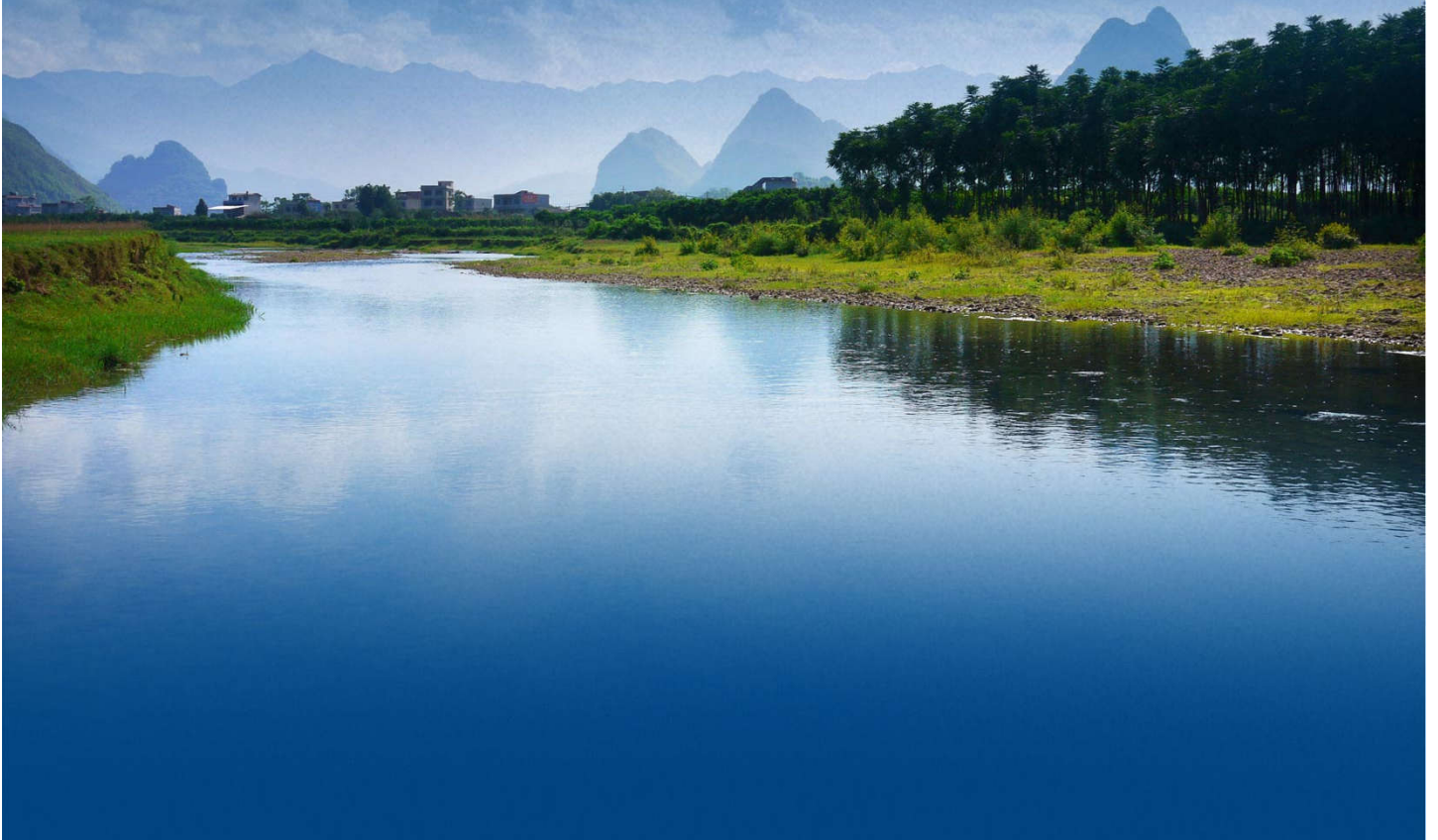


DETAILED SITE INVESTIGATION REPORT



330 – 350 Eighth Avenue, Austral NSW

Woolworths Ltd – April 2023



Geo-Logix
environment • geotech

DOCUMENT CONTROL

DETAILED SITE INVESTIGATION REPORT

330 – 350 Eighth Avenue,
Austral NSW

PREPARED FOR

Nikita Mahapatra
Woolworths Ltd
1 Woolworths Way,
Bella Vista NSW 2153

Report reference: 2301008Rpt01FinalV01_21Apr23

Date: 21 April 2023

DISTRIBUTION AND REVISION REGISTER

Revision Number	Date	Description	Recipient	Deliverables
V01	21/04/2023	Final Report 2301008Rpt01FinaV01_21Apr23	Geo-Logix Pty Ltd	1 Electronic Copy
V01	21/04/2023	Final Report 2301008Rpt01FinaV01_21Apr23	Woolworths Ltd	1 Electronic Copy

Issued by: Geo-Logix Pty Ltd

ABN: 86 116 892 936



Jenna Maltman
BSc, MEnvMgt
Project Scientist



David Gregory
BSc (Hons) R.G, MEIANZ, CEnvP#139
Principal



EXECUTIVE SUMMARY

Geo-Logix Pty Ltd was commissioned by Woolworths Ltd to conduct a Detailed Site Investigation (DSI) of the property located at 330 – 350 Eighth Avenue, Austral NSW. Woolworths proposed to develop the site as commercial retail centre with on-grade parking.

The objective of the DSI was to assess the land for contamination that may be associated with historical site activities and consider the suitability of the site for retail development.

Review of aerial imagery indicates the site has historically been used for market gardening. No evidence of on-site farm dams or extensive filling was identified; however it was noted some filling may be present in the vicinity of the on-site residences and sheds. Minor vehicle and farm machinery maintenance was also likely to have occurred at the site in the vicinity of existing and former sheds. All former site structures were noted to be on the northern half of the site.

To assess for potential soil contamination on the site the following scope of works was completed:

- Systematic sampling of shallow soils for market gardening COPC (OCPs and heavy metals) at 40 locations on a 21 m square grid. The sampling frequency meets NSW EPA (2022) minimum sampling density requirements and is sufficient to identify circular contamination hotspots equal to or greater than 25m diameter at a 95% degree of statistical certainty.
- Systematic sampling of shallow soils for market gardening COPC and fill/demolition COPC (OCPs and heavy metals) at 40 locations on a square 15 m grid sampling plan across the northern half of the site. The sampling frequency meets NSW EPA (2022) minimum sampling density requirements and WA DOH (2009) asbestos assessment guidelines and is sufficient to identify circular contamination hotspots equal to or greater than 17.7 m diameter at a 95% degree of statistical certainty.

During the site investigations, fill was encountered across the majority of the site. Fill comprised:

- Northern half: A moderate brown clayey sand with gravels. In some areas (generally south of the east and west dwellings) the fill appeared similar to the tilled soils in the southern portion of the site. In some areas surrounding the onsite dwellings, fill comprised sandy gravelly clays. Some anthropogenic materials (bricks, plastic, tiles, concrete pieces, plaster cement fragments) were observed, generally in an upper clayey sand layer. Fragments of asbestos containing material (ACM, cement sheeting) was observed at location TP15.
- Southern half: The material in majority of locations investigated comprised moderate brown clayey sands with gravels and pieces of black plastic sheeting, most likely to be tilled soil from former market gardening activities. No ACM was observed at locations investigated.

Based on the fill observations during investigation, the following further analysis were performed.

Northern half

- Fill COPC TRH, BTEX, PAHs: Analysis of samples from 15 locations (including two locations with samples of two different fill layers). Samples were selected based on observations of fill thickness and anthropogenic inclusions. Analysis of samples in areas

of current and former site infrastructure for COPC associated for former farming equipment maintenance.

- Fill COPC PCBs: Selected for analysis of fill COPC PCBs based on high anthropogenic content and general coverage.

Southern half

- Fill COPC TRH, BTEX, PAHs: Samples at four locations selected for analysis where fill was identified at greater depths;
- Fill was inspected for ACM at each sample location.

Results of the investigation identified a non-conformance of the project decision rules due to fragments of bonded ACM and fibrous asbestos (AF/FA associated with weathered ACM) in shallow soils in the central portion of the northern half of the site (surrounding TP15 and TP50).

On this basis the project decision has not been met and the site is not considered suitable for the proposed retail development without remediation. Geo-Logix's opinion is that the site can be made suitable for the proposed development subject to the following:

- Preparation of a Remedial Action Plan (RAP) detailing the remedial methodology and validation requirements for asbestos impacted soils; and
- Remediation and validation of asbestos impacted soils.

It is recommended site demolition be conducted prior to remediation in the event the demolition works results in localised residual hazardous building material contamination to shallow soils.

TABLE OF CONTENTS

1. INTRODUCTION	1
2. SITE INFORMATION	1
3. SITE HISTORY	2
3.1 Historical Aerial Imagery Review.....	2
3.2 Public Database Search	3
4. SITE HISTORY SUMMARY	4
5. POTENTIAL SITE CONTAMINATION	4
5.1 Onsite Activities	4
5.2 Offsite Activities	4
6. PRELIMINARY CONCEPTUAL SITE MODEL	5
7. DATA QUALITY OBJECTIVES	5
8. ASSESSMENT CRITERIA.....	7
8.1 Soil Assessment Criteria	7
9. INVESTIGATION METHODOLOGIES.....	8
9.1 Sampling Analysis Plan	8
9.2 Soil Sampling Methodology	10
9.3 Quality Assurance	10
10. INVESTIGATION RESULTS.....	11
10.1 Site Geology.....	11
10.2 Site Hydrogeology	12
10.3 Soil Analytical Results	12
10.4 QA/QC Results.....	13
11. DISCUSSION.....	14
12. REVISED CONCEPTUAL SITE MODEL	15
13. CONCLUSIONS.....	15
14. LIMITATIONS	16

15. REFERENCES	18
-----------------------------	-----------

FIGURES

Figure 1: Site Location

Figure 2: Site Map

Figure 3: Sampling Locations

TABLES

Table 1: Summary of Soil Analytical Data – Petroleum Hydrocarbons

Table 2: Summary of Soil Analytical Data – Polycyclic Aromatic Hydrocarbons

Table 3: Summary of Soil Analytical Data – Organochlorine Pesticides

Table 4: Summary of Soil Analytical Data – Heavy Metals

Table 5: Summary of Soil Analytical Data – Asbestos

ATTACHMENTS

Attachment A: Photographic Log

Attachment B: Underground Utilities Plan

Attachment C: Historical Aerial Imagery

Attachment D: NSW EPA public database searches

Attachment E: Calibration Certificates

Attachment F: Testpit and Bore Logs

Attachment G: Laboratory Reports

Attachment H: Asbestos Gravimetric Worksheet

1. INTRODUCTION

Geo-Logix Pty Ltd (Geo-Logix) was commissioned by Woolworths Ltd (Woolworths) to conduct a Detailed Site Investigation (DSI) of the property located at 330 – 350 Eighth Avenue, Austral NSW (Figure 1). Woolworths propose to develop the site as commercial retail centre with on-grade parking.

The objective of the DSI was to assess the land for contamination that may be associated with historical site activities and consider the suitability of the site for retail development.

2. SITE INFORMATION

Address	330-350 Eighth Avenue, Austral NSW 2179 (Also referenced as 260-260A Eighth Avenue https://maps.six.nsw.gov.au/)
Lot and Deposited Plan (DP)	Lot 940 DP 1265677
Approximate Area	18,169 m ² (https://maps.six.nsw.gov.au/)
Coordinates	Lat: 33.937°S Long: 150.798°E
Zoning	R2: Low Density Residential
Current Land Use	The northern portion of the site is currently used for residential purposes. Three separate dwellings and a number of sheds exist on the northern portion of the site. The southern portion of the site is vacant, with the eastern portion overgrown. .
Surrounding Land Use	North – Eighth Avenue and residential and vacant plots undergoing construction beyond; South – Auger Street and vacant plots beyond; East – Residential properties and vacant plots; and West –Residential properties, and Narrami Road beyond.
Site Description (Attachment A– Photographic Log)	The following observations were made during site inspection and field works conducted by Geo-Logix from March 6 to 8 2023 (Figure 2): <ul style="list-style-type: none"> • The northern half of site has three residential properties and numerous sheds. • The central dwelling and sheds south of the central dwelling appear to comprise potential asbestos containing material (ACM) fibre cement sheeting. The majority of shed appears to comprise corrugated metal sheeting and a non-fibrous plaster cement sheeting. At least one shed (former toilet) in this location comprised a fibrous cement sheeting, likely ACM. This sheeting was broken in some areas. A substantial number of plaster cement fragments on the site surface in and around this location. Many were observed to be the non-fibrous plaster cement sheet that was considered not likely to be ACM, however, it was not possible to differentiate non-fibrous from fibrous due to the volume of fragments. It is likely there are some ACM cement fragments on the ground surface in this location. • The southern half of site is vacant, with the eastern half overgrown. Evidence of cropping over the southern portion remains (irrigation infrastructure). • Most of the site was unsealed and grassed.
Topography and Elevation	The site topography has been artificially levelled with fill in some areas. There is a general slope towards the northeast. The regional topography also slopes towards northeast. The site elevation ranges from 75 to 80 m.

Geology	Mesozoic era, Triassic period, middle epoch, Wianamatta Group with shale, carbonaceous claystone, claystone, laminite, fine to medium-grained lithic sandstone, rare coal and tuff. (Penrith 1:100,000 Geological Series sheet 9030).
Nearest Surface Water	A tributary of Kemps Creek is located approximately 400 m northeast of the site and flow towards north. The closest surface water is a dam that is connected to this tributary 280m east of the site.
Regional Hydrogeology	Groundwater is expected to follow regional topography and flow northeast towards the tributary of Kemps Creek.
Underground Utilities (Attachment B – Underground Utilities Plan)	<p>A Dial Before You Dig search was conducted to determine the presence of underground utilities which may act as conduits for contamination migration both onsite and offsite (Attachment B). The plans indicate:</p> <ul style="list-style-type: none"> • Endeavour Energy, Jemena and Telstra utilities run underneath Eighth Avenue north of the site and continue north and east; • Endeavour Energy, Jemena and Telstra utilities run underneath vacant land to be developed south of the site and run south and east; • Telstra utilities run underneath the northern portion of the site, entering the site from Eighth Avenue; • Sydney water utilities run underneath Eighth Avenue north of the site and continue east; and • Sydney water utilities run underneath Nemean Road southwest of the site and continue south.

3. SITE HISTORY

The following information has been reviewed to determine historical land use and assess the likelihood of potentially contaminating activities having occurred at the site:

- Historical aerial photographs;
- Available public databases including NSW Environmental Protection Authority (EPA) databases; and
- Protection of Environment Operations Act 1997 Public Register.

3.1 Historical Aerial Imagery Review

Historical aerial photographs were reviewed to assess for potentially contaminating activities. Historical aerial imagery was obtained by Land Insight (Attachment C). A summary is included below.

Year	Site	Surrounding Area
1947	The site is a residential property with three buildings in the northern portion of the site. Possible market gardening is apparent in the northwest corner of the site. The site has been cleared of vegetation. The start of revegetation is apparent in the southern portion of the site.	<p>The land to the south and west is vacant bushland with some clearing to the south.</p> <p>The land to the north and east appears to be cleared for rural residential land use with market gardening also apparent to the north</p>
1961	Vegetation at the site, particularly in the southern half has increased significantly. The building in the centre of the site appears to have been demolished and replaced with a smaller shed.	Additional areas have been cleared for cropping to the west and south of the site.

Year	Site	Surrounding Area
1969	Photograph is blurry. Vegetation appears to have been cut back at the site. No other changes are apparent	A long building, possibly a chicken shed is apparent to the south of the site.
1975	One building remains in the northern portion of the site, presumably a residence. Two small sheds are apparent near to the house.	The majority of the surrounding land is now cleared. Less market gardening is apparent.
1982	The majority of the site is market gardening. Multiple sheds have been built to the south and east of the residence.	Appears similar to the previous aerial photograph. Market gardening of the surrounding land is apparent in this photo. A second chicken shed and a farm dam are present on the property to the south.
1986	Appears similar to the previous aerial photograph.	Appears similar to the previous aerial photograph.
1991	A larger house has been built to the east of the original residence.	Greenhouses are apparent to the west of the site and a large residence has been built to the east. Surrounding land use remains primarily agricultural.
1994	Appears similar to the previous aerial photograph.	Appears similar to the previous aerial photograph.
1998	Appears similar to the previous aerial photograph.	Appears similar to the previous aerial photograph.
2002	A new residence has been built in the northwest corner of the site.	Appears similar to the previous aerial photograph.
2010	Appears similar to the previous aerial photograph.	Appears similar to the previous aerial photograph.
2008	The northern portion of the site adjacent to the drainage line appears disturbed, filled. The remainder appears similar to the previous aerial photograph.	Appears similar to the previous aerial photograph.
2010	Appears similar to the previous aerial photograph.	Appears similar to the previous aerial photograph.
2013	Appears similar to the previous aerial photograph.	Appears similar to the previous aerial photograph.
2016	Stockpiles of material are apparent in the centre of the site	Appears similar to the previous aerial photograph.
2019	Appears similar to the previous aerial photograph.	Damage is apparent to the roof of the large chicken shed immediately to the south of the site.
2022	Appears similar to the previous aerial photograph.	The area to the south of the site has been redeveloped as moderate density residential. Some materials appeared to be stored on the southern site boundary.

3.2 Public Database Search

A search of public databases maintained by the NSW EPA was conducted, including the Contaminated Land Database, POEO Public Register of Licences and Notices, and List of sites notified under the Duty to Notify. A summary of the search result is presented in the table below. The search results are presented in the attached Attachment D.

Database	Sites
Sites Notified as Contaminated to the EPA	None identified within 500 m of site.
Contaminated Land Record of Notice	None identified within 500 m of site.
NSW EPA Licences Protection of the Environment Operations Act 1997 (POEO Act)	210B Seventh Avenue, Austral NSW 2179, approximately 280m south east, was issued a clean-up notice by the NSW EPA in 2018 for stockpiled soil and construction waste, including asbestos, exceeding 40 m ³ . No other records were found for properties within 500 m of the subject site.
NSW EPA Clean UP and Penalty Notices	None identified within 500 m of site.

4. SITE HISTORY SUMMARY

Review of available aerial imagery data indicates the site has historically been located in rural residential area. Historical aerial photography from 1947 suggests the properties and surrounding areas have been used for market gardening. Chicken farming and orcharding also occurring in proximity to the site. No evidence of on-site farm dams or extensive filling were identified in the aerial photographs. Some filling may be present in the vicinity of the on-site residences and sheds. Minor vehicle and farm machinery maintenance is also likely to have occurred at the site, in the vicinity of existing and former sheds.

5. POTENTIAL SITE CONTAMINATION

5.1 Onsite Activities

Market Gardening

Given this historical activity there is potential for contamination to soil of the following contaminants of potential concern (COPC) associated with application of environmentally persistent pesticides:

- Organochlorine Pesticides (OCPs); and
- Heavy Metals (As, Cd, Cr, Cu, Hg, Ni, Pb and Zn).

Hazardous building materials

Historical aerial photography suggests several former structures have been demolished on the northern half of the site. Given the age of the structures onsite, there is a high potential for hazardous building materials (asbestos and lead) in shallow soil.

Onsite Vehicle/Machinery Maintenance and Fill Material of Unknown Origin

There is evidence of potential filling over the northern half of the site. Where there is application of fill of unknown origin, the following COPC may be present:

- Petroleum hydrocarbons;
- Polycyclic aromatic hydrocarbons (PAHs);
- OCPs;
- Polychlorinated biphenyls (PCBs);
- Heavy metals; and
- Asbestos.

5.2 Offsite Activities

No evidence of potential offsite sources of contamination were identified.

6. PRELIMINARY CONCEPTUAL SITE MODEL

For site contamination to present a risk to human health and the environment there has to be a link between the contaminant and the receptor as detailed below.



If any of the links do not exist contaminant exposure cannot occur.

Conceptual Site Model – Commercial Retail Centre				
Relevant Exposure Pathways	Receptors			
	Construction Workers	Site Visitors / Staff	Offsite	Other
Soil Ingestion/Dermal Contact/Dust	✓	✓	X	Terrestrial Ecology X Ecological pathway considered incomplete due to minimal soil access for proposed development
Inhalation of Vapours derived from Soil	✓	✓	✓	Onsite Trench worker ✓
Inhalation of Vapours Derived from Groundwater	✓	✓	✓	Onsite Trench worker ✓
Soils Leaching to Groundwater	--	--	--	Ongoing Groundwater Impact ✓
Groundwater Ingestion/Dermal Contact	X	X	✓	--
Groundwater Discharge to Surface Water	--	--	--	Recreation/Aquatic ecosystem ✓
Comments				
X – exposure pathway incomplete no unacceptable risk ✓ – exposure pathway maybe complete, investigation is required -- – Not relevant				

7. DATA QUALITY OBJECTIVES

The objective of the DSI was to assess the land for contamination that may be associated with historical site activities and consider the suitability of the site for retail development.

To achieve the objective, Geo-Logix has adopted the seven step Data Quality Objective (DQO) process as described in AS 4482.1–2005, NEPC (2013) and NSW EPA (2020).

Step 1: State the problem.

The subject site may be contaminated because of historical and current land use activities. Investigation of the site is required to determine the suitability for the proposed retail development.

Step 2: Identify the decision.

Contamination has not been identified in soil at concentrations above commercial land use standards. The site is considered suitable for the proposed commercial development without the requirement for remediation/management of site contamination.

Step 3: Identify inputs into the decision.

- Identification of issues of potential environmental concern;
- Appropriate identification of COPCs;
- Systematic soil sampling and analysis program of shallow soils across the site at a frequency consistent with minimum sampling requirements as defined in NSW EPA (2022);
- Double density grid sampling across the northern half of the site for characterisation of asbestos in shallow fill, consistent with the requirements recommended by WA DOH (2009) asbestos assessment guidelines;
- Grid based sampling across the site for the assessment of potential pesticides application associated with former market gardening;
- Targeted analysis of additional fill COPC (majority of locations selected over the northern half of the site)
- Visual inspection of shallow fill across the southern half for presence of ACM (asbestos was not considered likely in this location based on site history);
- Appropriate quality assurance/control to enable an evaluation of the reliability of the analytical data; and
- Screening sample analytical results against appropriate health based assessment criteria for the intended land use (Commercial/Industrial).

Step 4: Define the boundaries of the site.

The project boundary is defined as the area within the site boundary (330 Eighth Avenue, Austral NSW) to a maximum test pit depth of 3 metres below grade (mbg).

Step 5: Develop a decision rule.

To accept the assessment decision the shallow soils must be free of COPC hotspots of 25 m diameter or greater at a 95% statistical degree of certainty (17.7m diameter for asbestos over northern portion of the site). The sampling data must meet the following statistical qualifiers.

- The 95% Upper Confidence Limit of COPC concentration data does not exceed the soil assessment criteria;
- No single sample exceeds 250% of the soil COPC assessment criteria;

- The standard deviation of COPC analytical results is less than 50% of the soil assessment criteria; and
- No visible identification of ACM in soil samples.

The results of targeted soil samples must not exceed the assessment criteria.

Step 6: Specify acceptable limits on decision errors.

The field sampling methodology, sample preservation techniques, and laboratory analytical procedures must be appropriate to provide confidence in data quality so any comparison against assessment criteria can be considered reliable. This is achieved by defining and comparing results against the Data Quality Indicators (DQIs).

Step 7: Optimise the design for obtaining data.

This is achieved by sampling plan design in consideration of the available site history information, area of investigation, contaminant behaviour in the environment, and likely spatial distribution of contamination.

8. ASSESSMENT CRITERIA

The primary reference for environmental site assessment in Australia is the Amended Assessment of Site Contamination (ASC) National Environmental Protection Measure (NEPM) 1999 (NEPC, 2013). This document includes soil criteria for use in evaluating potential contamination risk to human health and the environment.

The application of these investigation levels and screening levels is subject to a range of limitations and their selection and use must be in the context of the conceptual site model (CSM) relating to the nature and distribution of impacts and potential exposure pathways. Each relevant guideline is discussed further below and the adopted screening criteria are presented in summary sample analytical tables attached to this report.

8.1 Soil Assessment Criteria

The following soil assessment criteria were adopted for the investigation.

NEPM Health Based Investigation Level D (HILs D)

HILs are Tier 1 risk based generic assessment criteria used for the assessment of potential risks to human health from chronic exposure to contaminants in soil. They are intentionally conservative and based on a reasonable worst-case scenario for generic land use settings including Low Density Residential (HILs A), High Density Residential (HILs B), Open Space/Recreational (HILs C) and Commercial Industrial (HILs D). HILs D soil assessment criteria were adopted on the basis the proposed site use is commercial.

NEPM Health Screening Levels D (HSLs D)

HSLs are Tier 1 risk based generic soil assessment criteria used for the assessment of potential risks to human health from chronic inhalation exposure of petroleum vapour emanating off petroleum contaminated soils (Vapour Risk). They are intentionally conservative and based on a reasonable worst-case scenario for generic soil types, contamination depth and land use settings including Residential (HSLs A/B), Open

Space/Recreational (HSLs C) and Commercial Industrial (HSLs D). HSLs D soil assessment criteria were adopted. The generic soil types adopted included;

- HSL D Sand Soil 0 to 1 m were adopted on basis of general site geology and proposed land use;

NEPM Asbestos Criteria – Commercial/Industrial D

Asbestos assessment criteria are included in NEPM (1999) amendment. Those criteria apply to the assessment of known and suspected asbestos contamination in soil and address friable and non-friable forms of asbestos.

Historical imagery indicates former structures were located on the northern half of the site. During investigations, shallow fill containing anthropogenic materials was observed over the northern half of the site. Based on these observations, Commercial/Industrial D health screening levels were adopted for the proposed land use. Criteria for Commercial/Industrial D includes the following:

- 0.05% w/w for ACM (bonded);
- 0.001% FA and AF (friable); and
- No visible asbestos in the top 0.1 m.

Asbestos and extensive filling was not expected over the southern half of the site. Given the presence of asbestos contamination was not known at the time of investigation therefore its investigation was of a preliminary nature. Given the preliminary assessment the following assessment criteria was adopted:

- No visible ACM on the site surface or in the subsurface at soil sampling locations; and
- No asbestos is detected in soil samples.

9. INVESTIGATION METHODOLOGIES

Geo-Logix conducted environmental investigation during the period 6 – 8 March, 2023. Sample locations are presented in Figure 3.

9.1 Sampling Analysis Plan

Based on the site history, the site has been split into two for the purposes of formulating the sampling analysis plan. The former market gardening occurred over the majority of the site, whilst historical aerial imagery indicates former structures were located over the northern half only.

Northern Half

To assess for potential soil contamination Geo-Logix completed the following scope of works across the northern half of the site. Rationale is provided in the table below.

Sampling Plan	Samples	Rationale	Analysis
Systematic sampling of shallow soils at 20 locations on a 21 m grid-based sampling plan. The sampling frequency meets NSW EPA (2022) minimum sampling density requirements and is sufficient to identify contamination hotspots of a minimum diameter of 25 m at a 95% degree of statistical certainty.	One sample of shallow soils collected from each location TP1 – TP20.	Former market gardening and potential pesticide application over the majority of site area.	OCPs and eight heavy metals (As, Cd, Ca, Co, Cu, Pb, Hg, Ni)
Samples of fill at 15 locations (17 samples) were selected for analysis of additional fill COPC.	TP14/0-0.2, TP12/0-0.2, TP4/0.15-0.35, TP6/0.2-0.4, TP10/0-0.2, TP9/0-0.3, TP1/0.1-0.3, TP1/0.3-0.5, TP17/0-0.2, TP17/0.4-0.6, TP2/0-0.2, TP8/0.15-0.35, TP3/0-0.2, TP7/0-0.2, TP13/0-0.3, TP15/0-0.2, TP57/0.3-0.5	Samples at 15 locations (including two locations with samples of two different fill layers) selected for analysis of additional fill COPC based on observations of fill thickness and field observations, such as anthropogenic inclusions. Location also in areas of current and former site infrastructure for COPC associated for former farming equipment maintenance.	TRH, BTEX, PAHs
Five of these samples were selected for analysis of fill COPC PCB.	TP2/0-0.2, TP8/0.15-0.35, TP13/0-0.3, TP15/0-0.2, TP57/0.3-0.5	Selected for analysis of fill COPC PCBs based on high anthropogenic content and general coverage.	PCBs
Double density systematic soil sampling was performed at 40 locations (TP1 – TP20, TP38, TP39, BH2, TP41 – TP57) on a 15 m grid-based sampling plan. The sampling frequency meets NSW EPA (2022) minimum sampling density requirements and WA DOH (2009) asbestos assessment guidelines and is sufficient to identify contamination hotspots of a minimum diameter of 17.7 m at a 95% degree of statistical certainty.	A 10L bulk sample of fill was collected for gravimetric visual assessment of ACM, and a 500mL fill sample was collected for laboratory quantification of asbestos fines/fibrous asbestos (AF/FA) in soil.	For the characterisation of asbestos in fill.	Asbestos

Southern Half

To assess for potential soil contamination Geo-Logix completed the following scope of works across the southern half of the site. Rationale is provided in the table below.

Sampling Plan	Samples	Rationale	Analysis
Systematic sampling of shallow soils at 20 locations on a 21 m grid-based sampling plan. The sampling frequency meets NSW EPA (2022) minimum sampling density requirements and is sufficient to identify contamination hotspots of a minimum diameter of 25 m at a 95% degree of statistical certainty.	One sample of shallow soils collected from each location (TP21 – TP37, TP40, TP59, TP60).	Former market gardening and potential pesticide application over the majority of site area.	OCPs and eight heavy metals (As, Cd, Ca, Co, Cu, Pb, Hg, Ni)
Samples at four locations were selected for additional fill COPC.	TP36/0.3-0.5, TP31/0-0.2, TP35/0-0.2, TP28/0-0.2 and TP23/0-0.2	Samples at locations where fill/tilled soils was identified at greater depths.	TRH, BTEX, PAHs

Sampling Plan	Samples	Rationale	Analysis
Fill was inspected for ACM at each sample location.	Shallow fill at all locations.	Preliminary assessment for asbestos.	Asbestos

9.2 Soil Sampling Methodology

A total of 60 sample locations (55 test pits, five bore holes) were completed across the investigation area as follows (Figure 3):

- Test pits (TP1 – TP9, TP11 – TP33, TP35 – TP39, TP41 – TP44, TP46 – TP57, TP59, TP60) were excavated using an excavator to depths between 0.4 and 3.0 mbg;
- Borehole BH2 was completed using a ute mounted drill rig to 9.0 mbg (completed as a concurrent geo-technical investigation); and
- Bore holes TP10, TP34, TP40 and TP45 were completed using a hand auger to depth between 0.4 and 0.7 mbg.

Soil samples were collected from test pits and bore holes. Soil samples were placed in laboratory prepared jars (Ziploc bag for asbestos), labelled and placed on ice in an esky for transport. A chain of custody form was prepared to accompany the esky to a NATA Accredited Laboratory for the analysis of the COPC.

Fill subsamples were placed in a zip lock bag for field screening for volatile compounds using a Photo-ionisation Detector (PID). Equipment calibration certificates are included in Attachment E.

Gravimetric assessment methodology was adopted for bonded ACM assessment as follows:

- Collection of a 10-litre volume soil sample;
- Each sample was spread out for inspection on a contrasting colour tarpaulin; and
- ACM was collected and weighed to calculate the asbestos soil concentration as per WA DOH (2009) where:
- $\% \text{Soil Asbestos} = (\% \text{Asbestos Content} \times \text{ACM Mass}) / (\text{Soil Volume} \times \text{Soil Density})$.

It is assumed that the % Asbestos Content in ACM is 15% and that Soil Density is 1.6 kg/L

Quality Control procedures included the decontamination of the hand auger between boring locations, ensuring samples were collected from soil that not touched the excavator bucket and changing disposable gloves between samples. A rinsate sample was collected off the hand auger after decontamination to assess the potential for cross contamination.

9.3 Quality Assurance

Quality control (QC) sampling was undertaken in general accordance with specifications outlined in AS4482.1, Guide to Sampling and Investigation of Potentially Contaminated Soil. Field QC samples were collected and included the following:

Sample Identification	Sample Type	Sample Matrix	Rate of Collection
DS1	Field duplicate of TP16/0-0.2	Soil	1 in 20 samples
TS1	Field triplicate of TP16/0-0.2	Soil	1 in 20 samples

Sample Identification	Sample Type	Sample Matrix	Rate of Collection
DS2	Field duplicate of TP2/0-0.2	Soil	1 in 20 samples
TS2	Field triplicate of TP2/0-0.2	Soil	1 in 20 samples
DS3	Field duplicate of TP28/0-0.2	Soil	1 in 20 samples
TS3	Field triplicate of TP28/0-0.2	Soil	1 in 20 samples
TRIPB1	Transport blank sample	Soil	1 per batch
TRIPS1	Spike sample	Soil	1 per batch
TRIPB2	Transport blank sample	Soil	1 per batch
TRIPS2	Spike sample	Soil	1 per batch
Rinsate	Rinsate water	Water	1 per batch

Note – Rate of QC sample collection specified as 1 in 20 samples in AS4482.1

The laboratory internal QC procedures are consistent with NEPM policy on laboratory analysis of contaminated soils.

10. INVESTIGATION RESULTS

10.1 Site Geology

The geology generally encountered across the site is summarised in the table below.

Type	Approximate Depth (m)	Description
FILL	0 – 0.5	<p><u>Northern half:</u> Fill was identified across the area, with greater depths observed in the locations of the dwellings on the eastern side and western side. A moderate brown clayey sand with gravels was identified across the majority of the area. In some areas (generally south of the east and west dwellings) the fill appeared similar to the tilled soils in the southern portion of the site. In some areas surrounding the onsite dwellings, fill comprised sandy gravelly clays. Some anthropogenic materials (bricks, plastic, tiles, concrete pieces, plaster cement fragments) were observed, generally in an upper clayey sand layer. A fibre cement ACM fragment was found at location TP15.</p> <p><u>Southern half:</u> A layer of fill was encountered over this area that was observed to most likely be tilled soil, likely from the former market gardening practices. The material in majority of locations investigated comprised moderate brown clayey sands with gravels and pieces of black plastic sheeting. Some locations (TP23, TP32, TP34, TP35) had a similar but lighter colour layer fill/tilled soils (clayey sands with gravels). At location TP36 a reddish orange clayey gravelly sand with charcoal wooden pieces (0.3-0.8 m) was observed underlying the upper moderate brown fill/tilled soils. No ACM was observed in the material at the locations investigated.</p>
NATIVE CLAYS	0.5 – 3.6+	Generally encountered was a layer <1.0m in thickness comprising yellowish orange and reddish orange sandy clays and sandy gravelly clays, damp, firm, low – medium plasticity; overlying Grey and reddish orange lean clays, damp, stiff and medium plasticity.
BEDROCK	3.6+	Weathered shale was encountered at 3.6m in BH2.

Soil testpit and borehole logs are presented in Attachment F.

10.2 Site Hydrogeology

Groundwater was not encountered during the site investigation. During the concurrent geotechnical investigation groundwater was encountered approximately 5 mbg.

The area north of the central dwelling was water logged with water infiltrating testpits in this location at around 0.4 m. The water was suspected to be from a leaking water pipe or associated with the adjacent septic tank. The water was observed with slight sheen but no odour noted.

Water was also encountered at a suspected septic absorption trench at location TP17 approximately 0.4mbg.

10.3 Soil Analytical Results

Soil analytical results are summarised in Tables 1 to 6. Laboratory reports are presented in Attachment G.

OCPs

OCPs were not detected at concentrations above the site assessment criteria in all soil samples analysed (Table 1).

Heavy Metals

Arsenic, cadmium, chromium, copper, lead, mercury, nickel and zinc were not detected at concentrations greater than the site assessment criteria in all soil samples analysed (Table 2).

Petroleum Hydrocarbons

TRH and BTEX were not detected at concentrations above the site assessment criteria in all soil samples analysed (Table 3).

PAHs

PAHs were not detected at concentrations above the site assessment criteria in all soil samples analysed (Table 4).

PCBs

PCBs were not detected at concentrations above the site assessment criteria in all soil samples analysed (Table 5).

Asbestos

Northern Half

Except for TP15/0-0.5, ACM was not observed within 10L bulk samples of fill.

A fragment of ACM fibrous cement sheeting (8.28g) was observed in the 10L bulk sample of fill at location TP15. The fragment was sent for analysis at the laboratory for identification of asbestos (TP15/A1) and laboratory results identified asbestos within the fragment. The w/w % in soil was calculated at 0.008% at this location which is less than the site assessment criteria of 0.05% for ACM. The field sheet for calculation of ACM concentration in fill at TP15 is presented as Attachment H. However, given the ACM was encountered in the top 0.1m, it exceeds the assessment criteria "No visible asbestos in the top 0.1 m".

AF/FA was not detected within 500mL samples of fill collected from each location with exception to TP15/0-0.5 and TP50/0-0.2, both at concentrations that exceed site assessment criteria 0.001%. The results are presented in Table 6.

An additional plaster cement fragment observed in TP13 (TP13/A1) was sent for laboratory analysis for asbestos identification and the analysis did not identify asbestos within the fragment.

Southern Half

ACM was not observed on the site surface or within fill/tilled soil at the locations investigated.

10.4 QA/QC Results

Field Duplicates / Triplicates

Soil duplicate/triplicate results are within the adopted acceptance criteria of 30–50% (AS4482.1) relative percent difference (RPD). It is noted that a number of RPD results exceed 50%; however, these are considered acceptable as are attributed to low concentrations detected (<10 time LOR). These include:

- Copper, lead and zin in soil triplicate pair TP16/0-0.2 and TS1;
- Arsenic in soil duplicate pair TP28/0-0.2 and DS3;
- Chromium in soil triplicate pair TP28/0-0.2 and TS3;

Rinsate Samples

COPC were not detected at concentrations above laboratory reporting limits in the rinsate samples collected from the hand auger indicating decontamination procedures were adequate to prevent cross contamination.

Field Blanks

Contaminants of Potential Concern (COPCs) were not detected at concentrations above laboratory reporting limits in the field soil blank samples indicating sample handling and transport techniques were sufficient to prevent cross contamination between samples.

Field Spikes

BTEX recoveries were between 70% and 130 % in the field soil spike samples. The results indicate the sample handling, storage, transport and analytical procedures were sufficient to prevent volatile loss.

A summary of Laboratory QA/QC data is presented on the following table.

Report #	Analysis Within Holding Time	Surrogate Recovery	Lab. Duplicate RPD %	Lab Matrix Spike Recovery	Lab. Control Sample	Lab Method Blank
971509-S	X	✓	✓	✓	✓	✓
971657-S	X	✓	✓	✓	✓	✓
971509-W	✓	✓	✓	✓	✓	✓
✓ = Pass X = Fail -- = not required * = refer to report text						
Quality Assurance Criteria			Quality Control Criteria			
Holding Times			Accuracy			
TRH and BTEX: 14 days soil PAHs: 14 days soil OCPs: 14 days soil; 7 days water Metals: 28 days soil; 28 days water PCBs: 28 days soil Asbestos: no limit			Surrogate, matrix spike, control sample 70–130% and 30–130% for Phenols. Surrogate recovery 50–150% and 20–130% for Phenols.			
			Precision			
			Method Blank Not detected Duplicate – No limit (<10xEQL), 0–50% (10–20xEQL), 0–30% (>20xEQL)			

Report #971509-S

Samples were analysed 6-8 days outside of the recommended timeframes for OCPs. Analytes were either not detected above laboratory reporting limits, or marginally above laboratory reporting limits and well below assessment criteria, in primary samples, duplicates or triplicates and the exceedance of holding time is not considered to have affected results.

Report #971657-S

Samples were analysed 9-10 days outside of the recommended timeframes for OCPs, TRH, BTEX and PAHs. Analytes were either not detected above laboratory reporting limits, or marginally above laboratory reporting limits and well below assessment criteria, in primary samples, duplicates or triplicates and the exceedance of holding time is not considered to have affected results.

Field spikes recoveries also provide evidence the hold time exceedances have not impacted sample integrity.

Geo-Logix accepts the integrity of the analytical data.

11. DISCUSSION

Asbestos in soil

ACM/FA/AF where identified at concentrations above landuse assessment criteria in shallow fill (~0.5m) at locations TP15 and TP50. Both locations are adjacent and are in the location of current and former sheds/structures. The majority of shed appears to comprise corrugated metal sheeting and a non-fibrous plaster cement sheeting. At least one shed (former toilet) in this location comprised a fibrous cement sheeting, likely ACM, which was broken in some areas. A substantial number of plaster cement fragments on the site surface in and around this location. Many were observed to be the non-fibrous plaster cement sheet that was considered not likely to be ACM, however, it was not possible to differentiate non-fibrous from fibrous due to the volume of fragments. It is likely there is some ACM cement fragments on the ground surface in this location, and potentially near the adjacent central dwelling.

It is noted that potential ACM plaster cement fragments were identified in 10L bulk samples of fill from locations TP2, TP8 and TP13. These fragments were not similar to the fibrous fragment identified in TP15 and were noted to be similar to the bulk of the non-fibrous plaster cement fragments on the ground surface around location TP15. The fragment observed in TP13 (TP13/A1) was sent for laboratory analysis for asbestos identification and the results indicate the fragment did not contain asbestos.

Given the absence of asbestos detected in shallow fill across the site during the investigation, with exception to the area concentrated around the sheds and former site infrastructure, it is considered that the asbestos identified is likely associated the demolition of former structures.

12. REVISED CONCEPTUAL SITE MODEL

A summary of the revised CSM for contamination is presented below.

Conceptual Site Model – Commercial Retail Centre				
Relevant Exposure Pathways	Receptors			
	Construction Workers	Site visitors/ Staff	Offsite	Other
Soil Ingestion/Dermal Contact/Dust	√	X	X	Onsite Trench Worker √
Inhalation of Vapours derived from Soil	X	X	X	--
Inhalation of Vapours Derived from Groundwater	X	X	X	--
Soils Leaching to Groundwater	--	--	--	Ongoing Groundwater Impact X
Groundwater Ingestion/Dermal contact	X	X	X	--
Groundwater Discharge to Surface Water	--	--	--	Recreation/Aquatic ecosystem X
Comments				
X – exposure pathway incomplete no unacceptable risk √ – exposure pathway complete potential unacceptable risk -- Not relevant				

13. CONCLUSIONS

Results of the investigation identified a non-conformance of the project decision rules due to fragments of bonded ACM and AF/FA (associated with weathered ACM) in shallow soils in the central portion of the northern half of the site (surrounding TP15 and TP50).

On this basis the project decision has not been met and the site is not considered suitable for the proposed retail development without the requirement for minor soils remediation. Geo-Logix's opinion is that the site can be made suitable for the proposed development subject to the following:

- Preparation of a Remedial Action Plan (RAP) detailing the remedial methodology and validation requirements for asbestos impacted soils; and
- Remediation and validation of a minor area of asbestos impacted soils.

It is recommended site demolition be conducted prior to remediation in the event the demolition works results in localised residual hazardous building material contamination to shallow soils.

14. LIMITATIONS

This report should be read in full, and no executive summary, conclusion or other section of the report may be used or relied on in isolation, or taken as representative of the report as a whole. No responsibility is accepted by Geo-Logix, and any duty of care that may arise but for this statement is excluded, in relation to any use of any part of this report other than on this basis.

This report has been prepared for the sole benefit of and use by the Client. No other person may rely on the report for any purpose whatsoever except with Geo-Logix's express written consent. Any duty of care to third parties that would or may arise in respect of persons other than the Client, but for this statement, is excluded.

Geo-Logix owns the copyright in this report. No copies of this report are to be made or distributed by any person without express written consent to do so from Geo-Logix. If the Client provides a copy of this report to a third party, without Geo-Logix's consent, the Client indemnifies Geo-Logix against all loss, including without limitation consequential loss, damage and/or liability, howsoever arising, in connection with any use or reliance by a Third Party.

The works undertaken by Geo-Logix are based solely on the scope of works, as agreed by the Client (Scope of Works). No other investigations, sampling, monitoring works or reporting will be carried out other than as expressly provided in the Scope of Works. **A COPY OF THE SCOPE OF WORKS IS AVAILABLE ON REQUEST.**

To the extent permitted by law, Geo-Logix makes no warranties or representations as to the:

- a. suitability of the Site for any specific use, or category of use, or
- b. potential statutory requirements for remediation, if any, of the Site,
- c. approvals, if any, that may be needed in respect of any use or category of use, or
- d. level of remediation, if any, that is warranted to render the Site suitable for any specific use, or category of use, or
- e. level of ongoing monitoring of Site conditions, if any, that is required in respect of any specific use, or category of use, or
- f. presence, extent or absence of any substance in, on or under the Site, other than as expressly stated in this report.

The conclusions stated in this report are based solely on the information, Scope of Works, analysis and data that are stated or expressly referred to in this report.

To the extent that the information and data relied upon to prepare this report has been conveyed to Geo-Logix by the Client or third parties orally or in the form of documents, Geo-Logix has assumed that the information and data are completely accurate and has not sought independently to verify the accuracy of the information or data. Geo-Logix assumes no responsibility or duty of care in respect of any errors or omissions in the information or data provided to it.

Without limiting the paragraph above, where laboratory tests have been carried out by others on Geo-Logix's behalf, the tests are reproduced in this report on the assumption that the tests are accurate. Geo-Logix has not sought independently to verify the accuracy of those tests and assumes no responsibility in respect of them.

Geo-Logix assumes no responsibility in respect of any changes in the condition of the Site which have occurred since the time when Geo-Logix gathered data and/or took samples from the Site on its site inspections dated **6 to 8 March 2023**.

Given the nature of asbestos, and the difficulties involved in identifying asbestos fibres, despite the exercise of all reasonable due care and diligence, thorough investigations may not always reveal its presence in either buildings or fill. Even if asbestos has been tested for and those tests' results do not reveal the presence of asbestos at those specific points of sampling, asbestos or asbestos containing materials may still be present at the Site, particularly if fill has been imported at any time, buildings constructed prior to 1980 have been demolished on the Site or materials from such buildings have been disposed of on the Site.

Where the Scope of Works does not include offsite investigations, Geo-Logix provides no warranty as to offsite conditions, including the extent if any to which substances in the Site may be emanating off site, and if so whether any adjoining sites have been or may be impacted by contamination originating from the Site.

Where the Scope of Works does not include the investigation, sampling, monitoring or other testing of groundwater in, on or under the Site, Geo-Logix provides no warranty or representation as to the quality of groundwater on the Site or the actual or potential migration of contamination in groundwater across or off the Site.

Subsurface site conditions are typically heterogeneous, and may change with time. Samples taken from different points on the Site may not enable inferences to be drawn about the condition of areas of the Site significantly removed from the sample points, or about the condition of any part of the Site whatsoever, in particular where the proposed inferences are to be drawn a long time after the date of the report.

Geo-Logix has prepared this report with the diligence, care and skill which a reasonable person would expect from a reputable environmental consultancy and in accordance with environmental regulatory authority and industry standards, guidelines and assessment criteria applicable as at the date of this report. Industry standards and environmental criteria change frequently, and may change at any time after the date of this report.

15. REFERENCES

Australian Standard (2005) AS 4482.1–2005 Guide to the investigation and sampling of sites with potentially contaminated soil. Part 1: Volatile and Semi-volatile compounds. Standards Australia.

Australian Standard (1999) AS 4482.2–1999 Guide to the investigation and sampling of sites with potentially contaminated soil. Part 2: Volatile substances. Standards Australia.

Before You Dig (2023), <https://www.byda.com.au/>, Accessed 1 March 2023.

Clark N.R. and Jones D.C., 1991, Penrith 1:100 000 Geological Sheet 9030, 1st edition. Geological Survey of New South Wales, Sydney.

Google Earth (2023). Austral, NSW.

Nearmap (2023) Austral, <https://www.nearmap.com/au/en>.

NEPC (1999) Amended National Environmental Protection Measure (2013), National Environmental Protection Council.

NSW EPA (2020) Consultants Reporting on Contaminated Land, Contaminated Land Guidelines. NSW Environment Protection Authority, April 2020, Updated 5 May 2020.

NSW EPA (2017) Guidelines for NSW Site Auditor Scheme, NSW Environment Protection Authority, October 2017.

NSW EPA (2022) Sampling design part 1 – application, Contaminated Land Guidelines. NSW Environment Protection Authority, August 2022

NSW EPA (2023) Contaminated land record of notices,
<https://app.epa.nsw.gov.au/prclmapp/searchregister.aspx>, Accessed 5 April 2023.

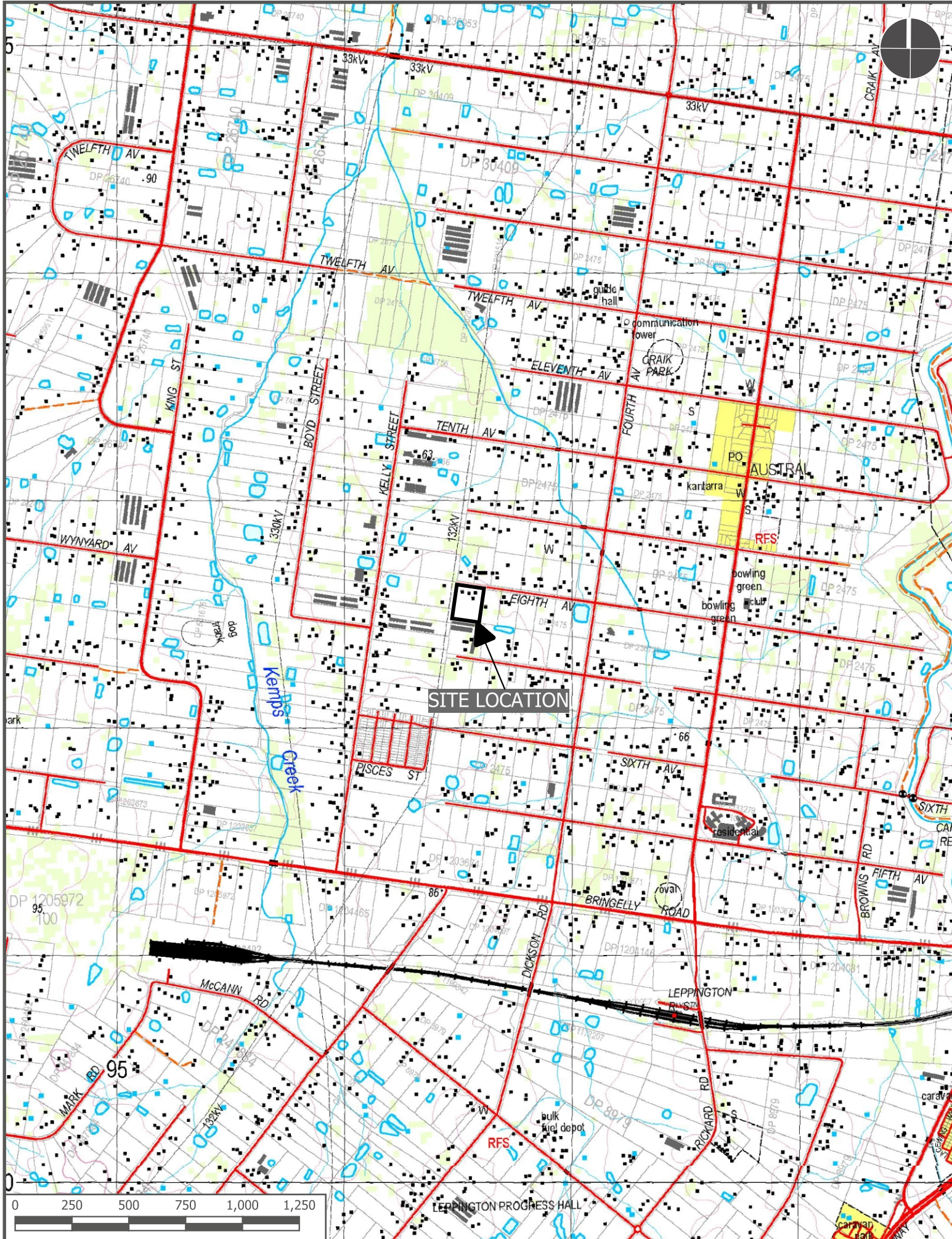
NSW EPA (2023) List of NSW Contaminated Sites Notified to the EPA, <https://www.epa.nsw.gov.au/your-environment/contaminated-land/notified-and-regulated-contaminated-land/list-of-notified-sites>, Accessed 5 April 2023.

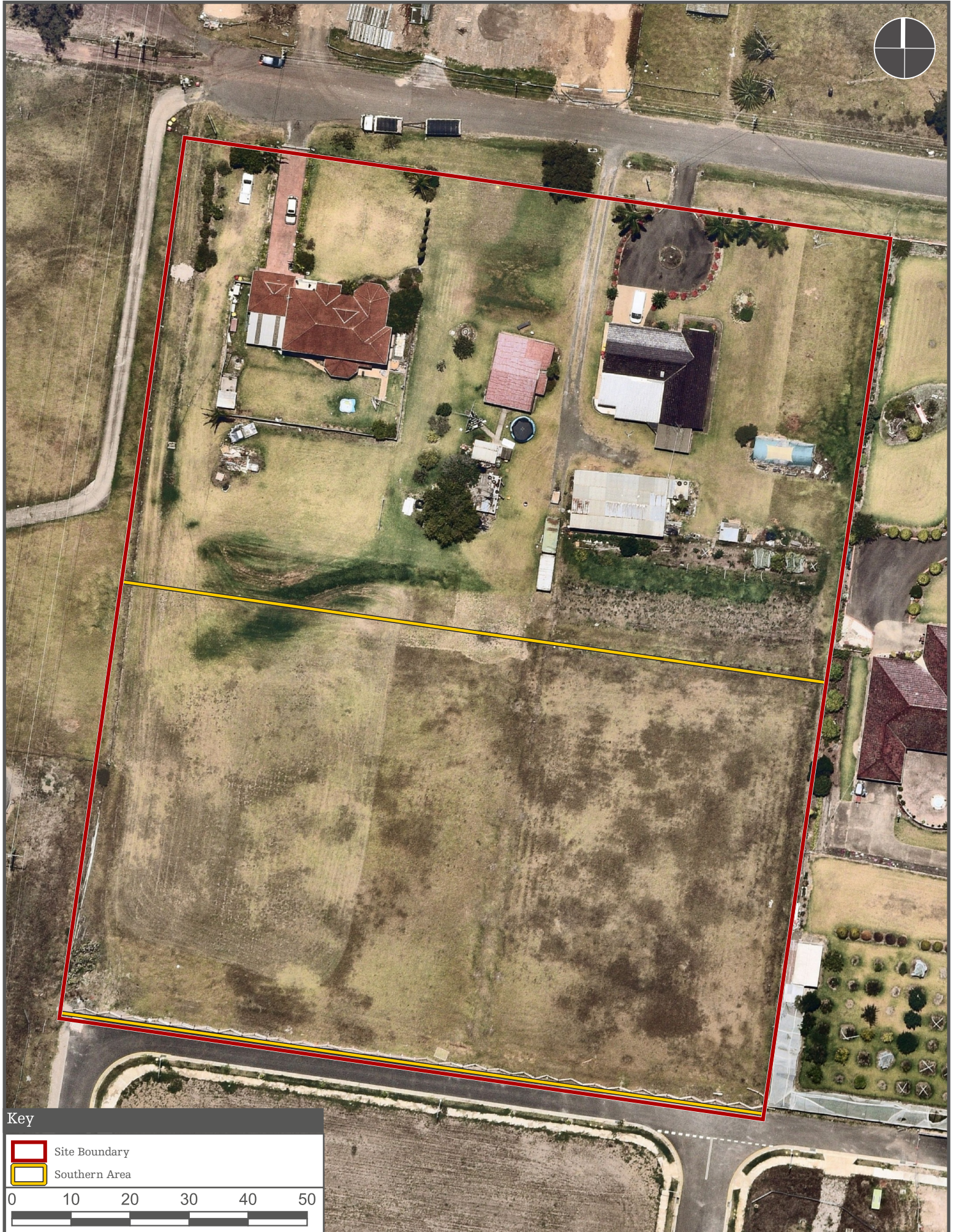
NSW EPA (2023) POEO Public register search,
<https://app.epa.nsw.gov.au/prpoeoapp/searchregister.aspx>

NSW Government (2023) <https://maps.six.nsw.gov.au/>, Accessed 11 April 2023.



WA DOH (2009) Guidelines for the Assessment, Remediation and Management of Asbestos Contaminated Sites in Western Australia, Government of Western Australia Department of Health.

FIGURES






Key

	Site Boundary
	Southern Area

0 10 20 30 40 50



COPYRIGHT
Other than for the sole purpose of work associated with the Detailed Site Investigation as detailed herein, the use, reproduction and/or publication of this figure wholly, or in part, whether or not modified or altered, is strictly prohibited.

SITE MAP

Detailed Site Investigation
330 Eight Avenue, Austral NSW 2179

Project No. 2301008

Figure 2



Key

- Site Boundary
- Southern Area
- Test Pit Locations
- Additional Asbestos Samples

0 10 20 30 40 50

TABLES

Table 1 : Summary of Soil Analytical Data - Organochlorine Pesticides

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

	Criteria 1	Sample ID	TP1/0.1-0.3	TP1/0.3-0.5	TP2/0-0.2	DS2	RPD_DS2
		Depth (m)	0.1-0.3	0.3-0.5	0.0-0.2	-	-
	HILs - D	Type	Fill	Fill	Fill	-	-
		Date	7/03/2023	7/03/2023	7/03/2023	7/03/2023	-
4.4'-DDD	-		< 0.05	< 0.05	< 0.05	< 0.05	nc
4.4'-DDE	-		< 0.05	< 0.05	< 0.05	< 0.05	nc
4.4'-DDT	-		< 0.05	0.06	< 0.05	< 0.05	nc
a-BHC	-		< 0.05	< 0.05	< 0.05	< 0.05	nc
Aldrin	-		< 0.05	< 0.05	< 0.05	< 0.05	nc
b-BHC	-		< 0.05	< 0.05	< 0.05	< 0.05	nc
Chlordanes - Total	530		< 0.1	< 0.1	< 0.1	< 0.1	nc
d-BHC	-		< 0.05	< 0.05	< 0.05	< 0.05	nc
Dieldrin	-		< 0.05	< 0.05	< 0.05	< 0.05	nc
Endosulfan I	-		< 0.05	< 0.05	< 0.05	< 0.05	nc
Endosulfan II	-		< 0.05	< 0.05	< 0.05	< 0.05	nc
Endosulfan sulphate	-		< 0.05	< 0.05	< 0.05	< 0.05	nc
Endrin	100		< 0.05	< 0.05	< 0.05	< 0.05	nc
Endrin aldehyde	-		< 0.05	< 0.05	< 0.05	< 0.05	nc
Endrin ketone	-		< 0.05	< 0.05	< 0.05	< 0.05	nc
g-BHC (Lindane)	-		< 0.05	< 0.05	< 0.05	< 0.05	nc
Heptachlor	50		< 0.05	< 0.05	< 0.05	< 0.05	nc
Heptachlor epoxide	-		< 0.05	< 0.05	< 0.05	< 0.05	nc
Hexachlorobenzene	80		< 0.05	< 0.05	< 0.05	< 0.05	nc

Notes:

Criteria 1 = NEPC (1999) Amended, Health-based Investigation Levels for soil contaminants.

Total concentrations in mg/kg

- = assessment criteria not available

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

--- = sample not analysed

Bold/red indicates exceedance of assessment criteria



Bold/red indicates exceedance of assessment criteria

Table 1 : Summary of Soil Analytical Data - Organochlorine Pesticides

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

	Criteria 1	Sample ID	TS2	RPD_TS2	TP3/0-0.2	TP4/0.15-0.35	TP5/0-0.2
		Depth (m)	-	-	0.0-0.2	0.15-0.35	0.0-0.2
	HILs - D	Type	-	-	Fill	Fill	Fill
		Date	7/03/2023	-	7/03/2023	8/03/2023	8/03/2023
4.4'-DDD	-		< 0.05	nc	< 0.05	< 0.05	< 0.05
4.4'-DDE	-		< 0.05	nc	< 0.05	< 0.05	< 0.05
4.4'-DDT	-		< 0.05	nc	< 0.05	< 0.05	< 0.05
a-BHC	-		< 0.05	nc	< 0.05	< 0.05	< 0.05
Aldrin	-		< 0.05	nc	< 0.05	< 0.05	< 0.05
b-BHC	-		< 0.05	nc	< 0.05	< 0.05	< 0.05
Chlordanes - Total	530		< 0.1	nc	< 0.1	< 0.1	< 0.1
d-BHC	-		< 0.05	nc	< 0.05	< 0.05	< 0.05
Dieldrin	-		< 0.05	nc	< 0.05	< 0.05	< 0.05
Endosulfan I	-		< 0.05	nc	< 0.05	< 0.05	< 0.05
Endosulfan II	-		< 0.05	nc	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	-		< 0.05	nc	< 0.05	< 0.05	< 0.05
Endrin	100		< 0.05	nc	< 0.05	< 0.05	< 0.05
Endrin aldehyde	-		< 0.05	nc	< 0.05	< 0.05	< 0.05
Endrin ketone	-		< 0.05	nc	< 0.05	< 0.05	< 0.05
g-BHC (Lindane)	-		< 0.05	nc	< 0.05	< 0.05	< 0.05
Heptachlor	50		< 0.05	nc	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	-		< 0.05	nc	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	80		< 0.05	nc	< 0.05	< 0.05	< 0.05

Notes:

Criteria 1 = NEPC (1999) Amended, Health-based Investigation Levels for soil contaminants.

Total concentrations in mg/kg

- = assessment criteria not available

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

--- = sample not analysed

Bold/red indicates exceedance of assessment criteria



Table 1 : Summary of Soil Analytical Data - Organochlorine Pesticides

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

[illegible]

Notes:

Criteria 1 = NEPC (1999) Amended, Health-based Investigation Levels for soil contaminants.

Total concentrations in mg/kg

– = assessment criteria not available

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria

Table 1 : Summary of Soil Analytical Data - Organochlorine Pesticides

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

	Criteria 1	Sample ID	TP6/0.2-0.4	TP7/0-0.2	TP8/0.15-0.35	TP9/0-0.3	TP10/0-0.2
		Depth (m)	0.2-0.4	0.0-0.2	0.15-0.35	0.0-0.3	0.0-0.2
	HILs - D	Type	Fill	Fill	Fill	Fill	Fill
		Date	8/03/2023	7/03/2023	7/03/2023	7/03/2023	6/03/2023
4.4'-DDD	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.5
4.4'-DDE	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.5
4.4'-DDT	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.5
a-BHC	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.5
Aldrin	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.5
b-BHC	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.5
Chlordanes - Total	530		< 0.1	< 0.1	< 0.1	< 0.1	< 1
d-BHC	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.5
Dieldrin	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.5
Endosulfan I	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.5
Endosulfan II	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.5
Endosulfan sulphate	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.5
Endrin	100		< 0.05	< 0.05	< 0.05	< 0.05	< 0.5
Endrin aldehyde	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.5
Endrin ketone	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.5
g-BHC (Lindane)	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.5
Heptachlor	50		< 0.05	< 0.05	< 0.05	< 0.05	< 0.5
Heptachlor epoxide	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.5
Hexachlorobenzene	80		< 0.05	< 0.05	< 0.05	< 0.05	< 0.5

Notes:

Criteria 1 = NEPC (1999) Amended, Health-based Investigation Levels for soil contaminants.

Total concentrations in mg/kg

- = assessment criteria not available

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

--- = sample not analysed

Bold/red indicates exceedance of assessment criteria



Table 1 : Summary of Soil Analytical Data - Organochlorine Pesticides

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

[illegible]

Notes:

Criteria 1 = NEPC (1999) Amended, Health-based Investigation Levels for soil contaminants.

Total concentrations in mg/kg

– = assessment criteria not available

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria

Table 1 : Summary of Soil Analytical Data - Organochlorine Pesticides

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

	Criteria 1	Sample ID	TP11/0-0.2	TP12/0-0.2	TP13/0-0.2	TP14/0-0.2	TP15/0-0.2
		Depth (m)	0.0-0.2	0.0-0.2	0.0-0.2	0.0-0.2	0.0-0.2
	HILs - D	Type	Fill	Fill	Fill	Fill	Fill
		Date	8/03/2023	8/03/2023	8/03/2023	8/03/2023	8/03/2023
4.4'-DDD	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDE	-		< 0.05	< 0.05	< 0.05	< 0.05	0.06
4.4'-DDT	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
a-BHC	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aldrin	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
b-BHC	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Chlordanes - Total	530		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
d-BHC	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan I	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan II	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endrin	100		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endrin aldehyde	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endrin ketone	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
g-BHC (Lindane)	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor	50		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	80		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05

Notes:

Criteria 1 = NEPC (1999) Amended, Health-based Investigation Levels for soil contaminants.

Total concentrations in mg/kg

- = assessment criteria not available

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

--- = sample not analysed

Bold/red indicates exceedance of assessment criteria



Table 1 : Summary of Soil Analytical Data - Organochlorine Pesticides

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

[illegible]

Notes:

Criteria 1 = NEPC (1999) Amended, Health-based Investigation Levels for soil contaminants.

Total concentrations in mg/kg

– = assessment criteria not available

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria

Table 1 : Summary of Soil Analytical Data - Organochlorine Pesticides

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

	Criteria 1	Sample ID	TP16/0-0.2	DS1	RPD_DS1	TS1	RPD_TS1
		Depth (m)	0.0-0.2	-	-	-	-
	HILs - D	Type	Fill	-	-	-	-
		Date	7/03/2023	7/03/2023	-	7/03/2023	-
4.4'-DDD	-		< 0.05	< 0.05	nc	< 0.05	nc
4.4'-DDE	-		< 0.05	< 0.05	nc	< 0.05	nc
4.4'-DDT	-		< 0.05	< 0.05	nc	< 0.05	nc
a-BHC	-		< 0.05	< 0.05	nc	< 0.05	nc
Aldrin	-		< 0.05	< 0.05	nc	< 0.05	nc
b-BHC	-		< 0.05	< 0.05	nc	< 0.05	nc
Chlordanes - Total	530		< 0.1	< 0.1	nc	< 0.1	nc
d-BHC	-		< 0.05	< 0.05	nc	< 0.05	nc
Dieldrin	-		< 0.05	< 0.05	nc	< 0.05	nc
Endosulfan I	-		< 0.05	< 0.05	nc	< 0.05	nc
Endosulfan II	-		< 0.05	< 0.05	nc	< 0.05	nc
Endosulfan sulphate	-		< 0.05	< 0.05	nc	< 0.05	nc
Endrin	100		< 0.05	< 0.05	nc	< 0.05	nc
Endrin aldehyde	-		< 0.05	< 0.05	nc	< 0.05	nc
Endrin ketone	-		< 0.05	< 0.05	nc	< 0.05	nc
g-BHC (Lindane)	-		< 0.05	< 0.05	nc	< 0.05	nc
Heptachlor	50		< 0.05	< 0.05	nc	< 0.05	nc
Heptachlor epoxide	-		< 0.05	< 0.05	nc	< 0.05	nc
Hexachlorobenzene	80		< 0.05	< 0.05	nc	< 0.05	nc

Notes:

Criteria 1 = NEPC (1999) Amended, Health-based Investigation Levels for soil contaminants.

Total concentrations in mg/kg

- = assessment criteria not available

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

--- = sample not analysed

Bold/red indicates exceedance of assessment criteria

Table 1 : Summary of Soil Analytical Data - Organochlorine Pesticides

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

	Criteria 1	Sample ID	TP17/0-0.2	TP17/0.4-0.6	TP18/0-0.2	TP19/0-0.2	TP20/0-0.2
		Depth (m)	0.0-0.2	0.4-0.6	0.0-0.2	0.0-0.2	0.0-0.2
	HILs - D	Type	Fill	Fill	Fill	Fill	Fill
		Date	7/03/2023	7/03/2023	7/03/2023	8/03/2023	8/03/2023
4.4'-DDD	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDE	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDT	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
a-BHC	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aldrin	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
b-BHC	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Chlordanes - Total	530		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
d-BHC	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	-		< 0.05	< 0.05	< 0.05	< 0.05	0.06
Endosulfan I	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan II	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endrin	100		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endrin aldehyde	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endrin ketone	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
g-BHC (Lindane)	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor	50		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	80		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05

Notes:

Criteria 1 = NEPC (1999) Amended, Health-based Investigation Levels for soil contaminants.

Total concentrations in mg/kg

- = assessment criteria not available

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

--- = sample not analysed

Bold/red indicates exceedance of assessment criteria



Table 1 : Summary of Soil Analytical Data - Organochlorine Pesticides

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

[illegible]

Notes:

Criteria 1 = NEPC (1999) Amended, Health-based Investigation Levels for soil contaminants.

Total concentrations in mg/kg

– = assessment criteria not available

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria

Table 1 : Summary of Soil Analytical Data - Organochlorine Pesticides

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

	Criteria 1	Sample ID	TP21/0-0.2	TP22/0-0.2	TP23/0-0.2	TP24/0-0.2	TP25/0-0.1
		Depth (m)	0.0-0.2	0.0-0.2	0.0-0.2	0.0-0.2	0.0-0.1
	HILs - D	Type	Fill	Fill	Fill	Fill	Fill
		Date	8/03/2023	8/03/2023	8/03/2023	7/03/2023	6/03/2023
4.4'-DDD	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDE	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDT	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
a-BHC	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aldrin	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
b-BHC	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Chlordanes - Total	530		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
d-BHC	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan I	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan II	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endrin	100		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endrin aldehyde	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endrin ketone	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
g-BHC (Lindane)	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor	50		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	80		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05

Notes:

Criteria 1 = NEPC (1999) Amended, Health-based Investigation Levels for soil contaminants.

Total concentrations in mg/kg

- = assessment criteria not available

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

--- = sample not analysed

Bold/red indicates exceedance of assessment criteria

Table 1 : Summary of Soil Analytical Data - Organochlorine Pesticides

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

	Criteria 1	Sample ID	TP21/0-0.2	TP22/0-0.2	TP23/0-0.2	TP24/0-0.2	TP25/0-0.1
		Depth (m)	0.0-0.2	0.0-0.2	0.0-0.2	0.0-0.2	0.0-0.1
	HILs - D	Type	Fill	Fill	Fill	Fill	Fill
		Date	8/03/2023	8/03/2023	8/03/2023	7/03/2023	6/03/2023
Methoxychlor	2,500		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Toxaphene	160		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Aldrin + Dieldrin	45		ND	ND	ND	ND	ND
Endosulfans - Total	2,000		ND	ND	ND	ND	ND
DDD + DDE + DDT	3,600		ND	ND	ND	ND	ND
Scheduled Chemical Wastes	-		ND	ND	ND	ND	ND

Notes:

Criteria 1 = NEPC (1999) Amended, Health-based Investigation Levels for soil contaminants.

Total concentrations in mg/kg

- = assessment criteria not available

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

--- = sample not analysed

Bold/red indicates exceedance of assessment criteria

Table 1 : Summary of Soil Analytical Data - Organochlorine Pesticides

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

	Criteria 1	Sample ID	TP26/0-0.2	TP27/0-0.2	TP28/0-0.2	DS3	RPD_DS3
		Depth (m)	0.0-0.2	0.0-0.2	0.0-0.2	-	-
	HILs - D	Type	Fill	Fill	Fill	-	-
		Date	7/03/2023	8/03/2023	8/03/2023	8/03/2023	-
4.4'-DDD	-		< 0.05	< 0.05	< 0.05	< 0.05	nc
4.4'-DDE	-		< 0.05	0.14	< 0.05	< 0.05	nc
4.4'-DDT	-		< 0.05	0.14	< 0.05	< 0.05	nc
a-BHC	-		< 0.05	< 0.05	< 0.05	< 0.05	nc
Aldrin	-		< 0.05	< 0.05	< 0.05	< 0.05	nc
b-BHC	-		< 0.05	< 0.05	< 0.05	< 0.05	nc
Chlordanes - Total	530		< 0.1	< 0.1	< 0.1	< 0.1	nc
d-BHC	-		< 0.05	< 0.05	< 0.05	< 0.05	nc
Dieldrin	-		< 0.05	< 0.05	< 0.05	< 0.05	nc
Endosulfan I	-		< 0.05	< 0.05	< 0.05	< 0.05	nc
Endosulfan II	-		< 0.05	< 0.05	< 0.05	< 0.05	nc
Endosulfan sulphate	-		< 0.05	< 0.05	< 0.05	< 0.05	nc
Endrin	100		< 0.05	< 0.05	< 0.05	< 0.05	nc
Endrin aldehyde	-		< 0.05	< 0.05	< 0.05	< 0.05	nc
Endrin ketone	-		< 0.05	< 0.05	< 0.05	< 0.05	nc
g-BHC (Lindane)	-		< 0.05	< 0.05	< 0.05	< 0.05	nc
Heptachlor	50		< 0.05	< 0.05	< 0.05	< 0.05	nc
Heptachlor epoxide	-		< 0.05	< 0.05	< 0.05	< 0.05	nc
Hexachlorobenzene	80		< 0.05	< 0.05	< 0.05	< 0.05	nc

Notes:

Criteria 1 = NEPC (1999) Amended, Health-based Investigation Levels for soil contaminants.

Total concentrations in mg/kg

- = assessment criteria not available

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

--- = sample not analysed

Bold/red indicates exceedance of assessment criteria



Table 1 : Summary of Soil Analytical Data - Organochlorine Pesticides

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

[illegible]

Notes:

Criteria 1 = NEPC (1999) Amended, Health-based Investigation Levels for soil contaminants.

Total concentrations in mg/kg

– = assessment criteria not available

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria

Table 1 : Summary of Soil Analytical Data - Organochlorine Pesticides

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

	Criteria 1	Sample ID	TS3	RPD_TS3	TP29/0-0.2	TP30/0-0.2	TP31/0-0.2
		Depth (m)	-	-	0.0-0.2	0.0-0.2	0.0-0.2
	HILs - D	Type	-	-	Fill	Fill	Fill
		Date	8/03/2023	-	8/03/2023	8/03/2023	8/03/2023
4.4'-DDD	-		< 0.05	nc	< 0.05	< 0.05	< 0.05
4.4'-DDE	-		< 0.05	nc	< 0.05	< 0.05	< 0.05
4.4'-DDT	-		< 0.05	nc	< 0.05	< 0.05	0.06
a-BHC	-		< 0.05	nc	< 0.05	< 0.05	< 0.05
Aldrin	-		< 0.05	nc	< 0.05	< 0.05	< 0.05
b-BHC	-		< 0.05	nc	< 0.05	< 0.05	< 0.05
Chlordanes - Total	530		< 0.1	nc	< 0.1	< 0.1	< 0.1
d-BHC	-		< 0.05	nc	< 0.05	< 0.05	< 0.05
Dieldrin	-		< 0.05	nc	< 0.05	< 0.05	< 0.05
Endosulfan I	-		< 0.05	nc	< 0.05	< 0.05	< 0.05
Endosulfan II	-		< 0.05	nc	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	-		< 0.05	nc	< 0.05	< 0.05	< 0.05
Endrin	100		< 0.05	nc	< 0.05	< 0.05	< 0.05
Endrin aldehyde	-		< 0.05	nc	< 0.05	< 0.05	< 0.05
Endrin ketone	-		< 0.05	nc	< 0.05	< 0.05	< 0.05
g-BHC (Lindane)	-		< 0.05	nc	< 0.05	< 0.05	< 0.05
Heptachlor	50		< 0.05	nc	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	-		< 0.05	nc	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	80		< 0.05	nc	< 0.05	< 0.05	< 0.05

Notes:

Criteria 1 = NEPC (1999) Amended, Health-based Investigation Levels for soil contaminants.

Total concentrations in mg/kg

- = assessment criteria not available

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

--- = sample not analysed

Bold/red indicates exceedance of assessment criteria



Table 1 : Summary of Soil Analytical Data - Organochlorine Pesticides

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

[illegible]

Notes:

Criteria 1 = NEPC (1999) Amended, Health-based Investigation Levels for soil contaminants.

Total concentrations in mg/kg

– = assessment criteria not available

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria

Table 1 : Summary of Soil Analytical Data - Organochlorine Pesticides

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

	Criteria 1	Sample ID	TP32/0-0.3	TP33/0-0.1	TP34/0-0.1	TP35/0-0.2	TP36/0.3-0.5
		Depth (m)	0.0-0.3	0.0-0.1	0.0-0.1	0.0-0.2	0.3-0.5
	HILs - D	Type	Fill	Fill	Fill	Fill	Fill
		Date	7/03/2023	8/03/2023	6/03/2023	8/03/2023	8/03/2023
4.4'-DDD	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDE	-		0.08	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDT	-		0.07	< 0.05	< 0.05	< 0.05	< 0.05
a-BHC	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aldrin	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
b-BHC	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Chlordanes - Total	530		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
d-BHC	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan I	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan II	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endrin	100		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endrin aldehyde	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endrin ketone	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
g-BHC (Lindane)	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor	50		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	80		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05

Notes:

Criteria 1 = NEPC (1999) Amended, Health-based Investigation Levels for soil contaminants.

Total concentrations in mg/kg

- = assessment criteria not available

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

--- = sample not analysed

Bold/red indicates exceedance of assessment criteria



Table 1 : Summary of Soil Analytical Data - Organochlorine Pesticides

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

[illegible]

Notes:

Criteria 1 = NEPC (1999) Amended, Health-based Investigation Levels for soil contaminants.

Total concentrations in mg/kg

– = assessment criteria not available

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria

Table 1 : Summary of Soil Analytical Data - Organochlorine Pesticides

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

	Criteria 1	Sample ID	TP37/0-0.2	TP40/0-0.1	TP41/0-0.3	TP57/0.3-0.5	TP59/0-0.2
		Depth (m)	0.0-0.2	0.0-0.1	0.0-0.3	0.3-0.5	0.0-0.2
	HILs - D	Type	Fill	Fill	Fill	Fill	Fill
		Date	8/03/2023	7/03/2023	8/03/2023	8/03/2023	8/03/2023
4.4'-DDD	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDE	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDT	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
a-BHC	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aldrin	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
b-BHC	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Chlordanes - Total	530		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
d-BHC	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan I	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan II	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endrin	100		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endrin aldehyde	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endrin ketone	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
g-BHC (Lindane)	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor	50		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	80		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05

Notes:

Criteria 1 = NEPC (1999) Amended, Health-based Investigation Levels for soil contaminants.

Total concentrations in mg/kg

- = assessment criteria not available

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

--- = sample not analysed

Bold/red indicates exceedance of assessment criteria

Table 1 : Summary of Soil Analytical Data - Organochlorine Pesticides

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

	Criteria 1	Sample ID	TP37/0-0.2	TP40/0-0.1	TP41/0-0.3	TP57/0.3-0.5	TP59/0-0.2
		Depth (m)	0.0-0.2	0.0-0.1	0.0-0.3	0.3-0.5	0.0-0.2
	HILs - D	Type	Fill	Fill	Fill	Fill	Fill
		Date	8/03/2023	7/03/2023	8/03/2023	8/03/2023	8/03/2023
Methoxychlor	2,500		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Toxaphene	160		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Aldrin + Dieldrin	45		ND	ND	ND	ND	ND
Endosulfans - Total	2,000		ND	ND	ND	ND	ND
DDD + DDE + DDT	3,600		ND	ND	ND	ND	ND
Scheduled Chemical Wastes	-		ND	ND	ND	ND	ND

Notes:

Criteria 1 = NEPC (1999) Amended, Health-based Investigation Levels for soil contaminants.

Total concentrations in mg/kg

- = assessment criteria not available

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

--- = sample not analysed

Bold/red indicates exceedance of assessment criteria

Table 1 : Summary of Soil Analytical Data - Organochlorine Pesticides

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

	Criteria 1	Sample ID	TP60/0-0.2	TRIPB1	TRIPS1	TRIPB2	TRIPS2
		Depth (m)	0.0-0.2	-	-	-	-
	HILs - D	Type	Fill	-	-	-	-
		Date	8/03/2023	-	-	-	-
4.4'-DDD	-		< 0.05	--	--	--	--
4.4'-DDE	-		< 0.05	--	--	--	--
4.4'-DDT	-		< 0.05	--	--	--	--
a-BHC	-		< 0.05	--	--	--	--
Aldrin	-		< 0.05	--	--	--	--
b-BHC	-		< 0.05	--	--	--	--
Chlordanes - Total	530		< 0.1	--	--	--	--
d-BHC	-		< 0.05	--	--	--	--
Dieldrin	-		< 0.05	--	--	--	--
Endosulfan I	-		< 0.05	--	--	--	--
Endosulfan II	-		< 0.05	--	--	--	--
Endosulfan sulphate	-		< 0.05	--	--	--	--
Endrin	100		< 0.05	--	--	--	--
Endrin aldehyde	-		< 0.05	--	--	--	--
Endrin ketone	-		< 0.05	--	--	--	--
g-BHC (Lindane)	-		< 0.05	--	--	--	--
Heptachlor	50		< 0.05	--	--	--	--
Heptachlor epoxide	-		< 0.05	--	--	--	--
Hexachlorobenzene	80		< 0.05	--	--	--	--

Notes:

Criteria 1 = NEPC (1999) Amended, Health-based Investigation Levels for soil contaminants.

Total concentrations in mg/kg

- = assessment criteria not available

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria



Table 1 : Summary of Soil Analytical Data - Organochlorine Pesticides

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

[illegible]

Notes:

Criteria 1 = NEPC (1999) Amended, Health-based Investigation Levels for soil contaminants.

Total concentrations in mg/kg

– = assessment criteria not available

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria

Table 1 : Summary of Soil Analytical Data - Organochlorine Pesticides

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

	Criteria 1	Sample ID	R1
		Depth (m)	-
	HILs - D	Type	-
		Date	8/03/2023
4.4'-DDD	-		< 0.0002
4.4'-DDE	-		< 0.0002
4.4'-DDT	-		< 0.0002
a-BHC	-		< 0.0002
Aldrin	-		< 0.0002
b-BHC	-		< 0.0002
Chlordanes - Total	530		< 0.002
d-BHC	-		< 0.0002
Dieldrin	-		< 0.0002
Endosulfan I	-		< 0.0002
Endosulfan II	-		< 0.0002
Endosulfan sulphate	-		< 0.0002
Endrin	100		< 0.0002
Endrin aldehyde	-		< 0.0005
Endrin ketone	-		< 0.0002
g-BHC (Lindane)	-		< 0.0002
Heptachlor	50		< 0.0002
Heptachlor epoxide	-		< 0.0002
Hexachlorobenzene	80		< 0.0002

Notes:

Criteria 1 = NEPC (1999) Amended, Health-based Investigation Levels for soil contaminants.

Total concentrations in mg/kg

- = assessment criteria not available

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

--- = sample not analysed

Bold/red indicates exceedance of assessment criteria



Table 1 : Summary of Soil Analytical Data - Organochlorine Pesticides

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

[illegible]

Notes:

Criteria 1 = NEPC (1999) Amended, Health-based Investigation Levels for soil contaminants.

Total concentrations in mg/kg

– = assessment criteria not available

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit.

< # or ND = analyte(s) not detected in excess of laboratory reporting limit.

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria



Table 2 : Summary of Soil Analytical Data - Heavy Metals

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

[illegible]

Notes:

Criteria 1 = NEPC (1999) Amended, Health-based Investigation Levels for soil contaminants.

Total concentrations in mg/kg

– = assessment criteria not available

¹Guideline for Chromium (VI) used conservatively.

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit.

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria



Table 2 : Summary of Soil Analytical Data - Heavy Metals

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

[illegible]

Notes:

Criteria 1 = NEPC (1999) Amended, Health-based Investigation Levels for soil contaminants.

Total concentrations in mg/kg

– = assessment criteria not available

¹Guideline for Chromium (VI) used conservatively.

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria



Table 2 : Summary of Soil Analytical Data - Heavy Metals

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

[illegible]

Notes:

Criteria 1 = NEPC (1999) Amended, Health-based Investigation Levels for soil contaminants.

Total concentrations in mg/kg

– = assessment criteria not available

¹Guideline for Chromium (VI) used conservatively.

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit.

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria



Table 2 : Summary of Soil Analytical Data - Heavy Metals

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

[illegible]

Notes:

Criteria 1 = NEPC (1999) Amended, Health-based Investigation Levels for soil contaminants.

Total concentrations in mg/kg

– = assessment criteria not available

¹Guideline for Chromium (VI) used conservatively.

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit.

< # or ND = analyte(s) not detected in excess of laboratory reporting limit.

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria



Table 2 : Summary of Soil Analytical Data - Heavy Metals

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

[illegible]

Notes:

Criteria 1 = NEPC (1999) Amended, Health-based Investigation Levels for soil contaminants.

Total concentrations in mg/kg

– = assessment criteria not available

¹Guideline for Chromium (VI) used conservatively.

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit.

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria



Table 2 : Summary of Soil Analytical Data - Heavy Metals

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

[illegible]

Notes:

Criteria 1 = NEPC (1999) Amended, Health-based Investigation Levels for soil contaminants.

Total concentrations in mg/kg

– = assessment criteria not available

¹Guideline for Chromium (VI) used conservatively.

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit.

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria



Table 2 : Summary of Soil Analytical Data - Heavy Metals

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

[illegible]

Notes:

Criteria 1 = NEPC (1999) Amended, Health-based Investigation Levels for soil contaminants.

Total concentrations in mg/kg

– = assessment criteria not available

¹Guideline for Chromium (VI) used conservatively.

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit.

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria



Table 2 : Summary of Soil Analytical Data - Heavy Metals

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

[illegible]

Notes:

Criteria 1 = NEPC (1999) Amended, Health-based Investigation Levels for soil contaminants.

Total concentrations in mg/kg

– = assessment criteria not available

¹Guideline for Chromium (VI) used conservatively.

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit.

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria



Table 2 : Summary of Soil Analytical Data - Heavy Metals

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

[illegible]

Notes:

Criteria 1 = NEPC (1999) Amended, Health-based Investigation Levels for soil contaminants.

Total concentrations in mg/kg

– = assessment criteria not available

¹Guideline for Chromium (VI) used conservatively.

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit.

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria



Table 2 : Summary of Soil Analytical Data - Heavy Metals

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

[illegible]

Notes:

Criteria 1 = NEPC (1999) Amended, Health-based Investigation Levels for soil contaminants.

Total concentrations in mg/kg

– = assessment criteria not available

¹Guideline for Chromium (VI) used conservatively.

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria



Table 2 : Summary of Soil Analytical Data - Heavy Metals

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

[illegible]

Notes:

Criteria 1 = NEPC (1999) Amended, Health-based Investigation Levels for soil contaminants.

Total concentrations in mg/kg

– = assessment criteria not available

¹Guideline for Chromium (VI) used conservatively.

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit.

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria



Table 2 : Summary of Soil Analytical Data - Heavy Metals

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

[illegible]

Notes:

Criteria 1 = NEPC (1999) Amended, Health-based Investigation Levels for soil contaminants.

Total concentrations in mg/kg

– = assessment criteria not available

¹Guideline for Chromium (VI) used conservatively.

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit.

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria

Table 3 : Summary of Soil Analytical Data - Petroleum Hydrocarbons

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

	Criteria 1	Criteria 2	Sample ID	TP1/0.1-0.3	TP1/0.3-0.5	TP2/0-0.2	DS2	RPD_DS2
	HSLs - D	Management	Depth (m)	0.1-0.3	0.3-0.5	0.0-0.2	-	-
	Sand	Limits	Type	Fill	Fill	Fill	-	-
	0 to <1 m	Comm/Ind	Date	7/03/2023	7/03/2023	7/03/2023	7/03/2023	-
TRH C ₆ -C ₁₀	-	700		< 20	< 20	< 20	--	--
TRH C ₆ -C ₁₀ less BTEX (F1)	260	-		< 20	< 20	< 20	--	--
TRH >C ₁₀ -C ₁₆	-	1,000		< 50	< 50	< 50	--	--
TRH >C ₁₀ -C ₁₆ less Naphthalene (F2)	NL	-		< 50	< 50	< 50	--	--
TRH >C ₁₆ -C ₃₄	-	3,500		< 100	< 100	< 100	--	--
TRH >C ₃₄ -C ₄₀	-	10,000		< 100	< 100	< 100	--	--
Benzene	3	-		< 0.1	< 0.1	< 0.1	--	--
Toluene	NL	-		< 0.1	< 0.1	< 0.1	--	--
Ethylbenzene	NL	-		< 0.1	< 0.1	< 0.1	--	--
m&p-Xylenes	-	-		< 0.2	< 0.2	< 0.2	--	--
o-Xylene	-	-		< 0.1	< 0.1	< 0.1	--	--
Xylenes - Total	230	-		< 0.3	< 0.3	< 0.3	--	--
Naphthalene (MAH)	NL	-		< 0.5	< 0.5	< 0.5	--	--

Notes:

Criteria 1 = NEPC (1999) Amended, 'D' Commercial/industrial Soil Health Screening Levels for vapour intrusion, sand 0 to <1m.

Criteria 2 = NEPC (1999) Amended, Commercial/industrial Management Limits for TPH fractions in soil, coarse material.

Total concentrations in mg/kg

-- = assessment criteria not available

NL = not limiting

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria

Table 3 : Summary of Soil Analytical Data - Petroleum Hydrocarbons

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

	Criteria 1	Criteria 2	Sample ID	TS2	RPD_TS2	TP3/0-0.2	TP4/0.15-0.35	TP5/0-0.2
	HSLs - D	Management	Depth (m)	-	-	0.0-0.2	0.15-0.35	0.0-0.2
	Sand	Limits	Type	-	-	Fill	Fill	Fill
	0 to <1 m	Comm/Ind	Date	7/03/2023	-	7/03/2023	8/03/2023	8/03/2023
TRH C ₆ -C ₁₀	-	700		--	--	< 20	< 20	--
TRH C ₆ -C ₁₀ less BTEX (F1)	260	-		--	--	< 20	< 20	--
TRH >C ₁₀ -C ₁₆	-	1,000		--	--	< 50	< 50	--
TRH >C ₁₀ -C ₁₆ less Naphthalene (F2)	NL	-		--	--	< 50	< 50	--
TRH >C ₁₆ -C ₃₄	-	3,500		--	--	< 100	< 100	--
TRH >C ₃₄ -C ₄₀	-	10,000		--	--	< 100	< 100	--
Benzene	3	-		--	--	< 0.1	< 0.1	--
Toluene	NL	-		--	--	< 0.1	< 0.1	--
Ethylbenzene	NL	-		--	--	< 0.1	< 0.1	--
m&p-Xylenes	-	-		--	--	< 0.2	< 0.2	--
o-Xylene	-	-		--	--	< 0.1	< 0.1	--
Xylenes - Total	230	-		--	--	< 0.3	< 0.3	--
Naphthalene (MAH)	NL	-		--	--	< 0.5	< 0.5	--

Notes:

Criteria 1 = NEPC (1999) Amended, 'D' Commercial/industrial Soil Health Screening Levels for vapour intrusion, sand 0 to <1m.

Criteria 2 = NEPC (1999) Amended, Commercial/industrial Management Limits for TPH fractions in soil, coarse material.

Total concentrations in mg/kg

-- = assessment criteria not available

NL = not limiting

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria

Table 3 : Summary of Soil Analytical Data - Petroleum Hydrocarbons

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

	Criteria 1	Criteria 2	Sample ID	TP6/0.2-0.4	TP7/0-0.2	TP8/0.15-0.35	TP9/0-0.3	TP10/0-0.2
	HSLs - D	Management	Depth (m)	0.2-0.4	0.0-0.2	0.15-0.35	0.0-0.3	0.0-0.2
	Sand	Limits	Type	Fill	Fill	Fill	Fill	Fill
	0 to <1 m	Comm/Ind	Date	8/03/2023	7/03/2023	7/03/2023	7/03/2023	6/03/2023
TRH C ₆ -C ₁₀	-	700		< 20	< 20	< 20	< 20	< 20
TRH C ₆ -C ₁₀ less BTEX (F1)	260	-		< 20	< 20	< 20	< 20	< 20
TRH >C ₁₀ -C ₁₆	-	1,000		< 50	< 50	< 50	< 50	< 50
TRH >C ₁₀ -C ₁₆ less Naphthalene (F2)	NL	-		< 50	< 50	< 50	< 50	< 50
TRH >C ₁₆ -C ₃₄	-	3,500		< 100	< 100	< 100	< 100	130
TRH >C ₃₄ -C ₄₀	-	10,000		< 100	< 100	< 100	< 100	< 100
Benzene	3	-		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Toluene	NL	-		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Ethylbenzene	NL	-		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
m&p-Xylenes	-	-		< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
o-Xylene	-	-		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Xylenes - Total	230	-		< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Naphthalene (MAH)	NL	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5

Notes:

Criteria 1 = NEPC (1999) Amended, 'D' Commercial/industrial Soil Health Screening Levels for vapour intrusion, sand 0 to <1m.

Criteria 2 = NEPC (1999) Amended, Commercial/industrial Management Limits for TPH fractions in soil, coarse material.

Total concentrations in mg/kg

- = assessment criteria not available

NL = not limiting

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria

Table 3 : Summary of Soil Analytical Data - Petroleum Hydrocarbons

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

	Criteria 1	Criteria 2	Sample ID	TP11/0-0.2	TP12/0-0.2	TP13/0-0.2	TP14/0-0.2	TP15/0-0.2
	HSLs - D	Management	Depth (m)	0.0-0.2	0.0-0.2	0.0-0.2	0.0-0.2	0.0-0.2
	Sand	Limits	Type	Fill	Fill	Fill	Fill	Fill
	0 to <1 m	Comm/Ind	Date	8/03/2023	8/03/2023	8/03/2023	8/03/2023	8/03/2023
TRH C ₆ -C ₁₀	-	700		--	< 20	< 20	< 20	< 20
TRH C ₆ -C ₁₀ less BTEX (F1)	260	-		--	< 20	< 20	< 20	< 20
TRH >C ₁₀ -C ₁₆	-	1,000		--	< 50	< 50	< 50	< 50
TRH >C ₁₀ -C ₁₆ less Naphthalene (F2)	NL	-		--	< 50	< 50	< 50	< 50
TRH >C ₁₆ -C ₃₄	-	3,500		--	150	< 100	< 100	< 100
TRH >C ₃₄ -C ₄₀	-	10,000		--	< 100	< 100	< 100	< 100
Benzene	3	-		--	< 0.1	< 0.1	< 0.1	< 0.1
Toluene	NL	-		--	< 0.1	< 0.1	< 0.1	< 0.1
Ethylbenzene	NL	-		--	< 0.1	< 0.1	< 0.1	< 0.1
m&p-Xylenes	-	-		--	< 0.2	< 0.2	< 0.2	< 0.2
o-Xylene	-	-		--	< 0.1	< 0.1	< 0.1	< 0.1
Xylenes - Total	230	-		--	< 0.3	< 0.3	< 0.3	< 0.3
Naphthalene (MAH)	NL	-		--	< 0.5	< 0.5	< 0.5	< 0.5

Notes:

Criteria 1 = NEPC (1999) Amended, 'D' Commercial/industrial Soil Health Screening Levels for vapour intrusion, sand 0 to <1m.

Criteria 2 = NEPC (1999) Amended, Commercial/industrial Management Limits for TPH fractions in soil, coarse material.

Total concentrations in mg/kg

-- = assessment criteria not available

NL = not limiting

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria

Table 3 : Summary of Soil Analytical Data - Petroleum Hydrocarbons

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

	Criteria 1	Criteria 2	Sample ID	TP16/0-0.2	DS1	RPD_DS1	TS1	RPD_TS1
	HSLs - D	Management	Depth (m)	0.0-0.2	-	-	-	-
	Sand	Limits	Type	Fill	-	-	-	-
	0 to <1 m	Comm/Ind	Date	7/03/2023	7/03/2023	-	7/03/2023	-
TRH C ₆ -C ₁₀	-	700		--	< 20	--	< 20	--
TRH C ₆ -C ₁₀ less BTEX (F1)	260	-		--	< 20	--	< 20	--
TRH >C ₁₀ -C ₁₆	-	1,000		--	< 50	--	< 50	--
TRH >C ₁₀ -C ₁₆ less Naphthalene (F2)	NL	-		--	< 50	--	< 50	--
TRH >C ₁₆ -C ₃₄	-	3,500		--	< 100	--	< 100	--
TRH >C ₃₄ -C ₄₀	-	10,000		--	< 100	--	< 100	--
Benzene	3	-		--	< 0.1	--	< 0.1	--
Toluene	NL	-		--	< 0.1	--	< 0.1	--
Ethylbenzene	NL	-		--	< 0.1	--	< 0.1	--
m&p-Xylenes	-	-		--	< 0.2	--	< 0.2	--
o-Xylene	-	-		--	< 0.1	--	< 0.1	--
Xylenes - Total	230	-		--	< 0.3	--	< 0.3	--
Naphthalene (MAH)	NL	-		--	< 0.5	--	< 0.5	--

Notes:

Criteria 1 = NEPC (1999) Amended, 'D' Commercial/industrial Soil Health Screening Levels for vapour intrusion, sand 0 to <1m.

Criteria 2 = NEPC (1999) Amended, Commercial/industrial Management Limits for TPH fractions in soil, coarse material.

Total concentrations in mg/kg

-- = assessment criteria not available

NL = not limiting

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria

Table 3 : Summary of Soil Analytical Data - Petroleum Hydrocarbons

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

	Criteria 1	Criteria 2	Sample ID	TP17/0-0.2	TP17/0.4-0.6	TP18/0-0.2	TP19/0-0.2	TP20/0-0.2
	HSLs - D	Management	Depth (m)	0.0-0.2	0.4-0.6	0.0-0.2	0.0-0.2	0.0-0.2
	Sand	Limits	Type	Fill	Fill	Fill	Fill	Fill
	0 to <1 m	Comm/Ind	Date	7/03/2023	7/03/2023	7/03/2023	8/03/2023	8/03/2023
TRH C ₆ -C ₁₀	-	700		< 20	< 20	--	--	--
TRH C ₆ -C ₁₀ less BTEX (F1)	260	-		< 20	< 20	--	--	--
TRH >C ₁₀ -C ₁₆	-	1,000		< 50	< 50	--	--	--
TRH >C ₁₀ -C ₁₆ less Naphthalene (F2)	NL	-		< 50	< 50	--	--	--
TRH >C ₁₆ -C ₃₄	-	3,500		< 100	< 100	--	--	--
TRH >C ₃₄ -C ₄₀	-	10,000		< 100	< 100	--	--	--
Benzene	3	-		< 0.1	< 0.1	--	--	--
Toluene	NL	-		< 0.1	< 0.1	--	--	--
Ethylbenzene	NL	-		< 0.1	< 0.1	--	--	--
m&p-Xylenes	-	-		< 0.2	< 0.2	--	--	--
o-Xylene	-	-		< 0.1	< 0.1	--	--	--
Xylenes - Total	230	-		< 0.3	< 0.3	--	--	--
Naphthalene (MAH)	NL	-		< 0.5	< 0.5	--	--	--

Notes:

Criteria 1 = NEPC (1999) Amended, 'D' Commercial/industrial Soil Health Screening Levels for vapour intrusion, sand 0 to <1m.

Criteria 2 = NEPC (1999) Amended, Commercial/industrial Management Limits for TPH fractions in soil, coarse material.

Total concentrations in mg/kg

-- = assessment criteria not available

NL = not limiting

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria

Table 3 : Summary of Soil Analytical Data - Petroleum Hydrocarbons

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

	Criteria 1	Criteria 2	Sample ID	TP21/0-0.2	TP22/0-0.2	TP23/0-0.2	TP24/0-0.2	TP25/0-0.1
	HSLs - D	Management	Depth (m)	0.0-0.2	0.0-0.2	0.0-0.2	0.0-0.2	0.0-0.1
	Sand	Limits	Type	Fill	Fill	Fill	Fill	Fill
	0 to <1 m	Comm/Ind	Date	8/03/2023	8/03/2023	8/03/2023	7/03/2023	6/03/2023
TRH C ₆ -C ₁₀	-	700		--	--	< 20	--	--
TRH C ₆ -C ₁₀ less BTEX (F1)	260	-		--	--	< 20	--	--
TRH >C ₁₀ -C ₁₆	-	1,000		--	--	< 50	--	--
TRH >C ₁₀ -C ₁₆ less Naphthalene (F2)	NL	-		--	--	< 50	--	--
TRH >C ₁₆ -C ₃₄	-	3,500		--	--	< 100	--	--
TRH >C ₃₄ -C ₄₀	-	10,000		--	--	< 100	--	--
Benzene	3	-		--	--	< 0.1	--	--
Toluene	NL	-		--	--	< 0.1	--	--
Ethylbenzene	NL	-		--	--	< 0.1	--	--
m&p-Xylenes	-	-		--	--	< 0.2	--	--
o-Xylene	-	-		--	--	< 0.1	--	--
Xylenes - Total	230	-		--	--	< 0.3	--	--
Naphthalene (MAH)	NL	-		--	--	< 0.5	--	--

Notes:

Criteria 1 = NEPC (1999) Amended, 'D' Commercial/industrial Soil Health Screening Levels for vapour intrusion, sand 0 to <1m.

Criteria 2 = NEPC (1999) Amended, Commercial/industrial Management Limits for TPH fractions in soil, coarse material.

Total concentrations in mg/kg

-- = assessment criteria not available

NL = not limiting

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria

Table 3 : Summary of Soil Analytical Data - Petroleum Hydrocarbons

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

	Criteria 1	Criteria 2	Sample ID	TP26/0-0.2	TP27/0-0.2	TP28/0-0.2	DS3	RPD_DS3
	HSLs - D	Management	Depth (m)	0.0-0.2	0.0-0.2	0.0-0.2	-	-
	Sand	Limits	Type	Fill	Fill	Fill	-	-
	0 to <1 m	Comm/Ind	Date	7/03/2023	8/03/2023	8/03/2023	8/03/2023	-
TRH C ₆ -C ₁₀	-	700		--	--	< 20	--	--
TRH C ₆ -C ₁₀ less BTEX (F1)	260	-		--	--	< 20	--	--
TRH >C ₁₀ -C ₁₆	-	1,000		--	--	< 50	--	--
TRH >C ₁₀ -C ₁₆ less Naphthalene (F2)	NL	-		--	--	< 50	--	--
TRH >C ₁₆ -C ₃₄	-	3,500		--	--	< 100	--	--
TRH >C ₃₄ -C ₄₀	-	10,000		--	--	< 100	--	--
Benzene	3	-		--	--	< 0.1	--	--
Toluene	NL	-		--	--	< 0.1	--	--
Ethylbenzene	NL	-		--	--	< 0.1	--	--
m&p-Xylenes	-	-		--	--	< 0.2	--	--
o-Xylene	-	-		--	--	< 0.1	--	--
Xylenes - Total	230	-		--	--	< 0.3	--	--
Naphthalene (MAH)	NL	-		--	--	< 0.5	--	--

Notes:

Criteria 1 = NEPC (1999) Amended, 'D' Commercial/industrial Soil Health Screening Levels for vapour intrusion, sand 0 to <1m.

Criteria 2 = NEPC (1999) Amended, Commercial/industrial Management Limits for TPH fractions in soil, coarse material.

Total concentrations in mg/kg

-- = assessment criteria not available

NL = not limiting

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria

Table 3 : Summary of Soil Analytical Data - Petroleum Hydrocarbons

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

	Criteria 1	Criteria 2	Sample ID	TS3	RPD_TS3	TP29/0-0.2	TP30/0-0.2	TP31/0-0.2
	HSLs - D	Management	Depth (m)	-	-	0.0-0.2	0.0-0.2	0.0-0.2
	Sand	Limits	Type	-	-	Fill	Fill	Fill
	0 to <1 m	Comm/Ind	Date	8/03/2023	-	8/03/2023	8/03/2023	8/03/2023
TRH C ₆ -C ₁₀	-	700		--	--	--	--	< 20
TRH C ₆ -C ₁₀ less BTEX (F1)	260	-		--	--	--	--	< 20
TRH >C ₁₀ -C ₁₆	-	1,000		--	--	--	--	< 50
TRH >C ₁₀ -C ₁₆ less Naphthalene (F2)	NL	-		--	--	--	--	< 50
TRH >C ₁₆ -C ₃₄	-	3,500		--	--	--	--	< 100
TRH >C ₃₄ -C ₄₀	-	10,000		--	--	--	--	< 100
Benzene	3	-		--	--	--	--	< 0.1
Toluene	NL	-		--	--	--	--	< 0.1
Ethylbenzene	NL	-		--	--	--	--	< 0.1
m&p-Xylenes	-	-		--	--	--	--	< 0.2
o-Xylene	-	-		--	--	--	--	< 0.1
Xylenes - Total	230	-		--	--	--	--	< 0.3
Naphthalene (MAH)	NL	-		--	--	--	--	< 0.5

Notes:

Criteria 1 = NEPC (1999) Amended, 'D' Commercial/industrial Soil Health Screening Levels for vapour intrusion, sand 0 to <1m.

Criteria 2 = NEPC (1999) Amended, Commercial/industrial Management Limits for TPH fractions in soil, coarse material.

Total concentrations in mg/kg

-- = assessment criteria not available

NL = not limiting

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria

Table 3 : Summary of Soil Analytical Data - Petroleum Hydrocarbons

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

	Criteria 1	Criteria 2	Sample ID	TP32/0-0.3	TP33/0-0.1	TP34/0-0.1	TP35/0-0.2	TP36/0.3-0.5
	HSLs - D	Management	Depth (m)	0.0-0.3	0.0-0.1	0.0-0.1	0.0-0.2	0.3-0.5
	Sand	Limits	Type	Fill	Fill	Fill	Fill	Fill
	0 to <1 m	Comm/Ind	Date	7/03/2023	8/03/2023	6/03/2023	8/03/2023	8/03/2023
TRH C ₆ -C ₁₀	-	700		--	--	--	< 20	< 20
TRH C ₆ -C ₁₀ less BTEX (F1)	260	-		--	--	--	< 20	< 20
TRH >C ₁₀ -C ₁₆	-	1,000		--	--	--	< 50	< 50
TRH >C ₁₀ -C ₁₆ less Naphthalene (F2)	NL	-		--	--	--	< 50	< 50
TRH >C ₁₆ -C ₃₄	-	3,500		--	--	--	< 100	< 100
TRH >C ₃₄ -C ₄₀	-	10,000		--	--	--	< 100	< 100
Benzene	3	-		--	--	--	< 0.1	< 0.1
Toluene	NL	-		--	--	--	< 0.1	< 0.1
Ethylbenzene	NL	-		--	--	--	< 0.1	< 0.1
m&p-Xylenes	-	-		--	--	--	< 0.2	< 0.2
o-Xylene	-	-		--	--	--	< 0.1	< 0.1
Xylenes - Total	230	-		--	--	--	< 0.3	< 0.3
Naphthalene (MAH)	NL	-		--	--	--	< 0.5	< 0.5

Notes:

Criteria 1 = NEPC (1999) Amended, 'D' Commercial/industrial Soil Health Screening Levels for vapour intrusion, sand 0 to <1m.

Criteria 2 = NEPC (1999) Amended, Commercial/industrial Management Limits for TPH fractions in soil, coarse material.

Total concentrations in mg/kg

-- = assessment criteria not available

NL = not limiting

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria

Table 3 : Summary of Soil Analytical Data - Petroleum Hydrocarbons

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

	Criteria 1	Criteria 2	Sample ID	TP37/0-0.2	TP40/0-0.1	TP41/0-0.3	TP57/0.3-0.5	TP59/0-0.2
	HSLs - D	Management	Depth (m)	0.0-0.2	0.0-0.1	0.0-0.3	0.3-0.5	0.0-0.2
	Sand	Limits	Type	Fill	Fill	Fill	Fill	Fill
	0 to <1 m	Comm/Ind	Date	8/03/2023	7/03/2023	8/03/2023	8/03/2023	8/03/2023
TRH C ₆ -C ₁₀	-	700		--	--	--	< 20	--
TRH C ₆ -C ₁₀ less BTEX (F1)	260	-		--	--	--	< 20	--
TRH >C ₁₀ -C ₁₆	-	1,000		--	--	--	< 50	--
TRH >C ₁₀ -C ₁₆ less Naphthalene (F2)	NL	-		--	--	--	< 50	--
TRH >C ₁₆ -C ₃₄	-	3,500		--	--	--	< 100	--
TRH >C ₃₄ -C ₄₀	-	10,000		--	--	--	< 100	--
Benzene	3	-		--	--	--	< 0.1	--
Toluene	NL	-		--	--	--	< 0.1	--
Ethylbenzene	NL	-		--	--	--	< 0.1	--
m&p-Xylenes	-	-		--	--	--	< 0.2	--
o-Xylene	-	-		--	--	--	< 0.1	--
Xylenes - Total	230	-		--	--	--	< 0.3	--
Naphthalene (MAH)	NL	-		--	--	--	< 0.5	--

Notes:

Criteria 1 = NEPC (1999) Amended, 'D' Commercial/industrial Soil Health Screening Levels for vapour intrusion, sand 0 to <1m.

Criteria 2 = NEPC (1999) Amended, Commercial/industrial Management Limits for TPH fractions in soil, coarse material.

Total concentrations in mg/kg

-- = assessment criteria not available

NL = not limiting

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria

Table 3 : Summary of Soil Analytical Data - Petroleum Hydrocarbons

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

	Criteria 1	Criteria 2	Sample ID	TP60/0-0.2	TRIPB1	TRIPS1	TRIPB2	TRIPS2
	HSLs - D	Management	Depth (m)	0.0-0.2	-	-	-	-
	Sand	Limits	Type	Fill	-	-	-	-
	0 to <1 m	Comm/Ind	Date	8/03/2023	-	-	-	-
TRH C ₆ -C ₁₀	-	700		--	< 20	99	< 20	110
TRH C ₆ -C ₁₀ less BTEX (F1)	260	-		--	< 20	--	< 20	--
TRH >C ₁₀ -C ₁₆	-	1,000		--	--	--	--	--
TRH >C ₁₀ -C ₁₆ less Naphthalene (F2)	NL	-		--	--	--	--	--
TRH >C ₁₆ -C ₃₄	-	3,500		--	--	--	--	--
TRH >C ₃₄ -C ₄₀	-	10,000		--	--	--	--	--
Benzene	3	-		--	< 0.1	97	< 0.1	110
Toluene	NL	-		--	< 0.1	99	< 0.1	110
Ethylbenzene	NL	-		--	< 0.1	100	< 0.1	110
m&p-Xylenes	-	-		--	< 0.2	100	< 0.2	100
o-Xylene	-	-		--	< 0.1	110	< 0.1	100
Xylenes - Total	230	-		--	< 0.3	100	< 0.3	100
Naphthalene (MAH)	NL	-		--	< 0.5	91	< 0.5	100

Notes:

Criteria 1 = NEPC (1999) Amended, 'D' Commercial/industrial Soil Health Screening Levels for vapour intrusion, sand 0 to <1m.

Criteria 2 = NEPC (1999) Amended, Commercial/industrial Management Limits for TPH fractions in soil, coarse material.

Total concentrations in mg/kg

-- = assessment criteria not available

NL = not limiting

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria

Table 3 : Summary of Soil Analytical Data - Petroleum Hydrocarbons

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

	Criteria 1	Criteria 2	Sample ID	R1
	HSLs - D	Management	Depth (m)	-
	Sand	Limits	Type	-
	0 to <1 m	Comm/Ind	Date	8/03/2023
TRH C ₆ -C ₁₀	-	700		--
TRH C ₆ -C ₁₀ less BTEX (F1)	260	-		--
TRH >C ₁₀ -C ₁₆	-	1,000		--
TRH >C ₁₀ -C ₁₆ less Naphthalene (F2)	NL	-		--
TRH >C ₁₆ -C ₃₄	-	3,500		--
TRH >C ₃₄ -C ₄₀	-	10,000		--
Benzene	3	-		--
Toluene	NL	-		--
Ethylbenzene	NL	-		--
m&p-Xylenes	-	-		--
o-Xylene	-	-		--
Xylenes - Total	230	-		--
Naphthalene (MAH)	NL	-		--

Notes:

Criteria 1 = NEPC (1999) Amended, 'D' Commercial/industrial Soil Health Screening Levels for vapour intrusion, sand 0 to <1m.

Criteria 2 = NEPC (1999) Amended, Commercial/industrial Management Limits for TPH fractions in soil, coarse material.

Total concentrations in mg/kg

-- = assessment criteria not available

NL = not limiting

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria

Table 4 : Summary of Soil Analytical Data - Polycyclic Aromatic Hydrocarbons

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

	Criteria 1	Sample ID	TP1/0.1-0.3	TP1/0.3-0.5	TP2/0-0.2	DS2	RPD_DS2
		Depth (m)	0.1-0.3	0.3-0.5	0.0-0.2	-	-
	HILs - D	Type	Fill	Fill	Fill	-	-
		Date	7/03/2023	7/03/2023	7/03/2023	7/03/2023	-
Acenaphthene	-		< 0.5	< 0.5	< 0.5	--	--
Acenaphthylene	-		< 0.5	< 0.5	< 0.5	--	--
Anthracene	-		< 0.5	< 0.5	< 0.5	--	--
Benz(a)anthracene	-		< 0.5	< 0.5	< 0.5	--	--
Benzo(a)pyrene	-		< 0.5	< 0.5	< 0.5	--	--
Benzo(b&j)fluoranthene	-		< 0.5	< 0.5	< 0.5	--	--
Benzo(g,h,i)perylene	-		< 0.5	< 0.5	< 0.5	--	--
Benzo(k)fluoranthene	-		< 0.5	< 0.5	< 0.5	--	--
Chrysene	-		< 0.5	< 0.5	< 0.5	--	--
Dibenz(a,h)anthracene	-		< 0.5	< 0.5	< 0.5	--	--
Fluoranthene	-		< 0.5	< 0.5	< 0.5	--	--
Fluorene	-		< 0.5	< 0.5	< 0.5	--	--
Indeno(1.2.3-cd)pyrene	-		< 0.5	< 0.5	< 0.5	--	--
Naphthalene	-		< 0.5	< 0.5	< 0.5	--	--
Phenanthrene	-		< 0.5	< 0.5	< 0.5	--	--
Pyrene	-		< 0.5	< 0.5	< 0.5	--	--
Benzo(a)pyrene TEQ	40		0.6	0.6	0.6	--	--
Total PAH	4,000		< 0.5	< 0.5	< 0.5	--	--

Notes:

Criteria 1 = NEPC (1999) Amended, Health-based Investigation Levels for soil contaminants.

Total concentrations in mg/kg

- = assessment criteria not available

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria

Table 4 : Summary of Soil Analytical Data - Polycyclic Aromatic Hydrocarbons

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

	Criteria 1	Sample ID	TS2	RPD_TS2	TP3/0-0.2	TP4/0.15-0.35	TP5/0-0.2
		Depth (m)	-	-	0.0-0.2	0.15-0.35	0.0-0.2
	HILs - D	Type	-	-	Fill	Fill	Fill
		Date	7/03/2023	-	7/03/2023	8/03/2023	8/03/2023
Acenaphthene	-		--	--	< 0.5	< 0.5	--
Acenaphthylene	-		--	--	< 0.5	< 0.5	--
Anthracene	-		--	--	< 0.5	< 0.5	--
Benz(a)anthracene	-		--	--	< 0.5	< 0.5	--
Benzo(a)pyrene	-		--	--	< 0.5	< 0.5	--
Benzo(b&j)fluoranthene	-		--	--	< 0.5	< 0.5	--
Benzo(g,h,i)perylene	-		--	--	< 0.5	< 0.5	--
Benzo(k)fluoranthene	-		--	--	< 0.5	< 0.5	--
Chrysene	-		--	--	< 0.5	< 0.5	--
Dibenz(a,h)anthracene	-		--	--	< 0.5	< 0.5	--
Fluoranthene	-		--	--	< 0.5	< 0.5	--
Fluorene	-		--	--	< 0.5	< 0.5	--
Indeno(1.2.3-cd)pyrene	-		--	--	< 0.5	< 0.5	--
Naphthalene	-		--	--	< 0.5	< 0.5	--
Phenanthrene	-		--	--	< 0.5	< 0.5	--
Pyrene	-		--	--	< 0.5	< 0.5	--
Benzo(a)pyrene TEQ	40		--	--	0.6	0.6	--
Total PAH	4,000		--	--	< 0.5	< 0.5	--

Notes:

Criteria 1 = NEPC (1999) Amended, Health-based Investigation Levels for soil contaminants.

Total concentrations in mg/kg

-- = assessment criteria not available

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria

Table 4 : Summary of Soil Analytical Data - Polycyclic Aromatic Hydrocarbons

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

	Criteria 1	Sample ID	TP6/0.2-0.4	TP7/0-0.2	TP8/0.15-0.35	TP9/0-0.3	TP10/0-0.2
		Depth (m)	0.2-0.4	0.0-0.2	0.15-0.35	0.0-0.3	0.0-0.2
	HILs - D	Type	Fill	Fill	Fill	Fill	Fill
		Date	8/03/2023	7/03/2023	7/03/2023	7/03/2023	6/03/2023
Acenaphthene	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g,h,i)perylene	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a,h)anthracene	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ	40		0.6	0.6	0.6	0.6	0.6
Total PAH	4,000		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5

Notes:

Criteria 1 = NEPC (1999) Amended, Health-based Investigation Levels for soil contaminants.

Total concentrations in mg/kg

- = assessment criteria not available

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

--- = sample not analysed

Bold/red indicates exceedance of assessment criteria

Table 4 : Summary of Soil Analytical Data - Polycyclic Aromatic Hydrocarbons

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

	Criteria 1	Sample ID	TP11/0-0.2	TP12/0-0.2	TP13/0-0.2	TP14/0-0.2	TP15/0-0.2
		Depth (m)	0.0-0.2	0.0-0.2	0.0-0.2	0.0-0.2	0.0-0.2
	HILs - D	Type	Fill	Fill	Fill	Fill	Fill
		Date	8/03/2023	8/03/2023	8/03/2023	8/03/2023	8/03/2023
Acenaphthene	-		--	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	-		--	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	-		--	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	-		--	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	-		--	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene	-		--	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g,h,i)perylene	-		--	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	-		--	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	-		--	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a,h)anthracene	-		--	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	-		--	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	-		--	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	-		--	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	-		--	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	-		--	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	-		--	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ	40		--	0.6	0.6	0.6	0.6
Total PAH	4,000		--	< 0.5	< 0.5	< 0.5	< 0.5

Notes:

Criteria 1 = NEPC (1999) Amended, Health-based Investigation Levels for soil contaminants.

Total concentrations in mg/kg

-- = assessment criteria not available

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria

Table 4 : Summary of Soil Analytical Data - Polycyclic Aromatic Hydrocarbons

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

	Criteria 1	Sample ID	TP16/0-0.2	DS1	RPD_DS1	TS1	RPD_TS1
		Depth (m)	0.0-0.2	-	-	-	-
	HILs - D	Type	Fill	-	-	-	-
		Date	7/03/2023	7/03/2023	-	7/03/2023	-
Acenaphthene	-		--	< 0.5	--	< 0.5	--
Acenaphthylene	-		--	< 0.5	--	< 0.5	--
Anthracene	-		--	< 0.5	--	< 0.5	--
Benz(a)anthracene	-		--	< 0.5	--	< 0.5	--
Benzo(a)pyrene	-		--	< 0.5	--	< 0.5	--
Benzo(b&j)fluoranthene	-		--	< 0.5	--	< 0.5	--
Benzo(g,h,i)perylene	-		--	< 0.5	--	< 0.5	--
Benzo(k)fluoranthene	-		--	< 0.5	--	< 0.5	--
Chrysene	-		--	< 0.5	--	< 0.5	--
Dibenz(a,h)anthracene	-		--	< 0.5	--	< 0.5	--
Fluoranthene	-		--	< 0.5	--	< 0.5	--
Fluorene	-		--	< 0.5	--	< 0.5	--
Indeno(1.2.3-cd)pyrene	-		--	< 0.5	--	< 0.5	--
Naphthalene	-		--	< 0.5	--	< 0.5	--
Phenanthrene	-		--	< 0.5	--	< 0.5	--
Pyrene	-		--	< 0.5	--	< 0.5	--
Benzo(a)pyrene TEQ	40		--	0.6	--	0.6	--
Total PAH	4,000		--	< 0.5	--	< 0.5	--

Notes:

Criteria 1 = NEPC (1999) Amended, Health-based Investigation Levels for soil contaminants.

Total concentrations in mg/kg

-- = assessment criteria not available

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria

Table 4 : Summary of Soil Analytical Data - Polycyclic Aromatic Hydrocarbons

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

	Criteria 1	Sample ID	TP17/0-0.2	TP17/0.4-0.6	TP18/0-0.2	TP19/0-0.2	TP20/0-0.2
		Depth (m)	0.0-0.2	0.4-0.6	0.0-0.2	0.0-0.2	0.0-0.2
	HILs - D	Type	Fill	Fill	Fill	Fill	Fill
		Date	7/03/2023	7/03/2023	7/03/2023	8/03/2023	8/03/2023
Acenaphthene	-		< 0.5	< 0.5	--	--	--
Acenaphthylene	-		< 0.5	< 0.5	--	--	--
Anthracene	-		< 0.5	< 0.5	--	--	--
Benz(a)anthracene	-		< 0.5	< 0.5	--	--	--
Benzo(a)pyrene	-		< 0.5	< 0.5	--	--	--
Benzo(b&j)fluoranthene	-		< 0.5	< 0.5	--	--	--
Benzo(g,h,i)perylene	-		< 0.5	< 0.5	--	--	--
Benzo(k)fluoranthene	-		< 0.5	< 0.5	--	--	--
Chrysene	-		< 0.5	< 0.5	--	--	--
Dibenz(a,h)anthracene	-		< 0.5	< 0.5	--	--	--
Fluoranthene	-		< 0.5	< 0.5	--	--	--
Fluorene	-		< 0.5	< 0.5	--	--	--
Indeno(1.2.3-cd)pyrene	-		< 0.5	< 0.5	--	--	--
Naphthalene	-		< 0.5	< 0.5	--	--	--
Phenanthrene	-		< 0.5	< 0.5	--	--	--
Pyrene	-		< 0.5	< 0.5	--	--	--
Benzo(a)pyrene TEQ	40		0.6	0.6	--	--	--
Total PAH	4,000		< 0.5	< 0.5	--	--	--

Notes:

Criteria 1 = NEPC (1999) Amended, Health-based Investigation Levels for soil contaminants.

Total concentrations in mg/kg

-- = assessment criteria not available

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria

Table 4 : Summary of Soil Analytical Data - Polycyclic Aromatic Hydrocarbons

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

	Criteria 1	Sample ID	TP21/0-0.2	TP22/0-0.2	TP23/0-0.2	TP24/0-0.2	TP25/0-0.1
		Depth (m)	0.0-0.2	0.0-0.2	0.0-0.2	0.0-0.2	0.0-0.1
	HILs - D	Type	Fill	Fill	Fill	Fill	Fill
		Date	8/03/2023	8/03/2023	8/03/2023	7/03/2023	6/03/2023
Acenaphthene	-		--	--	< 0.5	--	--
Acenaphthylene	-		--	--	< 0.5	--	--
Anthracene	-		--	--	< 0.5	--	--
Benz(a)anthracene	-		--	--	< 0.5	--	--
Benzo(a)pyrene	-		--	--	< 0.5	--	--
Benzo(b&j)fluoranthene	-		--	--	< 0.5	--	--
Benzo(g,h,i)perylene	-		--	--	< 0.5	--	--
Benzo(k)fluoranthene	-		--	--	< 0.5	--	--
Chrysene	-		--	--	< 0.5	--	--
Dibenz(a,h)anthracene	-		--	--	< 0.5	--	--
Fluoranthene	-		--	--	< 0.5	--	--
Fluorene	-		--	--	< 0.5	--	--
Indeno(1,2,3-cd)pyrene	-		--	--	< 0.5	--	--
Naphthalene	-		--	--	< 0.5	--	--
Phenanthrene	-		--	--	< 0.5	--	--
Pyrene	-		--	--	< 0.5	--	--
Benzo(a)pyrene TEQ	40		--	--	0.6	--	--
Total PAH	4,000		--	--	< 0.5	--	--

Notes:

Criteria 1 = NEPC (1999) Amended, Health-based Investigation Levels for soil contaminants.

Total concentrations in mg/kg

-- = assessment criteria not available

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria

Table 4 : Summary of Soil Analytical Data - Polycyclic Aromatic Hydrocarbons

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

	Criteria 1	Sample ID	TP26/0-0.2	TP27/0-0.2	TP28/0-0.2	DS3	RPD_DS3
		Depth (m)	0.0-0.2	0.0-0.2	0.0-0.2	-	-
	HILs - D	Type	Fill	Fill	Fill	-	-
		Date	7/03/2023	8/03/2023	8/03/2023	8/03/2023	-
Acenaphthene	-		--	--	< 0.5	--	--
Acenaphthylene	-		--	--	< 0.5	--	--
Anthracene	-		--	--	< 0.5	--	--
Benz(a)anthracene	-		--	--	< 0.5	--	--
Benzo(a)pyrene	-		--	--	< 0.5	--	--
Benzo(b&j)fluoranthene	-		--	--	< 0.5	--	--
Benzo(g,h,i)perylene	-		--	--	< 0.5	--	--
Benzo(k)fluoranthene	-		--	--	< 0.5	--	--
Chrysene	-		--	--	< 0.5	--	--
Dibenz(a,h)anthracene	-		--	--	< 0.5	--	--
Fluoranthene	-		--	--	< 0.5	--	--
Fluorene	-		--	--	< 0.5	--	--
Indeno(1.2.3-cd)pyrene	-		--	--	< 0.5	--	--
Naphthalene	-		--	--	< 0.5	--	--
Phenanthrene	-		--	--	< 0.5	--	--
Pyrene	-		--	--	< 0.5	--	--
Benzo(a)pyrene TEQ	40		--	--	0.6	--	--
Total PAH	4,000		--	--	< 0.5	--	--

Notes:

Criteria 1 = NEPC (1999) Amended, Health-based Investigation Levels for soil contaminants.

Total concentrations in mg/kg

-- = assessment criteria not available

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria

Table 4 : Summary of Soil Analytical Data - Polycyclic Aromatic Hydrocarbons

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

	Criteria 1	Sample ID	TS3	RPD_TS3	TP29/0-0.2	TP30/0-0.2	TP31/0-0.2
		Depth (m)	-	-	0.0-0.2	0.0-0.2	0.0-0.2
	HILs - D	Type	-	-	Fill	Fill	Fill
		Date	8/03/2023	-	8/03/2023	8/03/2023	8/03/2023
Acenaphthene	-		--	--	--	--	< 0.5
Acenaphthylene	-		--	--	--	--	< 0.5
Anthracene	-		--	--	--	--	< 0.5
Benz(a)anthracene	-		--	--	--	--	< 0.5
Benzo(a)pyrene	-		--	--	--	--	< 0.5
Benzo(b&j)fluoranthene	-		--	--	--	--	< 0.5
Benzo(g,h,i)perylene	-		--	--	--	--	< 0.5
Benzo(k)fluoranthene	-		--	--	--	--	< 0.5
Chrysene	-		--	--	--	--	< 0.5
Dibenz(a,h)anthracene	-		--	--	--	--	< 0.5
Fluoranthene	-		--	--	--	--	< 0.5
Fluorene	-		--	--	--	--	< 0.5
Indeno(1,2,3-cd)pyrene	-		--	--	--	--	< 0.5
Naphthalene	-		--	--	--	--	< 0.5
Phenanthrene	-		--	--	--	--	< 0.5
Pyrene	-		--	--	--	--	< 0.5
Benzo(a)pyrene TEQ	40		--	--	--	--	0.6
Total PAH	4,000		--	--	--	--	< 0.5

Notes:

Criteria 1 = NEPC (1999) Amended, Health-based Investigation Levels for soil contaminants.

Total concentrations in mg/kg

- = assessment criteria not available

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria

Table 4 : Summary of Soil Analytical Data - Polycyclic Aromatic Hydrocarbons

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

	Criteria 1	Sample ID	TP32/0-0.3	TP33/0-0.1	TP34/0-0.1	TP35/0-0.2	TP36/0.3-0.5
		Depth (m)	0.0-0.3	0.0-0.1	0.0-0.1	0.0-0.2	0.3-0.5
	HILs - D	Type	Fill	Fill	Fill	Fill	Fill
		Date	7/03/2023	8/03/2023	6/03/2023	8/03/2023	8/03/2023
Acenaphthene	-		--	--	--	< 0.5	< 0.5
Acenaphthylene	-		--	--	--	< 0.5	< 0.5
Anthracene	-		--	--	--	< 0.5	< 0.5
Benz(a)anthracene	-		--	--	--	< 0.5	< 0.5
Benzo(a)pyrene	-		--	--	--	< 0.5	< 0.5
Benzo(b&j)fluoranthene	-		--	--	--	< 0.5	< 0.5
Benzo(g,h,i)perylene	-		--	--	--	< 0.5	< 0.5
Benzo(k)fluoranthene	-		--	--	--	< 0.5	< 0.5
Chrysene	-		--	--	--	< 0.5	< 0.5
Dibenz(a,h)anthracene	-		--	--	--	< 0.5	< 0.5
Fluoranthene	-		--	--	--	< 0.5	< 0.5
Fluorene	-		--	--	--	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	-		--	--	--	< 0.5	< 0.5
Naphthalene	-		--	--	--	< 0.5	< 0.5
Phenanthrene	-		--	--	--	< 0.5	< 0.5
Pyrene	-		--	--	--	< 0.5	< 0.5
Benzo(a)pyrene TEQ	40		--	--	--	0.6	0.6
Total PAH	4,000		--	--	--	< 0.5	< 0.5

Notes:

Criteria 1 = NEPC (1999) Amended, Health-based Investigation Levels for soil contaminants.

Total concentrations in mg/kg

-- = assessment criteria not available

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria

Table 4 : Summary of Soil Analytical Data - Polycyclic Aromatic Hydrocarbons

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

	Criteria 1	Sample ID	TP37/0-0.2	TP40/0-0.1	TP41/0-0.3	TP57/0.3-0.5	TP59/0-0.2
		Depth (m)	0.0-0.2	0.0-0.1	0.0-0.3	0.3-0.5	0.0-0.2
	HILs - D	Type	Fill	Fill	Fill	Fill	Fill
		Date	8/03/2023	7/03/2023	8/03/2023	8/03/2023	8/03/2023
Acenaphthene	-		--	--	--	< 0.5	--
Acenaphthylene	-		--	--	--	< 0.5	--
Anthracene	-		--	--	--	< 0.5	--
Benz(a)anthracene	-		--	--	--	< 0.5	--
Benzo(a)pyrene	-		--	--	--	< 0.5	--
Benzo(b&j)fluoranthene	-		--	--	--	< 0.5	--
Benzo(g,h,i)perylene	-		--	--	--	< 0.5	--
Benzo(k)fluoranthene	-		--	--	--	< 0.5	--
Chrysene	-		--	--	--	< 0.5	--
Dibenz(a,h)anthracene	-		--	--	--	< 0.5	--
Fluoranthene	-		--	--	--	< 0.5	--
Fluorene	-		--	--	--	< 0.5	--
Indeno(1.2.3-cd)pyrene	-		--	--	--	< 0.5	--
Naphthalene	-		--	--	--	< 0.5	--
Phenanthrene	-		--	--	--	< 0.5	--
Pyrene	-		--	--	--	< 0.5	--
Benzo(a)pyrene TEQ	40		--	--	--	0.6	--
Total PAH	4,000		--	--	--	< 0.5	--

Notes:

Criteria 1 = NEPC (1999) Amended, Health-based Investigation Levels for soil contaminants.

Total concentrations in mg/kg

-- = assessment criteria not available

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria

Table 4 : Summary of Soil Analytical Data - Polycyclic Aromatic Hydrocarbons

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

	Criteria 1	Sample ID	TP60/0-0.2	TRIPB1	TRIPS1	TRIPB2	TRIPS2
		Depth (m)	0.0-0.2	-	-	-	-
	HILs - D	Type	Fill	-	-	-	-
		Date	8/03/2023	-	-	-	-
Acenaphthene	-		--	--	--	--	--
Acenaphthylene	-		--	--	--	--	--
Anthracene	-		--	--	--	--	--
Benz(a)anthracene	-		--	--	--	--	--
Benzo(a)pyrene	-		--	--	--	--	--
Benzo(b&j)fluoranthene	-		--	--	--	--	--
Benzo(g,h,i)perylene	-		--	--	--	--	--
Benzo(k)fluoranthene	-		--	--	--	--	--
Chrysene	-		--	--	--	--	--
Dibenz(a,h)anthracene	-		--	--	--	--	--
Fluoranthene	-		--	--	--	--	--
Fluorene	-		--	--	--	--	--
Indeno(1.2.3-cd)pyrene	-		--	--	--	--	--
Naphthalene	-		--	--	--	--	--
Phenanthrene	-		--	--	--	--	--
Pyrene	-		--	--	--	--	--
Benzo(a)pyrene TEQ	40		--	--	--	--	--
Total PAH	4,000		--	--	--	--	--

Notes:

Criteria 1 = NEPC (1999) Amended, Health-based Investigation Levels for soil contaminants.

Total concentrations in mg/kg

- = assessment criteria not available

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria

Table 4 : Summary of Soil Analytical Data - Polycyclic Aromatic Hydrocarbons

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

	Criteria 1	Sample ID	R1
		Depth (m)	-
	HILs - D	Type	-
		Date	8/03/2023
Acenaphthene	-		--
Acenaphthylene	-		--
Anthracene	-		--
Benz(a)anthracene	-		--
Benzo(a)pyrene	-		--
Benzo(b&j)fluoranthene	-		--
Benzo(g,h,i)perylene	-		--
Benzo(k)fluoranthene	-		--
Chrysene	-		--
Dibenz(a,h)anthracene	-		--
Fluoranthene	-		--
Fluorene	-		--
Indeno(1,2,3-cd)pyrene	-		--
Naphthalene	-		--
Phenanthrene	-		--
Pyrene	-		--
Benzo(a)pyrene TEQ	40		--
Total PAH	4,000		--

Notes:

Criteria 1 = NEPC (1999) Amended, Health-based Investigation Levels for soil contaminants.

Total concentrations in mg/kg

- = assessment criteria not available

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria

Table 5 : Summary of Soil Analytical Data - Polychlorinated Biphenyls

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

	Criteria 1	Sample ID	TP1/0.1-0.3	TP1/0.3-0.5	TP2/0-0.2	DS2	RPD_DS2
		Depth (m)	0.1-0.3	0.3-0.5	0.0-0.2	-	-
	HILs - D	Type	Fill	Fill	Fill	-	-
		Date	7/03/2023	7/03/2023	7/03/2023	7/03/2023	-
Aroclor 1016	-		--	--	< 0.1	--	--
Aroclor 1221	-		--	--	< 0.1	--	--
Aroclor 1232	-		--	--	< 0.1	--	--
Aroclor 1242	-		--	--	< 0.1	--	--
Aroclor 1248	-		--	--	< 0.1	--	--
Aroclor 1254	-		--	--	< 0.1	--	--
Aroclor 1260	-		--	--	< 0.1	--	--
Total PCBs	7		--	--	< 0.1	--	--

Notes:

Criteria 1 = NEPC (1999) Amended, Health-based Investigation Levels for soil contaminants.

Total concentrations in mg/kg

-- = assessment criteria not available

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria

Table 5 : Summary of Soil Analytical Data - Polychlorinated Biphenyls

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

	Criteria 1	Sample ID	TS2	RPD_TS2	TP3/0-0.2	TP4/0.15-0.35	TP5/0-0.2
		Depth (m)	-	-	0.0-0.2	0.15-0.35	0.0-0.2
	HILs - D	Type	-	-	Fill	Fill	Fill
		Date	7/03/2023	-	7/03/2023	8/03/2023	8/03/2023
Aroclor 1016	-		--	--	--	--	--
Aroclor 1221	-		--	--	--	--	--
Aroclor 1232	-		--	--	--	--	--
Aroclor 1242	-		--	--	--	--	--
Aroclor 1248	-		--	--	--	--	--
Aroclor 1254	-		--	--	--	--	--
Aroclor 1260	-		--	--	--	--	--
Total PCBs	7		--	--	--	--	--

Notes:

Criteria 1 = NEPC (1999) Amended, Health-based Investigation Levels for soil contaminants.

Total concentrations in mg/kg

- = assessment criteria not available

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria

Table 5 : Summary of Soil Analytical Data - Polychlorinated Biphenyls

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

	Criteria 1	Sample ID	TP6/0.2-0.4	TP7/0-0.2	TP8/0.15-0.35	TP9/0-0.3	TP10/0-0.2
		Depth (m)	0.2-0.4	0.0-0.2	0.15-0.35	0.0-0.3	0.0-0.2
	HILs - D	Type	Fill	Fill	Fill	Fill	Fill
		Date	8/03/2023	7/03/2023	7/03/2023	7/03/2023	6/03/2023
Aroclor 1016	-		--	--	< 0.1	--	--
Aroclor 1221	-		--	--	< 0.1	--	--
Aroclor 1232	-		--	--	< 0.1	--	--
Aroclor 1242	-		--	--	< 0.1	--	--
Aroclor 1248	-		--	--	< 0.1	--	--
Aroclor 1254	-		--	--	< 0.1	--	--
Aroclor 1260	-		--	--	< 0.1	--	--
Total PCBs	7		--	--	< 0.1	--	--

Notes:

Criteria 1 = NEPC (1999) Amended, Health-based Investigation Levels for soil contaminants.

Total concentrations in mg/kg

-- = assessment criteria not available

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria

Table 5 : Summary of Soil Analytical Data - Polychlorinated Biphenyls

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

	Criteria 1	Sample ID	TP11/0-0.2	TP12/0-0.2	TP13/0-0.2	TP14/0-0.2	TP15/0-0.2
		Depth (m)	0.0-0.2	0.0-0.2	0.0-0.2	0.0-0.2	0.0-0.2
	HILs - D	Type	Fill	Fill	Fill	Fill	Fill
		Date	8/03/2023	8/03/2023	8/03/2023	8/03/2023	8/03/2023
Aroclor 1016	-		--	--	< 0.1	--	< 0.1
Aroclor 1221	-		--	--	< 0.1	--	< 0.1
Aroclor 1232	-		--	--	< 0.1	--	< 0.1
Aroclor 1242	-		--	--	< 0.1	--	< 0.1
Aroclor 1248	-		--	--	< 0.1	--	< 0.1
Aroclor 1254	-		--	--	< 0.1	--	< 0.1
Aroclor 1260	-		--	--	< 0.1	--	< 0.1
Total PCBs	7		--	--	< 0.1	--	< 0.1

Notes:

Criteria 1 = NEPC (1999) Amended, Health-based Investigation Levels for soil contaminants.

Total concentrations in mg/kg

-- = assessment criteria not available

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria



Bold/red indicates exceedance of assessment criteria

Table 5 : Summary of Soil Analytical Data - Polychlorinated Biphenyls

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

	Criteria 1	Sample ID	TP17/0-0.2	TP17/0.4-0.6	TP18/0-0.2	TP19/0-0.2	TP20/0-0.2
		Depth (m)	0.0-0.2	0.4-0.6	0.0-0.2	0.0-0.2	0.0-0.2
	HILs - D	Type	Fill	Fill	Fill	Fill	Fill
		Date	7/03/2023	7/03/2023	7/03/2023	8/03/2023	8/03/2023
Aroclor 1016	-		--	--	--	--	--
Aroclor 1221	-		--	--	--	--	--
Aroclor 1232	-		--	--	--	--	--
Aroclor 1242	-		--	--	--	--	--
Aroclor 1248	-		--	--	--	--	--
Aroclor 1254	-		--	--	--	--	--
Aroclor 1260	-		--	--	--	--	--
Total PCBs	7		--	--	--	--	--

Notes:

Criteria 1 = NEPC (1999) Amended, Health-based Investigation Levels for soil contaminants.

Total concentrations in mg/kg

-- = assessment criteria not available

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria

Table 5 : Summary of Soil Analytical Data - Polychlorinated Biphenyls

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

	Criteria 1	Sample ID	TP21/0-0.2	TP22/0-0.2	TP23/0-0.2	TP24/0-0.2	TP25/0-0.1
		Depth (m)	0.0-0.2	0.0-0.2	0.0-0.2	0.0-0.2	0.0-0.1
	HILs - D	Type	Fill	Fill	Fill	Fill	Fill
		Date	8/03/2023	8/03/2023	8/03/2023	7/03/2023	6/03/2023
Aroclor 1016	-		--	--	--	--	--
Aroclor 1221	-		--	--	--	--	--
Aroclor 1232	-		--	--	--	--	--
Aroclor 1242	-		--	--	--	--	--
Aroclor 1248	-		--	--	--	--	--
Aroclor 1254	-		--	--	--	--	--
Aroclor 1260	-		--	--	--	--	--
Total PCBs	7		--	--	--	--	--

Notes:

Criteria 1 = NEPC (1999) Amended, Health-based Investigation Levels for soil contaminants.

Total concentrations in mg/kg

-- = assessment criteria not available

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria

Table 5 : Summary of Soil Analytical Data - Polychlorinated Biphenyls

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

	Criteria 1	Sample ID	TP26/0-0.2	TP27/0-0.2	TP28/0-0.2	DS3	RPD_DS3
		Depth (m)	0.0-0.2	0.0-0.2	0.0-0.2	-	-
	HILs - D	Type	Fill	Fill	Fill	-	-
		Date	7/03/2023	8/03/2023	8/03/2023	8/03/2023	-
Aroclor 1016	-		--	--	--	--	--
Aroclor 1221	-		--	--	--	--	--
Aroclor 1232	-		--	--	--	--	--
Aroclor 1242	-		--	--	--	--	--
Aroclor 1248	-		--	--	--	--	--
Aroclor 1254	-		--	--	--	--	--
Aroclor 1260	-		--	--	--	--	--
Total PCBs	7		--	--	--	--	--

Notes:

Criteria 1 = NEPC (1999) Amended, Health-based Investigation Levels for soil contaminants.

Total concentrations in mg/kg

-- = assessment criteria not available

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria



Bold/red indicates exceedance of assessment criteria

Table 5 : Summary of Soil Analytical Data - Polychlorinated Biphenyls

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

	Criteria 1	Sample ID	TP32/0-0.3	TP33/0-0.1	TP34/0-0.1	TP35/0-0.2	TP36/0.3-0.5
		Depth (m)	0.0-0.3	0.0-0.1	0.0-0.1	0.0-0.2	0.3-0.5
	HILs - D	Type	Fill	Fill	Fill	Fill	Fill
		Date	7/03/2023	8/03/2023	6/03/2023	8/03/2023	8/03/2023
Aroclor 1016	-		--	--	--	--	--
Aroclor 1221	-		--	--	--	--	--
Aroclor 1232	-		--	--	--	--	--
Aroclor 1242	-		--	--	--	--	--
Aroclor 1248	-		--	--	--	--	--
Aroclor 1254	-		--	--	--	--	--
Aroclor 1260	-		--	--	--	--	--
Total PCBs	7		--	--	--	--	--

Notes:

Criteria 1 = NEPC (1999) Amended, Health-based Investigation Levels for soil contaminants.

Total concentrations in mg/kg

-- = assessment criteria not available

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria

Table 5 : Summary of Soil Analytical Data - Polychlorinated Biphenyls

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

	Criteria 1	Sample ID	TP37/0-0.2	TP40/0-0.1	TP41/0-0.3	TP57/0.3-0.5	TP59/0-0.2
		Depth (m)	0.0-0.2	0.0-0.1	0.0-0.3	0.3-0.5	0.0-0.2
	HILs - D	Type	Fill	Fill	Fill	Fill	Fill
		Date	8/03/2023	7/03/2023	8/03/2023	8/03/2023	8/03/2023
Aroclor 1016	-		--	--	--	< 0.1	--
Aroclor 1221	-		--	--	--	< 0.1	--
Aroclor 1232	-		--	--	--	< 0.1	--
Aroclor 1242	-		--	--	--	< 0.1	--
Aroclor 1248	-		--	--	--	< 0.1	--
Aroclor 1254	-		--	--	--	< 0.1	--
Aroclor 1260	-		--	--	--	< 0.1	--
Total PCBs	7		--	--	--	< 0.1	--

Notes:

Criteria 1 = NEPC (1999) Amended, Health-based Investigation Levels for soil contaminants.

Total concentrations in mg/kg

-- = assessment criteria not available

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria

Table 5 : Summary of Soil Analytical Data - Polychlorinated Biphenyls

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

	Criteria 1	Sample ID	TP60/0-0.2	TRIPB1	TRIPS1	TRIPB2	TRIPS2
		Depth (m)	0.0-0.2	-	-	-	-
	HILs - D	Type	Fill	-	-	-	-
		Date	8/03/2023	-	-	-	-
Aroclor 1016	-		--	--	--	--	--
Aroclor 1221	-		--	--	--	--	--
Aroclor 1232	-		--	--	--	--	--
Aroclor 1242	-		--	--	--	--	--
Aroclor 1248	-		--	--	--	--	--
Aroclor 1254	-		--	--	--	--	--
Aroclor 1260	-		--	--	--	--	--
Total PCBs	7		--	--	--	--	--

Notes:

Criteria 1 = NEPC (1999) Amended, Health-based Investigation Levels for soil contaminants.

Total concentrations in mg/kg

- = assessment criteria not available

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria

Table 5 : Summary of Soil Analytical Data - Polychlorinated Biphenyls

Detailed Site Investigation

Project No.: 2301008

330 - 350 Eighth Avenue

Austral NSW

	Criteria 1	Sample ID	R1
		Depth (m)	-
	HILs - D	Type	-
		Date	8/03/2023
Aroclor 1016	-		--
Aroclor 1221	-		--
Aroclor 1232	-		--
Aroclor 1242	-		--
Aroclor 1248	-		--
Aroclor 1254	-		--
Aroclor 1260	-		--
Total PCBs	7		--

Notes:

Criteria 1 = NEPC (1999) Amended, Health-based Investigation Levels for soil contaminants.

Total concentrations in mg/kg

- = assessment criteria not available

DS2 = duplicate of TP2/0-0.2

TS2 = triplicate of TP2/0-0.2

DS1 = duplicate of TP16/0-0.2

TS1 = triplicate of TP16/0-0.2

DS3 = duplicate of TP28/0-0.2

TS3 = triplicate of TP28/0-0.2

TRIPB1 = blank sample

TRIPS1 = spike sample

TRIPB2 = blank sample

TRIPS2 = spike sample

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria

Table 6 : Summary of Soil Analytical Data - Asbestos
Detailed Site Investigation
Project No.: 2301008

330-350 Eighth Avenue,
Austral, NSW

	Criteria 1	Criteria 2						
	Asbestos	Asbestos						
	HSL D - >0.1m	HSL D - Surface	Sample ID	TP56/0-0.2	TP48/0-0.2	TP14/0-0.2	TP55/0-0.2	TP12/0-0.2
		(Top 10 cm)	Date	8/03/2023	8/03/2023	8/03/2023	8/03/2023	8/03/2023
Approximate Sample Mass (kg)^	-	-	16	16	16	16	16	16
Mass ACM (g)*	-	ND	ND	ND	ND	ND	ND	ND
Mass Asbestos in ACM (g)*	-	-	ND	ND	ND	ND	ND	ND
Asbestos from ACM in Soil (%w/w)*	0.05	-	ND	ND	ND	ND	ND	ND
Approximate Sample Mass (g)	-	-	802	700	838	782	815	
Mass ACM (g)**	-	ND	--	--	--	--	--	--
Mass Asbestos in ACM (g)**	-	-	--	--	--	--	--	--
Asbestos from ACM in Soil (%w/w)**	0.05	-	--	--	--	--	--	--
Mass FA (g)	-	ND	ND	ND	ND	ND	ND	ND
Mass Asbestos in FA (g)	-	-	ND	ND	ND	ND	ND	ND
Mass AF (g)	-	ND	ND	ND	ND	ND	ND	ND
Mass Asbestos in AF (g)	-	-	ND	ND	ND	ND	ND	ND
Mass Asbestos in FA & AF (g)	-	-	ND	ND	ND	ND	ND	ND
Asbestos from FA & AF in Soil (%w/w)	0.001	-	ND	ND	ND	ND	ND	ND

Notes:

Criteria 1 = NEPC (1999) Amended, Health Screening Levels for asbestos contamination in soil.

Total concentrations in g

- = assessment criteria not available

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria

^ soil density assumed to be 1.6 kg/L

* Field gravimetric data for 10L bulk sample ACM %w/w

** Laboratory data for 500mL sample bag for ACM %w/w

ACM = Bonded Asbestos Containing Material

FA = Fibrous Asbestos

AF = Asbestos Fines

Table 6 : Summary of Soil Analytical Data - Asbestos
Detailed Site Investigation
Project No.: 2301008

330-350 Eighth Avenue,
Austral, NSW

	Criteria 1	Criteria 2						
	Asbestos	Asbestos						
	HSL D - >0.1m	HSL D - Surface	Sample ID	TP57/0-0.15	TP6/0-0.2	TP46/0-0.2	TP43/0-0.2	TP47/0-0.2
		(Top 10 cm)	Date	8/03/2023	8/03/2023	8/03/2023	8/03/2023	8/03/2023
Approximate Sample Mass (kg)^	-	-		16	16	16	16	16
Mass ACM (g)*	-	ND		ND	ND	ND	ND	ND
Mass Asbestos in ACM (g)*	-	-		ND	ND	ND	ND	ND
Asbestos from ACM in Soil (%w/w)*	0.05	-		ND	ND	ND	ND	ND
Approximate Sample Mass (g)	-	-		607	724	617	704	795
Mass ACM (g)**	-	ND		--	--	--	--	--
Mass Asbestos in ACM (g)**	-	-		--	--	--	--	--
Asbestos from ACM in Soil (%w/w)**	0.05	-		--	--	--	--	--
Mass FA (g)	-	ND		ND	ND	ND	ND	ND
Mass Asbestos in FA (g)	-	-		ND	ND	ND	ND	ND
Mass AF (g)	-	ND		ND	ND	ND	ND	ND
Mass Asbestos in AF (g)	-	-		ND	ND	ND	ND	ND
Mass Asbestos in FA & AF (g)	-	-		ND	ND	ND	ND	ND
Asbestos from FA & AF in Soil (%w/w)	0.001	-		ND	ND	ND	ND	ND

Notes:

Criteria 1 = NEPC (1999) Amended, Health Screening Levels for asbestos contamination in soil.

Total concentrations in g

- = assessment criteria not available

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria

^ soil density assumed to be 1.6 kg/L

* Field gravimetric data for 10L bulk sample ACM %w/w

** Laboratory data for 500mL sample bag for ACM %w/w

ACM = Bonded Asbestos Containing Material

FA = Fibrous Asbestos

AF = Asbestos Fines

Table 6 : Summary of Soil Analytical Data - Asbestos
Detailed Site Investigation
Project No.: 2301008

330-350 Eighth Avenue,
Austral, NSW

	Criteria 1	Criteria 2						
	Asbestos	Asbestos						
	HSL D - >0.1m	HSL D - Surface	Sample ID	TP49/0-0.2	TP50/0-0.2	TP10/0-0.2	TP45/0-0.2	TP9/0-0.3
		(Top 10 cm)	Date	8/03/2023	8/03/2023	6/03/2023	6/03/2023	7/03/2023
Approximate Sample Mass (kg)^	-	-		16	16	16	16	16
Mass ACM (g)*	-	ND		ND	ND	ND	ND	ND
Mass Asbestos in ACM (g)*	-	-		ND	ND	ND	ND	ND
Asbestos from ACM in Soil (%w/w)*	0.05	-		ND	ND	ND	ND	ND
Approximate Sample Mass (g)	-	-		820	928	501	545	742
Mass ACM (g)**	-	ND		--	--	--	--	--
Mass Asbestos in ACM (g)**	-	-		--	--	--	--	--
Asbestos from ACM in Soil (%w/w)**	0.05	-		--	--	--	--	--
Mass FA (g)	-	ND		ND	0.02	ND	ND	ND
Mass Asbestos in FA (g)	-	-		ND	0.005	ND	ND	ND
Mass AF (g)	-	ND		ND	0.22	ND	ND	ND
Mass Asbestos in AF (g)	-	-		ND	0.022	ND	ND	ND
Mass Asbestos in FA & AF (g)	-	-		ND	0.027	ND	ND	ND
Asbestos from FA & AF in Soil (%w/w)	0.001	-		ND	0.0029	ND	ND	ND

Notes:

Criteria 1 = NEPC (1999) Amended, Health Screening Levels for asbestos contamination in soil.

Total concentrations in g

- = assessment criteria not available

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria

^ soil density assumed to be 1.6 kg/L

* Field gravimetric data for 10L bulk sample ACM %w/w

** Laboratory data for 500mL sample bag for ACM %w/w

ACM = Bonded Asbestos Containing Material

FA = Fibrous Asbestos

AF = Asbestos Fines

Table 6 : Summary of Soil Analytical Data - Asbestos
Detailed Site Investigation
Project No.: 2301008

330-350 Eighth Avenue,
Austral, NSW

	Criteria 1	Criteria 2						
	Asbestos	Asbestos						
	HSL D - >0.1m	HSL D - Surface	Sample ID	TP52/0-0.5	TP1/0.3-0.5	TP44/0.15-0.35	TP51/0-0.3	TP2/0-0.7
		(Top 10 cm)	Date	7/03/2023	7/03/2023	7/03/2023	7/03/2023	7/03/2023
Approximate Sample Mass (kg)^	-	-		16	16	16	16	16
Mass ACM (g)*	-	ND		ND	ND	ND	ND	ND
Mass Asbestos in ACM (g)*	-	-		ND	ND	ND	ND	ND
Asbestos from ACM in Soil (%w/w)*	0.05	-		ND	ND	ND	ND	ND
Approximate Sample Mass (g)	-	-		628	703	593	721	754
Mass ACM (g)**	-	ND		--	--	--	--	--
Mass Asbestos in ACM (g)**	-	-		--	--	--	--	--
Asbestos from ACM in Soil (%w/w)**	0.05	-		--	--	--	--	--
Mass FA (g)	-	ND		ND	ND	ND	ND	ND
Mass Asbestos in FA (g)	-	-		ND	ND	ND	ND	ND
Mass AF (g)	-	ND		ND	ND	ND	ND	ND
Mass Asbestos in AF (g)	-	-		ND	ND	ND	ND	ND
Mass Asbestos in FA & AF (g)	-	-		ND	ND	ND	ND	ND
Asbestos from FA & AF in Soil (%w/w)	0.001	-		ND	ND	ND	ND	ND

Notes:

Criteria 1 = NEPC (1999) Amended, Health Screening Levels for asbestos contamination in soil.

Total concentrations in g

- = assessment criteria not available

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria

^ soil density assumed to be 1.6 kg/L

* Field gravimetric data for 10L bulk sample ACM %w/w

** Laboratory data for 500mL sample bag for ACM %w/w

ACM = Bonded Asbestos Containing Material

FA = Fibrous Asbestos

AF = Asbestos Fines

	Criteria 1	Criteria 2						
	Asbestos	Asbestos						
	HSL D - >0.1m	HSL D - Surface	Sample ID	TP38/0-0.6	TP8/0.15-1	TP39/0-0.6	TP7/0-0.4	TP42/0-0.3
		(Top 10 cm)	Date	7/03/2023	7/03/2023	7/03/2023	7/03/2023	7/03/2023
Approximate Sample Mass (kg)^	-	-		16	16	16	16	16
Mass ACM (g)*	-	ND		ND	ND	ND	ND	ND
Mass Asbestos in ACM (g)*	-	-		ND	ND	ND	ND	ND
Asbestos from ACM in Soil (%w/w)*	0.05	-		ND	ND	ND	ND	ND
Approximate Sample Mass (g)	-	-		780	592	696	670	503
Mass ACM (g)**	-	ND		--	--	--	--	--
Mass Asbestos in ACM (g)**	-	-		--	--	--	--	--
Asbestos from ACM in Soil (%w/w)**	0.05	-		--	--	--	--	--
Mass FA (g)	-	ND		ND	ND	ND	ND	ND
Mass Asbestos in FA (g)	-	-		ND	ND	ND	ND	ND
Mass AF (g)	-	ND		ND	ND	ND	ND	ND
Mass Asbestos in AF (g)	-	-		ND	ND	ND	ND	ND
Mass Asbestos in FA & AF (g)	-	-		ND	ND	ND	ND	ND
Asbestos from FA & AF in Soil (%w/w)	0.001	-		ND	ND	ND	ND	ND

Notes:

Criteria 1 = NEPC (1999) Amended, Health Screening Levels for asbestos contamination in soil.

Total concentrations in g

- = assessment criteria not available

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria

^ soil density assumed to be 1.6 kg/L

* Field gravimetric data for 10L bulk sample ACM %w/w

** Laboratory data for 500mL sample bag for ACM %w/w

ACM = Bonded Asbestos Containing Material

FA = Fibrous Asbestos

AF = Asbestos Fines

Table 6 : Summary of Soil Analytical Data - Asbestos
Detailed Site Investigation
Project No.: 2301008

330-350 Eighth Avenue,
Austral, NSW

	Criteria 1	Criteria 2						
	Asbestos	Asbestos						
	HSL D - >0.1m	HSL D - Surface	Sample ID	TP13/0-0.3	TP54/0-0.4	TP15/0-0.5	BH02/0.15-0.35	TP17/0-0.4
		(Top 10 cm)	Date	8/03/2023	8/03/2023	8/03/2023	7/03/2023	7/03/2023
Approximate Sample Mass (kg)^	-	-		16	16	16	16	16
Mass ACM (g)*	-	ND		ND	ND	8.28	ND	ND
Mass Asbestos in ACM (g)*	-	-		ND	ND	1.242	ND	ND
Asbestos from ACM in Soil (%w/w)*	0.05	-		ND	ND	0.008%	ND	ND
Approximate Sample Mass (g)	-	-		712	641	872	317	782
Mass ACM (g)**	-	ND		--	--	--	--	--
Mass Asbestos in ACM (g)**	-	-		--	--	--	--	--
Asbestos from ACM in Soil (%w/w)**	0.05	-		--	--	--	--	--
Mass FA (g)	-	ND		ND	ND	0.036	ND	ND
Mass Asbestos in FA (g)	-	-		ND	ND	0.014	ND	ND
Mass AF (g)	-	ND		ND	ND	ND	ND	ND
Mass Asbestos in AF (g)	-	-		ND	ND	ND	ND	ND
Mass Asbestos in FA & AF (g)	-	-		ND	ND	0.014	ND	ND
Asbestos from FA & AF in Soil (%w/w)	0.001	-		ND	ND	0.0016	ND	ND

Notes:

Criteria 1 = NEPC (1999) Amended, Health Screening Levels for asbestos contamination in soil.

Total concentrations in g

- = assessment criteria not available

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria

^ soil density assumed to be 1.6 kg/L

* Field gravimetric data for 10L bulk sample ACM %w/w

** Laboratory data for 500mL sample bag for ACM %w/w

ACM = Bonded Asbestos Containing Material

FA = Fibrous Asbestos

AF = Asbestos Fines

Table 6 : Summary of Soil Analytical Data - Asbestos
Detailed Site Investigation
Project No.: 2301008

330-350 Eighth Avenue,
Austral, NSW

	Criteria 1	Criteria 2						
	Asbestos	Asbestos						
	HSL D - >0.1m	HSL D - Surface	Sample ID	TP16/0-0.2	TP53/0-0.4	TP18/0-0.3	TP3/0-0.4	TP11/0-0.2
		(Top 10 cm)	Date	7/03/2023	7/03/2023	7/03/2023	7/03/2023	8/03/2023
Approximate Sample Mass (kg)^	-	-		16	16	16	16	16
Mass ACM (g)*	-	ND		ND	ND	ND	ND	ND
Mass Asbestos in ACM (g)*	-	-		ND	ND	ND	ND	ND
Asbestos from ACM in Soil (%w/w)*	0.05	-		ND	ND	ND	ND	ND
Approximate Sample Mass (g)	-	-		699	705	578	573	835
Mass ACM (g)**	-	ND		--	--	--	--	--
Mass Asbestos in ACM (g)**	-	-		--	--	--	--	--
Asbestos from ACM in Soil (%w/w)**	0.05	-		--	--	--	--	--
Mass FA (g)	-	ND		ND	ND	ND	ND	ND
Mass Asbestos in FA (g)	-	-		ND	ND	ND	ND	ND
Mass AF (g)	-	ND		ND	ND	ND	ND	ND
Mass Asbestos in AF (g)	-	-		ND	ND	ND	ND	ND
Mass Asbestos in FA & AF (g)	-	-		ND	ND	ND	ND	ND
Asbestos from FA & AF in Soil (%w/w)	0.001	-		ND	ND	ND	ND	ND

Notes:

Criteria 1 = NEPC (1999) Amended, Health Screening Levels for asbestos contamination in soil.

Total concentrations in g

- = assessment criteria not available

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria

^ soil density assumed to be 1.6 kg/L

* Field gravimetric data for 10L bulk sample ACM %w/w

** Laboratory data for 500mL sample bag for ACM %w/w

ACM = Bonded Asbestos Containing Material

FA = Fibrous Asbestos

AF = Asbestos Fines

Table 6 : Summary of Soil Analytical Data - Asbestos
Detailed Site Investigation
Project No.: 2301008

330-350 Eighth Avenue,
Austral, NSW

	Criteria 1	Criteria 2						
	Asbestos	Asbestos						
	HSL D - >0.1m	HSL D - Surface	Sample ID	TP19/0-0.2	TP20/0-0.2	TP4/0-0.15	TP41/0-0.3	TP5/0-0.3
		(Top 10 cm)	Date	8/03/2023	8/03/2023	8/03/2023	8/03/2023	8/03/2023
Approximate Sample Mass (kg)^	-	-		16	16	16	16	16
Mass ACM (g)*	-	ND		ND	ND	ND	ND	ND
Mass Asbestos in ACM (g)*	-	-		ND	ND	ND	ND	ND
Asbestos from ACM in Soil (%w/w)*	0.05	-		ND	ND	ND	ND	ND
Approximate Sample Mass (g)	-	-		799	657	799	501	648
Mass ACM (g)**	-	ND		--	--	--	--	--
Mass Asbestos in ACM (g)**	-	-		--	--	--	--	--
Asbestos from ACM in Soil (%w/w)**	0.05	-		--	--	--	--	--
Mass FA (g)	-	ND		ND	ND	ND	ND	ND
Mass Asbestos in FA (g)	-	-		ND	ND	ND	ND	ND
Mass AF (g)	-	ND		ND	ND	ND	ND	ND
Mass Asbestos in AF (g)	-	-		ND	ND	ND	ND	ND
Mass Asbestos in FA & AF (g)	-	-		ND	ND	ND	ND	ND
Asbestos from FA & AF in Soil (%w/w)	0.001	-		ND	ND	ND	ND	ND

Notes:

Criteria 1 = NEPC (1999) Amended, Health Screening Levels for asbestos contamination in soil.

Total concentrations in g

- = assessment criteria not available

< # or ND = analyte(s) not detected in excess of laboratory reporting limit

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria

^ soil density assumed to be 1.6 kg/L

* Field gravimetric data for 10L bulk sample ACM %w/w

** Laboratory data for 500mL sample bag for ACM %w/w

ACM = Bonded Asbestos Containing Material

FA = Fibrous Asbestos

AF = Asbestos Fines

ATTACHMENT A

DETAILED SITE INVESTIGATION

330 – 350 Eighth Avenue, Austral NSW



Plate 1 – View from the northwest corner of the site, facing east.



Plate 2 – View of southeast corner of the site facing east.



Plate 3 – View of water logged area in central northern portion of the site.



Plate 4 – View of eastern boundary in the northern half of the site.



Plate 5 – View of the central western portion of the site, facing north.

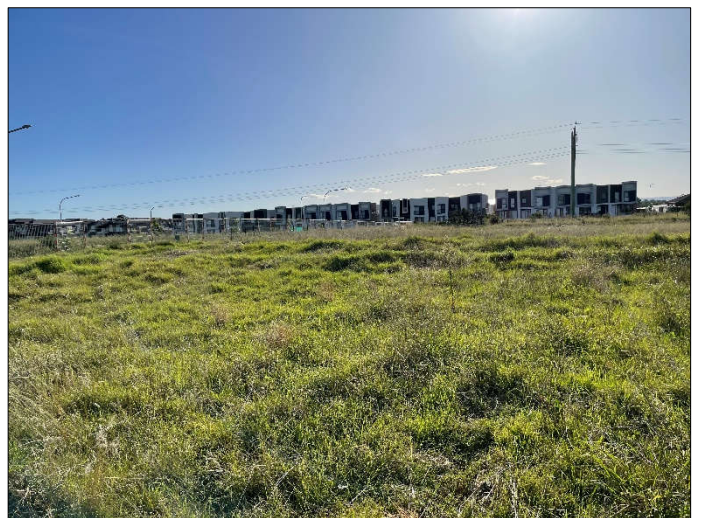


Plate 6 – View of southwest corner of the site, facing west.

DETAILED SITE INVESTIGATION

330 – 350 Eighth Avenue, Austral NSW

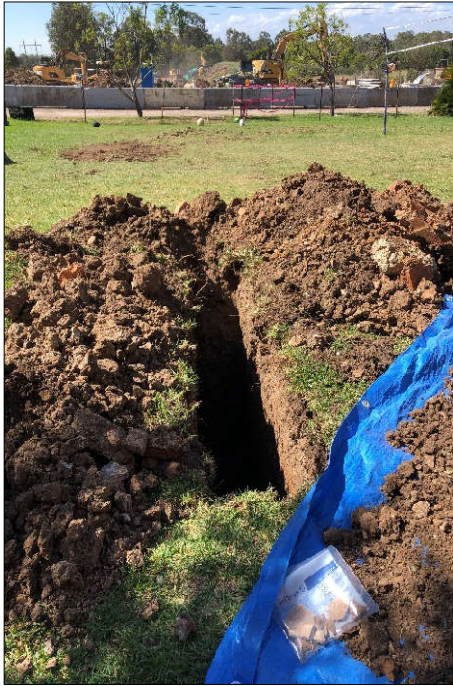


Plate 7 – Fill excavated from TP8 with non-fibrous plaster fragments.



Plate 8 – Fill excavated from TP8 with non-fibrous plaster fragments.



Plate 9 – Tilled soil/fill from TP5 inspected for ACM.



Plate 10 – Fill excavated from TP57 adjacent to eastern dwelling on northern portion of site.



Plate 11 – Fill excavated from TP15 inspected for ACM, adjacent to sheds in central portion of north half of site.



Plate 12 – Test pit excavated near the shed (TP15) in the north half of the site.

DETAILED SITE INVESTIGATION

330 – 350 Eighth Avenue, Austral NSW



Plate 13 – One of the sheds comprising plaster cement sheeting that does not appear fibrous, on central portion of northern half of site.



Plate 14 – Area of potential ACM fragments on the ground surface near location TP15, majority observed to be non-fibrous and not ACM .

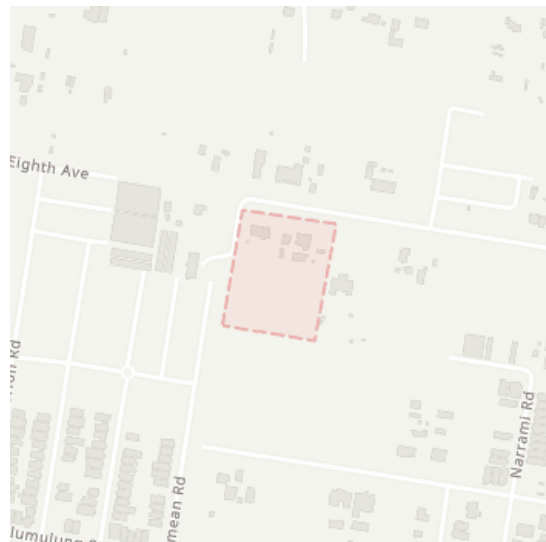
ATTACHMENT B

Caller Details

Contact:	Tiffany Mabbott	Caller Id:	3007457	Phone:	0455 278 841
Company:	Not supplied				
Address:	Unit 2309/4 Daydream Street Warriewood NSW 2102	Email:	tmabbott@geo-logix.com.au		

Dig Site and Enquiry Details

WARNING: The map below only displays the location of the proposed dig site and does not display any asset owners' pipe or cables. The area highlighted has been used only to identify the participating asset owners, who will send information to you directly.



User Reference:	2301008	
Working on Behalf of:	Private	
Enquiry Date:	Start Date:	End Date:
01/03/2023	02/03/2023	10/03/2023

Address:
254 Eighth Avenue
Austral NSW 2179

Job Purpose:
Excavation

Onsite Activities:
Vertical Boring

Location of Workplace:
Private

Location in Road:

- Check that the location of the dig site is correct. If not you must submit a new enquiry.
- Should the scope of works change, or plan validity dates expire, you must submit a new enquiry.
- Do NOT dig without plans. Safe excavation is your responsibility. If you do not understand the plans or how to proceed safely, please contact the relevant asset owners.

Notes/Description of Works:
Not supplied

Your Responsibilities and Duty of Care

- The lodgement of an enquiry does not authorise the project to commence. You must obtain all necessary information from any and all likely impacted asset owners prior to excavation.
- If plans are not received within 2 working days, contact the asset owners directly & quote their Sequence No.
- ALWAYS perform an onsite inspection for the presence of assets. Should you require an onsite location, contact the asset owners directly. Please remember, plans do not detail the exact location of assets.
- Pothole to establish the exact location of all underground assets using a hand shovel, before using heavy machinery.
- Ensure you adhere to any State legislative requirements regarding Duty of Care and safe digging requirements.
- If you damage an underground asset you MUST advise the asset owner immediately.
- By using this service, you agree to Privacy Policy and the terms and disclaimers set out at www.byda.com.au
- For more information on safe excavation practices, visit www.byda.com.au

Asset Owner Details

The assets owners listed below have been requested to contact you with information about their asset locations within 2 working days. Additional time should be allowed for information issued by post. It is **your responsibility** to identify the presence of any underground assets in and around your proposed dig site. Please be aware, that not all asset owners are registered with the Before You Dig service, so it is **your responsibility** to identify and contact any asset owners not listed here directly.

** Asset owners highlighted by asterisks ** require that you visit their offices to collect plans.

Asset owners highlighted with a hash # require that you call them to discuss your enquiry or to obtain plans.

Seq. No.	Authority Name	Phone	Status
221794463	Endeavour Energy	(02) 9853 4161	NOTIFIED
221794461	Jemena Gas West	1300 880 906	NOTIFIED
221794459	Liverpool City Council	1300 362 170	NOTIFIED
221794460	NBN Co NswAct	1800 687 626	NOTIFIED
221794462	Sydney Water	13 20 92	NOTIFIED
221794464	Telstra NSW Central	1800 653 935	NOTIFIED

END OF UTILITIES LIST

BYDA Underground Search Report

Date: 01/03/2023

BYDA Sequence No: 221794463

BYDA Job No: 33721751

ENDEAVOUR ENERGY ASSETS AFFECTED

To:	Tiffany Mabbott	Company:	Not Supplied
Address:	Unit 2309/4 Daydream Street, Warriewood, NSW 2102		
Cust. ID:	3007457	Email:	tmabbott@geo-logix.com.au
Phone:	+61455278841		
Enquiry Location: 254 Eighth Avenue, Austral, NSW 2179			

Our Search has shown that **UNDERGROUND ASSETS ARE PRESENT** on our plans within the nominated enquiry location. This search is based on the graphical position of the excavation site as denoted in the BYDA customer confirmation sheet.

WARNING

- **All electrical apparatus shall be regarded as live until proved de-energised.** Contact with live electrical apparatus will cause severe injury or death.
- Underground assets may be congested at the approach to bridges and other structures. Typical asset depths and alignment may vary substantially, rising and falling sharply and at much shallower depths than elsewhere as they are channelled into shared allocated spaces on bridges and other structures. Additional precautions and underground asset location methods will be required in proximity to bridges and other structures.
- In accordance with the *Electricity Supply Act 1995*, you are obliged to report any damage to Endeavour Energy Assets immediately by calling **131 003**.
- The customer must obtain a new set of plans from Endeavour Energy if work has not been started or completed within twenty **(20)** working days of the original plan issue date.
- The customer must contact Endeavour Energy if any of the plans provided have blank pages, as some underground asset information may be incomplete.
- Endeavour Energy underground earth grids may exist and their location **may not** be shown on plans. Persons excavating are expected to exercise all due care, especially in the vicinity of padmount substations, pole mounted substations, pole mounted switches, transmission poles and towers.
- Endeavour Energy plans **do not** show any underground customer service mains or information relating to service mains within private property.
- Asbestos or asbestos-containing material may be present on or near Endeavour Energy's underground assets.
- Organo-Chloride Pesticides (OCP) may be present in some sub-transmission trenches.
- All plans must be made available at the worksite where excavation is to be undertaken in either printed or electronic format. If the plans are in an electronic format, they must be in a format visible on a screen size 10 inches or greater. Plans must be reviewed and understood by the crew on site prior to commencing excavation.
- Non-destructive water excavation must be operated at or below 2000PSI. Any operation exceeding 2000PSI must be classed and treated as a destructive excavation practice

SUPPLEMENTARY MATERIAL

Material	Purpose	Location
BYDA Cover Letter	Endeavour Energy BYDA response Cover Letter	Attached
BYDA Important Information & Disclaimer	Endeavour Energy disclaimer, responsibilities and information on understanding plans	Attached
BYDA Response Plans	Endeavour Energy BYDA plans	Attached
Work Cover NSW "Work near underground assets: Guide"	Guideline for anyone involved in construction work near underground assets	Contact Work Cover NSW for a copy
Work Cover NSW "Excavation work: Code of practice"	Practical guidance on managing health and safety risks associated with excavation	URL [Click Here]
Safe Work Australia "Working in the vicinity of overhead and underground electric lines guidance material"	Provides information on how to manage risks when working in the vicinity of overhead and underground electric lines at a workplace	URL [Click Here]
Endeavour Energy Safety Brochures & Guides	To raise awareness of dangers of working on or near Endeavour Energy's assets	URL [Click Here]

WARNING











- **All electrical apparatus shall be regarded as live until proved de-energised.** Contact with live electrical apparatus will cause severe injury or death.
- Underground assets may be congested at the approach to bridges and other structures. Typical asset depths and alignment may vary substantially, rising and falling sharply and at much shallower depths than elsewhere as they are channelled into shared allocated spaces on bridges and other structures. Additional precautions and underground asset location methods will be required in proximity to bridges and other structures.
- In accordance with the *Electricity Supply Act 1995*, you are obliged to report any damage to Endeavour Energy Assets immediately by calling **131 003**.
- The customer must obtain a new set of plans from Endeavour Energy if work has not been started or completed within twenty (20) working days of the original plan issue date.
- The customer must contact Endeavour Energy if any of the plans provided have blank pages, as some underground asset information may be incomplete.
- Endeavour Energy underground earth grids may exist and their location **may not** be shown on plans. Persons excavating are expected to exercise all due care, especially in the vicinity of padmount substations, pole mounted substations, pole mounted switches, transmission poles and towers.
- Endeavour Energy plans **do not** show any underground customer service mains or information relating to service mains within private property.
- Asbestos or asbestos-containing material may be present on or near Endeavour Energy's underground assets.
- Organo-Chloride Pesticides (OCP) may be present in some sub-transmission trenches.
- All plans must be made available at the worksite where excavation is to be undertaken in either printed or electronic format. If the plans are in an electronic format, they must be in a format visible on a screen size 10 inches or greater. Plans must be reviewed and understood by the crew on site prior to commencing excavation.
- Non-destructive water excavation must be operated at or below 2000PSI. Any operation exceeding 2000PSI must be classed and treated as a destructive excavation practice

INFORMATION PROVIDED BY ENDEAVOUR ENERGY

- Any plans provided pursuant to this service are intended to show the approximate location of underground assets relative to road boundaries, property fences and other structures at the time of installation.
- Depth of underground assets may vary significantly from information provided on plans as a result of changes to road, footpath or surface levels subsequent to installation.
- Such plans have been prepared solely for use by Endeavour Energy staff for design, construction and maintenance purposes.
- All enquiry details and results are kept in a register.

DISCLAIMER

Whilst Endeavour Energy has taken all reasonable steps to ensure that the information contained in the plans is as accurate as possible it will accept no liability for inaccuracies in the information shown on such plans.

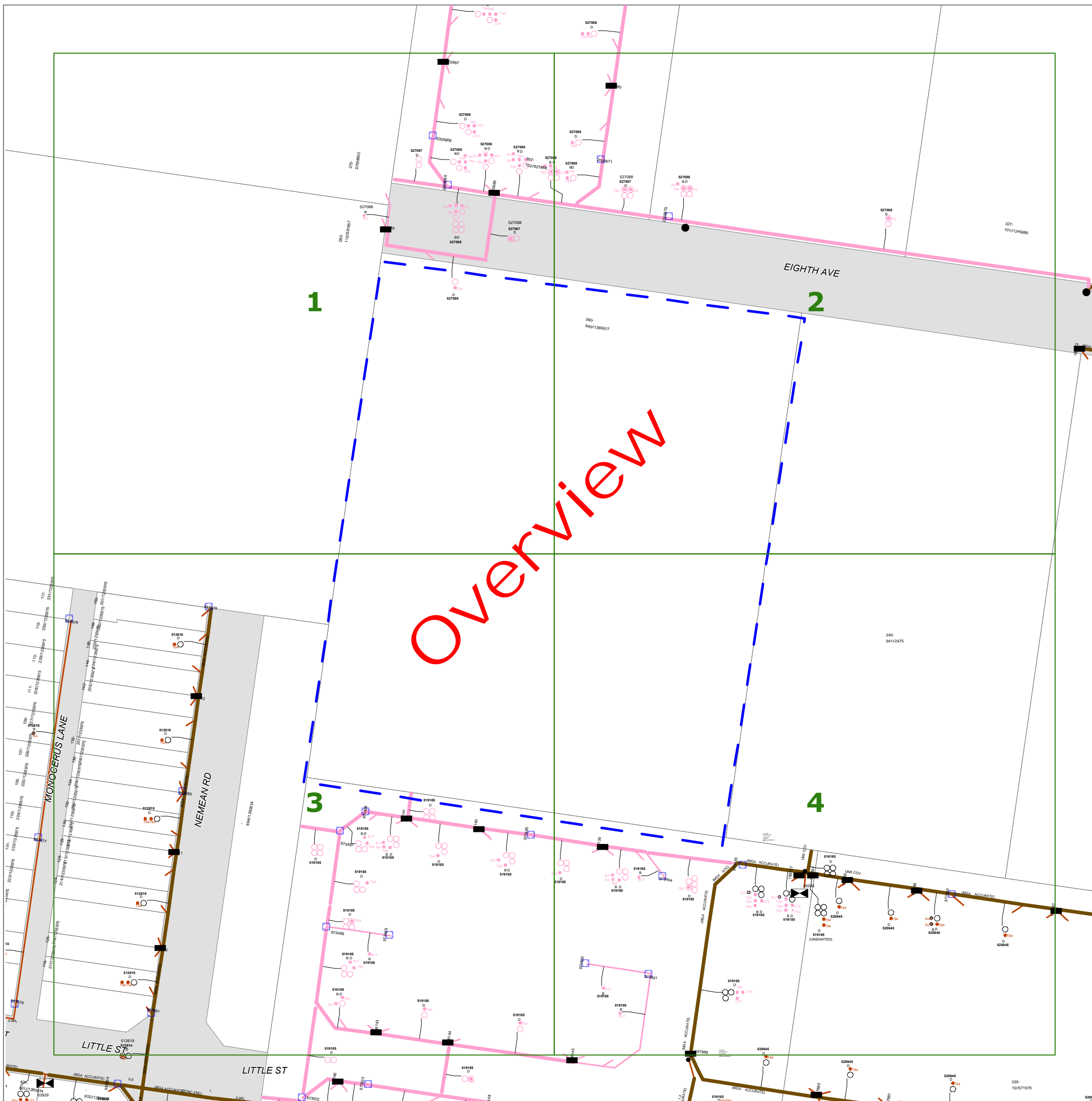
-  or  Street light column
-  Padmount substation
-  or  Overground pillar (O.G.Box)
-  Underground pit
-  Duct run
-  Cable run
-  Typical duct section
-  Asbestos warning



NOT TO SCALE

DBYD Sequence No.:	221794463
Issued Date:	01/03/2023

Cadastre: © Land and Property Information 2015, 2016





WARNING

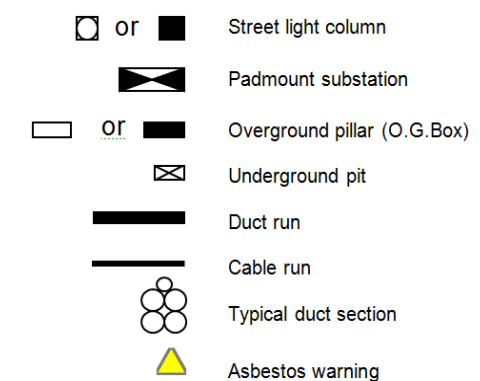
- **All electrical apparatus shall be regarded as live until proved de-energised.**
Contact with live electrical apparatus will cause severe injury or death.
- Underground assets may be congested at the approach to bridges and other structures. Typical asset depths and alignment may vary substantially, rising and falling sharply and at much shallower depths than elsewhere as they are channelled into shared allocated spaces on bridges and other structures.
Additional precautions and underground asset location methods will be required in proximity to bridges and other structures.
- In accordance with the *Electricity Supply Act 1995*, you are obliged to report any damage to Endeavour Energy Assets immediately by calling **131 003**.
- The customer must obtain a new set of plans from Endeavour Energy if work has not been started or completed within twenty (**20**) working days of the original plan issue date.
- The customer must contact Endeavour Energy if any of the plans provided have blank pages, as some underground asset information may be incomplete.
- Endeavour Energy underground earth grids may exist and their location **may not** be shown on plans. Persons excavating are expected to exercise all due care, especially in the vicinity of padmount substations, pole mounted substations, pole mounted switches, transmission poles and towers.
- Endeavour Energy plans **do not** show any underground customer service mains or information relating to service mains within private property.
- Asbestos or asbestos-containing material may be present on or near Endeavour Energy's underground assets.
- Organo-Chloride Pesticides (OCP) may be present in some sub-transmission trenches.
- All plans must be made available at the worksite where excavation is to be undertaken in either printed or electronic format. If the plans are in an electronic format, they must be in a format visible on a screen size 10 inches or greater. Plans must be reviewed and understood by the crew on site prior to commencing excavation.
- Non-destructive water excavation must be operated at or below 2000PSI. Any operation exceeding 2000PSI must be classed and treated as a destructive excavation practice

INFORMATION PROVIDED BY ENDEAVOUR ENERGY

- Any plans provided pursuant to this service are intended to show the approximate location of underground assets relative to road boundaries, property fences and other structures at the time of installation.
- Depth of underground assets may vary significantly from information provided on plans as a result of changes to road, footpath or surface levels subsequent to installation.
- Such plans have been prepared solely for use by Endeavour Energy staff for design, construction and maintenance purposes.
- All enquiry details and results are kept in a register.

DISCLAIMER

Whilst Endeavour Energy has taken all reasonable steps to ensure that the information contained in the plans is as accurate as possible it will accept no liability for inaccuracies in the information shown on such plans.

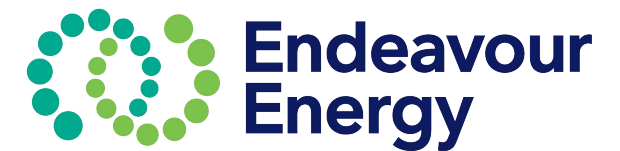


NOT TO SCALE

DBYD Sequence No.:	221794463
Issued Date:	01/03/2023

Cadastre: © Land and Property Information 2015, 2016





WARNING

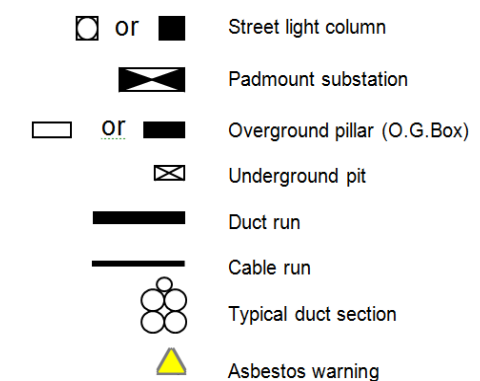
- **All electrical apparatus shall be regarded as live until proved de-energised.**
Contact with live electrical apparatus will cause severe injury or death.
- Underground assets may be congested at the approach to bridges and other structures. Typical asset depths and alignment may vary substantially, rising and falling sharply and at much shallower depths than elsewhere as they are channelled into shared allocated spaces on bridges and other structures.
Additional precautions and underground asset location methods will be required in proximity to bridges and other structures.
- In accordance with the *Electricity Supply Act 1995*, you are obliged to report any damage to Endeavour Energy Assets immediately by calling **131 003**.
- The customer must obtain a new set of plans from Endeavour Energy if work has not been started or completed within twenty (**20**) working days of the original plan issue date.
- The customer must contact Endeavour Energy if any of the plans provided have blank pages, as some underground asset information may be incomplete.
- Endeavour Energy underground earth grids may exist and their location **may not** be shown on plans. Persons excavating are expected to exercise all due care, especially in the vicinity of padmount substations, pole mounted substations, pole mounted switches, transmission poles and towers.
- Endeavour Energy plans **do not** show any underground customer service mains or information relating to service mains within private property.
- Asbestos or asbestos-containing material may be present on or near Endeavour Energy's underground assets.
- Organo-Chloride Pesticides (OCP) may be present in some sub-transmission trenches.
- All plans must be made available at the worksite where excavation is to be undertaken in either printed or electronic format. If the plans are in an electronic format, they must be in a format visible on a screen size 10 inches or greater. Plans must be reviewed and understood by the crew on site prior to commencing excavation.
- Non-destructive water excavation must be operated at or below 2000PSI. Any operation exceeding 2000PSI must be classed and treated as a destructive excavation practice

INFORMATION PROVIDED BY ENDEAVOUR ENERGY

- Any plans provided pursuant to this service are intended to show the approximate location of underground assets relative to road boundaries, property fences and other structures at the time of installation.
- Depth of underground assets may vary significantly from information provided on plans as a result of changes to road, footpath or surface levels subsequent to installation.
- Such plans have been prepared solely for use by Endeavour Energy staff for design, construction and maintenance purposes.
- All enquiry details and results are kept in a register.

DISCLAIMER

Whilst Endeavour Energy has taken all reasonable steps to ensure that the information contained in the plans is as accurate as possible it will accept no liability for inaccuracies in the information shown on such plans.



NOT TO SCALE

DBYD Sequence No.:	221794463
Issued Date:	01/03/2023

Cadastre: © Land and Property Information 2015, 2016

WARNING











- **All electrical apparatus shall be regarded as live until proved de-energised.** Contact with live electrical apparatus will cause severe injury or death.
- Underground assets may be congested at the approach to bridges and other structures. Typical asset depths and alignment may vary substantially, rising and falling sharply and at much shallower depths than elsewhere as they are channelled into shared allocated spaces on bridges and other structures. Additional precautions and underground asset location methods will be required in proximity to bridges and other structures.
- In accordance with the *Electricity Supply Act 1995*, you are obliged to report any damage to Endeavour Energy Assets immediately by calling **131 003**.
- The customer must obtain a new set of plans from Endeavour Energy if work has not been started or completed within twenty (20) working days of the original plan issue date.
- The customer must contact Endeavour Energy if any of the plans provided have blank pages, as some underground asset information may be incomplete.
- Endeavour Energy underground earth grids may exist and their location **may not** be shown on plans. Persons excavating are expected to exercise all due care, especially in the vicinity of padmount substations, pole mounted substations, pole mounted switches, transmission poles and towers.
- Endeavour Energy plans **do not** show any underground customer service mains or information relating to service mains within private property.
- Asbestos or asbestos-containing material may be present on or near Endeavour Energy's underground assets.
- Organo-Chloride Pesticides (OCP) may be present in some sub-transmission trenches.
- All plans must be made available at the worksite where excavation is to be undertaken in either printed or electronic format. If the plans are in an electronic format, they must be in a format visible on a screen size 10 inches or greater. Plans must be reviewed and understood by the crew on site prior to commencing excavation.
- Non-destructive water excavation must be operated at or below 2000PSI. Any operation exceeding 2000PSI must be classed and treated as a destructive excavation practice

INFORMATION PROVIDED BY ENDEAVOUR ENERGY

- Any plans provided pursuant to this service are intended to show the approximate location of underground assets relative to road boundaries, property fences and other structures at the time of installation.
- Depth of underground assets may vary significantly from information provided on plans as a result of changes to road, footpath or surface levels subsequent to installation.
- Such plans have been prepared solely for use by Endeavour Energy staff for design, construction and maintenance purposes.
- All enquiry details and results are kept in a register.

DISCLAIMER

Whilst Endeavour Energy has taken all reasonable steps to ensure that the information contained in the plans is as accurate as possible it will accept no liability for inaccuracies in the information shown on such plans.

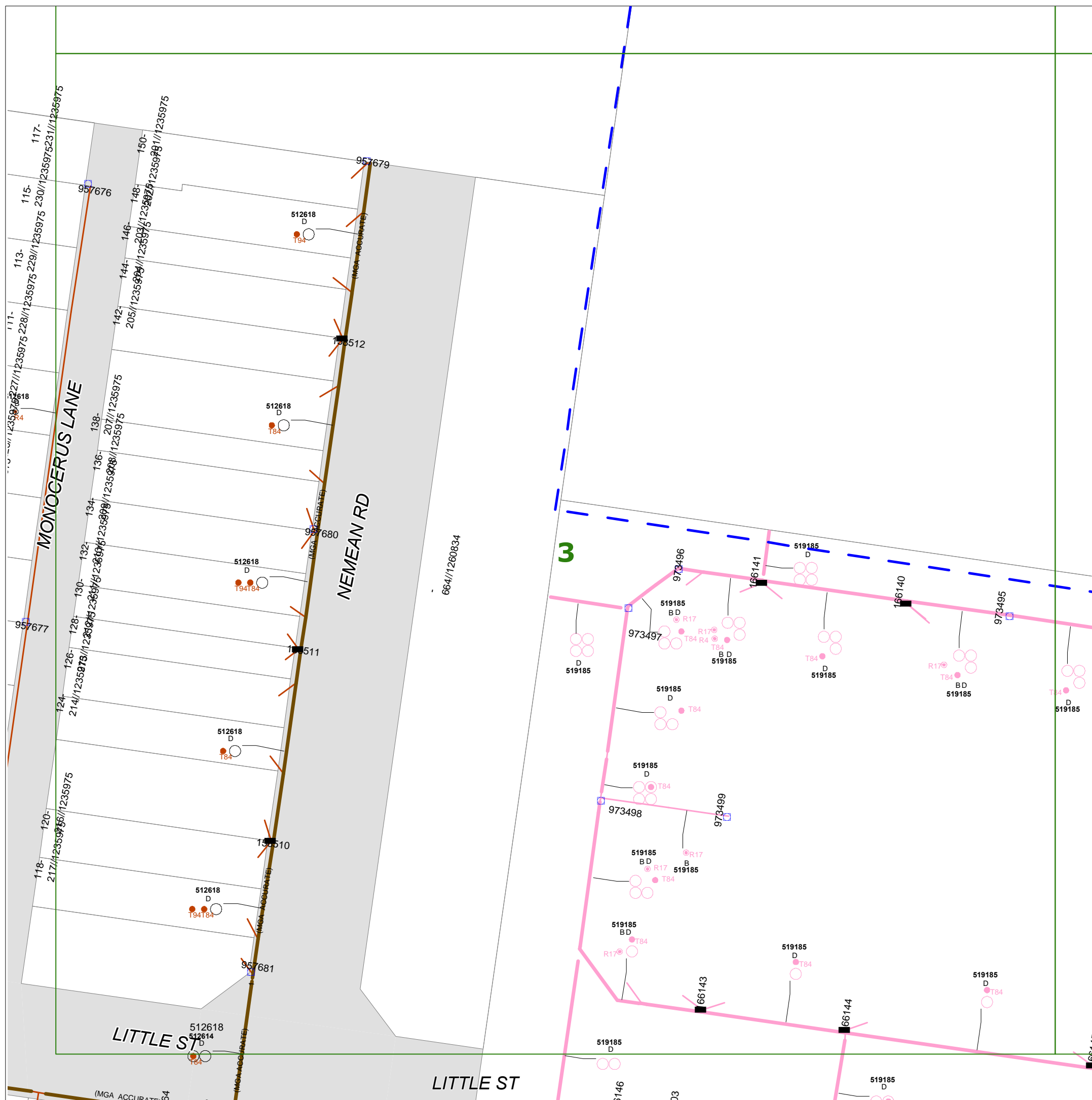
-  or  Street light column
-  Padmount substation
-  or  Overground pillar (O.G.Box)
-  Underground pit
-  Duct run
-  Cable run
-  Typical duct section
-  Asbestos warning

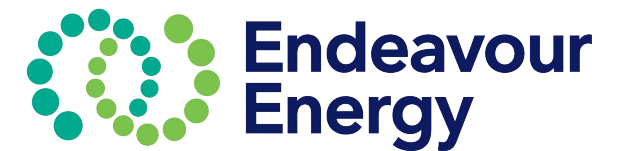


NOT TO SCALE

DBYD Sequence No.:	221794463
Issued Date:	01/03/2023

Cadastre: © Land and Property Information 2015, 2016





WARNING

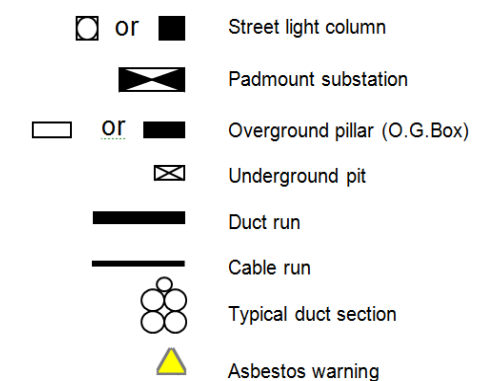
- **All electrical apparatus shall be regarded as live until proved de-energised.**
Contact with live electrical apparatus will cause severe injury or death.
- Underground assets may be congested at the approach to bridges and other structures. Typical asset depths and alignment may vary substantially, rising and falling sharply and at much shallower depths than elsewhere as they are channelled into shared allocated spaces on bridges and other structures.
Additional precautions and underground asset location methods will be required in proximity to bridges and other structures.
- In accordance with the *Electricity Supply Act 1995*, you are obliged to report any damage to Endeavour Energy Assets immediately by calling **131 003**.
- The customer must obtain a new set of plans from Endeavour Energy if work has not been started or completed within twenty (**20**) working days of the original plan issue date.
- The customer must contact Endeavour Energy if any of the plans provided have blank pages, as some underground asset information may be incomplete.
- Endeavour Energy underground earth grids may exist and their location **may not** be shown on plans. Persons excavating are expected to exercise all due care, especially in the vicinity of padmount substations, pole mounted substations, pole mounted switches, transmission poles and towers.
- Endeavour Energy plans **do not** show any underground customer service mains or information relating to service mains within private property.
- Asbestos or asbestos-containing material may be present on or near Endeavour Energy's underground assets.
- Organo-Chloride Pesticides (OCP) may be present in some sub-transmission trenches.
- All plans must be made available at the worksite where excavation is to be undertaken in either printed or electronic format. If the plans are in an electronic format, they must be in a format visible on a screen size 10 inches or greater. Plans must be reviewed and understood by the crew on site prior to commencing excavation.
- Non-destructive water excavation must be operated at or below 2000PSI. Any operation exceeding 2000PSI must be classed and treated as a destructive excavation practice

INFORMATION PROVIDED BY ENDEAVOUR ENERGY

- Any plans provided pursuant to this service are intended to show the approximate location of underground assets relative to road boundaries, property fences and other structures at the time of installation.
- Depth of underground assets may vary significantly from information provided on plans as a result of changes to road, footpath or surface levels subsequent to installation.
- Such plans have been prepared solely for use by Endeavour Energy staff for design, construction and maintenance purposes.
- All enquiry details and results are kept in a register.

DISCLAIMER

Whilst Endeavour Energy has taken all reasonable steps to ensure that the information contained in the plans is as accurate as possible it will accept no liability for inaccuracies in the information shown on such plans.



NOT TO SCALE

DBYD Sequence No.:	221794463
Issued Date:	01/03/2023

Cadastre: © Land and Property Information 2015, 2016

ASSETS AFFECTED

This information is only valid for 28 days from the date of issue

Please note that there are **Gas Mains or Services** in the vicinity of your intended work, as generally illustrated on the attached map. There may also be other mains or services at the location. For an explanation of the map, please see the legend attachment and read the important information below.

Please note that you have duty of care to ensure that Jemena's assets are not compromised or damaged during any digging, future development or construction work.

















Excavation Guidelines:

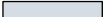
It is essential that the location of gas pipe/s are confirmed by carefully pot-holing by hand excavation prior to proceeding with mechanical excavation in the vicinity of gas pipes. If you cannot locate the pipe, contact the local depot.


Important Information:

1. The enclosed plans have been prepared solely for the use of Jemena Gas Networks (NSW) Ltd and Jemena Asset Management Pty Ltd (together "Jemena") and show the position of Jemena's underground gas mains and installations in public gazetted roads. If the enclosed plans show gas assets located on private property or other third party property, these are approximate locations.
2. There may be underground assets owned by other utilities in the vicinity of your work and it is your responsibility to identify and locate such assets.
3. The plans may show the position of underground mains and installations relative to fences, buildings and other structures, as they existed at the time the assets were installed and may not have been updated to take account of any subsequent change in the location or style of those features. Depth of underground assets may also vary as a result of changes to road, footpath or surface levels subsequent to installation.
4. While Jemena takes all reasonable care to ensure the accuracy and completeness of the information provided, it makes no warranty as to the accuracy or completeness of the enclosed plans and does not assume any duty of care to you nor any responsibility for the accuracy, adequacy, suitability or completeness of the plans or for any error or omission. It is intended to be indicative only and must not be solely relied upon when undertaking underground works.
5. Except to the extent that liability may not be capable of being lawfully excluded, Jemena, its employees, agents, officers and contractors will not be liable to any person for loss or damage (including indirect and consequential loss or damage) which may be suffered or incurred in connection with the provision of this information.
6. Persons excavating or carrying out other earthworks will be held responsible for any damage caused to Jemena's underground mains, service lines and equipment. In accordance with the *Work Near Underground Assets – Guide* published in 2007 by Work Cover Authority*, Jemena recommends that you carry out potholing by hand to accurately confirm the location of gas mains and installation prior to commencing excavations.


Network Mains

	Proposed New Main (coloured as per kPa)
	Proposed Isolate (coloured as per kPa)
	Unknown kPa
	2kPa Low Pressure gas main
	7kPa Low Pressure gas main
	30kPa Medium pressure gas main
	100kPa Medium Pressure gas main
	210kPa Medium Pressure gas main
	300kPa Medium Pressure gas main
	400kPa Medium Pressure gas main
	1050kPa High Pressure gas main
	3500kPa High Pressure gas main
	7000kPa High Pressure gas main
	>7000kPa Transmission pipeline
	Isolated Service - Former Med/High Pressure
	Isolated Steel Main - Treat as High Pressure

	Conduit or Casing
100 PVC	Size & Material (see conduit material codes)

	Critical Main - Treat as High Pressure (Main coloured as per kPa)
---	---

	Exposed Main section
EXPOSED	





SHALLOW-SP

Shallow Main section: see Protection Code below, no code assume no protection








SP	Steel Plate	CE	Concrete Encased
PP	PE Plate	UNK	Unknown Type
CS	Concrete Slab		

Gas Services

	Gas service – coloured by kPa
	Serviced Site indicator

Jemena has created service pipe features programmatically based on known pipe characteristics and cartographic principles. They may provide guidance to identify assets whilst in the field in addition to existing processes.

Network Assets

	Siphon
	Network Valve
	High Pressure Main Line Valve (≥ 1050 kPa)
	High Pressure Automatic Line Break Valve (> 1050 kPa)
	Boundary Regulator Set (≤ 1050 kPa)
	Distribution Regulator Set (≤ 1050 kPa)
	High Pressure Regulating Station (> 1050 kPa)

Annotations

Pipe and Conduit Material Codes

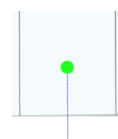
NY	Nylon	NB	Nominal Bore – Cast Iron
PE	Polyethylene	ST	Steel
P/PL	Plastic (undefined)	C/CO	Copper
PVC	Polyvinyl Chloride		

Pipe code combinations and dimension references

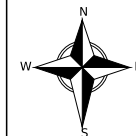
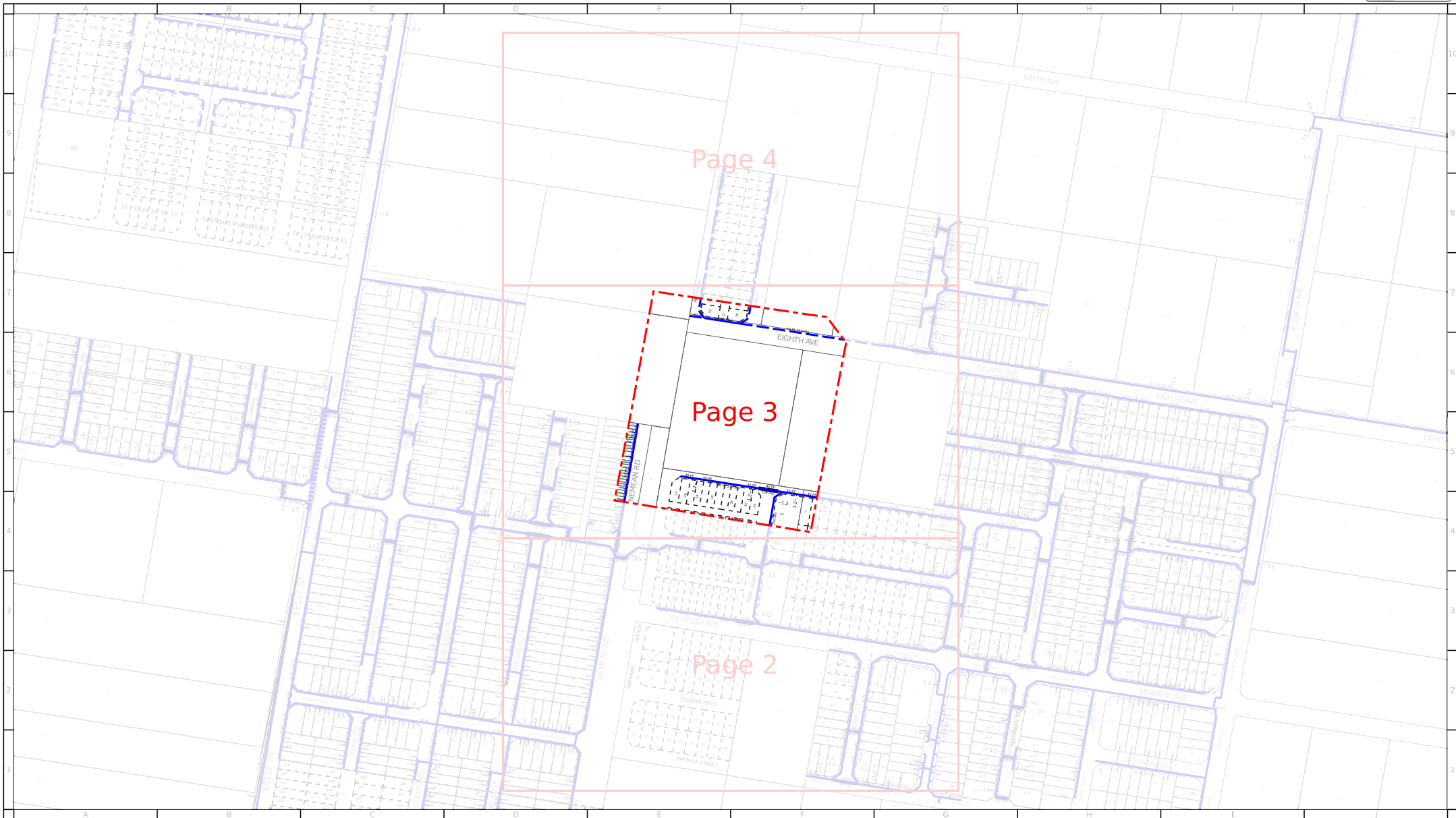
⑥NB 50MM NY	50mm Nylon main inserted into 6 inch (Nominal Bore) Cast Iron pipe
⑤0MM 32MM NY	32mm Nylon main inserted into 50mm Steel pipe
~1.5	Distance (in metres) of main from Boundary Line (MBL)
MBK	Distance in Metres Back of Kerb
MKL	Distance in Metres from Kerb Line
MEBL	Distance in Metres from Eastern Boundary Line (North/South/West)
MCL	Distance in Metres from Centre Line of Road
MFL	Distance in Metres from Fence Line



Distance (in metres) of service from side Boundary where the service pipe crosses from the road reserve into the private lot
Service placed towards left or right boundary
Service pipe size & material where known

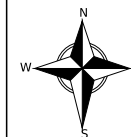


For connected sites with insufficient asset details, service is shown down the centre of the lot with no attributes plotted





For legend details, please refer to the Coversheet attachment provided as part of this DBYD response.



Scale: 1:2000

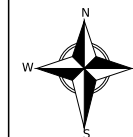
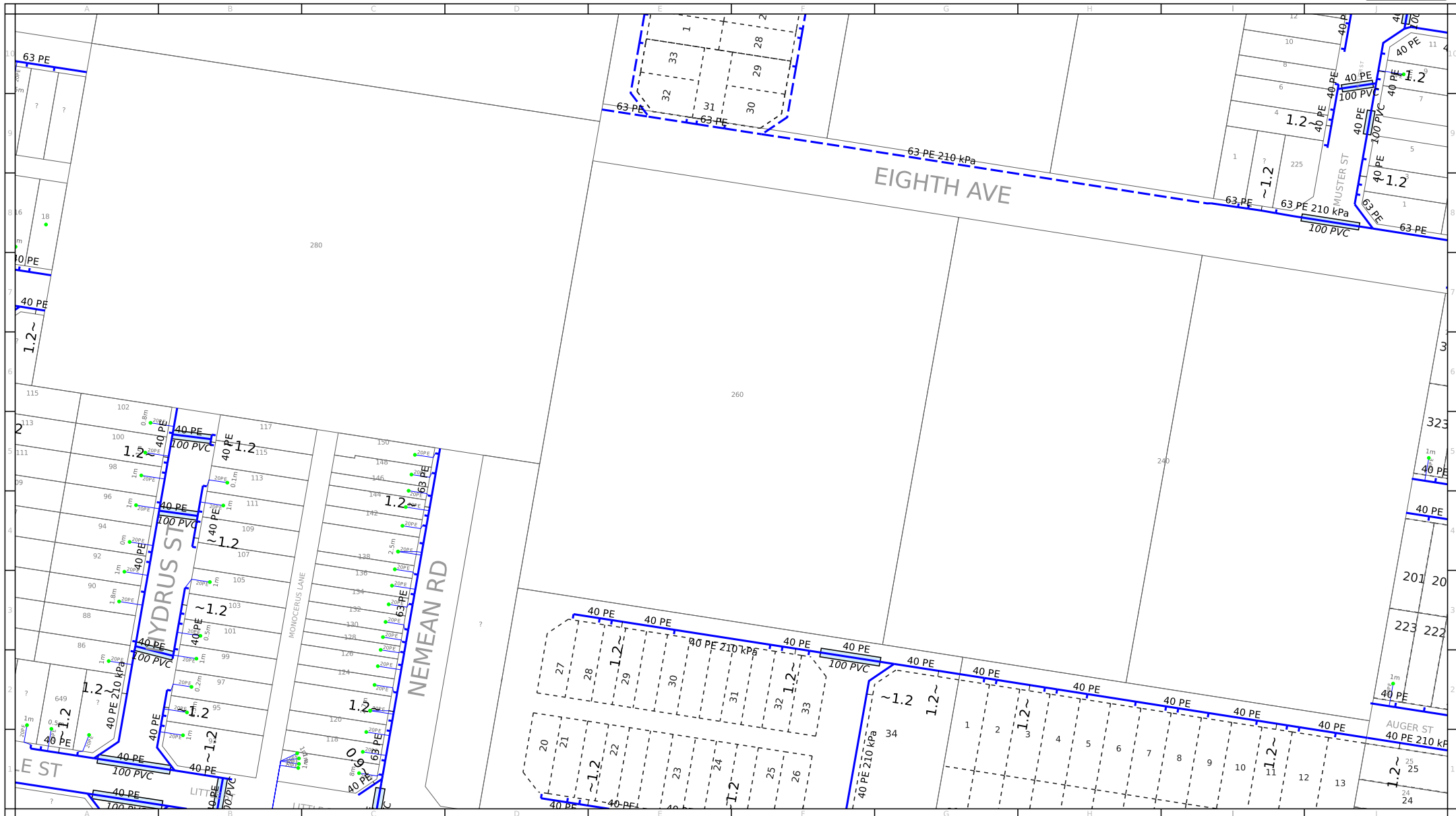
Issue Date: 01/03/2023

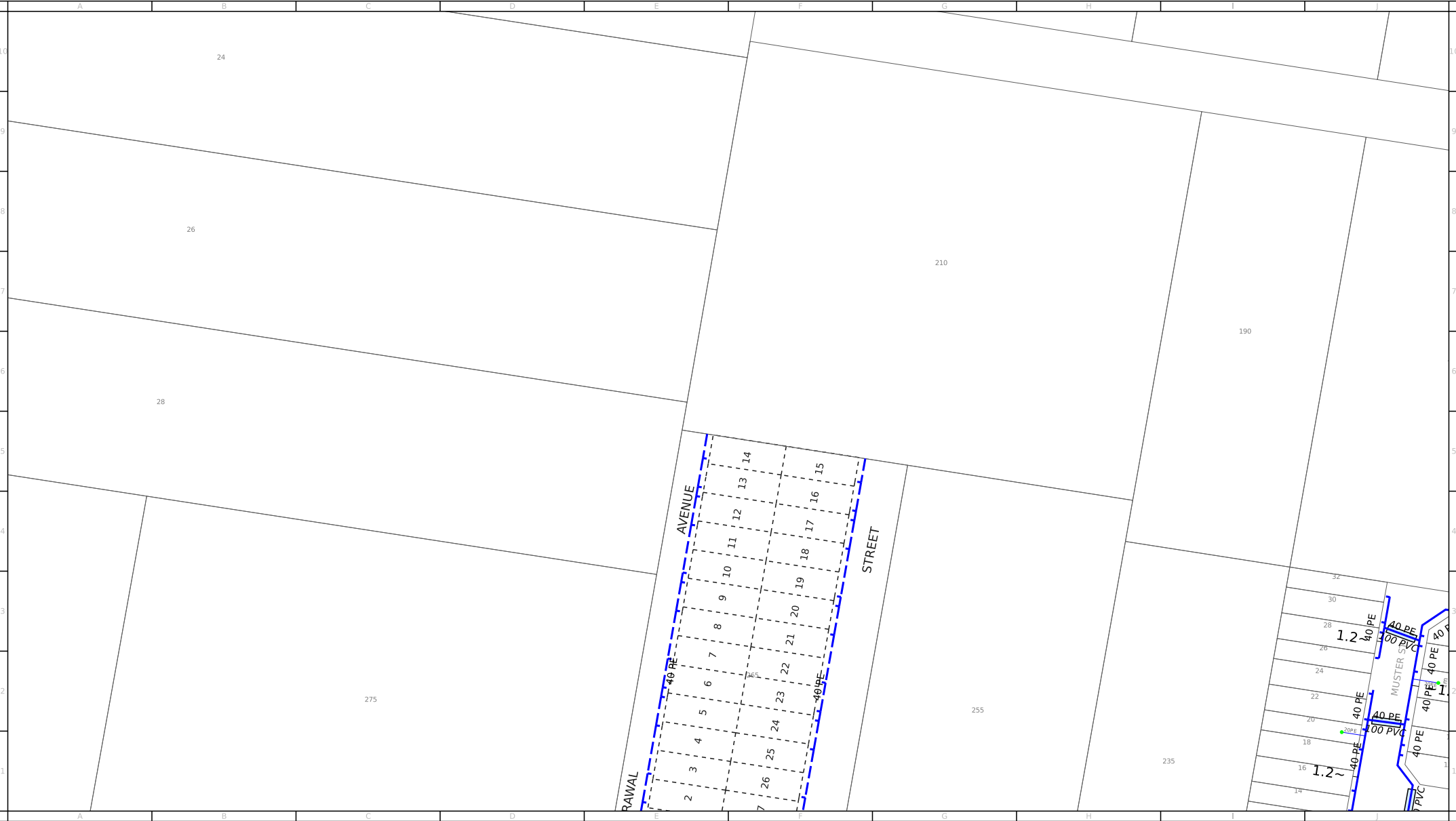
DBYD Seq No: 221794461

DBYD Job No: 33721751

0m 10m 20m 30m 40m 50m 60m 70m 80m

WARNING: This is a representation of Jemena Gas Networks underground assets only and may not indicate all assets in the area. It must not be used for the purpose of exact asset location in order to undertake any type of excavation. This plan is diagrammatic only, and distances scaled from this plan may not be accurate. Please read all conditions and information on the attached information sheet. This extract is subject to those conditions. The information contained on this plan is only valid for 28 days from the date of issue.





For legend details, please refer to the Coversheet attachment provided as part of this DBYD response.



Scale:1:2000

Issue Date: 01/03/2023

DBYD Seq No: 221794461

DBYD Job No: 33721751

0m 10m 20m 30m 40m 50m 60m 70m80m

WARNING: This is a representation of Jemena Gas Networks underground assets only and may not indicate all assets in the area. It must not be used for the purpose of exact asset location in order to undertake any type of excavation. This plan is diagrammatic only, and distances scaled from this plan may not be accurate. Please read all conditions and information on the attached information sheet. This extract is subject to those conditions. The information contained on this plan is only valid for 28 days from the date of issue.

Response Cover Letter

Liverpool City Council

Locked Bag 7064

Liverpool BC NSW 1871

www.liverpool.nsw.gov.au



Date: 01/03/2023

To:

Tiffany Mabbott

Not Supplied

Unit 2309/4 Daydream Street

Warriewood NSW 2102

According to our records your enquiry with the following details impacts our infrastructure. Please review other documents included with this response for additional details:

Sequence No: 221794459

Job No: 33721751

Location: 254 Eighth Avenue
Austral NSW 2179

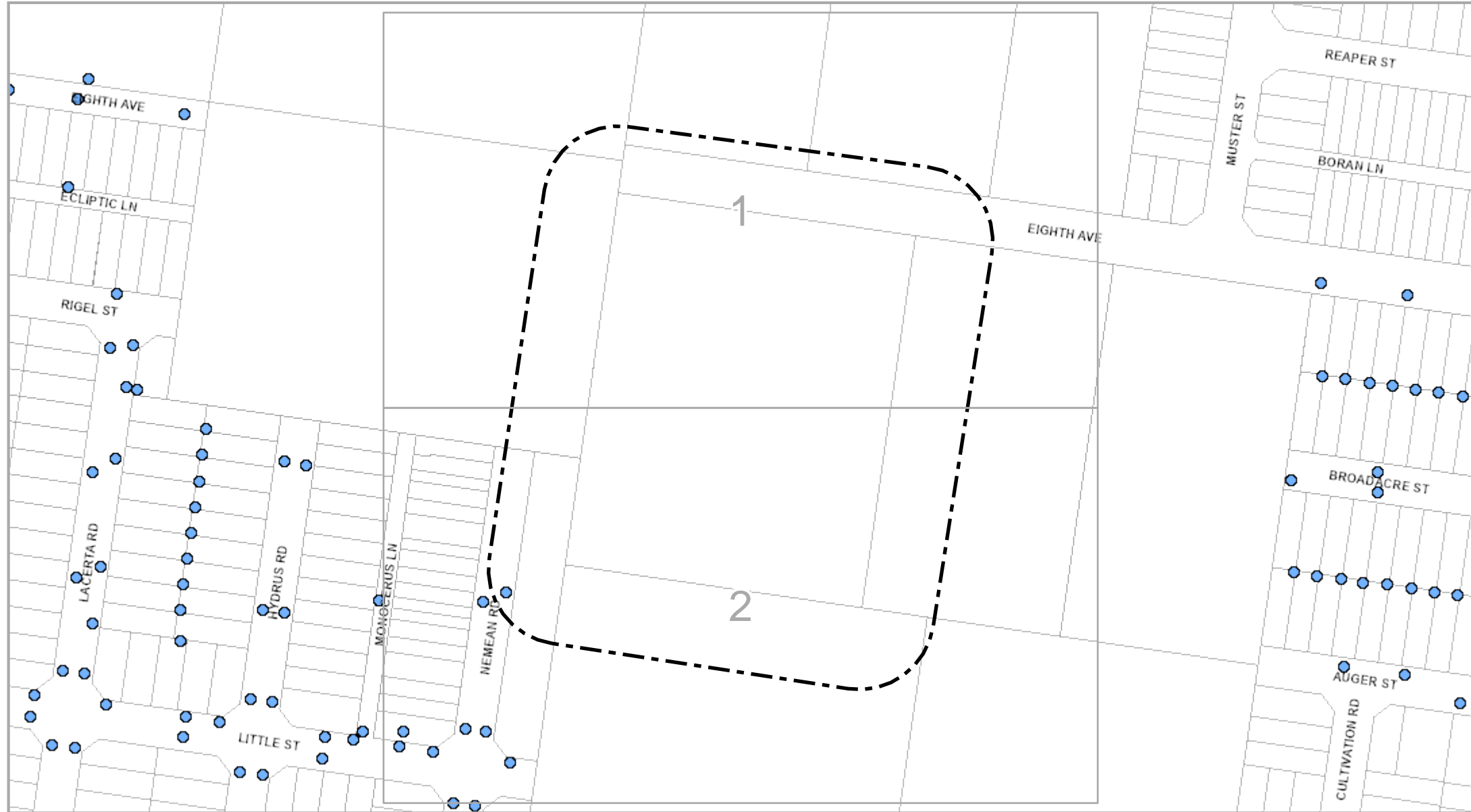
If you require further information, please contact the Liverpool City Council's Customer Centre on 1300 362 170 or lcc@liverpool.nsw.gov.au

Important Notice: This enquiry response, including any associated documentation, has been assessed and compiled from the information detailed within the DBYD enquiry outlined above. Please ensure that the DBYD enquiry details and this response accurately reflect your proposed works.

This response is intended for use only by the addressee. If you have received the enquiry response in error, please let us know by telephone and delete all copies; you are advised that copying, distributing, disclosing or otherwise acting in reliance on the response is expressly prohibited.



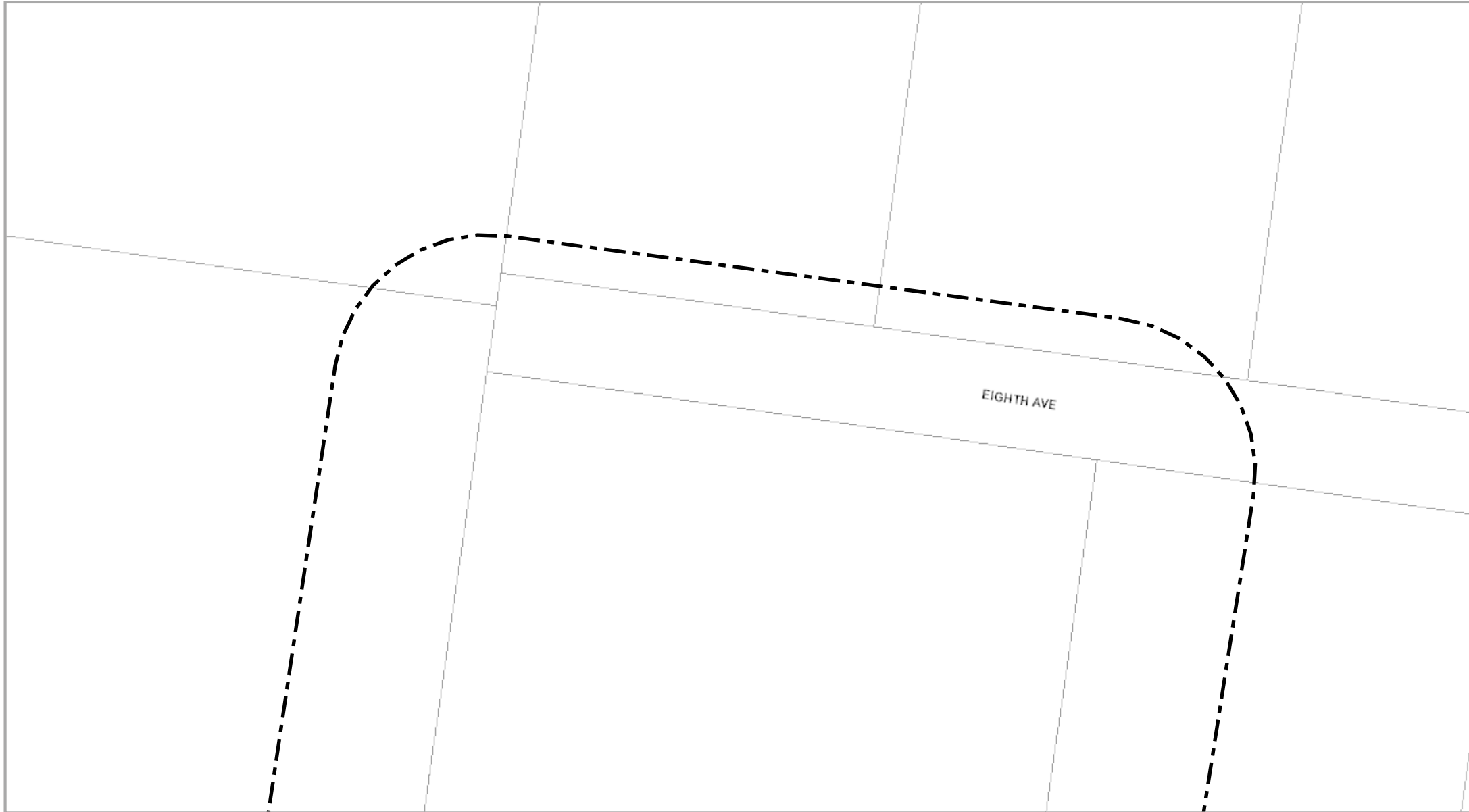
While reasonable measures have been taken to ensure the accuracy of the information contained in this plan response, neither Liverpool City Council or PelicanCorp shall have any liability whatsoever in relation to any loss, damage, cost or expense arising from the use of this plan response or the information contained in it or the completeness or accuracy of such information. Use of such information is subject to and constitutes acceptance of these terms.



Legend | Scale: 1:2050 | Overview










- | | | |
|---|---|--|
| ■ Bus Stops | — Kerb and Gutter | Cadastre |
| ● Pits | — Footpaths and Cycleways | Bridges |
| ● Headwalls | — Pipes | Environmentally Sensitive Land |

DISCLAIMER: While reasonable measures have been taken to ensure the accuracy of the information contained in this plan response, neither Liverpool City Council or PelicanCorp shall have any liability whatsoever in relation to any loss, damage, cost or expense arising from the use of this plan response or the information contained in it or the completeness or accuracy of such information. Use of such information is subject to and constitutes acceptance of these terms.

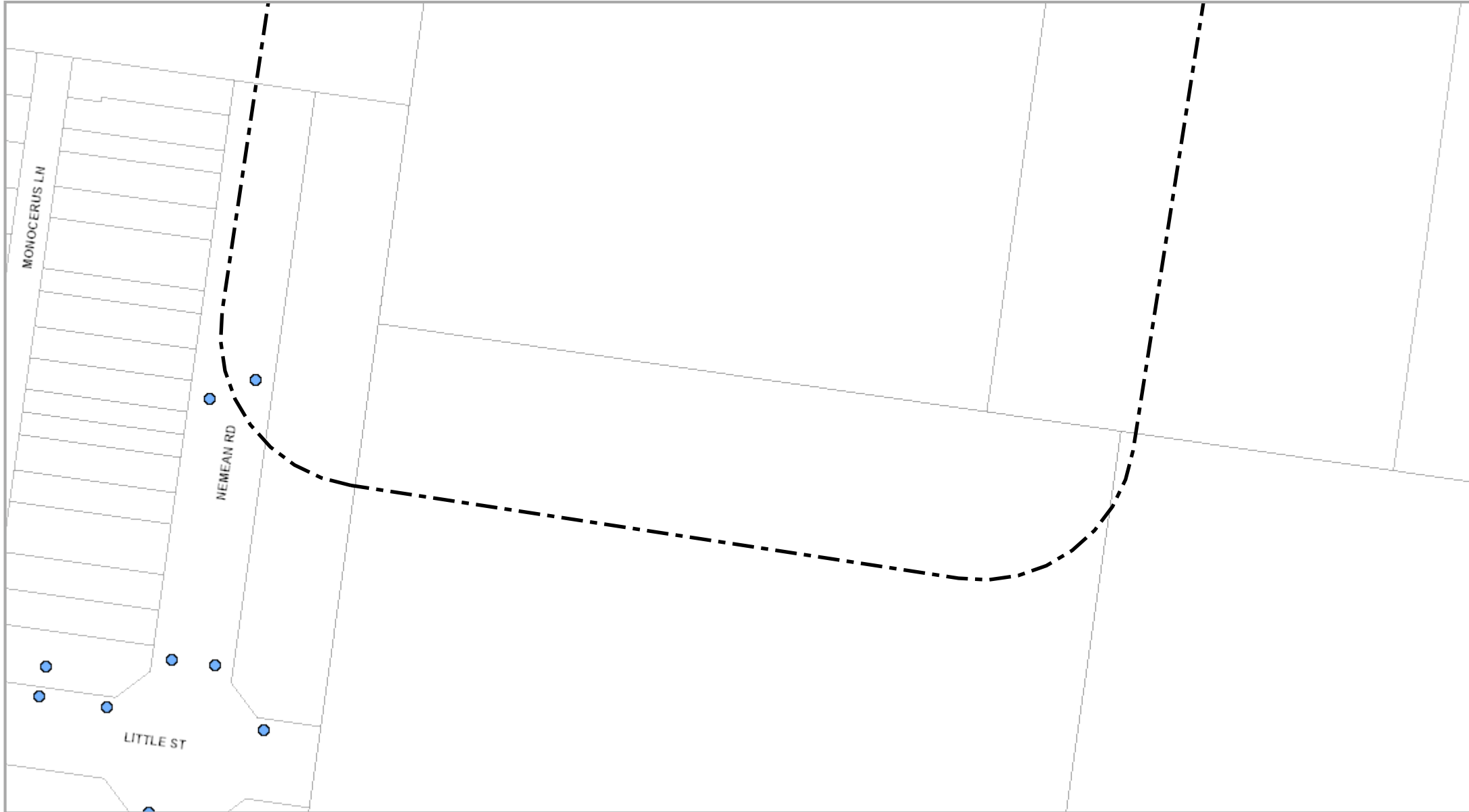


Legend | Scale: 1:1000 | Tile No: 1












- | | | |
|---|---|--|
|  Bus Stops |  Kerb and Gutter |  Cadastre |
|  Pits |  Footpaths and Cycleways |  Bridges |
|  Headwalls |  Pipes |  Environmentally Sensitive Land |

DISCLAIMER: While reasonable measures have been taken to ensure the accuracy of the information contained in this plan response, neither Liverpool City Council or PelicanCorp shall have any liability whatsoever in relation to any loss, damage, cost or expense arising from the use of this plan response or the information contained in it or the completeness or accuracy of such information. Use of such information is subject to and constitutes acceptance of these terms.



Legend | Scale: 1:1000 | Tile No: 2



- | | | |
|---|---|--|
|  Bus Stops |  Kerb and Gutter |  Cadastre |
|  Pits |  Footpaths and Cycleways |  Bridges |
|  Headwalls |  Pipes |  Environmentally Sensitive Land |

DISCLAIMER: While reasonable measures have been taken to ensure the accuracy of the information contained in this plan response, neither Liverpool City Council or PelicanCorp shall have any liability whatsoever in relation to any loss, damage, cost or expense arising from the use of this plan response or the information contained in it or the completeness or accuracy of such information. Use of such information is subject to and constitutes acceptance of these terms.



Working near **nbn**TM cables

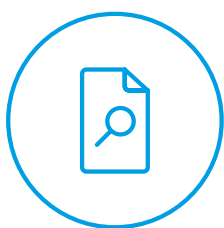
nbn has partnered with Dial Before You Dig to give you a single point of contact to get information about **nbn** underground services owned by **nbn** and other utility/service providers in your area including communications, electricity, gas and other services. Contact with underground power cables and gas services can result in serious injury to the worker, and damage and costly repairs. You must familiarise yourself with all of the Referral Conditions (meaning the referral conditions referred to in the DBYD Notice provided by **nbn**).

Practice safe work habits

Once the DBYD plans are reviewed, the Five P's of Excavation should be adopted in conjunction with your safe work practices (which must be compliant with the relevant state Electrical Safety Act and Safe Work Australia "Excavation Work Code of Practice", as a minimum) to ensure the risk of any contact with underground **nbn** assets are minimised.



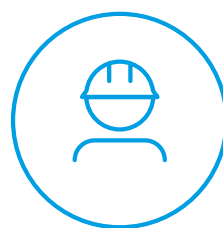
Plan: Plan your job by ensuring the plans received are current and apply to the work to be performed. Also check for any visual cues that may indicate the presence of services not covered in the DBYD plans.



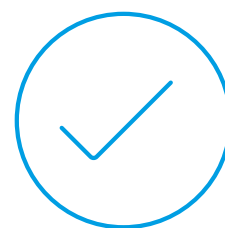
Prepare: Prepare for your job by engaging a DBYD Certified Plant Locator to help interpret plans and identify on-site assets. Contact **nbn** should you require further assistance.



Pothole: Non-destructive potholing (i.e. hand digging or hydro excavation) should be used to positively locate **nbn** underground assets with minimal risk of contact and service damage.

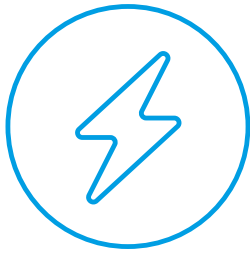


Protect: Protecting and supporting the exposed **nbn** underground asset is the responsibility of the worker. Exclusion zones for **nbn** assets are clearly stated in the plan and appropriate controls must be implemented to ensure that encroachment into the exclusion zone by machinery or activities with the potential to damage the asset is prevented.

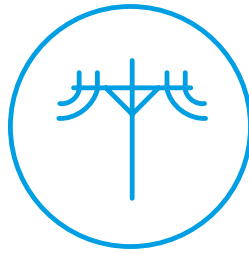


Proceed: Proceed only when the appropriate planning, preparation, potholing and protective measures are in place.

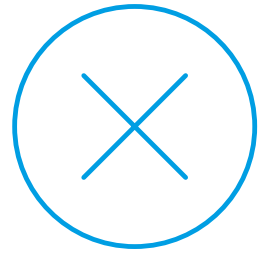
Working near **nbn**[™] cables



Identify all electrical hazards, assess the risks and establish control measures.



When using excavators and other machinery, also check the location of overhead power lines.



Workers and equipment must maintain safety exclusion zones around power lines.

Once all work is completed, the excavation should be re-instated with the same type of excavated material unless specified by **nbn**. Please note:

- Construction Partners of **nbn** may require additional controls to be in place when performing excavation activities.
- The information contained within this pamphlet must be used in conjunction with other material supplied as part of this request for information to adequately control the risk of potential asset damage.

Contact

All **nbn**[™] network facility damages must be reported online [here](#).
For enquiries related to your DBYD request please call 1800 626 329.

Disclaimer


This brochure is a guide only. It does not address all the matters you need to consider when working near our cables. You must familiarise yourself with other material provided (including the Referral Conditions) and make your own inquiries as appropriate.

nbn will not be liable or responsible for any loss, damage or costs incurred as a result of reliance on this brochure.

This document is provided for information purposes only. This document is subject to the information classification set out on this page. If no information classification has been included, this document must be treated as UNCLASSIFIED, SENSITIVE and must not be disclosed other than with the consent of nbn co. The recipient (including third parties) must make and rely on their own inquiries as to the currency, accuracy and completeness of the information contained herein and must not use this document other than with the consent of nbn co. Copyright © 2021 nbn co limited. All rights reserved.



To: Tiffany Mabbott
Phone: Not Supplied
Fax: Not Supplied
Email: tmabbott@geo-logix.com.au

Dial before you dig Job #:	33721751	 DIAL BEFORE YOU DIG <small>www.1100.com.au</small>
Sequence #	221794460	
Issue Date:	01/03/2023	
Location:	254 Eighth Avenue , Austral , NSW , 2179	

Indicative Plans

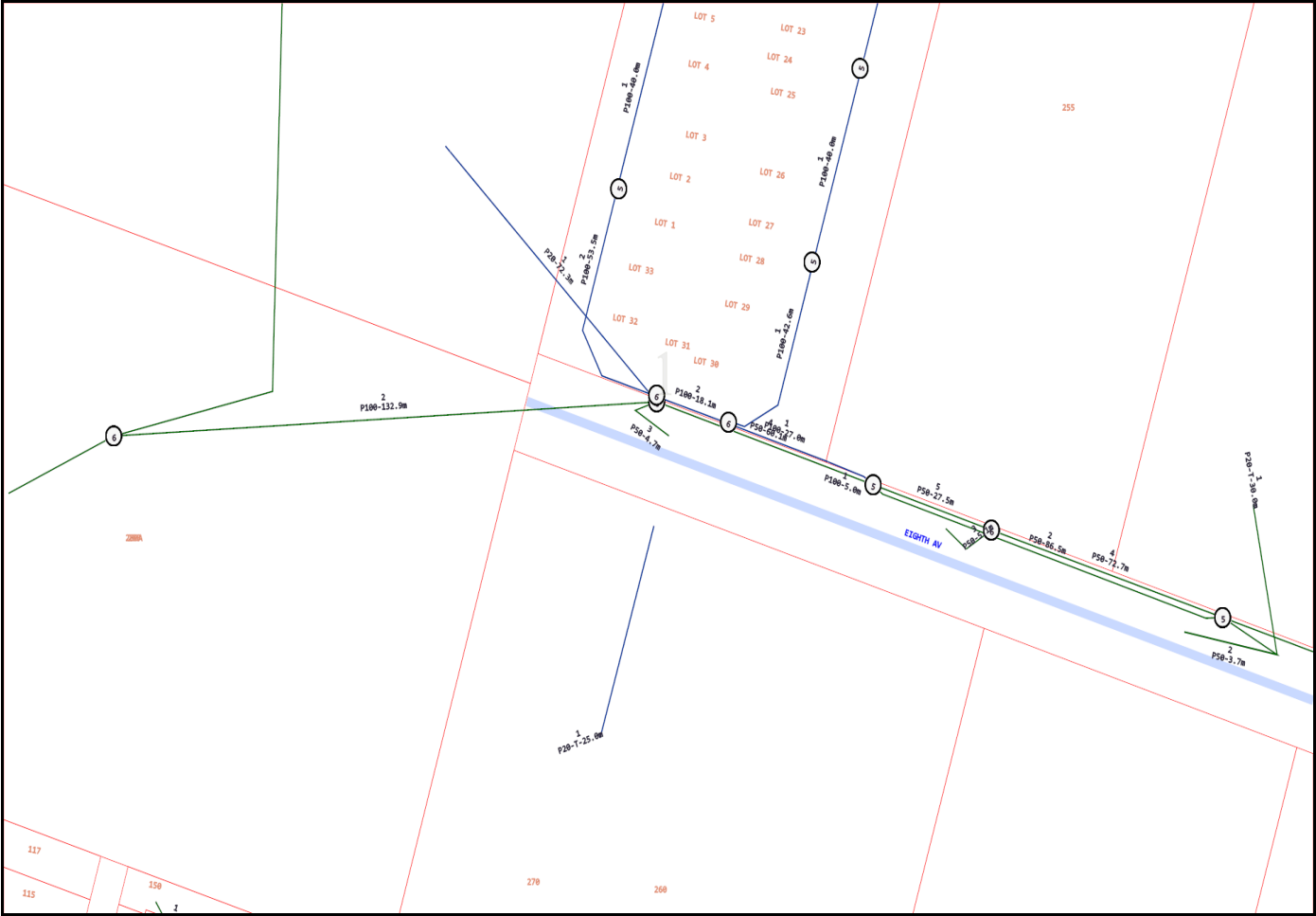


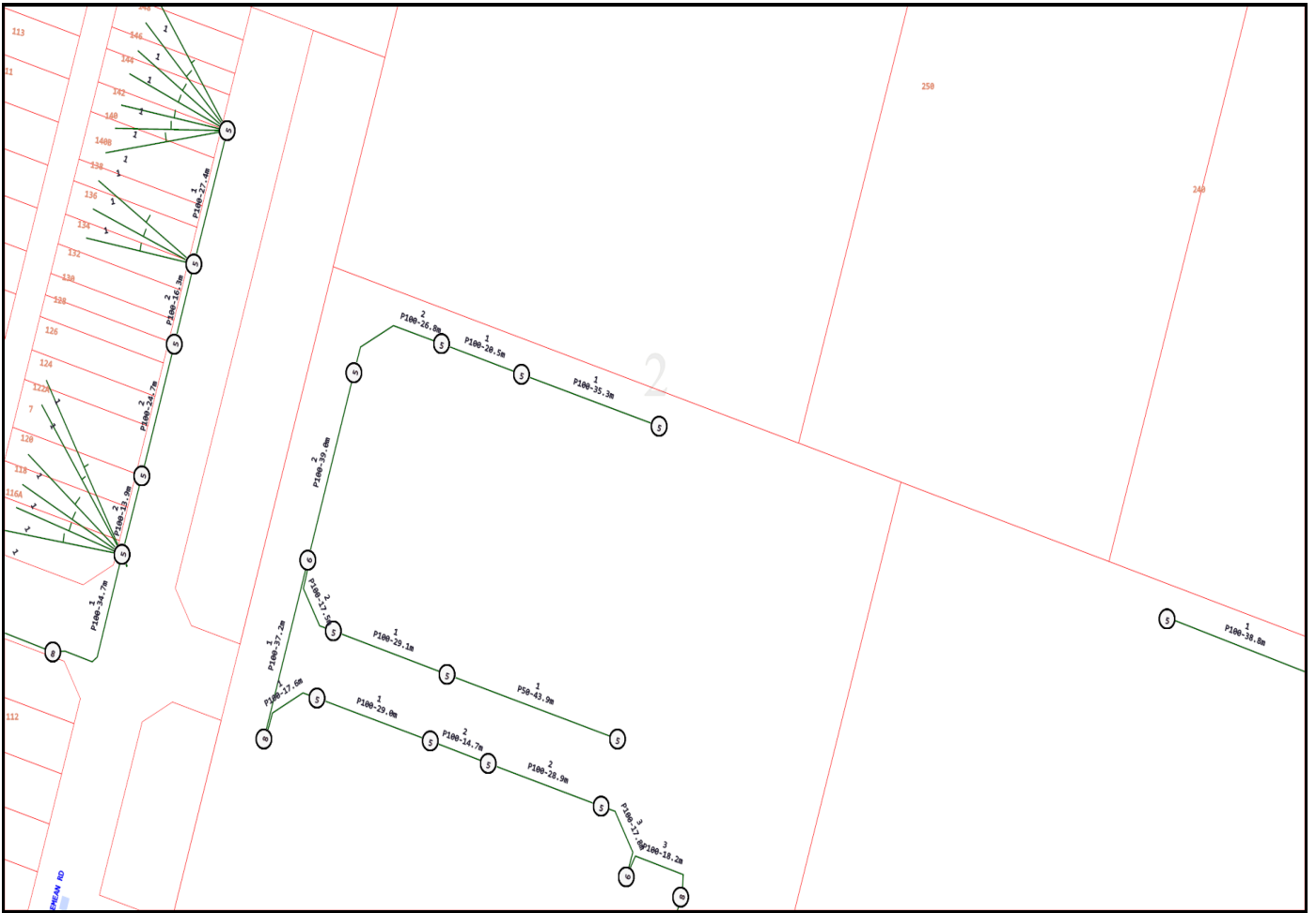


LEGEND



	Parcel and the location
	Pit with size "5"
	Power Pit with size "2E". Valid PIT Size: e.g. 2E, 5E, 6E, 8E, 9E, E, null.
	Manhole
	Pillar
	Cable count of trench is 2. One "Other size" PVC conduit (PO) owned by Telstra (-T-), between pits of sizes, "5" and "9" are 25.0m apart. One 40mm PVC conduit (P40) owned by NBN, between pits of sizes, "5" and "9" are 20.0m apart.
	2 Direct buried cables between pits of sizes, "5" and "9" are 10.0m apart.
	Trench containing any INSERVICE/CONSTRUCTED (Copper/RF/Fibre) cables.
	Trench containing only DESIGNED/PLANNED (Copper/RF/Fibre/Power) cables.
	Trench containing any INSERVICE/CONSTRUCTED (Power) cables.
	Road and the street name "Broadway ST"
Scale	0 20 40 60 Meters 1:2000 1 cm equals 20 m
































Emergency Contacts

You must immediately report any damage to the **nbn™** network that you are/become aware of. Notification may be by telephone - 1800 626 329.

Guide to reading Sydney Water DBYD Plans



This guide will help you understand our plans and what our services are.

Symbol	Meaning	Symbol	Meaning
	Sewer main with flow arrow and size type text.		Sewer vertical
	Disused sewer main This means the sewer has been disused but remains in the ground.		Sewer pumping station
	Sewer maintenance hole with upstream depth invert.		Pressure sewer main These are also found in Vacuum sewer areas.
	Sewer Sub-surface chamber		Pressure sewer Pump unit Alarm, electrical cable and pump unit.
	Sewer Maintenance hole with overflow chamber		Pressure sewer property valve boundary assembly
	Sewer Ventshaft EDUCT		Pressure sewer stop valve
	Sewer Ventshaft IDUCT		Pressure sewer reducer / taper
	Sewer property connection point With chainage to downstream maintenance hole.		Pressure sewer flushing point
	Sewer concrete encased section		Vacuum sewer division valve
	Sewer Rehabilitation		Vacuum sewer vacuum chamber
	Sewer terminal maintenance shaft		Vacuum sewer clean out pot
	Sewer maintenance shaft		Stormwater pipe
	Sewer rodding point		Stormwater channel
	Sewer lamphole		



Symbol	Meaning	Symbol	Meaning
	Stormwater gully		Potable water stop valves with Tapers
	Stormwater maintenance hole		Potable water closed stop valve
	Watermain – potable drinking water With size type text.		Potable water air valve
	Disconnected watermain – potable drinking water This means the watermain has been disused but remains in the ground.		Potable water valve
	Recycled watermain		Potable water scour
	Special supply conditions – potable drinking water		Potable water reducer / taper
	Special supply conditions – recycled water		Potable water vertical bends
	Restrained joints – Potable drinking water		Potable water reservoir
	Sewer concrete encased section		Recycled water is shown as per potable above. Colour as indicated
	Restrained joints – Potable drinking water		Private potable water main
	Potable water hydrant		Private recycled water main
	Potable water maintenance hole		Private sewer main
	Potable water stop valve		
	Potable water stop valve with By-pass		



Pipe types



PIPE TYPES		PIPE TYPES	
ABS	Acrylonitrile Butadiene Styrene	AC	Asbestos Cement
BRICK	Brick	CI	Cast Iron
CICL	Cast Iron Cement Lined	CONC	Concrete
COPPER	Copper	DI	Ductile Iron
DICL	Ductile Iron Cement (mortar) Lined	DIPL	Ductile Iron Polymeric Lined
EW	Earthenware	FIBG	Fibreglass
FL BAR	Forged Locking Bar	GI	Galvanised Iron
GRP	Glass Reinforced Plastics	HDPE	High Density Polyethylene
MS	Mild Steel	MSCL	Mild Steel Cement Lined
IPE	Polyethylene	PC	Polymer Concrete
PP	Polypropylene	PVC	Polyvinylchloride
PVC - M	Polyvinylchloride, Modified	PVC - O	Polyvinylchloride, Oriented
PVC - U	Polyvinylchloride, Unplasticised	RC	Reinforced Concrete
RC-PL	Reinforced Concrete Plastics Lined	S	Steel
SCL	Steel Cement (mortar) Lined	SCL IBL	Steel Cement Lined Internal Bitumen
SGW	Salt Glazed Ware	SPL	Steel Polymeric Lined
SS	Stainless Steel	STONE	Stone
VC	Vitrified Clay	WI	Wrought Iron
WS	Woodstave		

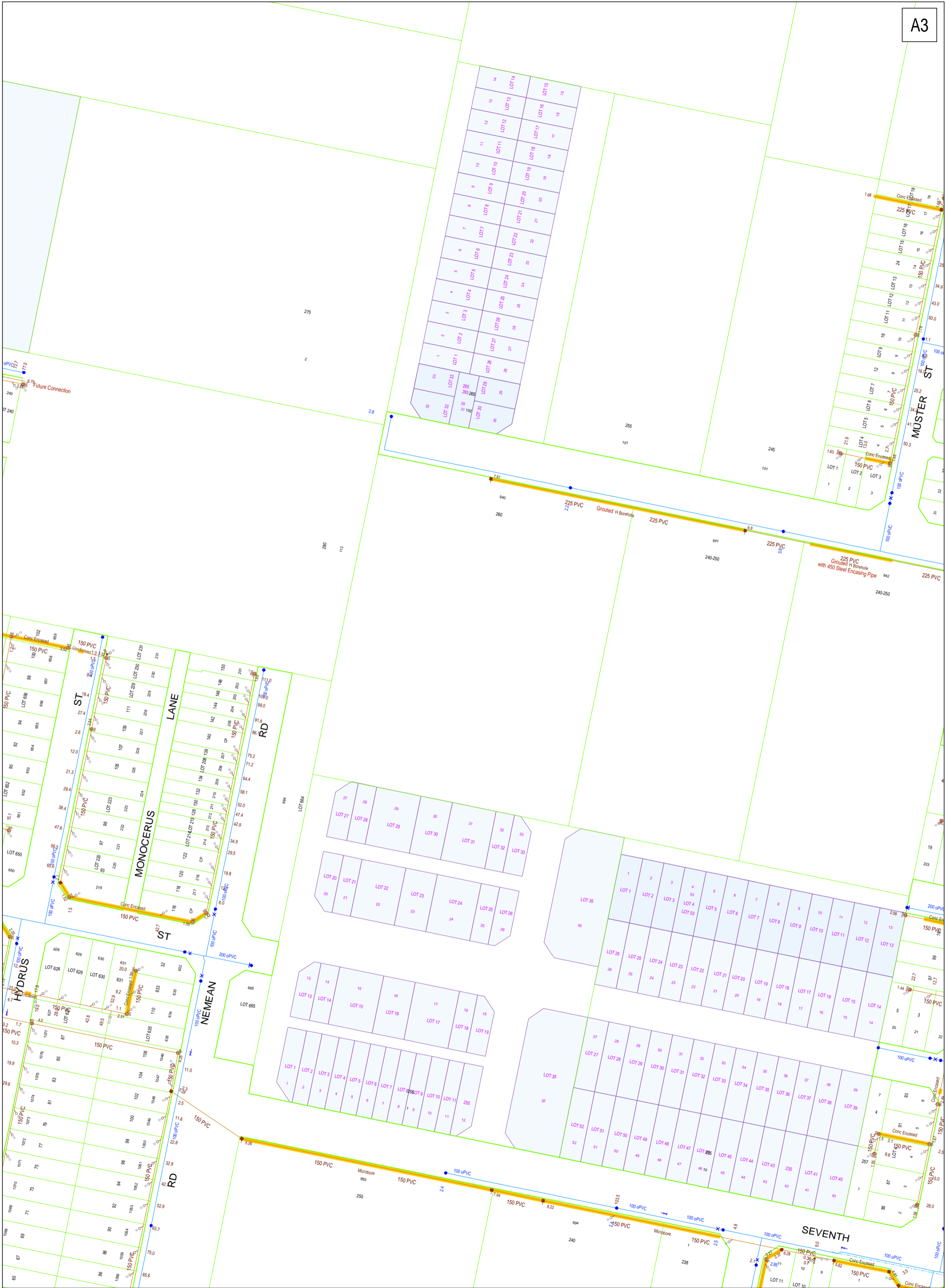


Further Information

Please consult the Dial Before You Dig enquiries page on our website.

For general enquiries please call the Customer Contact Centre on 132 092

In an emergency, or to notify Sydney Water of damage or threats to its structures, call 13 20 90 (24 hours, 7 days)



DBYD Address:
254 Eighth Avenue
Austral NSW 2179

DBYD Job No: 33721751
DBYD Sequence No: 221794462

Copyright Reserved Sydney Water 2023
No warranty is given that the information shown is complete or accurate.
SYDNEY WATER CORPORATION

Scale: 1:1500
Date of Production: 01/03/2023

Plan 1 of 1
0m 7m 14m 21m 28m
N



OPENING ELECTRONIC MAP ATTACHMENTS -

Telstra Cable Plans are generated automatically in either PDF or DWF file types dependant on the site address and the size of area selected. You may need to download and install free viewing software from the internet e.g.



PDF Map Files (max size A3)

Adobe Acrobat Reader (<http://get.adobe.com/reader/>),



DWF Map Files (all sizes over A3)

Autodesk A360 (<https://360.autodesk.com/viewer>) or

Autodesk Design Review (<http://usa.autodesk.com/design-review/>) for DWF files.
(Windows)



Telstra DBYD map related enquiries

email - Telstra.Plans@team.telstra.com

1800 653 935 (AEST Business Hours only)



REPORT ANY DAMAGE TO THE TELSTRA NETWORK IMMEDIATELY

Report online - <https://service.telstra.com.au/customer/general/forms/report-damage-to-telstra-equipment>

Ph: 13 22 03

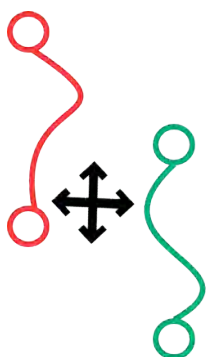
If you receive a message asking for a phone or account number say:

"I don't have one" then say "Report Damage" then press 1 to speak to an operator.



Telstra New Connections / Disconnections

13 22 00



Telstra asset relocation enquiries: 1800 810 443 (AEST business hours only).

NetworkIntegrity@team.telstra.com

<https://www.telstra.com.au/consumer-advice/digging-construction>

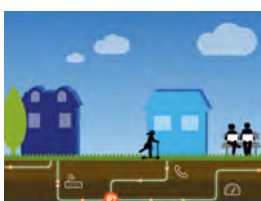
Certified Locating Organisation (CLO)

<https://dbydlocator.com/certified-locating-organisation/>



DBYDCertification

Please refer to attached Accredited Plant Locator.pdf



Telstra Smart Communities

Information for new developments (developers, builders, homeowners)

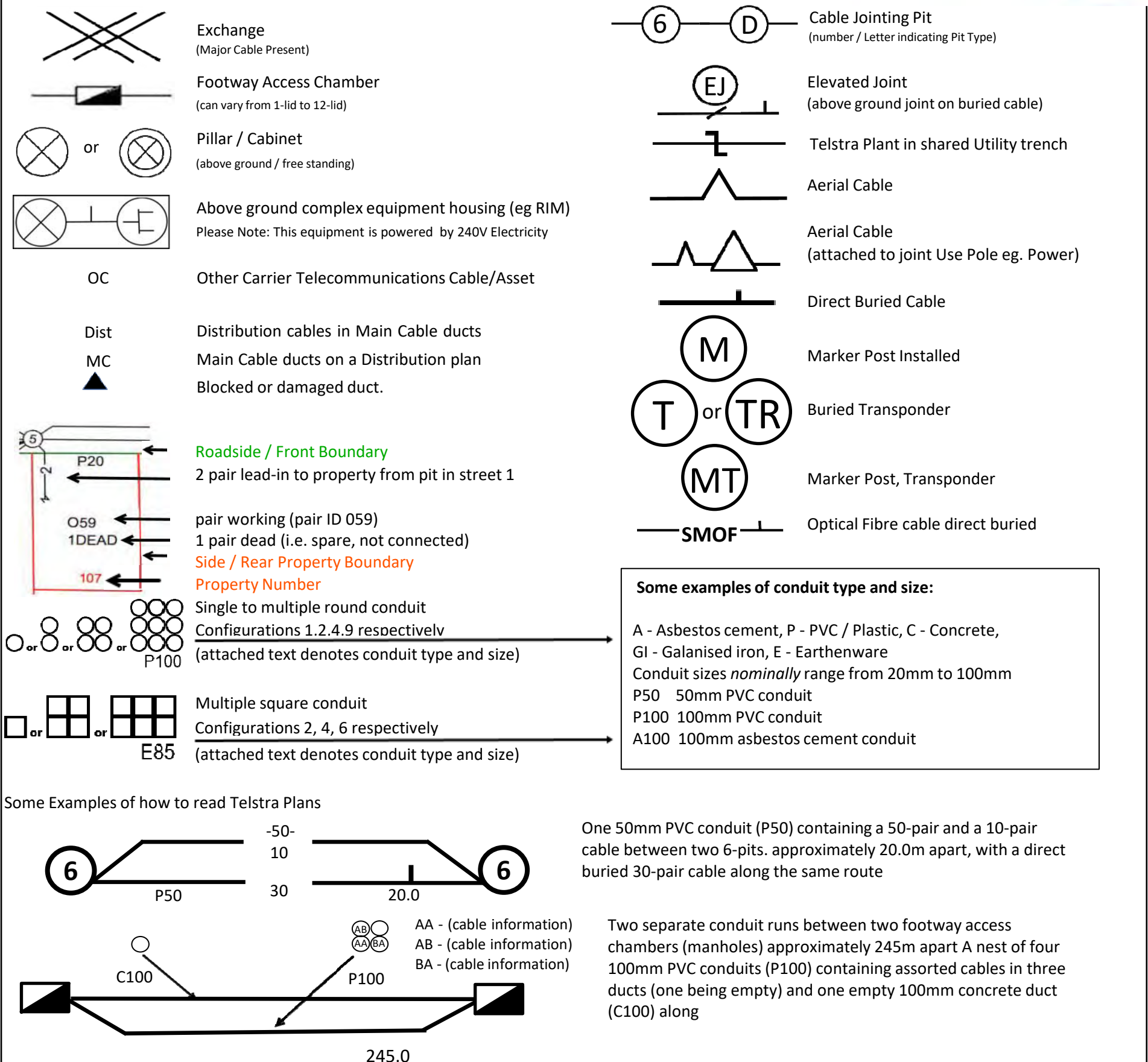
<https://www.telstra.com.au/smart-community>

LEGEND

IT'S HOW
WE CONNECT



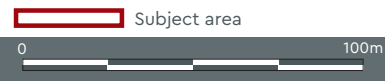
For more info contact a [Certified Locating Organisation](#) or Telstra Plan Services 1800 653 935



WARNING: Telstra plans and location information conform to Quality Level 'D' of the Australian Standard AS 5488 - Classification of Subsurface Utility Information. As such, Telstra supplied location information is indicative only. Spatial accuracy is not applicable to Quality Level D. Refer to AS 5488 for further details. Telstra does not warrant or hold out that its plans are accurate and accepts no responsibility for any inaccuracy shown on the plans. FURTHER ON SITE INVESTIGATION IS REQUIRED TO VALIDATE THE EXACT LOCATION OF TELSTRA PLANT PRIOR TO COMMENCING CONSTRUCTION WORK. A plant location service is an essential part of the process to validate the exact location of Telstra assets and to ensure the assets are protected during construction works. The exact position of Telstra assets can only be validated by physically exposing them. Telstra will seek compensation for damages caused to its property and losses caused to Telstra and its customers.

ATTACHMENT C

Historic Aerial Photograph - 1947



Historic Aerial Photograph - 1961



Austral

LI-2943 Aerial Photograph 1961 19 09 2022. Data source: Please refer to 'Digital Data Sources' in the Product Guide



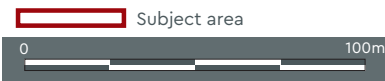
 Subject area

0 100m

Historic Aerial Photograph - 1969



LI-2943 Aerial Photograph 1969 19 09 2022. Data source: Please refer to 'Digital Data Sources' in the Product Guide



Historic Aerial Photograph - 1975



Historic Aerial Photograph - 1982



LI-2943 Aerial Photograph 1982 19 09 2022. Data source: Please refer to 'Digital Data Sources' in the Product Guide

Subject area

0

100m

Historic Aerial Photograph - 1986



Historic Aerial Photograph - 1991



Austral

Eighth Avenue

Seventh Avenue

Subject area

0 100m

Historic Aerial Photograph - 1994



Historic Aerial Photograph - 1998



Austral

Eighth Avenue

Seventh Avenue

Subject area

0 100m

Historic Aerial Photograph - 2002



LI-2943 Aerial Photograph 1994, 19 09 2022. Data source: Please refer to 'Digital Data Sources' in the Product Guide

Subject area

0

100m

Historic Aerial Photograph - 2010



Historic Aerial Photograph - 2013



LI-2943 Aerial Photograph 2013/19 09/2022. Data source: Please refer to 'Digital Data Sources' in the Product Guide

Historic Aerial Photograph - 2016



LI-2943 Aerial Photograph 2016 19 09 2022. Data source: Please refer to 'Digital Data Sources' in the Product Guide

Subject area

0 100m

Historic Aerial Photograph - 2019



Historic Aerial Photograph - 2022



ATTACHMENT D

[Home](#) [Public registers](#) [POEO Public Register](#) [Licences, applications and notices search](#)

Search results

Your search for: **General Search** with the following criteria

Suburb - austral

returned 17 results

[Export to excel](#)

1 of 1 Pages

[Search Again](#)

Number	Name	Location	Type	Status	Issued date
1583321	CHRISTOPHER BINOS	235 Tenth Ave, AUSTRAL, NSW 2179	s.91 Clean Up Notice	Issued	31 Mar 2020
3173529188	CHRISTOPHER BINOS	235 Tenth Ave, AUSTRAL, NSW 2179	Penalty Notice	Issued	06 Aug 2020
3501075	CHRISTOPHER MURRAY	235 TENTH AVENUE, AUSTRAL, NEW SOUTH WALES 2179	s.91 Clean Up Notice	Issued	30 Sep 2021
1595824	DUNG LUU	210 GURNER AVENUE, AUSTRAL, NSW 2179	s.91 Clean Up Notice	Issued	06 Oct 2020
3173530342	FOUAD ARJA	1 KELLY STREET, AUSTRAL, NSW 2179	Penalty Notice	Issued	01 Jul 2021
1573301	KIET MA	130 Edmondson Avenue, AUSTRAL, NSW 2179	s.91 Clean Up Notice	Issued	21 Feb 2019
1600802	LOW COST HOUSING NO4 PTY LTD	1 KELLY STREET, AUSTRAL, NSW 2179	s.91 Clean Up Notice	Issued	15 Apr 2021
1609589	LOW COST HOUSING NO4 PTY LTD	1 KELLY STREET, AUSTRAL, NSW 2179	s.110 Variation of Clean Up Notice	Issued	07 Jun 2021
1613766	LOW COST HOUSING NO4 PTY LTD	1 KELLY STREET, AUSTRAL, NSW 2179	s.110 Variation of Clean Up Notice	Issued	28 Oct 2021
1614897	LOW COST HOUSING NO4 PTY LTD	1 KELLY STREET, AUSTRAL, NSW 2179	s.110 Variation of Clean Up Notice	Issued	07 Dec 2021
1617640	LOW COST HOUSING NO4 PTY LTD	1 KELLY STREET, AUSTRAL, NSW 2179	s.110 Variation of Clean Up Notice	Issued	29 Mar 2022
1593777	SANJANA CHAND	28-32 BOYD STREET, AUSTRAL, NSW 2179	s.91 Clean Up Notice	Issued	22 Sep 2020
1602214	SANJANA CHAND	28-32 BOYD STREET, AUSTRAL, NSW 2179	s.110 Variation of Clean Up Notice	Issued	29 Oct 2020
1611587	SANJANA CHAND	28-32 BOYD STREET, AUSTRAL, NSW 2179	s.110 Variation of Clean Up Notice	Issued	13 Aug 2021
1789	SCALABRINI VILLAGE LTD	65 EDMONDSON AVE, AUSTRAL, NSW 2171	POEO licence	Surrendered	25 Sep 2000
1028758	SCALABRINI VILLAGE LTD	65 EDMONDSON AVE, AUSTRAL, NSW 2171	s.80 Surrender of a Licence	Issued	13 Jan 2004
1568507	SUMAN DESHPANDE	210B Seventh Avenue, AUSTRAL, NSW 2179	s.91 Clean Up Notice	Issued	30 Oct 2018

05 April 2023

For business and industry ^

For local government ^

Contact us

131 555 (tel:131555)

Online (<https://www.epa.nsw.gov.au/about-us/contact-us/feedback>)

info@epa.nsw.gov.au (<mailto:info@epa.nsw.gov.au>)

EPA Office Locations (<https://www.epa.nsw.gov.au/about-us/contact-us/locations>)

- [Accessibility \(<https://www.epa.nsw.gov.au/about-us/contact-us/website-service-standards/help-index>\)](https://www.epa.nsw.gov.au/about-us/contact-us/website-service-standards/help-index)
- [Disclaimer \(<https://www.epa.nsw.gov.au/about-us/contact-us/website-service-standards/disclaimer>\)](https://www.epa.nsw.gov.au/about-us/contact-us/website-service-standards/disclaimer)
- [Privacy \(<https://www.epa.nsw.gov.au/about-us/contact-us/website-service-standards/privacy>\)](https://www.epa.nsw.gov.au/about-us/contact-us/website-service-standards/privacy)
- [Copyright \(<https://www.epa.nsw.gov.au/about-us/contact-us/website-service-standards/copyright>\)](https://www.epa.nsw.gov.au/about-us/contact-us/website-service-standards/copyright)


([https://au.l](https://au.linkedin.com/company/epa-nsw)
environmer
protection-
authrity-
epa/


([https://twitter/t](https://twitter.com/epa_nsw)

Find us on

[Home](#) [Public registers](#) [Contaminated land record of notices](#)

Search results

Your search for: Suburb: AUSTRAL

did not find any records in our database.

If a site does not appear on the record it may still be affected by contamination. For example:

- Contamination may be present but the site has not been regulated by the EPA under the Contaminated Land Management Act 1997 or the Environmentally Hazardous Chemicals Act 1985.
- The EPA may be regulating contamination at the site through a licence or notice under the Protection of the Environment Operations Act 1997 (POEO Act).
- Contamination at the site may be being managed under the [planning process](#).

More information about particular sites may be available from:

- The [POEO public register](#)
- The appropriate planning authority: for example, on a planning certificate issued by the local council under [section 149 of the Environmental Planning and Assessment Act](#).

See [What's in the record and What's not in the record](#).

If you want to know whether a specific site has been the subject of notices issued by the EPA under the CLM Act, we suggest that you search by Local Government Area only and carefully review the sites that are listed.

This public record provides information about sites regulated by the EPA under the Contaminated Land Management Act 1997, including sites currently and previously regulated under the Environmentally Hazardous Chemicals Act 1985. Your inquiry using the above search criteria has not matched any record of current or former regulation. You should consider searching again using different criteria. The fact that a site does not appear on the record does not necessarily mean that it is not affected by contamination. The site may have been notified to the EPA but not yet assessed, or contamination may be present but the site is not yet being regulated by the EPA. Further information about particular sites may be available from the appropriate planning authority, for example, on a planning certificate issued by the local council under section 149 of the Environmental Planning and Assessment Act. In addition the EPA may be regulating contamination at the site through a licence under the Protection of the Environment Operations Act 1997. You may wish to search the POEO public register: [POEO public register](#)

[Search Again](#)

[Refine Search](#)

Search TIP

To search for a specific site, search by LGA (local government area) and carefully review all sites listed.

... [more search tips](#)

For business and industry ^

5 April 2023

For local government ^

Contact us

131 555 (tel:131555)

Online (<https://www.epa.nsw.gov.au/about-us/contact-us/feedback>)

info@epa.nsw.gov.au (<mailto:info@epa.nsw.gov.au>)

EPA Office Locations (<https://www.epa.nsw.gov.au/about-us/contact-us/locations>)

Accessibility (<https://www.epa.nsw.gov.au/about-us/contact-us/website-service-standards/help-index>)

Disclaimer (<https://www.epa.nsw.gov.au/about-us/contact-us/website-service-standards/disclaimer>)

Privacy (<https://www.epa.nsw.gov.au/about-us/contact-us/website-service-standards/privacy>)

Copyright (<https://www.epa.nsw.gov.au/about-us/contact-us/website-service-standards/copyright>)

in
(<https://au.l>
environmer
protection-
authority-
epa)
twitter

Find us on

Suburb	SiteName	Address	ContaminationActivityType	ManagementClass	Latitude	Longitude
AUBURN	Department of Corrective Services land adjacent to the former Auburn Landfill	Jamieson STREET	Landfill	Contamination formerly regulated under the CLM Act	-33.82928257	151.0590653
AUBURN	Commercial Premises	11-13 Percy STREET	Other Industry	Under assessment	-33.85021046	151.0410097
AWABA	Awaba Colliery	Wilton ROAD	Other Industry	Regulation under CLM Act not required	-33.02098186	151.5383612
BALGOWLAH	BP Service Station	Cnr Sydney Road and Maretimo STREET	Service Station	Regulation under CLM Act not required	-33.79546175	151.2559309
BALGOWLAH	Part of Manly Council Maintenance Depot	8-10 Roseberry STREET	Other Petroleum	Regulation under CLM Act not required	-33.78928907	151.2679557
BALGOWNIE	Fuel Power Plus	99 Balgownie ROAD	Service Station	Contamination currently regulated under POEO Act	-34.38925632	150.8808544
BALLINA	Former Mobil Service Station	37-41 Cherry STREET	Service Station	Regulation under CLM Act not required	-28.86952673	153.5624436
BALLINA	Ballina Shell	273 River STREET	Service Station	Regulation under CLM Act not required	-28.86809272	153.5552789
BALLINA	Woolworths Petrol	Kerr STREET	Service Station	Regulation under CLM Act not required	-28.85824461	153.5605439
BALLINA	Ballina Mays Motors	River STREET	Other Petroleum	Regulation under CLM Act not required	-28.86935402	153.5585931
BALRANALD	Caltex Service Station	Sturt HIGHWAY	Service Station	Regulation under CLM Act not required	-34.66747746	143.5662034
BANKSIA	Woolworths Petrol Service Station Banksia	314 Princes HIGHWAY	Service Station	Regulation under CLM Act not required	-33.94567308	151.1416884
BANKSIA	Cooks Cove Development	Cooks Cove PARK	Landfill	Regulation under CLM Act not required	-33.94492759	151.1549947
BANKSMEADOW	Orica Botany Groundwater Project	16-20 Beauchamp ROAD	Chemical Industry	Contamination currently regulated under CLM Act	-33.95526361	151.2152005
BANKSMEADOW	Discovery Cove, Former Ampol Rail Terminal	1801 Botany ROAD	Other Petroleum	Regulation being finalised	-33.96162178	151.2184122

ATTACHMENT E

Certificate of Service and Calibration

Gas Detector
MiniRAE 3000

Company Name	WAM Scientific
Office Address	26 Bungarra Crescent, Chipping Norton NSW 2170
Phone Number	+61 405 241 484
Contact Name	William Pak
Instrument	MiniRAE 3000 (PGM 7320)
Serial Number	592-932890
Client Name	Tiffany Mabbott (Geo-Logix)
Project Number	PO5820TM

Instrument Check			
Item	Test	Test Passed	Comments
Li-Ion Rechargeable Battery	Battery Charge and Drain	✓	Unit runs for > 8 hours on a full charge
Charger and Power Supply	Operation/Check	✓	No damage
Unit Display	Operation	✓	Screen visible, no damage
Keypad	Operation	✓	Responsive, no damage
Pump	Flow Check	✓	Flow rate > 0.5 L/min
Monitor Housing	Condition/Check	✓	No damage
Rubber Boot	Check	✓	Clean, no damage
Flexi Probe	Condition/Check	✓	No leaks, no damage
Water Trap Filter	Visual Check	✓	Clean
Alarms	Audible, Visual, Vibration Check	✓	All modes of alarms are functional
Data Logger	Operation	✓	Unit records data, default set at 60 seconds
Lamp and Sensor	Clean and Calibration	✓	Lamp and PID sensor cleaned and calibrated
PCB	Operation	✓	Unit is fully functional
Firmware	Version	✓	v2.20A

Instrument Readings					
Parameter	Calibration Gas	Concentration	Reference No.	Zero Reading	Span Reading
PID (10.6eV)	Isobutylene	100 ppm	WO233801-61	0 ppm	100.0 ppm

Declaration
<p>WAM Scientific certifies that the above instrument was successfully tested according to manufacturer's standards and all necessary checks were conducted to ensure the instrument was fully operational prior to dispatch. The calibration data supplied was obtained in accordance with manufacturer's specifications using gases of known concentrations.</p>

Calibrated By	William Pak
Calibration Date	09/01/2023
Calibration Due	09/07/2023

ATTACHMENT F



Test Pit Logs
Detailed Site Investigation
Project No.: 2301008

330 - 350 Eighth Avenue,
Austral NSW

Geo-Logix

Location	Depth	Description
TP1	0.0-0.1	Fill - moderate brown (5YR3/4), 35% clay, 55% sand, 10% gravel, damp, well compacted, top soil, semi-rounded gravel, no ACM observed.
	0.1-0.3	Fill - greyish pink (5R8/2), 85% clay, 10% sand, 5% gravel, damp, well compacted, reworked natural clay, semi-rounded gravels, no ACM observed.
	0.3-0.6	Fill - moderate brown (5YR3/4), 35% clay, 55% sand, 10% gravel, damp, well compacted, old top soil, no ACM observed.
	0.6-0.8	Fat Clay (CH) - light red (5R6/6), 85% clay, 10% sand, 5% gravel, damp, firm, high plasticity, rounded gravels.
TP2	0.0-0.7	Fill - moderate brown (5YR3/4), 40% clay, 40% sand, 20% gravel, dry, well compacted, non-fibrous plaster cement fragment observed.
	0.7-1.1	Fat Clay (CH) - moderate reddish orange (10R6/6), 80% clay, 10% sand, 10% gravel, damp, stiff, high plasticity, possibly reworked with some rounded gravel.
	1.1-1.2	Fat Clay (CH) - pale red (10R6/2), 90% clay, 10% sand, damp, firm, high plasticity, presence of ironstone.
TP3	0.0-0.4	Fill - moderate brown (5YR3/4), 40% clay, 40% sand, 20% gravel, wet, well compacted, suspected leaking pipe, top soil, no ACM observed.
	0.4-0.9	Fat Clay (CH) - pale red (5R6/2), 90% clay, 10% sand, wet, firm, high plasticity, water infiltrating at 0.4 m, sheen on water.
TP4	0.0-0.15	Fill - moderate brown (5YR4/4), 30% clay, 30% sand, 40% gravel, damp, well compacted, no ACM was observed.
	0.15-0.6	Fill - dark yellowish orange (10YR6/6), 70% clay, 30% sand, damp, well compacted, no ACM was observed.
	0.6-1.0	Fat Clay (CH) - light grey (N7), 80% clay, 20% sand, damp, stiff, high plasticity.
TP5	0.0-0.3	Fill - moderate brown (5YR3/4), 40% clay, 40% sand, 20% gravel, damp, well compacted, no ACM was observed, top soil, plastic found.
	0.3-0.5	Fat Clay (CH) - light red (5R6/6), 80% clay, 15% sand, 5% gravel, damp, firm, high plasticity, sub rounded gravels.
	0.5-0.6	Fat Clay (CH) - light brown (5YR5/6), 90% clay, 10% sand, damp, firm, high plasticity.
TP6	0.0-0.2	Fill - moderate brown (5YR4/4), 30% clay, 30% sand, 40% gravel, damp, well compacted, no ACM was observed.
	0.2-0.8	Fill - dark yellowish orange (10YR6/6), 70% clay, 30% sand, damp, well compacted, no ACM was observed.
	0.8-1.2	Fat Clay (CH) - light grey (N7), 80% clay, 20% sand, damp, stiff, high plasticity.
TP7	0.0-0.4	Fill - moderate brown (5YR3/4), 40% clay, 40% sand, 20% gravel, wet, well compacted, no ACM observed, top soil.
	0.4-0.7	Fat Clay (CH) - light brown (5YR5/6), 80% clay, 15% sand, 5% gravel, wet, soft, high plasticity, water infiltrating around 0.4 m.
	0.7-0.9	Fat Clay (CH) - pale red (5R6/2), 90% clay, 10% sand, wet, soft, high plasticity.
TP8	0.0-0.15	Fill - moderate brown (5YR3/4), 40% clay, 60% sand, dry, well compacted, top soil.
	0.15-1.0	Fill - moderate brown (5YR3/4), 40% clay, 40% sand, 20% gravel, dry, well compacted, non-fibrous plaster cement fragment, brick, plastic, concrete pieces.
	1.0-1.3	Fat Clay (CH) - light red (5R6/6), 90% clay, 10% sand, damp, firm, high plasticity.
TP9	0.0-0.3	Fill - moderate brown (5YR3/4), 30% clay, 60% sand, 10% gravel, damp, well compacted, top soil, no ACM, concrete pieces, plastic pieces.
	0.3-0.4	Fill - pale red (5R6/2), 80% clay, 15% sand, 5% gravel, damp, well compacted, top 0.1 m has reworked clay, semi angular gravel.
	0.4-0.6	Fat Clay (CH) - moderate reddish orange (10R6/6), 90% clay, 10% sand, damp, firm, high plasticity.
TP10	0.0-0.5	Fill - moderate brown (5YR3/4), 40% clay, 55% sand, 5% gravel, damp, well compacted, top soil, some plastic pieces, no ACM.
	0.5-0.7	Fat Clay (CH) - moderate reddish orange (10R6/6), 85% clay, 10% sand, 5% gravel, damp, stiff, high plasticity, some subangular gravel.
TP11	0.0-0.3	Fill - moderate brown (5YR4/4), 40% clay, 30% sand, 30% gravel, damp, well compacted, no ACM observed.
	0.3-0.6	Sandy Clay (CH) - dark yellowish orange (10YR6/6), 70% clay, 30% sand, damp, firm, high plasticity.
	0.6-1.0	Fat Clay (CH) - light grey (N7), 90% clay, 10% sand, damp, firm, high plasticity.
TP12	0.0-0.4	Fill - moderate brown (5YR4/4), 40% clay, 30% sand, 30% gravel, damp, well compacted, no ACM was observed.
	0.4-1.0	Fat Clay (CH) - dark yellowish orange (10YR6/6), 80% clay, 20% sand, damp, stiff, high plasticity.
TP13	0.0-0.3	Fill - moderate brown (5YR3/4), 40% clay, 40% sand, 20% gravel, damp, well compacted, top soil, non-fibrous plaster cement fragment observed.
	0.3-0.6	Fat Clay (CH) - moderate red (5R4/6), 90% clay, 10% sand, damp, firm, high plasticity.
TP14	0.0-0.3	Fill - moderate brown (5YR4/4), 40% clay, 30% sand, 30% gravel, damp, well compacted, no ACM was observed.
	0.3-1.0	Fat Clay (CH) - moderate reddish orange (10R6/6), 85% clay, 10% sand, damp, stiff, high plasticity.
TP15	0.0-0.5	Fill - moderate brown (5YR3/4), 40% clay, 40% sand, 20% gravel, dry, well compacted, top soil, bricks found, potential ACM fragment observed.
	0.5-0.7	Fat Clay (CH) - moderate reddish orange (10R6/6), 80% clay, 10% sand, 10% gravel, damp, firm, high plasticity.
TP16	0.0-0.4	Fill - moderate brown (5YR3/4), 40% clay, 55% sand, 5% gravel, damp, well compacted, no ACM was observed, top soil, sub angular gravel.
	0.4-0.7	Fat Clay (CH) - light brown (5YR5/6), 85% clay, 10% sand, 5% gravel, damp, stiff, high plasticity, some rounded gravel.
	0.7-0.9	Fat Clay (CH) - moderate reddish orange (10R6/6), 90% clay, 10% sand, damp, firm, high plasticity.
TP17	0.0-0.4	Fill - moderate brown (5YR3/4), 40% clay, 55% sand, 5% gravel, moist, well compacted, top soil, semi angular gravel, no ACM observed.
	0.4-0.65	Fill - pale red (5R6/2), 20% clay, 20% sand, 60% gravel, wet, well compacted, septic trench pit, wet, gravel.
TP18	0.0-0.3	Fill - moderate brown (5YR3/4), 40% clay, 50% sand, 10% gravel, damp, well compacted, top soil, no ACM was observed.
	0.3-0.6	Fat Clay (CH) - dark yellowish orange (10YR6/6), 85% clay, 10% sand, 5% gravel, damp, soft, medium plasticity, some sub angular gravel.
	0.6-0.8	Fat Clay (CH) - pale red (10R6/2), 90% clay, 10% sand, damp, firm, high plasticity.
TP19	0.0-0.25	Fill - moderate brown (5YR4/4), 60% clay, 40% sand, damp, well compacted, no ACM was observed.
	0.25-0.6	Sandy Clay (CH) - moderate red (5R4/6), 70% clay, 30% sand, damp, firm.
	0.6-0.8	Fat Clay (CH) - light grey (N7), 90% clay, 10% sand, damp, firm, high plasticity.
TP20	0.0-0.2	Fill - moderate brown (5YR4/4), 40% clay, 30% sand, 30% gravel, damp, well compacted, no ACM was observed.
	0.2-1.0	Fat Clay (CH) - moderate reddish orange (10R6/6), 80% clay, 20% sand, damp, stiff, high plasticity.
TP21	0.0-0.2	Fill - moderate brown (5YR4/4), 30% clay, 40% sand, 30% gravel, dry, well compacted, no ACM was observed.
	0.2-0.9	Fat Clay (CH) - dark yellowish orange (10YR6/6), 80% clay, 20% sand, damp, stiff, high plasticity.
	0.9-1.5	Fat Clay (CH) - light grey (N7), 80% clay, 20% sand, damp, stiff, high plasticity.
TP22	0.0-0.4	Fill - moderate brown (5YR3/4), 40% clay, 40% sand, 20% gravel, dry, well compacted, top soil, no ACM observed.
	0.4-0.6	Fat Clay (CH) - greyish orange (10YR7/4), 70% clay, 20% sand, 10% gravel, dry, firm, medium plasticity.
	0.6-0.8	Fat Clay (CH) - moderate red (5R4/6), 90% clay, 10% sand, damp, firm, high plasticity.
TP23	0.0-0.2	Fill - moderate brown (5YR4/4), 30% clay, 40% sand, 30% gravel, dry, well compacted, no ACM observed.
	0.2-0.25	Fill - very pale orange (10YR8/2), 30% clay, 30% sand, 40% gravel, dry, well compacted.
	0.25-0.9	Fat Clay (CH) - dark yellowish orange (10YR6/6), 80% clay, 20% sand, damp, stiff, high plasticity.
TP24	0.9-1.5	Fat Clay (CH) - light grey (N7), 90% clay, 10% sand, damp, stiff, high plasticity.
	0.0-0.4	Fill - moderate brown (5YR3/4), 40% clay, 55% sand, 5% gravel, damp, medium dense, No ACM, top soil, gravel.
	0.4-0.9	Fat Clay (CH) - very dark red (5R2/6), 85% clay, 15% sand, damp, soft, high plasticity.
TP24	0.9-1.0	Fat Clay (CH) - dark yellowish orange (10YR6/6), 85% clay, 15% sand, damp, soft, high plasticity.



Test Pit Logs
Detailed Site Investigation
Project No.: 2301008

330 - 350 Eighth Avenue,
Austral NSW

Geo-Logix

Location	Depth	Description
TP25	0.0-0.2	Fill - moderate brown (5YR3/4), 40% clay, 55% sand, 5% gravel, damp, well compacted, some plastic film, no ACM observed, top soil, subrounded gravel.
	0.2-0.5	Fat Clay (CH) - pale red (5R6/2), 80% clay, 15% sand, 5% gravel, damp, firm.
	0.5-0.7	Fat Clay (CH) - moderate reddish orange (10R6/6), 90% clay, 10% sand, damp, firm, high plasticity.
TP26	0.0-0.3	Fill - moderate brown (5YR3/4), 40% clay, 50% sand, 10% gravel, damp, well compacted, no ACM was observed, top soil.
	0.3-0.6	Fat Clay (CH) - light brown (5YR5/6), 85% clay, 10% sand, 5% gravel, damp, stiff, high plasticity, subangular gravel.
	0.6-0.8	Fat Clay (CH) - pale red (10R6/2), 90% clay, 10% sand, damp, firm, high plasticity.
TP27	0.0-0.3	Fill - moderate brown (5YR4/4), 30% clay, 40% sand, 30% gravel, damp, well compacted, no ACM observed.
	0.3-1.0	Fat Clay (CH) - dark yellowish orange (10YR6/6), 80% clay, 20% sand, damp, stiff, high plasticity.
	1.0-1.5	Fat Clay (CH) - light grey (N7), 80% clay, 20% sand, damp, stiff, high plasticity.
TP28	0.0-0.4	Fill - moderate brown (5YR3/4), 40% clay, 40% sand, 20% gravel, dry, well compacted, top soil, no ACM was observed.
	0.4-0.5	Fill - moderate brown (5YR4/4), 50% clay, 40% sand, 10% gravel, dry, well compacted, no ACM was observed.
	0.5-0.8	Sandy Clay (CL) - greyish orange (10YR7/4), 70% clay, 20% sand, 10% gravel, dry, firm, medium plasticity.
	0.8-0.9	Fat Clay (CH) - pale red (10R6/2), 90% clay, 10% sand, damp, firm, high plasticity.
TP29	0.0-0.4	Fill - moderate brown (5YR3/4), 40% clay, 40% sand, 20% gravel, damp, well compacted, top soil, no ACM was observed.
	0.4-0.7	Sandy Clay (CL) - greyish orange (10YR7/4), 70% clay, 20% sand, 10% gravel, damp, firm, medium plasticity, semi rounded gravel.
	0.7-0.9	Fat Clay (CH) - greyish pink (5R8/2), 90% clay, 10% sand, damp, firm, high plasticity.
TP30	0.0-0.3	Fill - moderate brown (5YR4/4), 30% clay, 40% sand, 30% gravel, damp, well compacted, no ACM observed.
	0.3-0.7	Fat Clay (CH) - dark yellowish orange (10YR6/6), 80% clay, 20% sand, damp, stiff, high plasticity.
	0.7-3.0	Fat Clay (CH) - light grey (N7), 90% clay, 10% sand, damp, stiff, high plasticity.
TP31	0.0-0.3	Fill - moderate brown (5YR3/4), 40% clay, 40% sand, 20% gravel, damp, well compacted, top soil, no ACM was observed.
	0.3-0.4	Fill - moderate brown (5YR4/4), 50% clay, 40% sand, 10% gravel, damp, well compacted, old top soil, no ACM observed.
	0.4-0.6	Sandy Clay (CH) - greyish orange (10YR7/4), 70% clay, 20% sand, 10% gravel, damp, firm, high plasticity, sub rounded gravel.
	0.6-0.7	Fat Clay (CH) - moderate red (5R4/6), 90% clay, 10% sand, damp, firm, high plasticity.
TP32	0.0-0.3	Fill - moderate brown (5YR3/4), 40% clay, 50% sand, 10% gravel, damp, well compacted, top soil, sub angular gravels, no ACM was observed.
	0.3-0.4	Fill - moderate orange pink (10R7/4), 50% clay, 40% sand, 10% gravel, dry, well compacted, sub rounded gravels, no ACM was observed.
	0.4-1.3	Fat Clay (CH) - moderate yellowish brown (10YR5/4), 90% clay, 10% sand, damp, firm, high plasticity.
	1.3-3.0	Fat Clay (CH) - dark yellowish orange (10YR6/6), 85% clay, 15% sand, damp, soft, high plasticity, sub rounded gravel.
TP33	0.0-0.2	Fill - moderate brown (5YR3/4), 40% clay, 60% sand, damp, well compacted, top soil, no ACM was observed.
	0.2-0.5	Fat Clay (CH) - light brown (5YR5/6), 85% clay, 15% sand, damp, very stiff, high plasticity.
TP34	0.0-0.2	Fill - moderate brown (5YR3/4), 40% clay, 55% sand, 5% gravel, damp, well compacted, top soil, semi-rounded gravel, black plastic sheet found, no ACM observed.
	0.2-0.3	Fill - moderate brown (5YR4/4), 30% clay, 65% sand, 5% gravel, dry, well compacted, finer sand.
	0.3-0.6	Fat Clay (CH) - moderate reddish orange (10R6/6), 80% clay, 15% sand, 5% gravel, damp, stiff, high plasticity, semi rounded gravel.
TP35	0.0-0.3	Fill - moderate brown (5YR4/4), 30% clay, 40% sand, 30% gravel, damp, well compacted, no ACM observed.
	0.3-0.6	Fill - very pale orange (10YR8/2), 30% clay, 30% sand, 40% gravel, damp, well compacted, no ACM observed.
	0.6-1.0	Fat Clay (CH) - dark yellowish orange (10YR6/6), 80% clay, 20% sand, damp, stiff, high plasticity.
TP36	0.0-0.3	Fill - moderate brown (5YR3/4), 40% clay, 40% sand, 20% gravel, dry, well compacted, top soil, gravel, black plastic, no ACM observed.
	0.3-0.8	Fill - moderate reddish orange (10R6/6), 40% clay, 50% sand, 10% gravel, dry, well compacted, charcoal wooden pieces found, no ACM found.
	0.8-0.9	Fat Clay (CH) - pale red (10R6/2), 85% clay, 15% sand, dry, firm, medium plasticity.
TP37	0.0-0.2	Fill - moderate brown (5YR4/4), 30% clay, 40% sand, 30% gravel, dry, well compacted, no ACM was observed.
	0.2-0.9	Fat Clay (CH) - dark yellowish orange (10YR6/6), 80% clay, 20% sand, damp, stiff, high plasticity.
	0.9-1.5	Fat Clay (CH) - light grey (N7), 70% clay, 30% sand, damp, stiff, high plasticity.
TP38	0.0-0.6	Fill - moderate brown (5YR3/4), 40% clay, 40% sand, 20% gravel, dry, well compacted, lumps of clay, bricks, concrete, tin, plastic observed, no ACM was observed.
	0.6-0.8	Fat Clay (CH) - moderate red (5R4/6), 90% clay, 10% sand, damp, firm, high plasticity.
TP39	0.0-0.6	Fill - moderate brown (5YR3/4), 40% clay, 50% sand, 10% gravel, damp, well compacted, top soil, no ACM was observed.
	0.6-1.0	Gravelly Clay (CL) - moderate reddish orange (10R6/6), 70% clay, 10% sand, 20% gravel, damp, soft, medium plasticity, semi rounded gravel.
	1.0-1.5	Fat Clay (CH) - pale red (5R6/2), 90% clay, 10% sand, damp, soft, high plasticity.
TP40	0.0-0.15	Fill - moderate brown (5YR3/4), 40% clay, 55% sand, 5% gravel, damp, well compacted, top soil with semi rounded gravel, black plastic shells found, no ACM was observed.
	0.15-0.40	Fat Clay (CH) - moderate reddish orange (10R6/6), 80% clay, 15% sand, 5% gravel, damp, very stiff, high plasticity, presence of ironstone.
TP41	0.0-0.3	Fill - moderate brown (5YR3/4), 40% clay, 40% sand, 20% gravel, damp, well compacted, no ACM was observed, top soil, black plastic found.
	0.3-0.7	Fat Clay (CH) - greyish orange (10YR7/4), 80% clay, 10% sand, 10% gravel, damp, firm, high plasticity.
	0.7-3.0	Fat Clay (CH) - moderate red (5R4/6), 90% clay, 10% sand, damp, firm, high plasticity.
TP42	0.0-0.3	Fill - moderate brown (5YR3/4), 40% clay, 40% sand, 20% gravel, damp, well compacted, no ACM was observed.
	0.3-0.5	Fat Clay (CH) - light brown (5YR5/6), 80% clay, 15% sand, 5% gravel, damp, firm, high plasticity.
TP43	0.5-0.8	Fat Clay (CH) - pale red (5R6/2), 90% clay, 10% sand, damp, soft, high plasticity.
	0.0-0.7	Fill - moderate brown (5YR4/4), 50% clay, 40% sand, 10% gravel, damp, well compacted, no ACM was observed.
	0.7-1.0	Fat Clay (CH) - dark yellowish orange (10YR6/6), 80% clay, 20% sand, damp, stiff, high plasticity.
TP44	0.0-0.05	Fill - moderate brown (5YR3/4), 35% clay, 55% sand, 10% gravel, damp, well compacted, some angular gravels, no ACM observed.
	0.05-0.15	Fill - light red (5R6/6), 85% clay, 10% sand, 5% gravel, damp, well compacted, no ACM observed.
	0.15-0.3	Fill - moderate brown (5YR3/4), 35% clay, 55% sand, 10% gravel, damp, well compacted, old top soil, no ACM observed.
	0.3-3.0	Fat Clay (CH) - light red (5R6/6), 85% clay, 10% sand, 5% gravel, damp, firm, high plasticity, Presence of red iron stone.
TP45	0.0-0.5	Fill - moderate brown (5YR3/4), 40% clay, 40% sand, 10% gravel, damp, well compacted, top soil, some plastic pieces, no ACM.
	0.5-0.7	Fat Clay (CH) - moderate reddish orange (10R6/6), 85% clay, 15% sand, 5% gravel, damp, stiff, high plasticity, top 0.1 m reworked clay, sub angular and sub rounded gravel found.
TP46	0.0-0.4	Fill - greyish black (N2), 60% clay, 30% sand, 10% gravel, moist, well compacted, no ACM was observed.
	0.4-1.0	Fat Clay (CH) - dark yellowish orange (10YR6/6), 80% clay, 20% sand, damp, stiff, high plasticity.



Test Pit Logs
Detailed Site Investigation
Project No.: 2301008

330 - 350 Eighth Avenue,
Austral NSW

Geo-Logix

Location	Depth	Description
TP47	0.0-0.4	Fill - moderate brown (5YR4/4), 50% clay, 40% sand, 10% gravel, damp, well compacted, no ACM was observed.
	0.4-1.0	Fat Clay (CH) - dark yellowish orange (10YR6/6), 80% clay, 20% sand, damp, stiff, high plasticity.
TP48	0.0-0.2	Fill - moderate brown (5YR4/4), 40% clay, 30% sand, 30% gravel, damp, well compacted, no ACM was observed.
	0.2-1.0	Fat Clay (CH) - moderate reddish orange (10R6/6), 80% clay, 20% sand, damp, stiff, high plasticity.
TP49	0.0-0.25	Fill - moderate brown (5YR4/4), 30% clay, 30% sand, 40% gravel, damp, well compacted, no ACM was observed.
	0.25-1.0	Fat Clay (CH) - dark yellowish orange (10YR6/6), 80% clay, 20% sand, damp, stiff, high plasticity.
TP50	0.0-0.4	Fill - moderate brown (5YR4/4), 25% clay, 25% sand, 50% gravel, damp, well compacted, top soil with grass, presence of gravel, no ACM was observed.
	0.4-1.0	Fat Clay (CH) - dark yellowish orange (10YR6/6), 80% clay, 20% sand, damp, firm, high plasticity.
TP51	0.0-0.3	Fill - moderate brown (5YR3/4), 40% clay, 55% sand, 5% gravel, damp, well compacted, no ACM was observed, top soil.
	0.3-0.6	Fat Clay (CH) - light brown (5YR5/6), 85% clay, 10% sand, 5% gravel, damp, stiff, high plasticity, reworked natural clay, sub-angular gravel.
	0.6-0.8	Fat Clay (CH) - moderate reddish orange (10R6/6), 90% clay, 10% sand, damp, firm, high plasticity.
TP52	0.0-0.5	Fill - moderate brown (5YR3/4), 30% clay, 60% sand, 10% gravel, damp, well compacted, top soil, gravels, concrete, plastic and brick pieces, no ACM found.
	0.5-0.6	Fill - pale red (5R6/2), 80% clay, 15% sand, 5% gravel, damp, well compacted, semi-angular gravels, reworked natural clay, no ACM observed.
	0.6-0.9	Fat Clay (CH) - moderate reddish orange (10R6/6), 90% clay, 10% sand, damp, firm, high plasticity, native soil.
TP53	0.0-0.3	Fill - moderate brown (5YR3/4), 40% clay, 55% sand, 5% gravel, damp, well compacted, No ACM observed, top soil, occasional gravel.
	0.3-0.7	Fat Clay (CH) - light brown (5YR5/6), 85% clay, 10% sand, 5% gravel, damp, stiff, high plasticity, reworked clay, sub gravels.
	0.7-0.9	Fat Clay (CH) - moderate reddish orange (10R6/6), 90% clay, 10% sand, damp, firm, high plasticity.
TP54	0.0-0.4	Fill - moderate brown (5YR3/4), 40% clay, 40% sand, 20% gravel, damp, well compacted, no ACM was observed, semi-rounded gravel found.
	0.4-0.7	Gravelly Clay (CL) - light brown (5YR6/4), 70% clay, 10% sand, 20% gravel, damp, soft, high plasticity.
TP55	0.0-0.2	Fill - moderate brown (5YR4/4), 40% clay, 30% sand, 30% gravel, damp, well compacted, no ACM was observed.
	0.2-1.0	Fat Clay (CH) - moderate reddish orange (10R6/6), 80% clay, 20% sand, damp, stiff, high plasticity.
TP56	0.0-0.3	Fill - moderate brown (5YR4/4), 30% clay, 40% sand, 30% gravel, dry, well compacted, no ACM was observed.
	0.3-1.0	Fat Clay (CH) - moderate red (5R4/6), 80% clay, 20% sand, damp, stiff, high plasticity.
TP57	0.0-0.15	Fill - moderate brown (5YR4/4), 30% clay, 60% sand, 10% gravel, dry, well compacted, no ACM was observed.
	0.15-0.3	Fill - dark yellowish orange (10YR6/6), 20% clay, 70% sand, 10% gravel, damp, well compacted.
	0.3-1.2	Fill - light grey (N7), 60% clay, 40% sand, damp, well compacted.
	1.2-1.3	Fat Clay (CH) - light grey (N7), 80% clay, 20% sand, damp, stiff, high plasticity.
TP59	0.0-0.3	Fill - moderate brown (5YR3/4), 40% clay, 40% sand, 20% gravel, dry, well compacted, top soil, no ACM observed.
	0.3-0.7	Fat Clay (CH) - moderate reddish orange (10R6/6), 70% clay, 20% sand, 10% gravel, damp, firm, medium plasticity.
	0.7-1.5	Fat Clay (CH) - pale red (10R6/2), 85% clay, 15% sand, damp, firm, medium plasticity.
TP60	0.0-0.2	Fill - moderate brown (5YR4/4), 30% clay, 40% sand, 30% gravel, dry, well compacted, no ACM was observed.
	0.2-0.5	Fat Clay (CH) - dark yellowish orange (10YR6/6), 80% clay, 20% sand, damp, stiff, high plasticity.
	0.5-1.0	Fat Clay (CH) - moderate reddish orange (10R6/6), 90% clay, 10% sand, damp, stiff, high plasticity.
BH2	0.0-0.15	Asphalt
	0.15-0.7	Fill - light grey (N7), 80% clay, 20% sand, damp, well compacted, No ACM was observed.
	0.7-2.0	Fat Clay (CH) - moderate red (5R4/6), 80% clay, 20% sand, damp, stiff, high plasticity, V-bit refusal at 2m, change to TC bit.
	2.0-2.3	Fat Clay (CH) - light brown (5YR5/6), 80% clay, 20% sand, damp, stiff, high plasticity.
	2.3-3.6	Fat Clay (CH) - light grey (N7), 80% clay, 20% sand, damp, stiff, high plasticity, Shale at 3.6 m.
	3.6-9.0	Weathered Shale - light grey (N7), 80% clay, 20% sand, damp, hard.

ATTACHMENT G

Geo-Logix P/L
Bld Q2 Level 3, 2309/4 Daydream St
Warriewood
NSW 2102



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: Ted Lilly

Report 971509-S
Project name AUSTRAL - PRIMARY
Project ID 2301008
Received Date Mar 10, 2023

Client Sample ID			TP60/0-0.2	TP37/0-0.2	TP27/0-0.2	TP30/0-0.2
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23- Ma0031528	S23- Ma0031529	S23- Ma0031530	S23- Ma0031531
Date Sampled			Mar 08, 2023	Mar 08, 2023	Mar 08, 2023	Mar 08, 2023
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05	< 0.05	0.14	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05	< 0.05	0.14	< 0.05
a-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
b-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
d-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
g-HCH (Lindane)	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Toxaphene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05	0.28	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	0.28	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dibutylchloredate (surr.)	1	%	89	93	108	97
Tetrachloro-m-xylene (surr.)	1	%	99	95	97	96
Heavy Metals						
Arsenic	2	mg/kg	19	23	16	13
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	36	39	27	26
Copper	5	mg/kg	17	18	27	13
Lead	5	mg/kg	15	18	18	26
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Nickel	5	mg/kg	< 5	< 5	5.2	< 5
Zinc	5	mg/kg	36	49	43	28

Client Sample ID			TP60/0-0.2	TP37/0-0.2	TP27/0-0.2	TP30/0-0.2
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-Ma0031528	S23-Ma0031529	S23-Ma0031530	S23-Ma0031531
Date Sampled			Mar 08, 2023	Mar 08, 2023	Mar 08, 2023	Mar 08, 2023
Test/Reference	LOR	Unit				
Sample Properties						
% Moisture	1	%	8.1	10	8.9	11

Client Sample ID			TP35/0-0.2	TP35/0.3-0.5	TP35/0.6-0.8	TP21/0-0.2
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-Ma0031532	S23-Ma0031533	S23-Ma0031534	S23-Ma0031536
Date Sampled			Mar 08, 2023	Mar 08, 2023	Mar 08, 2023	Mar 08, 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	%	66	-	-	114
Tetrachloro-m-xylene (surr.)	1	%	72	-	-	103
Heavy Metals						
Arsenic	2	mg/kg	12	-	-	19
Cadmium	0.4	mg/kg	< 0.4	-	-	< 0.4
Chromium	5	mg/kg	25	-	-	41
Copper	5	mg/kg	24	-	-	25
Lead	5	mg/kg	16	-	-	18
Mercury	0.1	mg/kg	< 0.1	-	-	< 0.1
Nickel	5	mg/kg	< 5	-	-	< 5
Zinc	5	mg/kg	30	-	-	44
Sample Properties						
% Moisture	1	%	7.1	7.4	15	12

Client Sample ID Sample Matrix Eurofins Sample No. Date Sampled Test/Reference	LOR	Unit	TP35/0-0.2 Soil S23- Ma0031532 Mar 08, 2023	TP35/0.3-0.5 Soil S23- Ma0031533 Mar 08, 2023	TP35/0.6-0.8 Soil S23- Ma0031534 Mar 08, 2023	TP21/0-0.2 Soil S23- Ma0031536 Mar 08, 2023
Total Recoverable Hydrocarbons						
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	-	-	-
TRH C6-C10	20	mg/kg	< 20	-	-	-
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	< 20	-	-	-
TRH >C10-C16	50	mg/kg	< 50	-	-	-
TRH >C10-C16 less Naphthalene (F2) ^{N01}	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	-	-	-
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	%	101	-	-	-
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene ^{N02}	0.5	mg/kg	< 0.5	-	-	-
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	%	70	-	-	-
p-Terphenyl-d14 (surr.)	1	%	72	-	-	-

Client Sample ID			TP35/0-0.2	TP35/0.3-0.5	TP35/0.6-0.8	TP21/0-0.2
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-Ma0031532	S23-Ma0031533	S23-Ma0031534	S23-Ma0031536
Date Sampled			Mar 08, 2023	Mar 08, 2023	Mar 08, 2023	Mar 08, 2023
Test/Reference	LOR	Unit				
Chloride	10	mg/kg	< 10	< 10	320	-
Conductivity (1:5 aqueous extract at 25 °C as rec.)	10	uS/cm	15	20	260	-
pH (1:5 Aqueous extract at 25 °C as rec.)	0.1	pH Units	5.9	5.8	6.0	-
Resistivity*	0.5	ohm.m	660	500	38	-
Sulphate (as SO4)	10	mg/kg	20	32	130	-

Client Sample ID			TP23/0-0.2	TP14/0-0.2	TP14/0.3-0.5	TP20/0-0.2
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-Ma0031537	S23-Ma0031539	S23-Ma0031540	S23-Ma0031542
Date Sampled			Mar 08, 2023	Mar 08, 2023	Mar 08, 2023	Mar 08, 2023
Test/Reference	LOR	Unit				
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	-	0.06
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	-	0.06
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
Dibutylchloroendate (surr.)	1	%	111	115	-	114
Tetrachloro-m-xylene (surr.)	1	%	102	101	-	101
Heavy Metals						
Arsenic	2	mg/kg	17	20	-	9.9
Cadmium	0.4	mg/kg	< 0.4	< 0.4	-	< 0.4
Chromium	5	mg/kg	31	44	-	24
Copper	5	mg/kg	24	17	-	26
Lead	5	mg/kg	20	23	-	17
Mercury	0.1	mg/kg	< 0.1	< 0.1	-	< 0.1
Nickel	5	mg/kg	6.6	5.2	-	< 5
Zinc	5	mg/kg	38	47	-	46

Client Sample ID			TP23/0-0.2	TP14/0-0.2	TP14/0.3-0.5	TP20/0-0.2
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-Ma0031537	S23-Ma0031539	S23-Ma0031540	S23-Ma0031542
Date Sampled			Mar 08, 2023	Mar 08, 2023	Mar 08, 2023	Mar 08, 2023
Test/Reference	LOR	Unit				
Sample Properties						
% Moisture	1	%	9.6	12	22	9.2
Total Recoverable Hydrocarbons						
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	-	-
TRH C6-C10	20	mg/kg	< 20	< 20	-	-
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	< 20	< 20	-	-
TRH >C10-C16	50	mg/kg	< 50	< 50	-	-
TRH >C10-C16 less Naphthalene (F2) ^{N01}	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	-	-
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	%	80	73	-	-
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene ^{N02}	0.5	mg/kg	< 0.5	< 0.5	-	-
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	%	100	100	-	-
p-Terphenyl-d14 (surr.)	1	%	102	103	-	-

Client Sample ID			TP23/0-0.2	TP14/0-0.2	TP14/0.3-0.5	TP20/0-0.2
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-Ma0031537	S23-Ma0031539	S23-Ma0031540	S23-Ma0031542
Date Sampled			Mar 08, 2023	Mar 08, 2023	Mar 08, 2023	Mar 08, 2023
Test/Reference	LOR	Unit				
Chloride	10	mg/kg	-	21	130	-
Conductivity (1:5 aqueous extract at 25 °C as rec.)	10	uS/cm	-	38	220	-
pH (1:5 Aqueous extract at 25 °C as rec.)	0.1	pH Units	-	6.3	5.4	-
Resistivity*	0.5	ohm.m	-	270	45	-
Sulphate (as SO4)	10	mg/kg	-	21	370	-

Client Sample ID			TP12/0-0.2	TP57/0.3-0.5	TP4/0.15-0.35	TP6/0.2-0.4
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-Ma0031543	S23-Ma0031544	S23-Ma0031546	S23-Ma0031548
Date Sampled			Mar 08, 2023	Mar 08, 2023	Mar 08, 2023	Mar 08, 2023
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4,4'-DDD	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4,4'-DDE	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4,4'-DDT	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
a-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
b-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
d-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
g-HCH (Lindane)	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Toxaphene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dibutylchloredate (surr.)	1	%	144	146	135	84
Tetrachloro-m-xylene (surr.)	1	%	98	104	105	68
Heavy Metals						
Arsenic	2	mg/kg	17	15	6.2	7.7
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	29	31	14	13
Copper	5	mg/kg	13	19	8.6	8.2
Lead	5	mg/kg	17	20	8.6	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	24	23	9.4	7.3

Client Sample ID			TP12/0-0.2	TP57/0.3-0.5	TP4/0.15-0.35	TP6/0.2-0.4
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-Ma0031543	S23-Ma0031544	S23-Ma0031546	S23-Ma0031548
Date Sampled			Mar 08, 2023	Mar 08, 2023	Mar 08, 2023	Mar 08, 2023
Test/Reference	LOR	Unit				
Sample Properties						
% Moisture	1	%	19	15	14	18
Total Recoverable Hydrocarbons						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	59	< 50	< 50	< 50
TRH C29-C36	50	mg/kg	120	< 50	< 50	< 50
TRH C10-C36 (Total)	50	mg/kg	179	< 50	< 50	< 50
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2) ^{N01}	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	150	< 100	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	150	< 100	< 100	< 100
BTEX						
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	78	69	111	73
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene ^{N02}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene ^{N07}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g,h,i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a,h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1,2,3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	98	101	98	66
p-Terphenyl-d14 (surr.)	1	%	98	105	104	74

Client Sample ID			TP12/0-0.2	TP57/0.3-0.5	TP4/0.15-0.35	TP6/0.2-0.4
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-Ma0031543	S23-Ma0031544	S23-Ma0031546	S23-Ma0031548
Date Sampled			Mar 08, 2023	Mar 08, 2023	Mar 08, 2023	Mar 08, 2023
Test/Reference	LOR	Unit				
Polychlorinated Biphenyls						
Aroclor-1016	0.1	mg/kg	-	< 0.1	-	-
Aroclor-1221	0.1	mg/kg	-	< 0.1	-	-
Aroclor-1232	0.1	mg/kg	-	< 0.1	-	-
Aroclor-1242	0.1	mg/kg	-	< 0.1	-	-
Aroclor-1248	0.1	mg/kg	-	< 0.1	-	-
Aroclor-1254	0.1	mg/kg	-	< 0.1	-	-
Aroclor-1260	0.1	mg/kg	-	< 0.1	-	-
Total PCB*	0.1	mg/kg	-	< 0.1	-	-
Dibutylchloredate (surr.)	1	%	-	146	-	-
Tetrachloro-m-xylene (surr.)	1	%	-	104	-	-

Client Sample ID			TP19/0-0.2	TP11/0-0.2	TP33/0-0.1	TP40/0-0.1
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-Ma0031553	S23-Ma0031555	S23-Ma0031556	S23-Ma0031557
Date Sampled			Mar 08, 2023	Mar 08, 2023	Mar 08, 2023	Mar 07, 2023
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4,4'-DDD	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4,4'-DDE	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4,4'-DDT	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
a-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
b-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
d-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
g-HCH (Lindane)	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Toxaphene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dibutylchloredate (surr.)	1	%	118	86	94	134
Tetrachloro-m-xylene (surr.)	1	%	101	76	74	100

Client Sample ID			TP19/0-0.2	TP11/0-0.2	TP33/0-0.1	TP40/0-0.1
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-Ma0031553	S23-Ma0031555	S23-Ma0031556	S23-Ma0031557
Date Sampled			Mar 08, 2023	Mar 08, 2023	Mar 08, 2023	Mar 07, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Arsenic	2	mg/kg	17	23	20	19
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	33	37	40	35
Copper	5	mg/kg	12	8.8	26	25
Lead	5	mg/kg	12	23	16	15
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	31	24	44	44
Sample Properties						
% Moisture	1	%	16	11	12	14

Client Sample ID			TP34/0-0.1	TP25/0-0.1	G01TP10/0-0.2	TP32/0-0.3
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-Ma0031558	S23-Ma0031559	S23-Ma0031560	S23-Ma0031562
Date Sampled			Mar 06, 2023	Mar 06, 2023	Mar 06, 2023	Mar 07, 2023
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	< 1	< 0.1
4,4'-DDD	0.05	mg/kg	< 0.05	< 0.05	< 0.5	< 0.05
4,4'-DDE	0.05	mg/kg	< 0.05	< 0.05	< 0.5	0.08
4,4'-DDT	0.05	mg/kg	< 0.05	< 0.05	< 0.5	0.07
a-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.5	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.5	< 0.05
b-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.5	< 0.05
d-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.5	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.5	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	< 0.5	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	< 0.5	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	< 0.5	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	< 0.5	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	< 0.5	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	< 0.5	< 0.05
g-HCH (Lindane)	0.05	mg/kg	< 0.05	< 0.05	< 0.5	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	< 0.5	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	< 0.5	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.5	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05	< 0.05	< 0.5	< 0.05
Toxaphene	0.5	mg/kg	< 0.5	< 0.5	< 10	< 0.5
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.5	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.5	0.15
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 1	0.15
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 1	< 0.1
Dibutylchloroendate (surr.)	1	%	109	106	91	66
Tetrachloro-m-xylene (surr.)	1	%	97	95	70	109

Client Sample ID			TP34/0-0.1	TP25/0-0.1	G01 TP10/0-0.2	TP32/0-0.3
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-Ma0031558	S23-Ma0031559	S23-Ma0031560	S23-Ma0031562
Date Sampled			Mar 06, 2023	Mar 06, 2023	Mar 06, 2023	Mar 07, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Arsenic	2	mg/kg	11	24	11	15
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	25	35	17	27
Copper	5	mg/kg	39	33	27	27
Lead	5	mg/kg	14	20	26	18
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Nickel	5	mg/kg	< 5	5.3	5.1	< 5
Zinc	5	mg/kg	75	65	88	38
Sample Properties						
% Moisture	1	%	24	25	26	7.3
Total Recoverable Hydrocarbons						
TRH C6-C9	20	mg/kg	-	-	< 20	-
TRH C10-C14	20	mg/kg	-	-	< 20	-
TRH C15-C28	50	mg/kg	-	-	63	-
TRH C29-C36	50	mg/kg	-	-	98	-
TRH C10-C36 (Total)	50	mg/kg	-	-	161	-
TRH C6-C10	20	mg/kg	-	-	< 20	-
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	-	-	< 20	-
TRH >C10-C16	50	mg/kg	-	-	< 50	-
TRH >C10-C16 less Naphthalene (F2) ^{N01}	50	mg/kg	-	-	< 50	-
TRH >C16-C34	100	mg/kg	-	-	130	-
TRH >C34-C40	100	mg/kg	-	-	< 100	-
TRH >C10-C40 (total)*	100	mg/kg	-	-	130	-
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	%	-	-	55	-
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene ^{N02}	0.5	mg/kg	-	-	< 0.5	-
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	-

Client Sample ID			TP34/0-0.1	TP25/0-0.1	G01 TP10/0-0.2	TP32/0-0.3
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-Ma0031558	S23-Ma0031559	S23-Ma0031560	S23-Ma0031562
Date Sampled			Mar 06, 2023	Mar 06, 2023	Mar 06, 2023	Mar 07, 2023
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
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	%	-	-	80	-
p-Terphenyl-d14 (surr.)	1	%	-	-	72	-

Client Sample ID			TP24/0-0.2	TP9/0-0.3	TP1/0.1-0.3	TP1/0.3-0.5
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-Ma0031563	S23-Ma0031564	S23-Ma0031566	S23-Ma0031567
Date Sampled			Mar 07, 2023	Mar 07, 2023	Mar 07, 2023	Mar 07, 2023
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05	< 0.05	< 0.05	0.06
a-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
b-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
d-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
g-HCH (Lindane)	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Toxaphene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	0.06
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dibutylchloroendate (surr.)	1	%	143	71	76	89
Tetrachloro-m-xylene (surr.)	1	%	100	71	82	78
Heavy Metals						
Arsenic	2	mg/kg	9.9	16	4.2	16
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	26	30	10	34
Copper	5	mg/kg	12	25	22	20

Client Sample ID			TP24/0-0.2	TP9/0-0.3	TP1/0.1-0.3	TP1/0.3-0.5
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-Ma0031563	S23-Ma0031564	S23-Ma0031566	S23-Ma0031567
Date Sampled			Mar 07, 2023	Mar 07, 2023	Mar 07, 2023	Mar 07, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	5	mg/kg	19	22	9.8	22
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Nickel	5	mg/kg	5.2	6.5	5.6	7.3
Zinc	5	mg/kg	18	39	35	33
Sample Properties						
% Moisture	1	%	18	8.6	24	13
Total Recoverable Hydrocarbons						
TRH C6-C9	20	mg/kg	-	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	-	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	-	< 50	< 50	< 50
TRH C29-C36	50	mg/kg	-	< 50	< 50	< 50
TRH C10-C36 (Total)	50	mg/kg	-	< 50	< 50	< 50
TRH C6-C10	20	mg/kg	-	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	-	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	-	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2) ^{N01}	50	mg/kg	-	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	-	< 100	< 100	< 100
TRH >C34-C40	100	mg/kg	-	< 100	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	-	< 100	< 100	< 100
BTEX						
Benzene	0.1	mg/kg	-	< 0.1	< 0.1	< 0.1
Toluene	0.1	mg/kg	-	< 0.1	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	-	< 0.1	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	-	< 0.1	< 0.1	< 0.1
Xylenes - Total*	0.3	mg/kg	-	< 0.3	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	-	114	63	105
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene ^{N02}	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	-	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	-	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene ^{N07}	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Benzo(g,h,i)perylene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Dibenz(a,h)anthracene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Indeno(1,2,3-cd)pyrene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5

Client Sample ID			TP24/0-0.2	TP9/0-0.3	TP1/0.1-0.3	TP1/0.3-0.5
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-Ma0031563	S23-Ma0031564	S23-Ma0031566	S23-Ma0031567
Date Sampled			Mar 07, 2023	Mar 07, 2023	Mar 07, 2023	Mar 07, 2023
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Pyrene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	-	67	92	71
p-Terphenyl-d14 (surr.)	1	%	-	68	97	65

Client Sample ID			TP17/0-0.2	TP17/0.4-0.6	TP16/0-0.2	TP18/0-0.2
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-Ma0031569	S23-Ma0031570	S23-Ma0031571	S23-Ma0031573
Date Sampled			Mar 07, 2023	Mar 07, 2023	Mar 07, 2023	Mar 07, 2023
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4,4'-DDD	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4,4'-DDE	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4,4'-DDT	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
a-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
b-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
d-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
g-HCH (Lindane)	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Toxaphene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dibutylchloroendate (surr.)	1	%	89	104	93	111
Tetrachloro-m-xylene (surr.)	1	%	74	101	85	97
Heavy Metals						
Arsenic	2	mg/kg	18	18	18	18
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	34	33	36	31
Copper	5	mg/kg	18	12	13	27
Lead	5	mg/kg	16	19	20	20
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Nickel	5	mg/kg	< 5	5.0	< 5	7.7
Zinc	5	mg/kg	26	19	21	55

Client Sample ID			TP17/0-0.2	TP17/0.4-0.6	TP16/0-0.2	TP18/0-0.2
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-Ma0031569	S23-Ma0031570	S23-Ma0031571	S23-Ma0031573
Date Sampled			Mar 07, 2023	Mar 07, 2023	Mar 07, 2023	Mar 07, 2023
Test/Reference	LOR	Unit				
Sample Properties						
% Moisture	1	%	13	14	17	15
Total Recoverable Hydrocarbons						
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	-	-
TRH C6-C10	20	mg/kg	< 20	< 20	-	-
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	< 20	< 20	-	-
TRH >C10-C16	50	mg/kg	< 50	< 50	-	-
TRH >C10-C16 less Naphthalene (F2) ^{N01}	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	-	-
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	%	99	108	-	-
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene ^{N02}	0.5	mg/kg	< 0.5	< 0.5	-	-
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	%	78	111	-	-
p-Terphenyl-d14 (surr.)	1	%	70	96	-	-

Client Sample ID			TP17/0-0.2	TP17/0.4-0.6	TP16/0-0.2	TP18/0-0.2
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-Ma0031569	S23-Ma0031570	S23-Ma0031571	S23-Ma0031573
Date Sampled			Mar 07, 2023	Mar 07, 2023	Mar 07, 2023	Mar 07, 2023
Test/Reference	LOR	Unit				
Chloride	10	mg/kg	< 10	< 10	-	-
Conductivity (1:5 aqueous extract at 25 °C as rec.)	10	uS/cm	15	11	-	-
pH (1:5 Aqueous extract at 25 °C as rec.)	0.1	pH Units	6.2	6.3	-	-
Resistivity*	0.5	ohm.m	680	890	-	-
Sulphate (as SO4)	10	mg/kg	< 10	< 10	-	-

Client Sample ID			TP26/0-0.2	TP2/0-0.2	TP8/0.15-0.35	TP3/0-0.2
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-Ma0031574	S23-Ma0031575	S23-Ma0031579	S23-Ma0031581
Date Sampled			Mar 07, 2023	Mar 07, 2023	Mar 07, 2023	Mar 07, 2023
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4,4'-DDD	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4,4'-DDE	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4,4'-DDT	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
a-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
b-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
d-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
g-HCH (Lindane)	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Toxaphene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dibutylchlorendate (surr.)	1	%	136	131	95	104
Tetrachloro-m-xylene (surr.)	1	%	100	104	86	97
Heavy Metals						
Arsenic	2	mg/kg	15	11	17	17
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	28	17	37	36
Copper	5	mg/kg	30	24	22	13
Lead	5	mg/kg	19	18	29	22
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Nickel	5	mg/kg	6.1	8.8	6.1	5.7
Zinc	5	mg/kg	63	43	36	24

Client Sample ID			TP26/0-0.2	TP2/0-0.2	TP8/0.15-0.35	TP3/0-0.2
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-Ma0031574	S23-Ma0031575	S23-Ma0031579	S23-Ma0031581
Date Sampled			Mar 07, 2023	Mar 07, 2023	Mar 07, 2023	Mar 07, 2023
Test/Reference	LOR	Unit				
Sample Properties						
% Moisture	1	%	9.1	18	13	24
Total Recoverable Hydrocarbons						
TRH C6-C9	20	mg/kg	-	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	-	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	-	< 50	< 50	< 50
TRH C29-C36	50	mg/kg	-	< 50	< 50	< 50
TRH C10-C36 (Total)	50	mg/kg	-	< 50	< 50	< 50
TRH C6-C10	20	mg/kg	-	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	-	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	-	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2) ^{N01}	50	mg/kg	-	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	-	< 100	< 100	< 100
TRH >C34-C40	100	mg/kg	-	< 100	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	-	< 100	< 100	< 100
BTEX						
Benzene	0.1	mg/kg	-	< 0.1	< 0.1	< 0.1
Toluene	0.1	mg/kg	-	< 0.1	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	-	< 0.1	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	-	< 0.1	< 0.1	< 0.1
Xylenes - Total*	0.3	mg/kg	-	< 0.3	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	-	65	105	97
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene ^{N02}	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	-	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	-	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene ^{N07}	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Benzo(g,h,i)perylene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Dibenz(a,h)anthracene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Indeno(1,2,3-cd)pyrene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	-	92	86	102
p-Terphenyl-d14 (surr.)	1	%	-	95	81	88

Client Sample ID			TP26/0-0.2	TP2/0-0.2	TP8/0.15-0.35	TP3/0-0.2
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-Ma0031574	S23-Ma0031575	S23-Ma0031579	S23-Ma0031581
Date Sampled			Mar 07, 2023	Mar 07, 2023	Mar 07, 2023	Mar 07, 2023
Test/Reference	LOR	Unit				
Polychlorinated Biphenyls						
Aroclor-1016	0.1	mg/kg	-	< 0.1	< 0.1	-
Aroclor-1221	0.1	mg/kg	-	< 0.1	< 0.1	-
Aroclor-1232	0.1	mg/kg	-	< 0.1	< 0.1	-
Aroclor-1242	0.1	mg/kg	-	< 0.1	< 0.1	-
Aroclor-1248	0.1	mg/kg	-	< 0.1	< 0.1	-
Aroclor-1254	0.1	mg/kg	-	< 0.1	< 0.1	-
Aroclor-1260	0.1	mg/kg	-	< 0.1	< 0.1	-
Total PCB*	0.1	mg/kg	-	< 0.1	< 0.1	-
Dibutylchloredate (surr.)	1	%	-	131	95	-
Tetrachloro-m-xylene (surr.)	1	%	-	104	86	-

Client Sample ID			TP7/0-0.2	TP5/0-0.2	TP41/0-0.3	TP13/0-0.2
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-Ma0031582	S23-Ma0031585	S23-Ma0031586	S23-Ma0031588
Date Sampled			Mar 07, 2023	Mar 08, 2023	Mar 08, 2023	Mar 08, 2023
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4,4'-DDD	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4,4'-DDE	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4,4'-DDT	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
a-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
b-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
d-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
g-HCH (Lindane)	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Toxaphene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dibutylchloredate (surr.)	1	%	85	110	129	82
Tetrachloro-m-xylene (surr.)	1	%	75	108	97	76

Client Sample ID			TP7/0-0.2	TP5/0-0.2	TP41/0-0.3	TP13/0-0.2
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-Ma0031582	S23-Ma0031585	S23-Ma0031586	S23-Ma0031588
Date Sampled			Mar 07, 2023	Mar 08, 2023	Mar 08, 2023	Mar 08, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Arsenic	2	mg/kg	12	22	15	24
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	21	51	26	23
Copper	5	mg/kg	11	25	25	19
Lead	5	mg/kg	44	20	18	16
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Nickel	5	mg/kg	5.2	5.3	5.9	6.8
Zinc	5	mg/kg	54	38	51	46
Sample Properties						
% Moisture	1	%	16	16	10	9.1
Total Recoverable Hydrocarbons						
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
TRH C6-C10	20	mg/kg	< 20	-	-	< 20
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	< 20	-	-	< 20
TRH >C10-C16	50	mg/kg	< 50	-	-	< 50
TRH >C10-C16 less Naphthalene (F2) ^{N01}	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
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	%	73	-	-	59
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene ^{N02}	0.5	mg/kg	< 0.5	-	-	< 0.5
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
Benzo(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

Client Sample ID			TP7/0-0.2	TP5/0-0.2	TP41/0-0.3	TP13/0-0.2
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-Ma0031582	S23-Ma0031585	S23-Ma0031586	S23-Ma0031588
Date Sampled			Mar 07, 2023	Mar 08, 2023	Mar 08, 2023	Mar 08, 2023
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
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	%	68	-	-	71
p-Terphenyl-d14 (surr.)	1	%	63	-	-	68
Polychlorinated Biphenyls						
Aroclor-1016	0.1	mg/kg	-	-	-	< 0.1
Aroclor-1221	0.1	mg/kg	-	-	-	< 0.1
Aroclor-1232	0.1	mg/kg	-	-	-	< 0.1
Aroclor-1242	0.1	mg/kg	-	-	-	< 0.1
Aroclor-1248	0.1	mg/kg	-	-	-	< 0.1
Aroclor-1254	0.1	mg/kg	-	-	-	< 0.1
Aroclor-1260	0.1	mg/kg	-	-	-	< 0.1
Total PCB*	0.1	mg/kg	-	-	-	< 0.1
Dibutylchlorendate (surr.)	1	%	-	-	-	82
Tetrachloro-m-xylene (surr.)	1	%	-	-	-	76

Client Sample ID			TP15/0-0.2	TP22/0-0.2	TP31/0-0.2	TP59/0-0.2
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-Ma0031591	S23-Ma0031592	S23-Ma0031593	S23-Ma0031594
Date Sampled			Mar 08, 2023	Mar 08, 2023	Mar 08, 2023	Mar 08, 2023
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDE	0.05	mg/kg	0.06	< 0.05	< 0.05	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05	< 0.05	0.06	< 0.05
a-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
b-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
d-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
g-HCH (Lindane)	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Toxaphene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5

Client Sample ID			TP15/0-0.2	TP22/0-0.2	TP31/0-0.2	TP59/0-0.2
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-Ma0031591	S23-Ma0031592	S23-Ma0031593	S23-Ma0031594
Date Sampled			Mar 08, 2023	Mar 08, 2023	Mar 08, 2023	Mar 08, 2023
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	0.06	< 0.05	0.06	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dibutylchlorendate (surr.)	1	%	99	96	113	99
Tetrachloro-m-xylene (surr.)	1	%	96	92	96	97
Heavy Metals						
Arsenic	2	mg/kg	17	15	18	21
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	28	44	33	43
Copper	5	mg/kg	36	18	26	27
Lead	5	mg/kg	64	16	18	20
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Nickel	5	mg/kg	6.0	< 5	< 5	< 5
Zinc	5	mg/kg	100	21	39	57
Sample Properties						
% Moisture	1	%	11	13	19	8.5
Total Recoverable Hydrocarbons						
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	-
TRH C6-C10	20	mg/kg	< 20	-	< 20	-
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	< 20	-	< 20	-
TRH >C10-C16	50	mg/kg	< 50	-	< 50	-
TRH >C10-C16 less Naphthalene (F2) ^{N01}	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	-
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	%	117	-	107	-
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene ^{N02}	0.5	mg/kg	< 0.5	-	< 0.5	-
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	-

Client Sample ID			TP15/0-0.2	TP22/0-0.2	TP31/0-0.2	TP59/0-0.2
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-Ma0031591	S23-Ma0031592	S23-Ma0031593	S23-Ma0031594
Date Sampled			Mar 08, 2023	Mar 08, 2023	Mar 08, 2023	Mar 08, 2023
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
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	%	93	-	86	-
p-Terphenyl-d14 (surr.)	1	%	96	-	90	-
Polychlorinated Biphenyls						
Aroclor-1016	0.1	mg/kg	< 0.1	-	-	-
Aroclor-1221	0.1	mg/kg	< 0.1	-	-	-
Aroclor-1232	0.1	mg/kg	< 0.1	-	-	-
Aroclor-1242	0.1	mg/kg	< 0.1	-	-	-
Aroclor-1248	0.1	mg/kg	< 0.1	-	-	-
Aroclor-1254	0.1	mg/kg	< 0.1	-	-	-
Aroclor-1260	0.1	mg/kg	< 0.1	-	-	-
Total PCB*	0.1	mg/kg	< 0.1	-	-	-
Dibutylchlorendate (surr.)	1	%	99	-	-	-
Tetrachloro-m-xylene (surr.)	1	%	96	-	-	-

Client Sample ID			TP28/0-0.2	TP29/0-0.2	TP36/0.3-0.5	DS1
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-Ma0031595	S23-Ma0031596	S23-Ma0031597	S23-Ma0031598
Date Sampled			Mar 08, 2023	Mar 08, 2023	Mar 08, 2023	Mar 07, 2023
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4,4'-DDD	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4,4'-DDE	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4,4'-DDT	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
a-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
b-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
d-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05

Client Sample ID			TP28/0-0.2	TP29/0-0.2	TP36/0.3-0.5	DS1
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-Ma0031595	S23-Ma0031596	S23-Ma0031597	S23-Ma0031598
Date Sampled			Mar 08, 2023	Mar 08, 2023	Mar 08, 2023	Mar 07, 2023
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
g-HCH (Lindane)	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Toxaphene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dibutylchloroendate (surr.)	1	%	144	124	101	109
Tetrachloro-m-xylene (surr.)	1	%	121	96	99	92
Heavy Metals						
Arsenic	2	mg/kg	16	18	20	16
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	30	36	37	33
Copper	5	mg/kg	23	24	21	15
Lead	5	mg/kg	16	17	19	22
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Nickel	5	mg/kg	< 5	< 5	5.3	6.5
Zinc	5	mg/kg	40	52	34	30
Sample Properties						
% Moisture	1	%	10	16	13	16
Total Recoverable Hydrocarbons						
TRH C6-C9	20	mg/kg	< 20	-	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	-	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	-	< 50	< 50
TRH C29-C36	50	mg/kg	< 50	-	< 50	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50	-	< 50	< 50
TRH C6-C10	20	mg/kg	< 20	-	< 20	< 20
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	< 20	-	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	-	< 50	< 50
TRH >C10-C16 less Naphthalene (F2) ^{N01}	50	mg/kg	< 50	-	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	-	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	-	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	-	< 100	< 100
BTEX						
Benzene	0.1	mg/kg	< 0.1	-	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	-	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	-	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	-	< 0.1	< 0.1
Xylenes - Total*	0.3	mg/kg	< 0.3	-	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	78	-	100	107
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene ^{N02}	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5

Client Sample ID			TP28/0-0.2	TP29/0-0.2	TP36/0.3-0.5	DS1
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-Ma0031595	S23-Ma0031596	S23-Ma0031597	S23-Ma0031598
Date Sampled			Mar 08, 2023	Mar 08, 2023	Mar 08, 2023	Mar 07, 2023
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	-	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	-	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Benzo(a)anthracene	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Benzo(b&j)fluoranthene ^{N07}	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Benzo(g,h,i)perylene	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Dibenz(a,h)anthracene	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	117	-	91	88
p-Terphenyl-d14 (surr.)	1	%	134	-	92	87

Client Sample ID			DS2	DS3	TRIPB1	TRIPS1
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-Ma0031599	S23-Ma0031600	S23-Ma0031603	S23-Ma0031604
Date Sampled			Mar 07, 2023	Mar 08, 2023	Not Provided ¹¹²	Not Provided ¹¹²
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	-	-

Client Sample ID Sample Matrix Eurofins Sample No. Date Sampled Test/Reference	LOR	Unit	DS2 Soil S23- Ma0031599 Mar 07, 2023	DS3 Soil S23- Ma0031600 Mar 08, 2023	TRIPB1 Soil S23- Ma0031603 Not Provided ¹²	TRIPS1 Soil S23- Ma0031604 Not Provided ¹²
Organochlorine Pesticides						
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	-	-
Dibutylchloredate (surr.)	1	%	83	111	-	-
Tetrachloro-m-xylene (surr.)	1	%	91	91	-	-
Heavy Metals						
Arsenic	2	mg/kg	12	29	-	-
Cadmium	0.4	mg/kg	< 0.4	< 0.4	-	-
Chromium	5	mg/kg	20	41	-	-
Copper	5	mg/kg	23	15	-	-
Lead	5	mg/kg	19	20	-	-
Mercury	0.1	mg/kg	< 0.1	< 0.1	-	-
Nickel	5	mg/kg	8.9	< 5	-	-
Zinc	5	mg/kg	44	26	-	-
Sample Properties						
% Moisture	1	%	23	11	-	-
Total Recoverable Hydrocarbons						
TRH C6-C9	20	mg/kg	-	-	< 20	-
TRH C6-C10	20	mg/kg	-	-	< 20	-
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	-	-	< 20	-
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	%	-	-	106	-
Naphthalene ^{N02}	0.5	mg/kg	-	-	< 0.5	-
TRH C6-C10	1	%	-	-	-	99
Total Recoverable Hydrocarbons						
Naphthalene	1	%	-	-	-	91
TRH C6-C9	1	%	-	-	-	100
BTEX						
Benzene	1	%	-	-	-	97
Ethylbenzene	1	%	-	-	-	100
m&p-Xylenes	1	%	-	-	-	100
o-Xylene	1	%	-	-	-	110
Toluene	1	%	-	-	-	99
Xylenes - Total	1	%	-	-	-	100
4-Bromofluorobenzene (surr.)	1	%	-	-	-	103

Client Sample ID			TRIPB2	TRIPS2
Sample Matrix			Soil	Soil
Eurofins Sample No.			S23-Ma0031605	S23-Ma0031606
Date Sampled			Not Provided ¹¹²	Not Provided ¹¹²
Test/Reference	LOR	Unit		
Total Recoverable Hydrocarbons				
TRH C6-C9	20	mg/kg	< 20	-
TRH C6-C10	20	mg/kg	< 20	-
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	< 20	-
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	%	105	-
Naphthalene ^{N02}	0.5	mg/kg	< 0.5	-
TRH C6-C10	1	%	-	110
Total Recoverable Hydrocarbons				
Naphthalene	1	%	-	100
TRH C6-C9	1	%	-	110
BTEX				
Benzene	1	%	-	110
Ethylbenzene	1	%	-	110
m&p-Xylenes	1	%	-	100
o-Xylene	1	%	-	100
Toluene	1	%	-	110
Xylenes - Total	1	%	-	100
4-Bromofluorobenzene (surr.)	1	%	-	97

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
Eurofins Suite B9			
Organochlorine Pesticides	Sydney	Mar 28, 2023	14 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
Metals M8	Sydney	Mar 28, 2023	28 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Sydney	Mar 16, 2023	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Mar 16, 2023	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Mar 16, 2023	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Polycyclic Aromatic Hydrocarbons	Sydney	Mar 16, 2023	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
% Moisture	Sydney	Mar 14, 2023	14 Days
- Method: LTM-GEN-7080 Moisture			
Total Recoverable Hydrocarbons	Sydney	Mar 16, 2023	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
BTEX	Sydney	Mar 16, 2023	14 Days
- Method: LTM-ORG-2010 BTEX and Volatile TRH			
Chloride	Sydney	Mar 16, 2023	28 Days
- Method: LTM-INO-4270 Anions by Ion Chromatography			
Conductivity (1:5 aqueous extract at 25 °C as rec.)	Sydney	Mar 16, 2023	7 Days
- Method: LTM-INO-4030 Conductivity			
pH (1:5 Aqueous extract at 25 °C as rec.)	Sydney	Mar 16, 2023	7 Days
- Method: LTM-GEN-7090 pH by ISE			
Sulphate (as SO ₄)	Sydney	Mar 16, 2023	28 Days
- Method: In-house method LTM-INO-4270 Sulphate by Ion Chromatograph			
Polychlorinated Biphenyls	Sydney	Mar 16, 2023	28 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			

Company Name: Geo-Logix P/L
Address: Bld Q2 Level 3, 2309/4 Daydream St
Warriewood
NSW 2102

Project Name: AUSTRAL - PRIMARY
Project ID: 2301008

Order No.: PO5836TP
Report #: 971509
Phone: 02 9979 1722
Fax: 02 9979 1222

Received: Mar 10, 2023 10:27 AM
Due: Mar 17, 2023
Priority: 5 Day
Contact Name: Ted Lilly

Eurofins Analytical Services Manager : Asim Khan

Sample Detail						Asbestos - W/A guidelines	Asbestos Absence / Presence	HOLD	Organochlorine Pesticides	Metals M8	Suite B13: OCP/PCB	Aggressivity Soil Set	Moisture Set	Eurofins Suite B7	Eurofins Suite B9	BTEXN and Volatile TRH	BTEXN and Volatile TRH
Melbourne Laboratory - NATA # 1261 Site # 1254										X				X	X		
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X	X	X	X	X	X	X	X	X
External Laboratory																	
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID												
1	TP60/0-0.2	Mar 08, 2023		Soil	S23-Ma0031528				X	X			X				
2	TP37/0-0.2	Mar 08, 2023		Soil	S23-Ma0031529				X	X			X				
3	TP27/0-0.2	Mar 08, 2023		Soil	S23-Ma0031530				X	X			X				
4	TP30/0-0.2	Mar 08, 2023		Soil	S23-Ma0031531				X	X			X				
5	TP35/0-0.2	Mar 08, 2023		Soil	S23-Ma0031532							X	X		X		
6	TP35/0.3-0.5	Mar 08, 2023		Soil	S23-Ma0031533							X	X				
7	TP35/0.6-0.8	Mar 08, 2023		Soil	S23-Ma0031534							X	X				
8	TP56/0-0.2	Mar 08, 2023		Soil	S23-Ma0031535	X											
9	TP21/0-0.2	Mar 08, 2023		Soil	S23-Ma0031536				X	X			X				
10	TP23/0-0.2	Mar 08, 2023		Soil	S23-Ma0031537								X		X		
11	TP48/0-0.2	Mar 08, 2023		Soil	S23-Ma0031538	X											
12	TP14/0-0.2	Mar 08, 2023		Soil	S23-Ma0031539	X						X	X		X		

Company Name: Geo-Logix P/L
Address: Bld Q2 Level 3, 2309/4 Daydream St
Warriewood
NSW 2102

Project Name: AUSTRAL - PRIMARY
Project ID: 2301008

Order No.: PO5836TP
Report #: 971509
Phone: 02 9979 1722
Fax: 02 9979 1222

Received: Mar 10, 2023 10:27 AM
Due: Mar 17, 2023
Priority: 5 Day
Contact Name: Ted Lilly

Eurofins Analytical Services Manager : Asim Khan

Sample Detail

Melbourne Laboratory - NATA # 1261 Site # 1254

Sydney Laboratory - NATA # 1261 Site # 18217

						Asbestos - WA guidelines	Asbestos Absence / Presence	HOLD	Organochlorine Pesticides	Metals M8	Suite B13: OCP/PCB	Aggressivity Soil Set	Moisture Set	Eurofins Suite B7	Eurofins Suite B9	BTEXN and Volatile TRH	BTEXN and Volatile TRH
										X				X	X		
						X	X	X	X	X	X	X	X	X	X	X	X
13	TP14/0.3-0.5	Mar 08, 2023		Soil	S23-Ma0031540							X	X				
14	TP55/0-0.2	Mar 08, 2023		Soil	S23-Ma0031541	X											
15	TP20/0-0.2	Mar 08, 2023		Soil	S23-Ma0031542				X	X			X				
16	TP12/0-0.2	Mar 08, 2023		Soil	S23-Ma0031543	X							X		X		
17	TP57/0.3-0.5	Mar 08, 2023		Soil	S23-Ma0031544						X		X	X			
18	TP57/0-0.15	Mar 08, 2023		Soil	S23-Ma0031545	X											
19	TP4/0.15-0.35	Mar 08, 2023		Soil	S23-Ma0031546								X		X		
20	TP6/0-0.2	Mar 08, 2023		Soil	S23-Ma0031547	X											
21	TP6/0.2-0.4	Mar 08, 2023		Soil	S23-Ma0031548								X		X		
22	TP46/0-0.2	Mar 08, 2023		Soil	S23-Ma0031549	X											
23	TP43/0-0.2	Mar 08, 2023		Soil	S23-Ma0031550	X											
24	TP47/0-0.2	Mar 08, 2023		Soil	S23-Ma0031551	X											
25	TP49/0-0.2	Mar 08, 2023		Soil	S23-Ma0031552	X											
26	TP19/0-0.2	Mar 08, 2023		Soil	S23-Ma0031553				X	X			X				
27	TP50/0-0.2	Mar 08, 2023		Soil	S23-Ma0031554	X											

Company Name: Geo-Logix P/L
Address: Bld Q2 Level 3, 2309/4 Daydream St
Warriewood
NSW 2102
Project Name: AUSTRAL - PRIMARY
Project ID: 2301008

Order No.: PO5836TP
Report #: 971509
Phone: 02 9979 1722
Fax: 02 9979 1222

Received: Mar 10, 2023 10:27 AM
Due: Mar 17, 2023
Priority: 5 Day
Contact Name: Ted Lilly

Eurofins Analytical Services Manager : Asim Khan

Sample Detail						Asbestos - W/A guidelines	Asbestos Absence / Presence	HOLD	Organochlorine Pesticides	Metals M8	Suite B13: OCP/PCB	Aggressivity Soil Set	Moisture Set	Eurofins Suite B7	Eurofins Suite B9	BTEXN and Volatile TRH	BTEXN and Volatile TRH
Melbourne Laboratory - NATA # 1261 Site # 1254										X				X	X		
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X	X	X	X	X	X	X	X	X
28	TP11/0-0.2	Mar 08, 2023		Soil	S23-Ma0031555				X	X			X				
29	TP33/0-0.1	Mar 08, 2023		Soil	S23-Ma0031556				X	X			X				
30	TP40/0-0.1	Mar 07, 2023		Soil	S23-Ma0031557				X	X			X				
31	TP34/0-0.1	Mar 06, 2023		Soil	S23-Ma0031558				X	X			X				
32	TP25/0-0.1	Mar 06, 2023		Soil	S23-Ma0031559				X	X			X				
33	TP10/0-0.2	Mar 06, 2023		Soil	S23-Ma0031560	X							X		X		
34	TP45/0-0.2	Mar 06, 2023		Soil	S23-Ma0031561	X											
35	TP32/0-0.3	Mar 07, 2023		Soil	S23-Ma0031562				X	X			X				
36	TP24/0-0.2	Mar 07, 2023		Soil	S23-Ma0031563				X	X			X				
37	TP9/0-0.3	Mar 07, 2023		Soil	S23-Ma0031564	X							X		X		
38	TP52/0-0.5	Mar 07, 2023		Soil	S23-Ma0031565	X											
39	TP1/0.1-0.3	Mar 07, 2023		Soil	S23-Ma0031566								X		X		
40	TP1/0.3-0.5	Mar 07, 2023		Soil	S23-Ma0031567	X							X		X		
41	TP44/0.15-0.35	Mar 07, 2023		Soil	S23-Ma0031568	X											

Company Name: Geo-Logix P/L
Address: Bld Q2 Level 3, 2309/4 Daydream St
Warriewood
NSW 2102

Project Name: AUSTRAL - PRIMARY
Project ID: 2301008

Order No.: PO5836TP
Report #: 971509
Phone: 02 9979 1722
Fax: 02 9979 1222

Received: Mar 10, 2023 10:27 AM
Due: Mar 17, 2023
Priority: 5 Day
Contact Name: Ted Lilly

Eurofins Analytical Services Manager : Asim Khan

Sample Detail						Asbestos - WA guidelines	Asbestos Absence / Presence	HOLD	Organochlorine Pesticides	Metals M8	Suite B13: OCP/PCB	Aggressivity Soil Set	Moisture Set	Eurofins Suite B7	Eurofins Suite B9	BTEXN and Volatile TRH	BTEXN and Volatile TRH
Melbourne Laboratory - NATA # 1261 Site # 1254										X				X	X		
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X	X	X	X	X	X	X	X	X
42	TP17/0-0.2	Mar 07, 2023		Soil	S23-Ma0031569							X	X		X		
43	TP17/0.4-0.6	Mar 07, 2023		Soil	S23-Ma0031570							X	X		X		
44	TP16/0-0.2	Mar 07, 2023		Soil	S23-Ma0031571				X	X			X				
45	TP51/0-0.3	Mar 07, 2023		Soil	S23-Ma0031572	X											
46	TP18/0-0.2	Mar 07, 2023		Soil	S23-Ma0031573				X	X			X				
47	TP26/0-0.2	Mar 07, 2023		Soil	S23-Ma0031574				X	X			X				
48	TP2/0-0.2	Mar 07, 2023		Soil	S23-Ma0031575						X		X	X			
49	TP2/0-0.7	Mar 07, 2023		Soil	S23-Ma0031576	X											
50	TP38/0-0.6	Mar 07, 2023		Soil	S23-Ma0031577	X											
51	TP8/0.15-1	Mar 07, 2023		Soil	S23-Ma0031578	X											
52	TP8/0.15-0.35	Mar 07, 2023		Soil	S23-Ma0031579						X		X	X			
53	TP39/0-0.6	Mar 07, 2023		Soil	S23-Ma0031580	X											
54	TP3/0-0.2	Mar 07, 2023		Soil	S23-Ma0031581								X		X		
55	TP7/0-0.2	Mar 07, 2023		Soil	S23-Ma0031582								X		X		
56	TP7/0-0.4	Mar 07, 2023		Soil	S23-Ma0031583	X											

Company Name: Geo-Logix P/L
Address: Bld Q2 Level 3, 2309/4 Daydream St
Warriewood
NSW 2102

Project Name: AUSTRAL - PRIMARY
Project ID: 2301008

Order No.: PO5836TP
Report #: 971509
Phone: 02 9979 1722
Fax: 02 9979 1222

Received: Mar 10, 2023 10:27 AM
Due: Mar 17, 2023
Priority: 5 Day
Contact Name: Ted Lilly

Eurofins Analytical Services Manager : Asim Khan

Sample Detail						Asbestos - W/A guidelines	Asbestos Absence / Presence	HOLD	Organochlorine Pesticides	Metals M8	Suite B13: OCP/PCB	Aggressivity Soil Set	Moisture Set	Eurofins Suite B7	Eurofins Suite B9	BTEXN and Volatile TRH	BTEXN and Volatile TRH
Melbourne Laboratory - NATA # 1261 Site # 1254										X				X	X		
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X	X	X	X	X	X	X	X	X
57	TP42/0-0.3	Mar 07, 2023		Soil	S23-Ma0031584	X											
58	TP5/0-0.2	Mar 08, 2023		Soil	S23-Ma0031585				X	X			X				
59	TP41/0-0.3	Mar 08, 2023		Soil	S23-Ma0031586				X	X			X				
60	TP13/0-0.3	Mar 08, 2023		Soil	S23-Ma0031587	X											
61	TP13/0-0.2	Mar 08, 2023		Soil	S23-Ma0031588						X		X	X			
62	TP54/0-0.4	Mar 08, 2023		Soil	S23-Ma0031589	X											
63	TP15/0-0.5	Mar 08, 2023		Soil	S23-Ma0031590	X											
64	TP15/0-0.2	Mar 08, 2023		Soil	S23-Ma0031591						X		X	X			
65	TP22/0-0.2	Mar 08, 2023		Soil	S23-Ma0031592				X	X			X				
66	TP31/0-0.2	Mar 08, 2023		Soil	S23-Ma0031593								X		X		
67	TP59/0-0.2	Mar 08, 2023		Soil	S23-Ma0031594				X	X			X				
68	TP28/0-0.2	Mar 08, 2023		Soil	S23-Ma0031595								X		X		
69	TP29/0-0.2	Mar 08, 2023		Soil	S23-Ma0031596				X	X			X				
70	TP36/0.3-0.5	Mar 08, 2023		Soil	S23-Ma0031597								X		X		
71	DS1	Mar 07, 2023		Soil	S23-Ma0031598								X		X		

Company Name: Geo-Logix P/L
Address: Bld Q2 Level 3, 2309/4 Daydream St
Warriewood
NSW 2102

Order No.: PO5836TP
Report #: 971509
Phone: 02 9979 1722
Fax: 02 9979 1222

Received: Mar 10, 2023 10:27 AM
Due: Mar 17, 2023
Priority: 5 Day
Contact Name: Ted Lilly

Project Name: AUSTRAL - PRIMARY
Project ID: 2301008

Eurofins Analytical Services Manager : Asim Khan

Sample Detail						Asbestos - W/A guidelines	Asbestos Absence / Presence	HOLD	Organochlorine Pesticides	Metals M8	Suite B13: OCP/PCB	Aggressivity Soil Set	Moisture Set	Eurofins Suite B7	Eurofins Suite B9	BTEXN and Volatile TRH	BTEXN and Volatile TRH
Melbourne Laboratory - NATA # 1261 Site # 1254										X				X	X		
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X	X	X	X	X	X	X	X	X
72	DS2	Mar 07, 2023		Soil	S23-Ma0031599				X	X			X				
73	DS3	Mar 08, 2023		Soil	S23-Ma0031600				X	X			X				
74	TP15/A1	Mar 08, 2023		Building Materials	S23-Ma0031601		X										
75	TP13/A1	Mar 08, 2023		Building Materials	S23-Ma0031602		X										
76	TRIPB1	Not Provided		Soil	S23-Ma0031603											X	
77	TRIPS1	Not Provided		Soil	S23-Ma0031604												X
78	TRIPB2	Not Provided		Soil	S23-Ma0031605											X	
79	TRIPS2	Not Provided		Soil	S23-Ma0031606												X
80	R1	Mar 08, 2023		Water	S23-Ma0031607				X	X							
81	TP60/0.2-0.4	Mar 08, 2023		Soil	S23-Ma0031610			X									
82	TP60/0.5-0.7	Mar 08, 2023		Soil	S23-Ma0031611			X									
83	TP37/0.2-0.4	Mar 08, 2023		Soil	S23-Ma0031612			X									
84	TP37/0.9-1.1	Mar 08, 2023		Soil	S23-Ma0031613			X									

Company Name: Geo-Logix P/L
Address: Bld Q2 Level 3, 2309/4 Daydream St
Warriewood
NSW 2102

Order No.: PO5836TP
Report #: 971509
Phone: 02 9979 1722
Fax: 02 9979 1222

Received: Mar 10, 2023 10:27 AM
Due: Mar 17, 2023
Priority: 5 Day
Contact Name: Ted Lilly

Project Name: AUSTRAL - PRIMARY
Project ID: 2301008

Eurofins Analytical Services Manager : Asim Khan

Sample Detail

Melbourne Laboratory - NATA # 1261 Site # 1254

Sydney Laboratory - NATA # 1261 Site # 18217

						Asbestos - W/A guidelines	Asbestos Absence / Presence	HOLD	Organochlorine Pesticides	Metals M8	Suite B13: OCP/PCB	Aggressivity Soil Set	Moisture Set	Eurofins Suite B7	Eurofins Suite B9	BTEXN and Volatile TRH	BTEXN and Volatile TRH
										X				X	X		
						X	X	X	X	X	X	X	X	X	X	X	X
85	TP27/0.3-0.5	Mar 08, 2023		Soil	S23-Ma0031614			X									
86	TP27/1-1.2	Mar 08, 2023		Soil	S23-Ma0031615			X									
87	TP30/0.3-0.5	Mar 08, 2023		Soil	S23-Ma0031616			X									
88	TP30/0.7-0.9	Mar 08, 2023		Soil	S23-Ma0031617			X									
89	TP21/0.2-0.4	Mar 08, 2023		Soil	S23-Ma0031618			X									
90	TP21/0.9-1.1	Mar 08, 2023		Soil	S23-Ma0031619			X									
91	TP23/0.25-0.45	Mar 08, 2023		Soil	S23-Ma0031620			X									
92	TP23/0.9-1.1	Mar 08, 2023		Soil	S23-Ma0031621			X									
93	TP20/0.2-0.4	Mar 08, 2023		Soil	S23-Ma0031622			X									
94	TP12/0.4-0.6	Mar 08, 2023		Soil	S23-Ma0031623			X									
95	TP57/0.15-0.3	Mar 08, 2023		Soil	S23-Ma0031624			X									
96	TP4/0-0.15	Mar 08, 2023		Soil	S23-Ma0031625			X									
97	TP4/0.6-0.8	Mar 08, 2023		Soil	S23-Ma0031626			X									
98	TP19/0.6-0.8	Mar 08, 2023		Soil	S23-Ma0031627			X									

Company Name: Geo-Logix P/L
Address: Bld Q2 Level 3, 2309/4 Daydream St
Warriewood
NSW 2102
Project Name: AUSTRAL - PRIMARY
Project ID: 2301008

Order No.: PO5836TP
Report #: 971509
Phone: 02 9979 1722
Fax: 02 9979 1222

Received: Mar 10, 2023 10:27 AM
Due: Mar 17, 2023
Priority: 5 Day
Contact Name: Ted Lilly

Eurofins Analytical Services Manager : Asim Khan

Sample Detail						Asbestos - W/A guidelines	Asbestos Absence / Presence	HOLD	Organochlorine Pesticides	Metals M8	Suite B13: OCP/PCB	Aggressivity Soil Set	Moisture Set	Eurofins Suite B7	Eurofins Suite B9	BTEXN and Volatile TRH	BTEXN and Volatile TRH
Melbourne Laboratory - NATA # 1261 Site # 1254										X				X	X		
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X	X	X	X	X	X	X	X	X
99	TP11/0.3-0.5	Mar 08, 2023		Soil	S23-Ma0031628			X									
100	TP33/0.2-0.4	Mar 06, 2023		Soil	S23-Ma0031629			X									
101	TP34/0.2-0.3	Mar 06, 2023		Soil	S23-Ma0031630			X									
102	TP25/0.2-0.4	Mar 07, 2023		Soil	S23-Ma0031631			X									
103	TP10/0.5-0.7	Mar 06, 2023		Soil	S23-Ma0031632			X									
104	TP32/0.3-0.4	Mar 07, 2023		Soil	S23-Ma0031633			X									
105	TP32/0.4-0.6	Mar 07, 2023		Soil	S23-Ma0031634			X									
106	TP24/0-0.4	Mar 07, 2023		Soil	S23-Ma0031635			X									
107	TP24/0.4-0.6	Mar 07, 2023		Soil	S23-Ma0031636			X									
108	TP9/0.3-0.4	Mar 07, 2023		Soil	S23-Ma0031637			X									
109	TP52/0-0.2	Mar 07, 2023		Soil	S23-Ma0031638			X									
110	TP52/0.5-0.6	Mar 07, 2023		Soil	S23-Ma0031639			X									
111	TP1/0.7-0.8	Mar 07, 2023		Soil	S23-Ma0031640			X									
112	TP44/0.3-0.5	Mar 07, 2023		Soil	S23-Ma0031641			X									
113	TP17/0-0.4	Mar 07, 2023		Soil	S23-Ma0031642			X									

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 Magowar Road
Girraween
NSW 2145
Tel: +61 2 9900 8400
NATA# 1261 Site# 18217

Canberra
Unit 1,2 Dacre Street
Mitchell
ACT 2911
Tel: +61 2 6113 8091
NATA# 1261 Site# 25466

Brisbane
1/21 Smallwood Place
Murarrie
QLD 4172
Tel: +61 7 3902 4600
NATA# 1261 Site# 20794

Newcastle
1/2 Frost Drive
Mayfield West NSW 2304
Tel: +61 2 4968 8448
NATA# 1261
Site# 25079 & 25289

Perth
46-48 Banksia Road
Welshpool
WA 6106
Tel: +61 8 6253 4444
NATA# 2377 Site# 2370

Auckland
35 O'Rourke 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

web: www.eurofins.com.au
email: EnviroSales@eurofins.com

Company Name:	Geo-Logix P/L	Order No.:	PO5836TP	Received:	Mar 10, 2023 10:27 AM
Address:	Bld Q2 Level 3, 2309/4 Daydream St Warriewood NSW 2102	Report #:	971509	Due:	Mar 17, 2023
		Phone:	02 9979 1722	Priority:	5 Day
		Fax:	02 9979 1222	Contact Name:	Ted Lilly
Project Name:	AUSTRAL - PRIMARY				
Project ID:	2301008				

Eurofins Analytical Services Manager : Asim Khan

Sample Detail						Asbestos - W/A guidelines	Asbestos Absence / Presence	HOLD	Organochlorine Pesticides	Metals M8	Suite B13: OCP/PCB	Aggressivity Soil Set	Moisture Set	Eurofins Suite B7	Eurofins Suite B9	BTEXN and Volatile TRH	BTEXN and Volatile TRH
Melbourne Laboratory - NATA # 1261 Site # 1254										X				X	X		
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X	X	X	X	X	X	X	X	X
114	TP60/0-0.4	Mar 07, 2023		Soil	S23-Ma0031643			X									
115	TP53/0-0.4	Mar 07, 2023		Soil	S23-Ma0031644			X									
116	TP16/0-0.2	Mar 07, 2023		Soil	S23-Ma0031645			X									
117	TP16/0.4-0.6	Mar 07, 2023		Soil	S23-Ma0031646			X									
118	TP18/0-0.3	Mar 07, 2023		Soil	S23-Ma0031647			X									
119	TP18/0.2-0.5	Mar 07, 2023		Soil	S23-Ma0031648			X									
120	TP59/0-0.4	Mar 07, 2023		Soil	S23-Ma0031649			X									
121	TP26/0-0.3	Mar 07, 2023		Soil	S23-Ma0031650			X									
122	TP26/0.2-0.5	Mar 07, 2023		Soil	S23-Ma0031651			X									
123	TP2/0.7-0.9	Mar 07, 2023		Soil	S23-Ma0031652			X									
124	TP8/0-0.15	Mar 07, 2023		Soil	S23-Ma0031653			X									
125	TP39/0.6-0.8	Mar 07, 2023		Soil	S23-Ma0031654			X									
126	TP3/0.4-0.6	Mar 07, 2023		Soil	S23-Ma0031655			X									
127	TP3/0-0.4	Mar 07, 2023		Soil	S23-Ma0031656			X									
128	TP7/0.4-0.6	Mar 07, 2023		Soil	S23-Ma0031657			X									

Company Name: Geo-Logix P/L
Address: Bld Q2 Level 3, 2309/4 Daydream St
Warriewood
NSW 2102

Project Name: AUSTRAL - PRIMARY
Project ID: 2301008

Order No.: PO5836TP
Report #: 971509
Phone: 02 9979 1722
Fax: 02 9979 1222

Received: Mar 10, 2023 10:27 AM
Due: Mar 17, 2023
Priority: 5 Day
Contact Name: Ted Lilly

Eurofins Analytical Services Manager : Asim Khan

Sample Detail						Asbestos - W/A guidelines	Asbestos Absence / Presence	HOLD	Organochlorine Pesticides	Metals M8	Suite B13: OCP/PCB	Aggressivity Soil Set	Moisture Set	Eurofins Suite B7	Eurofins Suite B9	BTEXN and Volatile TRH	BTEXN and Volatile TRH
Melbourne Laboratory - NATA # 1261 Site # 1254										X				X	X		
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X	X	X	X	X	X	X	X	X
129	TP5/0.3-0.5	Mar 08, 2023		Soil	S23-Ma0031658			X									
130	TP5/0-0.3	Mar 08, 2023		Soil	S23-Ma0031659			X									
131	TP41/0.3-0.7	Mar 08, 2023		Soil	S23-Ma0031660			X									
132	TP13/0.3-0.5	Mar 08, 2023		Soil	S23-Ma0031661			X									
133	TP15/0.5-0.7	Mar 08, 2023		Soil	S23-Ma0031662			X									
134	TP22/0.4-0.6	Mar 08, 2023		Soil	S23-Ma0031663			X									
135	TP31/0.3-0.4	Mar 08, 2023		Soil	S23-Ma0031664			X									
136	TP31/0.4-0.6	Mar 08, 2023		Soil	S23-Ma0031665			X									
137	TP59/0.3-0.5	Mar 08, 2023		Soil	S23-Ma0031666			X									
138	TP28/0.4-0.5	Mar 08, 2023		Soil	S23-Ma0031667			X									
139	TP28/0.5-0.7	Mar 08, 2023		Soil	S23-Ma0031668			X									
140	TP29/0.4-0.6	Mar 08, 2023		Soil	S23-Ma0031669			X									
141	TP36/0-0.2	Mar 08, 2023		Soil	S23-Ma0031670			X									
142	TP8/A1	Mar 07, 2023		Building Materials	S23-Ma0031671			X									

Company Name: Geo-Logix P/L
Address: Bld Q2 Level 3, 2309/4 Daydream St
Warriewood
NSW 2102

Project Name: AUSTRAL - PRIMARY
Project ID: 2301008

Order No.: PO5836TP
Report #: 971509
Phone: 02 9979 1722
Fax: 02 9979 1222

Received: Mar 10, 2023 10:27 AM
Due: Mar 17, 2023
Priority: 5 Day
Contact Name: Ted Lilly

Eurofins Analytical Services Manager : Asim Khan

Sample Detail						Asbestos - W/A guidelines	Asbestos Absence / Presence	HOLD	Organochlorine Pesticides	Metals M8	Suite B13: OCP/PCB	Aggressivity Soil Set	Moisture Set	Eurofins Suite B7	Eurofins Suite B9	BTEXN and Volatile TRH	BTEXN and Volatile TRH
Melbourne Laboratory - NATA # 1261 Site # 1254										X				X	X		
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X	X	X	X	X	X	X	X	X
143	TP2/A1	Mar 07, 2023		Building Materials	S23-Ma0031672			X									
144	TP2/A2	Mar 07, 2023		Building Materials	S23-Ma0031673			X									
145	BH1/0-0.2	Mar 07, 2023		Soil	S23-Ma0031674			X									
146	BH1/3.2-3.5	Mar 07, 2023		Soil	S23-Ma0031675			X									
147	BH2/1.6-1.8	Mar 07, 2023		Soil	S23-Ma0031676			X									
148	BH2/2.3-2.5	Mar 07, 2023		Soil	S23-Ma0031677			X									
149	BH2/6-6.2	Mar 07, 2023		Soil	S23-Ma0031678			X									
150	BH3/2-2.2	Mar 07, 2023		Soil	S23-Ma0031679			X									
151	BH3/3-3.2	Mar 07, 2023		Soil	S23-Ma0031680			X									
152	BH4/2-2.2	Mar 07, 2023		Soil	S23-Ma0031681			X									
153	BH4/5.5-5.7	Mar 07, 2023		Soil	S23-Ma0031682			X									
Test Counts						28	2	73	25	25	5	7	50	5	18	2	2

Internal Quality Control Review and Glossary

General

- 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.
- All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
- All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
- Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
- Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
- SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
- Samples were analysed on an 'as received' basis.
- Information identified on this report with blue colour, indicates data provided by customer that may have an impact on the results.
- 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
CP	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.
TBTO	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

- 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.
- 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.
- 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.
- Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of recovery the term "INT" appears against that analyte.
- For Matrix Spikes and LCS results a dash "-" in the report means that the specific analyte was not added to the QC sample.
- 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							
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							
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	
TRH C6-C10	mg/kg	< 20			20	Pass	
TRH C6-C10	mg/kg	< 20			20	Pass	
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							
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	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/kg	< 0.5			0.5	Pass	
Acenaphthylene	mg/kg	< 0.5			0.5	Pass	
Anthracene	mg/kg	< 0.5			0.5	Pass	
Benz(a)anthracene	mg/kg	< 0.5			0.5	Pass	
Benzo(a)pyrene	mg/kg	< 0.5			0.5	Pass	
Benzo(b&i)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Benzo(g,h,i)perylene	mg/kg	< 0.5			0.5	Pass	
Benzo(k)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Chrysene	mg/kg	< 0.5			0.5	Pass	
Dibenz(a,h)anthracene	mg/kg	< 0.5			0.5	Pass	
Fluoranthene	mg/kg	< 0.5			0.5	Pass	
Fluorene	mg/kg	< 0.5			0.5	Pass	
Indeno(1,2,3-cd)pyrene	mg/kg	< 0.5			0.5	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
Phenanthrene	mg/kg	< 0.5			0.5	Pass	
Pyrene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Chloride	mg/kg	< 10			10	Pass	
Conductivity (1:5 aqueous extract at 25 °C as rec.)	uS/cm	< 10			10	Pass	
Sulphate (as SO4)	mg/kg	< 10			10	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Polychlorinated Biphenyls							
Aroclor-1016	mg/kg	< 0.1			0.1	Pass	
Aroclor-1221	mg/kg	< 0.1			0.1	Pass	
Aroclor-1232	mg/kg	< 0.1			0.1	Pass	
Aroclor-1242	mg/kg	< 0.1			0.1	Pass	
Aroclor-1248	mg/kg	< 0.1			0.1	Pass	
Aroclor-1254	mg/kg	< 0.1			0.1	Pass	
Aroclor-1260	mg/kg	< 0.1			0.1	Pass	
Total PCB*	mg/kg	< 0.1			0.1	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
Chlordanes - Total	%	94			70-130	Pass	
4,4'-DDD	%	91			70-130	Pass	
4,4'-DDE	%	88			70-130	Pass	
4,4'-DDT	%	110			70-130	Pass	
a-HCH	%	94			70-130	Pass	
Aldrin	%	79			70-130	Pass	
b-HCH	%	87			70-130	Pass	
d-HCH	%	94			70-130	Pass	
Dieldrin	%	88			70-130	Pass	
Endosulfan I	%	76			70-130	Pass	
Endosulfan II	%	91			70-130	Pass	
Endosulfan sulphate	%	112			70-130	Pass	
Endrin	%	99			70-130	Pass	
Endrin aldehyde	%	99			70-130	Pass	
Endrin ketone	%	116			70-130	Pass	
g-HCH (Lindane)	%	95			70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Heptachlor	%	92			70-130	Pass	
Heptachlor epoxide	%	81			70-130	Pass	
Hexachlorobenzene	%	96			70-130	Pass	
Methoxychlor	%	93			70-130	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	110			80-120	Pass	
Cadmium	%	114			80-120	Pass	
Chromium	%	112			80-120	Pass	
Copper	%	109			80-120	Pass	
Lead	%	109			80-120	Pass	
Mercury	%	113			80-120	Pass	
Nickel	%	106			80-120	Pass	
Zinc	%	111			80-120	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons							
TRH C6-C9	%	128			70-130	Pass	
TRH C10-C14	%	79			70-130	Pass	
TRH C6-C10	%	127			70-130	Pass	
TRH C6-C10	%	119			70-130	Pass	
TRH >C10-C16	%	75			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	111			70-130	Pass	
Toluene	%	129			70-130	Pass	
Ethylbenzene	%	117			70-130	Pass	
m&p-Xylenes	%	123			70-130	Pass	
o-Xylene	%	120			70-130	Pass	
Xylenes - Total*	%	122			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	%	114			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	100			70-130	Pass	
Acenaphthylene	%	101			70-130	Pass	
Anthracene	%	94			70-130	Pass	
Benz(a)anthracene	%	93			70-130	Pass	
Benzo(a)pyrene	%	95			70-130	Pass	
Benzo(b&j)fluoranthene	%	91			70-130	Pass	
Benzo(g,h,i)perylene	%	91			70-130	Pass	
Benzo(k)fluoranthene	%	101			70-130	Pass	
Chrysene	%	95			70-130	Pass	
Dibenz(a,h)anthracene	%	91			70-130	Pass	
Fluoranthene	%	97			70-130	Pass	
Fluorene	%	100			70-130	Pass	
Indeno(1,2,3-cd)pyrene	%	91			70-130	Pass	
Naphthalene	%	102			70-130	Pass	
Phenanthrene	%	103			70-130	Pass	
Pyrene	%	98			70-130	Pass	
LCS - % Recovery							
Chloride	%	94			70-130	Pass	
Conductivity (1:5 aqueous extract at 25 °C as rec.)	%	95			70-130	Pass	
Resistivity*	%	95			70-130	Pass	

Test				Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Sulphate (as SO ₄)				%	92			70-130	Pass	
Naphthalene				%	108			70-130	Pass	
LCS - % Recovery										
Polychlorinated Biphenyls										
Aroclor-1016				%	91			70-130	Pass	
Aroclor-1260				%	77			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-Ma0060212	NCP	%	84				70-130	Pass	
4,4'-DDD	S23-Ma0060212	NCP	%	122				70-130	Pass	
4,4'-DDE	S23-Ma0060212	NCP	%	113				70-130	Pass	
a-HCH	S23-Ma0060212	NCP	%	86				70-130	Pass	
Aldrin	S23-Ma0060212	NCP	%	87				70-130	Pass	
b-HCH	S23-Ma0060212	NCP	%	122				70-130	Pass	
d-HCH	S23-Ma0060212	NCP	%	121				70-130	Pass	
Dieldrin	S23-Ma0060212	NCP	%	127				70-130	Pass	
Endosulfan I	S23-Ma0060212	NCP	%	109				70-130	Pass	
Endosulfan II	S23-Ma0060212	NCP	%	105				70-130	Pass	
Endosulfan sulphate	S23-Ma0060212	NCP	%	126				70-130	Pass	
Endrin aldehyde	S23-Ma0060212	NCP	%	91				70-130	Pass	
Endrin ketone	S23-Ma0060212	NCP	%	98				70-130	Pass	
g-HCH (Lindane)	S23-Ma0060212	NCP	%	101				70-130	Pass	
Heptachlor	S23-Ma0060212	NCP	%	89				70-130	Pass	
Heptachlor epoxide	S23-Ma0060212	NCP	%	83				70-130	Pass	
Hexachlorobenzene	S23-Ma0060212	NCP	%	112				70-130	Pass	
Spike - % Recovery										
Heavy Metals					Result 1					
Arsenic	S23-Ma0031530	CP	%	87				75-125	Pass	
Cadmium	S23-Ma0031530	CP	%	88				75-125	Pass	
Chromium	S23-Ma0031530	CP	%	87				75-125	Pass	
Copper	S23-Ma0031530	CP	%	89				75-125	Pass	
Lead	S23-Ma0031530	CP	%	86				75-125	Pass	
Mercury	S23-Ma0031530	CP	%	101				75-125	Pass	
Nickel	S23-Ma0031530	CP	%	85				75-125	Pass	
Zinc	S23-Ma0031530	CP	%	89				75-125	Pass	
Spike - % Recovery										
Total Recoverable Hydrocarbons					Result 1					
TRH C6-C9	S23-Ma0038992	NCP	%	104				70-130	Pass	
TRH C10-C14	S23-Ma0038171	NCP	%	122				70-130	Pass	
TRH C6-C10	S23-Ma0038992	NCP	%	104				70-130	Pass	
TRH >C10-C16	S23-Ma0038171	NCP	%	117				70-130	Pass	
Spike - % Recovery										
BTEX					Result 1					
Benzene	S23-Ma0038992	NCP	%	96				70-130	Pass	
Toluene	S23-Ma0038992	NCP	%	101				70-130	Pass	
Ethylbenzene	S23-Ma0038992	NCP	%	99				70-130	Pass	
m&p-Xylenes	S23-Ma0038992	NCP	%	98				70-130	Pass	
o-Xylene	S23-Ma0038992	NCP	%	99				70-130	Pass	
Xylenes - Total*	S23-Ma0038992	NCP	%	98				70-130	Pass	
Spike - % Recovery										
Total Recoverable Hydrocarbons - 2013 NEPM Fractions					Result 1					
Naphthalene	S23-Ma0038992	NCP	%	97				70-130	Pass	
Spike - % Recovery										

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
				Result 1					
Sulphate (as SO ₄)	S23-Ma0037303	NCP	%	86			70-130	Pass	
Spike - % Recovery									
				Result 1					
Chloride	S23-Ma0031539	CP	%	116			70-130	Pass	
Spike - % Recovery									
Polychlorinated Biphenyls				Result 1					
Aroclor-1016	S23-Ma0060212	NCP	%	89			70-130	Pass	
Aroclor-1260	S23-Ma0060212	NCP	%	84			70-130	Pass	
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
4,4'-DDT	S23-Ma0044320	NCP	%	80			70-130	Pass	
Endrin	S23-Ma0051011	NCP	%	74			70-130	Pass	
Methoxychlor	S23-Ma0044320	NCP	%	73			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	S23-Ma0038865	NCP	%	96			70-130	Pass	
Acenaphthylene	S23-Ma0038865	NCP	%	99			70-130	Pass	
Anthracene	S23-Ma0038865	NCP	%	83			70-130	Pass	
Benz(a)anthracene	S23-Ma0038865	NCP	%	105			70-130	Pass	
Benzo(a)pyrene	S23-Ma0038865	NCP	%	96			70-130	Pass	
Benzo(b&j)fluoranthene	S23-Ma0038865	NCP	%	86			70-130	Pass	
Benzo(g,h,i)perylene	S23-Ma0038865	NCP	%	85			70-130	Pass	
Benzo(k)fluoranthene	S23-Ma0038865	NCP	%	89			70-130	Pass	
Chrysene	S23-Ma0038865	NCP	%	98			70-130	Pass	
Dibenz(a,h)anthracene	S23-Ma0038865	NCP	%	93			70-130	Pass	
Fluoranthene	S23-Ma0038865	NCP	%	93			70-130	Pass	
Fluorene	S23-Ma0038865	NCP	%	97			70-130	Pass	
Indeno(1,2,3-cd)pyrene	S23-Ma0038865	NCP	%	88			70-130	Pass	
Naphthalene	S23-Ma0038865	NCP	%	96			70-130	Pass	
Phenanthrene	S23-Ma0038865	NCP	%	86			70-130	Pass	
Pyrene	S23-Ma0038865	NCP	%	91			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	S23-Ma0031566	CP	%	102			75-125	Pass	
Cadmium	S23-Ma0031566	CP	%	101			75-125	Pass	
Chromium	S23-Ma0031566	CP	%	105			75-125	Pass	
Copper	S23-Ma0031566	CP	%	100			75-125	Pass	
Lead	S23-Ma0031566	CP	%	101			75-125	Pass	
Mercury	S23-Ma0031566	CP	%	103			75-125	Pass	
Nickel	S23-Ma0031566	CP	%	92			75-125	Pass	
Zinc	S23-Ma0031566	CP	%	89			75-125	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	S23-Ma0031591	CP	%	82			75-125	Pass	
Cadmium	S23-Ma0031591	CP	%	91			75-125	Pass	
Mercury	S23-Ma0031591	CP	%	88			75-125	Pass	
Nickel	S23-Ma0031591	CP	%	81			75-125	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Chlordanes - Total	S23-Ma0044338	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4,4'-DDD	S23-Ma0044338	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4,4'-DDE	S23-Ma0044338	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1	Result 2	RPD	Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
4,4'-DDT	S23-Ma0044338	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-HCH	S23-Ma0043582	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	S23-Ma0044338	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-HCH	S23-Ma0044338	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
d-HCH	S23-Ma0044338	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	S23-Ma0044338	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan I	S23-Ma0044338	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	S23-Ma0044338	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	S23-Ma0044338	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	S23-Ma0044338	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	S23-Ma0044338	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	S23-Ma0044338	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-HCH (Lindane)	S23-Ma0043582	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	S23-Ma0044338	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor epoxide	S23-Ma0044338	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	S23-Ma0044338	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	S23-Ma0044338	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Toxaphene	S23-Ma0044338	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Cadmium	S23-Ma0031529	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	S23-Ma0031529	CP	mg/kg	39	31	23	30%	Pass	
Copper	S23-Ma0031529	CP	mg/kg	18	16	13	30%	Pass	
Lead	S23-Ma0031529	CP	mg/kg	18	15	23	30%	Pass	
Mercury	S23-Ma0031529	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Nickel	S23-Ma0031529	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Zinc	S23-Ma0031529	CP	mg/kg	49	40	21	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD			
TRH C6-C9	S23-Ma0031931	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C6-C10	S23-Ma0031931	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	S23-Ma0031931	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Toluene	S23-Ma0031931	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Ethylbenzene	S23-Ma0031931	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
m&p-Xylenes	S23-Ma0031931	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
o-Xylene	S23-Ma0031931	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Xylenes - Total*	S23-Ma0031931	NCP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
Naphthalene	S23-Ma0031931	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	S23-Ma0044338	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	S23-Ma0044338	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	S23-Ma0044338	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	S23-Ma0044338	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	S23-Ma0044338	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&j)fluoranthene	S23-Ma0044338	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g,h,i)perylene	S23-Ma0044338	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	S23-Ma0044338	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate								
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD		
Chrysene	S23-Ma0044338	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dibenz(a,h)anthracene	S23-Ma0044338	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Fluoranthene	S23-Ma0044338	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Fluorene	S23-Ma0044338	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Indeno(1.2.3-cd)pyrene	S23-Ma0044338	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Naphthalene	S23-Ma0044338	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Phenanthrene	S23-Ma0044338	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Pyrene	S23-Ma0044338	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Duplicate								
				Result 1	Result 2	RPD		
Conductivity (1:5 aqueous extract at 25 °C as rec.)	S23-Ma0031532	CP	uS/cm	15	17	13	30%	Pass
pH (1:5 Aqueous extract at 25 °C as rec.)	S23-Ma0031532	CP	pH Units	5.9	5.9	<1	30%	Pass
Resistivity*	S23-Ma0031532	CP	ohm.m	660	580	13	30%	Pass
Duplicate								
Sample Properties				Result 1	Result 2	RPD		
% Moisture	S23-Ma0031536	CP	%	12	11	14	30%	Pass
Duplicate								
				Result 1	Result 2	RPD		
Conductivity (1:5 aqueous extract at 25 °C as rec.)	S23-Ma0031539	CP	uS/cm	38	34	8.9	30%	Pass
pH (1:5 Aqueous extract at 25 °C as rec.)	S23-Ma0031539	CP	pH Units	6.3	6.3	<1	30%	Pass
Resistivity*	S23-Ma0031539	CP	ohm.m	270	290	8.9	30%	Pass
Duplicate								
Polychlorinated Biphenyls				Result 1	Result 2	RPD		
Aroclor-1016	S23-Ma0043582	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1221	S23-Ma0043582	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1232	S23-Ma0043582	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1242	S23-Ma0043582	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1248	S23-Ma0043582	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1254	S23-Ma0043582	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1260	S23-Ma0043582	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Total PCB*	S23-Ma0043582	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Duplicate								
Heavy Metals				Result 1	Result 2	RPD		
Arsenic	S23-Ma0031546	CP	mg/kg	6.2	11	53	30%	Fail Q15
Cadmium	S23-Ma0031546	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass
Chromium	S23-Ma0031546	CP	mg/kg	14	22	48	30%	Fail Q15
Copper	S23-Ma0031546	CP	mg/kg	8.6	9.4	9.7	30%	Pass
Lead	S23-Ma0031546	CP	mg/kg	8.6	11	21	30%	Pass
Mercury	S23-Ma0031546	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Nickel	S23-Ma0031546	CP	mg/kg	< 5	< 5	<1	30%	Pass
Zinc	S23-Ma0031546	CP	mg/kg	9.4	11	17	30%	Pass
Duplicate								
Sample Properties				Result 1	Result 2	RPD		
% Moisture	S23-Ma0031555	CP	%	11	15	30	30%	Pass
Duplicate								
Heavy Metals				Result 1	Result 2	RPD		
Arsenic	S23-Ma0031564	CP	mg/kg	16	17	6.7	30%	Pass
Cadmium	S23-Ma0031564	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass
Chromium	S23-Ma0031564	CP	mg/kg	30	31	4.9	30%	Pass
Copper	S23-Ma0031564	CP	mg/kg	25	23	8.7	30%	Pass
Lead	S23-Ma0031564	CP	mg/kg	22	23	4.2	30%	Pass

Duplicate								
Heavy Metals				Result 1	Result 2	RPD		
Mercury	S23-Ma0031564	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Nickel	S23-Ma0031564	CP	mg/kg	6.5	6.5	<1	30%	Pass
Zinc	S23-Ma0031564	CP	mg/kg	39	39	1.2	30%	Pass
Duplicate								
Sample Properties				Result 1	Result 2	RPD		
% Moisture	S23-Ma0031569	CP	%	13	13	4.7	30%	Pass
Duplicate								
				Result 1	Result 2	RPD		
Chloride	S23-Ma0031569	CP	mg/kg	< 10	< 10	<1	30%	Pass
Sulphate (as SO4)	S23-Ma0031569	CP	mg/kg	< 10	< 10	<1	30%	Pass
Duplicate								
Heavy Metals				Result 1	Result 2	RPD		
Arsenic	S23-Ma0031581	CP	mg/kg	17	15	9.8	30%	Pass
Cadmium	S23-Ma0031581	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass
Chromium	S23-Ma0031581	CP	mg/kg	36	28	24	30%	Pass
Copper	S23-Ma0031581	CP	mg/kg	13	24	63	30%	Fail
Lead	S23-Ma0031581	CP	mg/kg	22	24	8.9	30%	Pass
Mercury	S23-Ma0031581	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Nickel	S23-Ma0031581	CP	mg/kg	5.7	< 5	44	30%	Fail
Zinc	S23-Ma0031581	CP	mg/kg	24	23	3.6	30%	Pass
Duplicate								
Heavy Metals				Result 1	Result 2	RPD		
Arsenic	S23-Ma0031586	CP	mg/kg	15	15	2.0	30%	Pass
Cadmium	S23-Ma0031586	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass
Chromium	S23-Ma0031586	CP	mg/kg	26	25	4.3	30%	Pass
Copper	S23-Ma0031586	CP	mg/kg	25	26	<1	30%	Pass
Lead	S23-Ma0031586	CP	mg/kg	18	17	5.3	30%	Pass
Mercury	S23-Ma0031586	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Nickel	S23-Ma0031586	CP	mg/kg	5.9	< 5	43	30%	Fail
Zinc	S23-Ma0031586	CP	mg/kg	51	46	11	30%	Pass
Duplicate								
Sample Properties				Result 1	Result 2	RPD		
% Moisture	S23-Ma0031586	CP	%	10	8.9	12	30%	Pass
Duplicate								
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD		
TRH C10-C14	S23-Ma0031593	CP	mg/kg	< 20	< 20	<1	30%	Pass
TRH C15-C28	S23-Ma0031593	CP	mg/kg	< 50	< 50	<1	30%	Pass
TRH C29-C36	S23-Ma0031593	CP	mg/kg	< 50	< 50	<1	30%	Pass
TRH >C10-C16	S23-Ma0031593	CP	mg/kg	< 50	< 50	<1	30%	Pass
TRH >C16-C34	S23-Ma0031593	CP	mg/kg	< 100	< 100	<1	30%	Pass
TRH >C34-C40	S23-Ma0031593	CP	mg/kg	< 100	< 100	<1	30%	Pass
Duplicate								
Sample Properties				Result 1	Result 2	RPD		
% Moisture	S23-Ma0031599	CP	%	23	24	2.2	30%	Pass
Duplicate								
Heavy Metals				Result 1	Result 2	RPD		
Arsenic	S23-Ma0031600	CP	mg/kg	29	31	9.6	30%	Pass
Cadmium	S23-Ma0031600	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass
Chromium	S23-Ma0031600	CP	mg/kg	41	45	7.6	30%	Pass
Copper	S23-Ma0031600	CP	mg/kg	15	17	8.8	30%	Pass
Lead	S23-Ma0031600	CP	mg/kg	20	21	8.4	30%	Pass
Mercury	S23-Ma0031600	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Nickel	S23-Ma0031600	CP	mg/kg	< 5	< 5	<1	30%	Pass
Zinc	S23-Ma0031600	CP	mg/kg	26	28	8.1	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	N/A
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
G01	The LORs have been raised due to matrix interference
I12	Where sampling date has not been provided, Eurofins Environment Testing is not able to determine whether analysis has been performed within recommended holding times.
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
Dilani Samarakoon	Senior Analyst-Inorganic
Sayed Abu	Senior Analyst-Asbestos
Roopesh Rangarajan	Senior Analyst-Inorganic
Raymond Siu	Senior Analyst-Volatile
Roopesh Rangarajan	Senior Analyst-Organic
Fang Yee Tan	Senior Analyst-Metal



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](#).

Eurofins shall not be liable for loss, cost, damages or expenses incurred by the client, or any other person or company, resulting from the use of any information or interpretation given in this report. In no case shall Eurofins be liable for consequential damages including, but not limited to, lost profits, damages for failure to meet deadlines and lost production arising from this report. This document shall not be reproduced except in full and relates only to the items tested. Unless indicated otherwise, the tests were performed on the samples as received.

Geo-Logix P/L
Bld Q2 Level 3, 2309/4 Daydream St
Warriewood
NSW 2102



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: Ted Lilly

Report 971509-W
Project name AUSTRAL - PRIMARY
Project ID 2301008
Received Date Mar 10, 2023

Client Sample ID			R1
Sample Matrix			Water
Eurofins Sample No.			S23- Ma0031607
Date Sampled			Mar 08, 2023
Test/Reference	LOR	Unit	
Organochlorine Pesticides			
Chlordanes - Total	0.002	mg/L	< 0.002
4,4'-DDD	0.0002	mg/L	< 0.0002
4,4'-DDE	0.0002	mg/L	< 0.0002
4,4'-DDT	0.0002	mg/L	< 0.0002
a-HCH	0.0002	mg/L	< 0.0002
Aldrin	0.0002	mg/L	< 0.0002
b-HCH	0.0002	mg/L	< 0.0002
d-HCH	0.0002	mg/L	< 0.0002
Dieldrin	0.0002	mg/L	< 0.0002
Endosulfan I	0.0002	mg/L	< 0.0002
Endosulfan II	0.0002	mg/L	< 0.0002
Endosulfan sulphate	0.0002	mg/L	< 0.0002
Endrin	0.0002	mg/L	< 0.0002
Endrin aldehyde	0.0002	mg/L	< 0.0005
Endrin ketone	0.0002	mg/L	< 0.0002
g-HCH (Lindane)	0.0002	mg/L	< 0.0002
Heptachlor	0.0002	mg/L	< 0.0002
Heptachlor epoxide	0.0002	mg/L	< 0.0002
Hexachlorobenzene	0.0002	mg/L	< 0.0002
Methoxychlor	0.0002	mg/L	< 0.0002
Toxaphene	0.005	mg/L	< 0.005
Aldrin and Dieldrin (Total)*	0.0002	mg/L	< 0.0002
DDT + DDE + DDD (Total)*	0.0002	mg/L	< 0.0002
Vic EPA IWRG 621 OCP (Total)*	0.002	mg/L	< 0.002
Vic EPA IWRG 621 Other OCP (Total)*	0.002	mg/L	< 0.002
Dibutylchloredate (surr.)	1	%	138
Tetrachloro-m-xylene (surr.)	1	%	129
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
Eurofins Suite B9			
Organochlorine Pesticides	Sydney	Mar 15, 2023	7 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
Metals M8	Sydney	Mar 17, 2023	28 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			

Company Name: Geo-Logix P/L
Address: Bld Q2 Level 3, 2309/4 Daydream St
Warriewood
NSW 2102

Project Name: AUSTRAL - PRIMARY
Project ID: 2301008

Order No.: PO5836TP
Report #: 971509
Phone: 02 9979 1722
Fax: 02 9979 1222

Received: Mar 10, 2023 10:27 AM
Due: Mar 17, 2023
Priority: 5 Day
Contact Name: Ted Lilly

Eurofins Analytical Services Manager : Asim Khan

Sample Detail						Asbestos - W/A guidelines	Asbestos Absence / Presence	HOLD	Organochlorine Pesticides	Metals M8	Suite B13: OCP/PCB	Aggressivity Soil Set	Moisture Set	Eurofins Suite B7	Eurofins Suite B9	BTEXN and Volatile TRH	BTEXN and Volatile TRH
Melbourne Laboratory - NATA # 1261 Site # 1254										X				X	X		
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X	X	X	X	X	X	X	X	X
External Laboratory																	
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID												
1	TP60/0-0.2	Mar 08, 2023		Soil	S23-Ma0031528				X	X			X				
2	TP37/0-0.2	Mar 08, 2023		Soil	S23-Ma0031529				X	X			X				
3	TP27/0-0.2	Mar 08, 2023		Soil	S23-Ma0031530				X	X			X				
4	TP30/0-0.2	Mar 08, 2023		Soil	S23-Ma0031531				X	X			X				
5	TP35/0-0.2	Mar 08, 2023		Soil	S23-Ma0031532							X	X		X		
6	TP35/0.3-0.5	Mar 08, 2023		Soil	S23-Ma0031533							X	X				
7	TP35/0.6-0.8	Mar 08, 2023		Soil	S23-Ma0031534							X	X				
8	TP56/0-0.2	Mar 08, 2023		Soil	S23-Ma0031535	X											
9	TP21/0-0.2	Mar 08, 2023		Soil	S23-Ma0031536				X	X			X				
10	TP23/0-0.2	Mar 08, 2023		Soil	S23-Ma0031537								X		X		
11	TP48/0-0.2	Mar 08, 2023		Soil	S23-Ma0031538	X											
12	TP14/0-0.2	Mar 08, 2023		Soil	S23-Ma0031539	X						X	X		X		

Company Name: Geo-Logix P/L
Address: Bld Q2 Level 3, 2309/4 Daydream St
Warriewood
NSW 2102

Project Name: AUSTRAL - PRIMARY
Project ID: 2301008

Order No.: PO5836TP
Report #: 971509
Phone: 02 9979 1722
Fax: 02 9979 1222

Received: Mar 10, 2023 10:27 AM
Due: Mar 17, 2023
Priority: 5 Day
Contact Name: Ted Lilly

Eurofins Analytical Services Manager : Asim Khan

Sample Detail

Melbourne Laboratory - NATA # 1261 Site # 1254

Sydney Laboratory - NATA # 1261 Site # 18217

						Asbestos - WA guidelines	Asbestos Absence / Presence	HOLD	Organochlorine Pesticides	Metals M8	Suite B13: OCP/PCB	Aggressivity Soil Set	Moisture Set	Eurofins Suite B7	Eurofins Suite B9	BTEXN and Volatile TRH	BTEXN and Volatile TRH
										X				X	X		
						X	X	X	X	X	X	X	X	X	X	X	X
13	TP14/0.3-0.5	Mar 08, 2023		Soil	S23-Ma0031540							X	X				
14	TP55/0-0.2	Mar 08, 2023		Soil	S23-Ma0031541	X											
15	TP20/0-0.2	Mar 08, 2023		Soil	S23-Ma0031542				X	X			X				
16	TP12/0-0.2	Mar 08, 2023		Soil	S23-Ma0031543	X							X		X		
17	TP57/0.3-0.5	Mar 08, 2023		Soil	S23-Ma0031544						X		X	X			
18	TP57/0-0.15	Mar 08, 2023		Soil	S23-Ma0031545	X											
19	TP4/0.15-0.35	Mar 08, 2023		Soil	S23-Ma0031546								X		X		
20	TP6/0-0.2	Mar 08, 2023		Soil	S23-Ma0031547	X											
21	TP6/0.2-0.4	Mar 08, 2023		Soil	S23-Ma0031548								X		X		
22	TP46/0-0.2	Mar 08, 2023		Soil	S23-Ma0031549	X											
23	TP43/0-0.2	Mar 08, 2023		Soil	S23-Ma0031550	X											
24	TP47/0-0.2	Mar 08, 2023		Soil	S23-Ma0031551	X											
25	TP49/0-0.2	Mar 08, 2023		Soil	S23-Ma0031552	X											
26	TP19/0-0.2	Mar 08, 2023		Soil	S23-Ma0031553				X	X			X				
27	TP50/0-0.2	Mar 08, 2023		Soil	S23-Ma0031554	X											

Company Name: Geo-Logix P/L
Address: Bld Q2 Level 3, 2309/4 Daydream St
Warriewood
NSW 2102

Project Name: AUSTRAL - PRIMARY
Project ID: 2301008

Order No.: PO5836TP
Report #: 971509
Phone: 02 9979 1722
Fax: 02 9979 1222

Received: Mar 10, 2023 10:27 AM
Due: Mar 17, 2023
Priority: 5 Day
Contact Name: Ted Lilly

Eurofins Analytical Services Manager : Asim Khan

[illegible]

Company Name: Geo-Logix P/L
Address: Bld Q2 Level 3, 2309/4 Daydream St
Warriewood
NSW 2102

Project Name: AUSTRAL - PRIMARY
Project ID: 2301008

Order No.: PO5836TP
Report #: 971509
Phone: 02 9979 1722
Fax: 02 9979 1222

Received: Mar 10, 2023 10:27 AM
Due: Mar 17, 2023
Priority: 5 Day
Contact Name: Ted Lilly

Eurofins Analytical Services Manager : Asim Khan

Sample Detail						Asbestos - WA guidelines	Asbestos Absence / Presence	HOLD	Organochlorine Pesticides	Metals M8	Suite B13: OCP/PCB	Aggressivity Soil Set	Moisture Set	Eurofins Suite B7	Eurofins Suite B9	BTEXN and Volatile TRH	BTEXN and Volatile TRH
Melbourne Laboratory - NATA # 1261 Site # 1254										X				X	X		
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X	X	X	X	X	X	X	X	X
42	TP17/0-0.2	Mar 07, 2023		Soil	S23-Ma0031569							X	X		X		
43	TP17/0.4-0.6	Mar 07, 2023		Soil	S23-Ma0031570							X	X		X		
44	TP16/0-0.2	Mar 07, 2023		Soil	S23-Ma0031571				X	X			X				
45	TP51/0-0.3	Mar 07, 2023		Soil	S23-Ma0031572	X											
46	TP18/0-0.2	Mar 07, 2023		Soil	S23-Ma0031573				X	X			X				
47	TP26/0-0.2	Mar 07, 2023		Soil	S23-Ma0031574				X	X			X				
48	TP2/0-0.2	Mar 07, 2023		Soil	S23-Ma0031575						X		X	X			
49	TP2/0-0.7	Mar 07, 2023		Soil	S23-Ma0031576	X											
50	TP38/0-0.6	Mar 07, 2023		Soil	S23-Ma0031577	X											
51	TP8/0.15-1	Mar 07, 2023		Soil	S23-Ma0031578	X											
52	TP8/0.15-0.35	Mar 07, 2023		Soil	S23-Ma0031579						X		X	X			
53	TP39/0-0.6	Mar 07, 2023		Soil	S23-Ma0031580	X											
54	TP3/0-0.2	Mar 07, 2023		Soil	S23-Ma0031581								X		X		
55	TP7/0-0.2	Mar 07, 2023		Soil	S23-Ma0031582								X		X		
56	TP7/0-0.4	Mar 07, 2023		Soil	S23-Ma0031583	X											

Company Name: Geo-Logix P/L
Address: Bld Q2 Level 3, 2309/4 Daydream St
Warriewood
NSW 2102

Project Name: AUSTRAL - PRIMARY
Project ID: 2301008

Order No.: PO5836TP
Report #: 971509
Phone: 02 9979 1722
Fax: 02 9979 1222

Received: Mar 10, 2023 10:27 AM
Due: Mar 17, 2023
Priority: 5 Day
Contact Name: Ted Lilly

Eurofins Analytical Services Manager : Asim Khan

Sample Detail						Asbestos - W/A guidelines	Asbestos Absence / Presence	HOLD	Organochlorine Pesticides	Metals M8	Suite B13: OCP/PCB	Aggressivity Soil Set	Moisture Set	Eurofins Suite B7	Eurofins Suite B9	BTEXN and Volatile TRH	BTEXN and Volatile TRH
Melbourne Laboratory - NATA # 1261 Site # 1254										X				X	X		
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X	X	X	X	X	X	X	X	X
57	TP42/0-0.3	Mar 07, 2023		Soil	S23-Ma0031584	X											
58	TP5/0-0.2	Mar 08, 2023		Soil	S23-Ma0031585				X	X			X				
59	TP41/0-0.3	Mar 08, 2023		Soil	S23-Ma0031586				X	X			X				
60	TP13/0-0.3	Mar 08, 2023		Soil	S23-Ma0031587	X											
61	TP13/0-0.2	Mar 08, 2023		Soil	S23-Ma0031588						X		X	X			
62	TP54/0-0.4	Mar 08, 2023		Soil	S23-Ma0031589	X											
63	TP15/0-0.5	Mar 08, 2023		Soil	S23-Ma0031590	X											
64	TP15/0-0.2	Mar 08, 2023		Soil	S23-Ma0031591						X		X	X			
65	TP22/0-0.2	Mar 08, 2023		Soil	S23-Ma0031592				X	X			X				
66	TP31/0-0.2	Mar 08, 2023		Soil	S23-Ma0031593								X		X		
67	TP59/0-0.2	Mar 08, 2023		Soil	S23-Ma0031594				X	X			X				
68	TP28/0-0.2	Mar 08, 2023		Soil	S23-Ma0031595								X		X		
69	TP29/0-0.2	Mar 08, 2023		Soil	S23-Ma0031596				X	X			X				
70	TP36/0.3-0.5	Mar 08, 2023		Soil	S23-Ma0031597								X		X		
71	DS1	Mar 07, 2023		Soil	S23-Ma0031598								X		X		

Company Name: Geo-Logix P/L
Address: Bld Q2 Level 3, 2309/4 Daydream St
Warriewood
NSW 2102

Project Name: AUSTRAL - PRIMARY
Project ID: 2301008

Order No.: PO5836TP
Report #: 971509
Phone: 02 9979 1722
Fax: 02 9979 1222

Received: Mar 10, 2023 10:27 AM
Due: Mar 17, 2023
Priority: 5 Day
Contact Name: Ted Lilly

Eurofins Analytical Services Manager : Asim Khan

Sample Detail						Asbestos - W/A guidelines	Asbestos Absence / Presence	HOLD	Organochlorine Pesticides	Metals M8	Suite B13: OCP/PCB	Aggressivity Soil Set	Moisture Set	Eurofins Suite B7	Eurofins Suite B9	BTEXN and Volatile TRH	BTEXN and Volatile TRH
Melbourne Laboratory - NATA # 1261 Site # 1254										X				X	X		
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X	X	X	X	X	X	X	X	X
72	DS2	Mar 07, 2023		Soil	S23-Ma0031599				X	X			X				
73	DS3	Mar 08, 2023		Soil	S23-Ma0031600				X	X			X				
74	TP15/A1	Mar 08, 2023		Building Materials	S23-Ma0031601		X										
75	TP13/A1	Mar 08, 2023		Building Materials	S23-Ma0031602		X										
76	TRIPB1	Not Provided		Soil	S23-Ma0031603											X	
77	TRIPS1	Not Provided		Soil	S23-Ma0031604												X
78	TRIPB2	Not Provided		Soil	S23-Ma0031605											X	
79	TRIPS2	Not Provided		Soil	S23-Ma0031606												X
80	R1	Mar 08, 2023		Water	S23-Ma0031607				X	X							
81	TP60/0.2-0.4	Mar 08, 2023		Soil	S23-Ma0031610			X									
82	TP60/0.5-0.7	Mar 08, 2023		Soil	S23-Ma0031611			X									
83	TP37/0.2-0.4	Mar 08, 2023		Soil	S23-Ma0031612			X									
84	TP37/0.9-1.1	Mar 08, 2023		Soil	S23-Ma0031613			X									

Company Name: Geo-Logix P/L
Address: Bld Q2 Level 3, 2309/4 Daydream St
Warriewood
NSW 2102
Project Name: AUSTRAL - PRIMARY
Project ID: 2301008

Order No.: PO5836TP
Report #: 971509
Phone: 02 9979 1722
Fax: 02 9979 1222

Received: Mar 10, 2023 10:27 AM
Due: Mar 17, 2023
Priority: 5 Day
Contact Name: Ted Lilly

Eurofins Analytical Services Manager : Asim Khan

Sample Detail						Asbestos - W/A guidelines	Asbestos Absence / Presence	HOLD	Organochlorine Pesticides	Metals M8	Suite B13: OCP/PCB	Aggressivity Soil Set	Moisture Set	Eurofins Suite B7	Eurofins Suite B9	BTEXN and Volatile TRH	BTEXN and Volatile TRH
Melbourne Laboratory - NATA # 1261 Site # 1254										X				X	X		
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X	X	X	X	X	X	X	X	X
85	TP27/0.3-0.5	Mar 08, 2023		Soil	S23-Ma0031614			X									
86	TP27/1-1.2	Mar 08, 2023		Soil	S23-Ma0031615			X									
87	TP30/0.3-0.5	Mar 08, 2023		Soil	S23-Ma0031616			X									
88	TP30/0.7-0.9	Mar 08, 2023		Soil	S23-Ma0031617			X									
89	TP21/0.2-0.4	Mar 08, 2023		Soil	S23-Ma0031618			X									
90	TP21/0.9-1.1	Mar 08, 2023		Soil	S23-Ma0031619			X									
91	TP23/0.25-0.45	Mar 08, 2023		Soil	S23-Ma0031620			X									
92	TP23/0.9-1.1	Mar 08, 2023		Soil	S23-Ma0031621			X									
93	TP20/0.2-0.4	Mar 08, 2023		Soil	S23-Ma0031622			X									
94	TP12/0.4-0.6	Mar 08, 2023		Soil	S23-Ma0031623			X									
95	TP57/0.15-0.3	Mar 08, 2023		Soil	S23-Ma0031624			X									
96	TP4/0-0.15	Mar 08, 2023		Soil	S23-Ma0031625			X									
97	TP4/0.6-0.8	Mar 08, 2023		Soil	S23-Ma0031626			X									
98	TP19/0.6-0.8	Mar 08, 2023		Soil	S23-Ma0031627			X									

Company Name: Geo-Logix P/L
Address: Bld Q2 Level 3, 2309/4 Daydream St
Warriewood
NSW 2102

Project Name: AUSTRAL - PRIMARY
Project ID: 2301008

Order No.: PO5836TP
Report #: 971509
Phone: 02 9979 1722
Fax: 02 9979 1222

Received: Mar 10, 2023 10:27 AM
Due: Mar 17, 2023
Priority: 5 Day
Contact Name: Ted Lilly

Eurofins Analytical Services Manager : Asim Khan

Sample Detail

Melbourne Laboratory - NATA # 1261 Site # 1254

Sydney Laboratory - NATA # 1261 Site # 18217

99	TP11/0.3-0.5	Mar 08, 2023		Soil	S23-Ma0031628									
100	TP33/0.2-0.4	Mar 06, 2023		Soil	S23-Ma0031629									
101	TP34/0.2-0.3	Mar 06, 2023		Soil	S23-Ma0031630									
102	TP25/0.2-0.4	Mar 07, 2023		Soil	S23-Ma0031631									
103	TP10/0.5-0.7	Mar 06, 2023		Soil	S23-Ma0031632									
104	TP32/0.3-0.4	Mar 07, 2023		Soil	S23-Ma0031633									
105	TP32/0.4-0.6	Mar 07, 2023		Soil	S23-Ma0031634									
106	TP24/0.4-0.6	Mar 07, 2023		Soil	S23-Ma0031635									
107	TP24/0.4-0.6	Mar 07, 2023		Soil	S23-Ma0031636									
108	TP9/0.3-0.4	Mar 07, 2023		Soil	S23-Ma0031637									
109	TP52/0.2-0.2	Mar 07, 2023		Soil	S23-Ma0031638									
110	TP52/0.5-0.6	Mar 07, 2023		Soil	S23-Ma0031639									
111	TP1/0.7-0.8	Mar 07, 2023		Soil	S23-Ma0031640									
112	TP44/0.3-0.5	Mar 07, 2023		Soil	S23-Ma0031641									
113	TP17/0.4-0.4	Mar 07, 2023		Soil	S23-Ma0031642									

Company Name: Geo-Logix P/L
Address: Bld Q2 Level 3, 2309/4 Daydream St
Warriewood
NSW 2102
Project Name: AUSTRAL - PRIMARY
Project ID: 2301008

Order No.: PO5836TP
Report #: 971509
Phone: 02 9979 1722
Fax: 02 9979 1222

Received: Mar 10, 2023 10:27 AM
Due: Mar 17, 2023
Priority: 5 Day
Contact Name: Ted Lilly

Eurofins Analytical Services Manager : Asim Khan

Sample Detail						Asbestos - W/A guidelines	Asbestos Absence / Presence	HOLD	Organochlorine Pesticides	Metals M8	Suite B13: OCP/PCB	Aggressivity Soil Set	Moisture Set	Eurofins Suite B7	Eurofins Suite B9	BTEXN and Volatile TRH	BTEXN and Volatile TRH
Melbourne Laboratory - NATA # 1261 Site # 1254										X				X	X		
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X	X	X	X	X	X	X	X	X
114	TP60/0-0.4	Mar 07, 2023		Soil	S23-Ma0031643			X									
115	TP53/0-0.4	Mar 07, 2023		Soil	S23-Ma0031644			X									
116	TP16/0-0.2	Mar 07, 2023		Soil	S23-Ma0031645			X									
117	TP16/0.4-0.6	Mar 07, 2023		Soil	S23-Ma0031646			X									
118	TP18/0-0.3	Mar 07, 2023		Soil	S23-Ma0031647			X									
119	TP18/0.2-0.5	Mar 07, 2023		Soil	S23-Ma0031648			X									
120	TP59/0-0.4	Mar 07, 2023		Soil	S23-Ma0031649			X									
121	TP26/0-0.3	Mar 07, 2023		Soil	S23-Ma0031650			X									
122	TP26/0.2-0.5	Mar 07, 2023		Soil	S23-Ma0031651			X									
123	TP2/0.7-0.9	Mar 07, 2023		Soil	S23-Ma0031652			X									
124	TP8/0-0.15	Mar 07, 2023		Soil	S23-Ma0031653			X									
125	TP39/0.6-0.8	Mar 07, 2023		Soil	S23-Ma0031654			X									
126	TP3/0.4-0.6	Mar 07, 2023		Soil	S23-Ma0031655			X									
127	TP3/0-0.4	Mar 07, 2023		Soil	S23-Ma0031656			X									
128	TP7/0.4-0.6	Mar 07, 2023		Soil	S23-Ma0031657			X									

Company Name: Geo-Logix P/L
Address: Bld Q2 Level 3, 2309/4 Daydream St
Warriewood
NSW 2102

Project Name: AUSTRAL - PRIMARY
Project ID: 2301008

Order No.: PO5836TP
Report #: 971509
Phone: 02 9979 1722
Fax: 02 9979 1222

Received: Mar 10, 2023 10:27 AM
Due: Mar 17, 2023
Priority: 5 Day
Contact Name: Ted Lilly

Eurofins Analytical Services Manager : Asim Khan

Sample Detail						Asbestos - W/A guidelines	Asbestos Absence / Presence	HOLD	Organochlorine Pesticides	Metals M8	Suite B13: OCP/PCB	Aggressivity Soil Set	Moisture Set	Eurofins Suite B7	Eurofins Suite B9	BTEXN and Volatile TRH	BTEXN and Volatile TRH
Melbourne Laboratory - NATA # 1261 Site # 1254										X				X	X		
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X	X	X	X	X	X	X	X	X
129	TP5/0.3-0.5	Mar 08, 2023		Soil	S23-Ma0031658			X									
130	TP5/0-0.3	Mar 08, 2023		Soil	S23-Ma0031659			X									
131	TP41/0.3-0.7	Mar 08, 2023		Soil	S23-Ma0031660			X									
132	TP13/0.3-0.5	Mar 08, 2023		Soil	S23-Ma0031661			X									
133	TP15/0.5-0.7	Mar 08, 2023		Soil	S23-Ma0031662			X									
134	TP22/0.4-0.6	Mar 08, 2023		Soil	S23-Ma0031663			X									
135	TP31/0.3-0.4	Mar 08, 2023		Soil	S23-Ma0031664			X									
136	TP31/0.4-0.6	Mar 08, 2023		Soil	S23-Ma0031665			X									
137	TP59/0.3-0.5	Mar 08, 2023		Soil	S23-Ma0031666			X									
138	TP28/0.4-0.5	Mar 08, 2023		Soil	S23-Ma0031667			X									
139	TP28/0.5-0.7	Mar 08, 2023		Soil	S23-Ma0031668			X									
140	TP29/0.4-0.6	Mar 08, 2023		Soil	S23-Ma0031669			X									
141	TP36/0-0.2	Mar 08, 2023		Soil	S23-Ma0031670			X									
142	TP8/A1	Mar 07, 2023		Building Materials	S23-Ma0031671			X									

Company Name: Geo-Logix P/L
Address: Bld Q2 Level 3, 2309/4 Daydream St
Warriewood
NSW 2102
Project Name: AUSTRAL - PRIMARY
Project ID: 2301008

Order No.: PO5836TP
Report #: 971509
Phone: 02 9979 1722
Fax: 02 9979 1222

Received: Mar 10, 2023 10:27 AM
Due: Mar 17, 2023
Priority: 5 Day
Contact Name: Ted Lilly

Eurofins Analytical Services Manager : Asim Khan

Sample Detail						Asbestos - W/A guidelines	Asbestos Absence / Presence	HOLD	Organochlorine Pesticides	Metals M8	Suite B13: OCP/PCB	Aggressivity Soil Set	Moisture Set	Eurofins Suite B7	Eurofins Suite B9	BTEXN and Volatile TRH	BTEXN and Volatile TRH
Melbourne Laboratory - NATA # 1261 Site # 1254										X				X	X		
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X	X	X	X	X	X	X	X	X
143	TP2/A1	Mar 07, 2023		Building Materials	S23-Ma0031672			X									
144	TP2/A2	Mar 07, 2023		Building Materials	S23-Ma0031673			X									
145	BH1/0-0.2	Mar 07, 2023		Soil	S23-Ma0031674			X									
146	BH1/3.2-3.5	Mar 07, 2023		Soil	S23-Ma0031675			X									
147	BH2/1.6-1.8	Mar 07, 2023		Soil	S23-Ma0031676			X									
148	BH2/2.3-2.5	Mar 07, 2023		Soil	S23-Ma0031677			X									
149	BH2/6-6.2	Mar 07, 2023		Soil	S23-Ma0031678			X									
150	BH3/2-2.2	Mar 07, 2023		Soil	S23-Ma0031679			X									
151	BH3/3-3.2	Mar 07, 2023		Soil	S23-Ma0031680			X									
152	BH4/2-2.2	Mar 07, 2023		Soil	S23-Ma0031681			X									
153	BH4/5.5-5.7	Mar 07, 2023		Soil	S23-Ma0031682			X									
Test Counts						28	2	73	25	25	5	7	50	5	18	2	2

Internal Quality Control Review and Glossary

General

- 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.
- All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
- All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
- Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
- Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
- SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
- Samples were analysed on an 'as received' basis.
- Information identified on this report with blue colour, indicates data provided by customer that may have an impact on the results.
- 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
CP	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.
TBTO	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

- 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.
- 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.
- 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.
- Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of recovery the term "INT" appears against that analyte.
- For Matrix Spikes and LCS results a dash "-" in the report means that the specific analyte was not added to the QC sample.
- 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/L	< 0.002			0.002	Pass	
4,4'-DDD	mg/L	< 0.0002			0.0002	Pass	
4,4'-DDE	mg/L	< 0.0002			0.0002	Pass	
4,4'-DDT	mg/L	< 0.0002			0.0002	Pass	
a-HCH	mg/L	< 0.0002			0.0002	Pass	
Aldrin	mg/L	< 0.0002			0.0002	Pass	
b-HCH	mg/L	< 0.0002			0.0002	Pass	
d-HCH	mg/L	< 0.0002			0.0002	Pass	
Dieldrin	mg/L	< 0.0002			0.0002	Pass	
Endosulfan I	mg/L	< 0.0002			0.0002	Pass	
Endosulfan II	mg/L	< 0.0002			0.0002	Pass	
Endosulfan sulphate	mg/L	< 0.0002			0.0002	Pass	
Endrin	mg/L	< 0.0002			0.0002	Pass	
Endrin aldehyde	mg/L	< 0.0002			0.0002	Pass	
Endrin ketone	mg/L	< 0.0002			0.0002	Pass	
g-HCH (Lindane)	mg/L	< 0.0002			0.0002	Pass	
Heptachlor	mg/L	< 0.0002			0.0002	Pass	
Heptachlor epoxide	mg/L	< 0.0002			0.0002	Pass	
Hexachlorobenzene	mg/L	< 0.0002			0.0002	Pass	
Methoxychlor	mg/L	< 0.0002			0.0002	Pass	
Toxaphene	mg/L	< 0.005			0.005	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	mg/L	< 0.005			0.005	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
Chlordanes - Total	%	86			70-130	Pass	
4,4'-DDD	%	104			70-130	Pass	
4,4'-DDE	%	88			70-130	Pass	
4,4'-DDT	%	104			70-130	Pass	
a-HCH	%	103			70-130	Pass	
Aldrin	%	106			70-130	Pass	
b-HCH	%	113			70-130	Pass	
d-HCH	%	110			70-130	Pass	
Dieldrin	%	101			70-130	Pass	
Endosulfan I	%	102			70-130	Pass	
Endosulfan II	%	108			70-130	Pass	
Endrin	%	84			70-130	Pass	
Endrin ketone	%	88			70-130	Pass	
g-HCH (Lindane)	%	112			70-130	Pass	
Heptachlor	%	107			70-130	Pass	
Heptachlor epoxide	%	95			70-130	Pass	
Hexachlorobenzene	%	87			70-130	Pass	

Test				Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Methoxychlor				%	122			70-130	Pass	
LCS - % Recovery										
Heavy Metals										
Arsenic				%	91			80-120	Pass	
Cadmium				%	94			80-120	Pass	
Chromium				%	97			80-120	Pass	
Copper				%	98			80-120	Pass	
Lead				%	97			80-120	Pass	
Mercury				%	108			80-120	Pass	
Nickel				%	98			80-120	Pass	
Zinc				%	94			80-120	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-Ma0029272	NCP	%		84			70-130	Pass	
4,4'-DDD	S23-Ma0029272	NCP	%		92			70-130	Pass	
4,4'-DDE	S23-Ma0029272	NCP	%		82			70-130	Pass	
4,4'-DDT	S23-Ma0029272	NCP	%		97			70-130	Pass	
a-HCH	S23-Ma0029272	NCP	%		83			70-130	Pass	
Aldrin	S23-Ma0029272	NCP	%		90			70-130	Pass	
b-HCH	S23-Ma0029272	NCP	%		90			70-130	Pass	
d-HCH	S23-Ma0029272	NCP	%		95			70-130	Pass	
Dieldrin	S23-Ma0029272	NCP	%		91			70-130	Pass	
Endosulfan I	S23-Ma0029272	NCP	%		88			70-130	Pass	
Endosulfan II	S23-Ma0029272	NCP	%		93			70-130	Pass	
Endosulfan sulphate	S23-Ma0029272	NCP	%		71			70-130	Pass	
Endrin	S23-Ma0029272	NCP	%		87			70-130	Pass	
Endrin ketone	S23-Ma0029272	NCP	%		84			70-130	Pass	
g-HCH (Lindane)	S23-Ma0029272	NCP	%		104			70-130	Pass	
Heptachlor	S23-Ma0029272	NCP	%		98			70-130	Pass	
Heptachlor epoxide	S23-Ma0029272	NCP	%		89			70-130	Pass	
Hexachlorobenzene	S23-Ma0029272	NCP	%		75			70-130	Pass	
Methoxychlor	S23-Ma0029272	NCP	%		120			70-130	Pass	
Spike - % Recovery										
Heavy Metals					Result 1					
Arsenic	S23-Ma0026267	NCP	%		82			75-125	Pass	
Cadmium	S23-Ma0026267	NCP	%		81			75-125	Pass	
Chromium	S23-Ma0026267	NCP	%		80			75-125	Pass	
Copper	S23-Ma0026267	NCP	%		80			75-125	Pass	
Lead	S23-Ma0026267	NCP	%		80			75-125	Pass	
Mercury	S23-Ma0026267	NCP	%		88			75-125	Pass	
Nickel	S23-Ma0026267	NCP	%		80			75-125	Pass	
Zinc	N23-Ma0045674	NCP	%		90			75-125	Pass	
Test	Lab Sample ID	QA Source		Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate										
Heavy Metals					Result 1	Result 2	RPD			
Arsenic	S23-Ma0028908	NCP	mg/L		< 0.001	< 0.001	<1	30%	Pass	
Cadmium	S23-Ma0028908	NCP	mg/L		0.0002	0.0002	7.3	30%	Pass	
Chromium	S23-Ma0028908	NCP	mg/L		0.007	0.007	1.3	30%	Pass	
Copper	S23-Ma0028908	NCP	mg/L		< 0.001	< 0.001	<1	30%	Pass	
Lead	S23-Ma0028908	NCP	mg/L		< 0.001	< 0.001	<1	30%	Pass	
Mercury	S23-Ma0028908	NCP	mg/L		< 0.0001	< 0.0001	<1	30%	Pass	
Nickel	S23-Ma0028908	NCP	mg/L		0.014	0.014	4.1	30%	Pass	
Zinc	S23-Ma0031607	CP	mg/L		< 0.005	< 0.005	<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	N/A
Some samples have been subcontracted	No

Authorised by:

Adam Bateup	Analytical Services Manager
Fang Yee Tan	Senior Analyst-Metal
Roopesh Rangarajan	Senior Analyst-Organic



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](#).

Eurofins shall not be liable for loss, cost, damages or expenses incurred by the client, or any other person or company, resulting from the use of any information or interpretation given in this report. In no case shall Eurofins be liable for consequential damages including, but not limited to, lost profits, damages for failure to meet deadlines and lost production arising from this report. This document shall not be reproduced except in full and relates only to the items tested. Unless indicated otherwise, the tests were performed on the samples as received.

Geo-Logix P/L
Bld Q2 Level 3, 2309/4 Daydream St
Warriewood
NSW 2102



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: Ted Lilly
Report 971509-AID
Project Name AUSTRAL - PRIMARY
Project ID 2301008
Received Date Mar 10, 2023
Date Reported Mar 28, 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 AUSTRAL - PRIMARY
Project ID 2301008
Date Sampled Mar 06, 2023 to Mar 08, 2023
Report 971509-AID

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
TP56/0-0.2	23-Ma0031535	Mar 08, 2023	Approximate Sample 802g 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.
TP48/0-0.2	23-Ma0031538	Mar 08, 2023	Approximate Sample 700g 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.
TP14/0-0.2	23-Ma0031539	Mar 08, 2023	Approximate Sample 838g 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.
TP55/0-0.2	23-Ma0031541	Mar 08, 2023	Approximate Sample 782g 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.
TP12/0-0.2	23-Ma0031543	Mar 08, 2023	Approximate Sample 815g 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.
TP57/0-0.15	23-Ma0031545	Mar 08, 2023	Approximate Sample 607g Sample consisted of: Brown coarse- grained sandy clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
TP6/0-0.2	23-Ma0031547	Mar 08, 2023	Approximate Sample 724g 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.
TP46/0-0.2	23-Ma0031549	Mar 08, 2023	Approximate Sample 617g 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
TP43/0-0.2	23-Ma0031550	Mar 08, 2023	Approximate Sample 704g 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.
TP47/0-0.2	23-Ma0031551	Mar 08, 2023	Approximate Sample 795g 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.
TP49/0-0.2	23-Ma0031552	Mar 08, 2023	Approximate Sample 820g 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.
TP50/0-0.2	23-Ma0031554	Mar 08, 2023	Approximate Sample 928g Sample consisted of: Brown coarse- grained sandy clayey soil, cement and rocks	FA: Chrysotile and amosite asbestos detected in weathered fibre cement fragments. Approximate raw weight of FA = 0.020g Estimated asbestos content in FA = 0.0050g* AF: Chrysotile and amosite asbestos detected in fibre cement fragments. Approximate raw weight of AF = 0.22g* Estimated asbestos content in AF = 0.022g* Total estimated asbestos content in FA and AF = 0.027g* Total estimated asbestos concentration in FA and AF = 0.0029% w/w* Organic fibre detected. No trace asbestos detected.
TP10/0-0.2	23-Ma0031560	Mar 06, 2023	Approximate Sample 501g 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.
TP45/0-0.2	23-Ma0031561	Mar 06, 2023	Approximate Sample 545g 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.
TP9/0-0.3	23-Ma0031564	Mar 07, 2023	Approximate Sample 742g 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.
TP52/0-0.5	23-Ma0031565	Mar 07, 2023	Approximate Sample 628g 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.
TP1/0.3-0.5	23-Ma0031567	Mar 07, 2023	Approximate Sample 703g 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
TP44/0.15-0.35	23-Ma0031568	Mar 07, 2023	Approximate Sample 593g 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.
TP51/0-0.3	23-Ma0031572	Mar 07, 2023	Approximate Sample 721g 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.
TP2/0-0.7	23-Ma0031576	Mar 07, 2023	Approximate Sample 754g Sample consisted of: Brown fine-grained clayey soil, bitumen, brick, cement, ceramic material and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
TP38/0-0.6	23-Ma0031577	Mar 07, 2023	Approximate Sample 780g Sample consisted of: Brown fine-grained clayey soil, brick and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
TP8/0.15-1	23-Ma0031578	Mar 07, 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.
TP39/0-0.6	23-Ma0031580	Mar 07, 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.
TP7/0-0.4	23-Ma0031583	Mar 07, 2023	Approximate Sample 670g 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.
TP42/0-0.3	23-Ma0031584	Mar 07, 2023	Approximate Sample 503g 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.
TP13/0-0.3	23-Ma0031587	Mar 08, 2023	Approximate Sample 712g Sample consisted of: Brown fine-grained clayey soil, fragments of plaster, ceramic and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
TP54/0-0.4	23-Ma0031589	Mar 08, 2023	Approximate Sample 641g 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.
TP15/0-0.5	23-Ma0031590	Mar 08, 2023	Approximate Sample 872g Sample consisted of: Brown fine-grained clayey soil and rocks	FA: Chrysotile and amosite asbestos detected in weathered fibre cement fragments. Approximate raw weight of FA = 0.036g Estimated asbestos content in FA = 0.014g* Total estimated asbestos concentration in FA = 0.0016% w/w* Organic fibre detected. No trace asbestos detected.

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
TP15/A1	23-Ma0031601	Mar 08, 2023	Approximate Sample 5g / 25x15x3mm Sample consisted of: Grey fibre cement material	Chrysotile and amosite asbestos detected.
TP13/A1	23-Ma0031602	Mar 08, 2023	Approximate Sample 30g / 55x20x3mm Sample consisted of: Grey plaster cement material	No asbestos detected. No trace asbestos detected.

Sample History

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

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

Description	Testing Site	Extracted	Holding Time
Asbestos - LTM-ASB-8020	Sydney	Mar 14, 2023	Indefinite
Asbestos - LTM-ASB-8020	Sydney	Mar 14, 2023	Indefinite

Company Name: Geo-Logix P/L
Address: Bld Q2 Level 3, 2309/4 Daydream St
Warriewood
NSW 2102

Project Name: AUSTRAL - PRIMARY
Project ID: 2301008

Order No.: PO5836TP
Report #: 971509
Phone: 02 9979 1722
Fax: 02 9979 1222

Received: Mar 10, 2023 10:27 AM
Due: Mar 17, 2023
Priority: 5 Day
Contact Name: Ted Lilly

Eurofins Analytical Services Manager : Asim Khan

Sample Detail						Asbestos - W/A guidelines	Asbestos Absence / Presence	HOLD	Organochlorine Pesticides	Metals M8	Suite B13: OCP/PCB	Aggressivity Soil Set	Moisture Set	Eurofins Suite B7	Eurofins Suite B9	BTEXN and Volatile TRH	BTEXN and Volatile TRH
Melbourne Laboratory - NATA # 1261 Site # 1254										X				X	X		
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X	X	X	X	X	X	X	X	X
External Laboratory																	
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID												
1	TP60/0-0.2	Mar 08, 2023		Soil	S23-Ma0031528				X	X			X				
2	TP37/0-0.2	Mar 08, 2023		Soil	S23-Ma0031529				X	X			X				
3	TP27/0-0.2	Mar 08, 2023		Soil	S23-Ma0031530				X	X			X				
4	TP30/0-0.2	Mar 08, 2023		Soil	S23-Ma0031531				X	X			X				
5	TP35/0-0.2	Mar 08, 2023		Soil	S23-Ma0031532							X	X		X		
6	TP35/0.3-0.5	Mar 08, 2023		Soil	S23-Ma0031533							X	X				
7	TP35/0.6-0.8	Mar 08, 2023		Soil	S23-Ma0031534							X	X				
8	TP56/0-0.2	Mar 08, 2023		Soil	S23-Ma0031535	X											
9	TP21/0-0.2	Mar 08, 2023		Soil	S23-Ma0031536				X	X			X				
10	TP23/0-0.2	Mar 08, 2023		Soil	S23-Ma0031537								X		X		
11	TP48/0-0.2	Mar 08, 2023		Soil	S23-Ma0031538	X											
12	TP14/0-0.2	Mar 08, 2023		Soil	S23-Ma0031539	X						X	X		X		

Company Name: Geo-Logix P/L
Address: Bld Q2 Level 3, 2309/4 Daydream St
Warriewood
NSW 2102
Project Name: AUSTRAL - PRIMARY
Project ID: 2301008

Order No.: PO5836TP
Report #: 971509
Phone: 02 9979 1722
Fax: 02 9979 1222

Received: Mar 10, 2023 10:27 AM
Due: Mar 17, 2023
Priority: 5 Day
Contact Name: Ted Lilly

Eurofins Analytical Services Manager : Asim Khan

Sample Detail						Asbestos - W/A guidelines	Asbestos Absence / Presence	HOLD	Organochlorine Pesticides	Metals M8	Suite B13: OCP/PCB	Aggressivity Soil Set	Moisture Set	Eurofins Suite B7	Eurofins Suite B9	BTEXN and Volatile TRH	BTEXN and Volatile TRH
Melbourne Laboratory - NATA # 1261 Site # 1254										X				X	X		
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X	X	X	X	X	X	X	X	X
13	TP14/0.3-0.5	Mar 08, 2023		Soil	S23-Ma0031540							X	X				
14	TP55/0-0.2	Mar 08, 2023		Soil	S23-Ma0031541	X											
15	TP20/0-0.2	Mar 08, 2023		Soil	S23-Ma0031542				X	X			X				
16	TP12/0-0.2	Mar 08, 2023		Soil	S23-Ma0031543	X							X		X		
17	TP57/0.3-0.5	Mar 08, 2023		Soil	S23-Ma0031544						X		X	X			
18	TP57/0-0.15	Mar 08, 2023		Soil	S23-Ma0031545	X											
19	TP4/0.15-0.35	Mar 08, 2023		Soil	S23-Ma0031546								X		X		
20	TP6/0-0.2	Mar 08, 2023		Soil	S23-Ma0031547	X											
21	TP6/0.2-0.4	Mar 08, 2023		Soil	S23-Ma0031548								X		X		
22	TP46/0-0.2	Mar 08, 2023		Soil	S23-Ma0031549	X											
23	TP43/0-0.2	Mar 08, 2023		Soil	S23-Ma0031550	X											
24	TP47/0-0.2	Mar 08, 2023		Soil	S23-Ma0031551	X											
25	TP49/0-0.2	Mar 08, 2023		Soil	S23-Ma0031552	X											
26	TP19/0-0.2	Mar 08, 2023		Soil	S23-Ma0031553				X	X			X				
27	TP50/0-0.2	Mar 08, 2023		Soil	S23-Ma0031554	X											

Company Name: Geo-Logix P/L
Address: Bld Q2 Level 3, 2309/4 Daydream St
Warriewood
NSW 2102
Project Name: AUSTRAL - PRIMARY
Project ID: 2301008

Order No.: PO5836TP
Report #: 971509
Phone: 02 9979 1722
Fax: 02 9979 1222

Received: Mar 10, 2023 10:27 AM
Due: Mar 17, 2023
Priority: 5 Day
Contact Name: Ted Lilly

Eurofins Analytical Services Manager : Asim Khan

Sample Detail						Asbestos - W/A guidelines	Asbestos Absence / Presence	HOLD	Organochlorine Pesticides	Metals M8	Suite B13: OCP/PCB	Aggressivity Soil Set	Moisture Set	Eurofins Suite B7	Eurofins Suite B9	BTEXN and Volatile TRH	BTEXN and Volatile TRH
Melbourne Laboratory - NATA # 1261 Site # 1254										X				X	X		
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X	X	X	X	X	X	X	X	X
28	TP11/0-0.2	Mar 08, 2023		Soil	S23-Ma0031555				X	X			X				
29	TP33/0-0.1	Mar 08, 2023		Soil	S23-Ma0031556				X	X			X				
30	TP40/0-0.1	Mar 07, 2023		Soil	S23-Ma0031557				X	X			X				
31	TP34/0-0.1	Mar 06, 2023		Soil	S23-Ma0031558				X	X			X				
32	TP25/0-0.1	Mar 06, 2023		Soil	S23-Ma0031559				X	X			X				
33	TP10/0-0.2	Mar 06, 2023		Soil	S23-Ma0031560	X							X		X		
34	TP45/0-0.2	Mar 06, 2023		Soil	S23-Ma0031561	X											
35	TP32/0-0.3	Mar 07, 2023		Soil	S23-Ma0031562				X	X			X				
36	TP24/0-0.2	Mar 07, 2023		Soil	S23-Ma0031563				X	X			X				
37	TP9/0-0.3	Mar 07, 2023		Soil	S23-Ma0031564	X							X		X		
38	TP52/0-0.5	Mar 07, 2023		Soil	S23-Ma0031565	X											
39	TP1/0.1-0.3	Mar 07, 2023		Soil	S23-Ma0031566								X		X		
40	TP1/0.3-0.5	Mar 07, 2023		Soil	S23-Ma0031567	X							X		X		
41	TP44/0.15-0.35	Mar 07, 2023		Soil	S23-Ma0031568	X											

Company Name: Geo-Logix P/L
Address: Bld Q2 Level 3, 2309/4 Daydream St
Warriewood
NSW 2102

Project Name: AUSTRAL - PRIMARY
Project ID: 2301008

Order No.: PO5836TP
Report #: 971509
Phone: 02 9979 1722
Fax: 02 9979 1222

Received: Mar 10, 2023 10:27 AM
Due: Mar 17, 2023
Priority: 5 Day
Contact Name: Ted Lilly

Eurofins Analytical Services Manager : Asim Khan

Sample Detail						Asbestos - WA guidelines	Asbestos Absence / Presence	HOLD	Organochlorine Pesticides	Metals M8	Suite B13: OCP/PCB	Aggressivity Soil Set	Moisture Set	Eurofins Suite B7	Eurofins Suite B9	BTEXN and Volatile TRH	BTEXN and Volatile TRH
Melbourne Laboratory - NATA # 1261 Site # 1254										X				X	X		
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X	X	X	X	X	X	X	X	X
42	TP17/0-0.2	Mar 07, 2023		Soil	S23-Ma0031569							X	X		X		
43	TP17/0.4-0.6	Mar 07, 2023		Soil	S23-Ma0031570							X	X		X		
44	TP16/0-0.2	Mar 07, 2023		Soil	S23-Ma0031571				X	X			X				
45	TP51/0-0.3	Mar 07, 2023		Soil	S23-Ma0031572	X											
46	TP18/0-0.2	Mar 07, 2023		Soil	S23-Ma0031573				X	X			X				
47	TP26/0-0.2	Mar 07, 2023		Soil	S23-Ma0031574				X	X			X				
48	TP2/0-0.2	Mar 07, 2023		Soil	S23-Ma0031575						X		X	X			
49	TP2/0-0.7	Mar 07, 2023		Soil	S23-Ma0031576	X											
50	TP38/0-0.6	Mar 07, 2023		Soil	S23-Ma0031577	X											
51	TP8/0.15-1	Mar 07, 2023		Soil	S23-Ma0031578	X											
52	TP8/0.15-0.35	Mar 07, 2023		Soil	S23-Ma0031579						X		X	X			
53	TP39/0-0.6	Mar 07, 2023		Soil	S23-Ma0031580	X											
54	TP3/0-0.2	Mar 07, 2023		Soil	S23-Ma0031581								X		X		
55	TP7/0-0.2	Mar 07, 2023		Soil	S23-Ma0031582								X		X		
56	TP7/0-0.4	Mar 07, 2023		Soil	S23-Ma0031583	X											

Company Name: Geo-Logix P/L
Address: Bld Q2 Level 3, 2309/4 Daydream St
Warriewood
NSW 2102

Project Name: AUSTRAL - PRIMARY
Project ID: 2301008

Order No.: PO5836TP
Report #: 971509
Phone: 02 9979 1722
Fax: 02 9979 1222

Received: Mar 10, 2023 10:27 AM
Due: Mar 17, 2023
Priority: 5 Day
Contact Name: Ted Lilly

Eurofins Analytical Services Manager : Asim Khan

Sample Detail						Asbestos - W/A guidelines	Asbestos Absence / Presence	HOLD	Organochlorine Pesticides	Metals M8	Suite B13: OCP/PCB	Aggressivity Soil Set	Moisture Set	Eurofins Suite B7	Eurofins Suite B9	BTEXN and Volatile TRH	BTEXN and Volatile TRH
Melbourne Laboratory - NATA # 1261 Site # 1254										X				X	X		
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X	X	X	X	X	X	X	X	X
57	TP42/0-0.3	Mar 07, 2023		Soil	S23-Ma0031584	X											
58	TP5/0-0.2	Mar 08, 2023		Soil	S23-Ma0031585				X	X			X				
59	TP41/0-0.3	Mar 08, 2023		Soil	S23-Ma0031586				X	X			X				
60	TP13/0-0.3	Mar 08, 2023		Soil	S23-Ma0031587	X											
61	TP13/0-0.2	Mar 08, 2023		Soil	S23-Ma0031588						X		X	X			
62	TP54/0-0.4	Mar 08, 2023		Soil	S23-Ma0031589	X											
63	TP15/0-0.5	Mar 08, 2023		Soil	S23-Ma0031590	X											
64	TP15/0-0.2	Mar 08, 2023		Soil	S23-Ma0031591						X		X	X			
65	TP22/0-0.2	Mar 08, 2023		Soil	S23-Ma0031592				X	X			X				
66	TP31/0-0.2	Mar 08, 2023		Soil	S23-Ma0031593								X		X		
67	TP59/0-0.2	Mar 08, 2023		Soil	S23-Ma0031594				X	X			X				
68	TP28/0-0.2	Mar 08, 2023		Soil	S23-Ma0031595								X		X		
69	TP29/0-0.2	Mar 08, 2023		Soil	S23-Ma0031596				X	X			X				
70	TP36/0.3-0.5	Mar 08, 2023		Soil	S23-Ma0031597								X		X		
71	DS1	Mar 07, 2023		Soil	S23-Ma0031598								X		X		

Company Name: Geo-Logix P/L
Address: Bld Q2 Level 3, 2309/4 Daydream St
Warriewood
NSW 2102
Project Name: AUSTRAL - PRIMARY
Project ID: 2301008

Order No.: PO5836TP
Report #: 971509
Phone: 02 9979 1722
Fax: 02 9979 1222

Received: Mar 10, 2023 10:27 AM
Due: Mar 17, 2023
Priority: 5 Day
Contact Name: Ted Lilly

Eurofins Analytical Services Manager : Asim Khan

Sample Detail						Asbestos - W/A guidelines	Asbestos Absence / Presence	HOLD	Organochlorine Pesticides	Metals M8	Suite B13: OCP/PCB	Aggressivity Soil Set	Moisture Set	Eurofins Suite B7	Eurofins Suite B9	BTEXN and Volatile TRH	BTEXN and Volatile TRH
Melbourne Laboratory - NATA # 1261 Site # 1254										X				X	X		
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X	X	X	X	X	X	X	X	X
72	DS2	Mar 07, 2023		Soil	S23-Ma0031599				X	X			X				
73	DS3	Mar 08, 2023		Soil	S23-Ma0031600				X	X			X				
74	TP15/A1	Mar 08, 2023		Building Materials	S23-Ma0031601		X										
75	TP13/A1	Mar 08, 2023		Building Materials	S23-Ma0031602		X										
76	TRIPB1	Not Provided		Soil	S23-Ma0031603											X	
77	TRIPS1	Not Provided		Soil	S23-Ma0031604												X
78	TRIPB2	Not Provided		Soil	S23-Ma0031605											X	
79	TRIPS2	Not Provided		Soil	S23-Ma0031606												X
80	R1	Mar 08, 2023		Water	S23-Ma0031607				X	X							
81	TP60/0.2-0.4	Mar 08, 2023		Soil	S23-Ma0031610			X									
82	TP60/0.5-0.7	Mar 08, 2023		Soil	S23-Ma0031611			X									
83	TP37/0.2-0.4	Mar 08, 2023		Soil	S23-Ma0031612			X									
84	TP37/0.9-1.1	Mar 08, 2023		Soil	S23-Ma0031613			X									

Company Name: Geo-Logix P/L
Address: Bld Q2 Level 3, 2309/4 Daydream St
Warriewood
NSW 2102
Project Name: AUSTRAL - PRIMARY
Project ID: 2301008

Order No.: PO5836TP
Report #: 971509
Phone: 02 9979 1722
Fax: 02 9979 1222

Received: Mar 10, 2023 10:27 AM
Due: Mar 17, 2023
Priority: 5 Day
Contact Name: Ted Lilly

Eurofins Analytical Services Manager : Asim Khan

Sample Detail						Asbestos - W/A guidelines	Asbestos Absence / Presence	HOLD	Organochlorine Pesticides	Metals M8	Suite B13: OCP/PCB	Aggressivity Soil Set	Moisture Set	Eurofins Suite B7	Eurofins Suite B9	BTEXN and Volatile TRH	BTEXN and Volatile TRH
Melbourne Laboratory - NATA # 1261 Site # 1254										X				X	X		
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X	X	X	X	X	X	X	X	X
85	TP27/0.3-0.5	Mar 08, 2023		Soil	S23-Ma0031614			X									
86	TP27/1-1.2	Mar 08, 2023		Soil	S23-Ma0031615			X									
87	TP30/0.3-0.5	Mar 08, 2023		Soil	S23-Ma0031616			X									
88	TP30/0.7-0.9	Mar 08, 2023		Soil	S23-Ma0031617			X									
89	TP21/0.2-0.4	Mar 08, 2023		Soil	S23-Ma0031618			X									
90	TP21/0.9-1.1	Mar 08, 2023		Soil	S23-Ma0031619			X									
91	TP23/0.25-0.45	Mar 08, 2023		Soil	S23-Ma0031620			X									
92	TP23/0.9-1.1	Mar 08, 2023		Soil	S23-Ma0031621			X									
93	TP20/0.2-0.4	Mar 08, 2023		Soil	S23-Ma0031622			X									
94	TP12/0.4-0.6	Mar 08, 2023		Soil	S23-Ma0031623			X									
95	TP57/0.15-0.3	Mar 08, 2023		Soil	S23-Ma0031624			X									
96	TP4/0-0.15	Mar 08, 2023		Soil	S23-Ma0031625			X									
97	TP4/0.6-0.8	Mar 08, 2023		Soil	S23-Ma0031626			X									
98	TP19/0.6-0.8	Mar 08, 2023		Soil	S23-Ma0031627			X									

Company Name: Geo-Logix P/L
Address: Bld Q2 Level 3, 2309/4 Daydream St
Warriewood
NSW 2102

Project Name: AUSTRAL - PRIMARY
Project ID: 2301008

Order No.: PO5836TP
Report #: 971509
Phone: 02 9979 1722
Fax: 02 9979 1222

Received: Mar 10, 2023 10:27 AM
Due: Mar 17, 2023
Priority: 5 Day
Contact Name: Ted Lilly

Eurofins Analytical Services Manager : Asim Khan

Sample Detail						Asbestos - W/A guidelines	Asbestos Absence / Presence	HOLD	Organochlorine Pesticides	Metals M8	Suite B13: OCP/PCB	Aggressivity Soil Set	Moisture Set	Eurofins Suite B7	Eurofins Suite B9	BTEXN and Volatile TRH	BTEXN and Volatile TRH
Melbourne Laboratory - NATA # 1261 Site # 1254										X				X	X		
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X	X	X	X	X	X	X	X	X
99	TP11/0.3-0.5	Mar 08, 2023		Soil	S23-Ma0031628			X									
100	TP33/0.2-0.4	Mar 06, 2023		Soil	S23-Ma0031629			X									
101	TP34/0.2-0.3	Mar 06, 2023		Soil	S23-Ma0031630			X									
102	TP25/0.2-0.4	Mar 07, 2023		Soil	S23-Ma0031631			X									
103	TP10/0.5-0.7	Mar 06, 2023		Soil	S23-Ma0031632			X									
104	TP32/0.3-0.4	Mar 07, 2023		Soil	S23-Ma0031633			X									
105	TP32/0.4-0.6	Mar 07, 2023		Soil	S23-Ma0031634			X									
106	TP24/0-0.4	Mar 07, 2023		Soil	S23-Ma0031635			X									
107	TP24/0.4-0.6	Mar 07, 2023		Soil	S23-Ma0031636			X									
108	TP9/0.3-0.4	Mar 07, 2023		Soil	S23-Ma0031637			X									
109	TP52/0-0.2	Mar 07, 2023		Soil	S23-Ma0031638			X									
110	TP52/0.5-0.6	Mar 07, 2023		Soil	S23-Ma0031639			X									
111	TP1/0.7-0.8	Mar 07, 2023		Soil	S23-Ma0031640			X									
112	TP44/0.3-0.5	Mar 07, 2023		Soil	S23-Ma0031641			X									
113	TP17/0-0.4	Mar 07, 2023		Soil	S23-Ma0031642			X									

Company Name: Geo-Logix P/L
Address: Bld Q2 Level 3, 2309/4 Daydream St
Warriewood
NSW 2102

Project Name: AUSTRAL - PRIMARY
Project ID: 2301008

Order No.: PO5836TP
Report #: 971509
Phone: 02 9979 1722
Fax: 02 9979 1222

Received: Mar 10, 2023 10:27 AM
Due: Mar 17, 2023
Priority: 5 Day
Contact Name: Ted Lilly

Eurofins Analytical Services Manager : Asim Khan

Sample Detail						Asbestos - W/A guidelines	Asbestos Absence / Presence	HOLD	Organochlorine Pesticides	Metals M8	Suite B13: OCP/PCB	Aggressivity Soil Set	Moisture Set	Eurofins Suite B7	Eurofins Suite B9	BTEXN and Volatile TRH	BTEXN and Volatile TRH
Melbourne Laboratory - NATA # 1261 Site # 1254										X				X	X		
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X	X	X	X	X	X	X	X	X
114	TP60/0-0.4	Mar 07, 2023		Soil	S23-Ma0031643			X									
115	TP53/0-0.4	Mar 07, 2023		Soil	S23-Ma0031644			X									
116	TP16/0-0.2	Mar 07, 2023		Soil	S23-Ma0031645			X									
117	TP16/0.4-0.6	Mar 07, 2023		Soil	S23-Ma0031646			X									
118	TP18/0-0.3	Mar 07, 2023		Soil	S23-Ma0031647			X									
119	TP18/0.2-0.5	Mar 07, 2023		Soil	S23-Ma0031648			X									
120	TP59/0-0.4	Mar 07, 2023		Soil	S23-Ma0031649			X									
121	TP26/0-0.3	Mar 07, 2023		Soil	S23-Ma0031650			X									
122	TP26/0.2-0.5	Mar 07, 2023		Soil	S23-Ma0031651			X									
123	TP2/0.7-0.9	Mar 07, 2023		Soil	S23-Ma0031652			X									
124	TP8/0-0.15	Mar 07, 2023		Soil	S23-Ma0031653			X									
125	TP39/0.6-0.8	Mar 07, 2023		Soil	S23-Ma0031654			X									
126	TP3/0.4-0.6	Mar 07, 2023		Soil	S23-Ma0031655			X									
127	TP3/0-0.4	Mar 07, 2023		Soil	S23-Ma0031656			X									
128	TP7/0.4-0.6	Mar 07, 2023		Soil	S23-Ma0031657			X									

Company Name:	Geo-Logix P/L	Order No.:	PO5836TP	Received:	Mar 10, 2023 10:27 AM
Address:	Bld Q2 Level 3, 2309/4 Daydream St Warriewood NSW 2102	Report #:	971509	Due:	Mar 17, 2023
Project Name:	AUSTRAL - PRIMARY	Phone:	02 9979 1722	Priority:	5 Day
Project ID:	2301008	Fax:	02 9979 1222	Contact Name:	Ted Lilly

Eurofins Analytical Services Manager : Asim Khan

Sample Detail						Asbestos - W/A guidelines	Asbestos Absence / Presence	HOLD	Organochlorine Pesticides	Metals M8	Suite B13: OCP/PCB	Aggressivity Soil Set	Moisture Set	Eurofins Suite B7	Eurofins Suite B9	BTEXN and Volatile TRH	BTEXN and Volatile TRH
Melbourne Laboratory - NATA # 1261 Site # 1254										X				X	X		
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X	X	X	X	X	X	X	X	X
129	TP5/0.3-0.5	Mar 08, 2023		Soil	S23-Ma0031658			X									
130	TP5/0-0.3	Mar 08, 2023		Soil	S23-Ma0031659			X									
131	TP41/0.3-0.7	Mar 08, 2023		Soil	S23-Ma0031660			X									
132	TP13/0.3-0.5	Mar 08, 2023		Soil	S23-Ma0031661			X									
133	TP15/0.5-0.7	Mar 08, 2023		Soil	S23-Ma0031662			X									
134	TP22/0.4-0.6	Mar 08, 2023		Soil	S23-Ma0031663			X									
135	TP31/0.3-0.4	Mar 08, 2023		Soil	S23-Ma0031664			X									
136	TP31/0.4-0.6	Mar 08, 2023		Soil	S23-Ma0031665			X									
137	TP59/0.3-0.5	Mar 08, 2023		Soil	S23-Ma0031666			X									
138	TP28/0.4-0.5	Mar 08, 2023		Soil	S23-Ma0031667			X									
139	TP28/0.5-0.7	Mar 08, 2023		Soil	S23-Ma0031668			X									
140	TP29/0.4-0.6	Mar 08, 2023		Soil	S23-Ma0031669			X									
141	TP36/0-0.2	Mar 08, 2023		Soil	S23-Ma0031670			X									
142	TP8/A1	Mar 07, 2023		Building Materials	S23-Ma0031671			X									

Company Name:	Geo-Logix P/L	Order No.:	PO5836TP	Received:	Mar 10, 2023 10:27 AM
Address:	Bld Q2 Level 3, 2309/4 Daydream St Warriewood NSW 2102	Report #:	971509	Due:	Mar 17, 2023
		Phone:	02 9979 1722	Priority:	5 Day
		Fax:	02 9979 1222	Contact Name:	Ted Lilly
Project Name:	AUSTRAL - PRIMARY				
Project ID:	2301008				

Eurofins Analytical Services Manager : Asim Khan

Sample Detail						Asbestos - W/A guidelines	Asbestos Absence / Presence	HOLD	Organochlorine Pesticides	Metals M8	Suite B13: OCP/PCB	Aggressivity Soil Set	Moisture Set	Eurofins Suite B7	Eurofins Suite B9	BTEXN and Volatile TRH	BTEXN and Volatile TRH
Melbourne Laboratory - NATA # 1261 Site # 1254										X				X	X		
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X	X	X	X	X	X	X	X	X
143	TP2/A1	Mar 07, 2023		Building Materials	S23-Ma0031672			X									
144	TP2/A2	Mar 07, 2023		Building Materials	S23-Ma0031673			X									
145	BH1/0-0.2	Mar 07, 2023		Soil	S23-Ma0031674			X									
146	BH1/3.2-3.5	Mar 07, 2023		Soil	S23-Ma0031675			X									
147	BH2/1.6-1.8	Mar 07, 2023		Soil	S23-Ma0031676			X									
148	BH2/2.3-2.5	Mar 07, 2023		Soil	S23-Ma0031677			X									
149	BH2/6-6.2	Mar 07, 2023		Soil	S23-Ma0031678			X									
150	BH3/2-2.2	Mar 07, 2023		Soil	S23-Ma0031679			X									
151	BH3/3-3.2	Mar 07, 2023		Soil	S23-Ma0031680			X									
152	BH4/2-2.2	Mar 07, 2023		Soil	S23-Ma0031681			X									
153	BH4/5.5-5.7	Mar 07, 2023		Soil	S23-Ma0031682			X									
Test Counts						28	2	73	25	25	5	7	50	5	18	2	2

Internal Quality Control Review and Glossary General

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

Holding Times

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

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

Units

% w/w:	Percentage weight-for-weight basis, e.g. of asbestos in asbestos-containing finds in soil samples (% w/w)
F/field	Airborne fibre filter loading as Fibres (N) per Fields counted (n)
F/mL	Airborne fibre reported concentration as Fibres per millilitre of air drawn over the sampler membrane (C)
g, kg	Mass, e.g. of whole sample (M) or asbestos-containing find within the sample (m)
g/kg	Concentration in grams per kilogram
L, mL	Volume, e.g. of air as measured in AFM (V = r x t)
L/min	Airborne fibre sampling Flowrate as litres per minute of air drawn over the sampler membrane (r)
min	Time (t), e.g. of air sample collection period

Calculations

Airborne Fibre Concentration: $C = \left(\frac{A}{a}\right) \times \left(\frac{N}{n}\right) \times \left(\frac{1}{r}\right) \times \left(\frac{1}{t}\right) = K \times \left(\frac{N}{n}\right) \times \left(\frac{1}{r}\right)$

Asbestos Content (as asbestos): $\% w/w = \frac{(m \times P_A)}{M}$

Weighted Average (of asbestos): $\%_{WA} = \sum \frac{(m \times P_A) \times x}{x}$

Terms

%asbestos	Estimated percentage of asbestos in a given matrix. May be derived from knowledge or experience of the material, informed by HSG264 <i>Appendix 2</i> , else assumed to be 15% in accordance with WA DOH <i>Appendix 2 (PA)</i> .
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, <i>Asbestos: The Analysts Guide</i> , 2nd Edition (2021).
HSG264	UK HSE HSG264, <i>Asbestos: The Survey Guide</i> (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 to 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, <i>Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia</i> (updated 2021), including Appendix Four: <i>Laboratory analysis</i>
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	N/A
Some samples have been subcontracted	No

Asbestos Counter/Identifier:

Laxman Dias Senior Analyst-Asbestos

Authorised by:

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](#).

Eurofins shall not be liable for loss, cost, damages or expenses incurred by the client, or any other person or company, resulting from the use of any information or interpretation given in this report. In no case shall Eurofins be liable for consequential damages including, but not limited to, lost profits, damages for failure to meet deadlines and lost production arising from this report. This document shall not be reproduced except in full and relates only to the items tested. Unless indicated otherwise, the tests were performed on the samples as received.

(02) 9979 1722
(02) 9979 1222

CHAIN OF CUSTODY

Page 1 of 10
Purchase Order No: PO5836TP

Quote Reference:

Send Invoice to: accounts@geo-logix.com.au

TAT required: 87d

Project Manager: Ted Lilly

Contact email: *thilly@geo-lab.com.au, tpolaris@geo-lab.com.au* Quote Reference:

Project Name: Austral - Phoenix

Project Number: 2301008 Date Submitted: 9/5/23

ANALYSIS REQUIRED

[illegible]Metals** (circle) As, Cd, Cr, Cu, Ni, Pb, Zn, Hg, Cr⁶⁺, Cr³⁺, Fe²⁺, Fe³⁺ Be, B, Al, V, Mn, Fe, Co, Se, Sr, Sn, Mo, Ag, Ba, Ti, Bi, Sb

Chain of Custody

extinguished by: JM

Date/Time: 9/3/23 Signature: 

Received by: MR
Rec'd: Reynolds Phillips

Date/Time: 10:27 am 10/3/23 Signature: [Signature]

1.8°C drill corner

CHAIN OF CUSTODY

Project Manager: Ted Lilly
Contact email: tlilly@geo-logix.com.au, tpolassay@geo-logix.com.au
Project Name: Austral-Primary
Project Number: 2301008 Date Submitted: 9/3/23
Page 2 of 10
Purchase Order No: P05836TP
Quote Reference:
Send Invoice to: accounts@geo-logix.com.au
TAT required: std

ANALYSIS REQUIRED

Lab ID	Sample ID	Date	Matrix					Comments	COMPOSITE	TRH - C6 - C10	TRH - C10 - C40	VOCs	BTEXN	PAHs	PCBs	OCPs	OPPs	Phenols	Metals - M8	Metals - Lead	Metals - Specify **	TCLP	Asbestos (ID only)	Asbestos (WA DOH)	Foreign Materials	Conductivity (EC)	pH	L2	Hold	SUITE	Eurofins MGT Suite Codes	
			soil	water	air	paint, filters	other																									
	TP21/0.9-1.1	8/3/23	✓																												B1 TRH/BTEXN	
	TP23/0.0-0.2																														B1A TRH/MAH	
	TP23/0.2-0.25																														B2 TRH/BTEXN/Pb	
	TP23/0.25-0.45																														B2A TRH/MAH/Pb	
	TP23/0.9-1.1																														B3 PAH/Phenols	
	TP48/0.0-0.2							Asbestos bag																							B4 TRH/BTEXN/PAH	
	TP14/0.0-0.2							Asbestos bag + soil jar																							B4A TRH/BTEXN/PAH/Phenols	
	TP14/0.3-0.5																														B5 TRH/BTEXN/M7	
	TP55/0.0-0.2							Asbestos bag																							B6 TRH/BTEXN/M8	
	TP20/0.0-0.2							Asbestos bag + soil jar								X															B7 TRH/BTEXN/PAH/M8	
	TP20/0.2-0.4																															B7A TRH/BTEXN/PAH/Phenols/M8
	TP12/0.0-0.2							Asbestos bag + soil jar																							B8 TRH/VOC/PAH/M8	
	TP12/0.4-0.6																															B9 TRH/BTEXN/PAH/OCP/M8
	TP57/0.15-0.3																															B10 TRH/BTEXN/PAH/OCP/OPP/M8
	TP57/0.3-0.5																															B11 Na/K/Ca/Mg/Cl/SO ₄ /CO ₂ /HCO ₃ /NH ₄ /NO ₃
	TP57/0.0-0.15							Asbestos bag + soil jar																								B11A B11/Alkalinity
	TP4/0.0-0.45							Asbestos bag + soil jar																								B11B B11/EC/TDS
	TP4/0.15-0.35																															B12 TRH/BTEXN/Oxygenates/Ethanol

Metals**(circle) As, Cd, Cr, Cu, Ni, Pb, Zn, Hg, Cr ⁶⁺, Cr ³⁺, Fe ²⁺, Fe ³⁺, Ba, B, Al, V, Mn, Fe, Co, Se, Sr, Sn, Mo, Ag, Ba, Ti, Bi, Sb

Chain of Custody

Relinquished by: JM Date/Time: 9/13/23 Signature: [Signature]
Received by: MR Date/Time: 10/3 Signature: [Signature]

CHAIN OF CUSTODY

Project Manager:

Ted Lilly

Contact email:

tlilly@geo-logix.com.au, tpolassery@geo-logix.com.au

Project Name:

Austral - primary

Project Number:

2301008

Date Submitted:

9/3/23

Page

3 of 10

Purchase Order No:

P05836TP

Quote Reference:

Send Invoice to:

accounts@geo-logix.com.au

TAT required:

std

ANALYSIS REQUIRED

Lab ID	Sample ID	Date	Matrix					Comments	COMPOSITE	TRH - C6 - C10	TRH - C10 - C40	VOCs	BTEXN	PAHs	PCBs	OCPs	OPPs	Phenols	Metals - M8	Metals - Lead	Metals - Specify **	TCLP	Asbestos (ID only)	Asbestos (WA DOH)	Foreign Materials	Conductivity (EC)	pH		Hold	SUITE	Eurofins MGT Suite Codes	
			soil	water	air	paint, filters	other																									
	TPH/0.6-0.8	8/3/23	✓					.																				X		B1 TRH/BTEXN		
	TP6/0.0-0.2							Asbestos bag + soil jar.																X						B1A TRH/MAH		
	TP6/0.2-0.4																														B2 TRH/BTEXN/Pb	
	TP46/0.0-0.2							Asbestos bag.															X								B2A TRH/MAH/Pb	
	TP43/0.0-0.2							Asbestos bag															X								B3 PAH/Phenols	
	TP47/0.0-0.2							Asbestos bag															X								B4 TRH/BTEXN/PAH	
	TP49/0.0-0.2							Asbestos bag															X								B4A TRH/BTEXN/PAH/Phenols	
	TP19/0.0-0.2							Asbestos bag + soil jar							X				X												B5 TRH/BTEXN/M7	
	TP19/0.6-0.8																						X								B6 TRH/BTEXN/M8	
	TP50/0.0-0.2							Asbestos bag.															X								B7 TRH/BTEXN/PAH/M8	
	TP11/0.0-0.2							Asbestos bag + soil jar.							X				X												B7A TRH/BTEXN/PAH/Phenols/M8	
	TP11/0.3-0.5	✓	✓																										X			B8 TRH/VOC/PAH/M8
																																B9 TRH/BTEXN/PAH/OCP/M8
																																B10 TRH/BTEXN/PAH/OCP/OPP/M8
																																B11 Na/K/Ca/Mg/Cl/SO ₄ /CO ₃ /HCO ₃ /NH ₃ /NO ₃
																																B11A B11/Alkalinity
																																B11B B11/EC/TDS
																																B12 TRH/BTEXN/Oxygenates/Ethanol
																																B12A TRH/BTEXN/Oxygenates
																																B13 OCP/PCB
																																B14 OCP/OPP
																																B15 OCP/OPP/PCB
																																B16 TDS/SO ₄ /CH ₄ /Alk/BOD/COD/HPC/CUB
																																B17 SO ₄ /NO ₃ /Fe++/-HPC/CUB
																																B18 Cl-/SO ₄ /pH
																																B19 N/P/K
																																B20 CEC/%ESP/Ca/Mg/Na/K

Metals**(circle) As, Cd, Cr, Cu, Ni, Pb, Zn, Hg, Cr **, Cr **, Fe **, Fe **, Be, B, Al, V, Mn, Fe, Co, Se, Sr, Sn, Mo, Ag, Ba, Tl, Bi, Sb

Chain of Custody

Relinquished by:

dh

Date/Time:

9/3/23

Signature:

[Signature]

Received by:

ME

Date/Time:

10/3

Signature:

[Signature]

CHAIN OF CUSTODY

Project Manager:

Teal Lilly

Contact email:

lilly@, tpolasseny@geo-logix.com.au

Project Name:

Austral-primary

Project Number:

0301008

Date Submitted:

9/3/23

Page 4 of 10
Purchase Order No:

P05836TP

Quote Reference:

Send Invoice to:

accounts@geo-logix.com.au

TAT required:

Ad

ANALYSIS REQUIRED

Lab ID	Sample ID	Date	Matrix					Comments	COMPOSITE	TRH - C6 - C10	TRH - C10 - C40	VOCs	BTEXN	PAHs	PCBs	OCPs	OPP	Phenols	Metals - M8	Metals - Lead	Metals - Specify **	TCLP	Asbestos (ID only)	Asbestos (WA DOH)	Foreign Materials	Conductivity (EC)	pH		Hold	SUITE	Eurofins MGT Suite Codes
			soil	water	air	paint, filters	other																								
	TP33/00-0-1	6/3/23	X													X		X												B1 TRH/BTEXN	
	TP33/02-0-4	6/3/23	X																									X		B1A TRH/MAH	
	TP40/00-0-1	6/3/23	X													X		X												B2 TRH/BTEXN/Pb	
	TP34/00-0-1															X		X												B2A TRH/MAH/Pb	
	TP34/02-0-3															X		X												B3 PAH/Phenols	
	TP25/00-0-1															X		X												B4 TRH/BTEXN/PAH	
	TP25/02-0-5	7/3/23														X		X										X		B4A TRH/BTEXN/PAH/Phenols	
	TP10/00-0-2	6/3/23						Jar + Asbestos bag																X						B5 TRH/BTEXN/M7	
	TP10/05-0-7																											X		B6 TRH/BTEXN/M8	
	TP45/00-0-2							Asbestos bag																X						B7 TRH/BTEXN/PAH/M8	
	TP32/03-0-4	7/3/23																										X		B7A TRH/BTEXN/PAH/Phenols/M8	
	TP32/04-0-6																											X		B8 TRH/VOC/PAH/M8	
	TP32/00-0-3															X		X												B9 TRH/BTEXN/PAH/OCPI/M8	
	TP24/00-0-4							Asbestos bag								X		X												B10 TRH/BTEXN/PAH/OCPI/OPPM8	
	TP24/00-0-2															X		X												B11 Na/K/Ca/Mg/Cl/SO ₄ /CO ₃ /HCO ₃ /NH ₃ /NO ₃	
	TP24/00-0-6																							X				X		B11A B11/Alkalinity	
	TP9/00-0-3							Asbestos bag + Jar																				X		B11B B11/EC/TDS	
	TP9/03-0-4																											X		B12 TRH/BTEXN/Oxygenates/Ethanol	

Metals**(circle) As, Cd, Cr, Cu, Ni, Pb, Zn, Hg, Cr⁶⁺, Cr³⁺, Fe²⁺, Fe³⁺, Be, B, Al, V, Mn, Fe, Co, Se, Sr, Sn, Mo, Ag, Ba, Ti, Bi, Sb

Chain of Custody

Relinquished by: JM

Date/Time: 9/3/23

Signature: [Signature]

Received by: MR

Date/Time: 10/3

Signature: [Signature]

CHAIN OF CUSTODY

Project Manager:

Ted Lilly

Contact email:

lillya, tpolassen@geo-logix.com.au

Project Name:

Austral-priming

Project Number:

2201008

Date Submitted:

9/3/23

Page

5 of 10

Purchase Order No:

P05836TP

Quote Reference:

Send Invoice to:

accounts@geo-logix.com.au

TAT required:

Std

ANALYSIS REQUIRED

Lab ID	Sample ID	Date	Matrix					Comments	COMPOSITE	TRH - C6 - C10	TRH - C10 - C40	VOCs	BTEXN	PAHs	PCBs	OCFs	OPPs	Phenols	Metals - M8	Metals - Lead	Metals - Specify **	TCLP	Asbestos (ID only)	Asbestos (WA DOH)	Foreign Materials	Conductivity (EC)	pH	L2	Hold	SUITE	Eurofins MGT Suite Codes	
			soil	water	air	paint, filters	other																									
	TPS2/0.0-0.2	7/3/23	X																												B1 TRH/BTEXN	
	TPS2/0.5-0.6																														B1A TRH/MAH	
	TPS2/0.0-0.5							Asbestos bag															X								B2 TRH/BTEXN/Pb	
	TP1/0.1-0.3																														B2A TRH/MAH/Pb	
	TP1/0.3-0.5							Asbestos bag + Jar															X								B3 PAH/Phenols	
	TP1/0.7-0.8																														B4 TRH/BTEXN/PAH	
	TP4/0.15-0.35							Asbestos bag															X								B4A TRH/BTEXN/PAH/Phenols	
	TP4/0.3-0.5							Jar																							B5 TRH/BTEXN/M7	
	TPA/0.0-0.2																														B6 TRH/BTEXN/M8	
	TP7/0.0-0.4							Asbestos bag																							B7 TRH/BTEXN/PAH/M8	
	TP17/0.4-0.6																														B7A TRH/BTEXN/PAH/Phenols/M8	
	TP60/0.0-0.4							Asbestos bag																							B8 TRH/VOC/PAH/M8	
	TP53/0.0-0.4							Asbestos bag																							B9 TRH/BTEXN/PAH/OC/PP/M8	
	TP16/0.0-0.4							Asbestos bag																							B10 TRH/BTEXN/PAH/OC/PP/M8	
	TP16/0.0-0.2														X																B11 Na/K/Ca/Mg/Cl/SO ₄ /CO ₂ /HCO ₃ /NH ₄ /NK	
	TP16/0.4-0.6																															B11A B11/Alkalinity
	TP51/0.0-0.3							Asbestos bag																								B11B B11/EC/TDS
	TP18/0.0-0.2																															B12 TRH/BTEXN/Oxygenates/Ethanol
																																B12A TRH/BTEXN/Oxygenates
																																B13 OCP/PCB
																																B14 OCP/OPP
															X				X													B15 OCP/OPP/PCB
																																B16 TDS/SO ₄ /CH ₄ /Alk/BOD/COD/MP/CUE
																																B17 SO ₄ /NO ₃ /Fe++/HPC/CUB
																							X									B18 CH ₄ /SO ₄ /pH
																X																B19 N/P/K
																																B20 CEC/%ESP/Ca/Ma/NaK

Metals**(circle) As, Cd, Cr, Cu, Ni, Pb, Zn, Hg, Cr ⁶⁺, Cr ³⁺, Fe ²⁺, Fe ³⁺, Be, B, Al, V, Mn, Fe, Co, Se, Sr, Sn, Mo, Ag, Ba, Ti, Bi, Sb

Chain of Custody

Relinquished by:

fm

Date/Time:

9/3/23

Signature:

[Signature]

Received by:

MR

Date/Time:

Signature:

[Signature]

RP 10/3

CHAIN OF CUSTODY

Project Manager:

Ted Lilly

Contact email:

Hilly@, tpolassery@geo-logix.com.au

Project Name:

Austral

Project Number:

230008

Date Submitted:

9/3/23

Page

6 of 10

Purchase Order No:

POS836TR

Quote Reference:

Send Invoice to:

accounts@geo-logix.com.au

TAT required:

5d

ANALYSIS REQUIRED

Lab ID	Sample ID	Date	Matrix					Comments	COMPOSITE	TRH - C6 - C10	TRH - C10 - C40	VOCs	BTEXN	PAHs	PCBs	OCPs	OPPs	Phenols	Metals - M8	Metals - Lead	Metals - Specify **	TCLP	Asbestos (ID only)	Asbestos (WA DOH)	Foreign Materials	Conductivity (EC)	pH	L2	Hold	SUITE	Eurofins MGT Suite Codes	
			soil	water	air	paint, filters	other																									
	TP18/0.0-0.3	7/3/23	x					Asbestos bag																					X		B1 TRH/BTEXN	
	TP18/0.2-0.5																												X		B1A TRH/MAH	
	TP19/0.0-0.4							Asbestos bag																					X		B2 TRH/BTEXN/Pb	
	TP26/0.0-0.3							Asbestos bag																					X		B2A TRH/MAH/Pb	
	TP26/0.0-0.2														X					X											B3 PAH/Phenols	
	TP26/0.3-0.5																												X			B4 TRH/BTEXN/PAH
	TP26/0.0-0.2																															B4A TRH/BTEXN/PAH/Phenols
	TP26/0.3-0.5																												X			B5 TRH/BTEXNM7
	TP26/0.0-0.2																															B6 TRH/BTEXNM8
	TP26/0.3-0.5																															B7 TRH/BTEXN/PAH/M8
	TP26/0.0-0.2																														B9	B7A TRH/BTEXN/PAH/Phenols/M8
	TP26/0.3-0.5																												X			B8 TRH/VOC/PAH/M8
	TP26/0.0-0.2							Asbestos Bag																X								B9 TRH/BTEXN/PAH/OCP/M8
	TP26/0.3-0.5							Asbestos Bag																X								B10 TRH/BTEXN/PAH/OCP/OPP/M8
	TP26/0.0-0.2																															B11 Na/K/Ca/Mg/Cl/SO4/CO3/HCO3/NH4/NO3
	TP26/0.3-0.5																												X			B11A B11/Alkalinity
	TP26/0.0-0.2							Asbestos Bag																X								B11B B11/EC/TDS
	TP26/0.3-0.5																															B12 TRH/BTEXN/Oxygenates/Ethanol
	TP26/0.0-0.2																															B12A TRH/BTEXN/Oxygenates
	TP26/0.3-0.5																															B13 OCP/PCB
	TP26/0.0-0.2																															B14 OCP/OPP
	TP26/0.3-0.5																															B15 OCP/OPP/PCB
	TP26/0.0-0.2																															B16 TDS/SO4/CH4/Alk/BOD/COD/HPC/CUB
	TP26/0.3-0.5																															B17 SO4/NO3/Fe++/HPC/CUB
	TP26/0.0-0.2																															B18 CH-SO4/pH
	TP26/0.3-0.5																															B19 N/P/K
	TP26/0.0-0.2																															B20 CEC/ESP/Ca/Mg/Na/K

Metals**(circle) As, Cd, Cr, Cu, Ni, Pb, Zn, Hg, Cr⁶⁺, Cr³⁺, Fe²⁺, Fe³⁺, Be, B, Al, V, Mn, Fe, Co, Se, Sr, Sn, Mo, Ag, Ba, Tl, Bi, Sb

Chain of Custody

Relinquished by:

JM

Date/Time:

9/3/23

Signature:

final

Received by:

MR

Date/Time:

12/3

Signature:

[Signature]

CHAIN OF CUSTODY

Project Manager:

Ted Lilly

Contact email:

tlilly@tpolasseny@geo-logix.com.au

Project Name:

Austrail

Project Number:

2301008

Date Submitted:

9/3/23

Page

7 of 10

Purchase Order No:

PO5836TP

Quote Reference:

Send Invoice to:

accounts@geo-logix.com.au

TAT required:

5Ad

ANALYSIS REQUIRED

Lab ID	Sample ID	Date	Matrix					Comments	COMPOSITE	TRH - C6 - C10	TRH - C10 - C40	VOCs	BTEXN	PAHs	PCBs	OCFs	OPPs	Phenols	Metals - M8	Metals - Lead	Metals - Specify **	TCLP	Asbestos (ID only)	Asbestos (WA DOH)	Foreign Materials	Conductivity (EC)	pH		Hold	SUITE	Eurofins MGT Suite Codes			
			soil	water	air	paint, filters	other																											
	TP3/0.0-0.4	7/3/23	X					Asbestos bag																					X		B1	TRH/BTEXN		
	TP7/0.0-0.2																														B9	B2	TRH/BTEXN/Pb	
	TP7/0.4-0.6																												X			B2A	TRH/MAH/Pb	
	TP7/0.0-0.4							Asbestos bag																X								B3	PAH/Phenols	
	TP4/0.0-0.3							Asbestos bag																X								B4	TRH/BTEXN/PAH	
	TP5/0.0-0.2	8/3/23														X			X					X								B4A	TRH/BTEXN/PAH/Phenols	
	TP5/0.3-0.5															X																B5	TRH/BTEXNM7	
	TP5/0.0-0.3							Asbestos bag																						X		B6	TRH/BTEXNM8	
	TP4/0.0-0.3							Asbestos bag								X			X											X		B7	TRH/BTEXN/PAH/M8	
	TP4/0.3-0.7																																B7A	TRH/BTEXN/PAH/Phenols/M8
	TP3/0.0-0.3							Asbestos bag																X									B8	TRH/VOC/PAH/M8
	TP13/0.0-0.2																																B9	TRH/BTEXN/PAH/OCF/M8
	TP13/0.3-0.5																																B10	TRH/BTEXN/PAH/OCF/OPP/M8
	TP9/0.0-0.4							Asbestos bag																									B11	Na/K/Ca/Mg/Cl/SO ₄ /CO ₂ /HCO ₃ /NH ₄ /NO ₃
	TP15/0.0-0.5							Asbestos bag																X									B11A	B11/Alkalinity
	TP15/0.5-0.7																																B11B	B11/EC/TDS
	TP22/0.0-0.2																																B12	TRH/BTEXN/Oxygenates/Ethanol
																																	B12A	TRH/BTEXN/Oxygenates
																																	B13	OCF/PCB
																																	B14	OCF/OPP
																																	B15	OCF/OPP/PCB
																																	B16	TDS/SO ₄ /CH ₄ /Alk/SOD/COD/HPC/CUB
																																	B17	SO ₄ /NO ₃ /Fe++/HPC/CUB
																																	B18	Cl-SO ₄ /pH
																																	B19	N/P/K
																																	B20	CEC/%ESP/Ca/Mg/Na/K

Metals**(circle) As, Cd, Cr, Cu, Ni, Pb, Zn, Hg, Cr⁶⁺, Cr³⁺, Fe²⁺, Fe³⁺, Ba, B, Al, V, Mn, Fe, Co, Se, Sr, Sn, Mo, Ag, Ba, Ti, Bi, Sb

Chain of Custody

Relinquished by: VM

Date/Time: 9/3/23

Signature: [Signature]

Received by: MR

Date/Time: 10/3

Signature: [Signature]

Geo-Logix Pty Ltd

Building Q2, Level 3
2309/4 Daydream St
Warriewood, NSW 2102

ABN: 86 116 892 936

P: (02) 9979 1722
F: (02) 9979 1222

CHAIN OF CUSTODY

Project Manager:

Ted Lilly

Contact email:

tlilly@, tpolassem@geo-logix.com.au

Project Name:

Austral

Project Number:

2301008

Date Submitted:

9/3/23

Page

8 of 10

Purchase Order No:

PO5836TP

Quote Reference:

Send Invoice to:

accounts@geo-logix.com.au

TAT required:

STG

ANALYSIS REQUIRED

Lab ID	Sample ID	Date	Matrix					Comments	COMPOSITE	TRH - C6 - C10	TRH - C10 - C40	VOCs	BTEXN	PAHs	PCBs	OCPs	OPPs	Phenols	Metals - MB	Metals - Lead	Metals - Specify **	TCLP	Asbestos (ID only)	Asbestos (WA DOH)	Foreign Materials	Conductivity (EC)	pH		Hold	SUITE	Eurofins MGT Suite Codes	
			soil	water	air	paint, filters	other																									
	TP22/0.4-0.6	8/3/23	X																									X		B1	TRH/BTEXN	
	TP31/0.0-0.2																													B9	B1A TRH/MAH	
	TP31/0.3-0.4																											X		B2	TRH/BTEXN/Pb	
	TP31/0.4-0.6																											X		B2A	TRH/MAH/Pb	
	TP59/0.0-0.2															X			X											B3	PAH/Phenols	
	TP59/0.3-0.5																												X		B4	TRH/BTEXN/PAH
	TP28/0.7-0.9																														B4A	TRH/BTEXN/PAH/Phenols
	TP28/0.0-0.2																														B5	TRH/BTEXN/M7
	TP28/0.4-0.5																											X			B6	TRH/BTEXN/M8
	TP29/0.0-0.2																														B7	TRH/BTEXN/PAH/M8
	TP28/0.5-0.7																														B7A	TRH/BTEXN/PAH/Phenols/M8
	TP29/0.0-0.2															X			X											B8	TRH/VOC/PAH/M8	
	TP29/0.4-0.6																											X			B9	TRH/BTEXN/PAH/OCP/M8
	TP36/0.0-0.2																											X			B10	TRH/BTEXN/PAH/OCP/OPP/M8
	TP36/0.3-0.5															X			X												B11	Na/K/Ca/Mg/Cl/SO ₄ /CO ₂ /HCO ₃ /NH ₃ /NO ₃
																															B11A	B11/Alkalinity
																												X			B11B	B11/EC/TDS
																												X			B12	TRH/BTEXN/Oxygenates/Ethanol
																												X			B12A	TRH/BTEXN/Oxygenates
																															B13	OCP/PCB
																															B14	OCP/OPP
																															B15	OCP/OPP/PCB
																															B16	TDS/SO ₄ /CH ₄ /Alk/BOD/COD/HPC/CUB
																															B17	SO ₄ /NO ₃ /Fe ⁺⁺ /HPC/CUB
																															B18	Cl-/SO ₄ /pH
																															B19	N/P/K
																															B20	CEC/%ESP/Ca/Ma/Na/K

Metals**(circle) As, Cd, Cr, Cu, Ni, Pb, Zn, Hg, Cr⁶⁺, Cr³⁺, Fe²⁺, Fe³⁺, Be, B, Al, V, Mn, Fe, Co, Se, Sr, Sn, Mo, Ag, Ba, Ti, Bi, Sb

Chain of Custody

Relinquished by:

TL

Date/Time:

9/3/23

Signature:

[Signature]

Received by:

MR

Date/Time:

RP 10/3

Signature:

[Signature]

CHAIN OF CUSTODY

Project Manager:

Contact email:

Project Name:

Project Number:

Date Submitted:

Page

Purchase Order No:

Quote Reference:

Send Invoice to:

TAT required:

ANALYSIS REQUIRED

Lab ID	Sample ID	Date	Matrix					Comments	COMPOSITE	TRH - C6 - C10	TRH - C10 - C40	VOCs	BTEXN	PAHs	PCBs	OCPs	OPP	Phenols	Metals - M8	Metals - Lead	Metals - Specify **	TCLP	Asbestos (ID only)	Asbestos (WA DOH)	Foreign Materials	Conductivity (EC)	pH	Hold	SUITE	Eurofins MGT Suite Codes
			soil	water	air	paint, filters	other																							
	DS1	7/3/23	X																										B1	TRH/BTEXN
	DS2	↓													X			X											B1A	TRH/MAH
	DS3	8/3/23														X		X											B2	TRH/BTEXN/Pb
	TP8/A1	7/3/23					X	Potential ACM																					B2A	TRH/MAH/Pb
	TP2/A1	7/3/23																											B3	PAH/Phenols
	TP2/A2	↓																											B4	TRH/BTEXN/PAH
	TP15/A1	8/3/23																											B4A	TRH/BTEXN/PAH/Phenols
	TP13/A1	8/3/23																											B5	TRH/BTEXN/M7
	TRIPB1																												B6	TRH/BTEXN/M8
	TRIPS1																												B7	TRH/BTEXN/PAH/M8
	TRIPB2																												B7A	TRH/BTEXN/PAH/Phenols/M8
	RI																												B8	TRH/VOC/PAH/M8
																													B9	TRH/BTEXN/PAH/OCP/M8
																													B10	TRH/BTEXN/PAH/OCP/OPP/M8
																													B11	Na/K/Ca/Mg/Cl/SO ₄ /CO ₃ /HCO ₃ /NH ₄ /NO ₃
																													B11A	B11/Alkalinity
																													B11B	B11/EC/TDS
																													B12	TRH/BTEXN/Oxygenates/Ethanol
																													B12A	TRH/BTEXN/Oxygenates
																													B13	OCP/PCB
																													B14	OCP/OPP
																													B15	OCP/OPP/PCB
																													B16	TDS/SO ₄ /CH ₄ /Al/BOD/COD/HPC/CUB
																													B17	SO ₄ /NO ₃ /Fe ⁺⁺ /HPC/CUB
																													B18	CH ₄ /SO ₄ /pH
																													B19	N/P/K
																													B20	CEC/WES/PCa/Ma/Na/K

Metals**(circle) As, Cd, Cr, Cu, Ni, Pb, Zn, Hg, Cr⁶⁺, Cr³⁺, Fe²⁺, Fe³⁺, Ba, B, Al, V, Mn, Fe, Co, Se, Sr, Sn, Mo, Ag, Ba, Ti, Bi, Sb

Chain of Custody

Relinquished by:

Date/Time:

Signature:

Received by:

Date/Time:

Signature:

Geo-Logix Pty Ltd

Building Q2, Level 3
2309/4 Daydream St
Warriewood, NSW 2102

ABN: 86 116 892 936

P: (02) 9979 1722
F: (02) 9979 1222

CHAIN OF CUSTODY

Project Manager:

Ted Lilly

Contact email:

tlilly@geo-logix.com.au

Project Name:

Austral

Project Number:

2301008

Date Submitted:

9/3/23

Page

10 of 10

Purchase Order No:

P05836TP

Quote Reference:

Send Invoice to:

accounts@geo-logix.com.au

TAT required:

Std

ANALYSIS REQUIRED

Lab ID	Sample ID	Date	Matrix					Comments	COMPOSITE	TRH - C6 - C10	TRH - C10 - C40	VOCs	BTEXN	PAHs	PCBs	OCPs	OPP's	Phenols	Metals - M8	Metals - Lead	Metals - Specify **	TCLP	Asbestos (ID only)	Asbestos (WA DOH)	Foreign Materials	Conductivity (EC)	pH	Suite - L2	Hold	SUITE	Eurofins MGT Suite Codes
			soil	water	air	paint, filters	other																								
	BH1/0.0-0.2	7/3/23	✓																										X		B1 TRH/BTEXN
	BH1/3.2-3.5																												X		B1A TRH/MAH
	BH1/0.0-0.2																												X		B2 TRH/BTEXN/Pb
	BH1/3.2-3.5																												X		B2A TRH/MAH/Pb
	BH2/1.6-1.8																												X		B3 PAH/Phenols
	BH2/2.3-2.5																												X		B4 TRH/BTEXN/PAH
	BH2/6.0-6.2																												X		B4A TRH/BTEXN/PAH/Phenols
	BH3/2.0-2.2																												X		B5 TRH/BTEXN/M7
	BH3/3.0-3.2																												X		B6 TRH/BTEXN/M8
	BH4/2.0-2.2																												X		B7 TRH/BTEXN/PAH/M8
	BH4/5.5-5.7																												X		B7A TRH/BTEXN/PAH/Phenols/M8
																													X		B8 TRH/VOC/PAH/M8
																													X		B9 TRH/BTEXN/PAH/OCP/M8
																													X		B10 TRH/BTEXN/PAH/OCP/DPP/M8
																													X		B11 Na/K/Ca/Mg/Cl/SO ₄ /CO ₂ /HCO ₃ /NH ₃ /NO ₃
																													X		B11A B11/Alkalinity
																													X		B11B B11/EC/TDS
																													X		B12 TRH/BTEXN/Oxygenates/Ethanol
																													X		B12A TRH/BTEXN/Oxygenates
																													X		B13 OCP/PCB
																													X		B14 OCP/OPP
																													X		B15 OCP/OPP/PCB
																													X		B16 TDS/SO ₄ /CH ₄ /Alk/BOD/COD/HPC/CUB
																													X		B17 SO ₄ /NO ₃ /Fe++/HPC/CUB
																													X		B18 Cl/SO ₄ /pH
																													X		B19 N/P/K
																													X		B20 CEC/%ESP/Ca/Mg/Na/K

Metals**(circle) As, Cd, Cr, Cu, Ni, Pb, Zn, Hg, Cr ⁶⁺, Cr ³⁺, Fe ²⁺, Fe ³⁺, Be, B, Al, V, Mn, Fe, Co, Se, Sr, Sn, Mo, Ag, Ba, Tl, Bi, Sb

Chain of Custody

Relinquished by:

dm

Date/Time:

9/3/23

Signature:

[Signature]

Received by:

MR
RP

Date/Time:

9/3

Signature:

[Signature]

Geo-Logix Pty Ltd

Building Q2, Level 3
2309/4 Daydream St
Warriewood, NSW 2102

ABN: 86 116 892 936

P: (02) 9979 1722
F: (02) 9979 1222

CHAIN OF CUSTODY

Project Manager: Ted Lilly
Contact email: tpolassery@geo-logix.com.au
Project Name: Austral - triplicates
Project Number: 2301008 Date Submitted: 9/3/23

Page 1 of 1
Purchase Order No: P05841TP
Quote Reference:
Send Invoice to: accounts@geo-logix.com.au
TAT required: standard

ANALYSIS REQUIRED

Lab ID	Sample ID	Date	Matrix					Comments	COMPOSITE	TRH - C6 - C10	TRH - C10 - C40	VOCs	BTEXN	PAHs	PCBs	OCPs	OPPs	Phenols	Metals - M8	Metals - Lead	Metals - Specify **	TCLP	Asbestos (ID only)	Asbestos (WA DOH)	Foreign Materials	Conductivity (EC)	pH	Hold	SUITE	Eurofins MGT Suite Codes		
			soil	water	air	paint, filters	other																									
	TS1	7/3/23	X					Please forward to Melbourne. Eurofins																						X	B1 TRH/BTEXN	
	TS2	7/3/23	X													X				X												B1A TRH/MAH
	TS3	8/3/23	X													X				X											X	B2 TRH/BTEXN/Pb
																																B2A TRH/MAH/Pb
																																B3 PAH/Phenols
																																B4 TRH/BTEXN/PAH
																																B4A TRH/BTEXN/PAH/Phenols
																																B5 TRH/BTEXN/M7
																																B6 TRH/BTEXN/M8
																																B7 TRH/BTEXN/PAH/M8
																																B7A TRH/BTEXN/PAH/Phenols/M8
																																B8 TRH/VOC/PAH/M8
																																B9 TRH/BTEXN/PAH/OCP/M8
																																B10 TRH/BTEXN/PAH/OCP/OPP/M8
																																B11 Na/K/Ca/Mg/Cl/SO ₄ /CO ₂ /HCO ₃ /NH ₃ /NO ₃
																																B11A B11/Alkalinity
																																B11B B11/EC/TDS
																																B12 TRH/BTEXN/Oxygenates/Ethanol
																																B12A TRH/BTEXN/Oxygenates
																																B13 OCP/PCB
																																B14 OCP/OPP
																																B15 OCP/OPP/PCB
																																B16 TDS/SO ₄ /CH ₄ /Al/BOD/COD/HPC/CUB
																																B17 SO ₄ /NO ₃ /Fe ⁺⁺ /HPC/CUB
																																B18 CH ₂ SO ₄ /pH
																																B19 N/P/K
																																B20 CEC/%ESP/Ca/Ma/Na/K

Metals**(circle) As, Cd, Cr, Cu, Ni, Pb, Zn, Hg, Cr⁶⁺, Cr³⁺, Fe²⁺, Fe³⁺, Be, B, Al, V, Mn, Fe, Co, Se, Sr, Sn, Mo, Ag, Ba, Ti, Bi, Sb

Chain of Custody

Relinquished by: Ted Lilly Date/Time: 9/3/23 Signature: _____

Received by: Ryan Phillips Date/Time: 10/3/23 Signature: _____

Asim Khan

From: Jenna Maltman <jmaltman@geo-logix.com.au>
Sent: Monday, 13 March 2023 10:46 AM
To: Asim Khan
Cc: Adam Bateup; #AU25_Enviro_Sample_NSW; Ted Lilly; Thara Polassery
Subject: FW: 2301008 Samples
Attachments: 2301008_Austral_Primary_Geo-Logix.pdf; 2301008_Austral_Triplicate_Geo-Logix.pdf

CAUTION: EXTERNAL EMAIL - Sent from an email domain that is not formally trusted by Eurofins.

Do not click on links or open attachments unless you recognise the sender and are certain that the content is safe.

Hi,

Can I please amend the requested analysis from Suite B9 to Suite B7+B13 for the following samples:

- TP57/0.3-0.5
- TP15/0.0-0.2
- TP13/0.0-0.2
- TP8/0.15-0.35
- TP2/0.0-0.2

Please let me know any issue with this request. Thanks.

Jenna Maltman | Project Scientist

Unit 2309/4 Daydream St, Warriewood NSW 2102
T: 02 9979 1722 | www.geo-logix.com.au



This email message is intended only for the addressee(s) and contains information that may be confidential and/or copyright. If you are not the intended recipient please delete this email immediately. Use, disclosure or reproduction of this email by anyone other than the intended recipient(s) is strictly prohibited. No representation is made that this email or any attachments are free of viruses and the recipient is responsible for undertaking appropriate virus scanning. Any advice provided in or attached to this email is subjected to limitations.

From: Tiffany Mabbott <tmabbott@geo-logix.com.au>
Sent: Friday, 10 March 2023 10:37 AM
To: AsimKhan@eurofins.com
Cc: AdamBateup@eurofins.com; EnviroSampleNSW@eurofins.com; Ted Lilly <tlilly@geo-logix.com.au>; Thara Polassery <tpolassery@geo-logix.com.au>; Jenna Maltman <jmaltman@geo-logix.com.au>
Subject: 2301008 Samples

Hi Asim,

We had 6 eskies collected yesterday. We have since updated the cocs. Please disregard those in the esky for the analysis and use the attached instead.

Geo-Logix P/L
Bld Q2 Level 3, 2309/4 Daydream St
Warriewood
NSW 2102

Attention: Jenna Maltman
Report 976617-AID
Project Name AUSTRAL-ADDITIONAL
Project ID 2301008
Received Date Mar 29, 2023
Date Reported Apr 05, 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 AUSTRAL-ADDITIONAL
Project ID 2301008
Date Sampled Mar 07, 2023
Report 976617-AID

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
BH02/0.15-0.35	23-Ma0071198	Mar 07, 2023	Approximate Sample 317g Sample consisted of: Brown fine-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.

Sample History

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

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

Description	Testing Site	Extracted	Holding Time
Asbestos - LTM-ASB-8020	Sydney	Mar 30, 2023	Indefinite

Company Name: Geo-Logix P/L
Address: Bld Q2 Level 3, 2309/4 Daydream St
Warriewood
NSW 2102

Project Name: AUSTRAL-ADDITIONAL
Project ID: 2301008

Order No.:
Report #: 976617
Phone: 02 9979 1722
Fax: 02 9979 1222

Received: Mar 29, 2023 3:21 PM
Due: Apr 5, 2023
Priority: 5 Day
Contact Name: Jenna Maltman

Eurofins Analytical Services Manager : Asim Khan

Sample Detail

Asbestos - WA guidelines

Sydney Laboratory - NATA # 1261 Site # 18217

X

External Laboratory

No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID
1	BH02/0.15-0.35	Mar 07, 2023		Soil	S23-Ma0071198

X

Test Counts

1

Internal Quality Control Review and Glossary General

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

Holding Times

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

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

Units

% w/w:	Percentage weight-for-weight basis, e.g. of asbestos in asbestos-containing finds in soil samples (% w/w)
F/ftd	Airborne fibre filter loading as Fibres (N) per Fields counted (n)
F/mL	Airborne fibre reported concentration as Fibres per millilitre of air drawn over the sampler membrane (C)
g, kg	Mass, e.g. of whole sample (M) or asbestos-containing find within the sample (m)
g/kg	Concentration in grams per kilogram
L, mL	Volume, e.g. of air as measured in AFM (V = r x t)
L/min	Airborne fibre sampling Flowrate as litres per minute of air drawn over the sampler membrane (r)
min	Time (t), e.g. of air sample collection period

Calculations

Airborne Fibre Concentration: $C = \left(\frac{A}{a}\right) \times \left(\frac{N}{n}\right) \times \left(\frac{1}{r}\right) \times \left(\frac{1}{t}\right) = K \times \left(\frac{N}{n}\right) \times \left(\frac{1}{r}\right)$

Asbestos Content (as asbestos): $\% w/w = \frac{(m \times P_A)}{M}$

Weighted Average (of asbestos): $\%_{WA} = \sum \frac{(m \times P_A) \times x}{x}$

Terms

%asbestos	Estimated percentage of asbestos in a given matrix. May be derived from knowledge or experience of the material, informed by HSG264 <i>Appendix 2</i> , else assumed to be 15% in accordance with WA DOH <i>Appendix 2 (PA)</i> .
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, <i>Asbestos: The Analysts Guide</i> , 2nd Edition (2021).
HSG264	UK HSE HSG264, <i>Asbestos: The Survey Guide</i> (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 to 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, <i>Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia</i> (updated 2021), including Appendix Four: <i>Laboratory analysis</i>
Weighted Average	Combined average % w/w asbestos content of all asbestos-containing finds in the given aliquot or total soil sample (%_{WA}).

Comments

Sample received was less than the nominal 500mL as recommended in Section 4.10 of the NEPM Schedule B1 - Guideline on Investigation Levels for Soil and Groundwater.

Sample Integrity

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

Asbestos Counter/Identifier:

Chamath JHM Annakkage Senior Analyst-Asbestos

Authorised by:

Sayeed Abu Senior Analyst-Asbestos



Glenn Jackson
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](#).

Eurofins shall not be liable for loss, cost, damages or expenses incurred by the client, or any other person or company, resulting from the use of any information or interpretation given in this report. In no case shall Eurofins be liable for consequential damages including, but not limited to, lost profits, damages for failure to meet deadlines and lost production arising from this report. This document shall not be reproduced except in full and relates only to the items tested. Unless indicated otherwise, the tests were performed on the samples as received.

CHAIN OF CUSTODY

Project Manager: Jenna Maltman
Contact email: j.maltman@geo-logix.com.au
Project Name: Austral - additional
Project Number: 2301008 Date Submitted: 29/3/23

Page 1 of 1 PO5875
Purchase Order No:
Quote Reference:
Send Invoice to: accounts@geo-logix.com.au
TAT required: std

ANALYSIS REQUIRED

Lab ID	Sample ID	Date	Matrix					Comments	COMPOSITE	TRH - C6 - C10	TRH - C10 - C40	VOCs	BTEXN	PAHs	PCBs	OCs	OPPs	Phenols	Metals - M8	Metals - Lead	Metals - Specify **	TCLP	Asbestos (ID only)	Asbestos (WA DOH)	Foreign Materials	Conductivity (EC)	pH	Hold	SUITE	Eurofins MGT Suite Codes
			soil	water	air	paint, filters	other																							
	BH20.15-0.35		X					Asbestos testing															X							B1 TRH/BTEXN B1A TRH/MAH B2 TRH/BTEXN/Pb B2A TRH/MAH/Pb B3 PAH/Phenols B4 TRH/BTEXN/PAH B4A TRH/BTEXN/PAH/Phenols B5 TRH/BTEXN/M7 B6 TRH/BTEXN/M8 B7 TRH/BTEXN/PAH/M8 B7A TRH/BTEXN/PAH/Phenols/M8 B8 TRH/VOC/PAH/M8 B9 TRH/BTEXN/PAH/OC/Pb B10 TRH/BTEXN/PAH/OC/OPP/M8 B11 Na/K/Ca/Mg/Cl/SO ₄ /CO ₃ /HCO ₃ /NH ₃ /NO ₃ B11A B11/Alkalinity B11B B11/EC/TDS B12 TRH/BTEXN/Oxygenates/Ethanol B12A TRH/BTEXN/Oxygenates B13 OCP/PCB B14 OCP/OPP B15 OCP/OPP/PCB B16 TDS/SO ₄ /CH ₄ /Alk/BOD/COD/HPC/CUB B17 SO ₄ /NO ₃ /Fe ⁺⁺ /HPC/CUB B18 Cl/SO ₄ /pH B19 N/P/K B20 CEC/%ESP/Ca/Mg/Na/K

Metals**(circle) As, Cd, Cr, Cu, Ni, Pb, Zn, Hg, Cr⁶⁺, Cr³⁺, Fe²⁺, Fe³⁺, Be, B, Al, V, Mn, Fe, Co, Se, Sr, Sn, Mo, Ag, Ba, Tl, Bi, Sb

Chain of Custody

Relinquished by: Jenna Maltman Date/Time: 29/3/23 Signature: [Signature] Received by: Laura Luan Date/Time: 15:21 Signature: [Signature]
29.3.23

24.2°C
no ch-1

976617

Geo-Logix P/L
Bld Q2 Level 3, 2309/4 Daydream St
Warriewood
NSW 2102

Attention: Jenna Maltman
Report 977705-AID
Project Name **ADDITIONAL: AUSTRAL - PRIMARY**
Project ID **ADDITIONAL: 2301008**
Received Date Mar 29, 2023
Date Reported 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 ADDITIONAL: AUSTRAL - PRIMARY
Project ID ADDITIONAL: 2301008
Date Sampled Mar 07, 2023 to Mar 08, 2023
Report 977705-AID

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
TP17/0-0.4	23-Ap0003014	Mar 07, 2023	Approximate Sample 782g Sample consisted of: Brown coarse-grained clayey sandy soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
TP16/0-0.2	23-Ap0003015	Mar 07, 2023	Approximate Sample 699g Sample consisted of: Brown coarse-grained clayey sandy soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
TP53/0-0.4	23-Ap0003016	Mar 07, 2023	Approximate Sample 705g Sample consisted of: Brown coarse-grained clayey sandy soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
TP18/0-0.3	23-Ap0003017	Mar 07, 2023	Approximate Sample 578g Sample consisted of: Brown coarse-grained clayey sandy soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
TP3/0-0.4	23-Ap0003018	Mar 07, 2023	Approximate Sample 573g Sample consisted of: Brown coarse-grained clayey sandy soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
TP11/0-0.2	23-Ap0003019	Mar 08, 2023	Approximate Sample 835g Sample consisted of: Brown coarse-grained clayey sandy soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
TP19/0-0.2	23-Ap0003020	Mar 08, 2023	Approximate Sample 799g Sample consisted of: Brown coarse-grained clayey sandy soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
TP20/0-0.2	23-Ap0003021	Mar 08, 2023	Approximate Sample 657g Sample consisted of: Brown coarse-grained clayey sandy soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
TP4/0-0.15	23-Ap0003022	Mar 08, 2023	Approximate Sample 799g Sample consisted of: Brown coarse-grained clayey sandy soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
TP41/0-0.3	23-Ap0003023	Mar 08, 2023	Approximate Sample 501g Sample consisted of: Brown coarse-grained clayey sandy soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.
TP5/0-0.3	23-Ap0003024	Mar 08, 2023	Approximate Sample 648g Sample consisted of: Brown coarse-grained clayey sandy soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No trace asbestos detected.

Sample History

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

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

Description	Testing Site	Extracted	Holding Time
Asbestos - LTM-ASB-8020	Sydney	Apr 03, 2023	Indefinite

Company Name: Geo-Logix P/L
Address: Bld Q2 Level 3, 2309/4 Daydream St
Warriewood
NSW 2102

Project Name: ADDITIONAL: AUSTRAL - PRIMARY
Project ID: ADDITIONAL: 2301008

Order No.: PO5876
Report #: 977705
Phone: 02 9979 1722
Fax: 02 9979 1222

Received: Mar 29, 2023 12:10 PM
Due: Apr 5, 2023
Priority: 5 Day
Contact Name: Jenna Maltman

Eurofins Analytical Services Manager : Asim Khan

Sample Detail

Asbestos - WA guidelines

Sydney Laboratory - NATA # 1261 Site # 18217

External Laboratory

No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID	
1	TP17/0-0.4	Mar 07, 2023		Soil	S23-Ap0003014	X
2	TP16/0-0.2	Mar 07, 2023		Soil	S23-Ap0003015	X
3	TP53/0-0.4	Mar 07, 2023		Soil	S23-Ap0003016	X
4	TP18/0-0.3	Mar 07, 2023		Soil	S23-Ap0003017	X
5	TP3/0-0.4	Mar 07, 2023		Soil	S23-Ap0003018	X
6	TP11/0-0.2	Mar 08, 2023		Soil	S23-Ap0003019	X
7	TP19/0-0.2	Mar 08, 2023		Soil	S23-Ap0003020	X
8	TP20/0-0.2	Mar 08, 2023		Soil	S23-Ap0003021	X
9	TP4/0-0.15	Mar 08, 2023		Soil	S23-Ap0003022	X
10	TP41/0-0.3	Mar 08, 2023		Soil	S23-Ap0003023	X
11	TP5/0-0.3	Mar 08, 2023		Soil	S23-Ap0003024	X

Test Counts

11

Internal Quality Control Review and Glossary General

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

Holding Times

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

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

Units

% w/w:	Percentage weight-for-weight basis, e.g. of asbestos in asbestos-containing finds in soil samples (% w/w)
F/field	Airborne fibre filter loading as Fibres (N) per Fields counted (n)
F/mL	Airborne fibre reported concentration as Fibres per millilitre of air drawn over the sampler membrane (C)
g, kg	Mass, e.g. of whole sample (M) or asbestos-containing find within the sample (m)
g/kg	Concentration in grams per kilogram
L, mL	Volume, e.g. of air as measured in AFM (V = r x t)
L/min	Airborne fibre sampling Flowrate as litres per minute of air drawn over the sampler membrane (r)
min	Time (t), e.g. of air sample collection period

Calculations

Airborne Fibre Concentration: $C = \left(\frac{A}{a}\right) \times \left(\frac{N}{n}\right) \times \left(\frac{1}{r}\right) \times \left(\frac{1}{t}\right) = K \times \left(\frac{N}{n}\right) \times \left(\frac{1}{r}\right)$

Asbestos Content (as asbestos): $\% w/w = \frac{(m \times P_A)}{M}$

Weighted Average (of asbestos): $\%_{WA} = \sum \frac{(m \times P_A) \times x}{x}$

Terms

%asbestos	Estimated percentage of asbestos in a given matrix. May be derived from knowledge or experience of the material, informed by HSG264 <i>Appendix 2</i> , else assumed to be 15% in accordance with WA DOH <i>Appendix 2 (PA)</i> .
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, <i>Asbestos: The Analysts Guide</i> , 2nd Edition (2021).
HSG264	UK HSE HSG264, <i>Asbestos: The Survey Guide</i> (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 to 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, <i>Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia</i> (updated 2021), including Appendix Four: <i>Laboratory analysis</i>
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:

Sayeed Abu Senior Analyst-Asbestos

Authorised by:

Chamath JHM Annakkage 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](#).

Eurofins shall not be liable for loss, cost, damages or expenses incurred by the client, or any other person or company, resulting from the use of any information or interpretation given in this report. In no case shall Eurofins be liable for consequential damages including, but not limited to, lost profits, damages for failure to meet deadlines and lost production arising from this report. This document shall not be reproduced except in full and relates only to the items tested. Unless indicated otherwise, the tests were performed on the samples as received.

5 day TAT Additional Analysis FW: Eurofins Test Results, Invoice - Report 971509 : Site AUSTRAL - PRIMARY (2301008)

Asim Khan <AsimKhan@eurofins.com>

Wed 2023-03-29 12:11 PM

To: #AU25_Enviro_Sample_NSW <EnviroSampleNSW@eurofins.com>

Cc: Adam Bateup <AdamBateup@eurofins.com>

INFO: INTERNAL EMAIL - Sent from your own Eurofins email domain.

Additional analysis please on std TAT.

Thanks,

Kind regards,

Asim Khan

Analytical Services Manager

Please note my hours are from 9:30 am to 5:30 pm

Eurofins Environment Testing Australia Pty Ltd

Phone: +61 2 9900 8432

Mobile: +61 429 051 456

E-mail: AsimKhan@eurofins.com

This e-mail including its attachments may contain confidential and proprietary information. Any unauthorized disclosure or use of this e-mail including its attachments is prohibited and may be prosecuted. If you are not the intended recipient, please inform the sender by an e-mail reply and delete the message. Transmission by e-mail is not secure and can result in errors or omissions in the content of the message. Despite state-of-the-art precautions we cannot guarantee that e-mails and attachments are free from viruses. We accept no liability for viruses or any transmission-related errors and omissions. You need to always virus-check any e-mails and attachments.

Eurofins companies are independent legal entities that are bound only by members of their management bodies. No other persons have representation power unless specifically authorised by proxy or other legal means.

From: Jenna Maltman <jmaltman@geo-logix.com.au>

Sent: Wednesday, 29 March 2023 12:10 PM

To: Adam Bateup <AdamBateup@eurofins.com>

Cc: Asim Khan <AsimKhan@eurofins.com>

Subject: RE: Eurofins Test Results, Invoice - Report 971509 : Site AUSTRAL - PRIMARY (2301008)

CAUTION: EXTERNAL EMAIL - Sent from an email domain that is not formally trusted by Eurofins.

Do not click on links or open attachments unless you recognise the sender and are certain that the content is safe.

Hi,

Can I please request the following samples for Asbestos - WA guidelines. Std turn around.

- TP17/0-0.4 (asbestos bag)
- TP16/0-0.2 (asbestos bag)
- TP53/0-0.4 (asbestos bag)
- TP18/0-0.3 (asbestos bag)
- TP3/0-0.4 (asbestos bag)
- TP11/0-0.2 (asbestos bag)
- TP19/0-0.2 (asbestos bag)
- TP20/0-0.2 (asbestos bag)
- TP4/0-0.15 (asbestos bag)
- TP41/0-0.3 (asbestos bag)
- TP5/0-0.3 (asbestos bag)

Thanks

Jenna Maltman | Project Scientist

Unit 2309/4 Daydream St, Warriewood NSW 2102

T: 02 9979 1722 | www.geo-logix.com.au



This email message is intended only for the addressee(s) and contains information that may be confidential and/or copyright. If you are not the intended recipient please delete this email immediately. Use, disclosure or reproduction of this email by anyone other than the intended recipient(s) is strictly prohibited. No representation is made that this email or any attachments are free of viruses and the recipient is responsible for undertaking appropriate virus scanning. Any advice provided in or attached to this email is subjected to limitations.

From: AdamBateup@eurofins.com <AdamBateup@eurofins.com>

Sent: Tuesday, 28 March 2023 10:07 PM

To: Ted Lilly <tlilly@geo-logix.com.au>

Cc: Thara Polassery <tpolassery@geo-logix.com.au>

Subject: Eurofins Test Results, Invoice - Report 971509 : Site AUSTRAL - PRIMARY (2301008)

Please find the attached reports and invoice

Kind regards,
Adam Bateup
Assistant Analytical Services Manager
My hours are 3 pm - 11 pm

Eurofins Environment Testing Australia Pty Ltd
179 Magowar Road
Girraween, NSW, 2145

Email: AdamBateup@eurofins.com

Website: www.eurofins.com/environmental-testing

[View our latest EnviroNotes](#)



Geo-Logix P/L
Bld Q2 Level 3, 2309/4 Daydream St
Warriewood
NSW 2102



NATA Accredited
Accreditation Number 1261
Site Number 1254

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: Ted Lilly

Report 971657-S
Project name AUSTRAL - TRIPLICATES
Project ID 2301008
Received Date Mar 10, 2023

Client Sample ID			TS2	TS3	TS1
Sample Matrix			Soil	Soil	Soil
Eurofins Sample No.			S23- Ma0032935	S23- Ma0032936	S23- Ma0032937
Date Sampled			Mar 07, 2023	Mar 08, 2023	Mar 07, 2023
Test/Reference	LOR	Unit			
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
Dibutylchloroendate (surr.)	1	%	86	143	138
Tetrachloro-m-xylene (surr.)	1	%	94	79	61
Heavy Metals					
Arsenic	2	mg/kg	14	24	29
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	26	53	47
Copper	5	mg/kg	28	22	22
Lead	5	mg/kg	21	22	58
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Nickel	5	mg/kg	12	< 5	6.9
Zinc	5	mg/kg	50	37	40

Client Sample ID			TS2	TS3	TS1
Sample Matrix			Soil	Soil	Soil
Eurofins Sample No.			S23- Ma0032935	S23- Ma0032936	S23- Ma0032937
Date Sampled			Mar 07, 2023	Mar 08, 2023	Mar 07, 2023
Test/Reference	LOR	Unit			
Sample Properties					
% Moisture	1	%	18	12	7.9
Total Recoverable Hydrocarbons					
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
TRH C6-C10	20	mg/kg	-	-	< 20
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	-	-	< 20
TRH >C10-C16	50	mg/kg	-	-	< 50
TRH >C10-C16 less Naphthalene (F2) ^{N01}	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
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 Fractions					
Naphthalene ^{N02}	0.5	mg/kg	-	-	< 0.5
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	%	-	-	72
p-Terphenyl-d14 (surr.)	1	%	-	-	61

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
Eurofins Suite B9			
Organochlorine Pesticides	Melbourne	Mar 30, 2023	14 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water (USEPA 8270)			
Metals M8	Melbourne	Mar 30, 2023	28 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Melbourne	Mar 30, 2023	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Melbourne	Mar 30, 2023	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Melbourne	Mar 30, 2023	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
BTEX	Melbourne	Mar 30, 2023	14 Days
- Method: LTM-ORG-2010 BTEX and Volatile TRH			
Polycyclic Aromatic Hydrocarbons	Melbourne	Mar 30, 2023	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
% Moisture	Melbourne	Mar 21, 2023	14 Days
- Method: LTM-GEN-7080 Moisture			

Company Name: Geo-Logix P/L
Address: Bld Q2 Level 3, 2309/4 Daydream St
Warriewood
NSW 2102

Project Name: AUSTRAL - TRIPLICATES
Project ID: 2301008

Order No.: PO5836TP
Report #: 971657
Phone: 02 9979 1722
Fax: 02 9979 1222

Received: Mar 10, 2023 10:27 AM
Due: Mar 17, 2023
Priority: 5 Day
Contact Name: Ted Lilly

Eurofins Analytical Services Manager : Asim Khan

Sample Detail

Organochlorine Pesticides

Metals M8

Moisture Set

Eurofins Suite B9

Melbourne Laboratory - NATA # 1261 Site # 1254

External Laboratory

No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID				
1	TS2	Mar 07, 2023		Soil	S23-Ma0032935	X	X	X	
2	TS3	Mar 08, 2023		Soil	S23-Ma0032936	X	X	X	
3	TS1	Mar 07, 2023		Soil	S23-Ma0032937			X	X
Test Counts						2	2	3	1

Internal Quality Control Review and Glossary

General

- 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.
- All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
- All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
- Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
- Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
- SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
- Samples were analysed on an 'as received' basis.
- Information identified on this report with blue colour, indicates data provided by customer that may have an impact on the results.
- 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
CP	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.
TBTO	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

- 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.
- 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.
- 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.
- Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of recovery the term "INT" appears against that analyte.
- For Matrix Spikes and LCS results a dash "-" in the report means that the specific analyte was not added to the QC sample.
- 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							
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							
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	
TRH C6-C10	mg/kg	< 20			20	Pass	
Method Blank							
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							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	mg/kg	< 0.5			0.5	Pass	
Method Blank							

Test			Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Polycyclic Aromatic Hydrocarbons									
Acenaphthene			mg/kg	< 0.5			0.5	Pass	
Acenaphthylene			mg/kg	< 0.5			0.5	Pass	
Anthracene			mg/kg	< 0.5			0.5	Pass	
Benz(a)anthracene			mg/kg	< 0.5			0.5	Pass	
Benzo(a)pyrene			mg/kg	< 0.5			0.5	Pass	
Benzo(b&j)fluoranthene			mg/kg	< 0.5			0.5	Pass	
Benzo(g,h,i)perylene			mg/kg	< 0.5			0.5	Pass	
Benzo(k)fluoranthene			mg/kg	< 0.5			0.5	Pass	
Chrysene			mg/kg	< 0.5			0.5	Pass	
Dibenz(a,h)anthracene			mg/kg	< 0.5			0.5	Pass	
Fluoranthene			mg/kg	< 0.5			0.5	Pass	
Fluorene			mg/kg	< 0.5			0.5	Pass	
Indeno(1,2,3-cd)pyrene			mg/kg	< 0.5			0.5	Pass	
Naphthalene			mg/kg	< 0.5			0.5	Pass	
Phenanthrene			mg/kg	< 0.5			0.5	Pass	
Pyrene			mg/kg	< 0.5			0.5	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
Chlordanes - Total	M23-Ma0053598	NCP	%	109			70-130	Pass	
4,4'-DDD	M23-Ma0053598	NCP	%	112			70-130	Pass	
4,4'-DDE	M23-Ma0053598	NCP	%	78			70-130	Pass	
a-HCH	M23-Ma0053598	NCP	%	74			70-130	Pass	
Aldrin	M23-Ma0053598	NCP	%	80			70-130	Pass	
b-HCH	M23-Ma0053598	NCP	%	94			70-130	Pass	
d-HCH	M23-Ma0053598	NCP	%	87			70-130	Pass	
Dieldrin	M23-Ma0053598	NCP	%	103			70-130	Pass	
Endosulfan I	M23-Ma0053598	NCP	%	83			70-130	Pass	
Endosulfan II	M23-Ma0053598	NCP	%	79			70-130	Pass	
Endosulfan sulphate	M23-Ma0053598	NCP	%	74			70-130	Pass	
Endrin	M23-Ma0053598	NCP	%	100			70-130	Pass	
Endrin aldehyde	M23-Ma0053598	NCP	%	103			70-130	Pass	
Endrin ketone	M23-Ma0053598	NCP	%	71			70-130	Pass	
g-HCH (Lindane)	M23-Ma0053598	NCP	%	82			70-130	Pass	
Heptachlor	M23-Ma0053598	NCP	%	89			70-130	Pass	
Heptachlor epoxide	M23-Ma0053598	NCP	%	117			70-130	Pass	
Hexachlorobenzene	M23-Ma0053598	NCP	%	96			70-130	Pass	
Methoxychlor	M23-Ma0056517	NCP	%	84			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	M23-Ma0042268	NCP	%	105			75-125	Pass	
Cadmium	M23-Ma0042268	NCP	%	101			75-125	Pass	
Chromium	M23-Ma0042268	NCP	%	118			75-125	Pass	
Copper	M23-Ma0042268	NCP	%	109			75-125	Pass	
Lead	M23-Ma0042268	NCP	%	119			75-125	Pass	
Mercury	M23-Ma0042268	NCP	%	120			75-125	Pass	
Nickel	M23-Ma0042268	NCP	%	109			75-125	Pass	
Zinc	M23-Ma0042268	NCP	%	114			75-125	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons				Result 1					
TRH C6-C9	M23-Ma0072232	NCP	%	72			70-130	Pass	
TRH C10-C14	M23-Ma0035534	NCP	%	84			70-130	Pass	
TRH C6-C10	M23-Ma0072232	NCP	%	90			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
TRH >C10-C16	M23-Ma0035534	NCP	%	86			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	M23-Ma0072232	NCP	%	74			70-130	Pass	
Toluene	M23-Ma0072232	NCP	%	78			70-130	Pass	
Ethylbenzene	M23-Ma0072232	NCP	%	92			70-130	Pass	
m&p-Xylenes	M23-Ma0072232	NCP	%	85			70-130	Pass	
o-Xylene	M23-Ma0072232	NCP	%	88			70-130	Pass	
Xylenes - Total*	M23-Ma0072232	NCP	%	86			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
Naphthalene	M23-Ma0072232	NCP	%	100			70-130	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Chlordanes - Total	M23-Ma0039404	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4,4'-DDD	M23-Ma0039404	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4,4'-DDE	M23-Ma0039404	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4,4'-DDT	M23-Ma0039404	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-HCH	M23-Ma0039404	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	M23-Ma0039404	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-HCH	M23-Ma0039404	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
d-HCH	M23-Ma0039404	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	M23-Ma0039404	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan I	M23-Ma0039404	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	M23-Ma0039404	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	M23-Ma0039404	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	M23-Ma0039404	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	M23-Ma0039404	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	M23-Ma0039404	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-HCH (Lindane)	M23-Ma0039404	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	M23-Ma0039404	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor epoxide	M23-Ma0039404	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	M23-Ma0039404	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	M23-Ma0039404	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Toxaphene	M23-Ma0039404	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	M23-Ma0042512	NCP	mg/kg	< 2	2.5	43	30%	Fail	Q15
Cadmium	M23-Ma0042512	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	M23-Ma0042512	NCP	mg/kg	52	52	1.6	30%	Pass	
Copper	M23-Ma0042512	NCP	mg/kg	13	15	13	30%	Pass	
Lead	M23-Ma0042512	NCP	mg/kg	6.7	8.7	26	30%	Pass	
Mercury	M23-Ma0042512	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Nickel	M23-Ma0042512	NCP	mg/kg	36	38	6.1	30%	Pass	
Zinc	M23-Ma0042512	NCP	mg/kg	18	19	8.4	30%	Pass	
Duplicate									
Sample Properties				Result 1	Result 2	RPD			
% Moisture	M23-Ma0027500	NCP	%	8.5	8.5	<1	30%	Pass	

Duplicate								
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD		
TRH C6-C9	M23-Ma0072502	NCP	mg/kg	< 20	< 20	<1	30%	Pass
TRH C10-C14	M23-Ma0069234	NCP	mg/kg	< 20	< 20	<1	30%	Pass
TRH C15-C28	M23-Ma0069234	NCP	mg/kg	< 50	< 50	<1	30%	Pass
TRH C29-C36	M23-Ma0069234	NCP	mg/kg	< 50	< 50	<1	30%	Pass
TRH C6-C10	M23-Ma0072502	NCP	mg/kg	< 20	< 20	<1	30%	Pass
TRH >C10-C16	M23-Ma0069234	NCP	mg/kg	< 50	< 50	<1	30%	Pass
TRH >C16-C34	M23-Ma0069234	NCP	mg/kg	< 100	< 100	<1	30%	Pass
TRH >C34-C40	M23-Ma0069234	NCP	mg/kg	< 100	< 100	<1	30%	Pass
Duplicate								
BTX				Result 1	Result 2	RPD		
Benzene	M23-Ma0072502	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Toluene	M23-Ma0072502	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Ethylbenzene	M23-Ma0072502	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
m&p-Xylenes	M23-Ma0072502	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
o-Xylene	M23-Ma0072502	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Xylenes - Total*	M23-Ma0072502	NCP	mg/kg	< 0.3	< 0.3	<1	30%	Pass
Duplicate								
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD		
Naphthalene	M23-Ma0072502	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Duplicate								
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD		
Acenaphthene	M23-Ma0072988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Acenaphthylene	M23-Ma0072988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Anthracene	M23-Ma0072988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benz(a)anthracene	M23-Ma0072988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(a)pyrene	M23-Ma0072988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(b&j)fluoranthene	M23-Ma0072988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(g,h,i)perylene	M23-Ma0072988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(k)fluoranthene	M23-Ma0072988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Chrysene	M23-Ma0072988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dibenz(a,h)anthracene	M23-Ma0072988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Fluoranthene	M23-Ma0072988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Fluorene	M23-Ma0072988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Indeno(1,2,3-cd)pyrene	M23-Ma0072988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Naphthalene	M23-Ma0072988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Phenanthrene	M23-Ma0072988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Pyrene	M23-Ma0072988	NCP	mg/kg	< 0.5	< 0.5	<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
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:

Asim Khan	Analytical Services Manager
Caitlin Breeze	Senior Analyst-Metal
Joseph Edouard	Senior Analyst-Organic
Joseph Edouard	Senior Analyst-Volatile
Mary Makarios	Senior Analyst-Sample Properties
Mele Singh	Senior Analyst-Organic
Scott Beddoes	Senior Analyst-Metal



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](#).

Eurofins shall not be liable for loss, cost, damages or expenses incurred by the client, or any other person or company, resulting from the use of any information or interpretation given in this report. In no case shall Eurofins be liable for consequential damages including, but not limited to, lost profits, damages for failure to meet deadlines and lost production arising from this report. This document shall not be reproduced except in full and relates only to the items tested. Unless indicated otherwise, the tests were performed on the samples as received.

CHAIN OF CUSTODY

Project Manager:

Ted Lilly

Contact email:

tpolassery@geo-logix.com.au

Project Name:

Austral - triplicates

Project Number:

2301008

Date Submitted:

9/3/23

Page 1 of 1

Purchase Order No:

P0584/TP

Quote Reference:

Send Invoice to:

accounts@geo-logix.com.au

TAT required:

standard.

ANALYSIS REQUIRED

Lab ID	Sample ID	Date	Matrix					Comments	COMPOSITE	TRH - C6 - C10	TRH - C10 - C40	VOCs	BTEXN	PAHs	PCBs	OCPs	OPPs	Phenols	Metals - M8	Metals - Lead	Metals - Specify **	TCLP	Asbestos (ID only)	Asbestos (WA DOH)	Foreign Materials	Conductivity (EC)	pH	Hold	SUITE	B9	Eurofins MGT Suite Codes																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
			soil	water	air	paint, filters	other																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
	TS1	7/3/23	X					Please forward to Melbourne. Eurofins																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													</

Metals**(circle) As, Cd, Cr, Cu, Ni, Pb, Zn, Hg, Cr⁶⁺, Cr³⁺, Fe²⁺, Fe³⁺, Be, B, Al, V, Mn, Fe, Co, Se, Sr, Sn, Mo, Ag, Ba, Ti, Bi, Sb

Chain of Custody

Relinquished by:

T. Lilly

Date/Time:

9/3/23

Signature:

Received by:

Ryan Phillips

Date/Time:

10/3/23

Signature:

J. C.

1.8C

#971657

Chill
Cave

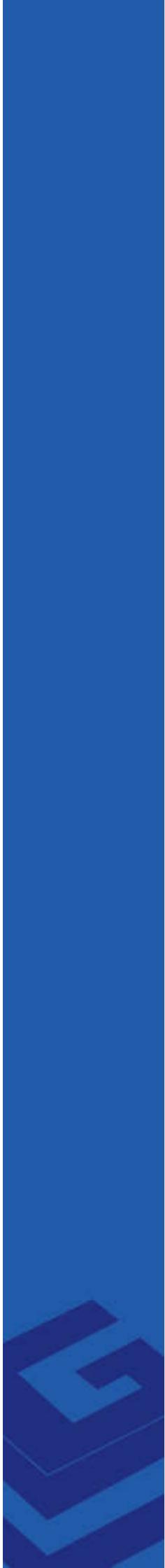
ATTACHMENT H



Geo-Logix

KNOWN WEIGHT QA/QC CHECK	
KNOWN WEIGHT:	g
MEASURED WEIGHT:	g
<input type="checkbox"/> MEASURED WEIGHT IS WITHIN 2%	
Asbestos in soil (%) = $\frac{\text{ACM Weight (g)} \times 0.015}{\text{Soil Sample Weight (kg)}}$	

<u>VERY ROUGH</u> Guide on Pass/Fail for Gravimetric Tests:	
Residential 'HSL-A': 10 g ACM (Size of a matchbook)	Public Open Space 'HSL-C': 20 g ACM
Residential 'HSL-B': 40 g ACM	Commercial/Industrial 'HSL-D': 50 g ACM (Size of a playing card)



GEO-LOGIX PTY LTD

ABN 86 116 892 936

Building Q2, Level 3
Suite 2309, 4 Daydream Street
Warriewood NSW 2102

Phone 02 9979 1722

Fax 02 9979 1222

Email info@geo-logix.com.au

Web www.geo-logix.com.au