	-
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	-	< 20	< 20	-
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	-	< 0.5	< 0.5	-
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	-	0.6	0.6	-
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	-	1.2	1.2	-
Acenaphthene	0.5	mg/kg	-	< 0.5	< 0.5	-
Acenaphthylene	0.5	mg/kg	-	< 0.5	< 0.5	-
Anthracene	0.5	mg/kg	-	< 0.5	< 0.5	-
Benz(a)anthracene	0.5	mg/kg	-	< 0.5	< 0.5	-
Benzo(a)pyrene	0.5	mg/kg	-	< 0.5	< 0.5	-
Benzo(b&j)fluoranthene ^{N07}	0.5	mg/kg	-	< 0.5	< 0.5	-
Benzo(g.h.i)perylene	0.5	mg/kg	-	< 0.5	< 0.5	-
Benzo(k)fluoranthene	0.5	mg/kg	-	< 0.5	< 0.5	-
Chrysene	0.5	mg/kg	-	< 0.5	< 0.5	-
Dibenz(a.h)anthracene	0.5	mg/kg	-	< 0.5	< 0.5	-
Fluoranthene	0.5	mg/kg	-	< 0.5	< 0.5	-
Fluorene	0.5	mg/kg	-	< 0.5	< 0.5	-
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	-	< 0.5	< 0.5	-
Naphthalene	0.5	mg/kg	-	< 0.5	< 0.5	-
Phenanthrene	0.5	mg/kg	-	< 0.5	< 0.5	-
Pyrene	0.5	mg/kg	-	< 0.5	< 0.5	-
Total PAH*	0.5	mg/kg	-	< 0.5	< 0.5	-
2-Fluorobiphenyl (surr.)	1	%	-	98	78	-
p-Terphenyl-d14 (surr.)	1	%	-	90	81	-
Total Recoverable Hydrocarbons - 2013 NEPM Fract	ions					
TRH >C10-C16	50	mg/kg	-	< 50	< 50	-
TRH >C16-C34	100	mg/kg	-	< 100	< 100	-
TRH >C34-C40	100	mg/kg	-	< 100	< 100	-
TRH >C10-C40 (total)*	100	mg/kg	-	< 100	< 100	-

Client Sample ID Sample Matrix Eurofins Sample No.			SS41-1 Soil N23- Ma0051707	SS40-1 Soil N23- Ma0051708	SS45-1 Soil N23- Ma0051709	SS42-1 Soil N23- Ma0051710
Date Sampled			Mar 21, 2023	Mar 21, 2023	Mar 21, 2023	Mar 21, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Arsenic	2	mg/kg	2.8	4.5	< 2	3.5
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	0.5
Chromium	5	mg/kg	37	21	16	17
Copper	5	mg/kg	12	10	6.1	7.4
Lead	5	mg/kg	21	15	9.9	12
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Nickel	5	mg/kg	< 5	< 5	< 5	< 5
Zinc	5	mg/kg	43	47	32	190



Client Sample ID			SS41-1	SS40-1	SS45-1	SS42-1
Sample Matrix			Soil	Soil	Soil	Soil
			N23-	N23-	N23-	N23-
Eurofins Sample No.			Ma0051707	Ma0051708	Ma0051709	Ma0051710
Date Sampled			Mar 21, 2023	Mar 21, 2023	Mar 21, 2023	Mar 21, 2023
Test/Reference	LOR	Unit				
Sample Properties	•					
% Moisture	1	%	17	8.0	11	14
Total Recoverable Hydrocarbons - 1999 NEPM Fract	ions					
TRH C6-C9	20	mg/kg	-	-	< 20	-
TRH C10-C14	20	mg/kg	-	-	< 20	-
TRH C15-C28	50	mg/kg	-	-	110	-
TRH C29-C36	50	mg/kg	-	-	120	-
TRH C10-C36 (Total)	50	mg/kg	-	-	230	-
втех						
Benzene	0.1	mg/kg	-	-	< 0.1	-
Toluene	0.1	mg/kg	-	-	< 0.1	-
Ethylbenzene	0.1	mg/kg	-	-	< 0.1	-
m&p-Xylenes	0.2	mg/kg	-	-	< 0.2	-
o-Xylene	0.1	mg/kg	-	-	< 0.1	-
Xylenes - Total*	0.3	mg/kg	-	-	< 0.3	-
4-Bromofluorobenzene (surr.)	1	%	-	-	117	-
Total Recoverable Hydrocarbons - 2013 NEPM Fract	ions					
Naphthalene ^{N02}	0.5	mg/kg	-	-	< 0.5	-
TRH >C10-C16 less Naphthalene (F2) ^{N01}	50	mg/kg	-	-	< 50	-
TRH C6-C10	20	mg/kg	-	-	< 20	-
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	-	-	< 20	-
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	-	-	< 0.5	-
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	-	-	0.6	-
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	-	-	1.2	-
Acenaphthene	0.5	mg/kg	-	-	< 0.5	-
Acenaphthylene	0.5	mg/kg	-	-	< 0.5	-
Anthracene	0.5	mg/kg	-	-	< 0.5	-
Benz(a)anthracene	0.5	mg/kg	-	-	< 0.5	-
Benzo(a)pyrene	0.5	mg/kg	-	-	< 0.5	-
Benzo(b&j)fluoranthene ^{N07}	0.5	mg/kg	-	-	< 0.5	-
Benzo(g.h.i)perylene	0.5	mg/kg	-	-	< 0.5	-
Benzo(k)fluoranthene	0.5	mg/kg	-	-	< 0.5	-
Chrysene	0.5	mg/kg	-	-	< 0.5	-
	0.5	mg/kg	-	-	< 0.5	-
Fluoranthene	0.5	mg/kg	-	-	< 0.5	-
	0.5	mg/kg	-	-	< 0.5	-
Naphtholone	0.5	mg/kg	-	-	< 0.5	-
Reporting	0.5	mg/kg	-	-	< 0.5	-
Pyropo	0.5	mg/kg	-	-	< 0.5	-
Total PAH*	0.5	mg/kg	_		< 0.5	
2-Eluorobinhenyl (surr.)	1	111g/kg %	_		97	
p-Terphenyl-d14 (surr.)	1	%	-	-	81	_
Total Recoverable Hydrocarbons - 2013 NFPM Fract	ions	70			51	
	50	ma/ka	_		~ 50	_
TRH >C16-C34	100	ma/ka	-	-	180	
TRH >C34-C40	100	ma/ka	-	-	< 100	-
TRH >C10-C40 (total)*	100	ma/ka	-	-	180	_
			1	1		1



Client Sample ID			SS43-1	SS58-5	SS50-3	TP01-1 0.0-0.2
Sample Matrix			Soil	Soil	Soil	Soil
			N23-	N23-	N23-	N23-
Eurofins Sample No.			Ma0051711	Ma0051712	Ma0051713	Ma0051714
Date Sampled			Mar 21, 2023	Mar 21, 2023	Mar 21, 2023	Mar 21, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Arsenic	2	mg/kg	7.6	< 2	< 2	< 2
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	18	17	19	23
Copper	5	mg/kg	< 5	11	15	< 5
Lead	5	mg/kg	6.9	8.6	7.8	6.4
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Nickel	5	mg/kg	< 5	< 5	< 5	< 5
Zinc	5	mg/kg	24	24	20	9.6
Sample Properties						
% Moisture	1	%	9.0	23	8.4	14
Total Recoverable Hydrocarbons - 1999 NEPM Fract	ions					
TRH C6-C9	20	mg/kg	-	-	< 20	-
TRH C10-C14	20	mg/kg	-	-	< 20	-
TRH C15-C28	50	mg/kg	-	-	< 50	-
TRH C29-C36	50	mg/kg	-	-	51	-
TRH C10-C36 (Total)	50	mg/kg	-	-	51	-
втех						
Benzene	0.1	mg/kg	-	-	< 0.1	-
Toluene	0.1	mg/kg	-	-	< 0.1	-
Ethylbenzene	0.1	mg/kg	-	-	< 0.1	-
m&p-Xylenes	0.2	mg/kg	-	-	< 0.2	-
o-Xylene	0.1	mg/kg	-	-	< 0.1	-
Xylenes - Total*	0.3	mg/kg	-	-	< 0.3	-
4-Bromofluorobenzene (surr.)	1	%	-	-	91	-
Total Recoverable Hydrocarbons - 2013 NEPM Fract	ions					
Naphthalene ^{N02}	0.5	mg/kg	-	-	< 0.5	-
TRH >C10-C16 less Naphthalene (F2) ^{N01}	50	mg/kg	-	-	< 50	-
TRH C6-C10	20	mg/kg	-	-	< 20	-
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	-	-	< 20	-
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	-	-	< 0.5	-
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	-	-	0.6	-
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	-	-	1.2	-
Acenaphthene	0.5	mg/kg	-	-	< 0.5	-
Acenaphthylene	0.5	mg/kg	-	-	< 0.5	-
Anthracene	0.5	mg/kg	-	-	< 0.5	-
Benz(a)anthracene	0.5	mg/kg	-	-	< 0.5	-
Benzo(a)pyrene	0.5	mg/kg	-	-	< 0.5	-
Benzo(b&j)fluoranthene ^{N07}	0.5	mg/kg	-	-	< 0.5	-
Benzo(g.h.i)perylene	0.5	mg/kg	-	-	< 0.5	-
Benzo(k)fluoranthene	0.5	mg/kg	-	-	< 0.5	-
Chrysene	0.5	mg/kg	-	-	< 0.5	-
Dibenz(a.h)anthracene	0.5	mg/kg	-	-	< 0.5	-
Fluoranthene	0.5	mg/kg	-	-	< 0.5	-
Fluorene	0.5	mg/kg	-	-	< 0.5	-
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	-	-	< 0.5	-
Naphthalene	0.5	mg/kg	-	-	< 0.5	-
Phenanthrene	0.5	mg/kg	-	-	< 0.5	-



Client Sample ID			SS43-1	SS58-5	SS50-3	TP01-1 0.0-0.2
Sample Matrix			Soil	Soil	Soil	Soil
			N23-	N23-	N23-	N23-
Eurofins Sample No.			Ma0051711	Ma0051712	Ma0051713	Ma0051714
Date Sampled			Mar 21, 2023	Mar 21, 2023	Mar 21, 2023	Mar 21, 2023
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Pyrene	0.5	mg/kg	-	-	< 0.5	-
Total PAH*	0.5	mg/kg	-	-	< 0.5	-
2-Fluorobiphenyl (surr.)	1	%	-	-	98	-
p-Terphenyl-d14 (surr.)	1	%	-	-	84	-
Total Recoverable Hydrocarbons - 2013 NEPM Fract	ions					
TRH >C10-C16	50	mg/kg	-	-	< 50	-
TRH >C16-C34	100	mg/kg	-	-	< 100	-
TRH >C34-C40	100	mg/kg	-	-	< 100	-
TRH >C10-C40 (total)*	100	mg/kg	-	-	< 100	-
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	-	< 0.1	-	-
4.4'-DDD	0.05	mg/kg	-	< 0.05	-	-
4.4'-DDE	0.05	mg/kg	-	0.05	-	-
4.4'-DDT	0.05	mg/kg	-	< 0.05	-	-
a-HCH	0.05	mg/kg	-	< 0.05	-	-
Aldrin	0.05	mg/kg	-	< 0.05	-	-
b-HCH	0.05	mg/kg	-	< 0.05	-	-
d-HCH	0.05	mg/kg	-	< 0.05	-	-
	0.05	mg/kg	-	< 0.05	-	-
	0.05	mg/kg	-	< 0.05	-	-
	0.05	mg/kg	-	< 0.05	-	-
	0.05	mg/kg	-	< 0.05	-	-
Endrin eldebude	0.05	mg/kg	-	< 0.05	-	-
Endrin kotono	0.05	mg/kg	-	< 0.05	-	-
	0.05	mg/kg	-	< 0.05	-	-
Hentachlor	0.05	mg/kg		< 0.05		
Hentachlor enovide	0.05	mg/kg	_	< 0.05		_
Hexachlorobenzene	0.05	ma/ka	_	< 0.05	-	_
Methoxychlor	0.05	ma/ka	-	< 0.05	-	_
Toxaphene	0.5	ma/ka	-	< 0.5	-	_
Aldrin and Dieldrin (Total)*	0.05	ma/ka	-	< 0.05	-	-
DDT + DDE + DDD (Total)*	0.05	mg/kg	-	0.05	-	-
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	-	< 0.1	-	-
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	-	< 0.1	-	-
Dibutylchlorendate (surr.)	1	%	-	144	-	-
Tetrachloro-m-xylene (surr.)	1	%	-	102	-	-
Organophosphorus Pesticides						
Azinphos-methyl	0.2	mg/kg	-	< 0.2	-	-
Bolstar	0.2	mg/kg	-	< 0.2	-	-
Chlorfenvinphos	0.2	mg/kg	-	< 0.2	-	-
Chlorpyrifos	0.2	mg/kg	-	< 0.2	-	-
Chlorpyrifos-methyl	0.2	mg/kg	-	< 0.2	-	-
Coumaphos	2	mg/kg	-	< 2	-	-
Demeton-S	0.2	mg/kg	-	< 0.2	-	-
Demeton-O	0.2	mg/kg	-	< 0.2	-	-
Diazinon	0.2	mg/kg	-	< 0.2	-	-
Dichlorvos	0.2	mg/kg	-	< 0.2	-	-
Dimethoate	0.2	mg/kg	-	< 0.2	-	-



Client Sample ID			SS43-1	SS58-5	SS50-3	TP01-1_0.0-0.2
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			N23- Ma0051711	N23- Ma0051712	N23- Ma0051713	N23- Ma0051714
Date Sampled			Mar 21, 2023	Mar 21, 2023	Mar 21, 2023	Mar 21, 2023
Test/Reference	LOR	Unit				
Organophosphorus Pesticides						
Disulfoton	0.2	mg/kg	-	< 0.2	-	-
EPN	0.2	mg/kg	-	< 0.2	-	-
Ethion	0.2	mg/kg	-	< 0.2	-	-
Ethoprop	0.2	mg/kg	-	< 0.2	-	-
Ethyl parathion	0.2	mg/kg	-	< 0.2	-	-
Fenitrothion	0.2	mg/kg	-	< 0.2	-	-
Fensulfothion	0.2	mg/kg	-	< 0.2	-	-
Fenthion	0.2	mg/kg	-	< 0.2	-	-
Malathion	0.2	mg/kg	-	< 0.2	-	-
Merphos	0.2	mg/kg	-	< 0.2	-	-
Methyl parathion	0.2	mg/kg	-	< 0.2	-	-
Mevinphos	0.2	mg/kg	-	< 0.2	-	-
Monocrotophos	2	mg/kg	-	< 2	-	-
Naled	0.2	mg/kg	-	< 0.2	-	-
Omethoate	2	mg/kg	-	< 2	-	-
Phorate	0.2	mg/kg	-	< 0.2	-	-
Pirimiphos-methyl	0.2	mg/kg	-	< 0.2	-	-
Pyrazophos	0.2	mg/kg	-	< 0.2	-	-
Ronnel	0.2	mg/kg	-	< 0.2	-	-
Terbufos	0.2	mg/kg	-	< 0.2	-	-
Tetrachlorvinphos	0.2	mg/kg	-	< 0.2	-	-
Tokuthion	0.2	mg/kg	-	< 0.2	-	-
Trichloronate	0.2	mg/kg	-	< 0.2	-	-
Triphenylphosphate (surr.)	1	%	-	108	-	-

Client Sample ID Sample Matrix Eurofins Sample No. Date Sampled			TP02-1_0.0-0.2 Soil N23- Ma0051716 Mar 21, 2023	SS75-2 Soil N23- Ma0051717 Mar 21, 2023	SS76-2 Soil N23- Ma0051718 Mar 21, 2023	SS77-2 Soil N23- Ma0051719 Mar 21, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Arsenic	2	mg/kg	< 2	< 2	2.2	< 2
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	16	35	440	37
Copper	5	mg/kg	< 5	8.8	35	13
Lead	5	mg/kg	11	7.1	9.6	7.6
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Nickel	5	mg/kg	< 5	< 5	7.3	< 5
Zinc	5	mg/kg	15	13	56	22
Sample Properties						
% Moisture	1	%	14	10	7.4	5.3
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	20	mg/kg	-	< 20	-	-
TRH C10-C14	20	mg/kg	-	< 20	-	-
TRH C15-C28	50	mg/kg	-	< 50	-	-
TRH C29-C36	50	mg/kg	-	< 50	-	-
TRH C10-C36 (Total)	50	mg/kg	-	< 50	-	-



Client Sample ID			TP02-1_0.0-0.2	SS75-2	SS76-2	SS77-2	
Sample Matrix			Soil	Soil	Soil	Soil	
			N23-	N23-	N23-	N23-	
Eurofins Sample No.			Ma0051716	Ma0051717	Ma0051718	Ma0051719	
Date Sampled			Mar 21, 2023	Mar 21, 2023	Mar 21, 2023	Mar 21, 2023	
Test/Reference	LOR	Unit					
втех							
Benzene	0.1	mg/kg	-	< 0.1	-	-	
Toluene	0.1	mg/kg	-	< 0.1	-	-	
Ethylbenzene	0.1	mg/kg	-	< 0.1	-	-	
m&p-Xylenes	0.2	mg/kg	-	< 0.2	-	-	
o-Xylene	0.1	mg/kg	-	< 0.1	-	-	
Xylenes - Total*	0.3	mg/kg	-	< 0.3	-	-	
4-Bromofluorobenzene (surr.)	1	%	-	83	-	-	
Total Recoverable Hydrocarbons - 2013 NEPM Fract	ions						
Naphthalene ^{N02}	0.5	mg/kg	-	< 0.5	-	-	
TRH >C10-C16 less Naphthalene (F2) ^{N01}	50	mg/kg	-	< 50	-	-	
TRH C6-C10	20	mg/kg	-	< 20	-	-	
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	-	< 20	-	-	
Polycyclic Aromatic Hydrocarbons							
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	-	< 0.5	-	-	
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	-	0.6	-	-	
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	-	1.2	-	-	
Acenaphthene	0.5	mg/kg	-	< 0.5	-	-	
Acenaphthylene	0.5	mg/kg	-	< 0.5	-	-	
Anthracene	0.5	mg/kg	-	< 0.5	-	-	
Benz(a)anthracene	0.5	mg/kg	-	< 0.5	-	-	
Benzo(a)pyrene	0.5	mg/kg	-	< 0.5	-	-	
Benzo(b&j)fluoranthene ^{N07}	0.5	mg/kg	-	< 0.5	-	-	
Benzo(g.h.i)perylene	0.5	mg/kg	-	< 0.5	-	-	
Benzo(k)fluoranthene	0.5	mg/kg	-	< 0.5	-	-	
Chrysene	0.5	mg/kg	-	< 0.5	-	-	
Dibenz(a.h)anthracene	0.5	mg/kg	-	< 0.5	-	-	
Fluoranthene	0.5	mg/kg	-	< 0.5	-	-	
Fluorene	0.5	mg/kg	-	< 0.5	-	-	
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	-	< 0.5	-	-	
Naphthalene	0.5	mg/kg	-	< 0.5	-	-	
Phenanthrene	0.5	mg/kg	-	< 0.5	-	-	
Pyrene	0.5	mg/kg	-	< 0.5	-	-	
Total PAH*	0.5	mg/kg	-	< 0.5	-	-	
2-Fluorobiphenyl (surr.)	1	%	-	84	-	-	
p-Terphenyl-d14 (surr.)	1	%	-	83	-	-	
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
TRH >C10-C16	50	mg/kg	-	< 50	-	-	
TRH >C16-C34	100	mg/kg	-	< 100	-	-	
TRH >C34-C40	100	mg/kg	-	< 100	-	-	
TRH >C10-C40 (total)*	100	mg/kg	-	< 100	-	-	
Conductivity (1:5 aqueous extract at 25 °C as rec.)	10	uS/cm	-	130	-	-	
pH (1:5 Aqueous extract at 25 °C as rec.)	0.1	pH Units	-	7.7	-	-	
Cation Exchange Capacity							
Cation Exchange Capacity	0.05	meq/100g	-	8.0	-	-	


Client Sample ID			SS57-5	SS65-5	SS38-1	SS64-5
Sample Matrix			Soil	Soil	Soil	Soil
			N23-	N23-	N23-	N23-
Eurofins Sample No.			Ma0051720	Ma0051721	Ma0051722	Ma0051723
Date Sampled			Mar 21, 2023	Mar 21, 2023	Mar 21, 2023	Mar 21, 2023
Test/Reference	LOR	Unit				
Acid Herbicides						
2.4-D	0.5	mg/kg	< 0.5	-	-	-
2.4-DB	0.5	mg/kg	< 0.5	-	-	-
2.4.5-T	0.5	mg/kg	< 0.5	-	-	-
2.4.5-TP	0.5	mg/kg	< 0.5	-	-	-
Actril (loxynil)	0.5	mg/kg	< 0.5	-	-	-
Dicamba	0.5	mg/kg	< 0.5	-	-	-
Dichlorprop	0.5	mg/kg	< 0.5	-	-	-
Dinitro-o-cresol	0.5	mg/kg	< 0.5	-	-	-
Dinoseb	0.5	mg/kg	< 0.5	-	-	-
MCPA	0.5	mg/kg	< 0.5	-	-	-
МСРВ	0.5	mg/kg	< 0.5	-	-	-
Mecoprop	0.5	mg/kg	< 0.5	-	-	-
Warfarin (surr.)	1	%	170	-	-	-
Heavy Metals						
Arsenic	2	mg/kg	2.8	4.0	2.6	3.1
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	16	23	19	16
Copper	5	mg/kg	5.3	8.6	< 5	7.4
Lead	5	mg/kg	5.1	15	10	11
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Nickel	5	mg/kg	< 5	< 5	< 5	< 5
	5	mg/kg	14	15	29	28
Sample Properties		1				
% Moisture	1	%	7.9	11	18	14
Total Recoverable Hydrocarbons - 1999 NEPM Fract	ions					
TRH C6-C9	20	mg/kg	< 20	-	-	-
TRH C10-C14	20	mg/kg	< 20	-	-	-
TRH C15-C28	50	mg/kg	< 50	-	-	-
TRH C29-C36	50	mg/kg	< 50	-	-	-
TRH C10-C36 (Total)	50	mg/kg	< 50	-	-	-
BTEX						
Benzene	0.1	mg/kg	< 0.1	-	-	-
	0.1	mg/kg	< 0.1	-	-	-
	0.1	mg/kg	< 0.1	-	-	-
m&p-Xylenes	0.2	mg/kg	< 0.2	-	-	-
0-Xylene	0.1	mg/kg	< 0.1	-	-	-
A Dremefluerebenzene (ourr.)	0.3	mg/kg	< 0.3	-	-	-
4-Bromonuorobenzene (surr.)	1 iene	%	89	-	-	-
Total Recoverable Hydrocarbons - 2013 NEPM Fract			0.5			
	0.5	mg/kg	< 0.5	-	-	-
	50	mg/kg	< 50	-	-	-
	20	mg/kg	< 20	-	-	-
Polycyclia Aromatic Hydrocenters	20	під/кд	< 20	-	-	-
	0.5		0.5			
Benzo(a)pyrene IEQ (lower bound) *	0.5	mg/kg	< 0.5	-	-	-
	0.5	mg/kg	0.6	-	-	-
Denzo(a)pyrene IEQ (upper bound) ^	0.5	mg/kg	1.2	-	-	-
Acenaphthene	0.5	mg/kg	< 0.5	-	-	-



Client Sample ID			SS57-5	SS65-5	SS38-1	SS64-5
Sample Matrix			Soil	Soil	Soil	Soil
			N23-	N23-	N23-	N23-
Eurofins Sample No.			Ma0051720	Ma0051721	Ma0051722	Ma0051723
Date Sampled			Mar 21, 2023	Mar 21, 2023	Mar 21, 2023	Mar 21, 2023
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Acenaphthylene	0.5	mg/kg	< 0.5	-	-	-
Anthracene	0.5	mg/kg	< 0.5	-	-	-
Benz(a)anthracene	0.5	mg/kg	< 0.5	-	-	-
Benzo(a)pyrene	0.5	mg/kg	< 0.5	-	-	-
Benzo(b&j)fluoranthene ^{N07}	0.5	mg/kg	< 0.5	-	-	-
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	-	-	-
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	-	-	-
Chrysene	0.5	mg/kg	< 0.5	-	-	-
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	-	-	-
Fluoranthene	0.5	mg/kg	< 0.5	-	-	-
Fluorene	0.5	mg/kg	< 0.5	-	-	-
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	-	-	-
Naphthalene	0.5	mg/kg	< 0.5	-	-	-
Phenanthrene	0.5	mg/kg	< 0.5	-	-	-
Pyrene	0.5	mg/kg	< 0.5	-	-	-
Total PAH*	0.5	mg/kg	< 0.5	-	-	-
2-Fluorobiphenyl (surr.)	1	%	90	-	-	-
p-Terphenyl-d14 (surr.)	1	%	93	-	-	-
Total Recoverable Hydrocarbons - 2013 NEPM Fract	ions					
TRH >C10-C16	50	mg/kg	< 50	-	-	-
TRH >C16-C34	100	mg/kg	< 100	-	-	-
TRH >C34-C40	100	mg/kg	< 100	-	-	-
TRH >C10-C40 (total)*	100	mg/kg	< 100	-	-	-
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	-	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
a-HCH	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
b-HCH	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
d-HCH	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
g-HCH (Lindane)	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Toxaphene	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	-	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	-	< 0.1



Client Sample ID			SS57-5	SS65-5	SS38-1	SS64-5
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			N23- Ma0051720	N23- Ma0051721	N23- Ma0051722	N23- Ma0051723
Date Sampled			Mar 21, 2023	Mar 21, 2023	Mar 21, 2023	Mar 21, 2023
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
Dibutylchlorendate (surr.)	1	%	125	111	-	91
Tetrachloro-m-xylene (surr.)	1	%	82	79	-	70
Organophosphorus Pesticides	-	,,,				
Azinphos-methyl	0.2	ma/ka	< 0.2	< 0.2	-	< 0.2
Bolstar	0.2	ma/ka	< 0.2	< 0.2	-	< 0.2
Chlorfenvinphos	0.2	ma/ka	< 0.2	< 0.2	-	< 0.2
Chlorpyrifos	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Coumaphos	2	mg/kg	< 2	< 2	-	< 2
Demeton-S	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Demeton-O	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Diazinon	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Dichlorvos	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Dimethoate	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Disulfoton	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
EPN	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Ethion	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Ethoprop	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Ethyl parathion	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Fenitrothion	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Fensulfothion	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Fenthion	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Malathion	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Merphos	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Methyl parathion	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Mevinphos	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Monocrotophos	2	mg/kg	< 2	< 2	-	< 2
Naled	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Omethoate	2	mg/kg	< 2	< 2	-	< 2
Phorate	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Pirimiphos-methyl	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Pyrazophos	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Ronnel	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Terbufos	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Tetrachlorvinphos	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Tokuthion	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Trichloronate	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Triphenylphosphate (surr.)	1	%	97	92	-	81



Client Sample ID			SS39-1	SS44-1	SS46-1
Sample Matrix			Soil	Soil	Soil
Eurofins Sample No.			N23- Ma0051724	N23- Ma0051725	N23- Ma0051726
Date Sampled			Mar 21, 2023	Mar 21, 2023	Mar 21, 2023
Test/Poteronco		Unit	1111 21, 2020	11111 21, 2020	1111 21, 2020
	LOK	Unit			
	2	ma/ka	- 2	- 2	- 2
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4
Chromium	5	ma/ka	24	19	12
Copper	5	ma/ka	< 5	< 5	< 5
Lead	5	ma/ka	59	59	55
Mercury	0.1	ma/ka	< 0.1	< 0.1	< 0.1
Nickel	5	ma/ka	< 5	< 5	< 5
Zinc	5	mg/kg	7.4	16	25
Sample Properties					
% Moisture	1	%	12	13	11
Organochlorine Pesticides					
Chlordanes - Total	0.1	ma/ka	-	< 0.1	-
4.4'-DDD	0.05	ma/ka	_	< 0.05	-
4.4'-DDE	0.05	ma/ka	-	< 0.05	-
4.4'-DDT	0.05	mg/kg	-	< 0.05	-
a-HCH	0.05	mg/kg	-	< 0.05	-
Aldrin	0.05	mg/kg	-	< 0.05	-
b-HCH	0.05	mg/kg	-	< 0.05	-
d-HCH	0.05	mg/kg	-	< 0.05	-
Dieldrin	0.05	mg/kg	-	< 0.05	-
Endosulfan I	0.05	mg/kg	-	< 0.05	-
Endosulfan II	0.05	mg/kg	-	< 0.05	-
Endosulfan sulphate	0.05	mg/kg	-	< 0.05	-
Endrin	0.05	mg/kg	-	< 0.05	-
Endrin aldehyde	0.05	mg/kg	-	< 0.05	-
Endrin ketone	0.05	mg/kg	-	< 0.05	-
g-HCH (Lindane)	0.05	mg/kg	-	< 0.05	-
Heptachlor	0.05	mg/kg	-	< 0.05	-
Heptachlor epoxide	0.05	mg/kg	-	< 0.05	-
Hexachlorobenzene	0.05	mg/kg	-	< 0.05	-
Methoxychlor	0.05	mg/kg	-	< 0.05	-
Toxaphene	0.5	mg/kg	-	< 0.5	-
Aldrin and Dieldrin (Total)*	0.05	mg/kg	-	< 0.05	-
DDT + DDE + DDD (Total)*	0.05	mg/kg	-	< 0.05	-
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	-	< 0.1	-
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	-	< 0.1	-
Dibutylchlorendate (surr.)	1	%	-	140	-
l etrachloro-m-xylene (surr.)	1	%	-	79	-
Organophosphorus Pesticides					
Azinphos-methyl	0.2	mg/kg	-	< 0.2	-
Bolstar	0.2	mg/kg	-	< 0.2	-
Chlorevrifes	0.2	mg/kg	-	< 0.2	-
Chloropyritos	0.2	mg/kg	-	< 0.2	-
Courseshee	0.2	mg/kg	-	< 0.2	-
Courriances	2	mg/kg	-	<2	-
Demeton O	0.2	mg/kg	-	< 0.2	-
Diazinon	0.2	mg/kg	-	< 0.2	-
	0.2	mg/kg	-	< 0.2	-
DIGHIOLVO3	0.2	L mg/kg	-	< 0.Z	-



Client Sample ID Sample Matrix			SS39-1 Soil	SS44-1 Soil	SS46-1 Soil
Eurofins Sample No.			N23- Ma0051724	N23- Ma0051725	N23- Ma0051726
Date Sampled			Mar 21, 2023	Mar 21, 2023	Mar 21, 2023
Test/Reference	LOR	Unit			
Organophosphorus Pesticides					
Dimethoate	0.2	mg/kg	-	< 0.2	-
Disulfoton	0.2	mg/kg	-	< 0.2	-
EPN	0.2	mg/kg	-	< 0.2	-
Ethion	0.2	mg/kg	-	< 0.2	-
Ethoprop	0.2	mg/kg	-	< 0.2	-
Ethyl parathion	0.2	mg/kg	-	< 0.2	-
Fenitrothion	0.2	mg/kg	-	< 0.2	-
Fensulfothion	0.2	mg/kg	-	< 0.2	-
Fenthion	0.2	mg/kg	-	< 0.2	-
Malathion	0.2	mg/kg	-	< 0.2	-
Merphos	0.2	mg/kg	-	< 0.2	-
Methyl parathion	0.2	mg/kg	-	< 0.2	-
Mevinphos	0.2	mg/kg	-	< 0.2	-
Monocrotophos	2	mg/kg	-	< 2	-
Naled	0.2	mg/kg	-	< 0.2	-
Omethoate	2	mg/kg	-	< 2	-
Phorate	0.2	mg/kg	-	< 0.2	-
Pirimiphos-methyl	0.2	mg/kg	-	< 0.2	-
Pyrazophos	0.2	mg/kg	-	< 0.2	-
Ronnel	0.2	mg/kg	-	< 0.2	-
Terbufos	0.2	mg/kg	-	< 0.2	-
Tetrachlorvinphos	0.2	mg/kg	-	< 0.2	-
Tokuthion	0.2	mg/kg	-	< 0.2	-
Trichloronate	0.2	mg/kg	-	< 0.2	-
Triphenylphosphate (surr.)	1	%	-	99	-
Conductivity (1:5 aqueous extract at 25 °C as rec.)	10	uS/cm	-	-	73
pH (1:5 Aqueous extract at 25 °C as rec.)	0.1	pH Units	-	-	7.3
Cation Exchange Capacity					
Cation Exchange Capacity	0.05	meq/100g	_	-	10



Sample History

Where samples are submitted/analysed over several days, the last date of extraction is reported.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Acid Herbicides	Melbourne	Mar 30, 2023	14 Days
- Method: LTM-ORG-2180 Phenoxy Acid Herbicides			
pH (1:5 Aqueous extract at 25 °C as rec.)	Sydney	Mar 29, 2023	7 Days
- Method: LTM-GEN-7090 pH by ISE			
Metals M8	Sydney	Mar 29, 2023	28 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Sydney	Mar 29, 2023	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
BTEX	Sydney	Mar 29, 2023	14 Days
- Method: LTM-ORG-2010 BTEX and Volatile TRH			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Mar 29, 2023	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Polycyclic Aromatic Hydrocarbons	Sydney	Mar 29, 2023	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Mar 29, 2023	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
% Moisture	Sydney	Mar 27, 2023	14 Days
- Method: LTM-GEN-7080 Moisture			
Organochlorine Pesticides	Sydney	Mar 29, 2023	14 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
Organophosphorus Pesticides	Sydney	Mar 29, 2023	14 Days
- Method: LTM-ORG-2200 Organophosphorus Pesticides by GC-MS			
Conductivity (1:5 aqueous extract at 25 °C as rec.)	Melbourne	Mar 30, 2023	7 Days
- Method: LTM-INO-4030 Conductivity			
Cation Exchange Capacity	Melbourne	Apr 03, 2023	28 Days

- Method: LTM-MET-3060 Cation Exchange Capacity by bases & Exchangeable Sodium Percentage

		ing Australia Pty Ltd													Eurofins ARL Pty Ltd ABN: 91 05 0159 898	Eurofins Environm	ent Testing NZ Ltd			
web: w email:	ww.eurofins.com.au	com	Melbourne 6 Monterey Roa Dandenong Sou VIC 3175 Tel: +61 3 8564 NATA# 1261 Sit	Geelon d 19/8 Le th Groved: VIC 321 5000 Tel: +61 e# 1254 NATA#	g Sydney walan Street 179 Mag ale Girrawee 6 NSW 21 1 3 8564 5000 Tel: +61 1261 Site# 25403 NATA# 1	owar Ro en 45 2 9900 261 Site	oad 8400 e# 1821	Canb Unit 1 Mitch ACT 2 Tel: + 7 NATA	erra ,2 Daci ell 2911 61 2 61 \# 1261	re Stree 113 809 Site# 2	t 1, N Q 1 T 25466 N	risbane /21 Sma lurarrie LD 417 el: +61 ATA# 1	e allwood 72 7 3902 4 261 Site	Place 4600 # 2079	Newo 1/2 Fi Mayfi Tel: + NATA 4 Site#	castle rost Driv eld Wes 61 2 49 4# 1261 25079	ve st NSW 2304 968 8448 & 25289	Perth 46-48 Banksia Road Welshpool WA 6106 Tel: +61 8 6253 4444 NATA# 2377 Site# 2370	Auckland 35 O'Rorke Road Penrose, Auckland 1061 Tel: +64 9 526 45 51 IANZ# 1327	Christchurch 43 Detroit Drive Rolleston, Christchurch 7675 Tel: 0800 856 450 IANZ# 1290
Co Ad	ompany Name: Idress:	Qualtest 2 Murray Dv Mayfield We NSW 2304	vyer Circuit est				O R(Pl Fa	rder N eport hone: ax:	lo.: #:	9 ((97415)2 496)2 496	0 68 446 60 977	68 75					Received: Due: Priority: Contact Name:	Mar 22, 2023 11:10 Mar 29, 2023 5 Day Libby Betz) AM
Pro Pro	oject Name: oject ID:	MEDOWIE (NEW23P-00	GARDENS 009														E	urofins Analytical Ser	vices Manager : Ar	ndrew Black
			Asbestos - WA guidelines	E.coli (MPN)	HOLD	HOLD	pH (1:5 Aqueous extract at 25 °C as rec.)	Thermotolerant Coliforms (MPN)	Acid Herbicides	Metals M8	Suite B14: OCP/OPP	Moisture Set	Cation Exchange Capacity	Eurofins Suite B7						
Melk	oourne Laborato	ory - NATA # 12	261 Site # 12	54				Х				Х				Х				
Syd	ney Laboratory	- NATA # 1261	Site # 18217	1		X	X		Х	X	X		X	Х	X		X			
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID		×				X									
1	TP09-4_1.5-	Mar 21, 2023		Soil	N23-Ma0051678			х												
2	TP09-4_1.9- 2.0	Mar 21, 2023		Soil	N23-Ma0051679			x												
3	TP11-4_0.2- 0.3	Mar 21, 2023		Soil	N23-Ma0051680		x				x									
4	TP11-4_1.0- 1.1	Mar 21, 2023		Soil	N23-Ma0051681		x				х									
5	TP11-4_1.5- 1.6	Mar 21, 2023		Soil	N23-Ma0051682			х												
6	TP11-4_1.9- 2.0	Mar 21, 2023		Soil	N23-Ma0051683			х												
7	TP12-5_0.0- 0.2	Mar 21, 2023		Soil	N23-Ma0051684	х						х	х		х					

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web: vehilt	www.eurofins.com.au	.com	Melbourne 6 Monterey Road Dandenong South VIC 3175 Tel: +61 3 8564 5000 NATA# 1261 Site# 123	Geelong S 19/8 Lewalan Street 1 Grovedale G VIC 3216 N Tel: +61 3 8564 5000 T 54 NATA# 1261 Site# 25403	Sydney 79 Magov Birraween ISW 2145 Fel: +61 2 IATA# 12	war Ro 5 9900 8 61 Site	oad 8400 e# 1821	Canb Unit 1 Mitch ACT Tel: +	erra ,2 Daci ell 2911 61 2 61 \# 1261	re Stree 113 809 Site# 2	Et 1 N G 01 T 25466 N	risbane /21 Sma lurarrie LD 417 el: +61 ATA# 1	allwood 72 7 3902 - 261 Site	Place 4600 e# 2079	Newo 1/2 Fi Mayfi Tel: + NATA 4 Site#	astle rost Driv eld Wes 61 2 49 # 1261 25079	ve st NSW 2304 968 8448 & 25289	Perth 46-48 Banksia Road Welshpool WA 6106 Tel: +61 8 6253 4444 NATA# 2377 Site# 2370	Auckland 35 O'Rorke Road Penrose, Auckland 1061 Tel: +64 9 526 45 51 IANZ# 1327	Christchurch 43 Detroit Drive Rolleston, Christchurch 7675 Tel: 0800 856 450 IANZ# 1290
Ca Ad	ompany Name: ddress:	Qualtest 2 Murray Dy Mayfield We NSW 2304	wyer Circuit est				O Re Pl Fa	rder N eport hone: ax:	lo.: #:	9	97415 02 490 02 490	0 58 440 50 977	68 75					Received: Due: Priority: Contact Name:	Mar 22, 2023 11:10 Mar 29, 2023 5 Day Libby Betz) AM
Pi Pi	roject Name: roject ID:	MEDOWIE NEW23P-0	GARDENS 009														E	urofins Analytical Ser	vices Manager : Ar	ndrew Black
			Asbestos - WA guidelines	E.coli (MPN)	HOLD	HOLD	pH (1:5 Aqueous extract at 25 °C as rec.)	Thermotolerant Coliforms (MPN)	Acid Herbicides	Metals M8	Suite B14: OCP/OPP	Moisture Set	Cation Exchange Capacity	Eurofins Suite B7						
Mel	bourne Laborato	ory - NATA # 1	261 Site # 1254					х				Х				Х				
Syc	Iney Laboratory	- NATA # 1261	Site # 18217			Х			Х	Х			x	х	X		х			
8	TP12-5_0.5- 0.6	Mar 21, 2023	Soil	N23-Ma005	51685				x											
9	TP13-5_0.0- 0.2	Mar 21, 2023	Soil	N23-Ma005	51686	х							х		x					
10	TP13-5_0.5- 0.6	Mar 21, 2023	Soil	N23-Ma005	51687				х											
11	TP07-4_0.2- 0.3	Mar 21, 2023	Soil	N23-Ma005	51688			х												
12	TP07-4_0.9- 1.0	Mar 21, 2023	Soil	N23-Ma005	51689		x				х									
13	TP07-4_1.5- 1.6	Mar 21, 2023	Soil	N23-Ma005	51690			х												
14	TP07-4_1.9- 2.0	Mar 21, 2023	Soil	N23-Ma005	51691			х												
15	TP08-4_0.2- 0.3	Mar 21, 2023	Soil	N23-Ma005	51692			х												
16	TP08-4_0.9- 1.0	Mar 21, 2023	Soil	N23-Ma005	51693		х				х									

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web: v email:	ww.eurofins.com.au EnviroSales@eurofins	.com	Melbourne 6 Monterey Road Dandenong South VIC 3175 Tel: +61 3 8564 5000 NATA# 1261 Site# 1:	Geelong S 19/8 Lewalan Street 1 Grovedale 0 VIC 3216 1 Tel: +61 3 8564 5000 1 54 NATA# 1261 Site# 25403 1	Sydney 179 Mago Girraweer NSW 214 Tel: +61 2 NATA# 12	owar Ro 5 2 9900 8 261 Site	oad 3400 # 1821	Canb Unit 1 Mitch ACT : Tel: + 7 NATA	erra I,2 Dac ell 2911 -61 2 61 A# 1261	re Stree 113 809 Site# 2	E t 1 N C 1 T 25466 N	V21 Sma /21 Sma /urarrie (LD 41 iel: +61 IATA# 1	e allwood 72 7 3902 261 Sit	Place 4600 e# 2079	Newo 1/2 F Mayfi Tel: + NATA 4 Site#	astle rost Driv eld Wes 61 2 49 # 1261 25079	ve st NSW 2304 968 8448 & 25289	Perth 46-48 Banksia Road Welshpool WA 6106 Tel: +61 8 6253 4444 NATA# 2377 Site# 2370	Auckland 35 O'Rorke Road Penrose, Auckland 1061 Tel: +64 9 526 45 51 IANZ# 1327	Christchurch 43 Detroit Drive Rolleston, Christchurch 7675 Tel: 0800 856 450 IANZ# 1290
Cc Ac	ompany Name: Idress:	Qualtest 2 Murray D Mayfield W NSW 2304	wyer Circuit est				O Ri Pl Fa	rder N eport hone: ax:	No.: #:	!	97415 02 49 02 49	60 68 440 60 97	68 75					Received: Due: Priority: Contact Name:	Mar 22, 2023 11:10 Mar 29, 2023 5 Day Libby Betz) AM
Pr Pr	oject Name: oject ID:	MEDOWIE NEW23P-0	GARDENS 009														E	urofins Analytical Ser	vices Manager : Ar	ndrew Black
	Sample Detail Melbourne Laboratory - NATA # 1261 Site # 1254						E.coli (MPN)	HOLD	HOLD	pH (1:5 Aqueous extract at 25 °C as rec.)	Thermotolerant Coliforms (MPN)	Acid Herbicides	Metals M8	Suite B14: OCP/OPP	Moisture Set	Cation Exchange Capacity	Eurofins Suite B7			
Mel	oourne Laborato	ory - NATA # 1	261 Site # 1254					X				X				Х				
Syd	ney Laboratory	- NATA # 1261	Site # 18217			Х			Х	Х			х	х	Х		х			
17	TP08-4_1.5-	Mar 21, 2023	So	I N23-Ma00	51694			х												
18	TP08-4_1.9- 2.0	Mar 21, 2023	So	I N23-Ma00	51695			х												
19	TP09-4_0.2- 0.3	Mar 21, 2023	So	I N23-Ma00	51696		x				х									
20	TP09-4_0.9- 1.0	Mar 21, 2023	So	I N23-Ma00	51697			х												
21	TP06-2_0.0- 0.2	Mar 21, 2023	So	I N23-Ma00	51698	х									х		х			
22	TP06-2_0.5- 0.6	Mar 21, 2023	So	I N23-Ma00	51699				x											
23	TP72-2_0.0- 0.2	Mar 21, 2023	So	I N23-Ma00	51700	х							х		x					
24	TP72-2_0.5- 0.6	Mar 21, 2023	So	I N23-Ma00	51701				х											
25	TP73-2_0.0- 0.2	Mar 21, 2023	So	I N23-Ma00	51702	х									х		x			

		Fine	Eurofins Environm ABN: 50 005 085 521	ent Testing Australia P	ty Ltd													Eurofins ARL Pty Ltd ABN: 91 05 0159 898	Eurofins Environm NZBN: 9429046024954	ent Testing NZ Ltd
web: web: web: web: web: web: web: web:	b: www.eurofins.com.au ail: EnviroSales@eurofins.com Company Name: Qualtest		Melbourne 6 Monterey Road Dandenong South VIC 3175 Tel: +61 3 8564 5000 NATA# 1261 Site# 125	Geelong 19/8 Lewalan Street Grovedale VIC 3216 Tel: +61 3 8564 5000 4 NATA# 1261 Site# 25403	Sydney 179 Mago Girraweer NSW 214 Tel: +61 2 NATA# 12	owar Ro n 5 2 9900 261 Site	oad 8400 e# 1821	Canb Unit 1 Mitch ACT 2 Tel: + 7 NATA	erra I,2 Daci ell 2911 61 2 61 \# 1261	re Stree 113 809 Site# 2	B t 1/ N Q 1 T 25466 N	risbane 21 Sma lurarrie LD 417 el: +61 ATA# 1	allwood 72 7 3902 4 261 Site	Place 4600 e# 2079	Newo 1/2 Fi Mayfi Tel: + NATA 4 Site#	castle rost Driv eld Wes 61 2 49 # 1261 25079	ve st NSW 2304 968 8448 & 25289	Perth 46-48 Banksia Road Welshpool WA 6106 Tel: +61 8 6253 4444 NATA# 2377 Site# 2370	Auckland 35 O'Rorke Road Penrose, Auckland 1061 Tel: +64 9 526 45 51 IANZ# 1327	Christchurch 43 Detroit Drive Rolleston, Christchurch 7675 Tel: 0800 856 450 IANZ# 1290
Co Ao	ompany Name: Idress:	Qualtest 2 Murray Dy Mayfield We NSW 2304	wyer Circuit est				O R Pl Fa	rder N eport hone: ax:	lo.: #:	9	97415 02 496 02 496	0 68 446 60 977	68 75					Received: Due: Priority: Contact Name:	Mar 22, 2023 11:10 Mar 29, 2023 5 Day Libby Betz) AM
Pr Pr	oject Name: oject ID:	MEDOWIE NEW23P-00	GARDENS 009														E	urofins Analytical Ser	vices Manager : Ar	ndrew Black
		Si	ample Detail			Asbestos - WA guidelines	E.coli (MPN)	HOLD	HOLD	pH (1:5 Aqueous extract at 25 °C as rec.)	Thermotolerant Coliforms (MPN)	Acid Herbicides	Metals M8	Suite B14: OCP/OPP	Moisture Set	Cation Exchange Capacity	Eurofins Suite B7			
Mel	bourne Laborato	ry - NATA # 1:	261 Site # 1254					Х				Х				Х				
Syd	ney Laboratory -	NATA # 1261	Site # 18217			Х			х	X			х	х	x		х			
26	TP73-2_0.5- 0.6	Mar 21, 2023	Soil	N23-Ma00	051703				х											
27	D21.3.23	Mar 21, 2023	Soil	N23-Ma00)51704										X		х			
28	TP74-2_0.0- 0.2	Mar 21, 2023	Soil	N23-Ma00)51705	х							х		х					
29	TP74-2_0.5- 0.6	Mar 21, 2023	Soil	N23-Ma00)51706				х											
30	SS41-1	Mar 21, 2023	Soil	N23-Ma00)51707	Х							Х		X					
31	SS40-1	Mar 21, 2023	Soil	N23-Ma00)51708	Х							Х		X					
32	SS45-1	Mar 21, 2023	Soil	N23-Ma00)51709	Х									X		Х			
33	SS42-1	Mar 21, 2023	Soil	N23-Ma00)51710	Х							Х		X					
34	SS43-1	Mar 21, 2023	Soil	N23-Ma00	051711	Х							Х		X					
35	SS58-5	Mar 21, 2023	Soil	N23-Ma00)51712								Х	Х	X					
36	SS50-3	Mar 21, 2023	Soil	N23-Ma00	051713	Х									х		х			
37	TP01-1_0.0- 0.2	Mar 21, 2023	Soil	N23-Ma00)51714	х							х		x					

		fine	Eurofins Environme ABN: 50 005 085 521	ent Testing Australia Pty Lto													Eurofins ARL Pty Ltd ABN: 91 05 0159 898	Eurofins Environm NZBN: 9429046024954	ent Testing NZ Ltd
web: w email:	ww.eurofins.com.au EnviroSales@eurofins	.com	Melbourne 6 Monterey Road Dandenong South VIC 3175 Tel: +61 3 8564 5000 NATA# 1261 Site# 1254	Geelong Sydn 19/8 Lewalan Street 179 M Grovedale Girrav VIC 3216 NSW Tel: +61 3 8564 5000 Tel: +1 NATA# 1261 Site# 25403 NATA	ey agowar F veen 2145 61 2 9900 # 1261 Si	Road 9 8400 te# 1821	Cant Unit Mitch ACT Tel: - 17 NAT	berra 1,2 Dac iell 2911 i-61 2 6 ⁷ A# 1261	re Stree 113 809 I Site# 2	B et 1, N C 01 T 25466 N	risbane /21 Sma lurarrie LD 417 el: +61 ATA# 1	allwood 72 7 3902 4 261 Site	Place 4600 e# 2079	Newo 1/2 Fi Mayfi Tel: + NATA 4 Site#	castle rost Driv eld Wes 61 2 49 4# 1261 25079	ve st NSW 2304 968 8448 & 25289	Perth 46-48 Banksia Road Welshpool WA 6106 Tel: +61 8 6253 4444 NATA# 2377 Site# 2370	Auckland 35 O'Rorke Road Penrose, Auckland 1061 Tel: +64 9 526 45 51 IANZ# 1327	Christchurch 43 Detroit Drive Rolleston, Christchurch 7675 Tel: 0800 856 450 IANZ# 1290
Cc Ac	ompany Name: Idress:	Qualtest 2 Murray Dy Mayfield We NSW 2304	wyer Circuit est			O R P F	Order I Report Phone: ax:	No.: #:		97415 02 490 02 490	0 58 446 50 977	68 75					Received: Due: Priority: Contact Name:	Mar 22, 2023 11:10 Mar 29, 2023 5 Day Libby Betz) AM
Pr Pr	oject Name: oject ID:	MEDOWIE NEW23P-0	GARDENS 009													E	urofins Analytical Ser	vices Manager : Ar	ndrew Black
Sample Detail Melbourne Laboratory - NATA # 1261 Site # 1254						E.coli (MPN)	HOLD	HOLD	pH (1:5 Aqueous extract at 25 °C as rec.)	Thermotolerant Coliforms (MPN)	Acid Herbicides	Metals M8	Suite B14: OCP/OPP	Moisture Set	Cation Exchange Capacity	Eurofins Suite B7			
Mell	bourne Laborato	ory - NATA # 1	261 Site # 1254				х				X				х				
Syd	ney Laboratory	- NATA # 1261	Site # 18217		Х			Х	Х			Х	Х	X		х			
38	TP01-1_0.5- 0.6	Mar 21, 2023	Soil	N23-Ma005171	5			x											
39	TP02-1_0.0- 0.2	Mar 21, 2023	Soil	N23-Ma005171	6 X							x		x					
40	SS75-2	Mar 21, 2023	Soil	N23-Ma005171	7 X				х					х	х	х			
41	SS76-2	Mar 21, 2023	Soil	N23-Ma005171	8 X							х		Х					
42	SS77-2	Mar 21, 2023	Soil	N23-Ma005171	9 X							х		х					
43	SS57-5	Mar 21, 2023	Soil	N23-Ma005172	20						х		х	Х		х			
44	SS65-5	Mar 21, 2023	Soil	N23-Ma005172	21							х	х	x					
45	SS38-1	Mar 21, 2023	Soil	N23-Ma005172	22 X							х		х					
46	SS64-5	Mar 21, 2023	Soil	N23-Ma005172	23							Х	х	х					
47	SS39-1	Mar 21, 2023	Soil	N23-Ma005172	24 X							Х		Х					
48	SS44-1	Mar 21, 2023	Soil	N23-Ma005172	25 X							Х	Х	Х					
49	SS46-1	Mar 21, 2023	Soil	N23-Ma005172	26 X				Х			Х		Х	Х				
50	TP02-1_0.5- 0.6	Mar 21, 2023	Soil	N23-Ma005185	50			х											

		Eurofins Environm	ent Testing Australia P	ty Ltd													Eurofins ARL Pty Ltd	Eurofins Environn	nent Testing NZ Ltd
web: www.eurofins.com.au email: EnviroSales@eurofins.c	ins	ABN: 50 005 085 521 Melbourne 6 Monterey Road Dandenong South VIC 3175 Tel: +61 3 8564 5000 NATA# 1261 Site# 1254	Geelong 19/8 Lewalan Street Grovedale VIC 3216 Tel: +61 3 8564 5000 NATA# 1261 Site# 25403	Sydney 179 Magowa Girraween NSW 2145 Tel: +61 2 99 NATA# 1261	r Roac 900 840 Site#	d 00 18217	Canb Unit 1 Mitche ACT 2 Tel: + 7 NATA	erra ,2 Dacı ell 2911 61 2 61 # 1261	re Stree 13 809 Site# 2	B t 1, C 1 T 5466 N	risband /21 Sma lurarrie LD 417 el: +61 ATA# 1	allwood 72 7 3902 261 Sit	Place 4600 e# 2079	Newo 1/2 Fi Mayfi Tel: + NATA 4 Site#	castle rost Driv eld Wes 61 2 49 4# 1261 25079 8	/e st NSW 230 68 8448 & 25289	ABN: 91 05 0159 898 Perth 46-48 Banksia Road Welshpool WA 6106 Tel: +61 8 6253 4444 NATA# 2377 Site# 2370	NZBN: 942904602495 Auckland 35 O'Rorke Road Penrose, Auckland 1061 Tel: +64 9 526 45 51 IANZ# 1327	4 Christchurch 43 Detroit Drive Rolleston, Christchurch 7675 Tel: 0800 856 450 IANZ# 1290
Company Name: Address: Project Name: Project ID:	Qualtest 2 Murray D Mayfield W NSW 2304 MEDOWIE NEW23P-0	Owyer Circuit /est GARDENS 0009				Or Re Ph Fa	der N port ione: x:	lo.: #:	(97415 02 496 02 496	0 68 440 60 97	68 75					Received: Due: Priority: Contact Name: Eurofins Analytical Ser	Mar 22, 2023 11:1 Mar 29, 2023 5 Day Libby Betz	0 AM
	roject ID: NEW23P-0009 Sample Detail					E.coli (MPN)	HOLD	HOLD	pH (1:5 Aqueous extract at 25 °C as rec.)	Thermotolerant Coliforms (MPN)	Acid Herbicides	Metals M8	Suite B14: OCP/OPP	Moisture Set	Cation Exchange Capacity	Eurofins Suite B7	-	-	
Melbourne Laborator	y - NATA # 1	1261 Site # 1254					Х				Х				Х				
Sydney Laboratory -	NATA # 126	1 Site # 18217			x			X	X			X	х	X		Х			
Test Counts				1	21	5	19	19	2	5	2	19	5	26	2	7			



Internal Quality Control Review and Glossary

General

- 1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
- 2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
- 3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
- 4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
- 5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds
- 6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
- 7. Samples were analysed on an 'as received' basis.
- 8. Information identified on this report with blue colour, indicates data provided by customer that may have an impact on the results.
- 9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA. If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported. Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

Units

enite		
mg/kg: milligrams per kilogram	mg/L: milligrams per litre	μg/L: micrograms per litre
ppm: parts per million	ppb: parts per billion	%: Percentage
org/100 mL: Organisms per 100 millilitres	NTU: Nephelometric Turbidity Units	MPN/100 mL: Most Probable Number of organisms per 100 millilitres
CFU: Colony forming unit		

Terms

АРНА	American Public Health Association
сос	Chain of Custody
СР	Client Parent - QC was performed on samples pertaining to this report
CRM	Certified Reference Material (ISO17034) - reported as percent recovery.
Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
LOR	Limit of Reporting.
LCS	Laboratory Control Sample - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
SRA	Sample Receipt Advice
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
ТВТО	Tributyltin oxide (bis-tributyltin oxide) - individual tributyltin compounds cannot be identified separately in the environment however free tributyltin was measured and its values were converted stoichiometrically into tributyltin oxide for comparison with regulatory limits.
TCLP	Toxicity Characteristic Leaching Procedure
TEQ	Toxic Equivalency Quotient or Total Equivalence
QSM	US Department of Defense Quality Systems Manual Version 5.4
US EPA	United States Environmental Protection Agency
WA DWER	Sum of PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC - Acceptance Criteria

The acceptance criteria should be used as a guide only and may be different when site specific Sampling Analysis and Quality Plan (SAQP) have been implemented

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR: No Limit

Results between 10-20 times the LOR: RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

NOTE: pH duplicates are reported as a range not as RPD

Surrogate Recoveries: Recoveries must lie between 20-130% for Speciated Phenols & 50-150% for PFAS

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.4 where no positive PFAS results have been reported have been reviewed and no data was affected.

QC Data General Comments

- 1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
- 2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
- 3. pH and Free Chlorine analysed in the laboratory Analysis on this test must begin within 30 minutes of sampling. Therefore, laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
- 4. Recovery Data (Spikes & Surrogates) where chromatographic interference does not allow the determination of recovery the term "INT" appears against that analyte.
- 5. For Matrix Spikes and LCS results a dash "-" in the report means that the specific analyte was not added to the QC sample.
- 6. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.



Quality Control Results

Test	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Method Blank				F		
Acid Herbicides						
2.4-D	mg/kg	< 0.5		0.5	Pass	
2.4-DB	mg/kg	< 0.5		0.5	Pass	
2.4.5-T	mg/kg	< 0.5		0.5	Pass	
2.4.5-TP	mg/kg	< 0.5		0.5	Pass	
Actril (loxynil)	mg/kg	< 0.5		0.5	Pass	
Dicamba	mg/kg	< 0.5		0.5	Pass	
Dichlorprop	mg/kg	< 0.5		0.5	Pass	
Dinitro-o-cresol	mg/kg	< 0.5		0.5	Pass	
Dinoseb	mg/kg	< 0.5		0.5	Pass	
МСРА	mg/kg	< 0.5		0.5	Pass	
МСРВ	mg/kg	< 0.5		0.5	Pass	
Месоргор	mg/kg	< 0.5		0.5	Pass	
Method Blank						
Heavy Metals						
Arsenic	mg/kg	< 2		2	Pass	
Cadmium	mg/kg	< 0.4		0.4	Pass	
Chromium	mg/kg	< 5		5	Pass	
Copper	mg/kg	< 5		5	Pass	
Lead	mg/kg	< 5		5	Pass	
Mercury	mg/kg	< 0.1		0.1	Pass	
Nickel	mg/kg	< 5		5	Pass	
Zinc	mg/kg	< 5		5	Pass	
Method Blank						
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	mg/kg	< 20		20	Pass	
TRH C10-C14	mg/kg	< 20		20	Pass	
TRH C15-C28	mg/kg	< 50		50	Pass	
TRH C29-C36	mg/kg	< 50		50	Pass	
Method Blank		r		1		
BTEX						
Benzene	mg/kg	< 0.1		0.1	Pass	
Toluene	mg/kg	< 0.1		0.1	Pass	
Ethylbenzene	mg/kg	< 0.1		0.1	Pass	
m&p-Xylenes	mg/kg	< 0.2		0.2	Pass	
o-Xylene	mg/kg	< 0.1		0.1	Pass	
Xylenes - Total*	mg/kg	< 0.3		0.3	Pass	
Method Blank		l	F	1		
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene	mg/kg	< 0.5		0.5	Pass	
TRH C6-C10	mg/kg	< 20		20	Pass	
Method Blank		r		1		
Polycyclic Aromatic Hydrocarbons						
Acenaphthene	mg/kg	< 0.5		0.5	Pass	
Acenaphthylene	mg/kg	< 0.5		0.5	Pass	
Anthracene	mg/kg	< 0.5		0.5	Pass	
Benz(a)anthracene	mg/kg	< 0.5		0.5	Pass	
Benzo(a)pyrene	mg/kg	< 0.5		0.5	Pass	
Benzo(b&j)fluoranthene	mg/kg	< 0.5		0.5	Pass	
Benzo(g.h.i)perylene	mg/kg	< 0.5		0.5	Pass	
Benzo(k)fluoranthene	mg/kg	< 0.5		0.5	Pass	



Test	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Chrysene	mg/kg	< 0.5		0.5	Pass	
Dibenz(a.h)anthracene	mg/kg	< 0.5		0.5	Pass	
Fluoranthene	mg/kg	< 0.5		0.5	Pass	
Fluorene	mg/kg	< 0.5		0.5	Pass	
Indeno(1.2.3-cd)pyrene	mg/kg	< 0.5		0.5	Pass	
Naphthalene	mg/kg	< 0.5		0.5	Pass	
Phenanthrene	mg/kg	< 0.5		0.5	Pass	
Pyrene	mg/kg	< 0.5		0.5	Pass	
Method Blank					_	
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
TRH >C10-C16	mg/kg	< 50		50	Pass	
TRH >C16-C34	mg/kg	< 100		100	Pass	
TRH >C34-C40	mg/kg	< 100		100	Pass	
Method Blank					-	
Organochlorine Pesticides						
Chlordanes - Total	mg/kg	< 0.1		0.1	Pass	
4.4'-DDD	mg/kg	< 0.05		0.05	Pass	
4.4'-DDE	mg/kg	< 0.05		0.05	Pass	
4.4'-DDT	mg/kg	< 0.05		0.05	Pass	
a-HCH	mg/kg	< 0.05		0.05	Pass	
Aldrin	mg/kg	< 0.05		0.05	Pass	
b-HCH	mg/kg	< 0.05		0.05	Pass	
d-HCH	mg/kg	< 0.05		0.05	Pass	
Dieldrin	mg/kg	< 0.05		0.05	Pass	
Endosulfan I	mg/kg	< 0.05		0.05	Pass	
Endosulfan II	mg/kg	< 0.05		0.05	Pass	
Endosulfan sulphate	mg/kg	< 0.05		0.05	Pass	
Endrin	mg/kg	< 0.05		0.05	Pass	
Endrin aldehyde	mg/kg	< 0.05		0.05	Pass	
Endrin ketone	mg/kg	< 0.05		0.05	Pass	
g-HCH (Lindane)	mg/kg	< 0.05		0.05	Pass	
Heptachlor	mg/kg	< 0.05		0.05	Pass	
Heptachlor epoxide	mg/kg	< 0.05		0.05	Pass	
Hexachlorobenzene	mg/kg	< 0.05		0.05	Pass	
Methoxychlor	mg/kg	< 0.05		0.05	Pass	
Toxaphene	mg/kg	< 0.5		0.5	Pass	
Method Blank			r	1		
Organophosphorus Pesticides						
Azinphos-methyl	mg/kg	< 0.2		0.2	Pass	
Bolstar	mg/kg	< 0.2		0.2	Pass	
Chlorfenvinphos	mg/kg	< 0.2		0.2	Pass	
Chlorpyrifos	mg/kg	< 0.2		0.2	Pass	
Chlorpyrifos-methyl	mg/kg	< 0.2		0.2	Pass	
Coumaphos	mg/kg	< 2		2	Pass	
Demeton-S	mg/kg	< 0.2		0.2	Pass	
Demeton-O	mg/kg	< 0.2		0.2	Pass	
Diazinon	mg/kg	< 0.2		0.2	Pass	
Dichlorvos	mg/kg	< 0.2		0.2	Pass	
Dimethoate	mg/kg	< 0.2		0.2	Pass	
Disulfoton	mg/kg	< 0.2		0.2	Pass	
EPN	mg/kg	< 0.2		0.2	Pass	
Ethion	mg/kg	< 0.2		0.2	Pass	
Ethoprop	mg/kg	< 0.2		0.2	Pass	
Ethyl parathion	mg/kg	< 0.2		0.2	Pass	



Test	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Fenitrothion	mg/kg	< 0.2		0.2	Pass	
Fensulfothion	mg/kg	< 0.2		0.2	Pass	
Fenthion	mg/kg	< 0.2		0.2	Pass	
Malathion	mg/kg	< 0.2		0.2	Pass	
Merphos	mg/kg	< 0.2		0.2	Pass	
Methyl parathion	mg/kg	< 0.2		0.2	Pass	
Mevinphos	mg/kg	< 0.2		0.2	Pass	
Monocrotophos	mg/kg	< 2		2	Pass	
Naled	ma/ka	< 0.2		0.2	Pass	
Omethoate	ma/ka	< 2		2	Pass	
Phorate	ma/ka	< 0.2		0.2	Pass	
Pirimiphos-methyl	ma/ka	< 0.2		0.2	Pass	
Pyrazophos	ma/ka	< 0.2		0.2	Pass	
Ronnel	ma/ka	< 0.2		0.2	Pass	
Terbufos	ma/ka	< 0.2		0.2	Pass	
Tetrachlorvinphos	ma/ka	< 0.2		0.2	Pass	
Tokuthion	ma/ka	< 0.2		0.2	Pass	
Trichloropate	ma/ka	< 0.2		0.2	Pass	
Method Blank	mg/ng	V 0.2		0.2	1 400	
Conductivity (1:5 aqueous extract at 25 °C as rec.)	uS/cm	< 10		10	Pass	
Method Blank	40/011			10	1 400	
Cation Exchange Capacity						
Cation Exchange Capacity	meq/100g	< 0.05		0.05	Pass	
LCS - % Recovery						
Acid Herbicides						
2.4-D	%	115		70-130	Pass	
2.4-DB	%	104		70-130	Pass	
2.4.5-T	%	90		70-130	Pass	
2.4.5-TP	%	73		70-130	Pass	
Actril (loxynil)	%	107		70-130	Pass	
Dicamba	%	127		70-130	Pass	
Dichlorprop	%	124		70-130	Pass	
Dinitro-o-cresol	%	106		70-130	Pass	
Dinoseb	%	111		70-130	Pass	
МСРА	%	122		70-130	Pass	
МСРВ	%	108		70-130	Pass	
Месоргор	%	107		70-130	Pass	
LCS - % Recovery						
Heavy Metals						
Arsenic	%	101		80-120	Pass	
Cadmium	%	102		80-120	Pass	
Chromium	%	99		80-120	Pass	
Copper	%	97		80-120	Pass	
Lead	%	99		80-120	Pass	
Mercury	%	99		80-120	Pass	
Nickel	%	95		80-120	Pass	
Zinc	%	95		80-120	Pass	
LCS - % Recovery			· · · · ·			
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	%	100		70-130	Pass	
TRH C10-C14	%	125		70-130	Pass	
LCS - % Recovery			ı I		. 1.00	
BTEX						
Benzene	%	101		70-130	Pass	



Test	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Toluene	%	103		70-130	Pass	
Ethylbenzene	%	100		70-130	Pass	
m&p-Xylenes	%	100		70-130	Pass	
o-Xylene	%	99		70-130	Pass	
Xylenes - Total*	%	100		70-130	Pass	
LCS - % Recovery			•	·		
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene	%	98		70-130	Pass	
TRH C6-C10	%	101		70-130	Pass	
LCS - % Recovery						
Polycyclic Aromatic Hydrocarbons						
Acenaphthene	%	89		70-130	Pass	
Acenaphthylene	%	95		70-130	Pass	
Anthracene	%	82		70-130	Pass	
Benz(a)anthracene	%	82		70-130	Pass	
Benzo(a)pyrene	%	78		70-130	Pass	
Benzo(b&j)fluoranthene	%	77		70-130	Pass	
Benzo(g.h.i)perylene	%	71		70-130	Pass	
Benzo(k)fluoranthene	%	81		70-130	Pass	
Chrysene	%	81		70-130	Pass	
Dibenz(a.h)anthracene	%	79		70-130	Pass	
Fluoranthene	%	72		70-130	Pass	
Fluorene	%	86		70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	81		70-130	Pass	
Naphthalene	%	78		70-130	Pass	
Phenanthrene	%	80		70-130	Pass	
Pyrene	%	73		70-130	Pass	
LCS - % Recovery						
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
TRH >C10-C16	%	73		70-130	Pass	
LCS - % Recovery						
Organochlorine Pesticides						
Chlordanes - Total	%	84		70-130	Pass	
4.4'-DDD	%	71		70-130	Pass	
4.4'-DDE	%	88		70-130	Pass	
4.4'-DDT	%	78		70-130	Pass	
a-HCH	%	79		70-130	Pass	
Aldrin	%	95		70-130	Pass	
b-HCH	%	85		70-130	Pass	
d-HCH	%	77		70-130	Pass	
Dieldrin	%	82		70-130	Pass	
Endosulfan I	%	77		70-130	Pass	
Endosulfan II	%	71		70-130	Pass	
Endosulfan sulphate	%	76		70-130	Pass	
Endrin	%	83		70-130	Pass	
Endrin aldehyde	%	78		70-130	Pass	
Endrin ketone	%	76		70-130	Pass	
g-HCH (Lindane)	%	84		70-130	Pass	
Heptachlor	%	89		70-130	Pass	
Heptachlor epoxide	%	85		70-130	Pass	
Hexachlorobenzene	%	89		70-130	Pass	
Methoxychlor	%	100		70-130	Pass	
LCS - % Recovery		1		1		
Organophosphorus Pesticides						



Test			Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Diazinon			%	82		70-130	Pass	
Dimethoate			%	90		70-130	Pass	
Ethion			%	96		70-130	Pass	
Fenitrothion			%	123		70-130	Pass	
Mevinphos			%	108		70-130	Pass	
LCS - % Recovery								
Conductivity (1:5 aqueous extract at	25 °C as rec.)		%	114		70-130	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery				1	r	I		
Acid Herbicides				Result 1				
Actril (loxynil)	S23-Ma0058918	NCP	%	98		70-130	Pass	
Dichlorprop	S23-Ma0058918	NCP	%	121		70-130	Pass	
МСРА	M23-Ma0053670	NCP	%	64		70-130	Fail	Q08
Spike - % Recovery				1				
Total Recoverable Hydrocarbons -	1999 NEPM Fract	ions		Result 1				
TRH C10-C14	S23-Ma0067174	NCP	%	121		70-130	Pass	
Spike - % Recovery				1	I I			
Total Recoverable Hydrocarbons -	2013 NEPM Fract	ions		Result 1				
TRH >C10-C16	S23-Ma0067174	NCP	%	128		70-130	Pass	
Spike - % Recovery				1				
Heavy Metals				Result 1				
Arsenic	N23-Ma0051702	CP	%	87		75-125	Pass	
Cadmium	N23-Ma0051702	CP	%	94		75-125	Pass	
Lead	N23-Ma0051702	CP	%	86		75-125	Pass	
Mercury	N23-Ma0051702	CP	%	95		75-125	Pass	
Zinc	N23-Ma0051702	CP	%	107		75-125	Pass	
Spike - % Recovery				1				
Organochlorine Pesticides				Result 1				
Chlordanes - Total	N23-Ma0051712	CP	%	91		70-130	Pass	
4.4'-DDD	N23-Ma0051712	CP	%	84		70-130	Pass	
4.4'-DDE	N23-Ma0051712	CP	%	95		70-130	Pass	
4.4'-DDT	N23-Ma0051712	CP	%	86		70-130	Pass	
а-НСН	N23-Ma0051712	CP	%	77		70-130	Pass	
Aldrin	N23-Ma0051712	CP	%	91		70-130	Pass	
b-HCH	N23-Ma0051712	CP	%	82		70-130	Pass	
d-HCH	N23-Ma0051712	CP	%	87		70-130	Pass	
Dieldrin	N23-Ma0051712	CP	%	88		70-130	Pass	
Endosulfan I	N23-Ma0051712	CP	%	89		70-130	Pass	
Endosulfan II	N23-Ma0051712	CP	%	95		70-130	Pass	
Endosulfan sulphate	N23-Ma0051712	CP	%	87		70-130	Pass	
Endrin	S23-Ma0070701	NCP	%	73		70-130	Pass	
Endrin aldehyde	N23-Ma0051712	CP	%	108		70-130	Pass	
Endrin ketone	N23-Ma0051712	CP	%	86		70-130	Pass	
g-HCH (Lindane)	N23-Ma0051712	CP	%	81		70-130	Pass	
Heptachlor	N23-Ma0051712	CP	%	85		70-130	Pass	
Heptachlor epoxide	N23-Ma0051712	CP	%	84		70-130	Pass	
Hexachlorobenzene	N23-Ma0051712	CP	%	81		70-130	Pass	
	S23-Ma0070701	NCP	%	90		/0-130	Pass	
Spike - % Recovery	4000 1:22:2							
Total Recoverable Hydrocarbons -	1999 NEPM Fract	ions	<i></i>	Result 1		70.100		
1RH C6-C9	N23-Ma0051717	CP	%	/8		70-130	Pass	
Spike - % Recovery								
BIEX		67	~ /	Result 1				
Benzene	N23-Ma0051717	CP	%	77		70-130	Pass	



Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Toluene	N23-Ma0051717	CP	%	75			70-130	Pass	
Ethylbenzene	N23-Ma0051717	CP	%	80			70-130	Pass	
m&p-Xylenes	N23-Ma0051717	CP	%	78			70-130	Pass	
o-Xylene	N23-Ma0051717	CP	%	80			70-130	Pass	
Xylenes - Total*	N23-Ma0051717	CP	%	78			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons -	2013 NEPM Fract	ions		Result 1					
Naphthalene	N23-Ma0051717	CP	%	77			70-130	Pass	
TRH C6-C10	N23-Ma0051717	CP	%	79			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	N23-Ma0051726	CP	%	83			75-125	Pass	
Cadmium	N23-Ma0051726	CP	%	88			75-125	Pass	
Chromium	N23-Ma0051726	CP	%	92			75-125	Pass	
Copper	N23-Ma0051726	CP	%	85			75-125	Pass	
Lead	N23-Ma0051726	CP	%	94			75-125	Pass	
Mercury	N23-Ma0051726	CP	%	87			75-125	Pass	
Nickel	N23-Ma0051726	CP	%	84			75-125	Pass	
Zinc	N23-Ma0051726	CP	%	87			75-125	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate				1					
Acid Herbicides	1			Result 1	Result 2	RPD			
2.4-D	S23-Ma0058919	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-DB	S23-Ma0058919	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4.5-T	S23-Ma0058919	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4.5-TP	S23-Ma0058919	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Actril (loxynil)	S23-Ma0058919	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dicamba	S23-Ma0058919	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dichlorprop	S23-Ma0058919	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dinitro-o-cresol	S23-Ma0058919	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dinoseb	S23-Ma0058919	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
МСРА	S23-Ma0058919	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
МСРВ	S23-Ma0058919	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Месоргор	S23-Ma0058919	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	ļ
Duplicate									ļ
Sample Properties				Result 1	Result 2	RPD			
% Moisture	S23-Ma0052103	NCP	%	7.4	6.9	8.0	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	N23-Ma0051686	CP	mg/kg	2.9	2.5	15	30%	Pass	
Cadmium	N23-Ma0051686	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	N23-Ma0051686	CP	mg/kg	23	21	8.3	30%	Pass	
Copper	N23-Ma0051686	CP	mg/kg	27	28	5.7	30%	Pass	
Lead	N23-Ma0051686	CP	mg/kg	13	13	1.3	30%	Pass	
Mercury	N23-Ma0051686	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Nickel	N23-Ma0051686	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Zinc	N23-Ma0051686	CP	mg/kg	21	20	6.3	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons -	1999 NEPM Fract	ions		Result 1	Result 2	RPD			
TRH C6-C9	N23-Ma0051698	CP	mg/kg	< 20	< 20	<1	30%	Pass	



BYEXUnit and the second se	Duplicate											
Benzene N22-M0051686 OP mg/kg < 0.1 < 1 30% Pass Ethydhenzene N22-M0051686 OP mg/kg < 0.1	BTEX				Result 1	Result 2	RPD					
Toluene N22-Ma0051688 CP mg/kg < 0.1 < 1 30% Pass m&p-Xylenes N23-Ma0051688 CP mg/kg < 0.2	30% Pass NP mg/kg < <td><td< td=""><td>Benzene</td><td>N23-Ma0051698</td><td>CP</td><td>mg/kg</td><td>< 0.1</td><td>< 0.1</td><td><1</td><td>30%</td><td>Pass</td><td></td></td<></td>	<td< td=""><td>Benzene</td><td>N23-Ma0051698</td><td>CP</td><td>mg/kg</td><td>< 0.1</td><td>< 0.1</td><td><1</td><td>30%</td><td>Pass</td><td></td></td<>	Benzene	N23-Ma0051698	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Ertybenzene N22-Ma0051688 CP mgkq < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1	Toluene	N23-Ma0051698	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass			
mbp.rylones N22-Ma0051088 CP mg/kg < 0.2 < 0.2 < 1.0 2.01 3.01 3.03 Pass Xylenes - Total" N23-Ma0051088 CP mg/kg < 0.3	Ethylbenzene	N23-Ma0051698	СР	mg/kg	< 0.1	< 0.1	<1	30%	Pass			
c×Xylene N23-Ma0051698 CP mg/kg < 0.1 < 1 30% Pass Xylenes - Total* N23-Ma0051698 CP mg/kg < 0.3	m&p-Xylenes	N23-Ma0051698	СР	mg/kg	< 0.2	< 0.2	<1	30%	Pass			
Xytenes - Total* N23-Ma0051698 GP mg/kg < 0.3 < 1 30% Pass Duplicate Tetal Recoverable Mydrocarbons - 2013 NEPM Fractions Result 1 Result 2 RPD Naphthalene N23-Ma0051698 CP mg/kq < 0.5	o-Xylene	N23-Ma0051698	СР	mg/kg	< 0.1	< 0.1	<1	30%	Pass			
Digilicate Non-Network Result 1 Result 2 RPD Pass Total Recoverable Hydrocarbons N23-Ma0061698 CP mgkg < 0.5	Xylenes - Total*	N23-Ma0051698	СР	mg/kg	< 0.3	< 0.3	<1	30%	Pass			
Total Recoverable Hydrocarbons - 2013 MEPM Fractions Result 1 Result 2 RPD Image Naphthalone N23-Ma0051698 CP mgkg < 0.5	Duplicate											
Naphthalene N22-Ma0051698 CP mg/kg < 0.5 < 1 30% Pass TRH C6-C10 N23-Ma0051698 CP mg/kg < 20	Total Recoverable Hydrocarbons -	2013 NEPM Fract	ions		Result 1	Result 2	RPD					
TRH Co-C10 N23-Ma0051698 CP mg/kg < 2.0 < 2.0 < 1 30% Pass Duplicate Polycycic Aromatic Hydrocarbons Result 1 Result 2 RPD Pass Acenaphthyden S23-Ma0062512 NCP mg/kg < 0.5	Naphthalene	N23-Ma0051698	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass			
Duplicate Norther Reput 2 RPD Reput 2 RPD Reput 2 RPD Reput 2 Reput 2 RPD Reput 2 Reput 2 RPD Reput 2 RPD Reput 2	TRH C6-C10	N23-Ma0051698	СР	mg/kg	< 20	< 20	<1	30%	Pass			
Polycyclic Aromatic Hydrocarbons Result 1 Result 2 RPD RPD Acanaphthene \$23:Ma0062512 NCP mgkq < 0.5	Duplicate											
Acenaphthene S23-Ma002512 NCP mgkg < 0.5 < 0.5 < 1 30% Pass Acenaphthylere S23-Ma002512 NCP mgkg < 0.5	Polycyclic Aromatic Hydrocarbons	6			Result 1	Result 2	RPD					
Acenaphtylene S23-Ma0062512 NCP mg/kg < 0.5 < 0.5 < 1 30% Pass Anthracene S23-Ma0062512 NCP mg/kg < 0.5	Acenaphthene	S23-Ma0062512	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass			
Anthracene S23-Ma0062512 NCP mg/kg < 0.5 < 0.5 < 1 30% Pass Berzo(a)prime S23-Ma0062512 NCP mg/kg < 0.5	Acenaphthylene	S23-Ma0062512	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass			
Benz(a)anthracene 523-Ma0062512 NCP mg/kg < 0.5 < 0.5 < 1 30% Pass Benz(a)byrene S23-Ma0062512 NCP mg/kg < 0.5	Anthracene	S23-Ma0062512	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass			
Benzo(a)pyrene S23-Ma0062512 NCP mg/kg < 0.5 < 1 30% Pass Benzo(b)///ucranthene S23-Ma0062512 NCP mg/kg < 0.5	Benz(a)anthracene	S23-Ma0062512	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass			
Benzo(b&)/tluoranthene S23-Ma0062512 NCP mg/kg < 0.5 < 1 30% Pass Benzo(t)/Logry(ene S23-Ma0062512 NCP mg/kg < 0.5	Benzo(a)pyrene	S23-Ma0062512	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass			
Benzo(g.h.i)perylene S23-Ma0062512 NCP mg/kg < 0.5 < 0.5 < 1 30% Pass Benzo(g/hluoranthene S23-Ma0062512 NCP mg/kg < 0.5	Benzo(b&j)fluoranthene	S23-Ma0062512	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass			
Benzo(k)fluoranthene S23-Ma0062512 NCP mg/kg < 0.5 < 0.5 < 1 30% Pass Chrysene S23-Ma0062512 NCP mg/kg < 0.5	Benzo(g.h.i)perylene	S23-Ma0062512	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass			
Chrysene S23-Ma0062512 NCP mg/kg < 0.5 < 0.5 < 1 30% Pass Dibenz(a.h)anthracene S23-Ma0062512 NCP mg/kg < 0.5	Benzo(k)fluoranthene	S23-Ma0062512	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass			
Dibenz(a.h)anthracene \$23-Ma0062512 NCP mg/kg < 0.5 < 0.5 < 1 30% Pass Fluoranthene \$23-Ma0062512 NCP mg/kg < 0.5	Chrysene	S23-Ma0062512	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass			
Fluoranthene \$23-Ma0062512 NCP mg/kg < 0.5 < 0.5 < 1 30% Pass Fluorene \$23-Ma0062512 NCP mg/kg < 0.5	Dibenz(a.h)anthracene	S23-Ma0062512	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass			
Fluorene \$23-Ma0062512 NCP mg/kg < 0.5 < 0.5 < 1 30% Pass Inden(1.2.3-cd)pyrene \$23-Ma0062512 NCP mg/kg < 0.5	Fluoranthene	S23-Ma0062512	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass			
Indeno(1.2.3-cd)pyrene S23-Ma0062512 NCP mg/kg < 0.5 < 1 30% Pass Naphthalene S23-Ma0062512 NCP mg/kg < 0.5	Fluorene	S23-Ma0062512	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass			
$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	Indeno(1.2.3-cd)pyrene	S23-Ma0062512	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass			
Phenanthrene \$23-Ma0062512 NCP mg/kg < 0.5 < 0.5 < 1 30% Pass Pyrene \$23-Ma0062512 NCP mg/kg < 0.5	Naphthalene	S23-Ma0062512	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass			
Pyrene \$\$23.Ma0062512 NCP mg/kg < 0.5 < 0.5 < 1 30% Pass Duplicate Result 1 Result 2 RPD Image: Colspan="4">Colspan="4"Colspan="4">Colspan="4"Colspan="4">Colspan="4"Colspan="4"Colspan="4"Colspan="4">Colspan="4"C	Phenanthrene	S23-Ma0062512	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass			
Duplicate Result 1 Result 1 Result 1 Result 2 RPD Arsenic N23-Ma0051700 CP mg/kg 2.5 2.8 11 30% Pass Cadmium N23-Ma0051700 CP mg/kg 6.40 650 1.3 30% Pass Chromium N23-Ma0051700 CP mg/kg 640 650 1.3 30% Pass Copper N23-Ma0051700 CP mg/kg 22 30 30 30% Pass Mercury N23-Ma0051700 CP mg/kg 2.0.1 <0.1	Pyrene	S23-Ma0062512	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass			
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	Duplicate											
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	Heavy Metals				Result 1	Result 2	RPD					
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	Arsenic	N23-Ma0051700	CP	mg/kg	2.5	2.8	11	30%	Pass			
Chromium N23-Ma0051700 CP mg/kg 640 650 1.3 30% Pass Copper N23-Ma0051700 CP mg/kg 17 23 30 30% Pass Lead N23-Ma0051700 CP mg/kg 22 30 30 30% Pass Mercury N23-Ma0051700 CP mg/kg <0.1	Cadmium	N23-Ma0051700	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass			
Copper N23-Ma0051700 CP mg/kg 17 23 30 30% Pass Lead N23-Ma0051700 CP mg/kg 22 30 30 30% Pass Mercury N23-Ma0051700 CP mg/kg <0.1	Chromium	N23-Ma0051700	CP	mg/kg	640	650	1.3	30%	Pass			
Lead N23-Ma0051700 CP mg/kg 22 30 30 30% Pass Mercury N23-Ma0051700 CP mg/kg <0.1	Copper	N23-Ma0051700	CP	mg/kg	17	23	30	30%	Pass			
Mercury N23-Ma0051700 CP mg/kg < 0.1 < 0.1 < 1 30% Pass Nickel N23-Ma0051700 CP mg/kg 13 9.8 26 30% Pass Duplicate Total Recoverable Hydrocarbons - 1999 NEPM Fractions Result 1 Result 2 RPD ////////////////////////////////////	Lead	N23-Ma0051700	СР	mg/kg	22	30	30	30%	Pass			
Nickel N23-Ma0051700 CP mg/kg 13 9.8 26 30% Pass Duplicate Total Recoverable Hydrocarbons - 1999 NEPM Fractions Result 1 Result 2 RPD Image: Control 100 and 1	Mercury	N23-Ma0051700	СР	mg/kg	< 0.1	< 0.1	<1	30%	Pass			
Duplicate Result 1 Result 2 RPD Image: Constraint of the state of the	Nickel	N23-Ma0051700	СР	mg/kg	13	9.8	26	30%	Pass			
Total Recoverable Hydrocarbons - 1999 NEPM Fractions Result 1 Result 2 RPD Image: Memory and the system of	Duplicate											
TRH C10-C14 N23-Ma0051704 CP mg/kg < 20 < 20 < 1 30% Pass TRH C15-C28 N23-Ma0051704 CP mg/kg < 50	Total Recoverable Hydrocarbons -	1999 NEPM Fract	ions		Result 1	Result 2	RPD					
TRH C15-C28 N23-Ma0051704 CP mg/kg < 50 < 50 < 1 30% Pass TRH C29-C36 N23-Ma0051704 CP mg/kg < 50	TRH C10-C14	N23-Ma0051704	CP	mg/kg	< 20	< 20	<1	30%	Pass			
TRH C29-C36 N23-Ma0051704 CP mg/kg < 50 < 50 < 1 30% Pass Duplicate Total Recoverable Hydrocarbons - 2013 NEPM Fractions Result 1 Result 2 RPD TRH >C10-C16 N23-Ma0051704 CP mg/kg < 50	TRH C15-C28	N23-Ma0051704	CP	mg/kg	< 50	< 50	<1	30%	Pass			
Duplicate Result 1 Result 2 RPD Image: Constraint of the system o	TRH C29-C36	N23-Ma0051704	CP	mg/kg	< 50	< 50	<1	30%	Pass			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions Result 1 Result 2 RPD Image: Constraint of the system	Duplicate											
TRH >C10-C16 N23-Ma0051704 CP mg/kg < 50 < 50 < 1 30% Pass TRH >C16-C34 N23-Ma0051704 CP mg/kg < 100	Total Recoverable Hydrocarbons -	2013 NEPM Fract	ions		Result 1	Result 2	RPD					
TRH >C16-C34 N23-Ma0051704 CP mg/kg < 100 < 1 30% Pass TRH >C34-C40 N23-Ma0051704 CP mg/kg < 100	TRH >C10-C16	N23-Ma0051704	CP	mg/kg	< 50	< 50	<1	30%	Pass			
TRH >C34-C40 N23-Ma0051704 CP mg/kg < 100 < 1 30% Pass Duplicate Organochlorine Pesticides Result 1 Result 2 RPD Chlordanes - Total S23-Ma0062022 NCP mg/kg 1.0 1.0 3.7 30% Pass 4.4'-DDD S23-Ma0062022 NCP mg/kg < 0.05	TRH >C16-C34	N23-Ma0051704	CP	mg/kg	< 100	< 100	<1	30%	Pass			
Duplicate Result 1 Result 2 RPD Image: Chlordanes - Total S23-Ma0062022 NCP mg/kg 1.0 1.0 3.7 30% Pass 4.4'-DDD S23-Ma0062022 NCP mg/kg <0.05	TRH >C34-C40	N23-Ma0051704	CP	mg/kg	< 100	< 100	<1	30%	Pass			
Organochlorine Pesticides Result 1 Result 2 RPD Image: Chlordanes - Total S23-Ma0062022 NCP mg/kg 1.0 1.0 3.7 30% Pass 4.4'-DDD S23-Ma0062022 NCP mg/kg <0.05	Duplicate											
Chlordanes - Total S23-Ma0062022 NCP mg/kg 1.0 1.0 3.7 30% Pass 4.4'-DDD S23-Ma0062022 NCP mg/kg < 0.05	Organochlorine Pesticides				Result 1	Result 2	RPD					
4.4'-DDD S23-Ma0062022 NCP mg/kg < 0.05 < 1 30% Pass 4.4'-DDE S23-Ma0062022 NCP mg/kg < 0.05	Chlordanes - Total	S23-Ma0062022	NCP	mg/kg	1.0	1.0	3.7	30%	Pass			
4.4'-DDE S23-Ma0062022 NCP mg/kg < 0.05 < 0.05 < 1 30% Pass 4.4'-DDT S23-Ma0062022 NCP mg/kg < 0.05	4.4'-DDD	S23-Ma0062022	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass			
4.4'-DDT S23-Ma0062022 NCP mg/kg < 0.05 < 0.05 < 1 30% Pass a-HCH S23-Ma0062022 NCP mg/kg < 0.05	4.4'-DDE	S23-Ma0062022	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass			
a-HCH S23-Ma0062022 NCP mg/kg < 0.05 < 1 30% Pass	4.4'-DDT	S23-Ma0062022	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass			
	a-HCH	S23-Ma0062022	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass			



Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Aldrin	S23-Ma0062022	NCP	mg/kg	0.73	0.88	19	30%	Pass	
b-HCH	S23-Ma0062022	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
d-HCH	S23-Ma0062022	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	S23-Ma0062022	NCP	mg/kg	1.2	1.3	7.3	30%	Pass	
Endosulfan I	S23-Ma0062022	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	S23-Ma0062022	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	S23-Ma0062022	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	S23-Ma0062022	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	S23-Ma0062022	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	S23-Ma0062022	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-HCH (Lindane)	S23-Ma0062022	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	S23-Ma0062022	NCP	mg/kg	0.77	0.70	10	30%	Pass	
Heptachlor epoxide	S23-Ma0062022	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	S23-Ma0062022	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	S23-Ma0062022	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Toxaphene	S23-Ma0062022	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate				•					
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Azinphos-methyl	S23-Ma0062022	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Bolstar	S23-Ma0062022	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorfenvinphos	S23-Ma0062022	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos	S23-Ma0062022	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos-methyl	S23-Ma0062022	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Coumaphos	S23-Ma0062022	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Demeton-S	S23-Ma0062022	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Demeton-O	S23-Ma0062022	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Diazinon	S23-Ma0062022	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dichlorvos	S23-Ma0062022	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dimethoate	S23-Ma0062022	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Disulfoton	S23-Ma0062022	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
EPN	S23-Ma0062022	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethion	S23-Ma0062022	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethoprop	S23-Ma0062022	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethyl parathion	S23-Ma0062022	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenitrothion	S23-Ma0062022	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fensulfothion	S23-Ma0062022	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenthion	S23-Ma0062022	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Malathion	S23-Ma0062022	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Merphos	S23-Ma0062022	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Methyl parathion	S23-Ma0062022	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Mevinphos	S23-Ma0062022	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Monocrotophos	S23-Ma0062022	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Naled	S23-Ma0062022	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Omethoate	S23-Ma0062022	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Phorate	S23-Ma0062022	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pirimiphos-methyl	S23-Ma0062022	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pyrazophos	S23-Ma0062022	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ronnel	S23-Ma0062022	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Terbufos	S23-Ma0062022	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tetrachlorvinphos	S23-Ma0062022	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tokuthion	S23-Ma0062022	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Trichloronate	S23-Ma0062022	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons -	1999 NEPM Fract	ions		Result 1	Result 2	RPD			
TRH C6-C9	N23-Ma0051713	CP	mg/kg	< 20	< 20	<1	30%	Pass	1



Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	N23-Ma0051713	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Toluene	N23-Ma0051713	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Ethylbenzene	N23-Ma0051713	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
m&p-Xylenes	N23-Ma0051713	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
o-Xylene	N23-Ma0051713	СР	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Xylenes - Total*	N23-Ma0051713	СР	mg/kg	< 0.3	< 0.3	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons -	2013 NEPM Fracti	ions		Result 1	Result 2	RPD			
Naphthalene	N23-Ma0051713	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	N23-Ma0051713	CP	mg/kg	< 20	< 20	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	N23-Ma0051714	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Cadmium	N23-Ma0051714	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	N23-Ma0051714	CP	mg/kg	23	23	<1	30%	Pass	
Copper	N23-Ma0051714	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Lead	N23-Ma0051714	CP	mg/kg	6.4	< 5	26	30%	Pass	
Mercury	N23-Ma0051714	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Nickel	N23-Ma0051714	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Zinc	N23-Ma0051714	CP	mg/kg	9.6	9.8	1.8	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Conductivity (1:5 aqueous extract	N00 N-0007005			000	040		000/	Deres	
at 25 °C as rec.)	M23-Ma0067335	NCP	uS/cm	220	210	3.0	30%	Pass	
Cation Exchange Capacity				Pocult 1	Popult 2	PPD			
Cation Exchange Capacity	M23-M20056190	NCP	meg/100g	20	22	53	30%	Pass	
	11123 11120000100	1101	meq/100g	20		0.0	0070	1 435	
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	N23-Ma0051719	CP	ma/ka	< 2	< 2	<1	30%	Pass	
Cadmium	N23-Ma0051719	CP	ma/ka	< 0.4	< 0.4	<1	30%	Pass	
Chromium	N23-Ma0051719	CP	ma/ka	37	22	50	30%	Fail	015
Copper	N23-Ma0051719	CP	ma/ka	13	16	15	30%	Pass	<u>u</u> lo
Lead	N23-Ma0051719	CP	ma/ka	7.6	7.8	38	30%	Pass	
Mercury	N23-Ma0051719	CP	ma/ka	< 0.1	< 0.1	<1	30%	Pass	
Nickel	N23-Ma0051719	CP	ma/ka	< 5	< 5	<1	30%	Pass	
Zinc	N23-Ma0051719	CP	ma/ka	22	13	51	30%	Fail	Q15
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	N23-Ma0051725	CP	mg/ka	< 2	2.1	10	30%	Pass	
Cadmium	N23-Ma0051725	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	N23-Ma0051725	CP	mg/ka	19	18	5.9	30%	Pass	
Copper	N23-Ma0051725	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Lead	N23-Ma0051725	CP	mg/kg	5.9	7.5	24	30%	Pass	
Mercury	N23-Ma0051725	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Nickel	N23-Ma0051725	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Zinc	N23-Ma0051725	CP	mg/kg	16	22	31	30%	Fail	Q15
Duplicate									
				Result 1	Result 2	RPD			
pH (1:5 Aqueous extract at 25 °C									
as rec.)	N23-Ma0051726	CP	pH Units	7.3	7.2	<1	30%	Pass	



Comments

All micro analysed by; Eurofins Food Testing; accreditation number 20293; report reference AR-23-NV-003966-01

Sample Integrity	
Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	Yes

Qualifier Codes/Comments

Code Description

F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles N01 (Purge & Trap analysis).

Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.

F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.

N07 Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs

The matrix spike recovery is outside of the recommended acceptance criteria. An acceptable recovery was obtained for the laboratory control sample indicating a sample matrix unterference.

Q15 The RPD reported passes Eurofins Environment Testing's QC - Acceptance Criteria as defined in the Internal Quality Control Review and Glossary page of this report.

Authorised by:

Adam Bateup	Analytical Services Manager
Caitlin Breeze	Senior Analyst-Metal
Chamath JHM Annakkage	Senior Analyst-Asbestos
Edward Lee	Senior Analyst-Organic
Fang Yee Tan	Senior Analyst-Metal
Joseph Edouard	Senior Analyst-Organic
Maria Tian	Senior Analyst-Organic
Mary Makarios	Senior Analyst-Inorganic
Mickael Ros	Senior Analyst-Metal
Raymond Siu	Senior Analyst-Volatile
Roopesh Rangarajan	Senior Analyst-Organic
Ryan Phillips	Senior Analyst-Inorganic

Glenn Jackson General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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Company	Qualtest		Project	Ne	NEV	W23P-000	9				Project Manag	er L	ibby Betz			Si	Impler	(8)	1	ſom Ha			
			Project N	lame	Mec	lowie Ga	rdens			-	EDD Format EStat, EQuiS et	E	xcel			Han	led ov	er by	F				
Address	2 Murray Dwyer Circuit, Ma	ayfield West NSW 2304	'n								-Acatoly Contribute					Emai	l for in	voice	ć	accou	unts	aqualtest.com	i.au
Contact Name	Libby Betz		tia" or "Fills E pricing.													Emai	l tor Re	sults	lii b	bbybetz@ illysnow(@quait @quai	ast.com.au emmacolema last.com.au	in@qualtest.com.au
Phone Ne	432189418		6 specity To direct SUIT			tals)										a	enge ca	Container In	alners pe & sta	n il nuces	6091	Required Tu Detault with	maround Time (TAT) be 5 days if not ticked.
Special Directions Purchase Order Quots ID Na	180622QUAN-3		Analyse When metals are instanted places SUITE code must be used to	MB	Asbestos (%w/w)	B7 (TRH, BTEX, PAHs, Me	B14 (OCPs/OPPs)	pH & CEC	Herbicides							500mL Plastic	coumt. Plastic 125mL Plastic	mL Amber Glass	0mL VOA vial	licrobiological	(Glass or HDPE)	Same day € ✓	 Surcharge will apply reporting by 9am) □ 1 day □ 3 days indard)
Na	Client Sample ID	Sampled Date/Time dd/mov/yy hfumat	Martrix Solid (S) Water (W)															200	ч	2	Jar	sage) batto / Dangerous G	le Commente loode Hezard Warning
1	SS63-5	22/03/23	Soil	X			X														1	1	
2	SS55-3	22/03/23	Soil		X	×		×													1	1	
3	S856-5	22/03/23	Soil	X			×														1	1 1	
4	SS47-3	22/03/23	Soil	X	×															,	1	1	
5	SS48-3	22/03/23	Soil	X	X															1	1	1	
6	SS49-3	22/03/23	Soil	X	×															1	1	1	
7	SS60-5	22/03/23	Soil	X			X													1	1	1	
8	SS14-1	22/03/23	Soil	X																1	1	1	
9	SS27-1	22/03/23	Soil	X											1					1	1	8	
10	SS19-1	22/03/23	Soil	X	X															1	1	1	
				9	5	1	3	1												1	0 1	0	
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Computity	Qualtest		9 (s)	(HEND	NEW	/23P-000	9			Protect Managar	Libby Betz			1	Sample	(6):	I I	om Ha	\$1		
Address	2 Murray Dwyer Circuit. N	lavfield West NSW 2304	Projec	UName	Med	owie Ga	rdens			EDD Format ISsor Fin Islam	Excel			н	an deci o	ver by					
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Comana Marrie	Libby Betz													E	nail tor S	tesult.	li	bbybetz(illysnow	@qualtest @qualtest	.com.au emmacolemai Lcom.au	n@qualtest.com.au
Phone No.	432189418		ALC: Notes of a			stals)									Charge:	Cb) Smither	ttainers Lynaitesie	a n'n Bres	atiy.	Required Terr Bytercore	TEROUND TIME (TAT) IN SIGNATION
aacht Dheefsan:			Analys Analysis Analysis	MB	tos (%w/w)	EX, PAHs, Me	(CPs/OPPs)	& CEC	rbicides) Lidelines)	Overnight (r	♦Surcharge will apply reporting by 9am)♦
undhase Order Gaute ID Na	180622QUAN-3		Mere met 2119		Asbes	B7 (TRH, BTI	B14 (O	Hd	Æ					mL Plastic)mL Plastic	omL Plastic Amher Glass	nL VOA viai	robiological	lass or HDPE As4964, WA G	2 days ♦ 2 days ♦ 5 days (Star	☐ 3 days ♦ ndard)
	ellarisetnojs (b	Stropted 921078700 sciencescheren	Marix Rold (8) WaterWg											20(25(121 200ml	401	Mic	Jar (G Other (Asbestos	Stamp / Danggrous G	e Comments corin Hazerd Wetning
	SS24-1	22/03/23	Soil	×	X		X						-	İ			2- 1		1 1	ELEBSIC TE	
	SS26-1	22/03/23	Soil	×															1 1		
	SS18-1	22/03/23	Soil	×															1 1		
	SS25-1	22/03/23	Soil	X	×														1 1		
	SS17-1	22/03/23	Soil	×	×														1 1	1	
	SS15-1	22/03/23	Soil	X															1 1	1	
	SS35-1	22/03/23	Soil	X	×							n							1 1		
	SS34-1	22/03/23	Soil	X	×														1 1		
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Submission of samples to the laboratory will be deemed as acceptance of Euronna | Environment Testing Standard Terms and Conditions unless agreed otherwise. A copy is available on request

Comp	any Qualtest		Proje	ct Ne	NEW	/23P-000	9			Project Manager	Libby Betz			1	Sampl	er(s)	8	Тог	m Hall			
			Project	Name	Med	owie Gar	dens			EDD Format ESdill, EQuiS etc	Excel			Ha	nded	over t	ÿ					
Addre	2 Murray Dwyer Circuit, Ma	vfield West NSW 2304	, Sea											Em	ail for	Invoi	-	ac	coun	ts@c	ualtest.com.	au
Contact	Name Libby Betz		tail or "Filb TE pótchig											Em	all tor	Resul	ts	iibb; billy	ybetz@q snow@c	uaitest.c juaitest.c	com.au emmacoleman com.au	@qualtest.com.au
Phone	432189418		athors SUIT			tals)									Change	C CONTRACT	ontali ker type	h ers & eize fi	THORSES	ir.	Required Turn Default will be	around Time (TAT) 5 days if not tidend.
pecial Dir Purchase Quote I	rections Order D Na 180622QUAN-3		Analyse When motels an requestor place BUTE pool must be used to	M8	Asbestos (%w/w)	B7 (TRH, BTEX, PAHs, Me	B14 (OCPs/OPPs)	pH & CEC	Herbicides					500mL Plastic	250mL Plastic	125mL Plastic	0mL Amber Glass	40mL VOA vial	microbiological ar (Glass or HDPE)	estos AS4964, WA Guidelines)	 ○ Overnight (re ○ Same day ◆ ○ 2 days ◆ ○ 5 days (Stan ○ Other(+Surcharge will apply pporting by 9am)↓ ☐ 1 day ∳ ☐ 3 days ∳ dard)
	Client Sample ID	Sampled Dete/Time ddfmivys filcnim	Matrix Sold (S) Water (W)														50	·	-	Other (Asb	Sample / Dangerous Go	Commenta odis Hazard Warning
	S837-1	22/03/23	Soil	×	X														1	1	I	٦
	SS32-1	22/03/23	Soil	×	×												~		1	1		
2	\$\$22-1	22/03/23	Soil	×															1	1		
	SS23-1	22/03/23	Soil	×			×												1	1		
	\$\$53-3	22/03/23	Soil	×	×														1	1		
	SS61-5	22/03/23	Soil	×			×												1	1		
	SS62-5	22/03/23	Soil	×			×												1	1		3
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Gonlast Name	Libby Betz		alah selat Minimura Minimura											E	mail (a Roi	uite	lii: bi	obybetz(illysnow	@qualte @qualte	st.com.au emmacolema est.com.au	n@qualtest.com.au
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Company	Qualtest		Proje	ctN≇	NEV	V23P-000	9				Project Manager	Libby Betz			-	Sam	pler(s)		То	m Hall			
Address	2 Murray Dwyer Circuit May	field West NSW 2304	Project	Name	Med	lowie Gar	dens				EDD Format ESdat. EQuils ate	Excel			Н	landed	d over	by					
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Contact Name	Libby Betz		alaf or F												E	mail (s	a Resu	ulta	libt bill	ybetz@ ysnow@	qualtest)qualtest	.com.au emmacoleman@ t.com.au	qualtest.com.au
Phone Na	432189418		Allined SU			itals)										Chan	ge contin	Contai iner Ige	niuns Ancel	1 (1923-25	57	Required Turn Detault will be	sround Time (TAT) 5 days if not ticked.
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No	Client Sample ID	Sampled Date/Time ddfmrvlyr htumm	Maturbs Solid (S) Water (W)															20(Other (Asbe	Sample / Dangerous Goo	Commenta de Hazard Warning
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7	TP70-20-0.2	22/03/23	Soil	X	×															1	1		
8	TP70-2_0.4-0.5	22/03/23	Soil																	1			
9	TP03-3_0.0-0.2	22/03/23	Soil	X	×										ł					1	1		
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Eurofins Environment Testing Australia Pty Ltd

ABN: 50 005 085 521						ABN:
Melbourne	Geelong	Sydney	Canberra	Brisbane	Newcastle	Perth
6 Monterey Road	19/8 Lewalan Street	179 Magowar Road	Unit 1,2 Dacre Street	1/21 Smallwood Place	1/2 Frost Drive	46-48
Dandenong South	Grovedale	Girraween	Mitchell	Murarrie	Mayfield West NSW 2304	Welsh
VIC 3175	VIC 3216	NSW 2145	ACT 2911	QLD 4172	Tel: +61 2 4968 8448	WA 6
Tel: +61 3 8564 5000	Tel: +61 3 8564 5000	Tel: +61 2 9900 8400	Tel: +61 2 6113 8091	Tel: +61 7 3902 4600	NATA# 1261	Tel: +
NATA# 1261 Site# 1254	NATA# 1261 Site# 25403	NATA# 1261 Site# 18217	NATA# 1261 Site# 25466	NATA# 1261 Site# 20794	Site# 25079 & 25289	NATA

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EnviroSales@eurofins.com

Eurofins ARL Pty Ltd Eurofins Environment Testing NZ Ltd ABN: 91 05 0159 898 NZBN: 9429046024954

	ABN: 91 05 0159 898	NZBN: 9429046024954		
tle	Perth	Auckland	Christchurch	
Drive	46-48 Banksia Road	35 O'Rorke Road	43 Detroit Drive	
/est NSW 2304	Welshpool	Penrose,	Rolleston,	
4968 8448	WA 6106	Auckland 1061	Christchurch 7675	
61	Tel: +61 8 6253 4444	Tel: +64 9 526 45 51	Tel: 0800 856 450	
9 & 25289	NATA# 2377 Site# 2370	IANZ# 1327	IANZ# 1290	

Sample Receipt Advice

Company name:	Qualtest
Contact name:	Libby Betz
Project name:	MEDOWIE GARDENS
Project ID:	NEW23P-0009
Turnaround time:	5 Day
Date/Time received	Mar 23, 2023 2:10 PM
Eurofins reference	974973

Sample Information

- A detailed list of analytes logged into our LIMS, is included in the attached summary table.
- All samples have been received as described on the above COC.
- COC has been completed correctly.
- Attempt to chill was evident.
- Appropriately preserved sample containers have been used.
- All samples were received in good condition.
- Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.
- Appropriate sample containers have been used.
- Sample containers for volatile analysis received with zero headspace.
- ✓ Split sample sent to requested external lab.
- X Some samples have been subcontracted.
- N/A Custody Seals intact (if used).

Notes

T.22.3.23 SEND TO SGS | Missing sample SS28-1| Extra sample received : SS21-1 LOGGED on hold

Contact

If you have any questions with respect to these samples, please contact your Analytical Services Manager:

Andrew Black on phone : (+61) 2 9900 8490 or by email: AndrewBlack@eurofins.com

Results will be delivered electronically via email to Libby Betz - libbybetz@qualtest.com.au.

Note: A copy of these results will also be delivered to the general Qualtest email address.

Global Leader - Results you can trust



Certificate of Analysis

Environment Testing

Qualtest 2 Murray Dwyer Circuit Mayfield West NSW 2304



NATA Accredited Accreditation Number 1261 Site Number 18217

Accredited for compliance with ISO/IEC 17025–Testing NATA is a signatory to the ILAC Mutual Recognition Arrangement for the mutual recognition of the equivalence of testing, medical testing, calibration, inspection, proficiency testing scheme providers and reference materials producers reports and certificates.

Attention: Report Project Name Project ID Received Date Date Reported	Libby Betz 974973-AID MEDOWIE GARDENS NEW23P-0009 Mar 23, 2023 Apr 11, 2023
Methodology: Asbestos Fibre Identification	Conducted in accordance with the Australian Standard AS 4964 – 2004: Method for the Qualitative Identification of Asbestos in Bulk Samples and in-house Method LTM-ASB-8020 by polarised light microscopy (PLM) and dispersion staining (DS) techniques. NOTE: Positive Trace Analysis results indicate the sample contains detectable respirable fibres.
Unknown Mineral Fibres	Mineral fibres of unknown type, as determined by PLM with DS, may require another analytical technique, such as Electron Microscopy, to confirm unequivocal identity. NOTE: While Actinolite, Anthophyllite and Tremolite asbestos may be detected by PLM with DS, due to variability in the optical properties of these materials, AS4964 requires that these are reported as UMF unless confirmed by an independent technique.
Subsampling Soil Samples	The whole sample submitted is first dried and then passed through a 10mm sieve followed by a 2mm sieve. All fibrous matter greater than 10mm, greater than 2mm as well as the material passing through the 2mm sieve are retained and analysed for the presence of asbestos. If the sub 2mm fraction is greater than approximately 30 to 60g then a sub-sampling routine based on ISO 3082:2009(E) is employed. NOTE: Depending on the nature and size of the soil sample, the sub-2 mm residue material may need to be sub-sampled for trace analysis, in accordance with AS 4964-2004.
Bonded asbestos- containing material (ACM)	The material is first examined and any fibres isolated for identification by PLM and DS. Where required, interfering matrices may be removed by disintegration using a range of heat, chemical or physical treatments, possibly in combination. The resultant material is then further examined in accordance with AS 4964 - 2004. NOTE: Even after disintegration it may be difficult to detect the presence of asbestos in some asbestos-containing bulk materials using PLM and DS. This is due to the low grade or small length or diameter of the asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials. Vinyl/asbestos floor tiles, some asbestos-containing sealants and mastics, asbestos-containing epoxy resins and some ore samples are examples of these types of material, which are difficult to analyse.
Limit of Reporting	The performance limitation of the AS 4964 (2004) method for non-homogeneous samples is around 0.1 g/kg (equivalent to 0.01% (w/w)). Where no asbestos is found by PLM and DS, including Trace Analysis, this is considered to be at the nominal reporting limit of 0.01% (w/w). The NEPM screening level of 0.001% (w/w) is intended as an on-site determination, not a laboratory Limit of Reporting (LOR), per se. Examination of a large sample size (e.g. 500 mL) may improve the likelihood of detecting asbestos, particularly AF, to aid assessment against the NEPM criteria. Gravimetric determinations to this level of accuracy are outside of AS 4964 and hence NATA Accreditation does not cover the performance of this service (non-NATA results shown with an asterisk). NOTE: NATA News March 2014, p.7, states in relation to AS 4964: "This is a qualitative method with a nominal reporting limit of 0.01 % " and that currently in Australia "there is no validated method available for the quantification of asbestos". This report is consistent with the analytical procedures and reporting recommendations in the NEPM and the WA DoH.



Project Name	MEDOWIE GARDENS
Project ID	NEW23P-0009
Date Sampled	Mar 22, 2023
Report	974973-AID

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result					
SS55-3	23-Ma0057481	Mar 22, 2023	Approximate Sample 833g Sample consisted of: Brown fine-grained clayey soil, plant residue and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.					
SS47-3	23-Ma0057483	Mar 22, 2023	Approximate Sample 675g Sample consisted of: Brown fine-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.					
SS48-3	23-Ma0057484	Mar 22, 2023	Approximate Sample 682g Sample consisted of: Brown fine-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.					
SS49-3	23-Ma0057485	Mar 22, 2023	Approximate Sample 592g Sample consisted of: Brown fine-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.					
SS19-1	23-Ma0057489	Mar 22, 2023	Approximate Sample 623g Sample consisted of: Brown fine-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.					
SS24-1	23-Ma0057490	Mar 22, 2023	Approximate Sample 747g Sample consisted of: Brown coarse-grained soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.					
SS25-1	23-Ma0057493	Mar 22, 2023	Approximate Sample 839g Sample consisted of: Brown fine-grained clayey soil, plant residue and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.					
SS17-1	23-Ma0057494	Mar 22, 2023	Approximate Sample 517g Sample consisted of: Brown fine-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.					



Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
SS35-1	23-Ma0057496	Mar 22, 2023	Approximate Sample 790g Sample consisted of: Brown fine-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
SS34-1	23-Ma0057497	Mar 22, 2023	Approximate Sample 707g Sample consisted of: Brown fine-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
SS36-1	23-Ma0057498	Mar 22, 2023	Approximate Sample 776g Sample consisted of: Brown fine-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
SS33-1	23-Ma0057499	Mar 22, 2023	Approximate Sample 706g Sample consisted of: Brown fine-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
SS37-1	23-Ma0057500	Mar 22, 2023	Approximate Sample 691g Sample consisted of: Brown fine-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
SS32-1	23-Ma0057501	Mar 22, 2023	Approximate Sample 747g Sample consisted of: Brown fine-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
SS53-3	23-Ma0057504	Mar 22, 2023	Approximate Sample 776g Sample consisted of: Brown fine-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
SS52-3	23-Ma0057507	Mar 22, 2023	Approximate Sample 681g Sample consisted of: Brown fine-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
SS54-3	23-Ma0057508	Mar 22, 2023	Approximate Sample 679g Sample consisted of: Brown fine-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
SS29-1	23-Ma0057510	Mar 22, 2023	Approximate Sample 668g Sample consisted of: Brown fine-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
SS30-1	23-Ma0057511	Mar 22, 2023	Approximate Sample 682g Sample consisted of: Brown fine-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
SS16-1	23-Ma0057514	Mar 22, 2023	Approximate Sample 610g Sample consisted of: Brown coarse-grained sandy soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
SS51-3	23-Ma0057515	Mar 22, 2023	Approximate Sample 591g Sample consisted of: Brown fine-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.



Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
SS27-1	23-Ma0057516	Mar 22, 2023	Approximate Sample 519g Sample consisted of: Brown fine-grained clayey soil, plant residue and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
TP68-2_0.0-0.2	23-Ma0057517	Mar 22, 2023	Approximate Sample 701g Sample consisted of: Brown fine-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
TP67-0.0-0.2	23-Ma0057519	Mar 22, 2023	Approximate Sample 668g Sample consisted of: Brown fine-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
TP69-2_0.0-0.2	23-Ma0057521	Mar 22, 2023	Approximate Sample 691g Sample consisted of: Brown coarse-grained sandy soil, plant residue and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
TP71-2_0.0-0.2	23-Ma0057523	Mar 22, 2023	Approximate Sample 743g Sample consisted of: Brown coarse-grained sandy soil, plant residue and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
TP71-2_FRAG	23-Ma0057524	Mar 22, 2023	Approximate Sample 8g / 30x32x4mm Sample consisted of: a) Grey compressed fibre cement material b) Blue and off-white paint layer	Chrysotile asbestos detected (a). Organic fibre detected.
TP70-2_0.0-0.2	23-Ma0057526	Mar 22, 2023	Approximate Sample 509g Sample consisted of: Brown coarse-grained sandy soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
TP03_0.0-0.2	23-Ma0057528	Mar 22, 2023	Approximate Sample 583g Sample consisted of: Brown fine-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
TP04_0.0-0.2	23-Ma0057530	Mar 22, 2023	Approximate Sample 574g Sample consisted of: Brown fine-grained clayey soil, glass and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
TP66-2_0.0-0.2	23-Ma0057532	Mar 22, 2023	Approximate Sample 683g Sample consisted of: Brown fine-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.



Sample History

Where samples are submitted/analysed over several days, the last date of extraction is reported.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description

Asbestos - LTM-ASB-8020 Asbestos - LTM-ASB-8020

Testing Site	Extracted	Holding Time
Sydney	Mar 24, 2023	Indefinite
Newcastle	Mar 24, 2023	Indefinite

web: www.eurofins.com.au email: EnviroSales@eurofins.com		C!	Eurofins Environment Testing Australia Pty Ltd ABN: 50 005 085 521														Eurofins ARL Pty Ltd	Eurofins Environment Testing NZ Ltd		
		Melbourne Geelong Sydney 6 Monterey Road 19/8 Lewalan Street 179 Mag Dandenong South Grovedale Girrawee VIC 3175 VIC 3216 NSW 21 Tel: +61 3 8564 5000 Tel: +61 3 8564 5000 Tel: +61 NATA# 1261 Site# 1254 NATA# 1261 Site# 25403 NATA# 1261		owar Ro en 45 2 9900 261 Site	oad 8400 e# 1821	Canberra Unit 1,2 Dacre Street Mitchell ACT 2911 Tel: +61 2 6113 8091 3217 NATA# 1261 Site# 254			Bi M Q 1 Te 5466 N	Brisbane 1/21 Smallwood Place Murarrie QLD 4172 Tel: +61 7 3902 4600 166 NATA# 1261 Site# 20794			Newc 1/2 Fr Mayfie Tel: + NATA 4 Site#	castle rost Drive eld West NSW 2304 61 2 4968 8448 \# 1261 25079 & 25289	Perth 46-48 Banksia Road Welshpool WA 6106 Tel: +61 8 6253 4444 NATA# 2377 Site# 2370	Auckland 35 O'Rorke Road Penrose, Auckland 1061 Tel: +64 9 526 45 51 IANZ# 1327	Christchurch 43 Detroit Drive Rolleston, Christchurch 7675 Tel: 0800 856 450 IANZ# 1290			
Co Ad	mpany Name: dress:	Qualtest 2 Murray Dw Mayfield We NSW 2304	vyer Circuit st				O R P Fa	rder N eport hone: ax:	lo.: #:	9 () ())7497:)2 496)2 496	3 68 446 60 977	68 75				Received: Due: Priority: Contact Name:	Mar 23, 2023 2:10 Mar 30, 2023 5 Day Libby Betz	PM	
Project Name:MEDOWIE GARDENSProject ID:NEW23P-0009															Eu	rofins Analytical Serv	vices Manager : Ar	ndrew Black		
Sample Detail						Asbestos - WA guidelines	Asbestos Absence /Presence	HOLD	pH (1:5 Aqueous extract at 25 °C as rec.)	Acid Herbicides	Metals M8	Suite B14: OCP/OPP	Moisture Set	Cation Exchange Capacity	Eurofins Suite B7					
Melb	ourne Laborato	ory - NATA # 12	261 Site # 12	54						Х	х			Х	х]				
Sydı	ney Laboratory	- NATA # 1261	Site # 18217	,		Х		Х	Х		х	х	Х		X					
May	ield Laboratory	- NATA # 1261	Site # 2507	9 & 25289			X									4				
Exte	rnal Laboratory															-				
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID											-				
1	SS63-5	Mar 22, 2023		Soil	N23-Ma0057480	X			X		X	X	X	X		-				
2	SS55-3	Mar 22, 2023		Soil	N23-Ma0057481	X			X		V	v	X	X	X	-				
3	5556-5	Mar 22, 2023		Soll	N23-Ma0057482	v					×	~				-				
4	5547-3	Mar 22, 2023		Soll	N23-Ma0057483											-				
6	5540-3 5540-3	Mar 22, 2023		Soil	N23-M20057484	× ×					×			-		1				
7	SS60-5	Mar 22, 2023		Soil	N23-Ma0057/96	\uparrow			<u> </u>		×	x	x	<u> </u>		4				
8	SS14-1	Mar 22, 2023		Soil	N23-Ma0057/87						x		x			1				
9	SS27-1	Mar 22, 2023		Soil	N23-Ma0057488						x		x			1				
10	SS19-1	Mar 22, 2023		Soil	N23-Ma0057489	x					X		X			1				
11	SS24-1	Mar 22, 2023		Soil	N23-Ma0057490	Х					Х	х	Х]				
•	🔅 eurofins		Eurofins Environment Testing Australia Pty Ltd ABN: 50 005 085 521												Eurofins ARL Pty Ltd ABN: 91 05 0159 898	Eurofins Environm	ent Testing NZ Ltd			
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web: w email:	WW.eurofins.com.au	com	Melbourne 6 Monterey Road Dandenong South VIC 3175 Tel: +61 3 8564 5000 NATA# 1261 Site# 125	Geelong S 19/8 Lewalan Street 17 Grovedale G VIC 3216 N Tel: +61 3 8564 5000 Tr 4 NATA# 1261 Site# 25403	ydney 79 Magov irraween SW 2145 el: +61 2 ATA# 12	war Ro 5 9900 { 61 Site	ad 3400 # 1821	Canb Unit 1 Mitch ACT : Tel: + 7 NATA	erra ,2 Dacr ell 2911 61 2 61 \# 1261	re Stree 13 809 Site# 2	t 1, N C 1 T 5466 N	/21 Sma /21 Sma lurarrie LD 417 el: +61 ATA# 1	e allwood 72 7 3902 - 261 Site	Place 4600 e# 2079	Newo 1/2 Fi Mayfi Tel: + NATA 94 Site#	castle rost Drive eld West NSW 2304 61 2 4968 8448 \# 1261 25079 & 25289	Perth 46-48 Banksia Road Welshpool WA 6106 Tel: +61 8 6253 4444 NATA# 2377 Site# 2370	Auckland 35 O'Rorke Road Penrose, Auckland 1061 Tel: +64 9 526 45 51 IANZ# 1327	Christchurch 43 Detroit Drive Rolleston, Christchurch 7675 Tel: 0800 856 450 IANZ# 1290	
Co Ad	ompany Name: Idress:	Qualtest 2 Murray Dy Mayfield We NSW 2304	wyer Circuit est				O R Pl Fa	rder N eport hone: ax:	lo.: #:	((97497)2 496)2 496	3 68 440 60 973	68 75				Received: Due: Priority: Contact Name:	Mar 23, 2023 2:10 Mar 30, 2023 5 Day Libby Betz	PM	
Pro Pro	oject Name: oject ID:	MEDOWIE NEW23P-0	GARDENS 009													Eu	urofins Analytical Ser	vices Manager : Ar	ndrew Black	
		S	ample Detail			Asbestos - WA guidelines	Asbestos Absence /Presence	HOLD	pH (1:5 Aqueous extract at 25 °C as rec.)	Acid Herbicides	Metals M8	Suite B14: OCP/OPP	Moisture Set	Cation Exchange Capacity	Eurofins Suite B7					
Melt	oourne Laborato	ory - NATA # 1	261 Site # 1254							X	Х			X	X	-				
Syd	ney Laboratory -	• NATA # 1261	Site # 18217			_X		X	X		X	X	X		X	-				
May	field Laboratory	- NATA # 126	1 Site # 25079 & 2	25289			X									-				
Exte	ernal Laboratory	Max 00, 0000	0	N00 M-005	7404						X		X			-				
12	5520-1	Mar 22, 2023	Soll	N23-Ma005	7491											-				
14	SS10-1 SS25-1	Mar 22, 2023	Soil	N23-Ma005	7492						×		×	-		-				
15	SS17-1	Mar 22, 2023	Soil	N23-Ma005	7494	X					X		X	1		-				
16	SS15-1	Mar 22, 2023	Soil	N23-Ma005	7495						X		X			-				
17	SS35-1	Mar 22, 2023	Soil	N23-Ma005	7496	x					X		X			-				
18	SS34-1	Mar 22, 2023	Soil	N23-Ma005	7497	х					х		х			1				
19	SS36-1	Mar 22, 2023	Soil	N23-Ma005	7498	Х					Х	Х	Х]				
20	SS33-1	Mar 22, 2023	Soil	N23-Ma005	7499	Х					X		X]				
21	SS37-1	Mar 22, 2023	Soil	N23-Ma005	7500	Х					Х		Х							
22	SS32-1	Mar 22, 2023	Soil	N23-Ma005	7501	х					Х		Х							
23	SS22-1	Mar 22, 2023	Soil	N23-Ma005	7502						Х		Х							
24	SS23-1	Mar 22, 2023	Soil	N23-Ma005	7503						Х	Х	Х							

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web: web: web: web: web: web: web: web:	www.eurofins.com.au	com	Melbourne 6 Monterey Road Dandenong South VIC 3175 Tel: +61 3 8564 5000 NATA# 1261 Site# 1254	Geelong Sy 19/8 Lewalan Street 17 Grovedale Gi VIC 3216 NS Tel: +61 3 8564 5000 Te 4 NATA# 1261 Site# 25403 NA	raween SW 2145 SW 2145 St +61 2 S ATA# 126	var Ro 9900 8 51 Site	ad 3400 # 1821	Canb Unit 1 Mitch ACT : Tel: + 7 NATA	erra I,2 Dacr ell 2911 61 2 61 \# 1261	e Stree 13 809 [.] Site# 2	B 1/ Q 1 T 5466 N	risbane 21 Sma urarrie LD 417 el: +61 ATA# 1	allwood 72 7 3902 4 261 Site	Place 4600 e# 2079	Newo 1/2 Fi Mayfi Tel: + NATA 94 Site#	castle rost Drive eld West NSW 2304 61 2 4968 8448 \# 1261 25079 & 25289	Perth 46-48 Banksia Road Welshpool WA 6106 Tel: +61 8 6253 4444 NATA# 2377 Site# 2370	Auckland 35 O'Rorke Road Penrose, Auckland 1061 Tel: +64 9 526 45 51 IANZ# 1327	Christchurch 43 Detroit Drive Rolleston, Christchurch 7675 Tel: 0800 856 450 IANZ# 1290
Co Ao	ompany Name: ddress:	Qualtest 2 Murray D Mayfield We NSW 2304	wyer Circuit est				O Re Pi Fa	rder N eport hone: ax:	lo.: #:	9 () ())7497)2 496)2 496	3 68 446 60 977	68 75				Received: Due: Priority: Contact Name:	Mar 23, 2023 2:10 Mar 30, 2023 5 Day Libby Betz	PM
Pr Pr	oject Name: oject ID:	MEDOWIE NEW23P-0	GARDENS 009													Eu	urofins Analytical Ser	vices Manager : Ar	ndrew Black
Mel	hourne Laborato	S	ample Detail			Asbestos - WA guidelines	Asbestos Absence /Presence	HOLD	pH (1:5 Aqueous extract at 25 °C as rec.)	Acid Herbicides	Metals M8 ×	Suite B14: OCP/OPP	Moisture Set	Cation Exchange Capacity ×	Eurofins Suite B7 ×				
Svd	lnev I aboratory	NATA # 1261	Site # 18217			х		x	x		X	x	x		X	-			
May	field Laboratory	- NATA # 126	1 Site # 25079 & 2	5289			x									-			
Ext	ernal Laboratory															1			
25	SS53-3	Mar 22, 2023	Soil	N23-Ma005	7504	Х					х		х						
26	SS61-5	Mar 22, 2023	Soil	N23-Ma005	7505						Х	Х	Х						
27	SS62-5	Mar 22, 2023	Soil	N23-Ma005	7506						х	Х	Х						
28	SS52-3	Mar 22, 2023	Soil	N23-Ma005	7507	Х					х		Х						
29	SS54-3	Mar 22, 2023	Soil	N23-Ma005	7508	Х					х		Х						
30	SS29-1	Mar 22, 2023	Soil	N23-Ma005	7510	Х					Х	Х	Х						
31	SS30-1	Mar 22, 2023	Soil	N23-Ma005	7511	Х							Х		X				
32	SS31-1	Mar 22, 2023	Soil	N23-Ma005	7512						х		Х						
33	SS59-5	Mar 22, 2023	Soil	N23-Ma005	7513					Х	Х	Х	Х						
34	SS16-1	Mar 22, 2023	Soil	N23-Ma005	7514	Х					х		Х						
35	SS51-3	Mar 22, 2023	Soil	N23-Ma005	7515	Х					х		Х						
36	SS27-1	Mar 22, 2023	Soil	N23-Ma005	7516	Х					Х		Х						
37	TP68-2_0.0-	Mar 22, 2023	Soil	N23-Ma005	7517	Х							Х		х				

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web: w email:	ww.eurofins.com.au EnviroSales@eurofins	.com	Melbourne 6 Monterey Road Dandenong South VIC 3175 Tel: +61 3 8564 500 NATA# 1261 Site#	Geelo 19/8 L Grove VIC 32 00 Tel: +6 1254 NATA	Sydney Lewalan Street 179 Mag idale Girrawee 216 NSW 21 61 3 8564 5000 Tel: +61 # 1261 Site# 25403 NATA# 1	owar Ro en 45 2 9900 261 Site	oad 8400 e# 1821	Canb Unit 1 Mitch ACT : Tel: +	erra ,2 Dacr ell 2911 61 2 61 \# 1261	e Stree 13 809 Site# 2	B t 1/ Q 1 T 5466 N	risbane 21 Sma lurarrie LD 417 el: +61 ATA# 1	allwood 72 7 3902 4 261 Site	Place 4600 e# 2079	Newc 1/2 Fr Mayfie Tel: + NATA 94 Site#	astle rost Drive eld West NSW 2304 61 2 4968 8448 # 1261 25079 & 25289	Perth 46-48 Banksia Road Welshpool WA 6106 Tel: +61 8 6253 4444 NATA# 2377 Site# 2370	Auckland 35 O'Rorke Road Penrose, Auckland 1061 Tel: +64 9 526 45 51 IANZ# 1327	Christchurch 43 Detroit Drive Rolleston, Christchurch 7675 Tel: 0800 856 450 IANZ# 1290
Co Ad	ompany Name: Idress:	Qualtest 2 Murray D Mayfield W NSW 2304	wyer Circuit est				O R Pl Fa	rder N eport hone: ax:	lo.: #:	((97497)2 496)2 496	3 58 446 50 977	68 75				Received: Due: Priority: Contact Name:	Mar 23, 2023 2:10 Mar 30, 2023 5 Day Libby Betz	PM
Pro Pro	oject Name: oject ID:	MEDOWIE NEW23P-0	GARDENS 009													Eu	urofins Analytical Serv	vices Manager : Ar	ndrew Black
		s	ample Detail			Asbestos - WA guidelines	Asbestos Absence /Presence	HOLD	pH (1:5 Aqueous extract at 25 °C as rec.)	Acid Herbicides	Metals M8	Suite B14: OCP/OPP	Moisture Set	Cation Exchange Capacity	Eurofins Suite B7				
Melt	oourne Laborato	ory - NATA # 1	261 Site # 1254							Х	Х			Х	X	-			
Syd	ney Laboratory	- NATA # 1261	Site # 18217			X		X	X		X	X	X		X	-			
May	field Laboratory	/ - NATA # 126	51 Site # 25079	& 25289			X									-			
Exte	anal Laboratory	1	1													-			
38	0.2 TP68-2_0.5- 0.6	Mar 22, 2023	s	oil	N23-Ma0057518			x								-			
39	TP67-0.0-0.2	Mar 22, 2023	S	oil	N23-Ma0057519	Х					Х		Х]			
40	TP67-0.5-0.6	Mar 22, 2023	S	oil	N23-Ma0057520			Х											
41	TP69-2_0.0- 0.2	Mar 22, 2023	S	oil	N23-Ma0057521	x					х		x						
42	TP69-2_0.4- 0.5	Mar 22, 2023	s	oil	N23-Ma0057522			x											
43	TP71-2_0.0- 0.2	Mar 22, 2023	s	oil	N23-Ma0057523	x							x		x	-			
44	TP71-2_FRAG	Mar 22, 2023	B	uilding laterials	N23-Ma0057524		x												
45	TP71-2_0.4- 0.5	Mar 22, 2023	S	oil	N23-Ma0057525			х											

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web: v email:	www.eurofins.com.au	rins .com	Melbourne 6 Monterey Road Dandenong South VIC 3175 Tel: +61 3 8564 5000 NATA# 1261 Site# 12	Geelong 19/8 Lewalan Street Grovedale VIC 3216 Tel: +61 3 8564 5000 54 NATA# 1261 Site# 25403	Sydney 179 Mago Girraweer NSW 214 Tel: +61 2 NATA# 12	owar Ro 5 2 9900 8 261 Site	oad 8400 e# 1821	Canb Unit 1 Mitch ACT Tel: + 7 NATA	erra ,2 Dacr ell 2911 61 2 61 \# 1261	re Stree 13 809 Site# 2	8 t 1, N C C 1 T 25466 N	risband /21 Sma lurarrie LD 41 el: +61 ATA# 1	e allwood 72 7 3902 261 Site	Place 4600 e# 2079	Newc 1/2 Fr Mayfie Tel: + NATA 94 Site#	castle rost Drive eld West NSW 2304 61 2 4968 8448 \# 1261 25079 & 25289	Perth 46-48 Banksia Road Welshpool WA 6106 Tel: +61 8 6253 4444 NATA# 2377 Site# 2370	Auckland 35 O'Rorke Road Penrose, Auckland 1061 Tel: +64 9 526 45 51 IANZ# 1327	Christchurch 43 Detroit Drive Rolleston, Christchurch 7675 Tel: 0800 856 450 IANZ# 1290
Co Ao	ompany Name: ddress:	Qualtest 2 Murray Dy Mayfield We NSW 2304	wyer Circuit est				O R Pl Fa	rder N eport hone: ax:	lo.: #:	((97497)2 490)2 490	3 58 44 50 97	68 75				Received: Due: Priority: Contact Name:	Mar 23, 2023 2:10 Mar 30, 2023 5 Day Libby Betz	PM
Pr Pr	oject Name: oject ID:	MEDOWIE NEW23P-0	GARDENS 009													Eu	rofins Analytical Serv	vices Manager : Ar	ndrew Black
		S	ample Detail			Asbestos - WA guidelines	Asbestos Absence /Presence	HOLD	pH (1:5 Aqueous extract at 25 °C as rec.)	Acid Herbicides	Metals M8	Suite B14: OCP/OPP	Moisture Set	Cation Exchange Capacity	Eurofins Suite B7				
Mel	bourne Laborato	ory - NATA # 1	261 Site # 1254							Х	Х			х	х	-			
Syd	ney Laboratory	- NATA # 1261	Site # 18217			Х		X	X		X	X	X		X	-			
Мау	field Laboratory	- NATA # 126	1 Site # 25079 &	25289			X									-			
Exte	ernal Laboratory		1 1													-			
46	TP70-2_0.0- 0.2	Mar 22, 2023	Soi	N23-Ma00	57526	х					X		X			1			
	0.5				01021			X								-			
48	TP03_0.0-0.2	Mar 22, 2023	Soi	N23-Ma00	57528	Х					X		X			-			
49	TP03_0.5-0.6	Mar 22, 2023	Soi	N23-Ma00	57529			X								-			
50	TP04_0.0-0.2	Mar 22, 2023	Soi	N23-Ma00	57530	X					X		X			-			
51	<u>1P04_0.5-0.6</u>	Mar 22, 2023	Soi	N23-Ma00	57531			X							-	-			
52	1P66-2_0.0- 0.2	Mar 22, 2023	Soi	N23-Ma00	57532	х					X		X			1			
	0.6	iviai 22, 2023	301		51355			Х								-			
54	WB 22.3.23	Mar 22, 2023	Wa	ter N23-Ma00	57534										X	4			
55	D.22.3.23	Mar 22, 2023	Soi	N23-Ma00	57535								Х		Х]			

	fins	Eurofins Environme	ent Testing Australia Pty Ltd											castle Perth	Eurofins ARL Pty Ltd	Eurofins Environn	n <mark>ent Testing NZ Lto</mark> 4
web: www.eurofins.com.au email: EnviroSales@eurofins	.com	Melbourne 6 Monterey Road Dandenong South VIC 3175 Tel: +61 3 8564 5000 NATA# 1261 Site# 1254	Geelong Sydney 19/8 Lewalan Street 179 Mag Grovedale Girrawee VIC 3216 NSW 21 Tel: +61 3 8564 5000 Tel: +61 NATA# 1261 Site# 25403 NATA#	owar Ro en 45 2 9900 261 Site	oad 8400 ∌# 1821	Cank Unit 7 Mitch ACT Tel: 4 17 NAT	oerra 1,2 Daci iell 2911 -61 2 61 \# 1261	re Street 13 809 ⁻ Site# 2	t 1, N Q 1 T 5466 N	risbane /21 Sma lurarrie LD 417 el: +61 IATA# 1	allwood 72 7 3902 261 Site	Place 4600 e# 2079	Newo 1/2 Fr Mayfi Tel: + NATA 94 Site#	castle rost Drive ield West NSW 2304 61 2 4968 8448 A# 1261 25079 & 25289	Perth 46-48 Banksia Road Welshpool WA 6106 Tel: +61 8 6253 4444 NATA# 2377 Site# 2370	Auckland 35 O'Rorke Road Penrose, Auckland 1061 Tel: +64 9 526 45 51 IANZ# 1327	Christchurch 43 Detroit Drive Rolleston, Christchurch 7675 Tel: 0800 856 450 IANZ# 1290
Company Name: Address:	Qualtest 2 Murray I Mayfield V NSW 2304	Dwyer Circuit /est I			O R P F	rder I eport hone: ax:	No.: #:	9 0 0	97497)2 496)2 496	3 68 440 60 973	68 75				Received: Due: Priority: Contact Name:	Mar 23, 2023 2:10 Mar 30, 2023 5 Day Libby Betz	PM
Project Name: Project ID:	MEDOWIE NEW23P-	GARDENS 0009												E	urofins Analytical Ser	vices Manager : A	ndrew Black
	5	Sample Detail		Asbestos - WA guidelines	Asbestos Absence /Presence	HOLD	pH (1:5 Aqueous extract at 25 °C as rec.)	Acid Herbicides	Metals M8	Suite B14: OCP/OPP	Moisture Set	Cation Exchange Capacity	Eurofins Suite B7				
Melbourne Laborato	ory - NATA #	1261 Site # 1254						Х	Х			Х	X				
Sydney Laboratory	- NATA # 126	1 Site # 18217		Х		Х	Х		Х	X	Х		X	1			
Mayfield Laboratory	- NATA # 12	61 Site # 25079 & 2	5289		X									1			
External Laboratory																	
56 SS21-1	Mar 22, 2023	Soil	N23-Ma0057536			Х											
Test Counts				30	1	9	1	1	40	10	45	1	6				



Internal Quality Control Review and Glossary General

- 1. 2. 3.
- CC data may be available on request. All soil results are reported on a dry basis, unless otherwise stated. Samples were analysed on an 'as received' basis. Information identified on this report with the colour **blue** indicates data provided by customer that may have an impact on the results. This report replaces any interim results previously issued. 4. 5.

Holding Times Please refer to the most recent version of the 'Sample Preservation and Container Guide' for holding times (QS3001).

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported. Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

Units % w/w: F/fld F/mL g, kg g/kg L, mL L/min min	Percentage weight-for-weight basis, e.g. of asbestos in asbestos-containing finds in soil samples (% w/w) Airborne fibre filter loading as Fibres (N) per Fields counted (n) Airborne fibre reported concentration as Fibres per millilite of air drawn over the sampler membrane (C) Mass, e.g. of whole sample (M) or asbestos-containing find within the sample (m) Concentration in grams per kilogram Volume, e.g. of air as measured in AFM (V = r x t) Airborne fibre sampling Flowrate as litres per minute of air drawn over the sampler membrane (r) Time (t), e.g. of air sample collection period
Calculations Airborne Fibre Concentration:	$C = \left(\frac{A}{a}\right) \times \left(\frac{N}{n}\right) \times \left(\frac{1}{t}\right) = K \times \left(\frac{N}{n}\right) \times \left(\frac{1}{t}\right) = K$
Asbestos Content (as asbestos):	$\% w/w = \frac{(m \times P_A)}{M}$
Weighted Average (of asbestos):	$\mathfrak{H}_{WA} = \sum \frac{(m \times P_A)_X}{x}$
Terms %asbestos	Estimated percentage of asbestos in a given matrix. May be derived from knowledge or experience of the material, informed by HSG264 Appendix 2, else assumed to be 15% in accordance with WA DOH Appendix 2 (P _A).
ACM	Asbestos Containing Materials. Asbestos contained within a non-asbestos matrix, typically presented in bonded (non-friable) condition. For the purposes of the NEPM and WA DOH, ACM corresponds to material larger than 7 mm x 7 mm.
AF	Asbestos Fines. Asbestos contamination within a soil sample, as defined by WA DOH. Includes loose fibre bundles and small pieces of friable and non-friable material such as asbestos cement fragments mixed with soil. Considered under the NEPM as equivalent to "non-bonded / friable".
AFM	Airborne Fibre Monitoring, e.g. by the MFM.
Amosite	Amosite Asbestos Detected. Amosite may also refer to Fibrous Grunerite or Brown Asbestos. Identified in accordance with AS 4964-2004.
AS	Australian Standard.
Asbestos Content (as asbestos)	, Total % w/w asbestos content in asbestos-containing finds in a soil sample (% w/w).
Chrysotile	Chrysotile Asbestos Detected. Chrysotile may also refer to Fibrous Serpentine or White Asbestos. Identified in accordance with AS 4964-2004.
COC	Chain of Custody.
Crocidolite	Crocidolite Asbestos Detected. Crocidolite may also refer to Fibrous Riebeckite or Blue Asbestos. Identified in accordance with AS 4964-2004.
Dry	Sample is dried by heating prior to analysis.
DS	Dispersion Staining. Technique required for Unequivocal Identification of asbestos fibres by PLM.
FA	Fibrous Asbestos. Asbestos containing material that is wholly or in part friable, including materials with higher asbestos content with a propensity to become friable with handling, and any material that was previously non-friable and in a severely degraded condition. For the purposes of the NEPM and WA DOH, FA generally corresponds to material larger than 7 mm x 7 mm, although FA may be more difficult to visibly distinguish and may be assessed as AF.
Fibre Count	Total of all fibres (whether asbestos or not) meeting the counting criteria set out in the NOHSC:3003
Fibre ID	Fibre Identification. Unequivocal identification of asbestos fibres according to AS 4964-2004. Includes Chrysotile, Amosite (Grunerite) or Crocidolite asbestos.
Friable	Asbestos-containing materials of any size that may be broken or crumbled by hand pressure. For the purposes of the NEPM, this includes both AF and FA. It is outside of the laboratory's remit to assess degree of friability.
HSG248	UK HSE HSG248, Asbestos: The Analysts Guide, 2nd Edition (2021).
HSG264	UK HSE HSG264, Asbestos: The Survey Guide (2012).
ISO (also ISO/IEC)	International Organization for Standardization / International Electrotechnical Commission.
K Factor	Microscope constant (K) as derived from the effective filter area of the given AFM membrane used for collecting the sample (A) and the projected eyepiece graticule area of the specific microscope used for the analysis (a).
LOR	Limit of Reporting.
MFM (also NOHSC:3003)	Membrane Filter Method. As described by the Australian Government National Occupational Health and Safety Commission, <i>Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres</i> , 2nd Edition [NOHSC:3003(2005)].
NEPM (also ASC NEPM)	National Environment Protection (Assessment of Site Contamination) Measure, (2013, as amended).
Organic	Organic Fibres Detected. Organic may refer to Natural or Man-Made Polymeric Fibres. Identified in accordance with AS 4964-2004.
PCM	Phase Contrast Microscopy. As used for Fibre Counting according to the MFM.
PLM	Polarised Light Microscopy. As used for Fibre Identification and Trace Analysis according to AS 4964-2004.
Sampling	Unless otherwise stated Eurofins are not responsible for sampling equipment or the sampling process.
SMF	Synthetic Mineral Fibre Detected. SMF may also refer to Man Made Vitreous Fibres. Identified in accordance with AS 4964-2004.
SRA	Sample Receipt Advice.
Trace Analysis	Analytical procedure used to detect the presence of respirable fibres (particularly asbestos) in a given sample matrix.
UK HSE HSG	United Kingdom, Health and Safety Executive, Health and Safety Guidance, publication.
UMF	Unidentified Mineral Fibre Detected. Fibrous minerals that are detected but have not been unequivocally identified by PLM with DS according the AS 4964-2004 May include (but not limited to) Actinolite, Anthophyllite or Tremolite asbestos.
WA DOH	Reference document for the NEPM. Government of Western Australia, Guidelines for the Assessment, Remediation and Management of Asbestos- Contaminated Sites in Western Australia (updated 2021), including Appendix Four: Laboratory analysis
Weighted Average	Combined average % w/w asbestos content of all asbestos-containing finds in the given aliquot or total soil sample (%wA).



Comments

Sample Integrity	
Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Asbestos Counter/Identifier:

Chamath JHM Annakkage	Senior Analyst-Asbestos
Md Mominul Haque	Senior Analyst-Asbestos

Authorised by:

Sayeed Abu

Senior Analyst-Asbestos

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Glenn Jackson General Manager

Final Report - this report replaces any previously issued Report

- Indicates Not Requested
- * Indicates NATA accreditation does not cover the performance of this service
- Measurement uncertainty of test data is available on request or please click here.

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Qualtest 2 Murray Dwyer Circuit **Mayfield West NSW 2304**

Libby Betz

Report Project name Project ID **Received Date**

Attention:

974973-S **MEDOWIE GARDENS** NEW23P-0009 Mar 23, 2023

			001			
Client Sample ID			^{G01} SS63-5	SS55-3	SS56-5	SS47-3
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			N23- Ma0057480	N23- Ma0057481	N23- Ma0057482	N23- Ma0057483
Date Sampled			Mar 22, 2023	Mar 22, 2023	Mar 22, 2023	Mar 22, 2023
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 1	-	< 0.1	-
4.4'-DDD	0.05	mg/kg	< 0.5	-	< 0.05	-
4.4'-DDE	0.05	mg/kg	< 0.5	-	< 0.05	-
4.4'-DDT	0.05	mg/kg	< 0.5	-	< 0.05	-
a-HCH	0.05	mg/kg	< 0.5	-	< 0.05	-
Aldrin	0.05	mg/kg	< 0.5	-	< 0.05	-
b-HCH	0.05	mg/kg	< 0.5	-	< 0.05	-
d-HCH	0.05	mg/kg	< 0.5	-	< 0.05	-
Dieldrin	0.05	mg/kg	< 0.5	-	< 0.05	-
Endosulfan I	0.05	mg/kg	< 0.5	-	< 0.05	-
Endosulfan II	0.05	mg/kg	< 0.5	-	< 0.05	-
Endosulfan sulphate	0.05	mg/kg	< 0.5	-	< 0.05	-
Endrin	0.05	mg/kg	< 0.5	-	< 0.05	-
Endrin aldehyde	0.05	mg/kg	< 0.5	-	< 0.05	-
Endrin ketone	0.05	mg/kg	< 0.5	-	< 0.05	-
g-HCH (Lindane)	0.05	mg/kg	< 0.5	-	< 0.05	-
Heptachlor	0.05	mg/kg	< 0.5	-	< 0.05	-
Heptachlor epoxide	0.05	mg/kg	< 0.5	-	< 0.05	-
Hexachlorobenzene	0.05	mg/kg	< 0.5	-	< 0.05	-
Methoxychlor	0.05	mg/kg	< 0.5	-	< 0.05	-
Toxaphene	0.5	mg/kg	< 10	-	< 0.5	-
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.5	-	< 0.05	-
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.5	-	< 0.05	-
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 1	-	< 0.1	-
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 1	-	< 0.1	-
Dibutylchlorendate (surr.)	1	%	108	-	76	-
Tetrachloro-m-xylene (surr.)	1	%	98	-	82	-
Organophosphorus Pesticides						
Azinphos-methyl	0.2	mg/kg	< 0.5	-	< 0.2	-
Bolstar	0.2	mg/kg	< 0.5	-	< 0.2	-
Chlorfenvinphos	0.2	mg/kg	< 0.5	-	< 0.2	-
Chlorpyrifos	0.2	mg/kg	< 0.5		< 0.2	
Chlorpyrifos-methyl	0.2	mg/kg	< 0.5	-	< 0.2	-
Coumaphos	2	mg/kg	< 5	-	< 2	
Demeton-S	0.2	mg/kg	< 0.5	-	< 0.2	-

עיוייא NATA ac-mra 4 Julia

NATA Accredited Accreditation Number 1261 Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing NATA is a signatory to the ILAC Mutual Recognition Arrangement for the mutual recognition of the equivalence of testing, medical testing, calibration, inspection, proficiency testing scheme providers and reference materials producers reports and certificates.



Client Sample ID			G01 SS63-5	SS55-3	SS56-5	SS47-3
Sample Matrix			Soil	Soil	Soil	Soil
			N23-	N23-	N23-	N23-
Eurofins Sample No.			Ma0057480	Ma0057481	Ma0057482	Ma0057483
Date Sampled			Mar 22, 2023	Mar 22, 2023	Mar 22, 2023	Mar 22, 2023
Test/Reference	LOR	Unit				
Organophosphorus Pesticides						
Demeton-O	0.2	ma/ka	< 0.5	-	< 0.2	-
Diazinon	0.2	mg/kg	< 0.5	-	< 0.2	-
Dichlorvos	0.2	mg/kg	< 0.5	-	< 0.2	-
Dimethoate	0.2	mg/kg	< 0.5	-	< 0.2	-
Disulfoton	0.2	mg/kg	< 0.5	-	< 0.2	-
EPN	0.2	mg/kg	< 0.5	-	< 0.2	-
Ethion	0.2	mg/kg	< 0.5	-	< 0.2	-
Ethoprop	0.2	mg/kg	< 0.5	-	< 0.2	-
Ethyl parathion	0.2	mg/kg	< 0.5	-	< 0.2	-
Fenitrothion	0.2	mg/kg	< 0.5	-	< 0.2	-
Fensulfothion	0.2	mg/kg	< 0.5	-	< 0.2	-
Fenthion	0.2	mg/kg	< 0.5	-	< 0.2	-
Malathion	0.2	mg/kg	< 0.5	-	< 0.2	-
Merphos	0.2	mg/kg	< 0.5	-	< 0.2	-
Methyl parathion	0.2	mg/kg	< 0.5	-	< 0.2	-
Mevinphos	0.2	mg/kg	< 0.5	-	< 0.2	-
Monocrotophos	2	mg/kg	< 5	-	< 2	-
Naled	0.2	mg/kg	< 0.5	-	< 0.2	-
Omethoate	2	mg/kg	< 5	-	< 2	-
Phorate	0.2	mg/kg	< 0.5	-	< 0.2	-
Pirimiphos-methyl	0.2	mg/kg	< 0.5	-	< 0.2	-
Pyrazophos	0.2	mg/kg	< 0.5	-	< 0.2	-
Ronnel	0.2	mg/kg	< 0.5	-	< 0.2	-
Terbufos	0.2	mg/kg	< 0.5	-	< 0.2	-
Tetrachlorvinphos	0.2	mg/kg	< 0.5	-	< 0.2	-
Tokuthion	0.2	mg/kg	< 0.5	-	< 0.2	-
Trichloronate	0.2	mg/kg	< 0.5	-	< 0.2	-
Triphenylphosphate (surr.)	1	%	69	-	71	-
Heavy Metals						
Arsenic	2	mg/kg	< 2	4.0	2.8	3.3
Cadmium	0.4	mg/kg	< 0.4	0.5	< 0.4	< 0.4
Chromium	5	mg/kg	13	350	15	30
Copper	5	mg/kg	14	38	78	< 5
Lead	5	mg/kg	12	23	5.9	8.5
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Nickel	5	mg/kg	< 5	14	< 5	< 5
Zinc	5	mg/kg	14	160	240	110
Sample Properties						
% Moisture	1	%	22	11	14	11
Total Recoverable Hydrocarbons - 1999 NEPM Fract	ions					
TRH C6-C9	20	mg/ka	-	< 20	-	-
TRH C10-C14	20	mg/ka	-	< 20	-	-
TRH C15-C28	50	mg/ka	-	< 50	-	-
TRH C29-C36	50	mg/ka	-	62	-	-
TRH C10-C36 (Total)	50	mg/kg	-	62	-	-



Client Sample ID			G01SS63-5	SS55-3	SS56-5	SS47-3
Sample Matrix			Soil	Soil	Soil	Soil
			N23-	N23-	N23-	N23-
Eurofins Sample No.			Ma0057480	Ma0057481	Ma0057482	Ma0057483
Date Sampled			Mar 22, 2023	Mar 22, 2023	Mar 22, 2023	Mar 22, 2023
Test/Reference	LOR	Unit				
BTEX						
Benzene	0.1	mg/kg	-	< 0.1	-	-
Toluene	0.1	mg/kg	-	< 0.1	-	-
Ethylbenzene	0.1	mg/kg	-	< 0.1	-	-
m&p-Xylenes	0.2	mg/kg	-	< 0.2	-	-
o-Xylene	0.1	mg/kg	-	< 0.1	-	-
Xylenes - Total*	0.3	mg/kg	-	< 0.3	-	-
4-Bromofluorobenzene (surr.)	1	%	-	68	-	-
Total Recoverable Hydrocarbons - 2013 NEPM Fract	ions					
Naphthalene ^{N02}	0.5	mg/kg	-	< 0.5	-	-
TRH >C10-C16 less Naphthalene (F2) ^{N01}	50	mg/kg	-	< 50	-	-
TRH C6-C10	20	mg/kg	-	< 20	-	-
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	-	< 20	-	-
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	-	< 0.5	-	-
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	-	0.6	-	-
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	-	1.2	-	-
Acenaphthene	0.5	mg/kg	-	< 0.5	-	-
Acenaphthylene	0.5	mg/kg	-	< 0.5	-	-
Anthracene	0.5	mg/kg	-	< 0.5	-	-
Benz(a)anthracene	0.5	mg/kg	-	< 0.5	-	-
Benzo(a)pyrene	0.5	mg/kg	-	< 0.5	-	-
Benzo(b&j)fluoranthene ^{N07}	0.5	mg/kg	-	< 0.5	-	-
Benzo(g.h.i)perylene	0.5	mg/kg	-	< 0.5	-	-
Benzo(k)fluoranthene	0.5	mg/kg	-	< 0.5	-	-
Chrysene	0.5	mg/kg	-	< 0.5	-	-
Dibenz(a.h)anthracene	0.5	mg/kg	-	< 0.5	-	-
Fluoranthene	0.5	mg/kg	-	< 0.5	-	-
Fluorene	0.5	mg/kg	-	< 0.5	-	-
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	-	< 0.5	-	-
Naphthalene	0.5	mg/kg	-	< 0.5	-	-
Phenanthrene	0.5	mg/kg	-	< 0.5	-	-
Pyrene	0.5	mg/kg	-	< 0.5	-	-
Total PAH*	0.5	mg/kg	-	< 0.5	-	-
2-Fluorobiphenyl (surr.)	1	%	-	111	-	-
p-Terphenyl-d14 (surr.)	1	%	-	84	-	-
Total Recoverable Hydrocarbons - 2013 NEPM Fract	ions	1				
TRH >C10-C16	50	mg/kg	-	< 50	-	-
TRH >C16-C34	100	mg/kg	-	< 100	-	-
TRH >C34-C40	100	mg/kg	-	< 100	-	-
TRH >C10-C40 (total)*	100	mg/kg	-	< 100	-	-
		1				
Conductivity (1:5 aqueous extract at 25 °C as rec.)	10	uS/cm	-	160	-	-
pH (1:5 Aqueous extract at 25 °C as rec.)	0.1	pH Units	-	7.6	-	-
Cation Exchange Capacity		1				
Cation Exchange Capacity	0.05	meq/100g	-	45	-	-



Client Sample ID			SS48-3	SS49-3	SS60-5	SS14-1
Sample Matrix			Soil	Soil	Soil	Soil
			N23-	N23-	N23-	N23-
Eurofins Sample No.			Ma0057484	Ma0057485	Ma0057486	Ma0057487
Date Sampled			Mar 22, 2023	Mar 22, 2023	Mar 22, 2023	Mar 22, 2023
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	-	-	< 0.1	-
4.4'-DDD	0.05	mg/kg	-	-	< 0.05	-
4.4'-DDE	0.05	mg/kg	-	-	< 0.05	-
4.4'-DDT	0.05	mg/kg	-	-	< 0.05	-
a-HCH	0.05	mg/kg	-	-	< 0.05	-
Aldrin	0.05	mg/kg	-	-	< 0.05	-
b-HCH	0.05	mg/kg	-	-	< 0.05	-
d-HCH	0.05	mg/kg	-	-	< 0.05	-
Dieldrin	0.05	mg/kg	-	-	< 0.05	-
Endosulfan I	0.05	mg/kg	-	-	< 0.05	-
Endosulfan II	0.05	mg/kg	-	-	< 0.05	-
Endosulfan sulphate	0.05	mg/kg	-	-	< 0.05	-
Endrin	0.05	mg/kg	-	-	< 0.05	-
Endrin aldehyde	0.05	mg/kg	-	-	< 0.05	-
Endrin ketone	0.05	mg/kg	-	-	< 0.05	-
g-HCH (Lindane)	0.05	mg/kg	-	-	< 0.05	-
Heptachlor	0.05	mg/kg	-	-	< 0.05	-
Heptachlor epoxide	0.05	mg/kg	-	-	< 0.05	-
Hexachlorobenzene	0.05	mg/kg	-	-	< 0.05	-
Methoxychlor	0.05	mg/kg	-	-	< 0.05	-
	0.5	mg/kg	-	-	< 0.5	-
	0.05	mg/kg	-	-	< 0.05	-
	0.05	mg/kg	-	-	< 0.05	-
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	-	-	< 0.1	-
Dibutyleblerendete (ourr.)	0.1	тт <u>д</u> /кд о/	-	-	< 0.1	-
Tetrachlero m vylopo (surr.)	1	- 70 0/	-	-	03	-
Organonhosphorus Posticidos	I	70	-	-	00	-
	0.0	~~~//ca			:0.2	
Azimphos-methyi	0.2	mg/kg	-	-	< 0.2	-
Chlorfonvinnhon	0.2	mg/kg	-	-	< 0.2	-
Chlorpyrifes	0.2	mg/kg	-	-	< 0.2	-
Chlorpyrifos-methyl	0.2	mg/kg			< 0.2	-
Coumanhos	2	ma/ka	_	_	< 0.2	_
Demeton-S	0.2	ma/ka	_	_	< 0.2	_
Demeton-Q	0.2	ma/ka	_	_	< 0.2	_
Diazinon	0.2	ma/ka	-	-	< 0.2	-
Dichloryos	0.2	ma/ka	-	-	< 0.2	-
Dimethoate	0.2	ma/ka	-	-	< 0.2	-
Disulfoton	0.2	ma/ka	-	-	< 0.2	-
EPN	0.2	ma/ka	-	-	< 0.2	-
Ethion	0.2	ma/ka	-	-	< 0.2	-
Ethoprop	0.2	mg/ka	-	-	< 0.2	-
Ethyl parathion	0.2	mg/ka	-	-	< 0.2	-
Fenitrothion	0.2	mg/kg	-	-	< 0.2	-
Fensulfothion	0.2	mg/kg	-	-	< 0.2	-
Fenthion	0.2	mg/kg	-	-	< 0.2	-
Malathion	0.2	mg/kg	-	-	< 0.2	-
Merphos	0.2	mg/kg	-	-	< 0.2	-



Client Sample ID			SS48-3	SS49-3	SS60-5	SS14-1
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			N23- Ma0057484	N23- Ma0057485	N23- Ma0057486	N23- Ma0057487
Date Sampled			Mar 22, 2023	Mar 22, 2023	Mar 22, 2023	Mar 22, 2023
Test/Reference	LOR	Unit				
Organophosphorus Pesticides						
Methyl parathion	0.2	mg/kg	-	-	< 0.2	-
Mevinphos	0.2	mg/kg	-	-	< 0.2	-
Monocrotophos	2	mg/kg	-	-	< 2	-
Naled	0.2	mg/kg	-	-	< 0.2	-
Omethoate	2	mg/kg	-	-	< 2	-
Phorate	0.2	mg/kg	-	-	< 0.2	-
Pirimiphos-methyl	0.2	mg/kg	-	-	< 0.2	-
Pyrazophos	0.2	mg/kg	-	-	< 0.2	-
Ronnel	0.2	mg/kg	-	-	< 0.2	-
Terbufos	0.2	mg/kg	-	-	< 0.2	-
Tetrachlorvinphos	0.2	mg/kg	-	-	< 0.2	-
Tokuthion	0.2	mg/kg	-	-	< 0.2	-
Trichloronate	0.2	mg/kg	-	-	< 0.2	-
Triphenylphosphate (surr.)	1	%	-	-	75	-
Heavy Metals						
Arsenic	2	mg/kg	2.7	2.8	2.5	3.4
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	23	14	22	17
Copper	5	mg/kg	< 5	7.0	7.5	7.4
Lead	5	mg/kg	11	35	11	8.9
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Nickel	5	mg/kg	< 5	< 5	< 5	< 5
Zinc	5	mg/kg	27	55	29	9.7
Sample Properties						
% Moisture	1	%	13	14	12	12

Client Sample ID			SS27-1	SS19-1	^{G01} SS24-1	SS26-1
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			N23- Ma0057488	N23- Ma0057489	N23- Ma0057490	N23- Ma0057491
Date Sampled			Mar 22, 2023	Mar 22, 2023	Mar 22, 2023	Mar 22, 2023
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	-	-	< 1	-
4.4'-DDD	0.05	mg/kg	-	-	< 0.5	-
4.4'-DDE	0.05	mg/kg	-	-	< 0.5	-
4.4'-DDT	0.05	mg/kg	-	-	< 0.5	-
a-HCH	0.05	mg/kg	-	-	< 0.5	-
Aldrin	0.05	mg/kg	-	-	< 0.5	-
b-HCH	0.05	mg/kg	-	-	< 0.5	-
d-HCH	0.05	mg/kg	-	-	< 0.5	-
Dieldrin	0.05	mg/kg	-	-	< 0.5	-
Endosulfan I	0.05	mg/kg	-	-	< 0.5	-
Endosulfan II	0.05	mg/kg	-	-	< 0.5	-
Endosulfan sulphate	0.05	mg/kg	-	-	< 0.5	-
Endrin	0.05	mg/kg	-	-	< 0.5	-
Endrin aldehyde	0.05	mg/kg	-	-	< 0.5	-
Endrin ketone	0.05	mg/kg	-	-	< 0.5	-



Client Sample ID			SS27-1	SS19-1	^{G01} SS24-1	SS26-1
Sample Matrix			Soil	Soil	Soil	Soil
			N23-	N23-	N23-	N23-
Eurofins Sample No.			Ma0057488	Ma0057489	Ma0057490	Ma0057491
Date Sampled			Mar 22, 2023	Mar 22, 2023	Mar 22, 2023	Mar 22, 2023
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
g-HCH (Lindane)	0.05	ma/ka	-	-	< 0.5	-
Heptachlor	0.05	mg/kg	-	-	< 0.5	-
Heptachlor epoxide	0.05	mg/kg	-	-	< 0.5	-
Hexachlorobenzene	0.05	mg/kg	-	-	< 0.5	-
Methoxychlor	0.05	mg/kg	-	-	< 0.5	-
Toxaphene	0.5	mg/kg	-	-	< 10	-
Aldrin and Dieldrin (Total)*	0.05	mg/kg	-	-	< 0.5	-
DDT + DDE + DDD (Total)*	0.05	mg/kg	-	-	< 0.5	-
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	-	-	< 1	-
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	-	-	< 1	-
Dibutylchlorendate (surr.)	1	%	-	-	141	-
Tetrachloro-m-xylene (surr.)	1	%	-	-	109	-
Organophosphorus Pesticides						
Azinphos-methyl	0.2	mg/kg	-	-	< 0.5	-
Bolstar	0.2	mg/kg	-	-	< 0.5	-
Chlorfenvinphos	0.2	mg/kg	-	-	< 0.5	-
Chlorpyrifos	0.2	mg/kg	-	-	< 0.5	-
Chlorpyrifos-methyl	0.2	mg/kg	-	-	< 0.5	-
Coumaphos	2	mg/kg	-	-	< 5	-
Demeton-S	0.2	mg/kg	-	-	< 0.5	-
Demeton-O	0.2	mg/kg	-	-	< 0.5	-
Diazinon	0.2	mg/kg	-	-	< 0.5	-
Dichlorvos	0.2	mg/kg	-	-	< 0.5	-
Dimethoate	0.2	mg/kg	-	-	< 0.5	-
Disulfoton	0.2	mg/kg	-	-	< 0.5	-
EPN	0.2	mg/kg	-	-	< 0.5	-
Ethion	0.2	mg/kg	-	-	< 0.5	-
Ethoprop	0.2	mg/kg	-	-	< 0.5	-
Ethyl parathion	0.2	mg/kg	-	-	< 0.5	-
	0.2	mg/kg	-	-	< 0.5	-
	0.2	mg/kg	-	-	< 0.5	-
Fentnion	0.2	mg/kg	-	-	< 0.5	-
Marahaa	0.2	mg/kg	-	-	< 0.5	-
Mathul possthion	0.2	mg/kg	-	-	< 0.5	-
Meyinghas	0.2	mg/kg	-	-	< 0.5	-
Menoprotophoa	0.2	mg/kg	-	-	< 0.5	-
Notocitiophos	2	mg/kg	-	-	< 0.5	-
Ometheate	0.2	mg/kg	-	-	< 0.5	-
Phorate	2 0.2	mg/kg	_		< 0.5	-
Pirimiphos-methyl	0.2	ma/ka	-	-	< 0.5	
Pyrazonhos	0.2	ma/ka		_	< 0.5	_
Ronnel	0.2	ma/ka	-	-	< 0.5	_
Terbufos	0.2	ma/ka	-	-	< 0.5	_
Tetrachlorvinphos	0.2	ma/ka	-	-	< 0.5	-
Tokuthion	0.2	ma/ka	-	-	< 0.5	-
Trichloronate	0,2	ma/ka	-	-	< 0.5	-
Triphenylphosphate (surr.)	1	%	-	-	85	-



Client Sample ID Sample Matrix Eurofins Sample No. Date Sampled			SS27-1 Soil N23- Ma0057488 Mar 22, 2023	SS19-1 Soil N23- Ma0057489 Mar 22, 2023	^{G01} SS24-1 Soil N23- Ma0057490 Mar 22, 2023	SS26-1 Soil N23- Ma0057491 Mar 22, 2023
Heavy Metals	LUK	Unit				
Arsenic	2	mg/kg	2.8	3.4	4.8	5.0
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	19	20	11	13
Copper	5	mg/kg	36	24	17	10
Lead	5	mg/kg	25	22	22	77
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Nickel	5	mg/kg	< 5	< 5	8.0	< 5
Zinc	5	mg/kg	90	110	110	140
Sample Properties						
% Moisture	1	%	4.8	8.0	5.3	5.7

Client Sample ID			SS18-1	SS25-1	SS17-1	SS15-1
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			N23- Ma0057492	N23- Ma0057493	N23- Ma0057494	N23- Ma0057495
Date Sampled			Mar 22, 2023	Mar 22, 2023	Mar 22, 2023	Mar 22, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Arsenic	2	mg/kg	2.6	4.5	18	3.7
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	19	8.3	34	18
Copper	5	mg/kg	11	13	36	12
Lead	5	mg/kg	19	13	20	12
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Nickel	5	mg/kg	< 5	< 5	< 5	< 5
Zinc	5	mg/kg	71	50	270	93
Sample Properties						
% Moisture	1	%	7.4	2.7	7.7	8.2

Client Sample ID			SS35-1	SS34-1	SS36-1	SS33-1
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			N23- Ma0057496	N23- Ma0057497	N23- Ma0057498	N23- Ma0057499
Date Sampled			Mar 22, 2023	Mar 22, 2023	Mar 22, 2023	Mar 22, 2023
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	-	-	< 0.1	-
4.4'-DDD	0.05	mg/kg	-	-	< 0.05	-
4.4'-DDE	0.05	mg/kg	-	-	0.26	-
4.4'-DDT	0.05	mg/kg	-	-	0.19	-
а-НСН	0.05	mg/kg	-	-	< 0.05	-
Aldrin	0.05	mg/kg	-	-	< 0.05	-
b-HCH	0.05	mg/kg	-	-	< 0.05	-
d-HCH	0.05	mg/kg	-	-	< 0.05	-
Dieldrin	0.05	mg/kg	-	-	< 0.05	-
Endosulfan I	0.05	mg/kg	-	-	< 0.05	-
Endosulfan II	0.05	mg/kg	-	-	< 0.05	-



Sample Matrix Eurofins Sample No.Seri N23- N23-N2307497Soil N23- N23-N2307497Soil N23- N23-N2307497Soil N23- N23-N2307497Soil N23- N23-N2307497Soil N23- N23-N2307497Soil N23- N23-N2307497Soil N23- N23-N2307497Soil N23-N2307497Nat 22, 2023Nat	Client Sample ID			SS35-1	SS34-1	SS36-1	SS33-1
Lordin a Sample No. Name Name </th <th>Sample Matrix</th> <th></th> <th></th> <th>Soil</th> <th>Soil</th> <th>Soil</th> <th>Soil</th>	Sample Matrix			Soil	Soil	Soil	Soil
Luron sample No. mater is a mail of year mater is a mail of ye	Eurofine Comple No			N23-	N23-	N23-	N23-
Dark Samped Natl 22, 2023 Natl 22, 2	Eurofins Sample No.			Mau057496	Mau057497	Mau057498	Mau057499
Test/Reference LOR Unit Image: Constraint of the set of th	Date Sampled			Mar 22, 2023	Mar 22, 2023	Mar 22, 2023	Mar 22, 2023
Organoschorine Pesticies mg/kg - - <	Test/Reference	LOR	Unit				
Endosilina subhate 0.06 mg/kg - - < < 0.06	Organochlorine Pesticides						
Endm 0.05 mg/kg - - < 0.06 - Endm latelyde 0.05 mg/kg - - 0.005 - Endm latelyde 0.05 mg/kg - - 0.005 - Heptachlor 0.05 mg/kg - - 0.005 - Heptachlor epoxide 0.05 mg/kg - - 0.005 - Heptachlor epoxide 0.05 mg/kg - - 0.005 - Hexachlorobenzene 0.05 mg/kg - - <0.05	Endosulfan sulphate	0.05	mg/kg	-	-	< 0.05	-
Endministeryde 0.05 mg/kg - - <	Endrin	0.05	mg/kg	-	-	< 0.05	-
Endmin ketonia 0.05 mg/kg - < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < < <	Endrin aldehyde	0.05	mg/kg	-	-	< 0.05	-
g-HCH (Lindane) 0.05 mg/kg - <	Endrin ketone	0.05	mg/kg	-	-	< 0.05	-
Heptachlor 0.05 mg/kg - - < <td>g-HCH (Lindane)</td> <td>0.05</td> <td>mg/kg</td> <td>-</td> <td>-</td> <td>< 0.05</td> <td>-</td>	g-HCH (Lindane)	0.05	mg/kg	-	-	< 0.05	-
Heptachlor opoxide 0.05 mg/kg - - <	Heptachlor	0.05	mg/kg	-	-	< 0.05	-
Hexachorobenzene 0.05 mg/kg - - < <	Heptachlor epoxide	0.05	mg/kg	-	-	< 0.05	-
Methosychior 0.05 mg/kg - - </td <td>Hexachlorobenzene</td> <td>0.05</td> <td>mg/kg</td> <td>-</td> <td>-</td> <td>< 0.05</td> <td>-</td>	Hexachlorobenzene	0.05	mg/kg	-	-	< 0.05	-
Toxaphene 0.5 mg/kg - - Addin and Dieldrin (Total)* 0.05 mg/kg - - 0.45 - DDT + DDE + DDD (Total)* 0.1 mg/kg - - 0.45 - Vic EPA IWRG 621 Other OCP (Total)* 0.1 mg/kg - - 0.45 - Vic EPA IWRG 621 Other OCP (Total)* 1 % - 133 - Organophosphorus Pesticides - 95 - - 0.2 mg/kg - <	Methoxychlor	0.05	mg/kg	-	-	< 0.05	-
Adman Deletim (rotal)* 0.05 mg/kg - - < 0.05	Toxaphene	0.5	mg/kg	-	-	< 0.5	-
DDI + DDE + DDD (rotal)" 0.05 mg/kg - 0.45 - Vic EPA IWRG 621 OCP (Total)" 0.1 mg/kg - - 133 - Dibutychlorendate (sur.) 1 % - - 133 - Tetrachtoro-wsylene (sur.) 1 % - - 40.2 - Arinphos-methyl 0.2 mg/kg - - <0.2	Aldrin and Dieldrin (Total)*	0.05	mg/kg	-	-	< 0.05	-
Vic EPA WKG 621 OLCP (Total)* 0.1 mg/kg - 0.45 - Dibutylchlorendate (surr.) 1 % - - 0.45 - Dibutylchlorendate (surr.) 1 % - - 95 - Crganophosphorus Pesticides - - 95 - - 0.2 - Azinphos-methyl 0.2 mg/kg - - 0.2 - Bolstar 0.2 mg/kg - - 0.2 - Chlorpnyinfos 0.2 mg/kg - - 0.2 - Chlorpnyinfos 0.2 mg/kg - - - 0.2 - Chlorpnyinfos 0.2 mg/kg - - - 0.2 - Chlorpnyinfos 0.2 mg/kg - - - - - - - - - - - - - - - - - - </td <td>DDT + DDE + DDD (Total)*</td> <td>0.05</td> <td>mg/kg</td> <td>-</td> <td>-</td> <td>0.45</td> <td>-</td>	DDT + DDE + DDD (Total)*	0.05	mg/kg	-	-	0.45	-
Vic EPA WRG 621 Other COP (Total)* 0.1 mg/kg - <th<< td=""><td>Vic EPA IWRG 621 OCP (Total)*</td><td>0.1</td><td>mg/kg</td><td>-</td><td>-</td><td>0.45</td><td>-</td></th<<>	Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	-	-	0.45	-
Dibutychorendate (sur.) 1 % - - 133 - Crganophosphorus Pesticides % - 95 - Azinphos-methyl 0.2 mg/kg - - <0.2	Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	-	-	< 0.1	-
Intractionor-mxylene (surr.) 1 % - - 95 - Organophosphorus Pesticides Bolstar 0.2 mg/kg - - < 0.2	Dibutylchlorendate (surr.)	1	%	-	-	133	-
Organophosphorus Pesticides mg/kg - < 0.2 mg/kg - < 0.2 - Azinphos-methyl 0.2 mg/kg - - < 0.2	l etrachloro-m-xylene (surr.)	1	%	-	-	95	-
Azinphos-methyl 0.2 mg/kg - < < < < < < < < < < < < < <	Organophosphorus Pesticides						
Bolstar 0.2 mg/kg - < 0.2 - Chlorprinbos 0.2 mg/kg - < 0.2	Azinphos-methyl	0.2	mg/kg	-	-	< 0.2	-
Chlorenvinphos 0.2 mg/kg - < 0.2 - Chlorpyrifos 0.2 mg/kg - < 0.2	Bolstar	0.2	mg/kg	-	-	< 0.2	-
Chlorpyritos 0.2 mg/kg - <td>Chlorfenvinphos</td> <td>0.2</td> <td>mg/kg</td> <td>-</td> <td>-</td> <td>< 0.2</td> <td>-</td>	Chlorfenvinphos	0.2	mg/kg	-	-	< 0.2	-
Chlorpyritos-methyl 0.2 mg/kg - <	Chlorpyrifos	0.2	mg/kg	-	-	< 0.2	-
Coumphos 2 mg/kg -	Chlorpyrifos-methyl	0.2	mg/kg	-	-	< 0.2	-
Demeton-S 0.2 mg/kg - -	Coumaphos	2	mg/kg	-	-	< 2	-
Demetor-O 0.2 mg/kg - -	Demeton-S	0.2	mg/kg	-	-	< 0.2	-
Diazinon 0.2 mg/kg - - < < 0.2	Demeton-O	0.2	mg/kg	-	-	< 0.2	-
Dicknorvos 0.2 mg/kg - - < 0.2 - Dimethoate 0.2 mg/kg - < 0.2		0.2	mg/kg	-	-	< 0.2	-
Dimension 0.2 mg/kg - <		0.2	mg/kg	-	-	< 0.2	-
Distinction 0.2 mg/kg - - < 0.2	Dimethoate	0.2	mg/kg	-	-	< 0.2	-
EPN 0.2 mg/kg - - <0.2	Disultoton	0.2	mg/kg	-	-	< 0.2	-
Ethion 0.2 mg/kg - - < 0.2	EPN Ethica	0.2	mg/kg	-	-	< 0.2	-
Ethyl parathion 0.2 Ing/kg - - < 0.2	Ethorem	0.2	mg/kg	-	-	< 0.2	-
Etry paratition 0.2 Ing/kg - - < 0.2	Ethoprop	0.2	mg/kg	-	-	< 0.2	-
Fernitorinon 0.2 Intg/kg - - < 0.2		0.2	mg/kg	-	-	< 0.2	-
Pensitivition 0.2 Inty/kg - - < 0.2 - Fenthion 0.2 mg/kg - - < 0.2	Fernulfathion	0.2	mg/kg	-	-	< 0.2	-
Terminon 0.2 mg/kg - - < 0.2	Fertsulotilion	0.2	mg/kg	-	-	< 0.2	-
Matantion 0.2 mg/kg - - < 0.2 - Merphos 0.2 mg/kg - - < 0.2	Malathian	0.2	mg/kg	-	-	< 0.2	-
Merphos 0.2 mg/kg - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0	Morphos	0.2	mg/kg	-	-	< 0.2	-
Meenly parametry 0.2 mg/kg - < 0.2 - < 0.2 - Mevinphos 0.2 mg/kg - - < 0.2	Methyl parathion	0.2	mg/kg	_		< 0.2	
Interniptios 0.2 mg/kg - < 0.2 - < 0.2 - Monocrotophos 2 mg/kg - - < 2		0.2	mg/kg	_		< 0.2	
Naled 0.2 mg/kg - - < 2 - Naled 0.2 mg/kg - - < 0.2	Monocratophos	0.2	mg/kg	_		< 0.2	_
Nature 0.2 mg/kg -	Naled	 ∩ 2	ma/ka	-	-	~02	
Phorate 0.2 mg/kg - < 2.2 - Pirimiphos-methyl 0.2 mg/kg - - < 0.2	Omethoate	2	ma/ka	_	-	< 2	
Pirimiphos-methyl 0.2 mg/kg - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 - < 0.2 -	Phorate	02	ma/ka	-	-	<02	_
Pyrazophos 0.2 mg/kg - < 0.2 - Ronnel 0.2 mg/kg - - < 0.2	Pirimiphos-methyl	0.2	ma/ka	_	-	< 0.2	_
Ronnel 0.2 mg/kg - < 0.2 - Terbufos 0.2 mg/kg - < 0.2	Pyrazophos	0.2	ma/ka	_	-	~ 0.2	
Terbufos 0.2 mg/kg - < 0.2 -	Ronnel	0.2	ma/ka	_	-	~ 0.2	
	Terbufos	0.2	ma/ka	_	-	< 0.2	_
Tetrachlorvinphos 0.2 ma/ka < 0.2 -	Tetrachlorvinphos	0.2	ma/ka	-	-	< 0.2	-



Client Sample ID			SS35-1	SS34-1	SS36-1	SS33-1
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			N23- Ma0057496	N23- Ma0057497	N23- Ma0057498	N23- Ma0057499
Date Sampled			Mar 22, 2023	Mar 22, 2023	Mar 22, 2023	Mar 22, 2023
Test/Reference	LOR	Unit				
Organophosphorus Pesticides						
Tokuthion	0.2	mg/kg	-	-	< 0.2	-
Trichloronate	0.2	mg/kg	-	-	< 0.2	-
Triphenylphosphate (surr.)	1	%	-	-	121	-
Heavy Metals						
Arsenic	2	mg/kg	2.2	2.6	2.6	2.0
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	20	30	26	26
Copper	5	mg/kg	14	21	8.8	6.5
Lead	5	mg/kg	21	40	17	22
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Nickel	5	mg/kg	< 5	5.9	< 5	< 5
Zinc	5	mg/kg	960	320	160	84
Sample Properties						
% Moisture	1	%	9.3	9.3	8.2	11

Client Sample ID			SS37-1	SS32-1	SS22-1	SS23-1
Sample Matrix			Soil	Soil	Soil	Soil
Eurofine Comple No			N23-	N23-	N23-	N23-
			Wa0057500	Wa0057501	Wa0057502	WI20057503
Date Sampled			Mar 22, 2023	Mar 22, 2023	Mar 22, 2023	Mar 22, 2023
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	-	-	-	< 0.1
4.4'-DDD	0.05	mg/kg	-	-	-	< 0.05
4.4'-DDE	0.05	mg/kg	-	-	-	< 0.05
4.4'-DDT	0.05	mg/kg	-	-	-	< 0.05
a-HCH	0.05	mg/kg	-	-	-	< 0.05
Aldrin	0.05	mg/kg	-	-	-	< 0.05
b-HCH	0.05	mg/kg	-	-	=	< 0.05
d-HCH	0.05	mg/kg	-	-	=	< 0.05
Dieldrin	0.05	mg/kg	-	-	=	0.07
Endosulfan I	0.05	mg/kg	-	-	=	< 0.05
Endosulfan II	0.05	mg/kg	-	-	=	< 0.05
Endosulfan sulphate	0.05	mg/kg	-	-	=	< 0.05
Endrin	0.05	mg/kg	-	-	=	< 0.05
Endrin aldehyde	0.05	mg/kg	-	-	-	< 0.05
Endrin ketone	0.05	mg/kg	-	-	-	< 0.05
g-HCH (Lindane)	0.05	mg/kg	-	-	-	< 0.05
Heptachlor	0.05	mg/kg	-	-	-	< 0.05
Heptachlor epoxide	0.05	mg/kg	-	-	-	< 0.05
Hexachlorobenzene	0.05	mg/kg	-	-	-	< 0.05
Methoxychlor	0.05	mg/kg	-	-	-	< 0.05
Toxaphene	0.5	mg/kg	-	-	-	< 0.5
Aldrin and Dieldrin (Total)*	0.05	mg/kg	-	-	-	0.07
DDT + DDE + DDD (Total)*	0.05	mg/kg	-	-	-	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	-	-	-	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	-	-	-	< 0.1
Dibutylchlorendate (surr.)	1	%	-	-	-	98
Tetrachloro-m-xylene (surr.)	1	%	-	-	-	92



Client Sample ID			SS37-1	SS32-1	SS22-1	SS23-1
Sample Matrix			Soil	Soil	Soil	Soil
			N23-	N23-	N23-	N23-
Eurofins Sample No.			Ma0057500	Ma0057501	Ma0057502	Ma0057503
Date Sampled			Mar 22, 2023	Mar 22, 2023	Mar 22, 2023	Mar 22, 2023
Test/Reference	LOR	Unit				
Organophosphorus Pesticides						
Azinphos-methyl	0.2	mg/kg	-	-	-	< 0.2
Bolstar	0.2	mg/kg	-	-	-	< 0.2
Chlorfenvinphos	0.2	mg/kg	-	-	-	< 0.2
Chlorpyrifos	0.2	mg/kg	-	-	-	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	-	-	-	< 0.2
Coumaphos	2	mg/kg	-	-	-	< 2
Demeton-S	0.2	mg/kg	-	-	-	< 0.2
Demeton-O	0.2	mg/kg	-	-	-	< 0.2
Diazinon	0.2	mg/kg	-	-	-	< 0.2
Dichlorvos	0.2	mg/kg	-	-	-	< 0.2
Dimethoate	0.2	mg/kg	-	-	-	< 0.2
Disulfoton	0.2	mg/kg	-	-	-	< 0.2
EPN	0.2	mg/kg	-	-	-	< 0.2
Ethion	0.2	mg/kg	-	-	-	< 0.2
Ethoprop	0.2	mg/kg	-	-	-	< 0.2
Ethyl parathion	0.2	mg/kg	-	-	-	< 0.2
Fenitrothion	0.2	mg/kg	-	-	-	< 0.2
Fensulfothion	0.2	mg/kg	-	-	-	< 0.2
Fenthion	0.2	mg/kg	-	-	-	< 0.2
Malathion	0.2	mg/kg	-	-	-	< 0.2
Merphos	0.2	mg/kg	-	-	-	< 0.2
Methyl parathion	0.2	mg/kg	-	-	-	< 0.2
Mevinphos	0.2	mg/kg	-	-	-	< 0.2
Monocrotophos	2	mg/kg	-	-	-	< 2
Naled	0.2	mg/kg	-	-	-	< 0.2
Omethoate	2	mg/kg	-	-	-	< 2
Phorate	0.2	mg/kg	-	-	-	< 0.2
Pirimiphos-methyl	0.2	mg/kg	-	-	-	< 0.2
Pyrazophos	0.2	mg/kg	-	-	-	0.4
Ronnel	0.2	mg/kg	-	-	-	< 0.2
Terbufos	0.2	mg/kg	-	-	-	< 0.2
Tetrachlorvinphos	0.2	mg/kg	-	-	-	< 0.2
Tokuthion	0.2	mg/kg	-	-	-	< 0.2
Trichloronate	0.2	mg/kg	-	-	-	< 0.2
Triphenylphosphate (surr.)	1	%	-	-	-	97
Heavy Metals						
Arsenic	2	mg/kg	2.2	2.4	8.9	24
Cadmium	0.4	mg/kg	< 0.4	< 0.4	0.7	< 0.4
Chromium	5	mg/kg	23	22	32	24
Copper	5	mg/kg	17	10	33	26
Lead	5	mg/kg	14	19	47	44
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Nickel	5	mg/kg	< 5	< 5	7.9	< 5
Zinc	5	mg/kg	75	120	200	120
Sample Properties						
% Moisture	1	%	8.8	11	14	4.8



Client Sample ID			SS53-3	SS61-5	SS62-5	SS52-3
Sample Matrix			Soil	Soil	Soil	Soil
			N23-	N23-	N23-	N23-
Eurofins Sample No.			Ma0057504	Ma0057505	Ma0057506	Ma0057507
Date Sampled			Mar 22, 2023	Mar 22, 2023	Mar 22, 2023	Mar 22, 2023
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	-	< 0.1	< 0.1	-
4.4'-DDD	0.05	mg/kg	-	< 0.05	< 0.05	-
4.4'-DDE	0.05	mg/kg	-	< 0.05	< 0.05	-
4.4'-DDT	0.05	mg/kg	-	< 0.05	< 0.05	-
a-HCH	0.05	mg/kg	-	< 0.05	< 0.05	-
Aldrin	0.05	mg/kg	-	< 0.05	< 0.05	-
b-HCH	0.05	mg/kg	-	< 0.05	< 0.05	-
d-HCH	0.05	mg/kg	-	< 0.05	< 0.05	-
Dieldrin	0.05	mg/kg	-	< 0.05	< 0.05	-
Endosulfan I	0.05	mg/kg	-	< 0.05	< 0.05	-
Endosulfan II	0.05	mg/kg	-	< 0.05	< 0.05	-
Endosulfan sulphate	0.05	mg/kg	-	< 0.05	< 0.05	-
Endrin	0.05	mg/kg	-	< 0.05	< 0.05	-
Endrin aldehyde	0.05	mg/kg	-	< 0.05	< 0.05	-
Endrin ketone	0.05	mg/kg	-	< 0.05	< 0.05	-
g-HCH (Lindane)	0.05	mg/kg	-	< 0.05	< 0.05	-
Heptachlor	0.05	mg/kg	-	< 0.05	< 0.05	-
Heptachlor epoxide	0.05	mg/kg	-	< 0.05	< 0.05	-
Hexachlorobenzene	0.05	mg/kg	-	< 0.05	< 0.05	-
Methoxychlor	0.05	mg/kg	-	< 0.05	< 0.05	-
Toxaphene	0.5	mg/kg	-	< 0.5	< 0.5	-
Aldrin and Dieldrin (Total)*	0.05	mg/kg	-	< 0.05	< 0.05	-
DDT + DDE + DDD (Total)*	0.05	mg/kg	-	< 0.05	< 0.05	-
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	-	< 0.1	< 0.1	-
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	-	< 0.1	< 0.1	-
Dibutylchlorendate (surr.)	1	%	-	135	84	-
Tetrachloro-m-xylene (surr.)	1	%	-	96	88	-
Organophosphorus Pesticides						
Azinphos-methyl	0.2	mg/kg	-	< 0.2	< 0.2	-
Bolstar	0.2	mg/kg	-	< 0.2	< 0.2	-
Chlorfenvinphos	0.2	mg/kg	-	< 0.2	< 0.2	-
Chlorpyrifos	0.2	mg/kg	-	< 0.2	< 0.2	-
Chlorpyrifos-methyl	0.2	mg/kg	-	< 0.2	< 0.2	-
Coumaphos	2	mg/kg	-	< 2	< 2	-
Demeton-S	0.2	mg/kg	-	< 0.2	< 0.2	-
Demeton-O	0.2	mg/kg	-	< 0.2	< 0.2	-
Diazinon	0.2	mg/kg	-	< 0.2	< 0.2	-
Dichlorvos	0.2	mg/kg	-	< 0.2	< 0.2	-
Dimethoate	0.2	mg/kg	-	< 0.2	< 0.2	-
Disulfoton	0.2	mg/kg	-	< 0.2	< 0.2	-
EPN	0.2	mg/kg	-	< 0.2	< 0.2	-
Ethion	0.2	mg/kg	-	< 0.2	< 0.2	-
Ethoprop	0.2	mg/kg	-	< 0.2	< 0.2	-
Ethyl parathion	0.2	mg/kg	-	< 0.2	< 0.2	-
Fenitrothion	0.2	mg/kg	-	< 0.2	< 0.2	-
Fensulfothion	0.2	mg/kg	-	< 0.2	< 0.2	-
Fenthion	0.2	mg/kg	-	< 0.2	< 0.2	-
Malathion	0.2	mg/kg	-	< 0.2	< 0.2	-
Merphos	0.2	mg/kg	-	< 0.2	< 0.2	-



Client Sample ID			SS53-3	SS61-5	SS62-5	SS52-3
Sample Matrix			Soil	Soil	Soil	Soil
			N23-	N23-	N23-	N23-
Eurofins Sample No.			Ma0057504	Ma0057505	Ma0057506	Ma0057507
Date Sampled			Mar 22, 2023	Mar 22, 2023	Mar 22, 2023	Mar 22, 2023
Test/Reference	LOR	Unit				
Organophosphorus Pesticides						
Methyl parathion	0.2	mg/kg	-	< 0.2	< 0.2	-
Mevinphos	0.2	mg/kg	-	< 0.2	< 0.2	-
Monocrotophos	2	mg/kg	-	< 2	< 2	-
Naled	0.2	mg/kg	-	< 0.2	< 0.2	-
Omethoate	2	mg/kg	-	< 2	< 2	-
Phorate	0.2	mg/kg	-	< 0.2	< 0.2	-
Pirimiphos-methyl	0.2	mg/kg	-	< 0.2	< 0.2	-
Pyrazophos	0.2	mg/kg	-	< 0.2	< 0.2	-
Ronnel	0.2	mg/kg	-	< 0.2	< 0.2	-
Terbufos	0.2	mg/kg	-	< 0.2	< 0.2	-
Tetrachlorvinphos	0.2	mg/kg	-	< 0.2	< 0.2	-
Tokuthion	0.2	mg/kg	-	< 0.2	< 0.2	-
Trichloronate	0.2	mg/kg	-	< 0.2	< 0.2	-
Triphenylphosphate (surr.)	1	%	-	Q09INT	78	-
Heavy Metals		-				
Arsenic	2	mg/kg	3.0	2.2	< 2	4.5
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	23	16	18	31
Copper	5	mg/kg	19	20	16	13
Lead	5	mg/kg	13	16	8.0	20
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Nickel	5	mg/kg	< 5	< 5	< 5	< 5
Zinc	5	mg/kg	19	12	14	18
Sample Properties						
% Moisture	1	%	12	7.0	7.2	12

Client Sample ID			SS54-3	SS29-1	SS30-1	SS31-1
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			N23- Ma0057508	N23- Ma0057510	N23- Ma0057511	N23- Ma0057512
Date Sampled			Mar 22, 2023	Mar 22, 2023	Mar 22, 2023	Mar 22, 2023
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	-	< 0.1	-	-
4.4'-DDD	0.05	mg/kg	-	< 0.05	-	-
4.4'-DDE	0.05	mg/kg	-	< 0.05	-	-
4.4'-DDT	0.05	mg/kg	-	< 0.05	-	-
a-HCH	0.05	mg/kg	-	< 0.05	-	-
Aldrin	0.05	mg/kg	-	< 0.05	-	-
b-HCH	0.05	mg/kg	-	< 0.05	-	-
d-HCH	0.05	mg/kg	-	< 0.05	-	-
Dieldrin	0.05	mg/kg	-	< 0.05	-	-
Endosulfan I	0.05	mg/kg	-	< 0.05	-	-
Endosulfan II	0.05	mg/kg	-	< 0.05	-	-
Endosulfan sulphate	0.05	mg/kg	-	< 0.05	-	-
Endrin	0.05	mg/kg	-	< 0.05	-	-
Endrin aldehyde	0.05	mg/kg	-	0.07	-	-
Endrin ketone	0.05	mg/kg	-	< 0.05	-	-



Client Sample ID			SS54-3	SS29-1	SS30-1	SS31-1
Sample Matrix			Soil	Soil	Soil	Soil
			N23-	N23-	N23-	N23-
Eurofins Sample No.			Ma0057508	Ma0057510	Ma0057511	Ma0057512
Date Sampled			Mar 22, 2023	Mar 22, 2023	Mar 22, 2023	Mar 22, 2023
Test/Reference	LOR	Unit				
Organochlorine Pesticides	_					
g-HCH (Lindane)	0.05	ma/ka	-	< 0.05	_	-
Heptachlor	0.05	ma/ka	_	< 0.05	-	-
Heptachlor epoxide	0.05	ma/ka	-	< 0.05	-	-
Hexachlorobenzene	0.05	mg/kg	-	< 0.05	-	-
Methoxychlor	0.05	mg/kg	-	< 0.05	-	-
Toxaphene	0.5	mg/kg	-	< 0.5	-	-
Aldrin and Dieldrin (Total)*	0.05	mg/kg	-	< 0.05	-	-
DDT + DDE + DDD (Total)*	0.05	mg/kg	-	< 0.05	-	-
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	-	< 0.1	-	-
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	-	< 0.1	-	-
Dibutylchlorendate (surr.)	1	%	-	109	-	-
Tetrachloro-m-xylene (surr.)	1	%	-	86	-	-
Organophosphorus Pesticides						
Azinphos-methyl	0.2	mg/kg	-	< 0.2	-	-
Bolstar	0.2	mg/kg	-	< 0.2	-	-
Chlorfenvinphos	0.2	mg/kg	-	< 0.2	-	-
Chlorpyrifos	0.2	mg/kg	-	< 0.2	-	-
Chlorpyrifos-methyl	0.2	mg/kg	-	< 0.2	-	-
Coumaphos	2	mg/kg	-	< 2	-	-
Demeton-S	0.2	mg/kg	-	< 0.2	-	-
Demeton-O	0.2	mg/kg	-	< 0.2	-	-
Diazinon	0.2	mg/kg	-	< 0.2	-	-
Dichlorvos	0.2	mg/kg	-	< 0.2	-	-
Dimethoate	0.2	mg/kg	-	< 0.2	-	-
Disulfoton	0.2	mg/kg	-	< 0.2	-	-
EPN	0.2	mg/kg	-	< 0.2	-	-
Ethion	0.2	mg/kg	-	< 0.2	-	-
Ethoprop	0.2	mg/kg	-	< 0.2	-	-
Ethyl parathion	0.2	mg/kg	-	< 0.2	-	-
	0.2	mg/kg	-	< 0.2	-	-
Fensulfothion	0.2	mg/kg	-	< 0.2	-	-
Penthion	0.2	mg/kg	-	< 0.2	-	-
Marahaa	0.2	mg/kg	-	< 0.2	-	-
Methyl parathion	0.2	mg/kg	-	< 0.2	-	-
	0.2	mg/kg		< 0.2		-
Monocratophos	0.2	mg/kg		< 0.2		-
Naled	0.2	mg/kg		< 0.2		
Omethoate	2	ma/ka	_	< 0.2	_	_
Phorate	0.2	ma/ka	_	< 0.2	_	_
Pirimiphos-methyl	0.2	ma/ka	-	< 0.2	-	-
Pyrazophos	0.2	ma/ka	_	< 0.2	-	-
Ronnel	0.2	ma/ka	_	< 0.2	-	-
Terbufos	0.2	ma/ka	-	< 0.2	-	-
Tetrachlorvinphos	0.2	mg/ka	-	< 0.2	-	-
Tokuthion	0.2	mg/kg	-	< 0.2	-	-
Trichloronate	0.2	mg/kg	-	< 0.2	-	-
Triphenylphosphate (surr.)	1	%	-	92	-	-



Client Sample ID			SS54-3	SS29-1	SS30-1	SS31-1
Sample Matrix			Soil	Soil	Soil	Soil
			N23-	N23-	N23-	N23-
Eurofins Sample No.			Ma0057508	Ma0057510	Ma0057511	Ma0057512
Date Sampled			Mar 22, 2023	Mar 22, 2023	Mar 22, 2023	Mar 22, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Arsenic	2	mg/kg	2.3	3.9	2.7	2.8
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	18	26	10.0	18
Copper	5	mg/kg	5.5	30	61	11
Lead	5	mg/kg	9.0	27	29	18
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Nickel	5	mg/kg	< 5	14	< 5	< 5
Zinc	5	mg/kg	32	190	240	64
Sample Properties						
% Moisture	1	%	8.6	7.3	7.6	9.0
Total Recoverable Hydrocarbons - 1999 NEPM Fract	ions	•				
TRH C6-C9	20	ma/ka	-	-	< 20	-
TRH C10-C14	20	ma/ka	-	-	< 20	-
TRH C15-C28	50	ma/ka	-	-	110	-
TRH C29-C36	50	ma/ka	-	-	100	-
TRH C10-C36 (Total)	50	ma/ka	-	-	210	-
BTEX						
Benzene	0.1	ma/ka	_	-	< 0.1	-
Toluene	0.1	ma/ka	_	-	< 0.1	_
Ethylbenzene	0.1	ma/ka	_	-	< 0.1	_
m&p-Xylenes	0.2	ma/ka	-	-	< 0.2	-
o-Xvlene	0.1	ma/ka	-	-	< 0.1	-
Xvlenes - Total*	0.3	ma/ka	-	-	< 0.3	-
4-Bromofluorobenzene (surr.)	1	%	-	-	82	-
Total Recoverable Hydrocarbons - 2013 NEPM Fract	ions				_	
Naphthalene ^{N02}	0.5	ma/ka	-	-	< 0.5	-
TRH >C10-C16 less Naphthalene (F2) ^{N01}	50	ma/ka	_	-	< 50	-
TRH C6-C10	20	ma/ka	_	-	< 20	-
TRH C6-C10 less BTEX (F1) ^{N04}	20	ma/ka	-	-	< 20	-
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	ma/ka	_	_	< 5	_
Benzo(a)pyrene TEQ (medium bound) *	0.5	ma/ka	_	-	< 5	-
Benzo(a)pyrene TEQ (upper bound) *	0.5	ma/ka	_	_	< 5	_
Acenaphthene	0.5	ma/ka	-	-	< 0.5	-
Acenaphthylene	0.5	ma/ka	-	-	< 0.5	-
Anthracene	0.5	ma/ka	-	-	< 0.5	-
Benz(a)anthracene	0.5	mg/kg	-	-	1.0	-
Benzo(a)pyrene	0.5	mg/kg	-	-	1.6	-
Benzo(b&j)fluoranthene ^{N07}	0.5	mg/kg	-	-	0.9	-
Benzo(g.h.i)perylene	0.5	mg/kg	-	-	< 5	-
Benzo(k)fluoranthene	0.5	mg/kg	-	-	0.9	-
Chrysene	0.5	mg/kg	-	-	1.2	-
Dibenz(a.h)anthracene	0.5	mg/kg	-	-	< 0.5	-
Fluoranthene	0.5	mg/kg	-	-	< 0.5	-
Fluorene	0.5	mg/kg	-	-	< 0.5	-
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	-	-	1.2	-
Naphthalene	0.5	mg/kg	-	-	< 0.5	-
Phenanthrene	0.5	mg/kg	-	-	< 0.5	-



Client Sample ID Sample Matrix Eurofins Sample No.			SS54-3 Soil N23- Ma0057508	SS29-1 Soil N23- Ma0057510	SS30-1 Soil N23- Ma0057511	SS31-1 Soil N23- Ma0057512
Date Sampled			Mar 22, 2023	Mar 22, 2023	Mar 22, 2023	Mar 22, 2023
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Pyrene	0.5	mg/kg	-	-	1.9	-
Total PAH*	0.5	mg/kg	-	-	8.7	-
2-Fluorobiphenyl (surr.)	1	%	-	-	119	-
p-Terphenyl-d14 (surr.)	1	%	-	-	108	-
Total Recoverable Hydrocarbons - 2013 NEPM Fract	ions					
TRH >C10-C16	50	mg/kg	-	-	< 50	-
TRH >C16-C34	100	mg/kg	-	-	180	-
TRH >C34-C40	100	mg/kg	-	-	130	-
TRH >C10-C40 (total)*	100	mg/kg	-	-	310	-

Client Sample ID			SS59-5	SS16-1	SS51-3	SS27-1
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			N23- Ma0057513	N23- Ma0057514	N23- Ma0057515	N23- Ma0057516
Date Sampled			Mar 22, 2023	Mar 22, 2023	Mar 22, 2023	Mar 22, 2023
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	0.3	-	-	-
4.4'-DDD	0.05	mg/kg	< 0.05	-	-	-
4.4'-DDE	0.05	mg/kg	0.24	-	-	-
4.4'-DDT	0.05	mg/kg	0.06	-	-	-
a-HCH	0.05	mg/kg	< 0.05	-	-	-
Aldrin	0.05	mg/kg	< 0.05	-	-	-
b-HCH	0.05	mg/kg	< 0.05	-	-	-
d-HCH	0.05	mg/kg	< 0.05	-	-	-
Dieldrin	0.05	mg/kg	0.08	-	-	-
Endosulfan I	0.05	mg/kg	< 0.05	-	-	-
Endosulfan II	0.05	mg/kg	< 0.05	-	-	-
Endosulfan sulphate	0.05	mg/kg	< 0.05	-	-	-
Endrin	0.05	mg/kg	< 0.05	-	-	-
Endrin aldehyde	0.05	mg/kg	< 0.05	-	-	-
Endrin ketone	0.05	mg/kg	< 0.05	-	-	-
g-HCH (Lindane)	0.05	mg/kg	< 0.05	-	-	-
Heptachlor	0.05	mg/kg	< 0.05	-	-	-
Heptachlor epoxide	0.05	mg/kg	< 0.05	-	-	-
Hexachlorobenzene	0.05	mg/kg	< 0.05	-	-	-
Methoxychlor	0.05	mg/kg	< 0.05	-	-	-
Toxaphene	0.5	mg/kg	< 0.5	-	-	-
Aldrin and Dieldrin (Total)*	0.05	mg/kg	0.08	-	-	-
DDT + DDE + DDD (Total)*	0.05	mg/kg	0.3	-	-	-
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	0.68	-	-	-
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	0.3	-	-	-
Dibutylchlorendate (surr.)	1	%	117	-	-	-
Tetrachloro-m-xylene (surr.)	1	%	90	-	-	-



Client Sample ID			SS59-5	SS16-1	SS51-3	SS27-1
Sample Matrix			Soil	Soil	Soil	Soil
			N23-	N23-	N23-	N23-
Eurofins Sample No.			Ma0057513	Ma0057514	Ma0057515	Ma0057516
Date Sampled			Mar 22, 2023	Mar 22, 2023	Mar 22, 2023	Mar 22, 2023
Test/Reference	LOR	Unit				
Organophosphorus Pesticides						
Azinphos-methyl	0.2	mg/kg	< 0.2	-	-	-
Bolstar	0.2	mg/kg	< 0.2	-	-	-
Chlorfenvinphos	0.2	mg/kg	< 0.2	-	-	-
Chlorpyrifos	0.2	mg/kg	< 0.2	-	-	-
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2	-	-	-
Coumaphos	2	mg/kg	< 2	-	-	-
Demeton-S	0.2	mg/kg	< 0.2	-	-	-
Demeton-O	0.2	mg/kg	< 0.2	-	-	-
Diazinon	0.2	mg/kg	< 0.2	-	-	-
Dichlorvos	0.2	mg/kg	< 0.2	-	-	-
Dimethoate	0.2	mg/kg	< 0.2	-	-	-
Disulfoton	0.2	mg/kg	< 0.2	-	-	-
EPN	0.2	mg/kg	< 0.2	-	-	-
Ethion	0.2	mg/kg	< 0.2	-	-	-
Ethoprop	0.2	mg/kg	< 0.2	-	-	-
Ethyl parathion	0.2	mg/kg	< 0.2	-	-	-
Fenitrothion	0.2	mg/kg	< 0.2	-	-	-
Fensulfothion	0.2	mg/kg	< 0.2	-	-	-
Fenthion	0.2	mg/kg	< 0.2	-	-	-
Malathion	0.2	mg/kg	< 0.2	-	-	-
Merphos	0.2	mg/kg	< 0.2	-	-	-
Methyl parathion	0.2	mg/kg	< 0.2	-	-	-
Mevinphos	0.2	mg/kg	< 0.2	-	-	-
Monocrotophos	2	mg/kg	< 2	-	-	-
Naled	0.2	mg/kg	< 0.2	-	-	-
Omethoate	2	mg/kg	< 2	-	-	-
Phorate	0.2	mg/kg	< 0.2	-	-	-
Pirimiphos-methyl	0.2	mg/kg	< 0.2	-	-	-
Pyrazophos	0.2	mg/kg	< 0.2	-	-	-
Ronnel	0.2	mg/kg	< 0.2	-	-	-
Terbufos	0.2	mg/kg	< 0.2	-	-	-
Tetrachlorvinphos	0.2	mg/kg	< 0.2	-	-	-
Tokuthion	0.2	mg/kg	< 0.2	-	-	-
Trichloronate	0.2	mg/kg	< 0.2	-	-	-
Triphenylphosphate (surr.)	1	%	93	-	-	-
Heavy Metals						
Arsenic	2	mg/kg	4.3	10	2.6	6.0
Cadmium	0.4	mg/kg	0.5	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	23	13	19	16
Copper	5	mg/kg	13	17	9.6	27
Lead	5	mg/kg	16	19	10	57
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Nickel	5	mg/kg	5.1	< 5	< 5	< 5
Zinc	5	mg/kg	29	100	36	250
Sample Properties						
% Moisture	1	%	6.7	13	9.4	8.2



Client Sample ID Sample Matrix Eurofins Sample No. Date Sampled			SS59-5 Soil N23- Ma0057513 Mar 22, 2023	SS16-1 Soil N23- Ma0057514 Mar 22, 2023	SS51-3 Soil N23- Ma0057515 Mar 22, 2023	SS27-1 Soil N23- Ma0057516 Mar 22, 2023
Test/Reference	LOR	Unit				
Acid Herbicides						
2.4-D	0.5	mg/kg	< 0.5	-	-	-
2.4-DB	0.5	mg/kg	< 0.5	-	-	-
2.4.5-T	0.5	mg/kg	< 0.5	-	-	-
2.4.5-TP	0.5	mg/kg	< 0.5	-	-	-
Actril (loxynil)	0.5	mg/kg	< 0.5	-	-	-
Dicamba	0.5	mg/kg	< 0.5	-	-	-
Dichlorprop	0.5	mg/kg	< 0.5	-	-	-
Dinitro-o-cresol	0.5	mg/kg	< 0.5	-	-	-
Dinoseb	0.5	mg/kg	< 0.5	-	-	-
MCPA	0.5	mg/kg	< 0.5	-	-	-
МСРВ	0.5	mg/kg	< 0.5	-	-	-
Месоргор	0.5	mg/kg	< 0.5	-	-	-
Warfarin (surr.)	1	%	135	-	-	-

			•	-	•	
Client Sample ID			TP68-2_0.0-0.2	TP67-0.0-0.2	TP69-2_0.0-0.2	TP71-2_0.0-0.2
Sample Matrix			Soil	Soil	Soil	Soil
			N23-	N23-	N23-	N23-
Eurofins Sample No.			Ma0057517	Ma0057519	Ma0057521	Ma0057523
Date Sampled			Mar 22, 2023	Mar 22, 2023	Mar 22, 2023	Mar 22, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Arsenic	2	mg/kg	3.7	4.1	2.8	2.7
Cadmium	0.4	mg/kg	< 0.4	< 0.4	0.6	< 0.4
Chromium	5	mg/kg	42	49	9.9	< 5
Copper	5	mg/kg	< 5	< 5	71	43
Lead	5	mg/kg	8.6	8.6	220	110
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Nickel	5	mg/kg	6.6	7.3	6.0	< 5
Zinc	5	mg/kg	12	10.0	440	230
Sample Properties						
% Moisture	1	%	13	14	4.8	3.5
Total Recoverable Hydrocarbons - 1999 NEPM Fract	ions					
TRH C6-C9	20	mg/kg	< 20	-	-	< 20
TRH C10-C14	20	mg/kg	< 20	-	-	< 20
TRH C15-C28	50	mg/kg	< 50	-	-	< 50
TRH C29-C36	50	mg/kg	< 50	-	-	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50	-	-	< 50
BTEX						
Benzene	0.1	mg/kg	< 0.1	-	-	< 0.1
Toluene	0.1	mg/kg	< 0.1	-	-	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	-	-	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	-	-	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	-	-	< 0.1
Xylenes - Total*	0.3	mg/kg	< 0.3	-	-	< 0.3
4-Bromofluorobenzene (surr.)	1	%	91	-	-	93



Client Sample ID			TP68-2_0.0-0.2	TP67-0.0-0.2	TP69-2_0.0-0.2	TP71-2_0.0-0.2
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			N23- Ma0057517	N23- Ma0057519	N23- Ma0057521	N23- Ma0057523
Date Sampled			Mar 22, 2023	Mar 22, 2023	Mar 22, 2023	Mar 22, 2023
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons - 2013 NEPM Fract	ions					
Naphthalene ^{N02}	0.5	mg/kg	< 0.5	-	-	< 0.5
TRH >C10-C16 less Naphthalene (F2) ^{N01}	50	mg/kg	< 50	-	-	< 50
TRH C6-C10	20	mg/kg	< 20	-	-	< 20
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	< 20	-	-	< 20
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	-	-	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	-	-	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	-	-	1.2
Acenaphthene	0.5	mg/kg	< 0.5	-	-	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	-	-	< 0.5
Anthracene	0.5	mg/kg	< 0.5	-	-	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	-	-	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	-	-	< 0.5
Benzo(b&j)fluoranthene ^{N07}	0.5	mg/kg	< 0.5	-	-	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	-	-	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	-	-	< 0.5
Chrysene	0.5	mg/kg	< 0.5	-	-	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	-	-	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	-	-	0.7
Fluorene	0.5	mg/kg	< 0.5	-	-	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	-	-	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	-	-	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	-	-	< 0.5
Pyrene	0.5	mg/kg	< 0.5	-	-	0.7
Total PAH*	0.5	mg/kg	< 0.5	-	-	1.4
2-Fluorobiphenyl (surr.)	1	%	109	-	-	89
p-Terphenyl-d14 (surr.)	1	%	98	-	-	106
Total Recoverable Hydrocarbons - 2013 NEPM Fract	ions					
TRH >C10-C16	50	mg/kg	< 50	-	-	< 50
TRH >C16-C34	100	mg/kg	< 100	-	-	< 100
TRH >C34-C40	100	mg/kg	< 100	-	-	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	-	-	< 100

Client Sample ID			TP70-2_0.0-0.2	TP03_0.0-0.2	TP04_0.0-0.2	TP66-2_0.0-0.2
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			N23- Ma0057526	N23- Ma0057528	N23- Ma0057530	N23- Ma0057532
Date Sampled			Mar 22, 2023	Mar 22, 2023	Mar 22, 2023	Mar 22, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Arsenic	2	mg/kg	< 2	4.4	3.9	3.2
Cadmium	0.4	mg/kg	0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	6.8	50	41	35
Copper	5	mg/kg	63	< 5	5.9	< 5
Lead	5	mg/kg	180	9.7	15	9.3
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Nickel	5	mg/kg	< 5	6.6	6.0	< 5
Zinc	5	mg/kg	330	25	98	5.7



Client Sample ID			TP70-2_0.0-0.2	TP03_0.0-0.2	TP04_0.0-0.2	TP66-2_0.0-0.2
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			N23- Ma0057526	N23- Ma0057528	N23- Ma0057530	N23- Ma0057532
Date Sampled			Mar 22, 2023	Mar 22, 2023	Mar 22, 2023	Mar 22, 2023
Test/Reference	LOR	Unit				
Sample Properties						
% Moisture	1	%	3.3	17	27	15

Client Sample ID			D.22.3.23
Sample Matrix			Soil
Furofins Sample No			N23- Ma0057535
Date Sampled			Mar 22, 2023
		11-21	Widi 22, 2023
	LOR	Unit	
	-		
Arsenic	2	mg/kg	<2
	0.4	mg/kg	< 0.4
Chromium	5	mg/kg	12
	5	mg/kg	14
Lead	5	mg/kg	11
Mercury	0.1	mg/kg	< 0.1
Nickel	5	mg/kg	< 5
Zinc	5	mg/kg	12
Sample Properties			
% Moisture	1	%	28
Total Recoverable Hydrocarbons - 1999 NEPM Fract	ions		
TRH C6-C9	20	mg/kg	< 20
TRH C10-C14	20	mg/kg	62
TRH C15-C28	50	mg/kg	230
TRH C29-C36	50	mg/kg	220
TRH C10-C36 (Total)	50	mg/kg	512
BTEX			
Benzene	0.1	mg/kg	< 0.1
Toluene	0.1	mg/kg	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2
o-Xylene	0.1	mg/kg	< 0.1
Xylenes - Total*	0.3	mg/kg	< 0.3
4-Bromofluorobenzene (surr.)	1	%	69
Total Recoverable Hydrocarbons - 2013 NEPM Fract	ions		
Naphthalene ^{N02}	0.5	mg/kg	< 0.5
TRH >C10-C16 less Naphthalene (F2) ^{N01}	50	mg/kg	< 50
TRH C6-C10	20	mg/kg	< 20
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	< 20
Polycyclic Aromatic Hydrocarbons			
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2
Acenaphthene	0.5	mg/kg	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5
Anthracene	0.5	mg/kg	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5



Client Sample ID			D.22.3.23
Sample Matrix			Soil
Eurofins Sample No.			N23- Ma0057535
Date Sampled			Mar 22, 2023
Test/Reference	LOR	Unit	
Polycyclic Aromatic Hydrocarbons			
Benzo(b&j)fluoranthene ^{N07}	0.5	mg/kg	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5
Chrysene	0.5	mg/kg	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5
Fluorene	0.5	mg/kg	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5
Naphthalene	0.5	mg/kg	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5
Pyrene	0.5	mg/kg	< 0.5
Total PAH*	0.5	mg/kg	< 0.5
2-Fluorobiphenyl (surr.)	1	%	89
p-Terphenyl-d14 (surr.)	1	%	104
Total Recoverable Hydrocarbons - 2013 NEPM Fract	ions		
TRH >C10-C16	50	mg/kg	< 50
TRH >C16-C34	100	mg/kg	380
TRH >C34-C40	100	mg/kg	130
TRH >C10-C40 (total)*	100	mg/kg	510



Sample History

Where samples are submitted/analysed over several days, the last date of extraction is reported.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Organochlorine Pesticides	Sydney	Apr 05, 2023	14 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
Organophosphorus Pesticides	Sydney	Apr 05, 2023	14 Days
- Method: LTM-ORG-2200 Organophosphorus Pesticides by GC-MS			
Metals M8	Sydney	Apr 05, 2023	28 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Sydney	Apr 05, 2023	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
BTEX	Sydney	Apr 05, 2023	14 Days
- Method: LTM-ORG-2010 BTEX and Volatile TRH			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Apr 05, 2023	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Polycyclic Aromatic Hydrocarbons	Sydney	Apr 05, 2023	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Apr 05, 2023	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
% Moisture	Sydney	Mar 24, 2023	14 Days
- Method: LTM-GEN-7080 Moisture			
Conductivity (1:5 aqueous extract at 25 °C as rec.)	Melbourne	Mar 30, 2023	7 Days
- Method: LTM-INO-4030 Conductivity			
Cation Exchange Capacity	Melbourne	Apr 03, 2023	28 Days
- Method: LTM-MET-3060 Cation Exchange Capacity by bases & Exchangeable Sodium Percentage			
pH (1:5 Aqueous extract at 25 °C as rec.)	Sydney	Mar 28, 2023	7 Days
- Method: LTM-GEN-7090 pH by ISE			
Acid Herbicides	Melbourne	Apr 06, 2023	14 Days
- Method: LTM-ORG-2180 Phenoxy Acid Herbicides			

		C!	Eurofins Env	ironment Testir	ng Australia Pty Ltd												Eurofins ARL Pty Ltd	Eurofins Environm	ent Testing NZ Ltd
web: w email:	ww.eurofins.com.au	.com	Melbourne 6 Monterey Roa Dandenong Sou VIC 3175 Tel: +61 3 8564 NATA# 1261 Sit	Geelong d 19/8 Lew th Grovedal VIC 3216 5000 5000 Tel: +61 e# 1254 NATA# 1	Sydney alan Street 179 Mag e Girrawee in NSW 21 NSW 21 3 8564 5000 Tel: +61 261 Site# 25403 NATA# 1	owar Ro en 45 2 9900 261 Site	oad 8400 e# 1821	Canbo Unit 1 Mitcho ACT 2 Tel: + 7 NATA	erra ,2 Dacr ell 2911 61 2 61 # 1261	e Street 13 8091 Site# 2	Bi 1/ M Q I Te 5466 N/	risbane 21 Sma urarrie LD 417 el: +61 7 ATA# 12) Illwood I 2 7 3902 4 261 Site	Place 4600 e# 2079	Newc 1/2 Fr Mayfie Tel: + NATA 4 Site#	astle rost Drive eld West NSW 2304 61 2 4968 8448 # 1261 25079 & 25289	Perth 46-48 Banksia Road Welshpool WA 6106 Tel: +61 8 6253 4444 NATA# 2377 Site# 2370	Auckland 35 O'Rorke Road Penrose, Auckland 1061 Tel: +64 9 526 45 51 IANZ# 1327	Christchurch 43 Detroit Drive Rolleston, Christchurch 7675 Tel: 0800 856 450 IANZ# 1290
Co Ad	mpany Name: dress:	Qualtest 2 Murray Dw Mayfield We NSW 2304	vyer Circuit st				O R P Fa	rder N eport hone: ax:	lo.: #:	9 0 0)7497:)2 496)2 496	3 68 446 60 977)8 75				Received: Due: Priority: Contact Name:	Mar 23, 2023 2:10 Mar 30, 2023 5 Day Libby Betz	PM
Pro Pro	oject Name: oject ID:	MEDOWIE (NEW23P-00	GARDENS 09													Eu	rofins Analytical Serv	vices Manager : Ar	ndrew Black
		Sa	imple Detail			Asbestos - WA guidelines	Asbestos Absence /Presence	HOLD	pH (1:5 Aqueous extract at 25 °C as rec.)	Acid Herbicides	Metals M8	Suite B14: OCP/OPP	Moisture Set	Cation Exchange Capacity	Eurofins Suite B7				
Melk	oourne Laborato	ory - NATA # 12	261 Site # 12	54						Х	х			х	х]			
Sydi	ney Laboratory	- NATA # 1261	Site # 18217	7		Х		X	х		Х	Х	Х		X	-			
May	field Laboratory	- NATA # 1261	Site # 2507	9 & 25289			X	<u> </u>								-			
Exte	rnal Laboratory							<u> </u>								-			
No	Sample ID	Sample Date	Sampling Time	Matrix				<u> </u>			×	×	V						
1	5563-5	Mar 22, 2023		Soll	N23-Ma0057480	v			v		^	^		v	v	-			
2	5555-3 8856 5	Mar 22, 2023		Soil	N23-Ma0057461			<u> </u>			x	x	x	^		-			
4	SS47-3	Mar 22, 2023		Soil	N23-Ma0057482	x					X	~	X			-			
5	SS48-3	Mar 22, 2023		Soil	N23-Ma0057484	X					x		x			-			
6	SS49-3	Mar 22, 2023		Soil	N23-Ma0057485	x		<u> </u>			X		x			1			
7	SS60-5	Mar 22, 2023		Soil	N23-Ma0057486			<u> </u>			x	х	x			1			
8	SS14-1	Mar 22, 2023		Soil	N23-Ma0057487			<u> </u>			X		X			1			
9	SS27-1	Mar 22, 2023		Soil	N23-Ma0057488			<u> </u>			х		х			1			
10	SS19-1	Mar 22, 2023		Soil	N23-Ma0057489	Х			l		х		х			1			
11	SS24-1	Mar 22, 2023		Soil	N23-Ma0057490	Х					Х	Х	Х]			

eurofins ABN: 50 005 Melbourne		Eurofins Enviro ABN: 50 005 085 5	Environment Testing Australia Pty Ltd 3 085 521											Eurofins ARL Pty Ltd ABN: 91 05 0159 898	Eurofins Environm	ent Testing NZ Ltd			
web: w email:	ww.eurofins.com.au	com	Melbourne 6 Monterey Road Dandenong South VIC 3175 Tel: +61 3 8564 50 NATA# 1261 Site#	Geelong 19/8 Lev Groveda VIC 321 00 Tel: +61 1254 NATA# 1	y Sydney valan Street 179 Ma ile Girrawe 6 NSW 2' 3 8564 5000 Tel: +61 1261 Site# 25403 NATA#	gowar R en 45 2 9900 1261 Sit	oad 8400 e# 1821	Canb Unit 1 Mitch ACT : Tel: +	erra I,2 Dacr ell 2911 -61 2 61 A# 1261	e Stree 13 809 Site# 2	B t 1/ Q 1 Te 5466 N	risbane 21 Sma urarrie LD 417 el: +61 5 ATA# 1	2 7 3902 4 261 Site	Place 4600 # 2079	Newc 1/2 Fr Mayfie Tel: + NATA 94 Site#	castle rost Drive eld West NSW 2304 61 2 4968 8448 \# 1261 25079 & 25289	Perth 46-48 Banksia Road Welshpool WA 6106 Tel: +61 8 6253 4444 NATA# 2377 Site# 2370	Auckland 35 O'Rorke Road Penrose, Auckland 1061 Tel: +64 9 526 45 51 IANZ# 1327	Christchurch 43 Detroit Drive Rolleston, Christchurch 7675 Tel: 0800 856 450 IANZ# 1290
Co Ad	mpany Name: dress:	Qualtest 2 Murray Dy Mayfield We NSW 2304	wyer Circuit est				O Re Pi Fa	rder N eport hone: ax:	No.: #:	9 () ()	97497)2 496)2 496	3 68 446 60 977	68 75				Received: Due: Priority: Contact Name:	Mar 23, 2023 2:10 Mar 30, 2023 5 Day Libby Betz	PM
Pro Pro	oject Name: oject ID:	MEDOWIE NEW23P-00	GARDENS 009													Eu	rofins Analytical Serv	rices Manager : Ar	drew Black
		Si	ample Detail			Asbestos - WA guidelines	Asbestos Absence /Presence	HOLD	pH (1:5 Aqueous extract at 25 °C as rec.)	Acid Herbicides	Metals M8	Suite B14: OCP/OPP	Moisture Set	Cation Exchange Capacity	Eurofins Suite B7				
Melk	ourne Laborato	ry - NATA # 1	261 Site # 1254							х	х			х	X	-			
Syd	ney Laboratory -	NATA # 1261	Site # 18217			X		Х	Х		Х	X	Х		X	-			
Мау	field Laboratory	- NATA # 126	1 Site # 25079	& 25289			X									-			
Exte	rnal Laboratory	N 00 0000														-			
12	SS26-1	Mar 22, 2023	S	011	N23-Ma0057491						X		X			-			
13	SS18-1	Mar 22, 2023	5		N23-Ma0057492						X					-			
14	SS17-1	Mar 22, 2023	3	oil	N23-Ma005749						X		X			-			
16	SS15-1	Mar 22, 2023	5	oil	N23-Ma005749						X		X			-			
17	SS35-1	Mar 22, 2023	l s	oil	N23-Ma0057496	, 3 X					X		x			-			
18	SS34-1	Mar 22, 2023	s	oil	N23-Ma0057497	/ X					X		X			-			
19	SS36-1	Mar 22, 2023	l s	oil	N23-Ma0057498	3 X					X	x	X			1			
20	SS33-1	Mar 22, 2023	s	oil	N23-Ma0057499) X		1			x		х		1	1			
21	SS37-1	Mar 22, 2023	s	oil	N23-Ma0057500) X		1			х		х		1	1			
22	SS32-1	Mar 22, 2023	s	oil	N23-Ma0057501	X					х		х			1			
23	SS22-1	Mar 22, 2023	s	oil	N23-Ma0057502	2					Х		х			1			
24	SS23-1	Mar 22, 2023	S	oil	N23-Ma0057503	3					Х	Х	Х]			

eurofins ABN: 50 005 Melbourne		Eurofins Enviro ABN: 50 005 085 5	o <mark>nment Testi</mark> 21	ng Australia Pty Ltd											Eurofins ARL Pty Ltd ABN: 91 05 0159 898	Eurofins Environm	ent Testing NZ Ltd		
web: w email:	ww.eurofins.com.au	.com	Melbourne 6 Monterey Road Dandenong South VIC 3175 Tel: +61 3 8564 50 NATA# 1261 Site#	Geelong 19/8 Lew Groveda VIC 3210 00 Tel: +61 1254 NATA# 1	Sydne valan Street 179 Ma ile Girraw 6 NSW 2 3 8564 5000 Tel: +6 1261 Site# 25403 NATA#	gowar R en 145 I 2 9900 1261 Sit	oad 8400 e# 1821	Canb Unit 1 Mitch ACT 2 Tel: + 7 NATA	erra ,2 Dacr ell 2911 61 2 61 # 1261	e Stree 13 809 [,] Site# 2	Bi M Q 1 Te 5466 N	risbane 21 Sma urarrie LD 417 el: +61 ATA# 1	2 7 3902 4 261 Site	Place 4600 # 2079	Newc 1/2 Fr Mayfie Tel: + NATA 94 Site#	astle rost Drive eld West NSW 2304 61 2 4968 8448 # 1261 25079 & 25289	Perth 46-48 Banksia Road Welshpool WA 6106 Tel: +61 8 6253 4444 NATA# 2377 Site# 2370	Auckland 35 O'Rorke Road Penrose, Auckland 1061 Tel: +64 9 526 45 51 IANZ# 1327	Christchurch 43 Detroit Drive Rolleston, Christchurch 7675 Tel: 0800 856 450 IANZ# 1290
Co Ad	mpany Name: dress:	Qualtest 2 Murray Dy Mayfield We NSW 2304	wyer Circuit est				O R P Fa	rder N eport hone: ax:	lo.: #:	9 (()7497:)2 496)2 496	3 68 446 60 977	68 75				Received: Due: Priority: Contact Name:	Mar 23, 2023 2:10 Mar 30, 2023 5 Day Libby Betz	PM
Pro Pro	oject Name: oject ID:	MEDOWIE NEW23P-0	GARDENS 009													Eu	rofins Analytical Serv	vices Manager : Ar	ndrew Black
		s	ample Detail			Asbestos - WA guidelines	Asbestos Absence /Presence	HOLD	pH (1:5 Aqueous extract at 25 °C as rec.)	Acid Herbicides	Metals M8	Suite B14: OCP/OPP	Moisture Set	Cation Exchange Capacity	Eurofins Suite B7				
Melk	ourne Laborato	ory - NATA # 1	261 Site # 1254	ļ.						х	х			х	X	-			
Syd	ney Laboratory	- NATA # 1261	Site # 18217			X		Х	X		Х	X	Х		X	-			
May	field Laboratory	- NATA # 126	1 Site # 25079	& 25289			X									-			
Exte	rnal Laboratory		1 1-			_										-			
25	SS53-3	Mar 22, 2023	S	oil	N23-Ma005750	1 X					X		X			-			
26	SS61-5	Mar 22, 2023			N23-Ma005750						X	X	X			-			
27	5562-5	Mar 22, 2023			N23-Ma005750						X	X	X			-			
20	3332-3 8854 2	Mar 22, 2023			N23-Ma005750											-			
29	SS04-3	Mar 22, 2023			N23-Ma005751						×	×	×			-			
31	SS30-1	Mar 22, 2023			N23-Ma005751						^		X		×	-			
32	SS31-1	Mar 22, 2023		oil	N23-Ma005751	\rightarrow					x		X			-			
33	SS59-5	Mar 22, 2023		oil	N23-Ma005751	3				x	x	x	x			1			
34	SS16-1	Mar 22, 2023		oil	N23-Ma005751	1 X	1				x	\uparrow	x	1		1			
35	SS51-3	Mar 22, 2023		oil	N23-Ma005751	5 X					x		X			1			
36	SS27-1	Mar 22, 2023		oil	N23-Ma005751	3 X					X		X			1			
37	TP68-2_0.0-	Mar 22, 2023	S	oil	N23-Ma005751	7 X							Х		Х]			

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web: web: web: web: web: web: web: web:	ww.eurofins.com.au EnviroSales@eurofins	.com	Melbourne 6 Monterey Road Dandenong South VIC 3175 Tel: +61 3 8564 5000 NATA# 1261 Site# 1	Geelong 19/8 Lewalan Street Grovedale VIC 3216) Tel: +61 3 8564 500 254 NATA# 1261 Site# 2	Sydney 179 Mago Girrawee NSW 214 0 Tel: +61 2 25403 NATA# 12	owar Ro 5 2 9900 8 261 Site	oad 8400 e# 1821	Canb Unit 1 Mitch ACT 2 Tel: + 7 NATA	erra ,2 Dacr ell 2911 61 2 61 # 1261	e Stree 13 809 [.] Site# 2	B t 1/ Q 1 T 5466 N	risbane 21 Sma urarrie LD 417 el: +61 ATA# 1	allwood 72 7 3902 4 261 Site	Place 4600 e# 2079	Newc 1/2 Fr Mayfie Tel: + NATA 94 Site#	astle rost Drive eld West NSW 2304 61 2 4968 8448 # 1261 25079 & 25289	Perth 46-48 Banksia Road Welshpool WA 6106 Tel: +61 8 6253 4444 NATA# 2377 Site# 2370	Auckland 35 O'Rorke Road Penrose, Auckland 1061 Tel: +64 9 526 45 51 IANZ# 1327	Christchurch 43 Detroit Drive Rolleston, Christchurch 7675 Tel: 0800 856 450 IANZ# 1290
Cc Ac	ompany Name: Idress:	Qualtest 2 Murray D Mayfield W NSW 2304	wyer Circuit est				O Re Pi Fa	rder N eport hone: ax:	lo.: #:	ç ()7497)2 496)2 496	3 68 446 60 977	68 75				Received: Due: Priority: Contact Name:	Mar 23, 2023 2:10 Mar 30, 2023 5 Day Libby Betz	PM
Pr Pr	oject Name: oject ID:	MEDOWIE NEW23P-0	GARDENS 009													Eu	urofins Analytical Ser	vices Manager : Ar	ndrew Black
		s	ample Detail			Asbestos - WA guidelines	Asbestos Absence /Presence	HOLD	pH (1:5 Aqueous extract at 25 °C as rec.)	Acid Herbicides	Metals M8	Suite B14: OCP/OPP	Moisture Set	Cation Exchange Capacity	Eurofins Suite B7				
Mell	oourne Laborato	ory - NATA # 1	261 Site # 1254							Х	Х			Х	X				
Syd	ney Laboratory	- NATA # 1261	Site # 18217			X		Х	Х		X	X	X		X				
May	field Laboratory	/ - NATA # 126	1 Site # 25079 8	25289			X												
Exte	ernal Laboratory																		
38	0.2 TP68-2_0.5- 0.6	Mar 22, 2023	Sc	il N23-N	Ma0057518			x											
39	TP67-0.0-0.2	Mar 22, 2023	Sc	il N23-N	Ma0057519	Х					Х		Х						
40	TP67-0.5-0.6	Mar 22, 2023	Sc	il N23-N	Ma0057520			Х											
41	TP69-2_0.0- 0.2	Mar 22, 2023	Sc	il N23-N	Ma0057521	х					х		х						
42	TP69-2_0.4- 0.5	Mar 22, 2023	Sc	il N23-N	Ma0057522			х											
43	TP71-2_0.0- 0.2	Mar 22, 2023	Sc	il N23-N	Ma0057523	х							х		x				
44	TP71-2_FRAG	Mar 22, 2023	Bu Ma	ilding N23-N tterials	Ma0057524		x												
45	TP71-2_0.4- 0.5	Mar 22, 2023	Sc	il N23-N	Ma0057525			х											

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web: w email:	ww.eurofins.com.au EnviroSales@eurofins	s.com	Melbourne 6 Monterey Road Dandenong Sout VIC 3175 Tel: +61 3 8564 5 NATA# 1261 Site	Geelo 19/8 L Grove VIC 32 000 Tel: +(# 1254 NATA	Sydney Lewalan Street 179 Ma dale Girrawe 216 NSW 2 61 3 8564 5000 Tel: +6' # 1261 Site# 25403 NATA#	gowar Ro en 45 2 9900 1261 Sit	oad 8400 e# 1821	Canb Unit 1 Mitch ACT 1 Tel: +	erra ,2 Dacr ell 2911 61 2 61 \# 1261	re Street 13 809 Site# 2	Bi 1/ Q 1 Te 5466 N/	risbane 21 Sma urarrie LD 417 el: +61 ATA# 1	allwood 72 7 3902 - 261 Site	Place 4600 e# 2079	Newo 1/2 Fi Mayfi Tel: + NATA 94 Site#	castle rost Drive ield West NSW 2304 61 2 4968 8448 A# 1261 25079 & 25289	Perth 46-48 Banksia Road Welshpool WA 6106 Tel: +61 8 6253 4444 NATA# 2377 Site# 2370	Auckland 35 O'Rorke Road Penrose, Auckland 1061 Tel: +64 9 526 45 51 IANZ# 1327	Christchurch 43 Detroit Drive Rolleston, Christchurch 7675 Tel: 0800 856 450 IANZ# 1290
Co Ad	ompany Name: Idress:	Qualtest 2 Murray D Mayfield W NSW 2304	wyer Circuit est				O R P Fa	rder N eport hone: ax:	lo.: #:	9 () ())7497:)2 496)2 496	3 68 446 60 977	68 75				Received: Due: Priority: Contact Name:	Mar 23, 2023 2:10 Mar 30, 2023 5 Day Libby Betz	PM
Pro Pro	oject Name: oject ID:	MEDOWIE NEW23P-0	GARDENS 009													Eu	rofins Analytical Serv	vices Manager : Ar	ndrew Black
		S	ample Detail			Asbestos - WA guidelines	Asbestos Absence /Presence	HOLD	pH (1:5 Aqueous extract at 25 °C as rec.)	Acid Herbicides	Metals M8	Suite B14: OCP/OPP	Moisture Set	Cation Exchange Capacity	Eurofins Suite B7				
Mell	oourne Laborato	ory - NATA # 1	261 Site # 125	4						х	х			х	Х]			
Syd	ney Laboratory	- NATA # 1261	Site # 18217			X		X	X		Х	X	Х		X	4			
Мау	field Laboratory	/ - NATA # 126	1 Site # 25079	& 25289			X									4			
Exte 46	TP70-2_0.0-	Mar 22, 2023		Soil	N23-Ma0057526	5 x					x		x			_			
47	TP70-2_0.4- 0.5	Mar 22, 2023		Soil	N23-Ma0057527	'		х											
48	TP03_0.0-0.2	Mar 22, 2023		Soil	N23-Ma0057528	8 X					х		Х			_			
49	TP03_0.5-0.6	Mar 22, 2023		Soil	N23-Ma0057529)		Х								_			
50	TP04_0.0-0.2	Mar 22, 2023		Soil	N23-Ma0057530) X					Х		Х			4			
51	TP04_0.5-0.6	Mar 22, 2023		Soil	N23-Ma005753			Х								_			
52	TP66-2_0.0- 0.2	Mar 22, 2023		Soil	N23-Ma0057532	2 X					х		x			-			
53	1P66-2_0.5- 0.6	Mar 22, 2023		Soll	N23-Ma0057533	5		Х								-			
54	WB 22.3.23	Mar 22, 2023		vvater	N23-Ma0057534	+ .									X	-			
55	D.22.3.23	Mar 22, 2023		Soil	N23-Ma005753)							Х		X				

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	fine	ABN: 50 005 085 521													ABN: 91 05 0159 898	NZBN: 942904602495	4
web: www.eurofins.com.au email: EnviroSales@eurofins.	.com	Melbourne 6 Monterey Road Dandenong South VIC 3175 Tel: +61 3 8564 5000 NATA# 1261 Site# 125;	Geelong Sydney 19/8 Lewalan Street 179 Ma Grovedale Girrawe VIC 3216 NSW 2' Tel: +61 3 8564 5000 Tel: +61 4 NATA# 1261 Site# 25403 NATA#	Sydney 179 Magowar Re Girraween NSW 2145 Tel: +61 2 9900 03 NATA# 1261 Sit		Cank Unit Mitch ACT Tel: 4 17 NAT	berra 1,2 Daci iell 2911 +61 2 61 A# 1261	e Stree 13 809 Site# 2	8 t 1/ Q 1 To 5466 N	risbane 21 Sma urarrie LD 417 el: +61 ATA# 1	allwood 72 7 3902 - 261 Site	Place 4600 e# 2079	Newo 1/2 Fr Mayfi Tel: + NATA 94 Site#	astle rost Drive eld West NSW 2304 61 2 4968 8448 # 1261 25079 & 25289	Perth 46-48 Banksia Road Welshpool WA 6106 Tel: +61 8 6253 4444 NATA# 2377 Site# 2370	Auckland 35 O'Rorke Road Penrose, Auckland 1061 Tel: +64 9 526 45 51 IANZ# 1327	Christchurch 43 Detroit Drive Rolleston, Christchurch 7675 Tel: 0800 856 450 IANZ# 1290
Company Name: Address:	Qualtest 2 Murray D Mayfield W NSW 2304	wyer Circuit est			O R P F	erder I eport hone: ax:	No.: #:	9 ((97497)2 496)2 496	3 68 446 60 977	68 75				Received: Due: Priority: Contact Name:	Mar 23, 2023 2:10 Mar 30, 2023 5 Day Libby Betz	PM
Project Name:	MEDOWIE	GARDENS															
Project ID:	NEW23P-0	009												E	urofins Analytical Serv	vices Manager : A	ndrew Black
	s	ample Detail		Asbestos - WA guidelines	Asbestos Absence /Presence	HOLD	pH (1:5 Aqueous extract at 25 °C as rec.)	Acid Herbicides	Metals M8	Suite B14: OCP/OPP	Moisture Set	Cation Exchange Capacity	Eurofins Suite B7				
Melbourne Laborato	ory - NATA # 1	261 Site # 1254						Х	Х			Х	X	-			
Sydney Laboratory -	- NATA # 126	I Site # 18217		X		Х	X		Х	X	X	 	X	1			
Mayfield Laboratory	- NATA # 126	51 Site # 25079 & 2	5289		X		 					 		ļ			
External Laboratory							 							ļ			
56 SS21-1	Mar 22, 2023	Soil	N23-Ma0057536	;		Х								1			
Test Counts				30	1	9	1	1	40	10	45	1	6				



Internal Quality Control Review and Glossary

General

- 1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
- 2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
- 3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
- 4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
- 5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds
- 6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
- 7. Samples were analysed on an 'as received' basis.
- 8. Information identified on this report with blue colour, indicates data provided by customer that may have an impact on the results.
- 9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA. If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported. Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

Units

mg/kg: milligrams per kilogram	mg/L: milligrams per litre	μg/L: micrograms per litre
ppm: parts per million	ppb: parts per billion	%: Percentage
org/100 mL: Organisms per 100 millilitres	NTU: Nephelometric Turbidity Units	MPN/100 mL: Most Probable Number of organisms per 100 millilitres
CFU: Colony forming unit		

Terms

APHA	American Public Health Association
coc	Chain of Custody
СР	Client Parent - QC was performed on samples pertaining to this report
CRM	Certified Reference Material (ISO17034) - reported as percent recovery.
Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
LOR	Limit of Reporting.
LCS	Laboratory Control Sample - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
SRA	Sample Receipt Advice
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
твто	Tributyltin oxide (<i>bis</i> -tributyltin oxide) - individual tributyltin compounds cannot be identified separately in the environment however free tributyltin was measured and its values were converted stoichiometrically into tributyltin oxide for comparison with regulatory limits.
TCLP	Toxicity Characteristic Leaching Procedure
TEQ	Toxic Equivalency Quotient or Total Equivalence
QSM	US Department of Defense Quality Systems Manual Version 5.4
US EPA	United States Environmental Protection Agency
WA DWER	Sum of PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC - Acceptance Criteria

The acceptance criteria should be used as a guide only and may be different when site specific Sampling Analysis and Quality Plan (SAQP) have been implemented

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR: No Limit

Results between 10-20 times the LOR: RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

NOTE: pH duplicates are reported as a range not as RPD

Surrogate Recoveries: Recoveries must lie between 20-130% for Speciated Phenols & 50-150% for PFAS

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.4 where no positive PFAS results have been reported have been reviewed and no data was affected.

QC Data General Comments

- 1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
- 2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
- 3. pH and Free Chlorine analysed in the laboratory Analysis on this test must begin within 30 minutes of sampling. Therefore, laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
- 4. Recovery Data (Spikes & Surrogates) where chromatographic interference does not allow the determination of recovery the term "INT" appears against that analyte.
- 5. For Matrix Spikes and LCS results a dash "-" in the report means that the specific analyte was not added to the QC sample.
- 6. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.



Quality Control Results

Test	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Method Blank				-		
Organochlorine Pesticides						
Chlordanes - Total	mg/kg	< 0.1		0.1	Pass	
4.4'-DDD	mg/kg	< 0.05		0.05	Pass	
4.4'-DDE	mg/kg	< 0.05		0.05	Pass	
4.4'-DDT	mg/kg	< 0.05		0.05	Pass	
a-HCH	mg/kg	< 0.05		0.05	Pass	
Aldrin	mg/kg	< 0.05		0.05	Pass	
b-HCH	mg/kg	< 0.05		0.05	Pass	
d-HCH	mg/kg	< 0.05		0.05	Pass	
Dieldrin	mg/kg	< 0.05		0.05	Pass	
Endosulfan I	mg/kg	< 0.05		0.05	Pass	
Endosulfan II	mg/kg	< 0.05		0.05	Pass	
Endosulfan sulphate	mg/kg	< 0.05		0.05	Pass	
Endrin	mg/kg	< 0.05		0.05	Pass	
Endrin aldehyde	mg/kg	< 0.05		0.05	Pass	
Endrin ketone	mg/kg	< 0.05		0.05	Pass	
g-HCH (Lindane)	mg/kg	< 0.05		0.05	Pass	
Heptachlor	mg/kg	< 0.05		0.05	Pass	
Heptachlor epoxide	mg/kg	< 0.05		0.05	Pass	
Hexachlorobenzene	mg/kg	< 0.05		0.05	Pass	
Methoxychlor	mg/kg	< 0.05		0.05	Pass	
Toxaphene	mg/kg	< 0.5		0.5	Pass	
Method Blank				I		
Organophosphorus Pesticides						
Azinphos-methyl	mg/kg	< 0.2		0.2	Pass	
Bolstar	mg/kg	< 0.2		0.2	Pass	
Chlorfenvinphos	mg/kg	< 0.2		0.2	Pass	
Chlorpyrifos	mg/kg	< 0.2		0.2	Pass	
Chlorpyrifos-methyl	mg/kg	< 0.2		0.2	Pass	
Coumaphos	mg/kg	< 2		2	Pass	
Demeton-S	mg/kg	< 0.2		0.2	Pass	
Demeton-O	mg/kg	< 0.2		0.2	Pass	
Diazinon	mg/kg	< 0.2		0.2	Pass	
Dichlorvos	mg/kg	< 0.2		0.2	Pass	
Dimethoate	mg/kg	< 0.2		0.2	Pass	
Disulfoton	mg/kg	< 0.2		0.2	Pass	
EPN	mg/kg	< 0.2		0.2	Pass	
Ethion	mg/kg	< 0.2		0.2	Pass	
Ethoprop	mg/kg	< 0.2		0.2	Pass	
Ethyl parathion	mg/kg	< 0.2		0.2	Pass	
Fenitrothion	mg/kg	< 0.2		0.2	Pass	
Fensulfothion	mg/kg	< 0.2		0.2	Pass	
Fenthion	mg/kg	< 0.2		0.2	Pass	
Malathion	mg/kg	< 0.2		0.2	Pass	
Merphos	mg/kg	< 0.2		0.2	Pass	
Methyl parathion	mg/kg	< 0.2		0.2	Pass	
Mevinphos	mg/kg	< 0.2		0.2	Pass	
Monocrotophos	mg/kg	< 2		2	Pass	
Naled	mg/kg	< 0.2		0.2	Pass	
Omethoate	mg/kg	< 2		2	Pass	
Phorate	mg/kg	< 0.2		0.2	Pass	


Primaphos methyl mg/kg < 0.2	Test	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Pyracophos mg/kg < 0.2 0.2 Pass Terhudon mg/kg < 0.2	Pirimiphos-methyl	mg/kg	< 0.2		0.2	Pass	
Romel mg/kg < 0.2 0.2 Pass Tethulos mg/kg < 0.2	Pyrazophos	mg/kg	< 0.2		0.2	Pass	
Tethachloriphos mgkq < 0.2 0.2 Pass Tokuthon mgkq < 0.2	Ronnel	mg/kg	< 0.2		0.2	Pass	
Tetrachovinphos mgkg < 0.2 0.2 Pass Trichiororate mgkg < 0.2	Terbufos	mg/kg	< 0.2		0.2	Pass	
Tokloronale mgkg < 0.2 0.2 Pass Method Blank	Tetrachlorvinphos	mg/kg	< 0.2		0.2	Pass	
Trichionate mg/kg < 0.2 Pass Method Blank - - - - Assnic mg/kg < 2.	Tokuthion	mg/kg	< 0.2		0.2	Pass	
Method Blank Image	Trichloronate	mg/kg	< 0.2		0.2	Pass	
Heavy Metals mgkg <	Method Blank		1				
Assenic mgkg < 2 Pass Cadmium mgkg < 5	Heavy Metals						
Cadmium mg/kg < 0.4 Pass Chromium mg/kg < 5	Arsenic	mg/kg	< 2		2	Pass	
Chromium mg/kg < 5 5 Pass Copper mg/kg < 5	Cadmium	mg/kg	< 0.4		0.4	Pass	
Copper mg/kg <.5 5 Pass Lead mg/kg <.5	Chromium	mg/kg	< 5		5	Pass	
Lead mg/kg <.5 5 Pass Marcury mg/kg <.0.1	Copper	mg/kg	< 5		5	Pass	
Mercury mg/kg < 0.1 Pass Nickel mg/kg < 5	Lead	mg/kg	< 5		5	Pass	
Nickel mg/kg < 5 Pass Zinc mg/kg < 5	Mercury	mg/kg	< 0.1		0.1	Pass	
Zinc mg/kg < 5 Pass Method Blank	Nickel	mg/kg	< 5		5	Pass	
Method Blank Total Recoverable Hydrocarbons - 1999 NEPM Fractions I I TRH C6-09 mg/kg < 20	Zinc	mg/kg	< 5		5	Pass	
Total Recoverable Hydrocarbons - 1999 NEPM Fractions mg/kg < 20 20 Pass TRH C10-C14 mg/kg < 20	Method Blank						
IRH C6-C9 mg/kg < 20 Pass TRH C10-C14 mg/kg < 20	Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C10-C14 mg/kg < 20 Pass TRH C29-C36 mg/kg < 60	TRH C6-C9	mg/kg	< 20		20	Pass	
TRH C15-C28 mg/kg < 50 50 Pass TRH C29-C36 mg/kg < 60	TRH C10-C14	mg/kg	< 20		20	Pass	
TRH C29-C36 mg/kg < 50 Fas Method Blank	TRH C15-C28	mg/kg	< 50		50	Pass	
Method Blank Image: Constraint of the second s	TRH C29-C36	mg/kg	< 50		50	Pass	
BTEX Image: Neglect of the system of the syst	Method Blank						
Benzene mg/kg < 0.1 Pass Toluene mg/kg < 0.1	втех	-					
Toluene mg/kg < 0.1 0.1 Pass Ethylbenzene mg/kg < 0.1	Benzene	mg/kg	< 0.1		0.1	Pass	
Ethylbenzene mg/kg < 0.1 Pass m&p-Xylenes mg/kg < 0.2	Toluene	mg/kg	< 0.1		0.1	Pass	
m&p-Xylenes mg/kg < 0.2 0.2 Pass o-Xylene mg/kg < 0.1	Ethylbenzene	mg/kg	< 0.1		0.1	Pass	
o-Xylene mg/kg < 0.1 Pass Xylenes - Total* mg/kg < 0.3	m&p-Xylenes	mg/kg	< 0.2		0.2	Pass	
Xylenes - Total* mg/kg < 0.3 Pass Method Blank Total Recoverable Hydrocarbons - 2013 NEPM Fractions Naminal Mark State of the stat	o-Xylene	mg/kg	< 0.1		0.1	Pass	
Method Blank Total Recoverable Hydrocarbons - 2013 NEPM Fractions mg/kg < 0.5 Pass Naphthalene mg/kg < 0.5	Xylenes - Total*	mg/kg	< 0.3		0.3	Pass	
Total Recoverable Hydrocarbons - 2013 NEPM Fractions mg/kg < 0.5 Me Mage Naphthalene mg/kg < 0.5	Method Blank		1	1	1		
Naphthalene mg/kg < 0.5 Pass TRH C6-C10 mg/kg < 20	Total Recoverable Hydrocarbons - 2013 NEPM Fractions	1					
TRH C6-C10mg/kg< 2020PassMethod Blank	Naphthalene	mg/kg	< 0.5		0.5	Pass	
Method Blank Polycyclic Aromatic Hydrocarbons Image: Margin Stress of	TRH C6-C10	mg/kg	< 20		20	Pass	
Polycyclic Aromatic Hydrocarbons mg/kg < <td>Method Blank</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Method Blank						
Acenaphthene mg/kg < 0.5 Pass Acenaphthylene mg/kg < 0.5	Polycyclic Aromatic Hydrocarbons	1					
Acenaphthylene mg/kg < 0.5 Pass Anthracene mg/kg < 0.5	Acenaphthene	mg/kg	< 0.5		0.5	Pass	
Anthracene mg/kg < 0.5 Pass Benz(a)anthracene mg/kg < 0.5	Acenaphthylene	mg/kg	< 0.5		0.5	Pass	
Benz(a)anthracene mg/kg < 0.5 Pass Benzo(a)pyrene mg/kg < 0.5	Anthracene	mg/kg	< 0.5		0.5	Pass	
Benzo(a)pyrene mg/kg < 0.5 Pass Benzo(b&j)fluoranthene mg/kg < 0.5	Benz(a)anthracene	mg/kg	< 0.5		0.5	Pass	
Benzo(b&j)fluoranthene mg/kg < 0.5 Pass Benzo(g.h.i)perylene mg/kg < 0.5	Benzo(a)pyrene	mg/kg	< 0.5		0.5	Pass	
Benzo(g.h.i)perylene mg/kg < 0.5 Pass Benzo(k)fluoranthene mg/kg < 0.5	Benzo(b&j)fluoranthene	mg/kg	< 0.5		0.5	Pass	
Benzo(k)fluoranthene mg/kg < 0.5 Pass Chrysene mg/kg < 0.5	Benzo(g.h.i)perylene	mg/kg	< 0.5		0.5	Pass	
Chrysene mg/kg < 0.5 Pass Dibenz(a.h)anthracene mg/kg < 0.5	Benzo(k)fluoranthene	mg/kg	< 0.5		0.5	Pass	
Dibenz(a.h)anthracene mg/kg < 0.5 Pass Fluoranthene mg/kg < 0.5	Chrysene	mg/kg	< 0.5	ļ	0.5	Pass	ļ
Fluoranthene mg/kg < 0.5 0.5 Pass Fluorene mg/kg < 0.5	Dibenz(a.h)anthracene	mg/kg	< 0.5		0.5	Pass	
Fluorene mg/kg < 0.5 0.5 Pass Indeno(1.2.3-cd)pyrene mg/kg < 0.5	Fluoranthene	mg/kg	< 0.5	ļ	0.5	Pass	ļ
Indeno(1.2.3-cd)pyrene mg/kg < 0.5 Dess Naphthalene mg/kg < 0.5	Fluorene	mg/kg	< 0.5	ļ	0.5	Pass	
Naphthalene mg/kg < 0.5 D Ass Phenanthrene mg/kg < 0.5	Indeno(1.2.3-cd)pyrene	mg/kg	< 0.5	ļ	0.5	Pass	
Phenanthrene mg/kg < 0.5 0.5 Pass Pyrene mg/kg < 0.5	Naphthalene	mg/kg	< 0.5	ļ	0.5	Pass	
Pyrene mg/kg < 0.5 Pass	Phenanthrene	mg/kg	< 0.5	ļ	0.5	Pass	
	Pyrene	mg/kg	< 0.5		0.5	Pass	ļ



Test	Units	Result 1	Acceptance Limits	Pass Limits	Qualifying Code
Total Recoverable Hydrocarbons - 2013 NEPM Fractions					
TRH >C10-C16	mg/kg	< 50	50	Pass	
TRH >C16-C34	mg/kg	< 100	100	Pass	
TRH >C34-C40	mg/kg	< 100	100	Pass	
Method Blank					
Conductivity (1:5 aqueous extract at 25 °C as rec.)	uS/cm	< 10	10	Pass	
Method Blank			•		
Cation Exchange Capacity					
Cation Exchange Capacity	meg/100g	< 0.05	0.05	Pass	
Method Blank			 •		
Acid Herbicides					
2.4-D	mg/kg	< 0.5	0.5	Pass	
2.4-DB	mg/kg	< 0.5	0.5	Pass	
2.4.5-T	mg/kg	< 0.5	0.5	Pass	
2.4.5-TP	mg/kg	< 0.5	0.5	Pass	
Actril (loxynil)	mg/kg	< 0.5	0.5	Pass	
Dicamba	mg/kg	< 0.5	0.5	Pass	
Dichlorprop	mg/kg	< 0.5	0.5	Pass	
Dinitro-o-cresol	mg/kg	< 0.5	0.5	Pass	
Dinoseb	mg/kg	< 0.5	0.5	Pass	
МСРА	mg/kg	< 0.5	0.5	Pass	
МСРВ	mg/kg	< 0.5	0.5	Pass	
Mecoprop	mg/kg	< 0.5	0.5	Pass	
LCS - % Recovery			 •		
Organochlorine Pesticides					
Chlordanes - Total	%	83	70-130	Pass	
4.4'-DDD	%	92	70-130	Pass	
4.4'-DDE	%	84	70-130	Pass	
4.4'-DDT	%	95	70-130	Pass	
a-HCH	%	85	70-130	Pass	
Aldrin	%	80	70-130	Pass	
b-HCH	%	94	70-130	Pass	
d-HCH	%	90	70-130	Pass	
Dieldrin	%	88	70-130	Pass	
Endosulfan I	%	87	70-130	Pass	
Endosulfan II	%	87	70-130	Pass	
Endosulfan sulphate	%	85	70-130	Pass	
Endrin	%	83	70-130	Pass	
Endrin aldehyde	%	82	70-130	Pass	
Endrin ketone	%	86	70-130	Pass	
g-HCH (Lindane)	%	86	70-130	Pass	
Heptachlor	%	100	70-130	Pass	
Heptachlor epoxide	%	89	70-130	Pass	
Hexachlorobenzene	%	84	70-130	Pass	
Methoxychlor	%	120	70-130	Pass	
LCS - % Recovery			1		
Organophosphorus Pesticides	1				
Diazinon	%	98	70-130	Pass	
Dimethoate	%	98	70-130	Pass	
Ethion	%	110	70-130	Pass	
Fenitrothion	%	125	70-130	Pass	
Methyl parathion	%	111	70-130	Pass	
Mevinphos	%	106	70-130	Pass	
LCS - % Recovery					



Test	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Heavy Metals						
Arsenic	%	104		80-120	Pass	
Cadmium	%	108		80-120	Pass	
Chromium	%	95		80-120	Pass	
Copper	%	96		80-120	Pass	
Lead	%	96		80-120	Pass	
Mercury	%	113		80-120	Pass	
Nickel	%	106		80-120	Pass	
Zinc	%	104		80-120	Pass	
LCS - % Recovery		1	1	I		
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	%	103		70-130	Pass	
TRH C10-C14	%	90		70-130	Pass	
LCS - % Recovery		1				
BTEX	1					
Benzene	%	108		70-130	Pass	
Toluene	%	102		70-130	Pass	
Ethylbenzene	%	114		70-130	Pass	
m&p-Xylenes	%	114		70-130	Pass	
o-Xylene	%	115		70-130	Pass	
Xylenes - Total*	%	115		70-130	Pass	
LCS - % Recovery		1				
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene	%	110		70-130	Pass	
TRH C6-C10	%	103		70-130	Pass	
LCS - % Recovery		1				
Polycyclic Aromatic Hydrocarbons						
Acenaphthene	%	97		70-130	Pass	
Acenaphthylene	%	98		70-130	Pass	
Anthracene	%	88		70-130	Pass	
Benz(a)anthracene	%	92		70-130	Pass	
Benzo(a)pyrene	%	99		70-130	Pass	
Benzo(b&j)fluoranthene	%	97		70-130	Pass	
Benzo(g.h.i)perylene	%	103		70-130	Pass	
Benzo(k)fluoranthene	%	94		70-130	Pass	
Chrysene	%	96		70-130	Pass	
Dibenz(a.h)anthracene	%	99		70-130	Pass	
	%	93		70-130	Pass	
Fluorene	%	96		70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	100		70-130	Pass	
Naphthalene	%	97		70-130	Pass	
Phenanthrene	%	95		70-130	Pass	
Pyrene	%	95		70-130	Pass	
LCS - % Recovery		1				
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	0/			70.400	Dese	
	%	90		70-130	Pass	
Conductivity (4.5 equation extract at 25.80 as real)	0/	140		70.400	Dess	
Conductivity (1:5 aqueous extract at 25 °C as rec.)	%	110		70-130	Pass	
Acid Harbioidae						
	0/	00		70 4 20	Deee	
2.4.0 ⁻¹	70 0/	09		70 130	Pass	
	-70 07	106		70 120	Page	
Diagmba	70 0/	100		70 420	Pass	
Dicamba	70	124	I I	70-130	Pass	



Test			Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Dichlorprop			%	118		70-130	Pass	
Dinitro-o-cresol			%	105		70-130	Pass	
Dinoseb			%	111		70-130	Pass	
Месоргор			%	104		70-130	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery								
Organochlorine Pesticides				Result 1				
Chlordanes - Total	S23-Ma0069773	NCP	%	85		70-130	Pass	
4.4'-DDD	S23-Ma0069773	NCP	%	104		70-130	Pass	
4.4'-DDE	S23-Ma0069773	NCP	%	87		70-130	Pass	
4.4'-DDT	S23-Ma0069773	NCP	%	125		70-130	Pass	
а-НСН	S23-Ma0069773	NCP	%	92		70-130	Pass	
Aldrin	S23-Ma0069773	NCP	%	84		70-130	Pass	
b-HCH	S23-Ma0069773	NCP	%	109		70-130	Pass	
d-HCH	S23-Ma0069773	NCP	%	101		70-130	Pass	
Dieldrin	S23-Ma0069773	NCP	%	124		70-130	Pass	
Endosulfan I	S23-Ma0069773	NCP	%	105		70-130	Pass	
Endosulfan II	S23-Ma0069773	NCP	%	98		70-130	Pass	
Endosulfan sulphate	S23-Ma0069773	NCP	%	94		70-130	Pass	
Endrin	S23-Ma0069773	NCP	%	116		70-130	Pass	
Endrin aldehyde	S23-Ma0072643	NCP	%	89		70-130	Pass	
Endrin ketone	S23-Ma0069773	NCP	%	126		70-130	Pass	
a-HCH (Lindane)	S23-Ma0069773	NCP	%	96		70-130	Pass	
Heptachlor	S23-Ma0072643	NCP	%	124		70-130	Pass	
Heptachlor epoxide	S23-Ma0069773	NCP	%	107		70-130	Pass	
Hexachlorobenzene	S23-Ma0069773	NCP	%	83		70-130	Pass	
Spike - % Recovery	,,,	1						
Total Recoverable Hydrocarbons -	1999 NEPM Fract	ions		Result 1				
TRH C6-C9	S23-Ma0057140	NCP	%	92		70-130	Pass	
Spike - % Recovery				1 -				
BTEX				Result 1				
Benzene	S23-Ma0057140	NCP	%	95		70-130	Pass	
Toluene	S23-Ma0057140	NCP	%	82		70-130	Pass	
Ethylbenzene	S23-Ma0057140	NCP	%	95		70-130	Pass	
m&p-Xylenes	S23-Ma0057140	NCP	%	92		70-130	Pass	
o-Xvlene	S23-Ma0057140	NCP	%	97		70-130	Pass	
Xvlenes - Total*	S23-Ma0057140	NCP	%	93		70-130	Pass	
Spike - % Recovery								
Total Recoverable Hydrocarbons -	2013 NEPM Fract	ions		Result 1				
Naphthalene	S23-Ma0057140	NCP	%	88		70-130	Pass	
TRH C6-C10	S23-Ma0057140	NCP	%	92		70-130	Pass	
Spike - % Recovery			,,,					
Organophosphorus Pesticides				Result 1				
Diazinon	N23-Ma0057482	CP	%	90		70-130	Pass	
Dimethoate	N23-Ma0057482	CP	%	74		70-130	Pass	
Ethion	N23-Ma0057482	CP	%	103		70-130	Pass	
Fenitrothion	N23-Ma0057482	CP	%	118		70-130	Pass	
Mevinphos	N23-Ma0057482	CP	%	90		70-130	Pass	
Spike - % Recovery								
Heavy Metals				Result 1				
Arsenic	N23-Ma0057491	CP	%	105		75-125	Pass	
Cadmium	N23-Ma0057491	CP	%	106		75-125	Pass	
Chromium	N23-Ma0057491	CP	%	105		75-125	Pass	
Copper	N23-Ma0057491	CP	%	102		75-125	Pass	
L 10°			. •		ı – I			



Test	Lab Sample ID	QA Source	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Lead	N23-Ma0057491	CP	%	99		75-125	Pass	
Mercury	N23-Ma0057491	CP	%	112		75-125	Pass	
Nickel	N23-Ma0057491	CP	%	99		75-125	Pass	
Spike - % Recovery								
Organochlorine Pesticides				Result 1				
Methoxychlor	S23-Ma0075435	NCP	%	86		70-130	Pass	
Spike - % Recovery								
Organophosphorus Pesticides				Result 1				
Methyl parathion	S23-Ma0075435	NCP	%	125		70-130	Pass	
Spike - % Recovery							_	
Polycyclic Aromatic Hydrocarbons	6			Result 1				
Acenaphthene	S23-Ma0075435	NCP	%	95		70-130	Pass	
Acenaphthylene	S23-Ma0075435	NCP	%	102		70-130	Pass	
Anthracene	S23-Ma0075435	NCP	%	83		70-130	Pass	
Benz(a)anthracene	S23-Ma0075435	NCP	%	90		70-130	Pass	
Benzo(a)pyrene	S23-Ma0075435	NCP	%	81		70-130	Pass	
Benzo(b&j)fluoranthene	S23-Ma0075435	NCP	%	88		70-130	Pass	
Benzo(g.h.i)perylene	S23-Ma0075435	NCP	%	117		70-130	Pass	
Benzo(k)fluoranthene	S23-Ma0075435	NCP	%	79		70-130	Pass	
Chrysene	S23-Ma0075435	NCP	%	90		70-130	Pass	
Dibenz(a.h)anthracene	S23-Ma0075435	NCP	%	101		70-130	Pass	
Fluoranthene	S23-Ma0075435	NCP	%	81		70-130	Pass	
Fluorene	S23-Ma0075435	NCP	%	90		70-130	Pass	
Indeno(1.2.3-cd)pyrene	S23-Ma0075435	NCP	%	101		70-130	Pass	
Naphthalene	S23-Ma0075435	NCP	%	92		70-130	Pass	
Phenanthrene	S23-Ma0075435	NCP	%	75		70-130	Pass	
Pyrene	S23-Ma0075435	NCP	%	90		70-130	Pass	
Spike - % Recovery								
Total Recoverable Hydrocarbons -	1999 NEPM Fract	ions		Result 1				
TRH C10-C14	N23-Ma0057511	CP	%	105		70-130	Pass	
Spike - % Recovery								
Total Recoverable Hydrocarbons -	2013 NEPM Fract	ions		Result 1				
TRH >C10-C16	N23-Ma0057511	CP	%	106		70-130	Pass	
Spike - % Recovery								
Heavy Metals				Result 1				
Arsenic	N23-Ma0057512	CP	%	92		75-125	Pass	
Cadmium	N23-Ma0057512	CP	%	100		75-125	Pass	
Chromium	N23-Ma0057512	CP	%	89		75-125	Pass	
Copper	N23-Ma0057512	CP	%	88		75-125	Pass	
Lead	N23-Ma0057512	CP	%	86		75-125	Pass	
Mercury	N23-Ma0057512	CP	%	105		75-125	Pass	
Nickel	N23-Ma0057512	CP	%	100		75-125	Pass	
Zinc	N23-Ma0057512	CP	%	107		75-125	Pass	
Spike - % Recovery				-				
Heavy Metals				Result 1				
Arsenic	N23-Ma0057528	CP	%	90		75-125	Pass	
Cadmium	N23-Ma0057528	CP	%	97		75-125	Pass	
Chromium	N23-Ma0057528	CP	%	92		75-125	Pass	
Copper	N23-Ma0057528	CP	%	90		75-125	Pass	
Lead	N23-Ma0057528	CP	%	96		75-125	Pass	
Mercury	N23-Ma0057528	CP	%	94		75-125	Pass	
Nickel	N23-Ma0057528	CP	%	91		75-125	Pass	
Zinc	N23-Ma0057528	CP	%	115		75-125	Pass	



Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate					1			-	
Organochlorine Pesticides	1			Result 1	Result 2	RPD			
Chlordanes - Total	N23-Ma0057480	CP	mg/kg	< 1	< 1	<1	30%	Pass	
4.4'-DDD	N23-Ma0057480	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4.4'-DDE	N23-Ma0057480	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4.4'-DDT	N23-Ma0057480	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
a-HCH	N23-Ma0057480	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aldrin	N23-Ma0057480	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
b-HCH	N23-Ma0057480	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
d-HCH	N23-Ma0057480	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dieldrin	N23-Ma0057480	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Endosulfan I	N23-Ma0057480	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Endosulfan II	N23-Ma0057480	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Endosulfan sulphate	N23-Ma0057480	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Endrin	N23-Ma0057480	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Endrin aldehyde	N23-Ma0057480	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Endrin ketone	N23-Ma0057480	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
g-HCH (Lindane)	N23-Ma0057480	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Heptachlor	N23-Ma0057480	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Heptachlor epoxide	N23-Ma0057480	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Hexachlorobenzene	N23-Ma0057480	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Methoxychlor	N23-Ma0057480	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Azinphos-methyl	N23-Ma0057480	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bolstar	N23-Ma0057480	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chlorfenvinphos	N23-Ma0057480	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chlorpyrifos	N23-Ma0057480	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chlorpyrifos-methyl	N23-Ma0057480	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Coumaphos	N23-Ma0057480	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Demeton-S	N23-Ma0057480	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Demeton-O	N23-Ma0057480	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Diazinon	N23-Ma0057480	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dichlorvos	N23-Ma0057480	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dimethoate	N23-Ma0057480	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Disulfoton	N23-Ma0057480	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
EPN	N23-Ma0057480	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Ethion	N23-Ma0057480	СР	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Ethoprop	N23-Ma0057480	СР	ma/ka	< 0.5	< 0.5	<1	30%	Pass	
Ethyl parathion	N23-Ma0057480	CP	ma/ka	< 0.5	< 0.5	<1	30%	Pass	
Fenitrothion	N23-Ma0057480	CP	ma/ka	< 0.5	< 0.5	<1	30%	Pass	
Fensulfothion	N23-Ma0057480	CP	ma/ka	< 0.5	< 0.5	<1	30%	Pass	
Fenthion	N23-Ma0057480	CP	ma/ka	< 0.5	< 0.5	<1	30%	Pass	
Malathion	N23-Ma0057480	CP	ma/ka	< 0.5	< 0.5	<1	30%	Pass	
Merphos	N23-Ma0057480	CP	ma/ka	< 0.5	< 0.5	<1	30%	Pass	
Methyl parathion	N23-Ma0057480	CP	mg/kg	< 0.0	< 0.5	<1	30%	Pass	
Mevinphos	N23-Ma0057480	CP	ma/ka	< 0.0	< 0.5	<1	30%	Pass	
Monocrotophos	N23-Ma0057480	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Naled	N23-Ma0057480	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Omethoate	N23-Ma0057480	CP	ma/ka	~ 5	~ 5	~1	30%	Page	
Phorate	N23-Ma0057480	CP	mg/kg	~05		~1	30%	Pass	
Piriminhos-methyl	N23-Ma0057400		ma/ka		< 0.5	~1	30%	Pass	
	N23-Ma0057400		mg/kg	< 0.5	< 0.5	~1	30%	Dace	
Ronnel	N23-Ma0057400		ma/ka		< 0.5	~1	30%	Pass	
	1123-111a0037460		тту/ку	< 0.0	< 0.0	<u> </u>	30%	F d 5 5	i



Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Terbufos	N23-Ma0057480	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Tetrachlorvinphos	N23-Ma0057480	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Tokuthion	N23-Ma0057480	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichloronate	N23-Ma0057480	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons	5			Result 1	Result 2	RPD			
Acenaphthene	N23-Ma0057480	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	N23-Ma0057480	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	N23-Ma0057480	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	N23-Ma0057480	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	N23-Ma0057480	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&j)fluoranthene	N23-Ma0057480	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	N23-Ma0057480	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	N23-Ma0057480	СР	ma/ka	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	N23-Ma0057480	СР	ma/ka	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a,h)anthracene	N23-Ma0057480	CP	ma/ka	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	N23-Ma0057480	CP	ma/ka	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	N23-Ma0057480	CP	ma/ka	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1,2,3-cd)pyrene	N23-Ma0057480	CP	ma/ka	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	N23-Ma0057480	CP	ma/ka	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	N23-Ma0057480	CP	ma/ka	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	N23-Ma0057480	CP	ma/ka	< 0.5	< 0.5	<1	30%	Pass	
Duplicate					1 010	••		1 0.00	
Sample Properties				Result 1	Result 2	RPD			
% Moisture	N23-Ma0057481	CP	%	11	11	2.2	30%	Pass	
		01	/0			<u> </u>	0070	1 400	
Total Recoverable Hydrocarbons -	Result 1	Result 2	RPD						
TRH C6-C9	S23-Ma0057139	NCP	ma/ka	< 20	< 20	<1	30%	Pass	
TRH C10-C14	S23-Ma0062018	NCP	ma/ka	< 20	< 20	<1	30%	Pass	
TRH C15-C28	S23-Ma0062018	NCP	ma/ka	< 50	< 50	<1	30%	Pass	
TRH C29-C36	S23-Ma0062018	NCP	ma/ka	< 50	< 50	<1	30%	Pass	
Duplicate	010 1100001010					••	0070	1 0.00	
BTEX				Result 1	Result 2	RPD			
Benzene	S23-Ma0057139	NCP	ma/ka	< 0.1	< 0.1	<1	30%	Pass	
Toluene	S23-Ma0057139	NCP	ma/ka	< 0.1	< 0.1	<1	30%	Pass	
Ethylbenzene	S23-Ma0057139	NCP	ma/ka	< 0.1	< 0.1	<1	30%	Pass	
m&p-Xylenes	S23-Ma0057139	NCP	ma/ka	< 0.2	< 0.2	<1	30%	Pass	
o-Xvlene	S23-Ma0057139	NCP	ma/ka	< 0.1	< 0.1	<1	30%	Pass	
Xvlenes - Total*	S23-Ma0057139	NCP	ma/ka	< 0.3	< 0.3	<1	30%	Pass	
Duplicate	020 1100001 100				1 010	••		1 0.00	
Total Recoverable Hydrocarbons -	2013 NEPM Fract	ions		Result 1	Result 2	RPD			
Naphthalene	S23-Ma0057139	NCP	ma/ka	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	S23-Ma0057139	NCP	ma/ka	< 20	< 20	<1	30%	Pass	
Duplicate	020 1100001 100			0	. 20	••		1 0.00	
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	S23-Ma0063882	NCP	ma/ka	< 0.5		<1	30%	Pass	
Acenaphthylene	S23-Ma0063882	NCP	ma/ka	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	S23-Ma0063882	NCP	ma/ka	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	S23-Ma0063882	NCP	ma/ka	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrepe	S23-Ma0063882	NCP	ma/ka	< 0.5	< 0.5	-1	30%	Page	
Benzo(b&i)fluoranthene	S23-Ma0063882	NCP	ma/ka	< 0.5	< 0.5	~1	30%	Page	
Benzo(a h i)pervlene	S23-Ma0063882	NCP	ma/ka	< 0.5	< 0.5	~1	30%	Page	
Benzo(k)fluoranthene	S23-Ma0063882	NCP	ma/ka	< 0.5	< 0.5	~1	30%	Page	
Chrysene	S23-Ma0063882	NCP	ma/ka	< 0.5	< 0.5	~1	30%	Page	
	010 ma000002			0.0	- 0.0		0070	1.000	1



Duplicate									
Polycyclic Aromatic Hydrocarbon	s			Result 1	Result 2	RPD			
Dibenz(a.h)anthracene	S23-Ma0063882	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	S23-Ma0063882	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	S23-Ma0063882	NCP	ma/ka	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	S23-Ma0063882	NCP	ma/ka	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	S23-Ma0063882	NCP	ma/ka	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	S23-Ma0063882	NCP	ma/ka	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	S23-Ma0063882	NCP	ma/ka	< 0.5	< 0.5	<1	30%	Pass	
Duplicate								1.000	
Total Recoverable Hydrocarbons	2013 NEPM Fracti	ions		Result 1	Result 2	RPD			
TRH >C10-C16	S23-Ma0062018	NCP	ma/ka	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	S23-Ma0062018	NCP	ma/ka	< 100	< 100	<1	30%	Pass	
TRH >C34-C40	S23-Ma0062018	NCP	ma/ka	< 100	< 100	<1	30%	Pass	
Duplicate	020 1100002010					••		1 400	
				Result 1	Result 2	RPD			
Conductivity (1:5 aqueous extract									
at 25 °C as rec.)	M23-Ma0066628	NCP	uS/cm	260	260	1.4	30%	Pass	
pH (1:5 Aqueous extract at 25 °C						_		_	
as rec.)	S23-Ma0058474	NCP	pH Units	6.8	6.8	<1	30%	Pass	
Duplicate					I		1	1	
Cation Exchange Capacity	1			Result 1	Result 2	RPD			
Cation Exchange Capacity	M23-Ma0056190	NCP	meq/100g	20	22	5.3	30%	Pass	
Duplicate					1		1	1	
Heavy Metals	1			Result 1	Result 2	RPD			
Arsenic	N23-Ma0057483	CP	mg/kg	3.3	2.5	29	30%	Pass	
Cadmium	N23-Ma0057483	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	N23-Ma0057483	CP	mg/kg	30	28	7.5	30%	Pass	
Copper	N23-Ma0057483	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Lead	N23-Ma0057483	CP	mg/kg	8.5	10	19	30%	Pass	
Mercury	N23-Ma0057483	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Nickel	N23-Ma0057483	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Zinc	N23-Ma0057483	CP	mg/kg	110	160	39	30%	Fail	Q02
Duplicate							1	1	
Heavy Metals	1 1			Result 1	Result 2	RPD			
Arsenic	N23-Ma0057485	CP	mg/kg	2.8	2.3	19	30%	Pass	
Cadmium	N23-Ma0057485	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	N23-Ma0057485	CP	mg/kg	14	14	5.8	30%	Pass	
Copper	N23-Ma0057485	CP	mg/kg	7.0	5.6	22	30%	Pass	
Lead	N23-Ma0057485	CP	mg/kg	35	38	9.5	30%	Pass	
Mercury	N23-Ma0057485	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Nickel	N23-Ma0057485	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Zinc	N23-Ma0057485	CP	mg/kg	55	54	1.2	30%	Pass	
Duplicate					1		1	1	
Sample Properties	,			Result 1	Result 2	RPD			
% Moisture	N23-Ma0057485	CP	%	14	16	12	30%	Pass	
Duplicate									
Organochlorine Pesticides	,			Result 1	Result 2	RPD			
Toxaphene	S23-Ma0063702	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Sample Properties				Result 1	Result 2	RPD			
% Moisture	N23-Ma0057496	CP	%	9.3	9.0	3.4	30%	Pass	
Duplicate									
Sample Properties				Result 1	Result 2	RPD			
% Moisture	N23-Ma0057507	CP	%	12	11	11	30%	Pass	



Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	N23-Ma0057511	CP	mg/kg	2.7	2.2	23	30%	Pass	
Cadmium	N23-Ma0057511	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	N23-Ma0057511	CP	mg/kg	10.0	7.8	25	30%	Pass	
Copper	N23-Ma0057511	CP	mg/kg	61	46	27	30%	Pass	
Lead	N23-Ma0057511	CP	mg/kg	29	25	15	30%	Pass	
Mercury	N23-Ma0057511	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Nickel	N23-Ma0057511	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Zinc	N23-Ma0057511	CP	mg/kg	240	190	23	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	N23-Ma0057514	CP	mg/kg	10	11	1.7	30%	Pass	
Cadmium	N23-Ma0057514	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	N23-Ma0057514	CP	mg/kg	13	15	12	30%	Pass	
Copper	N23-Ma0057514	CP	mg/kg	17	19	13	30%	Pass	
Lead	N23-Ma0057514	CP	mg/kg	19	18	2.9	30%	Pass	
Mercury	N23-Ma0057514	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Nickel	N23-Ma0057514	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Zinc	N23-Ma0057514	CP	mg/kg	100	120	16	30%	Pass	
Duplicate				r	1		-	-	
Sample Properties				Result 1	Result 2	RPD			
% Moisture	N23-Ma0057521	CP	%	4.8	4.6	4.4	30%	Pass	
Duplicate				r	1		1	-	
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	N23-Ma0057530	CP	mg/kg	3.9	3.6	8.4	30%	Pass	
Cadmium	N23-Ma0057530	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	N23-Ma0057530	CP	mg/kg	41	41	<1	30%	Pass	
Copper	N23-Ma0057530	CP	mg/kg	5.9	6.1	1.8	30%	Pass	
Lead	N23-Ma0057530	CP	mg/kg	15	13	12	30%	Pass	
Mercury	N23-Ma0057530	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Nickel	N23-Ma0057530	CP	mg/kg	6.0	6.2	3.2	30%	Pass	
Zinc	N23-Ma0057530	CP	mg/kg	98	74	27	30%	Pass	İ



Comments

Sample Integrity	
Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
G01	The LORs have been raised due to matrix interference
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs
Q02	The duplicate %RPD is outside the recommended acceptance criteria. Further analysis indicates sample heterogeneity as the cause

Q09 The Surrogate recovery is outside of the recommended acceptance criteria due to matrix interference. Acceptance criteria were met for all other QC

Authorised by:

Adam Bateup	Analytical Services Manager
Caitlin Breeze	Senior Analyst-Metal
Fang Yee Tan	Senior Analyst-Metal
Joseph Edouard	Senior Analyst-Organic
Maria Tian	Senior Analyst-Organic
Mary Makarios	Senior Analyst-Inorganic
Raymond Siu	Senior Analyst-Volatile
Roopesh Rangarajan	Senior Analyst-Inorganic
Roopesh Rangarajan	Senior Analyst-Organic
Sayeed Abu	Senior Analyst-Asbestos

Glenn Jackson General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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NATA

Accredited for compliance with ISO/IEC 17025 – Testing NATA is a signatory to the ILAC Mutual Recognition Arrangement for the mutual recognition of the equivalence of testing, medical testing, calibration, inspection, proficiency testing scheme providers and reference materials producers reports and certificates.

NATA Accredited Accreditation Number 1261 Site Number 18217

Qualtest 2 Murray Dwyer Circuit Mayfield West NSW 2304



Libby Betz

Report
Project name
Project ID
Received Date

Attention:

979699-S ADDITIONAL: MEDOWIE GARDENS ADDITIONAL: NEW23P-0009 Apr 11, 2023

Client Sample ID			TP72-2_0.0-0.2	TP73-2_0.0-0.2	TP74-2_0.0-0.2	SS76-2
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23- Ap0020355	S23- Ap0020356	S23- Ap0020357	S23- Ap0020358
Date Sampled			Mar 21, 2023	Mar 21, 2023	Mar 21, 2023	Mar 21, 2023
Test/Reference	LOR	Unit				
Chromium (hexavalent)	1	mg/kg	< 1	< 1	< 1	< 1
Chromium (trivalent)	5	mg/kg	560	400	420	310
Heavy Metals						
Chromium	5	mg/kg	560	400	420	310
Sample Properties						
% Moisture	1	%	5.5	8.7	7.9	6.3

Client Sample ID			SS55-3
Sample Matrix			Soil
Eurofins Sample No.			S23- Ap0020359
Date Sampled			Mar 22, 2023
Test/Reference	LOR	Unit	
Chromium (hexavalent)	1	mg/kg	< 1
Chromium (trivalent)	5	mg/kg	410
Heavy Metals			
Chromium	5	mg/kg	410
Sample Properties			
% Moisture	1	%	7.0



Sample History

Where samples are submitted/analysed over several days, the last date of extraction is reported.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Chromium (speciated)			
Chromium (hexavalent)	Sydney	Apr 13, 2023	28 Days
- Method: In-house method E057.2			
Chromium (trivalent)	Sydney	Apr 11, 2023	28 Days
- Method: E043 /E057 Total Speciated Chromium			
Heavy Metals	Sydney	Apr 13, 2023	28 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
% Moisture	Sydney	Apr 11, 2023	14 Days
- Method: LTM-GEN-7080 Moisture			

		C :	Eurofins Env	rironment Test	ting Australia Pty Ltd					Eurofins ARL Pty Ltd	Eurofins Environm	ent Testing NZ Ltd
web: www.eurofins.com.au email: EnviroSales@eurofins.com		Melbourne 6 Monterey Roa Dandenong Sou VIC 3175 Tel: +61 3 8564 NATA# 1261 Sit	Geelor d 19/8 Le tth Grovec VIC 32 5000 5000 Tel: +6 te# 1254 NATA#	ng Sydney ewalan Street 179 Ma dale Girrawe 16 NSW 2 1 3 8564 5000 Tel: +6' # 1261 Site# 25403 NATA#	gowar Ro en 145 2 9900 1 1261 Site	oad 8400 ∋# 1821	Canberra Brisbane Unit 1,2 Dacre Street 1/21 Smallwood Place Mitchell Murarrie ACT 2911 QLD 4172 Tel: +61 2 6113 8091 Tel: +61 7 3902 4600 7 NATA# 1261 Site# 25466 NATA# 1261 Site# 2075	Newcastle 1/2 Frost Drive Mayfield West NSW 2304 Tel: +61 2 4968 8448 NATA# 1261 14 Site# 25079 & 25289	Perth 46-48 Banksia Road Welshpool WA 6106 Tel: +61 8 6253 4444 NATA# 2377 Site# 2370	Auckland 35 O'Rorke Road Penrose, Auckland 1061 Tel: +64 9 526 45 51 IANZ# 1327	Christchurch 43 Detroit Drive Rolleston, Christchurch 7675 Tel: 0800 856 450 IANZ# 1290	
Cor Add Pro	mpany Name: dress: bject Name:	Qualtest 2 Murray Dw Mayfield We NSW 2304 ADDITIONA	vyer Circuit st L: MEDOWII	E GARDENS			O R P Fa	rder No.: eport #: 979699 none: 02 4968 4468 ix: 02 4960 9775		Received: Due: Priority: Contact Name:	Apr 11, 2023 3:37 Apr 13, 2023 2 Day Libby Betz	PM
Pro	oject ID:	ADDITIONA	L: NEW23P-	0009					E	urofins Analytical Serv	vices Manager : Ar	ndrew Black
		Sa	imple Detail			Chromium (speciated)	Moisture Set					
Sydr	ney Laboratory	- NATA # 1261	Site # 18217	7		Х	x					
Exte	rnal Laboratory	/ Commis Data	Compling	Matrix								
NO	Sample ID	Sample Date	Time	Matrix								
1	TP72-2_0.0- 0.2	Mar 21, 2023		Soil	S23-Ap0020355	х	x					
2	TP73-2_0.0- 0.2	Mar 21, 2023		Soil	S23-Ap0020356	х	x					
3	TP74-2_0.0- 0.2	Mar 21, 2023		Soil	S23-Ap0020357	х	x					
4	SS76-2	Mar 21, 2023		Soil	S23-Ap0020358	Х	Х					
5	SS55-3	Mar 22, 2023		Soil	S23-Ap0020359	X	Х					
Test	Counts					5	5					



Internal Quality Control Review and Glossary

General

- 1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
- 2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
- 3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
- 4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
- 5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds
- 6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
- 7. Samples were analysed on an 'as received' basis.
- 8. Information identified on this report with blue colour, indicates data provided by customer that may have an impact on the results.
- 9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA. If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported. Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

Units

mg/kg: milligrams per kilogram	mg/L: milligrams per litre	μg/L: micrograms per litre
ppm: parts per million	ppb: parts per billion	%: Percentage
org/100 mL: Organisms per 100 millilitres	NTU: Nephelometric Turbidity Units	MPN/100 mL: Most Probable Number of organisms per 100 millilitres
CFU: Colony forming unit		

Terms

АРНА	American Public Health Association
сос	Chain of Custody
СР	Client Parent - QC was performed on samples pertaining to this report
CRM	Certified Reference Material (ISO17034) - reported as percent recovery.
Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
LOR	Limit of Reporting.
LCS	Laboratory Control Sample - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
SRA	Sample Receipt Advice
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
ТВТО	Tributyltin oxide (bis-tributyltin oxide) - individual tributyltin compounds cannot be identified separately in the environment however free tributyltin was measured and its values were converted stoichiometrically into tributyltin oxide for comparison with regulatory limits.
TCLP	Toxicity Characteristic Leaching Procedure
TEQ	Toxic Equivalency Quotient or Total Equivalence
QSM	US Department of Defense Quality Systems Manual Version 5.4
US EPA	United States Environmental Protection Agency
WA DWER	Sum of PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC - Acceptance Criteria

The acceptance criteria should be used as a guide only and may be different when site specific Sampling Analysis and Quality Plan (SAQP) have been implemented

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR: No Limit

Results between 10-20 times the LOR: RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

NOTE: pH duplicates are reported as a range not as RPD

Surrogate Recoveries: Recoveries must lie between 20-130% for Speciated Phenols & 50-150% for PFAS

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.4 where no positive PFAS results have been reported have been reviewed and no data was affected.

QC Data General Comments

- 1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
- 2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
- 3. pH and Free Chlorine analysed in the laboratory Analysis on this test must begin within 30 minutes of sampling. Therefore, laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
- 4. Recovery Data (Spikes & Surrogates) where chromatographic interference does not allow the determination of recovery the term "INT" appears against that analyte.
- 5. For Matrix Spikes and LCS results a dash "-" in the report means that the specific analyte was not added to the QC sample.
- 6. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.



Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code		
Method Blank									
Chromium (hexavalent)			mg/kg	< 1			1	Pass	
Method Blank									
Heavy Metals									
Chromium			mg/kg	< 5			5	Pass	
LCS - % Recovery									
Chromium (hexavalent)			%	104			70-130	Pass	
LCS - % Recovery				1					
Heavy Metals									
Chromium	1		%	102			80-120	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
				Result 1					
Chromium (hexavalent)	N23-Ap0013123	NCP	%	81			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Chromium	S23-Ap0026009	NCP	%	89			75-125	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate				1	1				
				Result 1	Result 2	RPD			
Chromium (hexavalent)	S23-Ap0020355	CP	mg/kg	< 1	< 1	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Chromium	S23-Ap0005526	NCP	mg/kg	24	13	61	30%	Fail	Q15
Duplicate				T					
Sample Properties	1			Result 1	Result 2	RPD			
% Moisture	S23-Ap0015366	NCP	%	86	86	<1	30%	Pass	



Comments

Sample Integrity	
Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

 Code
 Description

 Q15
 The RPD reported passes Eurofins Environment Testing's QC - Acceptance Criteria as defined in the Internal Quality Control Review and Glossary page of this report.

Authorised by:

Adam Bateup Mickael Ros Ryan Phillips Analytical Services Manager Senior Analyst-Metal Senior Analyst-Inorganic

Glenn Jackson General Manager

Final Report - this report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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ANALYTICAL REPORT





CLIENT DETAILS		LABORATORY DE	TAILS	
Contact	Emma Coleman	Manager	Huong Crawford	
Client	QUALTEST	Laboratory	SGS Alexandria Environmental	
Address	2 MURRAY DWYER CIRCUIT MAYFIELD WEST NSW 2304	Address	Unit 16, 33 Maddox St Alexandria NSW 2015	
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Facsimile	(Not specified)	Facsimile	+61 2 8594 0499	
Email	emmacoleman@qualtest.com.au	Email	au.environmental.sydney@sgs.com	
Project	NEW23P-0009 Medowie Gardens	SGS Reference	SE245327 R0	
Order Number	NEW23P-0009	Date Received	30/3/2023	
Samples	1	Date Reported	6/4/2023	

COMMENTS

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

SIGNATORIES

Bennet LO Senior Chemist



Dong LIANG Metals/Inorganics Team Leader

And M____

Ly Kim HA Organic Section Head

Shon

Shane MCDERMOTT Inorganic/Metals Chemist

SGS Australia Pty Ltd ABN 44 000 964 278

Environment, Health and Safety

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Page 1 of 10



VOC's in Soil [AN433] Tested: 3/4/2023

			T.22.3.23
			SOIL - 29/3/2023
PARAMETER	UOM	LOR	SE245327.001
Benzene	mg/kg	0.1	<0.1
Toluene	mg/kg	0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2
o-xylene	mg/kg	0.1	<0.1
Total Xylenes*	mg/kg	0.3	<0.3
Total BTEX*	mg/kg	0.6	<0.6
Naphthalene (VOC)*	mg/kg	0.1	<0.1



Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 3/4/2023

			T.22.3.23
			SOIL
PARAMETER	UOM	LOR	SE245327.001
TRH C6-C9	mg/kg	20	<20
Benzene (F0)	mg/kg	0.1	<0.1
TRH C6-C10	mg/kg	25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25



TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 3/4/2023

			T.22.3.23
			SOIL
			-
PARAMETER	UOM	LOR	SE245327.001
TRH C10-C14	mg/kg	20	51
TRH C15-C28	mg/kg	45	240
TRH C29-C36	mg/kg	45	170
TRH C37-C40	mg/kg	100	<100
TRH >C10-C16	mg/kg	25	59
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	59
TRH >C16-C34 (F3)	mg/kg	90	360
TRH >C34-C40 (F4)	mg/kg	120	<120
TRH C10-C36 Total	mg/kg	110	460
TRH >C10-C40 Total (F bands)	mg/kg	210	420



ANALYTICAL RESULTS

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 3/4/2023

			T.22.3.23
			SOIL
			-
PARAMETER	UOM	LOR	29/3/2023 SE245327.001
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(b&j)fluoranthene	mg/kg	0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1
Carcinogenic PAHs, BaP TEQ <lor=0*< td=""><td>TEQ (mg/kg)</td><td>0.2</td><td><0.2</td></lor=0*<>	TEQ (mg/kg)	0.2	<0.2
Carcinogenic PAHs, BaP TEQ <lor=lor*< td=""><td>TEQ (mg/kg)</td><td>0.3</td><td><0.3</td></lor=lor*<>	TEQ (mg/kg)	0.3	<0.3
Carcinogenic PAHs, BaP TEQ <lor=lor 2*<="" td=""><td>TEQ (mg/kg)</td><td>0.2</td><td><0.2</td></lor=lor>	TEQ (mg/kg)	0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8



ANALYTICAL RESULTS

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 3/4/2023

			T.22.3.23
			SOIL
			- 29/3/2023
PARAMETER	UOM	LOR	SE245327.001
Arsenic, As	mg/kg	1	2
Cadmium, Cd	mg/kg	0.3	<0.3
Chromium, Cr	mg/kg	0.5	12
Copper, Cu	mg/kg	0.5	15
Lead, Pb	mg/kg	1	10
Nickel, Ni	mg/kg	0.5	1.8
Zinc, Zn	mg/kg	2	13



Mercury in Soil [AN312] Tested: 3/4/2023

			T.22.3.23
			SOIL
			-
			29/3/2023
PARAMETER	UOM	LOR	SE245327.001
Mercury	mg/kg	0.05	<0.05



Moisture Content [AN002] Tested: 3/4/2023

			T.22.3.23
			SOIL
PARAMETER	UOM	LOR	SE245327.001
% Moisture	%w/w	1	20.4



METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by ASS or ICP as per USEPA Method 200.8.
AN312	Mercury by Cold Vapour AAS in Soils: After digestion with nitric acid, hydrogen peroxide and hydrochloric acid, mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). F2 is reported directly and also corrected by subtracting Naphthalene (from VOC method AN433) where available.
AN403	Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Recoverable Hydrocarbons - Silica (TRH-Si) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents.
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D). Total PAH calculated from individual analyte detections at or above the limit of reporting.
AN420	Carcinogenic PAHs may be expressed as Benzo(a)pyrene equivalents by applying the BaP toxicity equivalence factor (NEPM 1999, June 2013, B7). These can be reported as the individual PAHs and as a sum of carcinogenic PAHs. The sum is reported three ways, the first assuming all <lor <="" <lor="" all="" and="" are="" assuming="" half="" lor="" lor.<="" results="" second="" td="" the="" third="" zero,=""></lor>
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC's are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.



FOOTNOTES -

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

*** Indicates that both * and ** apply. NVL IS I NR

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

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received. Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the "Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.

Note that in terms of units of radioactivity:

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

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sqs.com.au/en-gb/environment-health-and-safety

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Qualtest 2 Murray Dwyer Circuit Mayfield West NSW 2304





NATA Accredited Accreditation Number 1261 Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing NATA is a signatory to the ILAC Mutual Recognition Arrangement for the mutual recognition of the equivalence of testing, medical testing, calibration, inspection, proficiency testing scheme providers and reference materials producers reports and certificates.

Allention.	

Libby Betz

Report Project name Project ID Received Date **974973-W** MEDOWIE GARDENS NEW23P-0009 Mar 23, 2023

Client Sample ID			WB 22.3.23		
Sample Matrix			Water		
			N23-		
Eurofins Sample No.			Ma0057534		
Date Sampled			Mar 22, 2023		
Test/Reference	LOR	Unit			
Total Recoverable Hydrocarbons - 1999 NEPM Fract	ions				
TRH C6-C9	0.02	mg/L	< 0.02		
TRH C10-C14	0.05	mg/L	< 0.05		
TRH C15-C28	0.1	mg/L	< 0.1		
TRH C29-C36	0.1	mg/L	< 0.1		
TRH C10-C36 (Total)	0.1	mg/L	< 0.1		
втех					
Benzene	0.001	mg/L	< 0.001		
Toluene	0.001	mg/L	< 0.001		
Ethylbenzene	0.001	mg/L	< 0.001		
m&p-Xylenes	0.002	mg/L	< 0.002		
o-Xylene	0.001	mg/L	< 0.001		
Xylenes - Total*	0.003	mg/L	< 0.003		
4-Bromofluorobenzene (surr.)	1	%	129		
Total Recoverable Hydrocarbons - 2013 NEPM Fract	ions				
Naphthalene ^{N02}	0.01	mg/L	< 0.01		
TRH >C10-C16 less Naphthalene (F2) ^{N01}	0.05	mg/L	< 0.05		
TRH C6-C10	0.02	mg/L	< 0.02		
TRH C6-C10 less BTEX (F1) ^{N04}	0.02	mg/L	< 0.02		
Polycyclic Aromatic Hydrocarbons					
Acenaphthene	0.001	mg/L	< 0.001		
Acenaphthylene	0.001	mg/L	< 0.001		
Anthracene	0.001	mg/L	< 0.001		
Benz(a)anthracene	0.001	mg/L	< 0.001		
Benzo(a)pyrene	0.001	mg/L	< 0.001		
Benzo(b&j)fluoranthene ^{N07}	0.001	mg/L	< 0.001		
Benzo(g.h.i)perylene	0.001	mg/L	< 0.001		
Benzo(k)fluoranthene	0.001	mg/L	< 0.001		
Chrysene	0.001	mg/L	< 0.001		
Dibenz(a.h)anthracene	0.001	mg/L	< 0.001		
Fluoranthene	0.001	mg/L	< 0.001		
Fluorene	0.001	mg/L	< 0.001		
Indeno(1.2.3-cd)pyrene	0.001	mg/L	< 0.001		
Naphthalene	0.001	mg/L	< 0.001		
Phenanthrene	0.001	mg/L	< 0.001		
Pyrene	0.001	mg/L	< 0.001		



Client Sample ID Sample Matrix Eurofins Sample No. Date Sampled			WB 22.3.23 Water N23- Ma0057534 Mar 22, 2023
Test/Reference	LOR	Unit	
Polycyclic Aromatic Hydrocarbons			
Total PAH*	0.001	mg/L	< 0.001
2-Fluorobiphenyl (surr.)	1	%	62
p-Terphenyl-d14 (surr.)	1	%	118
Total Recoverable Hydrocarbons - 2013 NEPM Fract	ions		
TRH >C10-C16	0.05	mg/L	< 0.05
TRH >C16-C34	0.1	mg/L	< 0.1
TRH >C34-C40	0.1	mg/L	< 0.1
TRH >C10-C40 (total)*	0.1	mg/L	< 0.1
Heavy Metals			
Arsenic	0.001	mg/L	< 0.001
Cadmium	0.0002	mg/L	< 0.0002
Chromium	0.001	mg/L	< 0.001
Copper	0.001	mg/L	< 0.001
Lead	0.001	mg/L	< 0.001
Mercury	0.0001	mg/L	< 0.0001
Nickel	0.001	mg/L	< 0.001
Zinc	0.005	mg/L	< 0.005



Sample History

Where samples are submitted/analysed over several days, the last date of extraction is reported.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

- · · · ·			
Description	Testing Site	Extracted	Holding Time
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Sydney	Mar 28, 2023	7 Days
- Method: LTM-ORG-2010 TRH C6-C40			
BTEX	Sydney	Mar 28, 2023	14 Days
- Method: LTM-ORG-2010 BTEX and Volatile TRH			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Mar 28, 2023	7 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Polycyclic Aromatic Hydrocarbons	Sydney	Mar 28, 2023	7 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Mar 28, 2023	7 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Metals M8	Sydney	Mar 28, 2023	28 Days

- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS

	Eurofins Environment Testing Australia Pty L													Eurofins ARL Pty Ltd	Eurofins Environment Testing NZ Ltd				
web: www.eurofins.com.au email: EnviroSales@eurofins.com		.com	Melbourne Geelong 6 Monterey Road 19/8 Lewalz Dandenong South Grovedale VIC 3175 VIC 3216 Tel: +61 3 8564 5000 Tel: +61 3 ξ NATA# 1261 Site# 1254 NATA# 126		Ig Sydney swalan Street 179 Magov Jale Girraween 16 NSW 2145 11 3 8564 5000 Tel: +61 2 ‡ 1261 Site# 25403 NATA# 12		oad 8400 e# 1821	Canberra Unit 1,2 Dacre Street Mitchell ACT 2911 0 Tel: +61 2 6113 8091 18217 NATA# 1261 Site# 25		Brisbane t 1/21 Smallwood Place Murarrie QLD 4172 1 Tel: +61 7 3902 4600 5466 NATA# 1261 Site# 20794			Place 4600 e# 2079	Newcastle 1/2 Frost Drive Mayfield West NSW 2304 Tel: +61 2 4968 8448 NATA# 1261 4 Site# 25079 & 25289		Perth 46-48 Banksia Road Welshpool WA 6106 Tel: +61 8 6253 4444 NATA# 2377 Site# 2370	Auckland 35 O'Rorke Road Penrose, Auckland 1061 Tel: +64 9 526 45 51 IANZ# 1327	Christchurch 43 Detroit Drive Rolleston, Christchurch 7675 Tel: 0800 856 450 IANZ# 1290	
Co Ad	mpany Name: dress:	Qualtest 2 Murray Dw Mayfield We NSW 2304	vyer Circuit st				O R P Fa	rder N eport hone: ax:	lo.: #:	9 0 0)7497:)2 496)2 496	3 68 446 60 977)8 75				Received: Due: Priority: Contact Name:	Mar 23, 2023 2:10 Mar 30, 2023 5 Day Libby Betz	PM
Project Name:MEDOWIE GARDENSProject ID:NEW23P-0009																Eu	rofins Analytical Serv	vices Manager : An	drew Black
Sample Detail						Asbestos - WA guidelines	Asbestos Absence /Presence	HOLD	pH (1:5 Aqueous extract at 25 °C as rec.)	Acid Herbicides	Metals M8	Suite B14: OCP/OPP	Moisture Set	Cation Exchange Capacity	Eurofins Suite B7				
Melk	oourne Laborato	ory - NATA # 12	261 Site # 12	54						Х	х			х	х]			
Sydi	ney Laboratory	- NATA # 1261	Site # 18217	7		Х		X	х		Х	Х	Х		X	-			
May	field Laboratory	- NATA # 1261	Site # 2507	9 & 25289			X	<u> </u>								-			
Exte	rnal Laboratory							<u> </u>								-			
No	Sample ID	Sample Date	Sampling Time	Matrix				<u> </u>			×	×	V						
2	5503-5 6655 2	Mar 22, 2023		Soil	N23-Ma0057480	v		<u> </u>	v		^	^	×	v	v	-			
2	<u>9956-5</u>	Mar 22, 2023		Soil	N23-Ma0057481	\uparrow		+	\uparrow		x	x	×	\uparrow	\uparrow	1			
4	SS47-3	Mar 22, 2023		Soil	N23-Ma0057482	x					X	~	X			-			
5	SS48-3	Mar 22, 2023		Soil	N23-Ma0057484	X		<u> </u>			X		x			-			
6	SS49-3	Mar 22, 2023		Soil	N23-Ma0057485	x		+			X		x			1			
7	SS60-5	Mar 22, 2023		Soil	N23-Ma0057486			<u> </u>			x	х	x			1			
8	SS14-1	Mar 22, 2023		Soil	N23-Ma0057487			<u> </u>			X		X			1			
9	SS27-1	Mar 22, 2023		Soil	N23-Ma0057488			1			х		х			1			
10	SS19-1	Mar 22, 2023		Soil	N23-Ma0057489	х			1		х		х		1	1			
11	SS24-1	Mar 22, 2023		Soil	N23-Ma0057490	Х					Х	Х	Х]			

		Fine	Eurofins Enviro ABN: 50 005 085 5	nment Testi 21	ing Australia Pty Ltd												Eurofins ARL Pty Ltd ABN: 91 05 0159 898	Eurofins Environment Testing NZ L NZBN: 9429046024954		
web: w email:	web: www.eurofins.com.au email: EnviroSales@eurofins.com		Melbourne 6 Monterey Road Dandenong South VIC 3175 Tel: +61 3 8564 50 NATA# 1261 Site#	Geelong 19/8 Lev Groveda VIC 321 00 Tel: +61 1254 NATA#	g Sydney walan Street 179 Ma ale Girrawe 6 NSW 2 3 8564 5000 Tel: +6' 1261 Site# 25403 NATA#	gowar R en 145 I 2 9900 1261 Sit	oad 8400 œ# 1821	Canberra Unit 1,2 Dacre Stree Mitchell ACT 2911 Tel: +61 2 6113 809 217 NATA# 1261 Site# 2			Brisbane xt 1/21 Smallwood Place Murarrie QLD 4172 11 Tel: +61 7 3902 4600 25466 NATA# 1261 Site# 20794				Newc 1/2 Fr Mayfie Tel: + NATA 94 Site#	castle rost Drive eld West NSW 2304 61 2 4968 8448 \# 1261 25079 & 25289	Perth 46-48 Banksia Road Welshpool WA 6106 Tel: +61 8 6253 4444 NATA# 2377 Site# 2370	Auckland 35 O'Rorke Road Penrose, Auckland 1061 Tel: +64 9 526 45 51 IANZ# 1327	Christchurch 43 Detroit Drive Rolleston, Christchurch 7675 Tel: 0800 856 450 IANZ# 1290	
Co Ad	mpany Name: dress:	Qualtest 2 Murray Dy Mayfield We NSW 2304	wyer Circuit est				Order No.:Report #:974973Phone:02 4968 4468Fax:02 4960 9775										Received: Due: Priority: Contact Name:	Mar 23, 2023 2:10 Mar 30, 2023 5 Day Libby Betz	PM	
Pro Pro	Project Name:MEDOWIE GARDENSProject ID:NEW23P-0009															Eu	rofins Analytical Serv	rices Manager : Ar	drew Black	
Sample Detail					Asbestos - WA guidelines	Asbestos Absence /Presence	HOLD	pH (1:5 Aqueous extract at 25 °C as rec.)	Acid Herbicides	Metals M8	Suite B14: OCP/OPP	Moisture Set	Cation Exchange Capacity	Eurofins Suite B7						
Melk	ourne Laborato	ry - NATA # 1	261 Site # 1254							х	х			х	X	-				
Syd	ney Laboratory -	NATA # 1261	Site # 18217			X		Х	Х		Х	X	Х		X	-				
Мау	field Laboratory	- NATA # 126	1 Site # 25079	& 25289		-	X									-				
Exte	rnal Laboratory	N 00 0000														-				
12	SS26-1	Mar 22, 2023	S	011	N23-Ma005749						X		X			-				
13	SS18-1	Mar 22, 2023	5		N23-Ma0057492											-				
14	SS17-1	Mar 22, 2023	3	oil	N23-Ma005749) ^ 1 Y					X		X			-				
16	SS15-1	Mar 22, 2023	5	oil	N23-Ma005749	5 ^					X		X			-				
17	SS35-1	Mar 22, 2023	l s	oil	N23-Ma0057496	5 X					X		x			-				
18	SS34-1	Mar 22, 2023	s	oil	N23-Ma005749	7 X					X		X			-				
19	SS36-1	Mar 22, 2023	l s	oil	N23-Ma0057498	3 X					X	x	X			1				
20	SS33-1	Mar 22, 2023	s	oil	N23-Ma0057499) X	1	1			x		х		1	1				
21	SS37-1	Mar 22, 2023	s	oil	N23-Ma0057500) X	1				х		х		1	1				
22	SS32-1	Mar 22, 2023	s	oil	N23-Ma005750	I X	1				х		х			1				
23	SS22-1	Mar 22, 2023	s	oil	N23-Ma0057502	2					Х		х			1				
24	SS23-1	Mar 22, 2023	S	oil	N23-Ma0057503	3					Х	Х	Х]				

		fine	Eurofins Enviro ABN: 50 005 085 5	o <mark>nment Testi</mark> 21	ng Australia Pty Ltd												Eurofins ARL Pty Ltd ABN: 91 05 0159 898	Eurofins Environment Testing NZ Ltc NZBN: 9429046024954		
web: w email:	web: www.eurofins.com.au email: EnviroSales@eurofins.com		Melbourne 6 Monterey Road Dandenong South VIC 3175 Tel: +61 3 8564 50 NATA# 1261 Site#	Geelong 19/8 Lev Groveda VIC 321 00 Tel: +61 1254 NATA# 1	Sydne valan Street 179 Ma ile Girraw 6 NSW 2 3 8564 5000 Tel: +6 1261 Site# 25403 NATA#	gowar R en 145 I 2 9900 1261 Sit	oad 8400 e# 1821	Canberra Unit 1,2 Dacre Stree Mitchell ACT 2911 Tel: +61 2 6113 809 217 NATA# 1261 Site# 2			Brisbane 3t 1/21 Smallwood Place Murarrie QLD 4172 31 Tel: +61 7 3902 4600 25466 NATA# 1261 Site# 20794				Newc 1/2 Fr Mayfie Tel: + NATA 94 Site#	castle rost Drive eld West NSW 2304 61 2 4968 8448 \# 1261 25079 & 25289	Perth 46-48 Banksia Road Welshpool WA 6106 Tel: +61 8 6253 4444 NATA# 2377 Site# 2370	Auckland 35 O'Rorke Road Penrose, Auckland 1061 Tel: +64 9 526 45 51 IANZ# 1327	Christchurch 43 Detroit Drive Rolleston, Christchurch 7675 Tel: 0800 856 450 IANZ# 1290	
Co Ad	mpany Name: dress:	Qualtest 2 Murray Dy Mayfield We NSW 2304	wyer Circuit est				Order No.: Propert #: 974973 Phone: 02 4968 4468 Properties Properties										Received: Due: Priority: Contact Name:	Mar 23, 2023 2:10 Mar 30, 2023 5 Day Libby Betz	PM	
Pro Pro	Project Name:MEDOWIE GARDENSProject ID:NEW23P-0009															Eu	rofins Analytical Serv	vices Manager : Ar	ndrew Black	
Sample Detail					Asbestos - WA guidelines	Asbestos Absence /Presence	HOLD	pH (1:5 Aqueous extract at 25 °C as rec.)	Acid Herbicides	Metals M8	Suite B14: OCP/OPP	Moisture Set	Cation Exchange Capacity	Eurofins Suite B7						
Melk	ourne Laborato	ory - NATA # 1	261 Site # 1254	ļ.						х	х			х	X	-				
Syd	ney Laboratory	- NATA # 1261	Site # 18217			X		Х	X		Х	X	Х		X	-				
May	field Laboratory	- NATA # 126	1 Site # 25079	& 25289			X									-				
Exte	rnal Laboratory	, I	<u> </u>													-				
25	SS53-3	Mar 22, 2023	S	oil	N23-Ma005750	1 X					X		X			-				
26	SS61-5	Mar 22, 2023			N23-Ma005750						X	X	X			-				
27	5562-5	Mar 22, 2023			N23-Ma005750						X	X	X			-				
20	5552-3 8854 2	Mar 22, 2023			N23-Ma005750											-				
29	SS04-3	Mar 22, 2023			N23-Ma005751						×	x	×			-				
31	SS30-1	Mar 22, 2023			N23-Ma005751						^	^	X		×	-				
32	SS31-1	Mar 22, 2023		oil	N23-Ma005751	\rightarrow					x		X			-				
33	SS59-5	Mar 22, 2023		oil	N23-Ma005751	3				x	x	x	x			1				
34	SS16-1	Mar 22, 2023		oil	N23-Ma005751	1 X	1				x		x	1		1				
35	SS51-3	Mar 22, 2023		oil	N23-Ma005751	5 X					X		X			1				
36	SS27-1	Mar 22, 2023	5	oil	N23-Ma005751	3 X					X		X			1				
37	TP68-2_0.0-	Mar 22, 2023	S	oil	N23-Ma005751	7 X							Х		Х]				

the aurofine		finc	Eurofins Enviro ABN: 50 005 085 5	onment Testir 21	ng Australia Pty Ltd												Eurofins ARL Pty Ltd ABN: 91 05 0159 898	Eurofins Environment Testing NZ Lto NZBN: 9429046024954		
web: we email: E	web: www.eurofins.com.au email: EnviroSales@eurofins.com		Melbourne 6 Monterey Road Dandenong South VIC 3175 Tel: +61 3 8564 50 NATA# 1261 Site#	Geelong 19/8 Lew Groveda VIC 3216 00 Tel: +61 1254 NATA# 1	Geelong Sydney 19/8 Lewalan Street 179 Mag Grovedale Girrawee VIC 3216 NSW 214 Tel: +61 3 8564 5000 Tel: +61 NATA# 1261 Site# 25403 NATA# 1			Canb Unit 1 Mitch ACT 2 Tel: + 7 NATA	erra ,2 Dacn ell 2911 61 2 61 # 1261	Brisbane acre Street 1/21 Smallwood Place Murarrie QLD 4172 6113 8091 Tel: +61 7 3902 4600 61 Site# 25466 NATA# 1261 Site# 20794				Place 4600 # 2079	Newo 1/2 Fi Mayfi Tel: + NATA 94 Site#	castle rost Drive eld West NSW 2304 61 2 4968 8448 \# 1261 25079 & 25289	Perth 46-48 Banksia Road Welshpool WA 6106 Tel: +61 8 6253 4444 NATA# 2377 Site# 2370	Auckland 35 O'Rorke Road Penrose, Auckland 1061 Tel: +64 9 526 45 51 IANZ# 1327	Christchurch 43 Detroit Drive Rolleston, Christchurch 7675 Tel: 0800 856 450 IANZ# 1290	
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Pro Pro	Project Name: MEDOWIE GARDENS Project ID: NEW23P-0009															Eu	rofins Analytical Serv	vices Manager : Ar	ndrew Black	
Sample Detail						Asbestos - WA guidelines	Asbestos Absence /Presence	HOLD	pH (1:5 Aqueous extract at 25 °C as rec.)	Acid Herbicides	Metals M8	Suite B14: OCP/OPP	Moisture Set	Cation Exchange Capacity	Eurofins Suite B7					
Melb	ourne Laborato	ory - NATA # 12	261 Site # 1254	ļ						х	Х			Х	X	-				
Sydr	ey Laboratory	- NATA # 1261	Site # 18217			X		Х	X		Х	Х	X		X	-				
Mayf	ield Laboratory	<u>- NATA # 126</u>	1 Site # 25079	& 25289		-	X									-				
Exte																-				
38	0.2 TP68-2_0.5- 0.6	Mar 22, 2023	S	Soil	N23-Ma0057518			x								-				
39	TP67-0.0-0.2	Mar 22, 2023	S	oil	N23-Ma0057519	Х					х		Х]				
40	TP67-0.5-0.6	Mar 22, 2023	S	oil	N23-Ma0057520			Х												
41	TP69-2_0.0- 0.2	Mar 22, 2023	S	Soil	N23-Ma0057521	x					х		х							
42	TP69-2_0.4- 0.5	Mar 22, 2023	S	oil	N23-Ma0057522			х												
43	TP71-2_0.0- 0.2	Mar 22, 2023	S	Soil	N23-Ma0057523	х							х		x	-				
44	TP71-2_FRAG	Mar 22, 2023	E	uilding Iaterials	N23-Ma0057524		x													
45	TP71-2_0.4- 0.5	Mar 22, 2023	8	Soil	N23-Ma0057525			х												

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web: w email:	web: www.eurofins.com.au email: EnviroSales@eurofins.com		Melbourne 6 Monterey Road Dandenong South VIC 3175 Tel: +61 3 8564 5 NATA# 1261 Site	Geeld 19/8 L Grove VIC 3 000 Tel: + # 1254 NATA	Geelong Sydney 19/8 Lewalan Street 179 Magg Grovedale Girrawee VIC 3216 NSW 214 Tel: +61 3 8564 5000 Tel: +61 1 NATA# 1261 Site# 25403 NATA# 1			Canberra Unit 1,2 Dacre Stra Mitchell ACT 2911 Tel: +61 2 6113 80 3217 NATA# 1261 Site#			Brisbane reet 1/21 Smallwood Place Murarrie QLD 4172 3091 Tel: +61 7 3902 4600 ## 25466 NATA# 1261 Site# 20794				Newo 1/2 Fi Mayfi Tel: + NATA 94 Site#	castle rost Drive eld West NSW 2304 61 2 4968 8448 \# 1261 25079 & 25289	Perth 46-48 Banksia Road Welshpool WA 6106 Tel: +61 8 6253 4444 NATA# 2377 Site# 2370	Auckland 35 O'Rorke Road Penrose, Auckland 1061 Tel: +64 9 526 45 51 IANZ# 1327	Christchurch 43 Detroit Drive Rolleston, Christchurch 7675 Tel: 0800 856 450 IANZ# 1290	
Co Ad	ompany Name: Idress:	Qualtest 2 Murray D Mayfield W NSW 2304	wyer Circuit est				O R P Fa	rder I eport hone: ax:	No.: #:	9 (()7497)2 496)2 496	3 68 446 60 977)8 75				Received: Due: Priority: Contact Name:	Mar 23, 2023 2:10 Mar 30, 2023 5 Day Libby Betz	PM	
Pro Pro	Project Name: MEDOWIE GARDENS Project ID: NEW23P-0009												Eu	rofins Analytical Serv	vices Manager : Ar	ndrew Black				
Sample Detail					Asbestos - WA guidelines	Asbestos Absence /Presence	HOLD	pH (1:5 Aqueous extract at 25 °C as rec.)	Acid Herbicides	Metals M8	Suite B14: OCP/OPP	Moisture Set	Cation Exchange Capacity	Eurofins Suite B7						
Mell	bourne Laborate	ory - NATA # 1	261 Site # 125	4						х	Х			Х	Х]				
Syd	ney Laboratory	- NATA # 1261	Site # 18217			X		Х	X		Х	X	Х		X	-				
May	field Laboratory	/ - NATA # 126	1 Site # 25079	& 25289		_	X									-				
Exte	ernal Laboratory	/	1 1													-				
46	TP70-2_0.0- 0.2	Mar 22, 2023		Soil	N23-Ma0057526	³ X					х		x			-				
47	0.5	11101 22, 2023		001	1423-1480037321			Х								-				
48	TP03_0.0-0.2	Mar 22, 2023		Soil	N23-Ma0057528	3 X					Х		Х			-				
49	TP03_0.5-0.6	Mar 22, 2023		Soil	N23-Ma0057529)	-	Х								-				
50	TP04_0.0-0.2	Mar 22, 2023		Soil	N23-Ma0057530) X					Х		Х			-				
51	TP04_0.5-0.6	Mar 22, 2023		Soil	N23-Ma005753			X					<u> </u>			4				
52	1P66-2_0.0- 0.2	Mar 22, 2023		Soil	N23-Ma0057532	2 X	-				х		X							
53	0.6	iviar 22, 2023		2011	INZ3-IMA0057533	<u> </u>		X								-				
54	WB 22.3.23	Mar 22, 2023		Water	N23-Ma0057534	1									X	4				
55	D.22.3.23	Mar 22, 2023		Soil	N23-Ma0057535	5							Х		Х					

	C	Eurofins Environm	nent Testing Australia Pty Ltd	Eurofins ARL Pty Ltd	Eurofins Environment Testing NZ Ltd												
web: www.eurofins.com.au email: EnviroSales@eurofins	tins .com	ABN: 50 005 005 521 Melbourne 6 Monterey Road Dandenong South VIC 3175 Tel: +61 3 8564 5000 NATA# 1261 Site# 125	Geelong Sydney 19/8 Lewalan Street 179 Ma Grovedale Girrawe VIC 3216 NSW 2 Tel: +61 3 8564 5000 Tel: +6 ANATA# 1261 Site# 25403 NATA#	Sydney 179 Magowar Road Girraween NSW 2145 Tel: +61 2 9900 84 3 NATA# 1261 Site#		Canberra J Unit 1,2 Dacre Stree Mitchell ACT 2911 00 Tel: +61 2 6113 809 18217 NATA# 1261 Site# 2		Brisbane et 1/21 Smallwood Place Murarrie QLD 4172 QLD 4172 11 Tel: +61 7 3902 4600 25466 NATA# 1261 Site# 20794			Newcastle 1/2 Frost Drive Mayfield West NSW 2304 Tel: +61 2 4968 8448 NATA# 1261 4 Site# 25079 & 25289		Perth 46-48 Banksia Road Welshpool WA 6106 Tel: +61 8 6253 4444 NATA# 2377 Site# 2370	Auckland 35 O'Rorke Road Penrose, Auckland 1061 Tel: +64 9 526 45 51 IANZ# 1327	Christchurch 43 Detroit Drive Rolleston, Christchurch 7675 Tel: 0800 856 450 IANZ# 1290		
Company Name: Address:	Qualtest 2 Murray I Mayfield W NSW 2304	Dwyer Circuit /est			O R P F	erder I eport hone: ax:	No.: #:	9 (()7497)2 496)2 496	3 68 446 60 977	68 75				Received: Due: Priority: Contact Name:	Mar 23, 2023 2:10 Mar 30, 2023 5 Day Libby Betz	PM
Project Name: Project ID:	MEDOWIE NEW23P-(GARDENS												F.	unating Anglutical Com		daan Diash
														E	urotins Analytical Ser	vices Manager : A	ndrew Black
	S	Sample Detail		Asbestos - WA guidelines	Asbestos Absence /Presence	HOLD	oH (1:5 Aqueous extract at 25 °C as rec.)	Acid Herbicides	Metals M8	Suite B14: OCP/OPP	Moisture Set	Cation Exchange Capacity	Eurofins Suite B7				
Melbourne Laborate	ory - NATA #	1261 Site # 1254						Х	Х			Х	X	-			
Sydney Laboratory	- NATA # 126	1 Site # 18217		Х		Х	Х		Х	X	Х		X				
Mayfield Laboratory	/ - NATA # 12	61 Site # 25079 & 2	25289		X												
External Laboratory	1																
56 SS21-1	Mar 22, 2023	Soil	N23-Ma005753	6		Х											
Test Counts				30	1	9	1	1	40	10	45	1	6				



Internal Quality Control Review and Glossary

General

- 1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
- 2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
- 3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
- 4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
- 5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds
- 6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
- 7. Samples were analysed on an 'as received' basis.
- 8. Information identified on this report with blue colour, indicates data provided by customer that may have an impact on the results.
- 9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA. If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported. Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

Units

mg/kg: milligrams per kilogram	mg/L: milligrams per litre	μg/L: micrograms per litre
ppm: parts per million	ppb: parts per billion	%: Percentage
org/100 mL: Organisms per 100 millilitres	NTU: Nephelometric Turbidity Units	MPN/100 mL: Most Probable Number of organisms per 100 millilitres
CFU: Colony forming unit		

Terms

APHA	American Public Health Association
coc	Chain of Custody
СР	Client Parent - QC was performed on samples pertaining to this report
CRM	Certified Reference Material (ISO17034) - reported as percent recovery.
Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
LOR	Limit of Reporting.
LCS	Laboratory Control Sample - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
SRA	Sample Receipt Advice
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
твто	Tributyltin oxide (<i>bis</i> -tributyltin oxide) - individual tributyltin compounds cannot be identified separately in the environment however free tributyltin was measured and its values were converted stoichiometrically into tributyltin oxide for comparison with regulatory limits.
TCLP	Toxicity Characteristic Leaching Procedure
TEQ	Toxic Equivalency Quotient or Total Equivalence
QSM	US Department of Defense Quality Systems Manual Version 5.4
US EPA	United States Environmental Protection Agency
WA DWER	Sum of PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC - Acceptance Criteria

The acceptance criteria should be used as a guide only and may be different when site specific Sampling Analysis and Quality Plan (SAQP) have been implemented

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR: No Limit

Results between 10-20 times the LOR: RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

NOTE: pH duplicates are reported as a range not as RPD

Surrogate Recoveries: Recoveries must lie between 20-130% for Speciated Phenols & 50-150% for PFAS

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.4 where no positive PFAS results have been reported have been reviewed and no data was affected.

QC Data General Comments

- 1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
- 2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
- 3. pH and Free Chlorine analysed in the laboratory Analysis on this test must begin within 30 minutes of sampling. Therefore, laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
- 4. Recovery Data (Spikes & Surrogates) where chromatographic interference does not allow the determination of recovery the term "INT" appears against that analyte.
- 5. For Matrix Spikes and LCS results a dash "-" in the report means that the specific analyte was not added to the QC sample.
- 6. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.


Quality Control Results

Test	Units	Result 1	Acceptance Limits	Pass Limits	Qualifying Code
Method Blank		-			
Total Recoverable Hydrocarbons - 1999 NEPM Fractions					
TRH C6-C9	mg/L	< 0.02	0.02	Pass	
TRH C10-C14	mg/L	< 0.05	0.05	Pass	
TRH C15-C28	mg/L	< 0.1	0.1	Pass	
TRH C29-C36	mg/L	< 0.1	0.1	Pass	
Method Blank		1			
BTEX					
Benzene	mg/L	< 0.001	0.001	Pass	
Toluene	mg/L	< 0.001	0.001	Pass	
Ethylbenzene	mg/L	< 0.001	0.001	Pass	
m&p-Xylenes	mg/L	< 0.002	0.002	Pass	
o-Xylene	mg/L	< 0.001	0.001	Pass	
Xylenes - Total*	mg/L	< 0.003	0.003	Pass	
Method Blank					
Total Recoverable Hydrocarbons - 2013 NEPM Fractions					
Naphthalene	mg/L	< 0.01	0.01	Pass	
TRH C6-C10	mg/L	< 0.02	0.02	Pass	
Method Blank					
Polycyclic Aromatic Hydrocarbons					
Acenaphthene	mg/L	< 0.001	0.001	Pass	
Acenaphthylene	mg/L	< 0.001	0.001	Pass	
Anthracene	mg/L	< 0.001	0.001	Pass	
Benz(a)anthracene	mg/L	< 0.001	0.001	Pass	
Benzo(a)pyrene	mg/L	< 0.001	0.001	Pass	
Benzo(b&j)fluoranthene	mg/L	< 0.001	0.001	Pass	
Benzo(g.h.i)perylene	mg/L	< 0.001	0.001	Pass	
Benzo(k)fluoranthene	mg/L	< 0.001	0.001	Pass	
Chrysene	mg/L	< 0.001	0.001	Pass	
Dibenz(a.h)anthracene	mg/L	< 0.001	0.001	Pass	
Fluoranthene	mg/L	< 0.001	0.001	Pass	
Fluorene	mg/L	< 0.001	0.001	Pass	
Indeno(1.2.3-cd)pyrene	mg/L	< 0.001	0.001	Pass	
Naphthalene	mg/L	< 0.001	0.001	Pass	
Phenanthrene	mg/L	< 0.001	0.001	Pass	
Pyrene	mg/L	< 0.001	0.001	Pass	
Method Blank					
Total Recoverable Hydrocarbons - 2013 NEPM Fractions					
TRH >C10-C16	mg/L	< 0.05	0.05	Pass	
TRH >C16-C34	mg/L	< 0.1	0.1	Pass	
TRH >C34-C40	mg/L	< 0.1	0.1	Pass	
Method Blank					
Heavy Metals					
Arsenic	mg/L	< 0.001	0.001	Pass	
Cadmium	mg/L	< 0.0002	0.0002	Pass	
Chromium	mg/L	< 0.001	0.001	Pass	
Copper	mg/L	< 0.001	0.001	Pass	
Lead	mg/L	< 0.001	0.001	Pass	
Mercury	mg/L	< 0.0001	0.0001	Pass	
Nickel	mg/L	< 0.001	0.001	Pass	
Zinc	ma/L	< 0.005	0.005	Pass	
LCS - % Recovery			 		



Test			Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Total Recoverable Hydrocarbons -	1999 NEPM Fract	ions							
TRH C6-C9			%	87			70-130	Pass	
TRH C10-C14			%	102			70-130	Pass	
LCS - % Recovery				-					
ВТЕХ									
Benzene			%	93			70-130	Pass	
Toluene			%	95			70-130	Pass	
Ethylbenzene			%	94			70-130	Pass	
m&p-Xylenes			%	96			70-130	Pass	
o-Xylene			%	96			70-130	Pass	
Xylenes - Total*			%	96			70-130	Pass	
LCS - % Recovery				I	<u>г т</u>				
Total Recoverable Hydrocarbons -	2013 NEPM Fract	ions							
Naphthalene			%	93			70-130	Pass	
TRH C6-C10			%	87			70-130	Pass	
LCS - % Recovery				1	Г – Т				
Polycyclic Aromatic Hydrocarbons	i								
Acenaphthene			%	94			70-130	Pass	
Acenaphthylene			%	96			70-130	Pass	
Anthracene			%	89			70-130	Pass	
Benz(a)anthracene			%	88			70-130	Pass	
Benzo(a)pyrene			%	102			70-130	Pass	
Benzo(b&j)fluoranthene			%	100			70-130	Pass	
Benzo(g.h.i)perylene			%	103			70-130	Pass	
Benzo(k)fluoranthene			%	92			70-130	Pass	
Chrysene			%	98			70-130	Pass	
Dibenz(a.h)anthracene			%	96			70-130	Pass	
Fluoranthene			%	89			70-130	Pass	
Fluorene			%	94			70-130	Pass	
Indeno(1.2.3-cd)pyrene			%	96			70-130	Pass	
Naphthalene			%	96			70-130	Pass	
Phenanthrene			%	95			70-130	Pass	
Pyrene			%	91			70-130	Pass	
LCS - % Recovery				1					
Total Recoverable Hydrocarbons -	2013 NEPM Fract	ions							
TRH >C10-C16			%	104			70-130	Pass	
LCS - % Recovery				1	I I				
Heavy Metals									
Arsenic			%	96			80-120	Pass	
			%	95			80-120	Pass	
Chromium			%	96			80-120	Pass	
Copper			%	90			80-120	Pass	
Lead			%	94			80-120	Pass	
Mercury		%	109			80-120	Pass		
		%	93			80-120	Pass		
		0.4	70	88			00-120	Pass	Quelifying
Test	Lab Sample ID	Source	Units	Result 1			Limits	Limits	Code
Spike - % Recovery									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1					
1RH C10-C14	S23-Ap0000676	NCP	%	73			70-130	Pass	
Spike - % Recovery				D. 11					
Polycyclic Aromatic Hydrocarbons		NOD	0/	Result 1	<u>├</u> ──		70.400	D	
Acenaphthelese	N23-Ma0052132	NCP	%	86	├		70-130	Pass	
Acenaphthylene	N23-Ma0052132	NCP	%	90			70-130	Pass	



Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Anthracene	N23-Ma0052132	NCP	%	77			70-130	Pass	
Benz(a)anthracene	N23-Ma0071276	NCP	%	95			70-130	Pass	
Benzo(a)pyrene	N23-Ma0071276	NCP	%	110			70-130	Pass	
Benzo(b&j)fluoranthene	N23-Ma0071276	NCP	%	103			70-130	Pass	
Benzo(g.h.i)perylene	N23-Ma0071276	NCP	%	96			70-130	Pass	
Benzo(k)fluoranthene	N23-Ma0071276	NCP	%	116			70-130	Pass	
Chrysene	N23-Ma0071276	NCP	%	118			70-130	Pass	
Dibenz(a.h)anthracene	N23-Ma0071276	NCP	%	95			70-130	Pass	
Fluoranthene	N23-Ma0052132	NCP	%	70			70-130	Pass	
Fluorene	N23-Ma0052132	NCP	%	86			70-130	Pass	
Indeno(1.2.3-cd)pyrene	N23-Ma0071276	NCP	%	103			70-130	Pass	
Naphthalene	N23-Ma0052132	NCP	%	80			70-130	Pass	
Phenanthrene	N23-Ma0052132	NCP	%	84			70-130	Pass	
Pyrene	N23-Ma0052132	NCP	%	71			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons -	2013 NEPM Fract	ions		Result 1					
TRH >C10-C16	S23-Ap0000676	NCP	%	74			70-130	Pass	
Spike - % Recovery	•						•		
Heavy Metals				Result 1					
Arsenic	S23-Ma0061576	NCP	%	98			75-125	Pass	
Cadmium	S23-Ma0061576	NCP	%	97			75-125	Pass	
Chromium	S23-Ma0061576	NCP	%	93			75-125	Pass	
Copper	S23-Ma0061576	NCP	%	87			75-125	Pass	
Lead	S23-Ma0061576	NCP	%	91			75-125	Pass	
Mercury	S23-Ma0061576	NCP	%	108			75-125	Pass	
Nickel	S23-Ma0061576	NCP	%	90			75-125	Pass	
								_	
Zinc	S23-Ma0061576	NCP	%	85			75-125	Pass	
Zinc Test	S23-Ma0061576 Lab Sample ID	NCP QA Source	% Units	85 Result 1			75-125 Acceptance Limits	Pass Pass Limits	Qualifying Code
Zinc Test Duplicate	S23-Ma0061576 Lab Sample ID	NCP QA Source	% Units	85 Result 1			75-125 Acceptance Limits	Pass Pass Limits	Qualifying Code
Zinc Test Duplicate Total Recoverable Hydrocarbons -	S23-Ma0061576 Lab Sample ID 1999 NEPM Fract	NCP QA Source ions	% Units	85 Result 1 Result 1	Result 2	RPD	75-125 Acceptance Limits	Pass Pass Limits	Qualifying Code
Zinc Test Duplicate Total Recoverable Hydrocarbons - TRH C6-C9	S23-Ma0061576 Lab Sample ID 1999 NEPM Fract S23-Ma0065018	NCP QA Source ions NCP	% Units mg/L	85 Result 1 Result 1 < 0.02	Result 2 < 0.02	RPD <1	75-125 Acceptance Limits 30%	Pass Pass Limits Pass	Qualifying Code
Zinc Test Duplicate Total Recoverable Hydrocarbons - TRH C6-C9 TRH C10-C14	223-Ma0061576 Lab Sample ID 1999 NEPM Fract S23-Ma0065018 S23-Ma0062374	NCP QA Source ions NCP NCP	% Units mg/L mg/L	85 Result 1 < 0.02 < 0.05	Result 2 < 0.02 < 0.05	RPD <1 <1	75-125 Acceptance Limits 30% 30%	Pass Pass Limits Pass Pass	Qualifying Code
Zinc Test Duplicate Total Recoverable Hydrocarbons - TRH C6-C9 TRH C10-C14 TRH C15-C28	S23-Ma0061576 Lab Sample ID 1999 NEPM Fract S23-Ma0065018 S23-Ma0062374 S23-Ma0062374	NCP QA Source ions NCP NCP NCP	% Units mg/L mg/L mg/L	85 Result 1 < 0.02 < 0.05 < 0.1	Result 2 < 0.02 < 0.05 < 0.1	RPD <1 <1 <1	75-125 Acceptance Limits 30% 30% 30%	Pass Pass Limits Pass Pass Pass	Qualifying Code
Zinc Test Duplicate Total Recoverable Hydrocarbons - TRH C6-C9 TRH C10-C14 TRH C15-C28 TRH C29-C36	S23-Ma0061576 Lab Sample ID 1999 NEPM Fract S23-Ma0065018 S23-Ma0062374 S23-Ma0062374 S23-Ma0062374	NCP QA Source ions NCP NCP NCP NCP	% Units mg/L mg/L mg/L mg/L	85 Result 1 < 0.02 < 0.05 < 0.1 < 0.1	Result 2 < 0.02 < 0.05 < 0.1 < 0.1	RPD <1 <1 <1 <1 <1	75-125 Acceptance Limits 30% 30% 30% 30%	Pass Pass Limits Pass Pass Pass Pass	Qualifying Code
Zinc Test Duplicate Total Recoverable Hydrocarbons - TRH C6-C9 TRH C10-C14 TRH C15-C28 TRH C29-C36 Duplicate	S23-Ma0061576 Lab Sample ID 1999 NEPM Fract S23-Ma0065018 S23-Ma0062374 S23-Ma0062374 S23-Ma0062374	NCP QA Source ions NCP NCP NCP NCP	% Units mg/L mg/L mg/L mg/L	85 Result 1 < 0.02 < 0.05 < 0.1 < 0.1	Result 2 < 0.02 < 0.05 < 0.1 < 0.1	RPD <1 <1 <1 <1 <1	75-125 Acceptance Limits 30% 30% 30% 30%	Pass Limits Pass Pass Pass Pass	Qualifying Code
Zinc Test Duplicate Total Recoverable Hydrocarbons - TRH C6-C9 TRH C10-C14 TRH C15-C28 TRH C29-C36 Duplicate BTEX	S23-Ma0061576 Lab Sample ID 1999 NEPM Fract S23-Ma0065018 S23-Ma0062374 S23-Ma0062374 S23-Ma0062374	NCP QA Source ions NCP NCP NCP NCP	% Units mg/L mg/L mg/L mg/L	85 Result 1 < 0.02 < 0.05 < 0.1 < 0.1 Result 1	Result 2 < 0.02 < 0.05 < 0.1 < 0.1 Result 2	RPD <1 <1 <1 <1 <1 <1 RPD	75-125 Acceptance Limits 30% 30% 30% 30%	Pass Pass Limits Pass Pass Pass Pass	Qualifying Code
Zinc Test Duplicate Total Recoverable Hydrocarbons - TRH C6-C9 TRH C10-C14 TRH C15-C28 TRH C29-C36 Duplicate BTEX Benzene	S23-Ma0061576 Lab Sample ID 1999 NEPM Fract S23-Ma0065018 S23-Ma0062374 S23-Ma0062374 S23-Ma0062374 S23-Ma0065018	NCP QA Source ions NCP NCP NCP NCP	% Units mg/L mg/L mg/L mg/L mg/L	85 Result 1 < 0.02 < 0.05 < 0.1 < 0.1 Result 1 < 0.001	Result 2 < 0.02 < 0.05 < 0.1 < 0.1 Result 2 < 0.001	RPD <1 <1 <1 <1 <1 <1 RPD <1	75-125 Acceptance Limits 30% 30% 30% 30% 30%	Pass Pass Limits Pass Pass Pass Pass Pass	Qualifying Code
Zinc Test Duplicate Total Recoverable Hydrocarbons - TRH C6-C9 TRH C10-C14 TRH C15-C28 TRH C29-C36 Duplicate BTEX Benzene Toluene	S23-Ma0061576 Lab Sample ID 1999 NEPM Fract S23-Ma0065018 S23-Ma0062374 S23-Ma0062374 S23-Ma0062374 S23-Ma0065018 S23-Ma0065018	NCP QA Source ions NCP NCP NCP NCP NCP	% Units mg/L mg/L mg/L mg/L mg/L	85 Result 1 < 0.02 < 0.05 < 0.1 < 0.1 Result 1 < 0.001 < 0.001	Result 2 < 0.02 < 0.05 < 0.1 < 0.1 Result 2 < 0.001 < 0.001	RPD <1 <1 <1 <1 <1 RPD <1 <1	75-125 Acceptance Limits 30% 30% 30% 30% 30% 30%	Pass Pass Limits Pass Pass Pass Pass Pass Pass	Qualifying Code
Zinc Test Duplicate Total Recoverable Hydrocarbons - TRH C6-C9 TRH C10-C14 TRH C15-C28 TRH C29-C36 Duplicate BTEX Benzene Toluene Ethylbenzene	S23-Ma0061576 Lab Sample ID 1999 NEPM Fract S23-Ma0065018 S23-Ma0062374 S23-Ma0062374 S23-Ma0062374 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018	NCP QA Source ions NCP NCP NCP NCP NCP NCP NCP NCP	% Units mg/L mg/L mg/L mg/L mg/L mg/L	85 Result 1 < 0.02 < 0.05 < 0.1 < 0.1 Result 1 < 0.001 < 0.001 < 0.001	Result 2 < 0.02 < 0.05 < 0.1 < 0.1 Result 2 < 0.001 < 0.001 < 0.001	RPD <1 <1 <1 <1 <1 RPD <1 <1 <1 <1	75-125 Acceptance Limits 30% 30% 30% 30% 30% 30% 30%	Pass Pass Limits Pass Pass Pass Pass Pass Pass Pass	Qualifying Code
Zinc Test Duplicate Total Recoverable Hydrocarbons - TRH C6-C9 TRH C10-C14 TRH C15-C28 TRH C29-C36 Duplicate BTEX Benzene Toluene Ethylbenzene m&p-Xylenes	S23-Ma0061576 Lab Sample ID 1999 NEPM Fract S23-Ma0065018 S23-Ma0062374 S23-Ma0062374 S23-Ma0062374 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018	NCP QA Source ions NCP NCP NCP NCP NCP NCP NCP NCP NCP	% Units mg/L mg/L mg/L mg/L mg/L mg/L	85 Result 1 < 0.02 < 0.05 < 0.1 < 0.1 < 0.01 < 0.001 < 0.001 < 0.002	Result 2 < 0.02 < 0.05 < 0.1 < 0.1 < 0.1 Result 2 < 0.001 < 0.001 < 0.001 < 0.002	RPD <1	75-125 Acceptance Limits 30% 30% 30% 30% 30% 30% 30% 30%	Pass Pass Pass Pass Pass Pass Pass Pass	Qualifying Code
Zinc Test Duplicate Total Recoverable Hydrocarbons - TRH C6-C9 TRH C10-C14 TRH C15-C28 TRH C29-C36 Duplicate BTEX Benzene Toluene Ethylbenzene m&p-Xylenes o-Xylene	S23-Ma0061576 Lab Sample ID 1999 NEPM Fract S23-Ma0065018 S23-Ma0062374 S23-Ma0062374 S23-Ma0062374 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018	NCP QA Source ions NCP NCP NCP NCP NCP NCP NCP NCP NCP NCP	% Units mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	85 Result 1 < 0.02 < 0.05 < 0.1 < 0.1 < 0.01 < 0.001 < 0.001 < 0.002 < 0.001	Result 2 < 0.02 < 0.05 < 0.1 < 0.1 < 0.1 Result 2 < 0.001 < 0.001 < 0.001 < 0.002 < 0.001	RPD <1	75-125 Acceptance Limits 30% 30% 30% 30% 30% 30% 30% 30% 30%	Pass Pass Pass Pass Pass Pass Pass Pass	Qualifying Code
Zinc Test Duplicate Total Recoverable Hydrocarbons - TRH C6-C9 TRH C10-C14 TRH C15-C28 TRH C29-C36 Duplicate BTEX Benzene Toluene Ethylbenzene m&p-Xylenes o-Xylene Xylenes - Total*	S23-Ma0061576 Lab Sample ID 1999 NEPM Fract S23-Ma0065018 S23-Ma0062374 S23-Ma0062374 S23-Ma0062374 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018	NCP QA Source ions NCP NCP NCP NCP NCP NCP NCP NCP NCP NCP	% Units mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	85 Result 1 < 0.02 < 0.05 < 0.1 < 0.1 < 0.01 < 0.001 < 0.001 < 0.001 < 0.002 < 0.001 < 0.001 < 0.003	Result 2 < 0.02 < 0.05 < 0.1 < 0.1 < 0.1 Result 2 < 0.001 < 0.001 < 0.001 < 0.002 < 0.001 < 0.003	RPD <1	75-125 Acceptance Limits 30% 30% 30% 30% 30% 30% 30% 30% 30% 30%	Pass Pass Pass Pass Pass Pass Pass Pass	Qualifying Code
Zinc Test Duplicate Total Recoverable Hydrocarbons - TRH C6-C9 TRH C10-C14 TRH C15-C28 TRH C29-C36 Duplicate BTEX Benzene Toluene Ethylbenzene m&p-Xylenes o-Xylene Xylenes - Total* Duplicate	S23-Ma0061576 Lab Sample ID 1999 NEPM Fract S23-Ma0065018 S23-Ma0062374 S23-Ma0062374 S23-Ma0062374 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018	NCP QA Source ions NCP NCP NCP NCP NCP NCP NCP NCP NCP NCP	% Units mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	85 Result 1 < 0.02 < 0.05 < 0.1 < 0.1 < 0.001 < 0.001 < 0.001 < 0.001 < 0.001 < 0.001 < 0.001 < 0.001 < 0.001 < 0.003	Result 2 < 0.02 < 0.05 < 0.1 < 0.1 Result 2 < 0.001 < 0.001 < 0.001 < 0.002 < 0.001 < 0.003	RPD <1	75-125 Acceptance Limits 30% 30% 30% 30% 30% 30% 30% 30% 30% 30%	Pass Pass Pass Pass Pass Pass Pass Pass	Qualifying Code
Zinc Test Duplicate Total Recoverable Hydrocarbons - TRH C6-C9 TRH C10-C14 TRH C15-C28 TRH C29-C36 Duplicate BTEX Benzene Toluene Ethylbenzene m&p-Xylenes o-Xylene Xylenes - Total* Duplicate Total Recoverable Hydrocarbons -	S23-Ma0061576 Lab Sample ID 1999 NEPM Fract S23-Ma0065018 S23-Ma0062374 S23-Ma0062374 S23-Ma0062374 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018	NCP QA Source ions NCP NCP NCP NCP NCP NCP NCP NCP NCP NCP	% Units mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	85 Result 1 < 0.02 < 0.05 < 0.1 < 0.1 < 0.01 < 0.001 < 0.001 < 0.002 < 0.001 < 0.002 < 0.003 Result 1	Result 2 < 0.02 < 0.05 < 0.1 < 0.1 < 0.1 Result 2 < 0.001 < 0.001 < 0.001 < 0.002 < 0.001 < 0.003 Result 2	RPD <1	75-125 Acceptance Limits 30% 30% 30% 30% 30% 30% 30% 30% 30%	Pass Pass Pass Pass Pass Pass Pass Pass	Qualifying Code
Zinc Test Duplicate Total Recoverable Hydrocarbons - TRH C6-C9 TRH C10-C14 TRH C15-C28 TRH C29-C36 Duplicate BTEX Benzene Toluene Ethylbenzene m&p-Xylenes o-Xylene Xylenes - Total* Duplicate Total Recoverable Hydrocarbons - Naphthalene	S23-Ma0061576 Lab Sample ID 1999 NEPM Fract S23-Ma0065018 S23-Ma0062374 S23-Ma0062374 S23-Ma0062374 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018	NCP QA Source ions NCP NCP NCP NCP NCP NCP NCP NCP NCP NCP	% Units mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	85 Result 1 < 0.02 < 0.05 < 0.1 < 0.1 < 0.01 < 0.001 < 0.001 < 0.001 < 0.002 < 0.003 Result 1 < 0.003 Result 1 < 0.003	Result 2 < 0.02 < 0.05 < 0.1 < 0.1 < 0.1 Result 2 < 0.001 < 0.001 < 0.001 < 0.002 < 0.001 < 0.003 Result 2 < 0.01	RPD <1	75-125 Acceptance Limits 30% 30% 30% 30% 30% 30% 30% 30% 30% 30%	Pass Pass Pass Pass Pass Pass Pass Pass Pass Pass Pass Pass Pass Pass	Qualifying Code
Zinc Test Duplicate Total Recoverable Hydrocarbons - TRH C6-C9 TRH C10-C14 TRH C15-C28 TRH C29-C36 Duplicate BTEX Benzene Toluene Ethylbenzene m&p-Xylenes o-Xylene Xylenes - Total* Duplicate Total Recoverable Hydrocarbons - Naphthalene TRH C6-C10	S23-Ma0061576 Lab Sample ID 1999 NEPM Fract S23-Ma0065018 S23-Ma0062374 S23-Ma0062374 S23-Ma0062374 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018	NCP QA Source ions NCP NCP NCP NCP NCP NCP NCP NCP NCP NCP	% Units mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/	85 Result 1 < 0.02 < 0.05 < 0.1 < 0.01 < 0.001 < 0.001 < 0.002 < 0.003 Result 1 < 0.003 Result 1 < 0.003	Result 2 < 0.02 < 0.05 < 0.1 < 0.1 < 0.1 Result 2 < 0.001 < 0.001 < 0.001 < 0.002 < 0.001 < 0.003 Result 2 < 0.01 < 0.003	RPD <1	75-125 Acceptance Limits 30% 30% 30% 30% 30% 30% 30% 30% 30% 30%	Pass Pass Pass Pass Pass Pass Pass Pass Pass Pass Pass Pass Pass Pass Pass Pass Pass	Qualifying Code
Zinc Test Duplicate Total Recoverable Hydrocarbons - TRH C6-C9 TRH C10-C14 TRH C15-C28 TRH C29-C36 Duplicate BTEX Benzene Toluene Ethylbenzene m&p-Xylenes o-Xylene Xylenes - Total* Duplicate Total Recoverable Hydrocarbons - Naphthalene TRH C6-C10 Duplicate	S23-Ma0061576 Lab Sample ID 1999 NEPM Fract S23-Ma0065018 S23-Ma0062374 S23-Ma0062374 S23-Ma0062374 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018	NCP QA Source ions NCP NCP NCP NCP NCP NCP NCP NCP NCP NCP	% Units mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/	85 Result 1 < 0.02 < 0.05 < 0.1 < 0.01 < 0.001 < 0.001 < 0.001 < 0.002 < 0.001 < 0.003 Result 1 < 0.01 < 0.01 < 0.01 < 0.02	Result 2 < 0.02 < 0.05 < 0.1 < 0.1 < 0.1 Result 2 < 0.001 < 0.001 < 0.001 < 0.002 < 0.001 < 0.003 Result 2 < 0.01 < 0.003	RPD <1	75-125 Acceptance Limits 30% 30% 30% 30% 30% 30% 30% 30% 30% 30%	Pass Pass Pass Pass Pass Pass Pass Pass	Qualifying Code
Zinc Test Duplicate Total Recoverable Hydrocarbons - TRH C6-C9 TRH C10-C14 TRH C15-C28 TRH C29-C36 Duplicate BTEX Benzene Toluene Ethylbenzene m&p-Xylenes o-Xylene Xylenes - Total* Duplicate Total Recoverable Hydrocarbons - Naphthalene TRH C6-C10 Duplicate Polycyclic Aromatic Hydrocarbons	S23-Ma0061576 Lab Sample ID 1999 NEPM Fract S23-Ma0065018 S23-Ma0062374 S23-Ma0062374 S23-Ma0062374 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018	NCP QA Source ions NCP NCP NCP NCP NCP NCP NCP NCP NCP NCP	% Units mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	85 Result 1 < 0.02 < 0.05 < 0.1 < 0.1 < 0.01 < 0.001 < 0.001 < 0.001 < 0.001 < 0.001 < 0.001 < 0.003 Result 1 < 0.01 < 0.02 Result 1 < 0.02 Result 1	Result 2 < 0.02 < 0.05 < 0.1 < 0.1 < 0.1 Result 2 < 0.001 < 0.001 < 0.001 < 0.002 < 0.001 < 0.003 Result 2 < 0.01 < 0.02 Result 2	RPD <1	75-125 Acceptance Limits 30% 30% 30% 30% 30% 30% 30% 30% 30% 30%	Pass Pass Pass Pass Pass Pass Pass Pass	Qualifying Code
Zinc Test Duplicate Total Recoverable Hydrocarbons - TRH C6-C9 TRH C10-C14 TRH C15-C28 TRH C29-C36 Duplicate BTEX Benzene Toluene Ethylbenzene m&p-Xylenes o-Xylene Xylenes - Total* Duplicate Total Recoverable Hydrocarbons - Naphthalene TRH C6-C10 Duplicate Polycyclic Aromatic Hydrocarbons Acenaphthene	S23-Ma0061576 Lab Sample ID 1999 NEPM Fract S23-Ma0065018 S23-Ma0062374 S23-Ma0062374 S23-Ma0062374 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018	NCP QA Source ions NCP NCP NCP NCP NCP NCP NCP NCP NCP NCP	% Units mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	85 Result 1 < 0.02 < 0.05 < 0.1 < 0.1 < 0.01 < 0.001 < 0.001 < 0.001 < 0.002 < 0.001 < 0.003 Result 1 < 0.02 Result 1 < 0.02 Result 1 < 0.02	Result 2 < 0.02 < 0.05 < 0.1 < 0.1 < 0.01 < 0.001 < 0.001 < 0.001 < 0.002 < 0.001 < 0.003 Result 2 < 0.01 < 0.02 Result 2 < 0.01 < 0.02	RPD <1	75-125 Acceptance Limits 30% 30% 30% 30% 30% 30% 30% 30% 30% 30%	Pass Pass Pass Pass Pass Pass Pass Pass	Qualifying Code
Zinc Test Duplicate Total Recoverable Hydrocarbons - TRH C6-C9 TRH C10-C14 TRH C15-C28 TRH C29-C36 Duplicate BTEX Benzene Toluene Ethylbenzene m&p-Xylenes o-Xylene Xylenes - Total* Duplicate Total Recoverable Hydrocarbons - Naphthalene TRH C6-C10 Duplicate Polycyclic Aromatic Hydrocarbons Acenaphthene Acenaphthylene	S23-Ma0061576 Lab Sample ID 1999 NEPM Fract S23-Ma0065018 S23-Ma0062374 S23-Ma0062374 S23-Ma0062374 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018	NCP QA Source ions NCP NCP NCP NCP NCP NCP NCP NCP NCP NCP	% Units mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	85 Result 1 < 0.02 < 0.05 < 0.1 < 0.1 < 0.01 < 0.001 < 0.001 < 0.002 < 0.001 < 0.003 Result 1 < 0.01 < 0.02 Result 1 < 0.02 Result 1 < 0.02 Result 1 < 0.02	Result 2 < 0.02 < 0.05 < 0.1 < 0.1 < 0.1 Result 2 < 0.001 < 0.001 < 0.001 < 0.002 < 0.001 < 0.003 Result 2 < 0.01 < 0.02 Result 2 < 0.01 < 0.02	RPD <1	75-125 Acceptance Limits 30% 30% 30% 30% 30% 30% 30% 30% 30% 30%	Pass Pass Pass Pass Pass Pass Pass Pass	Qualifying Code
Zinc Test Duplicate Total Recoverable Hydrocarbons - TRH C6-C9 TRH C10-C14 TRH C15-C28 TRH C29-C36 Duplicate BTEX Benzene Toluene Ethylbenzene m&p-Xylenes o-Xylene Xylenes - Total* Duplicate Total Recoverable Hydrocarbons - Naphthalene TRH C6-C10 Duplicate Polycyclic Aromatic Hydrocarbons Acenaphthene Acenaphthylene Anthracene	S23-Ma0061576 Lab Sample ID S23-Ma0065018 S23-Ma0062374 S23-Ma0062374 S23-Ma0062374 S23-Ma0062374 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0052131 N23-Ma0052131 N23-Ma0052131	NCP QA Source ions NCP NCP NCP NCP NCP NCP NCP NCP NCP NCP	% Units mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/	85 Result 1 < 0.02 < 0.05 < 0.1 < 0.01 < 0.01 < 0.001 < 0.001 < 0.002 < 0.001 < 0.003 Result 1 < 0.01 < 0.02 Result 1 < 0.02 Result 1 < 0.02 Result 1 < 0.001 < 0.02 Result 1 < 0.001 < 0.001	Result 2 < 0.02 < 0.05 < 0.1 < 0.1 < 0.1 < 0.01 < 0.001 < 0.001 < 0.002 < 0.001 < 0.003 Result 2 < 0.01 < 0.02 Result 2 < 0.01 < 0.02	RPD <1	75-125 Acceptance Limits 30% 30% 30% 30% 30% 30% 30% 30% 30% 30%	Pass Pass Pass Pass Pass Pass Pass Pass	Qualifying Code
Zinc Test Duplicate Total Recoverable Hydrocarbons - TRH C6-C9 TRH C10-C14 TRH C15-C28 TRH C29-C36 Duplicate BTEX Benzene Toluene Ethylbenzene m&p-Xylenes o-Xylene Xylenes - Total* Duplicate Total Recoverable Hydrocarbons - Naphthalene TRH C6-C10 Duplicate Polycyclic Aromatic Hydrocarbons Acenaphthene Acenaphthene Acenaphthene Benz(a)anthracene	S23-Ma0061576 Lab Sample ID 1999 NEPM Fract S23-Ma0065018 S23-Ma0062374 S23-Ma0062374 S23-Ma0062374 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0052131 N23-Ma0052131 N23-Ma0052131 N23-Ma0052131	NCP QA Source ions NCP NCP NCP NCP NCP NCP NCP NCP NCP NCP	% Units mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/	85 Result 1 < 0.02 < 0.05 < 0.1 < 0.01 < 0.01 < 0.001 < 0.001 < 0.002 < 0.001 < 0.003 Result 1 < 0.01 < 0.02 Result 1 < 0.001 < 0.	Result 2 < 0.02 < 0.05 < 0.1 < 0.1 < 0.1 < 0.01 < 0.001 < 0.001 < 0.002 < 0.001 < 0.003 Result 2 < 0.01 < 0.02 < 0.01 < 0.02 Result 2 < 0.01 < 0.02	RPD <1	75-125 Acceptance Limits 30% 30% 30% 30% 30% 30% 30% 30% 30% 30%	Pass Pass Limits Pass Pass Pass Pass Pass Pass Pass Pa	Qualifying Code
Zinc Test Duplicate Total Recoverable Hydrocarbons - TRH C6-C9 TRH C10-C14 TRH C15-C28 TRH C29-C36 Duplicate BTEX Benzene Toluene Ethylbenzene m&p-Xylenes o-Xylene Xylenes - Total* Duplicate Total Recoverable Hydrocarbons - Naphthalene TRH C6-C10 Duplicate Polycyclic Aromatic Hydrocarbons Acenaphthylene Acenaphthylene Benz(a)anthracene Benz(a)apyrene	S23-Ma0061576 Lab Sample ID 1999 NEPM Fract S23-Ma0065018 S23-Ma0062374 S23-Ma0062374 S23-Ma0062374 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0065018 S23-Ma0052131 N23-Ma0052131 N23-Ma0052131 N23-Ma0052131 N23-Ma0052131	NCP QA Source ions NCP NCP NCP NCP NCP NCP NCP NCP NCP NCP	% Units mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	85 Result 1 < 0.02	Result 2 < 0.02 < 0.05 < 0.1 < 0.1 < 0.1 < 0.01 < 0.001 < 0.001 < 0.002 < 0.001 < 0.002 < 0.001 < 0.002 < 0.01 < 0.02 Result 2 < 0.01 < 0.02 Result 2 < 0.01 < 0.001 < 0.001 < 0.001 < 0.001 < 0.001 < 0.001	RPD <1	75-125 Acceptance Limits 30% 30% 30% 30% 30% 30% 30% 30% 30% 30%	Pass Pass Pass Pass Pass Pass Pass Pass	Qualifying Code



Duplicate									
Polycyclic Aromatic Hydrocarbons	5			Result 1	Result 2	RPD			
Benzo(g.h.i)perylene	N23-Ma0052131	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benzo(k)fluoranthene	N23-Ma0052131	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Chrysene	N23-Ma0052131	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Dibenz(a.h)anthracene	N23-Ma0052131	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Fluoranthene	N23-Ma0052131	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Fluorene	N23-Ma0052131	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	N23-Ma0052131	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Naphthalene	N23-Ma0052131	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Phenanthrene	N23-Ma0052131	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Pyrene	N23-Ma0052131	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons -	2013 NEPM Fract	ions		Result 1	Result 2	RPD			
TRH >C10-C16	S23-Ma0062374	NCP	mg/L	< 0.05	< 0.05	<1	30%	Pass	
TRH >C16-C34	S23-Ma0062374	NCP	mg/L	< 0.1	< 0.1	<1	30%	Pass	
TRH >C34-C40	S23-Ma0062374	NCP	mg/L	< 0.1	< 0.1	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	N23-Ma0052136	NCP	mg/L	0.003	0.003	19	30%	Pass	
Cadmium	N23-Ma0052136	NCP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass	
Chromium	N23-Ma0052136	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Copper	N23-Ma0052136	NCP	mg/L	0.002	< 0.001	59	30%	Fail	Q15
Lead	N23-Ma0052136	NCP	mg/L	0.002	0.001	45	30%	Fail	Q15
Mercury	S23-Ma0055842	NCP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass	
Nickel	N23-Ma0052136	NCP	mg/L	0.002	0.001	13	30%	Pass	
Zinc	N23-Ma0052136	NCP	mg/L	0.022	0.019	12	30%	Pass	



Comments

Sample Integrity	
Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code Description

N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs
Q15	The RPD reported passes Eurofins Environment Testing's QC - Acceptance Criteria as defined in the Internal Quality Control Review and Glossary page of this report.

Authorised by:

 Adam Bateup
 Analytical Services Manager

 Mickael Ros
 Senior Analyst-Metal

 Roopesh Rangarajan
 Senior Analyst-Organic

 Roopesh Rangarajan
 Senior Analyst-Volatile

Glenn Jackson General Manager

Final Report - this report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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Proiect	NEW23P-0009 Medowie Gardens	SGS Reference	SE245060 R0
Order Number	NEW23P-0009	Date Received	24 Mar 2023
Samples	1	Date Reported	31 Mar 2023

COMMENTS .

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

SIGNATORIES

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Sample Number SE245060.001

	S	ample Matrix Sample Date ample Name	501 21 Mar 2023 T21.3.23
Parameter	Units	LOR	
VOC's in Soil Method: AN433 Tested: 28/3/2023 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)	%	-	84
d8-toluene (Surrogate)	%	-	90
Bromofluorobenzene (Surrogate)	%	-	84

Т	-	+-		
ł	U	ld	15	

Total BTEX*	mg/kg	0.6	<0.6
Total Xylenes*	mg/kg	0.3	<0.3

Volatile Petroleum Hydrocarbons in Soil Method: AN433 Tested: 28/3/2023

TRH C6-C10	mg/kg	25	<25
TRH C6-C9	mg/kg	20	<20

Surrogates

d4-1,2-dichloroethane (Surrogate)	%	-	84
d8-toluene (Surrogate)	%	-	90
Bromofluorobenzene (Surrogate)	%	-	84



		Sample Number SE24506 Sample Matrix Soil Sample Date 21 Mar 2 Sample Name T21.3.			er SE245060.001 ix Soil te 21 Mar 2023 ie T21.3.23	
Parameter		Units		LOR		
Volatile Petroleum Hydrocarbons in Soil	Method: AN4	133 Tested: 28/	Tested: 28/3/2023		(continued)	
VPH F Bands						
Benzene (F0)		mg/kg		0.1	<0.1	
TRH C6-C10 minus BTEX (F1)		mg/kg		25	<25	

TRH (Total Recoverable Hydrocarbons) in Soil Method: AN403 Tested: 28/3/2023

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
TRH >C10-C40 Total (F bands)	mg/kg	210	<210

TRH F Bands

TRH >C10-C16	mg/kg	25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120

PAH (Polynuclear Aromatic Hydrocarbons) in Soil Method: AN420 Tested: 28/3/2023

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	0.2
Pyrene	mg/kg	0.1	0.2
Benzo(a)anthracene	mg/kg	0.1	<0.1
Chrysene	mg/kg	0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1
Carcinogenic PAHs, BaP TEQ <lor=0*< td=""><td>TEQ (mg/kg)</td><td>0.2</td><td><0.2</td></lor=0*<>	TEQ (mg/kg)	0.2	<0.2
Carcinogenic PAHs, BaP TEQ <lor=lor 2*<="" td=""><td>TEQ (mg/kg)</td><td>0.2</td><td><0.2</td></lor=lor>	TEQ (mg/kg)	0.2	<0.2
Carcinogenic PAHs, BaP TEQ <lor=lor*< td=""><td>TEQ (mg/kg)</td><td>0.3</td><td><0.3</td></lor=lor*<>	TEQ (mg/kg)	0.3	<0.3
Total PAH (18)	mg/kg	0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8



	Si	ample Number Sample Matrix Sample Date Sample Name	SE245060.001 Soil 21 Mar 2023 T21.3.23
Parameter	Units	LOR	
AH (Polynuclear Aromatic Hydrocarbons) in Soil	Method: AN420 Test	ed: 28/3/2023	(continued)
Surrogates			
d5-nitrobenzene (Surrogate)	%	-	111
2-fluorobiphenyl (Surrogate)	%	-	98
d14-p-terphenyl (Surrogate)	%	% -	
Total Recoverable Elements in Soil/Waste Solids/M Arsenic, As	aterials by ICPOES Me	ethod: AN040/	AN320 Tested 9
Cadmium, Cd	mg/kg	0.3	<0.3
Chromium, Cr	mg/kg	0.5	420
Copper, Cu	mg/kg	0.5	14
Nickel, Ni	mg/kg	0.5	5.6
Lead, Pb	mg/kg	1	24
Zinc, Zn	mg/kg	2	78

Mercury in Soil Method: AN312 Tested: 29/3/2023

Mercury	mg/kg	0.05	<0.05

Moisture Content Method: AN002 Tested: 28/3/2023

% Moisture	%w/w	1	8.9



MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample. DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage.* Where the DUP RPD is 'NA', the results are less than the LOR and thus the RPD is not applicable.

Mercury in Soil Method: ME-(AU)-[ENV]AN312

Parameter	QC	Units	LOR	MB	DUP %RPD	LCS	MS
	Reference					%Recovery	%Recovery
Mercury	LB275321	mg/kg	0.05	<0.05	0%	109%	105%

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

Parameter	QC Reference	Units	LOR	DUP %RPD
% Moisture	LB275210	%w/w	1	15 - 17%

PAH (Polynuclear Aromatic Hydrocarbons) in Soil Method: ME-(AU)-[ENV]AN420

Parameter	QC	Units	LOR	MB	DUP %RPD	LCS	MS
	Reference					%Recovery	%Recovery
Naphthalene	LB275206	mg/kg	0.1	<0.1	0%	111%	109%
2-methylnaphthalene	LB275206	mg/kg	0.1	<0.1	0%	NA	NA
1-methylnaphthalene	LB275206	mg/kg	0.1	<0.1	0%	NA	NA
Acenaphthylene	LB275206	mg/kg	0.1	<0.1	0%	113%	111%
Acenaphthene	LB275206	mg/kg	0.1	<0.1	0%	110%	106%
Fluorene	LB275206	mg/kg	0.1	<0.1	0%	NA	NA
Phenanthrene	LB275206	mg/kg	0.1	<0.1	0%	105%	102%
Anthracene	LB275206	mg/kg	0.1	<0.1	0%	113%	104%
Fluoranthene	LB275206	mg/kg	0.1	<0.1	10 - 11%	116%	107%
Pyrene	LB275206	mg/kg	0.1	<0.1	5 - 8%	116%	102%
Benzo(a)anthracene	LB275206	mg/kg	0.1	<0.1	0%	NA	NA
Chrysene	LB275206	mg/kg	0.1	<0.1	0%	NA	NA
Benzo(b&j)fluoranthene	LB275206	mg/kg	0.1	<0.1	0%	NA	NA
Benzo(k)fluoranthene	LB275206	mg/kg	0.1	<0.1	0%	NA	NA
Benzo(a)pyrene	LB275206	mg/kg	0.1	<0.1	0%	108%	95%
Indeno(1,2,3-cd)pyrene	LB275206	mg/kg	0.1	<0.1	0%	NA	NA
Dibenzo(ah)anthracene	LB275206	mg/kg	0.1	<0.1	0%	NA	NA
Benzo(ghi)perylene	LB275206	mg/kg	0.1	<0.1	0%	NA	NA
Carcinogenic PAHs, BaP TEQ <lor=0*< td=""><td>LB275206</td><td>TEQ (mg/kg)</td><td>0.2</td><td><0.2</td><td>0%</td><td>NA</td><td>NA</td></lor=0*<>	LB275206	TEQ (mg/kg)	0.2	<0.2	0%	NA	NA
Carcinogenic PAHs, BaP TEQ <lor=lor 2*<="" td=""><td>LB275206</td><td>TEQ (mg/kg)</td><td>0.2</td><td><0.2</td><td>0%</td><td>NA</td><td>NA</td></lor=lor>	LB275206	TEQ (mg/kg)	0.2	<0.2	0%	NA	NA
Carcinogenic PAHs, BaP TEQ <lor=lor*< td=""><td>LB275206</td><td>TEQ (mg/kg)</td><td>0.3</td><td><0.3</td><td>0%</td><td>NA</td><td>NA</td></lor=lor*<>	LB275206	TEQ (mg/kg)	0.3	<0.3	0%	NA	NA
Total PAH (18)	LB275206	mg/kg	0.8	<0.8	9 - 74%	NA	NA
Total PAH (NEPM/WHO 16)	LB275206	mg/kg	0.8	<0.8			

Surrogates							
Parameter	QC	Units	LOR	MB	DUP %RPD	LCS	MS
	Reference					%Recovery	%Recovery
d5-nitrobenzene (Surrogate)	LB275206	%	-	104%	0 - 1%	105%	113%
2-fluorobiphenyl (Surrogate)	LB275206	%	-	98%	1 - 3%	92%	100%
d14-p-terphenyl (Surrogate)	LB275206	%	-	112%	1 - 2%	104%	103%



MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample. DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : the absolute difference of the two results divided by the average of the two results as a percentage. Where the DUP RPD is 'NA', the results are less than the LOR and thus the RPD is not applicable.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES Method: ME-(AU)-[ENV]AN040/AN320

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recoverv	MS %Recoverv
Arsenic, As	LB275320	mg/kg	1	<1	13 - 22%	110%	89%
Cadmium, Cd	LB275320	mg/kg	0.3	<0.3	0%	97%	85%
Chromium, Cr	LB275320	mg/kg	0.5	<0.5	7 - 8%	106%	90%
Copper, Cu	LB275320	mg/kg	0.5	<0.5	2 - 14%	111%	90%
Nickel, Ni	LB275320	mg/kg	0.5	<0.5	3 - 14%	103%	86%
Lead, Pb	LB275320	mg/kg	1	<1	4 - 18%	104%	89%
Zinc, Zn	LB275320	mg/kg	2	<2.0	0 - 13%	104%	87%

TRH (Total Recoverable Hydrocarbons) in Soil Method: ME-(AU)-[ENV]AN403

Parameter	QC	Units	LOR	MB	DUP %RPD	LCS	MS
	Reference					%Recovery	%Recovery
TRH C10-C14	LB275206	mg/kg	20	<20	0 - 34%	129%	134%
TRH C15-C28	LB275206	mg/kg	45	<45	0 - 119%	138%	160%
TRH C29-C36	LB275206	mg/kg	45	<45	0 - 103%	96%	317%
TRH C37-C40	LB275206	mg/kg	100	<100	0 - 12%	NA	NA
TRH C10-C36 Total	LB275206	mg/kg	110	<110	0 - 106%	NA	NA
TRH >C10-C40 Total (F bands)	LB275206	mg/kg	210	<210	0 - 124%	NA	NA

TRH F Bands

Parameter	QC	Units	LOR	MB	DUP %RPD	LCS	MS
	Reference					%Recovery	%Recovery
TRH >C10-C16	LB275206	mg/kg	25	<25	0 - 9%	132%	100%
TRH >C10-C16 - Naphthalene (F2)	LB275206	mg/kg	25	<25	0 - 9%	NA	NA
TRH >C16-C34 (F3)	LB275206	mg/kg	90	<90	0 - 121%	130%	291%
TRH >C34-C40 (F4)	LB275206	mg/kg	120	<120	0 - 61%	86%	NA

VOC's in Soil Method: ME-(AU)-[ENV]AN433

Monocyclic Aromatic Hydrocarbons

Parameter	QC	Units	LOR	MB	DUP %RPD	LCS	MS
	Reference					%Recovery	%Recovery
Benzene	LB275205	mg/kg	0.1	<0.1	0%	99%	109%
Toluene	LB275205	mg/kg	0.1	<0.1	0%	96%	111%
Ethylbenzene	LB275205	mg/kg	0.1	<0.1	0%	97%	112%
m/p-xylene	LB275205	mg/kg	0.2	<0.2	0%	93%	107%
o-xylene	LB275205	mg/kg	0.1	<0.1	0%	99%	117%

Polycyclic VOCs

Parameter	QC	Units	LOR	MB	DUP %RPD	LCS	MS
	Reference					%Recovery	%Recovery
Naphthalene (VOC)*	LB275205	mg/kg	0.1	<0.1	0%	NA	NA

Surrogates

Parameter	QC	Units	LOR	MB	DUP %RPD	LCS	MS
	Reference					%Recovery	%Recovery
d4-1,2-dichloroethane (Surrogate)	LB275205	%	-	97%	4 - 5%	96%	81%
d8-toluene (Surrogate)	LB275205	%	-	100%	3 - 7%	99%	87%
Bromofluorobenzene (Surrogate)	LB275205	%	-	91%	2 - 7%	101%	94%

Totals

Parameter	QC	Units	LOR	MB	DUP %RPD	LCS	MS
	Reference					%Recovery	%Recovery
Total BTEX*	LB275205	mg/kg	0.6	<0.6	0%	NA	NA
Total Xylenes*	LB275205	mg/kg	0.3	<0.3	0%	NA	NA



MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample. DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : the absolute difference of the two results divided by the average of the two results as a percentage. Where the DUP RPD is 'NA', the results are less than the LOR and thus the RPD is not applicable.

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

Parameter	QC	Units	LOR	MB	DUP %RPD	LCS	MS
	Reference					%Recovery	%Recovery
TRH C6-C10	LB275205	mg/kg	25	<25	0%	95%	130%
TRH C6-C9	LB275205	mg/kg	20	<20	0%	97%	131%

Surrogates

Parameter	QC	Units	LOR	MB	DUP %RPD	LCS	MS
	Reference					%Recovery	%Recovery
d4-1,2-dichloroethane (Surrogate)	LB275205	%	-	97%	4 - 5%	96%	81%
d8-toluene (Surrogate)	LB275205	%	-	100%	3 - 7%	99%	87%
Bromofluorobenzene (Surrogate)	LB275205	%	-	91%	2 - 7%	101%	94%

VPH F Bands

Parameter	QC	Units	LOR	MB	DUP %RPD	LCS	MS
	Reference					%Recovery	%Recovery
Benzene (F0)	LB275205	mg/kg	0.1	<0.1	0%	NA	NA
TRH C6-C10 minus BTEX (F1)	LB275205	mg/kg	25	<25	0%	94%	140%



METHOD SUMMARY

- METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating
	basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete
	the digestion of metals and then filtered for analysis by ASS or ICP as per USEPA Method 200.8.
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete
	the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample
	basis. Dased on USEPA method 200.0 and 60 10C.
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
	Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA
	3112/3500
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent
	extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the
	combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36
	and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). F2 is reported
	directly and also corrected by subtracting Naphthalene (from VOC method AN433) where available.
AN403	Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Recoverable Hydrocarbons - Silica (TRH-Si) follows the same method of
	analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of
	analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents .
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken.
	This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are
	present at sufficient levels, dependent on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and
	USEPA 3500C and 8270D).
	Total PAH calculated from individual analyte detections at or above the limit of reporting.
AN420	Carcinogenic PAHs may be expressed as Benzo (a)pyrene equivalents by applying the BaP toxicity equivalence
	PAHs. The sum is reported three ways, the first assuming all <lor <<="" all="" are="" assuming="" results="" second="" td="" the="" zero,=""></lor>
	LOR results are half the LOR and the third assuming all <lor are="" lor.<="" results="" td="" the=""></lor>
AN433	VOCs and CR-C9 Hydrocarbons by CC-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 .

IS Insufficient sample for analysis. LOR Limit of Reporting LNR Sample listed, but not received. Raised or Lowered Limit of Reporting ↑↓ NATA accreditation does not cover the QFH QC result is above the upper tolerance performance of this service QFI QC result is below the lower tolerance ++ Indicative data, theoretical holding time exceeded. The sample was not analysed for this analyte *** Indicates that both * and ** apply. NVI Not Validated

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received. Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calcuated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the "Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.

Note that in terms of units of radioactivity:

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

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: <u>www.sgs.com.au/en-gb/environment-health-and-safety</u>.

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

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STATEMENT OF QA/QC PERFORMANCE

CLIENT DETAILS		LABORATORY DETAILS	
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Email	emmacoleman@qualtest.com.au	Email	au.environmental.sydney@sgs.com
Project	NEW23P-0009 Medowie Gardens	SGS Reference	SE245060 R0
Order Number	NEW23P-0009	Date Received	24 Mar 2023
Samples	1	Date Reported	31 Mar 2023

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document. This QA/QC Statement must be read in conjunction with the referenced Analytical Report. The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Duplicate	TRH (Total Recoverable Hydrocarbons) in Soil	5 items
Matrix Spike	TRH (Total Recoverable Hydrocarbons) in Soil	3 items
	Volatile Petroleum Hydrocarbons in Soil	3 items

Sample counts by matrix	1 Soil	Type of documentation received	COC	
Date documentation received	24/3/2023	Samples received in good order	Yes	
Samples received without headspace	Yes	Sample temperature upon receipt	19.6°C	
Sample container provider	Client	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			

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Environment, Health and Safety

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SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in Green when within suggested criteria or Red with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Mercury in Soil							Method: I	ME-(AU)-[ENVIAN312
Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
T21.3.23	SE245060.001	LB275321	21 Mar 2023	24 Mar 2023	18 Apr 2023	29 Mar 2023	18 Apr 2023	31 Mar 2023
Moisture Content							Method:	ME-(AU)-[ENV]AN002
Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
T21.3.23	SE245060.001	LB275210	21 Mar 2023	24 Mar 2023	04 Apr 2023	28 Mar 2023	02 Apr 2023	30 Mar 2023

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed	
T21.3.23	SE245060.001	LB275206	21 Mar 2023	24 Mar 2023	04 Apr 2023	28 Mar 2023	07 May 2023	30 Mar 2023	

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
T21.3.23	SE245060.001	LB275320	21 Mar 2023	24 Mar 2023	17 Sep 2023	29 Mar 2023	17 Sep 2023	31 Mar 2023
FRH (Total Recoverable H	Hydrocarbons) in Soil						Method:	ME-(AU)-[ENV]AN4
<mark>FRH (Total Recoverable H</mark> Sample Name	Hydrocarbons) in Soil Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Method: Analysis Due	ME-(AU)-[ENV]AN4 Analysed

VOU'S IN SOIL			Method: ME-				ME-(AU)-[ENV]AN433	
Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
T21.3.23	SE245060.001	LB275205	21 Mar 2023	24 Mar 2023	04 Apr 2023	28 Mar 2023	04 Apr 2023	30 Mar 2023

Volatile Petroleum Hydrocarbons in Soil Method: ME-(AU)-[EN							ME-(AU)-[ENV]AN433	
Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
T21.3.23	SE245060.001	LB275205	21 Mar 2023	24 Mar 2023	04 Apr 2023	28 Mar 2023	04 Apr 2023	30 Mar 2023



SURROGATES

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

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

PAH (Polynuclear Aromatic Hydrocarbons) in Soil Method: ME-(AU)-[ENV]AN420 Parameter Sample Nam Sample Numb Units Criteria Recovery % 2-fluorobiphenyl (Surrogate) SE245060.001 70 - 130% T21.3.23 % 98 d14-p-terphenyl (Surrogate) T21.3.23 SE245060.001 % 70 - 130% 106 SE245060.001 d5-nitrobenzene (Surrogate) T21.3.23 % 70 - 130% 111 Method: ME-(AU)-[ENV]AN433 VOC's in Soil Parameter Sample Name Sample Number Units Criteria Recovery % Bromofluorobenzene (Surrogate) T21.3.23 SE245060.001 60 - 130% 84 % d4-1,2-dichloroethane (Surrogate) T21.3.23 SE245060.001 60 - 130% 84 % d8-toluene (Surrogate) T21.3.23 SE245060.001 % 60 - 130% 90 Volatile Petroleum Hydrocarbons in Soil Method: ME-(AU)-[ENV]AN433 Parameter Units Criteria Recovery % Sample Name Sample Numb Bromofluorobenzene (Surrogate) T21.3.23 SE245060.001 60 - 130% % 84 d4-1,2-dichloroethane (Surrogate) T21.3.23 SE245060.001 % 60 - 130% 84 T21.3.23 SE245060.001 60 - 130% 90 d8-toluene (Surrogate) %



METHOD BLANKS

SE245060 R0

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

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

Mercury in Soil		Method: ME-(AU)-[ENV]				
Sample Number	Parameter	Units	LOR	Result		
LB275321.001	Mercury	mg/kg	0.05	<0.05		

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

PAH (Polynuclear Aromatic	c Hydrocarbons) in Soil			Metho	d: ME-(AU)-[ENV]AN420
Sample Number		Parameter	Units	LOR	Result
LB275206.001		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)	%	-	104
		2-fluorobiphenyl (Surrogate)	%	-	98
		d14-p-terphenyl (Surrogate)	%	-	112
Total Recoverable Elemen	ts in Soil/Waste Solids/M	aterials by ICPOES		Method: ME-	(AU)-[ENV]AN040/AN320
Sample Number		Parameter	Units	LOR	Result
L B275320 001		Arsonic As	ma/ka	1	-1

LB275320.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0

TRH (Total Recoverable Hydrocarbons) in Soil Method: ME-(AU)-[ENV]AN403 Sample Number Parameter Units LOR Result LB275206.001 TRH C10-C14 mg/kg 20 <20 TRH C15-C28 45 <45 mg/kg TRH C29-C36 <45 45 mg/kg TRH C37-C40 mg/kg 100 <100 TRH C10-C36 Total 110 <110 mg/kg

VOC's in Soil Method: ME-(AU)-[ENV]AN433 Result Sample Number Units LOR Parameter LB275205.001 Monocyclic Aromatic Benzene mg/kg 0.1 <0.1 Hydrocarbons Toluene 0.1 <0.1 mg/kg Ethylbenzene 0.1 <0.1 mg/kg m/p-xylene mg/kg 0.2 <0.2 o-xylene 0.1 <0.1 mg/kg Polycyclic VOCs Naphthalene (VOC)* 0.1 < 0.1 mg/kg Surrogates d4-1,2-dichloroethane (Surrogate) % 97 d8-toluene (Surrogate) % 100 Bromofluorobenzene (Surrogate) % 91 Totals Total BTEX* mg/kg 0.6 <0.6 Volatile Petroleum Hydrocarbons in Soil Method: ME-(AU)-[ENV]AN433 Sample Number Units LOR Result Parameter LB275205.001 TRH C6-C9 mg/kg 20 <20 Surrogates d4-1,2-dichloroethane (Surrogate) % 97



DUPLICATES

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

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

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may give a different calculated RPD.

Mercury in Soil Method: ME-(AU)-[E							ENVJAN312	
Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE245011.010	LB275321.014	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE245061.005	LB275321.024	Mercury	mg/kg	0.05	<0.05	<0.05	157	0

Moisture Content

Moisture Content						Meth	od: ME-(AU)-	[ENV]AN002
Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE245060.001	LB275210.019	% Moisture	%w/w	· 1	8.9	7.5	42	17
SE245159.029	LB275210.011	% Moisture	%w/w	1	14.1	16.4	37	15

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Original Duplicate Parameter Units LOR Original Duplicate SE245080.001 LB275206.021 Naphthalene mg/kg 0.1 <0.1 <0.1 <0.1 2-methylnaphthalene mg/kg 0.1 <0.1 <0.1 <0.1 <0.1 1-methylnaphthalene mg/kg 0.1 <0.1 <0.1 <0.1 <0.1 Acenaphthylene mg/kg 0.1 <0.1 <0.1 <0.1 <0.1 Fluorene mg/kg 0.1 <0.1 <0.1 <0.1 <0.1 Fluorene mg/kg 0.1 <0.1 <0.1 <0.1 <0.1 Privene mg/kg 0.1 <0.1 <0.1 <0.1 <0.1 Fluorene mg/kg 0.1 <0.1 <0.1 <0.1 <0.1 Pyrene mg/kg 0.1 <0.1 <0.1 <0.1 <0.1 Benzo(k)fluoranthene mg/kg 0.1 <0.1 <0.1 <0.1 <0.1	Criteria % 200 200 200 200 200 200 200 20	RPD % 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
S245080.001 LB275208.021 Naphthalene mg/kg 0.1 <0.1	200 200 200 200 200 200 200 200 200 200	0 0 0 0 0 0 0 0 0 10 8 0 0 0 0 0 0
2-methylnaphthalene mg/kg 0.1 <0.1	200 200 200 200 200 200 200 90 90 88 88 163 174 141 200 150 159	0 0 0 0 0 0 0 10 8 0 0 0 0 0 0
1-methylinaphthalene mg/kg 0.1 <0.1	200 200 200 200 200 90 88 163 174 141 200 150	0 0 0 0 0 0 0 10 8 0 0 0 0 0 0 0
Acenaphthylene mg/kg 0.1 <0.1 <0.1 Acenaphthene mg/kg 0.1 <0.1	200 200 200 200 90 88 163 174 141 200 150	0 0 0 10 8 0 0 0 0 0 0
Acenaphthene mg/kg 0.1 <0.1 <0.1 Fluorene mg/kg 0.1 <0.1	200 200 200 90 88 163 174 141 200 150	0 0 0 10 8 0 0 0 0 0
Fluorene mg/kg 0.1 <0.1 <0.1 Phenanthrene mg/kg 0.1 <0.1	200 200 90 88 163 174 141 200 150	0 0 10 8 0 0 0 0 0
Phenanthrene mg/kg 0.1 <0.1 <0.1 Anthracene mg/kg 0.1 <0.1	200 200 90 88 163 174 141 200 150 159	0 0 10 8 0 0 0 0 0
Anthracene mg/kg 0.1 <0.1 <0.1 Fluoranthene mg/kg 0.1 0.2 0.2 Pyrene mg/kg 0.1 0.2 0.2 Benzo(a)anthracene mg/kg 0.1 <0.1	200 90 88 163 174 141 200 150 159	0 10 8 0 0 0 0
Fluoranthene mg/kg 0.1 0.2 0.2 Pyrene mg/kg 0.1 0.2 0.2 Benzo(a)anthracene mg/kg 0.1 <0.1	90 88 163 174 141 200 150 159	10 8 0 0 0 0
Pyrene mg/kg 0.1 0.2 0.2 Benzo(a)anthracene mg/kg 0.1 <0.1	88 163 174 141 200 150 159	8 0 0 0 0
Benzo(a)anthracene mg/kg 0.1 <0.1 <0.1 Chrysene mg/kg 0.1 <0.1	163 174 141 200 150 159	0 0 0 0
Chrysene mg/kg 0.1 <0.1 <0.1 Benzo(b&j)fluoranthene mg/kg 0.1 <0.1	174 141 200 150 159	0 0 0
Benzo(b&j)fluoranthene mg/kg 0.1 <0.1 <0.1 Benzo(k)fluoranthene mg/kg 0.1 <0.1	141 200 150 159	0
Benzo(k)fluoranthene mg/kg 0.1 <0.1 <0.1 Benzo(a)pyrene mg/kg 0.1 <0.1	200 150 159	0
Benzo(a)pyrene mg/kg 0.1 <0.1 <0.1 Indeno(1,2,3-cd)pyrene mg/kg 0.1 <0.1	150 159	
Indeno(1,2,3-cd)pyrene mg/kg 0.1 <0.1 <0.1 Dibenzo(ah)anthracene mg/kg 0.1 <0.1	159	0
Dibenzo(ah)anthracene mg/kg 0.1 <0.1 <0.1 Benzo(ghi)perylene mg/kg 0.1 <0.1		0
Benzo(ghi)perylene mg/kg 0.1 <0.1 <0.1 Carcinogenic PAHs, BaP TEQ <lor=0*< td=""> mg/kg 0.2 <0.2</lor=0*<>	200	0
Carcinogenic PAHs, BaP TEQ <lor=0*< th=""> mg/kg 0.2 <0.2 <0.2 Carcinogenic PAHs, BaP TEQ <lor=lor 2*<="" td=""> mg/kg 0.2 <0.2</lor=lor></lor=0*<>	141	0
Carcinogenic PAHs, BaP TEQ <lor=lor 2*<="" th=""> mg/kg 0.2 <0.2 <0.2 Carcinogenic PAHs, BaP TEQ <lor=lor*< td=""> mg/kg 0.3 <0.3</lor=lor*<></lor=lor>	200	0
Carcinogenic PAHs, BaP TEQ <lor=lor*< th=""> mg/kg 0.3 <0.3 <0.3 Total PAH (18) mg/kg 0.8 <0.8</lor=lor*<>	175	0
Total PAH (18) ma/ka 0.8 <0.8 <0.8	134	0
	59	9
Surrogates d5-nitrobenzene (Surrogate) mg/kg - 0.6 0.6	30	1
2-fluorobiphenyl (Surrogate) mg/kg - 0.5 0.5	30	1
d14-p-terphenyl (Surrogate) mg/kg - 0.5 0.5	30	2
SE245159.029 LB275206.014 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	189	0
Anthracene mg/kg 0.1 <0.1 <0.1	197	0
Fluoranthene mg/kg 0.1 <0.1 0.1	144	11
Pyrene mg/kg 0.1 <0.1 0.1	151	5
Benzo(a)anthracene mg/kg 0.1 <0.1 <0.1	167	0
Chrysene mg/kg 0.1 <0.1 <0.1	195	0
Benzo(b&i)fluoranthene mg/kg 0.1 <0.1 <0.1	198	0
Benzo(k)fluoranthene mg/kg 0.1 <0.1 <0.1	192	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*< th=""> mg/kg 0.2 <0.2 <0.2</lor=0*<>	200	0
Carcinogenic PAHs, BaP TEQ <lor=lor 2*<="" th=""> mg/kg 0.2 <0.2 <0.2</lor=lor>	175	0
Carcinogenic PAHs, BaP TEQ <lor=lor*< th=""> mg/kg 0.3 <0.3 <0.3</lor=lor*<>	134	0
Total PAH (18) mg/kg 0.8 <0.8 <0.8	122	74
Surrogates d5-nitrobenzene (Surrogate) mg/kg - 0.6 0.6	30	0
2-fluorobiphenyl (Surrogate) mg/kg - 0.5 0.5		



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 give a different calculated RPD.

PAH (Polynuclear A	vromatic Hydrocarbo	ons) in Soil (continue	əd)				Meth	nod: ME-(AU)-	[ENV]AN420
Original SE245159.029	Duplicate LB275206.014	Surrogates	Parameter d14-p-terphenyl (Surrogate)	Units mg/kg	LOR	Original 0.6	Duplicate 0.6	Criteria % 30	RPD %
Total Recoverable E	Elements in Soil/Wa	ste Solids/Materials	by ICPOES				Method: ME	-(AU)-[ENV]A	N040/AN320
Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE245011.010	LB275320.014		Arsenic, As	mg/kg	1	6	5	48	13
			Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
			Chromium, Cr	mg/kg	0.5	13	13	34	7
			Copper, Cu	mg/kg	0.5	7.9	6.9	37	14
			Nickel, Ni	mg/kg	0.5	7.1	6.1	38	14
			Lead, Pb	mg/kg	1	51	43	32	18
			Zinc, Zn	mg/kg	2	54	47	34	13
SE245061.005	LB275320.024		Arsenic, As	mg/kg	1	4	4	55	22
			Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
			Chromium, Cr	mg/kg	0.5	370	400	30	8
			Copper, Cu	ma/ka	0.5	24	25	32	2
			Nickel, Ni	ma/ka	0.5	85	88	31	3
			Lead. Pb	ma/ka	1	13	13	38	4
			Zinc. Zn	ma/ka	2	47	47	34	0
TRH (Total Recover	rable Hydrocarbons	i) in Soll					Mett	nod: ME-(AU)-	ENVIAN40
Original	Duplicate	<i>,</i>	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE245060.001	L B275206 021		TRH C10-C14	ma/ka	20	<20	<20	200	0
02240000.001	20210200.021		TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	ma/ka	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<100	<100	200	0
			TRH >C10-C40 Total (E bands)	mg/kg	210	<210	<210	200	0
		TPH E Bands		mg/kg	210	<210	<210	200	0
		TRITI Danus	TRH >C10-C16 - Nanhthalene (F2)	ma/ka	25	<25	<25	200	0
			TRH >C16-C34 (F3)	ma/ka	90	<90	<90	200	0
			TPH >C34_C40 (F4)	mg/kg	120	<120	<120	200	
SE245150.020	1 8275206 014		TPH C10 C14	mg/kg	20	40	20	200	24
32243139.029	LB275200.014		TPH C15 C29	mg/kg	20	200	20	40	110 @
			TPH C20-C36	mg/kg	45	420	140	45	103 @
			TPH C27 C40	mg/kg	40	420	<100	40	103 @
			TPH C10 C26 Total	mg/kg	110	040	260	F0	106 @
				mg/kg	210	050	200	50	124 @
				mg/kg	210	50	220 E0	75	124 @
		TRH F Ballus		mg/kg	25	52	50	75	9
			TRH >C10-C16 - Naphthalene (F2)	Hig/kg	25	670	170	75	424 @
			TRH >C16-C34 (F3)	mg/kg	90	070	170	52	121 @
			TRH >C34-C40 (F4)	mg/kg	120	230	<120	114	
VOC's in Soil							Mett	nod: ME-(AU)-	[ENV]AN433
Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE245060.001	LB275205.023	Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
		Polycyclic	Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.4	8.8	50	4
			d8-toluene (Surrogate)	mg/kg	-	9.0	9.2	50	3
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.4	8.5	50	2
		Totals	Total BTEX*	mg/kg	0.6	<0.6	<0.6	200	0
			Total Xylenes*	mg/kg	0.3	<0.3	<0.3	200	0
SE245159.029	LB275205.014	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	-	7.6	7.2	50	5



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 give a different calculated RPD.

VOC's in Soil (cor	ntinued)						Meth	nod: ME-(AU)-	[ENV]AN433
Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE245159.029	.029 LB275205.014 Surrogates d8-toluene (Surrogate) Bromofluorobenzene (Surrogate)		mg/kg	-	8.6	8.0	50	7	
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.2	7.7	50	7
		Totals	Total BTEX*	mg/kg	0.6	<0.6	<0.6	200	0
			Total Xylenes*	mg/kg	0.3	<0.3	<0.3	200	0
Volatile Petroleum	Hydrocarbons in Soil	l					Meth	nod: ME-(AU)-	[ENV]AN433
Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE245060.001	LB275205.023		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.4	8.8	30	4
			d8-toluene (Surrogate)	mg/kg	-	9.0	9.2	30	3
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.4	8.5	30	2
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE245159.029	LB275205.014		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	7.6	7.2	30	5
			d8-toluene (Surrogate)	mg/kg	-	8.6	8.0	30	7
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.2	7.7	30	7
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	ma/ka	25	<25	<25	200	0



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

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					I	Nethod: ME-(A	U)-[ENV]AN312
Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB275321.002	Mercury	mg/kg	0.05	0.22	0.2	80 - 120	109

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB275206.002		Naphthalene	mg/kg	0.1	4.4	4	60 - 140	111
		Acenaphthylene	mg/kg	0.1	4.5	4	60 - 140	113
		Acenaphthene	mg/kg	0.1	4.4	4	60 - 140	110
		Phenanthrene	mg/kg	0.1	4.2	4	60 - 140	105
		Anthracene	mg/kg	0.1	4.5	4	60 - 140	113
		Fluoranthene	mg/kg	0.1	4.6	4	60 - 140	116
		Pyrene	mg/kg	0.1	4.6	4	60 - 140	116
		Benzo(a)pyrene	mg/kg	0.1	4.3	4	60 - 140	108
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	105
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	92
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	104
Total Recoverable I	Elements in Soil/V	/aste Solids/Materials by ICPOES				Method:	ME-(AU)-[EN	VJAN040/AN320
Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB275320.002		Arsenic, As	mg/kg	1	350	318.22	80 - 120	110
		Cadmium, Cd	mg/kg	0.3	4.7	4.81	70 - 130	97
		Chromium, Cr	mg/kg	0.5	41	38.31	80 - 120	106
		Copper, Cu	mg/kg	0.5	320	290	80 - 120	111
		Nickel, Ni	mg/kg	0.5	190	187	80 - 120	103
		Lead, Pb	mg/kg	1	94	89.9	80 - 120	104
		Zinc, Zn	mg/kg	2	280	273	80 - 120	104
TRH (Total Recove	rable Hydrocarboi	ns) in Soli				N	Method: ME-(A	U)-[ENV]AN403
Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB275206.002		TRH C10-C14	mg/kg	20	52	40	60 - 140	129
		TRH C15-C28	mg/kg	45	55	40	60 - 140	138
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	96
	TRH F Bands	TRH >C10-C16	mg/kg	25	53	40	60 - 140	132
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	130
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	86
VOC's in Soil						M	Method: ME-(A	U)-[ENV]AN433
Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB275205.002	Monocyclic	Benzene	mg/kg	0.1	4.9	5	60 - 140	99
	Aromatic	Toluene	mg/kg	0.1	4.8	5	60 - 140	96
		Ethylbenzene	mg/kg	0.1	4.8	5	60 - 140	97
		m/p-xylene	mg/kg	0.2	9.3	10	60 - 140	93
		o-xylene	mg/kg	0.1	5.0	5	60 - 140	99
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.6	10	70 - 130	96
		d8-toluene (Surrogate)	mg/kg	-	9.9	10	70 - 130	99
		Bromofluorobenzene (Surrogate)	mg/kg	-	10.1	10	70 - 130	101
Volatile Petroleum I	Hydrocarbons in S	oil				N	Method: ME-(A	U)-[ENV]AN433
Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery <u>%</u>
LB275205.002		TRH C6-C10	mg/kg	25	87	92.5	60 - 140	95
		TRH C6-C9	mg/kg	20	78	80	60 - 140	97
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.6	10	70 - 130	96
		Bromofluorobenzene (Surrogate)	mg/kg	-	10.1	10	70 - 130	101
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	59	62.5	60 - 140	94



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

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub-sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

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

Mercury in Soil						Mett	nod: ME-(AL	J)-[ENV]AN312
QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE245011.001	LB275321.004	Mercury	mg/kg	0.05	0.24	<0.05	0.2	105

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE245156.002	LB275206.023		Naphthalene	mg/kg	0.1	4.4	<0.1	4	109
			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	4.5	<0.1	4	111
			Acenaphthene	mg/kg	0.1	4.3	<0.1	4	106
			Fluorene	mg/kg	0.1	<0.1	<0.1	-	-
			Phenanthrene	mg/kg	0.1	4.3	0.2	4	102
			Anthracene	mg/kg	0.1	4.2	<0.1	4	104
			Fluoranthene	mg/kg	0.1	4.8	0.5	4	107
			Pvrene	ma/ka	0.1	4.6	0.5	4	102
			Benzo(a)anthracene	ma/ka	0.1	0.2	0.3	-	-
			Chrysene	ma/ka	0.1	0.2	0.3	-	-
			Benzo(b&i)fluoranthene	ma/ka	0.1	0.3	0.4	-	-
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	0.2	-	-
			Benzo(a)pyrene	ma/ka	0.1	4 1	0.3	4	95
			Indeno(1.2.3-cd)pyrene	mg/kg	0.1	<0.1	0.2	-	-
				mg/kg	0.1	<0.1	€0.1	_	_
			Benzo(dhi)nen/ene	mg/kg	0.1	0.2	0.3	_	
			Carcinogenic DAHs, Bap TEO <i op="0*</td"><td></td><td>0.1</td><td>4.1</td><td>0.0</td><td></td><td></td></i>		0.1	4.1	0.0		
			Carcinogenic PAHs, BaP TEO <i 2*<="" op="" op-1="" td=""><td>TEQ (mg/kg)</td><td>0.2</td><td>4.1</td><td>0.4</td><td></td><td></td></i>	TEQ (mg/kg)	0.2	4.1	0.4		
			Carcinogenic PAHs, BaP TEO <i op+<="" td=""><td>TEQ (mg/kg)</td><td>0.2</td><td>4.2</td><td>0.5</td><td></td><td></td></i>	TEQ (mg/kg)	0.2	4.2	0.5		
					0.0	4.2	2.1		
		Surrogotoo	dE pitrohoppono (Surrogoto)	mg/kg	0.0	0.6	3.1	-	- 112
		Surrogates		mg/kg	-	0.6	0.6	-	113
			2-Indirobiphenyi (Surrogate)	mg/kg	-	0.5	0.5	-	100
			d 14-p-terphenyl (Surrogate)	піў/ку	-	0.5	0.5	-	103
Total Recoverable	e Elements in Soil/W	aste Solids/Mater	ials by ICPOES				Method: ME	-(AU)-[ENV]	AN040/AN320
QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE245011.001	LB275320.004		Arsenic, As	mg/kg	1	52	7	50	89
			Cadmium, Cd	mg/kg	0.3	43	<0.3	50	85
			Chromium, Cr	mg/kg	0.5	64	19	50	90
			Copper, Cu	mg/kg	0.5	55	9.5	50	90
			Nickel, Ni	mg/kg	0.5	51	8.5	50	86
			Lead, Pb	mg/kg	1	70	25	50	89
			Zinc, Zn	mg/kg	2	92	49	50	87
TRH (Total Recov	verable Hvdrocarbor	s) in Soll					Meth	od: ME-(AU)-IENVIAN403
OC Samala	Sample Number	,	Parameter	Unito	LOP	Popult	Original	Spiko	Boooyory/%
QC Sample	Sample Number		Parameter	Units	LUR	Result	Original	бріке	Recovery%
SE245156.002	LB2/5206.023		TRH C10-C14	mg/kg	20	200	150	40	134
			TRH C15-C28	mg/kg	45	1200	1200	40	160 (5)
			TRH C29-C36	mg/kg	45	1300	1100	40	317 (5)
			TRH C37-C40	mg/kg	100	310	250	-	-
			TRH C10-C36 Total	mg/kg	110	2700	2400	-	-
			TRH >C10-C40 Total (F bands)	mg/kg	210	3000	2700	-	-
		TRH F	TRH >C10-C16	mg/kg	25	250	210	40	100
		Bands	TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	250	210	-	-
			TRH >C16-C34 (F3)	mg/kg	90	1900	1800	40	291 (5)
			TRH >C34-C40 (F4)	mg/kg	120	750	640	-	-
VOC's in Soil							Meth	od: ME-(AU)-[ENV]AN433
QC Sample	Sample Number		Parameter	Units	LOR	Resul <u>t</u>	Original	Spike	Recovery%
SE245156.002	1 0075005 005	Monocyclic	Benzene	mg/kg	0.1	5.5	<0.1	5	109
	LB2/5205.025	wonocyclic	Delizene						
	LB275205.025	Aromatic	Toluene	mg/kg	0.1	5.5	<0.1	5	111
	LB275205.025	Aromatic	Toluene Ethylbenzene	mg/kg mg/ka	0.1	5.5 5.6	<0.1 <0.1	5	111 112
	LB2/5205.025	Aromatic	Toluene Ethylbenzene m/p-xylene	mg/kg mg/kg mg/kg	0.1 0.1 0.2	5.5 5.6 11	<0.1 <0.1 <0.2	5 5 10	111 112 107



MATRIX SPIKES

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub-sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

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

VOC's in Soil (co	ontinued)						Met	hod: ME-(Al	J)-[ENV]AN433
QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE245156.002	LB275205.025	Polycyclic	Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.1	7.6	10	81
			d8-toluene (Surrogate)	mg/kg	-	8.7	8.1	10	87
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.4	8.6	10	94
		Totals	Total BTEX*	mg/kg	0.6	33	<0.6	-	-
			Total Xylenes*	mg/kg	0.3	17	<0.3	-	-
Volatile Petroleu	m Hydrocarbons in So	lic					Met	hod: ME-(Al	J)-[ENV]AN433
QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE245156.002	LB275205.025		TRH C6-C10	mg/kg	25	160	41	92.5	130 ⑤
			TRH C6-C9	mg/kg	20	140	39	80	131 ⑤
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.1	7.6	10	81
			d8-toluene (Surrogate)	mg/kg	-	8.7	8.1	10	87
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.4	8.6	-	94
		VPH F	Benzene (F0)	mg/kg	0.1	5.5	<0.1	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	130	41	62.5	140 ⑤



Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

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

No matrix spike duplicates were required for this job.



Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

- * NATA accreditation does not cover the performance of this service.
- ** Indicative data, theoretical holding time exceeded.
- *** Indicates that both * and ** apply.
- Sample not analysed for this analyte.
- IS Insufficient sample for analysis.
- LNR Sample listed, but not received.
- LOR Limit of reporting.
- QFH QC result is above the upper tolerance.
- QFL QC result is below the lower tolerance.
- ① At least 2 of 3 surrogates are within acceptance criteria.
- ② RPD failed acceptance criteria due to sample heterogeneity.
- ③ Results less than 5 times LOR preclude acceptance criteria for RPD.
- ④ Recovery failed acceptance criteria due to matrix interference.
- 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.
- Image:
- Recovery failed acceptance criteria due to sample heterogeneity.
- [®] LOR was raised due to high conductivity of the sample (required dilution).
- t Refer to relevant report comments for further information.

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STATEMENT OF QA/QC PERFORMANCE

CLIENT DETAILS		LABORATORY DETAILS	
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Email	emmacoleman@qualtest.com.au	Email	au.environmental.sydney@sgs.com
Project	NEW23P-0009 Medowie Gardens	SGS Reference	SE245327 R0
Order Number	NEW23P-0009	Date Received	30 Mar 2023
Samples	1	Date Reported	06 Apr 2023

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document. This QA/QC Statement must be read in conjunction with the referenced Analytical Report. The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Duplicate

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

2 items

Sample counts by matrix	1 Soil	Type of documentation received	000	
Date documentation received	30/3/2023	Samples received in good order	Yes	
Samples received without headspace	Yes	Sample temperature upon receipt	33.2C	
Sample container provider	Other Lab	Turnaround time requested	Standard	
Samples received in correct containers	Yes	Sufficient sample for analysis	Yes	
Sample cooling method	Ice Bricks	Samples clearly labelled	Yes	
Complete documentation received	Yes			

SGS Australia Pty Ltd ABN 44 000 964 278

SAMPLE SUMMARY

Environment, Health and Safety

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SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in Green when within suggested criteria or Red with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Mercury in Soil							Method: I	ME-(AU)-[ENV]AN312
Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
T.22.3.23	SE245327.001	LB275793	29 Mar 2023	30 Mar 2023	26 Apr 2023	03 Apr 2023	26 Apr 2023	05 Apr 2023
Moisture Content							Method: I	ME-(AU)-[ENV]AN002
Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
T.22.3.23	SE245327.001	LB275791	29 Mar 2023	30 Mar 2023	12 Apr 2023	03 Apr 2023	08 Apr 2023	05 Apr 2023
PAH (Polynuclear Aromat	tic Hvdrocarbons) in Soil						Method:	ME-(AU)-IENVIAN420

• •	•								
Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed	
T.22.3.23	SE245327.001	LB275748	29 Mar 2023	30 Mar 2023	12 Apr 2023	03 Apr 2023	13 May 2023	06 Apr 2023	

Total Recoverable Eleme	ents in Soil/Waste Solids/Ma	terials by ICPOES					Method: ME-(AU)-[ENV]AN040/AN320
Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
T.22.3.23	SE245327.001	LB275792	29 Mar 2023	30 Mar 2023	25 Sep 2023	03 Apr 2023	25 Sep 2023	05 Apr 2023
TRH (Total Recoverable	Hydrocarbons) in Soil						Method: I	/IE-(AU)-[ENV]AN403
Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
T.22.3.23	SE245327.001	LB275748	29 Mar 2023	30 Mar 2023	12 Apr 2023	03 Apr 2023	13 May 2023	05 Apr 2023

VOC's in Soil							Method: ME-(AU)-[ENV]AN433
Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
T.22.3.23	SE245327.001	LB275790	29 Mar 2023	30 Mar 2023	12 Apr 2023	03 Apr 2023	12 Apr 2023	05 Apr 2023

Volatile Petroleum Hydrocarbons in Soil							Method: I	ME-(AU)-[ENV]AN433
Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
T.22.3.23	SE245327.001	LB275790	29 Mar 2023	30 Mar 2023	12 Apr 2023	03 Apr 2023	12 Apr 2023	05 Apr 2023



SURROGATES

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

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

PAH (Polynuclear Aromatic Hydrocarbons) in Soil Method: ME-(AU)-[ENV]AN420 Parameter Sample Name Sample Numb Units Criteria Recovery % 2-fluorobiphenyl (Surrogate) SE245327.001 70 - 130% T.22.3.23 % 94 d14-p-terphenyl (Surrogate) T.22.3.23 SE245327.001 % 70 - 130% 103 SE245327.001 104 d5-nitrobenzene (Surrogate) T.22.3.23 % 70 - 130% Method: ME-(AU)-[ENV]AN433 VOC's in Soil Parameter Sample Name Sample Number Units Criteria Recovery % Bromofluorobenzene (Surrogate) T.22.3.23 SE245327.001 60 - 130% 72 % d4-1,2-dichloroethane (Surrogate) T.22.3.23 SE245327.001 60 - 130% % 80 d8-toluene (Surrogate) T.22.3.23 SE245327.001 % 60 - 130% 79 Volatile Petroleum Hydrocarbons in Soil Method: ME-(AU)-[ENV]AN433 Parameter Units Criteria Recovery % Sample Name Sample Numb Bromofluorobenzene (Surrogate) SE245327.001 60 - 130% T.22.3.23 % 72 d4-1,2-dichloroethane (Surrogate) T.22.3.23 SE245327.001 % 60 - 130% 80 T.22.3.23 SE245327.001 60 - 130% 79 d8-toluene (Surrogate) %



METHOD BLANKS

SE245327 R0

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

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

Mercury in Soil		Method: ME-(AU)-[ENV]AN312	
Sample Number	Parameter	Units LC	R Result
LB275793.001	Mercury	mg/kg 0.0	95 <0.05

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

PAH (Polynuclear Arom	natic Hydrocarbons) in Soi			Mett	nod: ME-(AU)-[ENV]AN420
Sample Number		Parameter	Units	LOR	Result
LB275748.001		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)	%	-	108
		2-fluorobiphenyl (Surrogate)	%	-	94
		d14-p-terphenyl (Surrogate)	%	-	100
Total Recoverable Elem	nents in Soil/Waste Solids	Materials by ICPOES		Method: ME	-(AU)-[ENV]AN040/AN320
Sample Number		Parameter	Units	LOR	Result

LB275792.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0

TRH (Total Recoverable Hydrocarbons	RH (Total Recoverable Hydrocarbons) in Soil			od: ME-(AU)-[ENV]AN403
Sample Number	Parameter	Units	LOR	Result
LB275748.001	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

Sample Number Parameter LB275790.001 Monocyclic Aromatic Benzene Hydrocarbons Toluene Ethylbenzene m/n-xvlene

		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)	%	-	90
		d8-toluene (Surrogate)	%	-	92
		Bromofluorobenzene (Surrogate)	%	-	81
	Totals	Total BTEX*	mg/kg	0.6	<0.3
Volatile Petroleum Hydroc	arbons in Soil			Meth	od: ME-(AU)-[ENV]AN433
Sample Number		Parameter	Units	LOR	Result
LB275790.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	90

VOC's in Soil

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

Result

<0.1

<0.1

<0.1

Units

mg/kg

mg/kg

mg/kg

LOR

0.1

0.1

0.1



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

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 give a different calculated RPD.

Mercury in Soil						Meth	od: ME-(AU)-[ENVJAN312
Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE245328.001	LB275793.014	Mercury	mg/kg	0.05	0.17	0.21	56	22
SE245328.018	LB275793.021	Mercury	mg/kg	0.05	0.27	0.29	48	8

Moisture Content

Moisture Content						Method: ME-(AU)-[ENV]AN00			
Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %	
SE245328.018	LB275791.021	% Moisture	%w/w	1	16	17	36	6	
SE245438.003	LB275791.011	% Moisture	%w/w	1	14	14	37	3	

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

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE245328.001	LB275792.014	Arsenic, As	mg/kg	1	4	4	54	2
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	15	14	33	8
		Copper, Cu	mg/kg	0.5	840	760	30	10
		Nickel, Ni	mg/kg	0.5	41	41	31	1
		Lead, Pb	mg/kg	1	100	98	31	6
		Zinc, Zn	mg/kg	2	200	200	31	3
SE245328.018	LB275792.021	Arsenic, As	mg/kg	1	11	14	38	28
		Cadmium, Cd	mg/kg	0.3	0.6	0.8	73	20
		Chromium, Cr	mg/kg	0.5	67	64	31	5
		Copper, Cu	mg/kg	0.5	180	190	30	8
		Nickel, Ni	mg/kg	0.5	26	39	32	40 @
		Lead, Pb	mg/kg	1	1900	1800	30	4
		Zinc, Zn	mg/kg	2	1400	2100	30	37 ②

TRH (Total Recoverable Hydrocarbons) in Soil

TRH (Total Recov	erable Hydrocarbons) in Soil					Meth	od: ME-(AU)-	ENVJAN403
Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE245328.002	LB275748.014		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	180	180	55	2
			TRH C29-C36	mg/kg	45	190	190	53	1
			TRH C37-C40	mg/kg	100	<100	<100	142	0
			TRH C10-C36 Total	mg/kg	110	370	370	59	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	460	460	76	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	310	310	59	0
			TRH >C34-C40 (F4)	mg/kg	120	150	150	112	1
SE245328.018	LB275748.020		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	110	120	69	2
			TRH C29-C36	mg/kg	45	81	81	86	1
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	190	200	86	1
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	154	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	170	170	83	2
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0

VOC's in Soil							Meth	od: ME-(AU)-[ENVJAN433
Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE245328.002	LB275790.014	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	-	7.5	7.5	50	1
			d8-toluene (Surrogate)	mg/kg	-	7.5	7.5	50	1
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.0	6.9	50	2
		Totals	Total BTEX*	mg/kg	0.6	<0.6	<0.3	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 give a different calculated RPD.

VOC's in Soil (continued) Method: ME-(AU)-[ENV]AN433 Original Duplicate Original Duplicate Criteria % RPD % Parameter Units LOR SE245328.002 LB275790.014 Total Xylenes* 200 Totals 0.3 <0.3 <0.3 mg/kg 0 SE245328.018 LB275790.020 Monocyclic Benzene mg/kg 0.1 < 0.1 < 0.1 200 0 Aromatic Toluene 0.1 <0.1 <0.1 200 0 mg/kg Ethylbenzene 0.1 <0.1 <0.1 200 0 mg/kg m/p-xylene mg/kg 02 <0.2 <0.2 200 0 o-xylene 0.1 <0.1 <0.1 200 0 mg/kg Polycyclic Naphthalene (VOC)* <0.1 <0.1 200 0 0.1 ma/ka Surrogates d4-1,2-dichloroethane (Surrogate) mg/kg 7.9 7.8 50 1 7.8 7.8 50 d8-toluene (Surrogate) 1 mg/kg Bromofluorobenzene (Surrogate) 7.2 7.2 50 0 mg/kg Totals Total BTEX* 0.6 <0.6 < 0.3 200 0 mg/kg <0.3 Total Xylenes* 0.3 <0.3 200 0 mg/kg Volatile Petroleum Hydrocarbons in Soil Method: ME-(AU)-[ENV]AN433 Duplicate Units LOR Duplicate Criteria % RPD % Original Original Parameter SE245328.002 LB275790.014 TRH C6-C10 mg/kg 25 <25 <25 200 0 TRH C6-C9 20 <20 <20 200 0 mg/kg Surrogates d4-1,2-dichloroethane (Surrogate) mg/kg 7.5 7.5 30 1 d8-toluene (Surrogate) 7.5 7.5 30 mg/kg 1 Bromofluorobenzene (Surrogate) 7.0 30 6.9 2 mg/kg VPH F Bands Benzene (F0) mg/kg 0.1 < 0.1 < 0.1 200 0 TRH C6-C10 minus BTEX (F1) 25 <25 <25 200 0 mg/kg SE245328.018 LB275790.020 TRH C6-C10 25 <25 <25 200 0 mg/kg 200 TRH C6-C9 mg/kg 20 <20 <20 0 Surrogates d4-1,2-dichloroethane (Surrogate) 7.9 7.8 30 1 mg/kg d8-toluene (Surrogate) 7.8 7.8 30 mg/kg 1 7.2 7.2 30 0 Bromofluorobenzene (Surrogate) mg/kg VPH F Bands Benzene (F0) 0.1 <0.1 <0.1 200 0 mg/kg TRH C6-C10 minus BTEX (F1) 25 <25 <25 200 0 mg/kg



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

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					1	Method: ME-(A	U)-[ENV]AN312
Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB275793.002	Mercury	mg/kg	0.05	0.21	0.2	80 - 120	103

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB275748.002		Naphthalene	mg/kg	0.1	4.9	4	60 - 140	124
		Acenaphthylene	mg/kg	0.1	5.1	4	60 - 140	127
		Acenaphthene	mg/kg	0.1	4.9	4	60 - 140	122
		Phenanthrene	mg/kg	0.1	4.5	4	60 - 140	113
		Anthracene	mg/kg	0.1	5.1	4	60 - 140	127
		Fluoranthene	mg/kg	0.1	5.1	4	60 - 140	127
		Pyrene	mg/kg	0.1	5.0	4	60 - 140	125
		Benzo(a)pyrene	mg/kg	0.1	4.9	4	60 - 140	122
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	99
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	88
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	101
Total Recoverable	Elements in Soil/V	/aste Solids/Materials by ICPOES				Method:	ME-(AU)-[EN	VJAN040/AN320
Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB275792.002		Arsenic, As	mg/kg	1	350	318.22	80 - 120	111
		Cadmium, Cd	mg/kg	0.3	4.9	4.81	70 - 130	101
		Chromium, Cr	mg/kg	0.5	43	38.31	80 - 120	112
		Copper, Cu	mg/kg	0.5	320	290	80 - 120	111
		Nickel, Ni	mg/kg	0.5	200	187	80 - 120	107
		Lead, Pb	mg/kg	1	98	89.9	80 - 120	109
		Zinc, Zn	mg/kg	2	310	273	80 - 120	115
TRH (Total Recove	rable Hydrocarbo	ns) in Soil					Aethod: ME-(A	
	abio Hydrodarbol	D-mouth	11		Desult	E		
Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB275748.002		IRH C10-C14	mg/kg	20	51	40	60 - 140	126
		IRH C15-C28	mg/kg	45	46	40	60 - 140	115
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	98
	TRH F Bands	TRH >C10-C16	mg/kg	25	51	40	60 - 140	127
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	112
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	95
VOC's in Soil				_			Nethod: ME-(A	U)-[ENV]AN433
Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB275790.002	Monocyclic	Benzene	mg/kg	0.1	4.3	5	60 - 140	86
	Aromatic	Toluene	mg/kg	0.1	4.2	5	60 - 140	84
		Ethylbenzene	mg/kg	0.1	4.2	5	60 - 140	85
		m/p-xylene	mg/kg	0.2	8.2	10	60 - 140	82
		o-xylene	mg/kg	0.1	4.4	5	60 - 140	87
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.8	10	70 - 130	88
		d8-toluene (Surrogate)	mg/kg	-	8.9	10	70 - 130	89
		Bromofluorobenzene (Surrogate)	mg/kg	-	9.1	10	70 - 130	91
Volatile Petroleum	Hydrocarbons in S	oil				I	Nethod: ME-(A	U)-[ENV]AN433
Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB275790.002		TRH C6-C10	mg/kg	25	86	92.5	60 - 140	93
		TRH C6-C9	mg/kg	20	77	80	60 - 140	96
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.8	10	70 - 130	88
		Bromofluorobenzene (Surrogate)	mg/kg	-	9.1	10	70 - 130	91
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	61	62.5	60 - 140	97



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

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub-sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

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

Mercury in Soil						Met	nod: ME-(AU	J)-[ENV]AN312
QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE245229.002	LB275793.004	Mercury	mg/kg	0.05	0.22	<0.05	0.2	86

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE245229.001	LB275748.004		Naphthalene	mg/kg	0.1	4.8	<0.1	4	120
			2-methylnaphthalene	ma/ka	0.1	<0.1	<0.1	-	-
			1-methylnaphthalene	ma/ka	0.1	<0.1	<0.1	-	-
			Acenaphthylene	ma/ka	0.1	5.1	<0.1	4	127
			Acenaphthene	mg/kg	0.1	4.9	<0.1	4	122
			Fluorene	mg/kg	0.1	<0.1	<0.1	-	-
			Phenanthrene	mg/kg	0.1	4.6	<0.1	4	115
			Anthracene	mg/kg	0.1	5.2	<0.1	4	129
			Fluoranthene	mg/kg	0.1	5.1	<0.1	4	128
			Pvrene	ma/ka	0.1	5.1	<0.1	4	126
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
			Chrysene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(b&i)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	4.9	<0.1	4	121
			Indeno(1 2 3-cd)pyrene	ma/ka	0.1	<0.1	<0.1	_	-
			Dibenzo(ab)anthracene	ma/ka	0.1	<0.1	<0.1	-	-
			Benzo(ahi)nervlene	mg/kg	0.1	<0.1	<0.1	_	
			Carcinogenic PAHs_BaP TEQ <i or="0*</td"><td>TEQ (ma/ka)</td><td>0.1</td><td>4.9</td><td><0.2</td><td>-</td><td>-</td></i>	TEQ (ma/ka)	0.1	4.9	<0.2	-	-
			Carcinogenic PAHs, BaP TEO <i 2*<="" i="" or="" td=""><td>TEQ (mg/kg)</td><td>0.2</td><td>4.9</td><td><0.2</td><td>_</td><td></td></i>	TEQ (mg/kg)	0.2	4.9	<0.2	_	
			Carcinogenic PAHs, BaP TEO <i or="I" or*<="" td=""><td>TEQ (mg/kg)</td><td>0.2</td><td>5.0</td><td><0.2 <0.3</td><td>_</td><td></td></i>	TEQ (mg/kg)	0.2	5.0	<0.2 <0.3	_	
				ma/ka	0.0	40	<0.8	_	
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	_	100
		Sunogates	2 fluorobinhenul (Surrogate)	mg/kg		0.0	0.5		86
			d14 p-terphenyl (Surrogate)	mg/kg		0.5	0.5		00
				iiig/kg	-	0.0	0.5		
Total Recoverable	e Elements in Soil/W	aste Solids/Mater	ials by ICPOES				Method: ME	-(AU)-[ENV]	AN040/AN320
QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE245229.002	LB275792.004		Arsenic, As	mg/kg	1	54	3	50	103
			Cadmium, Cd	mg/kg	0.3	48	<0.3	50	97
			Chromium, Cr	mg/kg	0.5	64	9.8	50	108
			Copper, Cu	mg/kg	0.5	55	10	50	89
			Nickel, Ni	mg/kg	0.5	53	1.3	50	104
			Lead, Pb	mg/kg	1	57	7	50	101
			Zinc, Zn	mg/kg	2	66	10	50	112
TRH (Total Recov	verable Hydrocarbor	s) in Soll					Meth	od: ME-(AU)-[ENV]AN403
OC Sample	Sample Number		Parameter	Unite	LOR	Result	Original	Snike	Recoverv%
SE245229 001	L B275748 004			onits ma/ka	20	53	<20	40	127
02240220.001	20210140.004		TPH C15-C28	mg/kg	45	58	<15	40	114
			TRH C20-C36	mg/kg	45	47	<45	40	86
			TRH C37-C40	mg/kg	100	<100	<100	40	00
				mg/kg	110	160	<110	-	-
			TRH >C10 C10 Total (E bando)	mg/kg	210	<210	<210	-	-
				mg/kg	210	52	<210	- 40	- 107
		Panda		mg/kg	25	53	<25	40	127
		Danus	TRH >C10-C16 - Naphthalene (F2)	mg/kg	25		<25	- 40	-
			TRI > C 10-C34 (F3)	mg/kg	400	<90	<90	40	90
			1111 × 034-040 (F4)	тіу/ку	120	×120	<12U	-	-
VOC's in Soil									
							Mett	od: ME-(AU)-[ENV]AN433
QC Sample	Sample Number		Parameter	Units	LOR	Result	Mett Original	od: ME-(AU Spike)-[ENV]AN433 Recovery%
QC Sample SE245229.001	Sample Number LB275790.004	Monocyclic	Parameter Benzene	Units mg/kg	LOR 0.1	Result 4.8	Mett Original <0.1	od: ME-(AU Spike 5)- <mark>[ENV]AN433</mark> Recovery% 96
QC Sample SE245229.001	Sample Number LB275790.004	Monocyclic Aromatic	Parameter Benzene Toluene	Units mg/kg mg/kg	LOR 0.1 0.1	Result 4.8 4.8	Metr Original <0.1 <0.1	od: ME-(AU Spike 5 5)-[ENV]AN433 Recovery% 96 96
QC Sample SE245229.001	Sample Number LB275790.004	Monocyclic Aromatic	Parameter Benzene Toluene Ethylbenzene	Units mg/kg mg/kg mg/kg	LOR 0.1 0.1 0.1	Result 4.8 4.8 4.9	Original <0.1	od: ME-(AU Spike 5 5 5)-[ENV]AN433 Recovery% 96 96 97
QC Sample SE245229.001	Sample Number LB275790.004	Monocyclic Aromatic	Parameter Benzene Toluene Ethylbenzene m/p-xylene	Units mg/kg mg/kg mg/kg mg/kg	LOR 0.1 0.1 0.1 0.2	Result 4.8 4.9 9.5	Original <0.1	nod: ME-(AU Spike 5 5 5 10)-[ENV]AN433 Recovery% 96 96 97 95



MATRIX SPIKES

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub-sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

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 (c	ontinued)						Met	hod: ME-(Al	J)-[ENV]AN433
QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE245229.001 LB275790.004	Polycyclic	Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1		-	
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.0	8.0	10	80
			d8-toluene (Surrogate)	mg/kg	-	8.1	8.2	10	81
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.4	7.7	10	84
		Totals	Total BTEX*	mg/kg	0.6	29	<0.6	-	-
			Total Xylenes*	mg/kg	0.3	15	<0.3	-	-
Volatile Petroleu	m Hydrocarbons in Se	lic					Met	hod: ME-(Al	J)-[ENV]AN433
QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE245229.001	LB275790.004		TRH C6-C10	mg/kg	25	93	<25	92.5	100
			TRH C6-C9	mg/kg	20	85	<20	80	106
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.0	8.0	10	80
			d8-toluene (Surrogate)	mg/kg	-	8.1	8.2	10	81
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.4	7.7	-	84
		VPH F	Benzene (F0)	mg/kg	0.1	4.8	<0.1	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	64	<25	62.5	101



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

No matrix spike duplicates were required for this job.


Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

- * NATA accreditation does not cover the performance of this service.
- ** Indicative data, theoretical holding time exceeded.
- *** Indicates that both * and ** apply.
- Sample not analysed for this analyte.
- IS Insufficient sample for analysis.
- LNR Sample listed, but not received.
- LOR Limit of reporting.
- QFH QC result is above the upper tolerance.
- QFL QC result is below the lower tolerance.
- ① At least 2 of 3 surrogates are within acceptance criteria.
- 2 RPD failed acceptance criteria due to sample heterogeneity.
- ③ Results less than 5 times LOR preclude acceptance criteria for RPD.
- ④ Recovery failed acceptance criteria due to matrix interference.
- 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.
- Image:
- Recovery failed acceptance criteria due to sample heterogeneity.
- IOR was raised due to high conductivity of the sample (required dilution).
- t Refer to relevant report comments for further information.

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