STAGE 2 DETAILED SITE INVESTIGATION

Central & NW Portions Of Outer Sydney Orbital
221-227 And 289-311 Luddenham Road, Orchard Hills, NSW

Prepared for **Co-ordinated Infrastructure**

24 October 2024

Ref: DRM P23.1039.V12-R01

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Report Title	Stage 2 Detailed Site Investigation
Site	Central & NW Portions Of Outer Sydney Orbital 221-227 And 289-311 Luddenham Road, Orchard Hills, NSW
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DOCUMENT HISTORY & DISTRIBUTION

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LIMITATIONS AND GENERAL NOTES

LIMITATIONS

The report has been prepared in accordance with the scope of services set out in the Development Risk Management Pty Ltd (DRM) Proposal under the agreed Terms of Engagement. The scope of services were agreed to with due consideration of a range of factors including time, budget, access and site constraints. The report is provided for the specific purpose as described in the report. The report may not contain sufficient information for purposes other than that described in the report.

The information in this report is considered accurate at the date of issue.

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Subsurface conditions can change with time and can vary between test locations. Therefore, actual conditions in areas not sampled may differ from those predicted since no subsurface investigation, no matter how comprehensive, can reveal all subsurface details and anomalies. Anthropogenic impact and natural causes can also affect subsurface conditions and thus the continuing adequacy of these reports. Seasonal variations can also affect subsurface conditions. DRM should be kept informed of any such events and should be retained to identify variances, conduct additional tests if required, and recommend solutions to problems encountered on site.

Data obtained from nominated discrete locations, subsequent laboratory testing and empirical or external sources are interpreted by trained professionals in order to provide an opinion about overall site conditions, their likely impact with respect to the report purpose and recommended actions in accordance with any relevant industry standards, guidelines or procedures.

EXECUTIVE SUMMARY

Development Risk Management Pty Ltd (DRM) was engaged by Co-ordinated Infrastructure to undertake a Stage 2 Detailed Site Investigation stage (DSI) for a portion of the land located at 221-227 and 289-311 Luddenham Road, Orchard Hills, NSW (the property). The assessment area is shown in Figure-1 will be referred to as "the site" from here on.

The eastern portion of the property is proposed to be developed for commercial/industrial land use (Alspec Industrial Business Park), but we understand that the development application covers the entire property. The western portion is proposed to be retained predominantly undeveloped (other than some flood retention basins) for environmental conservation. However, that area is also referred to as the Outer Sydney Orbital (OSO). Only the central and central north portions of the OSO had previously been assessed for contamination through intrusive assessments.

Based on information provided by the client, DRM understood the following:

North Western Portion of OSO

- This north western (NW) portion of the OSO has not been assessed previously;
- Potentially contaminated soil and demolition rubble has been imported and placed on parts of this NW portion of the OSO; and
- This area requires assessment and remediation of identified unacceptable contamination, to satisfy the current development application for the proposed commercial/industrial development.

Central Portion of OSO

- Following the observations of asbestos impacted soils being imported to the central portion of the OSO, Construction Sciences (CS) conducted an Asbestos in Soil Assessment (CS, 2021)[1], which identified asbestos in soils and stockpiled material within the assessed area. Identified asbestos was bonded ACM, though three samples also reported asbestos fines/fibrous asbestos (AF/FA) at concentrations that were well below the acceptable level of 0.001% w/w);
- CS subsequently prepared an asbestos remedial plan (CS, 2021a[2]) to remediate the asbestos impacted soils within specified areas of the central OSO. However, DRM understands that this recommended remediation has not been conducted;
- Since the preparation of the asbestos remedial plan (ARP) in 2021, aerial photographs of the site suggested potential disturbance of the remediation areas, as well as importation of new stockpiles, may have occurred. It is therefore highly likely that the asbestos impacted areas identified by CS (2021 and 2021a) have been disturbed and areas previously identified as not impacted may have been impacted by asbestos; and
- The Final Validation report prepared by DRM (2024[3]) for the property concluded that "*…The central portion of the Outer Sydney Orbital corridor requires further assessment and remediation, to remove previously identified asbestos impacted soils (CS, 2021 and 2021a).*" DRM recommended to "*Conduct a thorough assessment of the asbestos contamination status of the central portion of the OSO corridor, given the time elapsed since the previous investigations by CS (2021i). The identified contamination should be remediated in accordance with an updated asbestos remedial plan.*";

[1] CS, 2021. "Asbestos in Soil Assessment, 221-227 Luddenham Rd, Orchard Hills, NSW, PART LOT 1, IN DP 1099147" (ref: 10791EV.P.68-R05 dated 15 February 2021)
[2] CS, 2021a. "Asbestos Remedial Plan, 221-227 Luddenham Rd, Orchard Hills, NSW, 'Portion of Lot 1, IN DP 1099147' " (ref: 10791EV.P.68-R08 dated 17 February 2021)
[3] DRM, 2024. "Final Validation Report, 221-227 & 289-311 Luddenham Rd, Orchard Hills, NSW" (ref: DRM P23.1039-R05r1 dated 23 August 2024)

This stage 2 detailed site investigation was conducted to the contamination status at the central and NW portions of OSO, to allow remediation of identified unacceptable contamination.

The objectives of this project were to:

- Assess the contamination status of the north western portion of OSO;
- Assess the lateral extent of asbestos contamination in the central portion of OSO, which were previously proposed to be remediated to remove asbestos; and
- Provide recommendations for further assessment and/or management of identified contamination

The scope of work undertaken to address the project objectives included:

- Review of the CS reports (2021 and 2021a) and aerial photographs for the site;
- A site walkover;
- Excavation of 253 test pits and 3 surface samples using a 5T excavator to a target depth of 0.1m into residual soil;
- Collection of samples at the surface and at regular depth intervals, or where evidence of potential contamination is observed;
- Laboratory analysis of selected samples; and
- Data assessment and reporting.

The scope of works was undertaken with reference to the relevant sections of NEPC (2013), NSW EPA (2020b), HEPA (2020) and WA DOH (2021).

ID	AEC	COPC	Exposure Pathway	Receptor	Potential Unacceptable Risk
DRM - AEC 01	Fill material and land disturbance across Northwestern portion	Asbestos	Dust inhalation	Future site workers	Remediation for asbestos impacted soils required
DRM - AEC 02	Central OSO portion				

Based on DRM's assessment of desktop review information, field results and analytical results, DRM makes the following conclusions:

- The potential for significant unacceptable **chemical contamination** to be present at the northwestern portion is low, but the potential to encounter isolated patches of contamination cannot be precluded;
- Asbestos identified on the surface of uncontrolled fill pad and stockpiles in the north western portion requires remediation;
- Waste material present in the north western portion requires removal; and
- The lateral extent of asbestos contamination in the central portion of OSO remains consistent with that previously proposed by CS (2021a). Asbestos does not appear to have been spread to other areas of the Central OSO portion.

As such, DRM makes the following recommendations:

- Preparation of a remedial action plan (RAP) for northwestern portion to remove the identified bonded asbestos;
- Remediation of NW portion of OSO in accordance with the new RAP and remediation of the Central portion of OSO in accordance with the ARP (CS, 2021a);
- If isolated pockets of unexpected contamination are encountered during construction works, DRM recommends preparing and implementing an Unexpected Finds Protocol (UFP) to manage such instances; and
- Incorporation of the validation works into a revised final validation report for the site.

This report must be read in conjunction with the *Limitations and General Notes* at the front of this report.

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1. INTRODUCTION

1.1 Background

Development Risk Management Pty Ltd (DRM) was engaged by Co-ordinated Infrastructure to undertake a Stage 2 Detailed Site Investigation stage (DSI) for a portion of the land located at 221-227 and 289-311 Luddenham Road, Orchard Hills, NSW (the property). The assessment area is shown in Figure-1 will be referred to as "the site" from here on.

The eastern portion of the property is proposed to be developed for commercial/industrial land use (Alspec Industrial Business Park), but we understand that the development application covers the entire property. The western portion is proposed to be retained predominantly undeveloped (other than some flood retention basins) for environmental conservation. However, that area is also referred to as the Outer Sydney Orbital (OSO). Only the central and central north portions of the OSO had previously been assessed for contamination through intrusive assessments.

Based on information provided by the client, DRM understood the following:

1.1.1 North Western Portion of OSO

- This north western (NW) portion of the OSO has not been assessed previously;
- Potentially contaminated soil and demolition rubble has been imported and placed on parts of this NW portion of the OSO; and
- This area requires assessment and remediation of identified unacceptable contamination, to satisfy the current development application for the proposed commercial/industrial development.

1.1.2 Central Portion of OSO

- Following the observations of asbestos impacted soils being imported to the central portion of the OSO, Construction Sciences (CS) conducted an Asbestos in Soil Assessment (CS, 2021)[4], which identified asbestos in soils and stockpiled material within the assessed area. Identified asbestos was bonded ACM, though three samples also reported asbestos fines/fibrous asbestos (AF/FA) at concentrations that were well below the acceptable level of 0.001% w/w);
- CS subsequently prepared an asbestos remedial plan (CS, 2021a[5]) to remediate the asbestos impacted soils within specified areas of the central OSO. However, DRM understands that this recommended remediation has not been conducted;
- Since the preparation of the asbestos remedial plan (ARP) in 2021, aerial photographs of the site suggested potential disturbance of the remediation areas, as well as importation of new stockpiles, may have occurred. It is therefore highly likely that the asbestos impacted areas identified by CS (2021 and 2021a) have been disturbed and areas previously identified as not impacted may have been impacted by asbestos; and
- The Final Validation report prepared by DRM (2024[6]) for the property concluded that "*…The central portion of the Outer Sydney Orbital corridor requires further assessment and remediation, to remove previously identified asbestos impacted soils (CS, 2021 and 2021a).*" DRM recommended to "*Conduct a thorough assessment of the asbestos contamination status of the central portion of the OSO corridor, given the time elapsed since the previous investigations by CS (2021i). The identified contamination should be remediated in accordance with an updated asbestos remedial plan.*";

This stage 2 detailed site investigation was conducted to the contamination status at the central and NW portions of OSO, to allow remediation of identified unacceptable contamination.

[4] CS, 2021. "Asbestos in Soil Assessment, 221-227 Luddenham Rd, Orchard Hills, NSW, PART LOT 1, IN DP 1099147" (ref: 10791EV.P.68-R05 dated 15 February 2021)
[5] CS, 2021a. "Asbestos Remedial Plan, 221-227 Luddenham Rd, Orchard Hills, NSW, 'Portion of Lot 1, IN DP 1099147' " (ref: 10791EV.P.68-R08 dated 17 February 2021)
[6] DRM, 2024. "Final Validation Report, 221-227 & 289-311 Luddenham Rd, Orchard Hills, NSW" (ref: DRM P23.1039-R05r1 dated 23 August 2024)

1.2 Objectives

The objectives of this project were to:

- Assess the contamination status of the north western portion of OSO;
- Assess the lateral extent of previously identified asbestos contamination in the central portion of OSO, which was proposed to be remediated for asbestos; and
- Provide recommendations for further assessment and/or management of identified contamination

1.3 Scope of Work

The scope of work undertaken to address the project objectives included:

- Review of the following:
  - Asbestos assessment by CS (2021);
  - Asbestos remedial plan by CS (2021a); and
  - Review of aerial photographs for the site, available through MetroMaps and Google Earth.
- A site walkover to make observations of current site conditions and land use activities, and of land use activities on properties located immediately adjacent to the site;
- Excavation of 252 test pits and collection of three surface soil samples using a 5T excavator to a target depth of 0.1m into residual soil;
- Collection of samples at the surface and at regular depth intervals, or where evidence of potential contamination is observed;
- Laboratory analysis of selected samples for the identified contaminants of concern; and
- Data assessment and reporting.

The scope of works was undertaken with reference to the relevant sections of NEPC (2013), NSW EPA (2020), HEPA (2020) and WA DOH (2021).

2. SITE IDENTIFICATION

Site identification details are presented below:

Table 2-1 Site identification details

Identifier	Description
Site locality	The property is located to the west of Luddenham Road. North western portion of OSO is located at the corner of Patons Lane and Stockdale Road and Central portion of OSO is located at east of Stockdale Road as presented in Figure 1
Site Layout	North western portion covers an area of approximately 7ha and Central portion of OSO covers an area of approximately 8ha. The general layout and current site features are presented in Figure 2
Lot Number and Deposited Plan	Parts of Lot 1 in DP1293805
Local Government Authority	Penrith City Council
Zoning (NSW Government's online Planning Portal)	North west portion is zoned as C2 Environmental Conservation and Central OSO is zoned as RU2 Rural Landscape
Detail and Level Survey	Attached in Appendix A

3. SITE CHARACTERISATION

3.1 Geology

The Department of Mineral Resources Geological Survey of NSW Penrith 1:100,000 Geological Series Sheet 9030 (Edition 1) 1991, indicated that most of the site is likely to be underlain by Bringelly shale of Wianamatta Group comprising shale, carbonaceous claystone, laminite, lithic sandstone and rare coal.

A portion of the site to the east of north western portion and north west of central OSO is underlain by alluvial floodplain deposits comprising of silt, very fine to medium grained lithic to quartz rich sand, clay

3.2 Topography and Elevation

According to the survey plan of the site:

North Western Portion of OSO

- The topography of this portion is generally flat with a gentle slope to the south and east towards the creek (Section 3.3); and
- The elevation was approximately 41.9m Australian Height Datum (AHD) in the north west and 38.2m AHD in the south.

Central Portion of OSO

- The topography of this portion is generally flat with a gentle slope to the south east towards north west; and
- The elevation was approximately 46.3m Australian Height Datum (AHD) in the south east and 40.3m AHD in the north west.

3.3 Hydrogeology and Hydrology

WaterNSW Groundwater online data base indicated one registered groundwater bore (ID: GW105382.1.1) located within a 500m radius of the site. There were no registered bores for authorised extraction purposes within a 2km radius of the site. Summary information presented for the bore GW105382.1.1 indicated that:

- The bore was drilled in 2004 to a depth of 252m below ground level (bgl) at a reference elevation of 40.9 m AHD;
- The geology encountered during drilling included clay (0-5m bgl), shale (5-80m bgl). Sandstone was encountered at a depth of 80m;
- The salinity in groundwater was measured at 2500 TDS mg/L indicating highly saline water; and
- The depth to standing water level was reported at 24m bgl.

A review of Google Maps, indicated that surface water bodies near the site included:

- A tributary of South Creek is located immediately to the south east of the north western portion, and flows south east to South Creek, which is located approximately 1.8km to the east; and
- Blaxland Creek is located approximately 2.3km to the west.

Based on site surface topography and elevation, the inferred general surface water flow direction on the site is considered likely to be towards the northeast, towards Eastern Creek.

3.4 Acid Sulphate Soils

A review of the NSW Government's ESPADE website, indicated that the site is not mapped as having acid sulphate soil risks.

The stage 2 DSI (2024a)[7] report prepared by DRM stated that acid sulphate soils appear to be sporadically distributed within the alluvial clays at depths between 0.5m and 2.5m bgl in the outer Sydney orbital area. If the site requires excavation beyond 0.5m bgl into alluvial clays, acid sulphate risks should be considered and further assessment will be warranted.

3.5 PFAS Investigation & Management Programs

Perfluoroalkyl and Polyfluoroalkyl Substances (PFAS) is an emerging contamination risk that requires consideration.

Based on a review of the NSW EPA PFAS Investigation Sites Map (accessed 23.09.2024), there were no known NSW EPA PFAS Investigation Sites within the vicinity of the site.

[7] DRM, 2024a. "Stage 2 Detailed Site Investigation Proposed Flood Basins, 221-227 Luddenham Rd, Orchard Hills, NSW" (ref: DRM P23.1039-R06 dated 5 May 2024

4. REGULATORY RECORDS

4.1 Contaminated Land Management (CLM) Act 1997

A search of the NSW EPA online contaminated land record of notices indicated that the site (and land located immediately adjacent to the site) was not the subject of:

- orders made under Part 3 of the CLM Act;
- notices available to the public under section 58 of the CLM Act;
- an approved voluntary management proposal under the CLM Act that has not been fully carried out and where NSW EPA approval has not been revoked;
- site audit statements provided to the NSW EPA under section 53B of the CLM Act;
- where practicable, copies of anything formerly required to be part of the public record; or
- actions taken by NSW EPA (or the previous State Pollution Control Commission) under section 35 or 368 of the Environmentally Hazardous Chemicals Act 1985.

A search of the NSW EPA online list of NSW contaminated sites notified to NSW EPA indicated that the site (and land located immediately adjacent to the site) was not on the list.

4.2 Protection of the Environment Operations (POEO) Act 1997

A search of the NSW EPA online POEO public register indicated that the site (and land located immediately adjacent to the site) was not the subject of a licence, application, notice, audit, pollution study or reduction program.

4.3 Environmental Planning and Assessment (EP&A) Act 1979

A planning certificate issued under section 10.7 (2 and 5) of the EP&A Act was obtained on 20 March 2024. The certificate stated that the land is affected by Asbestos policy adopted by Council. It did not indicate that the site is affected by significant contamination, within the meaning of the Contaminated Land Management Act. A copy of the certificate is presented in Appendix H.

4.4 Work Health and Safety (WHS) Regulation 2017

A site search with SafeWork NSW for Schedule 11 hazardous chemicals (dangerous goods)[9] on the site was not undertaken given that the review of historical aerial photography (refer Section 5.1 of this report), did not indicate a potential for licensable quantities of Schedule 11 hazardous chemicals (dangerous goods) to have been stored on the site.

[8] Sections 35 and 36 of the Environmentally Hazardous Chemicals Act 1985 have been repealed. Notices under these sections are treated by the CLM Act as management orders.
[9] Under the Work Health and Safety Regulation

5. SITE HISTORY

5.1 Aerial Photography

A selection of historical aerial photographs of the site, were reviewed. The aerial images reviewed can be accessed via DRM SharePoint.

5.1.1 North Western Portion

Table 5.1.1-1 Summary of Aerial Image Review

	Site Features			
Year	Historical demolition	Land disturbance	Agricultural activity	Comment
1947				Appears to be vacant.
1965		Y		Some land disturbance is observed at the central portion.
1970-1982				No significant changes observed.
1986		Y		Dirt track is visible.
1986-2023				No significant changes observed
2024		Y		Land disturbance (potential uncontrolled filling) is observed at the north portion.

Based on the aerial image review DRM considers the land disturbance (potential uncontrolled filling) in 2024 as potentially contaminating activities.

5.1.2 Central OSO

Table 5.1.2-1 Summary of Aerial Image Review

	Site Features		
Year	Land disturbance	Building demolition	Comment
1947-1978			Appears to be vacant
1982			Two shed like structure is observed at the eastern portion
1998			Land disturbance is observed at the north eastern portion
1998-2019			No significant changes observed.
2019	Y		Potential land disturbance is observed at the southern portion
Aug 2020	Y		Land disturbance and stockpiling is visible in the central portion of OSO area, as described in CS (2021).
Dec 2020	Y		Land disturbance and stockpiling is visible in the central portion of OSO area, as described in CS (2021)..

Year	Site Features: Land disturbance	Site Features: Building demolition	Comment
Jun & Aug 2021			Land disturbance and stockpiling mentioned above is not visible.
Sep 2021	Y		Land disturbance in the central portion of OSO area is again visible. It appears that the remediation area previously identified by CS (2021a) has been disturbed and materials have been moved
2022			No significant land disturbance, stockpiling or significantly contaminating activity is visible.
Dec 2023		Y	Two shed like structure is no longer visible.
May 2024		Y	Possible new stockpiles in the central OSO area.

Based on the aerial image review DRM considers that potential land disturbance and stockpiling between 2019 to 2021 and demolition of structures in 2023 as potentially contaminating activities.

5.2 Historical Land Titles

A historical title search was not undertaken in accordance with the proposed and accepted scope of work as DRM considers that a review of historical titles would not provide significant additional information.

5.3 Local Meteorology

The Bureau of Meteorology website (http://www.bom.gov.au/climate/data/index.shtml?bookmark=200) was accessed and a search conducted for climatic information measured by the nearest bureau station to the site. A summary of data obtained from that search is presented in Table 5.3-1.

Table 5.3-1 Local Meteorology Data Summary

Nearest Weather Station Location and Number	Mean Annual Temperature (°C)		Mean Annual Rainfall (mm)
	Max	Min	
Orchard Hills -067084	23.4	11.6	825.1

5.4 Complaints

There was no evidence provided to DRM during the project, regarding historical complaints about the site.

5.5 Incident Reports

There was no evidence provided to DRM during the project, regarding historical incidents at the site.

5.6 Previous Reports

DRM reviewed the following reports to achieve the stated objectives:

- CS, 2021. “Asbestos in Soil Assessment, 221-227 Luddenham Rd, Orchard Hills, NSW, PART LOT 1, IN DP 1099147” (ref: 10791EV.P.68-R05 dated 15 February 2021)

- CS, 2021a. "Asbestos Remedial Plan, 221-227 Luddenham Rd, Orchard Hills, NSW, 'Portion of Lot 1, IN DP 1099147' " (ref: 10791EV.P.68-R08 dated 17 February 2021)

5.6.1 Asbestos in Soil Assessment - (CS, 2021)

CS conducted a contamination assessment within the central portion of the Outer Sydney Orbital corridor (CS, 2021) to assess the potential human health exposure risks associated with known the asbestos impacted soils identified in CS (2020[10]). The objectives of the CS (2021) assessment were to:

- Assess accessible disturbed areas of the central portion of OSO where recent historical aerial photographs indicate the potential for uncontrolled filling;
- Provide advice on the likely lateral and vertical extent of unacceptable asbestos related human health exposure risks at the site, associated with recently imported fill material; and
- Provide recommendations for further assessment, management and/or remediation of site soils (if warranted).

The scope included a desktop review, walkover, intrusive sampling, laboratory analysis, data assessment and reporting. The assessment concluded that the asbestos identified (in the form of asbestos fines, bonded ACM and free fibres) within assessed area could present an unacceptable human health exposure risk.

CS (2021) recommended the preparation of an asbestos remediation plan (ARP) to address the identified human health exposure risks. CS stated that an asbestos remediation and validation report should be prepared at the completion of the recommended remedial works.

This report (CS, 2021) can be accessed by clicking the link below.

Asbestos in Soil Assessment - (CS, 2021)

5.6.2 Asbestos Remedial Plan - (CS, 2021a)

CS (2021a) prepared an asbestos remedial plan (ARP) to address unacceptable asbestos exposure risks identified central OSO area. The ARP specified the remediation extents as shown below in Table 5.6.2-1.

Table 5.6.2-1 Remediation extents identified by the ARP (CS, 2021a)

AEC ID	AEC Description and Lateral Extent	Nominal Depth	COPC
OSO AEC01a	Former stockpile area, ~600m^2 area, (Western portion)	0.3m bgl	Bonded ACM
OSO AEC01b	Former stockpile area, ~3,000m^2, (Eastern portion)	0.1m bgl	Bonded ACM
OSO AEC01c	Former stockpile area ~700m^2, (Southern portion)	0.2m bgl	Asbestos fines
OSO AEC01d	Former stockpile area ~900m^2, (Eastern portion)	0.2-0.4m bgl	Asbestos fines
OSO AEC02	Data gap: Disturbed soils, obscured by vegetation (~150m^2)		Asbestos
OSO AEC03a	Site disturbed areas with ACM on surface (~300m^2)	0.1m bgl	Bonded ACM
OSO AEC03b	Site disturbed areas with ACM on surface (~200m^2),	0.1m bgl	Bonded ACM
OSO AEC03c	Site disturbed areas with ACM on surface (~200m^2)	0.1m bgl	Bonded ACM
OSO AEC03d	Site disturbed areas with ACM on surface (~500m^2)	0.25m bgl	Bonded ACM
OSO AEC04	Stockpile with demolition waste (~20m^3)	Base of stockpile	Bonded ACM

[10] CS, 2020. "Asbestos Assessment of Surface Soils, 221-227 and 289-317 Luddenham Rd, Orchard Hills, NSW, 2748" (ref: 10791EV.P.68-R02 dated 15 December 2020)

CS (2021a) recommended the following remediation strategies:

- Bonded Asbestos impacted soils at depth was to be excavated, spread on a treatment pad and subjected to emu picking to remove bonded asbestos;
- Bonded asbestos on the surface (up to 0.1m deep) was to be treated in -situ by tyning and emu picking to remove bonded asbestos;
- Asbestos fines impacted soils were to be excavated and disposed offsite; and
- Asbestos impacted stockpile was to be either disposed offsite or emu picked on a treatment pad.

This report can be accessed by clicking the link below.

Remedial Action Plan – CS (2021a)

5.7 Anecdotal Evidence

There was no anecdotal information regarding the site provided to DRM during the project.

6. SITE CONDITION

A site walkover was undertaken on 10 September 2024 by Rahabar Alam (Project Environmental Scientist), under guidance from Nalin De Silva (Principal Environmental Engineer). Observations were made of land use activities being undertaken on the site as well as on the properties located immediately adjacent to the site. The following sections present the observations made. Some of the features discussed below are also illustrated in Figure 2.

Table 6-1 Site conditions observed in north west portion

Observation Aspect	North Western Portion
Current Land Use	Currently vacant and was leased by Sydney metro for storage purpose during construction
Buildings, Infrastructure and Surfaces	Grassed surface No structures are observed within the site Thick vegetation is observed at the eastern portion.
Boundaries	North, east and west side is fenced. This portion of the site is triangular shaped. The fence in east and west are connected at the south.
Surface Water and Drainage	One small dam is located at the central portion. A tributary of South Creek is located immediately to the west of the site and flows north east.
Staining and Odours	No stains and odours were observed on site. A small road base compacted area was observed at the middle portion.
Chemical Storage	None observed
Aboveground and Underground Storage Tanks	None observed
Onsite Septic Systems	None observed
Wastes	6 stockpiles containing construction wastes (metal and wires), concrete waste, household waste and road base waste were observed. 4 discarded metal drums were observed. However no visible chemical leaking were observed. Refer to Figure 2
Hazardous Materials	Potential asbestos containing materials (ACM) were observed. Refer to section 11.1.2. Refer to Figure 5.
Fill Material	There was evidence of filling at the central portion of the NW Portion of OSO.
Phyto-toxicity	Plants and shrubs appeared healthy No evidence of phyto-toxicity observed
Surrounding Land Use	The Patons Lane Landfill is located to the north Alspec Industrial Park is proposed to be developed at the east. Aboveground Sydney metro track line is under construction at the west.

Table 6-2 Site Conditions observed in central OSO

Observation Aspect	Central OSO
Current Land Use	Currently vacant and was leased by Sydney metro for storage purpose during construction
Buildings, Infrastructure and Surfaces	Grassed surface No structures are observed within the site
Boundaries	Though the site area is not fully fenced, the property is surrounded by wired fence
Surface Water and Drainage	None observed
Staining and Odours	None observed
Chemical Storage	None observed
Aboveground and Underground Storage Tanks	None observed
Onsite Septic Systems	None observed
Wastes	1 stockpile containing demolition rubble is observed at the eastern portion. 1 stockpile of traffic management materials (metal posts and barriers) at the eastern portion.
Hazardous Materials	Potential asbestos containing materials (ACM) were observed. Refer to section 11.1.2. Refer to Figure 6.
Fill Material	There was evidence of filling at the southern portion
Phyto-toxicity	Plants and shrubs appeared healthy No evidence of phyto-toxicity observed
Surrounding Land Use	Alspec Industrial Park is proposed to be developed at the east. Aboveground Sydney metro track line is under construction at the west.

Representative photographs of the site are shown below. All photographs taken during the site walkover can be viewed via DRM SharePoint.

Photograph 6-1 Looking north east at Northwestern portion

Photograph 6-2 Looking east at Northwestern portion

Photograph 6-3 Looking western boundary at Northwestern portion

Photograph 6-4 Waste stockpile with concrete, wires and metal pipe at north of Northwestern portion

Photograph 6-5 Road base and concrete waste at east of Northwestern portion

Photograph 6-6 General waste material stockpiles at east of Northwestern portion

Photograph 6-7 Looking western boundary at Central Portion

Photograph 6-8 Looking northeast from south at Central portion

Photograph 6-9 Looking north from south at Central portion

Photograph 6-6 Stockpile of traffic management material at east of Central portion

7. EMERGING CONTAMINANTS AND CHEMICAL CONTROL ORDERS

7.1 Per and Poly-Fluoroalkyl Substances (PFAS)

DRM has adapted the PFAS decision matrix presented in HEPA (2020) along with the guidance in Section 7 of HEPA (2020) to facilitate an assessment of the potential for PFAS to be present on site. Refer to Section B1 of Appendix B.

Table 7.1-1 Adapted PFAS Decision Matrix

Preliminary PFAS Screening Question	Decision
Is there evidence of major commercial, industrial and government facilities, and activities that historically or currently use or store PFAS containing products?	No
Is there evidence of fuel[11] fires on the site?	No
Is there evidence of foam deluge systems, metal plating works, car washes, or electricity generation / distribution on the site?	No
Is there evidence of landfill, wastewater treatment, liquid waste treatment, bio-solid stockpiles or paper mill wastes on site?	No
Is there evidence of fire training occurring at the site?	No
Is there evidence of fire training occurring up gradient or adjacent to the site?	No
Is there evidence of the presence of an airport or fire station, up-gradient of, or adjacent to, the site?	No

Based on the results of the preliminary PFAS screening questions above, further assessment of PFAS related land contamination risks at the site, is considered not warranted.

7.2 Chemical Control Orders

DRM used the decision matrix presented in Table 7.2 (based on the NSW EPA Chemical control orders (CCO) available at the time of this project), to facilitate an assessment of the potential for those control chemicals to be present on site. Refer to Section B2 of Appendix B for more information.

Table 7.2-1 Preliminary CCO Screening Matrix

Preliminary CCO Screening Question	Decision
Were aluminium smelter wastes used or stored on site?[12]	No
Were dioxin contaminated wastes generated or stored on site?[13]	No
Were organotin wastes generated or stored on site?[14]	No
Were polychlorinated biphenyls (PCB) used or stored on site?[15]	No
Were scheduled chemicals[16] used, or wastes stored, on site?[17]	No

Based on the results of the preliminary CCO screening questions above, further assessment of CCO related land contamination risks at the site, is considered not warranted.

[11] Fuels could include solvents, petrol, diesel and kerosene.
[12] SPCC 1986, 'Chemical Control Order In Relation to Aluminium Smelter Wastes Containing Fluoride and/or Cyanide' dated 21 March 1986
[13] NSW EPA 1986, 'Chemical Control Order In Relation to Dioxin-Contaminated Waste Materials' dated 14 March 1986
[14] NSW EPA 1989, 'Chemical Control Order In Relation to Organotin Wastes' dated 11 March 1989
[15] NSW EPA 1997, 'Polychlorinated Biphenyl Chemical Control Order' dated 20 June 1997
[16] Primarily organochlorine pesticide (OCP) compounds, with some industrial by-products
[17] NSW EPA 2004, 'Chemical Control Order in Relation to Scheduled Chemical Wastes

8. CONCEPTUAL SITE MODEL

The site history review and observations made during the site walkover, were assessed in the context of the project objectives, in order to develop a conceptual site model (CSM) for the site.

8.1 Sources of Contamination

The sources of potential contamination and the contaminants of potential concern (COPC) identified for the site, based on the site history review and site walkover observations, are presented below.

Table 8.1-1 Sources and Contaminants of Potential Concern in North western portion

Source	COPC
Uncontrolled filling where	Petroleum hydrocarbons, pesticides, polychlorinated biphenyls, metals, asbestos
Stockpiling where	Hydrocarbons, pesticides, polychlorinated biphenyls, metals, asbestos

Table 8.1-2 Sources and Contaminants of Potential Concern in Central OSO

Source	COPC
Imported fill material in Central OSO	Asbestos (Based on CS (2021a) RAP)

8.2 Land Use Scenario

As mentioned in Section 1, the site is a portion of the property located at 221-227 Luddenham Road, Orchard Hills. The property is to be developed in to Alspec Industrial Park. For the purpose of this investigation, DRM has adopted the property's commercial / industrial land use scenario for the site.

Relevant documents including site surveys and development plans are attached in Appendix A. The assumptions relevant for this land use scenario are specified in Appendix C Section C1.

8.3 Receptors

Based on the adopted land use scenario, DRM considers receptors at the site may include future site workers, and terrestrial ecosystems (north western portion).

The assumptions relevant for these receptors are specified in Appendix C Section C2.

8.4 Exposure Routes

Table 8.4-1 Summary of the Exposure Routes

Exposure Route	Description	Further assessment
Dermal Contact, Ingestion and Dust Inhalation	There is a potential for contaminants to be present in soils at the site, which may present a dermal contact or ingestion risk or dust inhalation risk to human health.	Warranted
Vapour Intrusion / Inhalation	Vapour intrusion / inhalation exposure risks to human health can occur when a primary or secondary vapour source is present. Site history information did not indicate a potential for vapour sources to be present at the site.	Not Warranted
Asbestos Inhalation	There is a potential for bonded ACM, FA and/or AF to be present in soils (surface and depth) at the site.	Warranted
Hazardous ground gases	DRM has reviewed desktop site history information and site walkover data in the context of sources and origins of hazardous ground gases (HGG) in Table 1 and Table 2 of NSW EPA (2020a) and consider that there is unlikely to be sources of HGG present at the site. Refer to Appendix C Section C4 for more information on HGG.	Not Warranted
Aesthetics	DRM has used the guidance in Section 3.6.2 and Section 3.6.3 of NEPC (2013a) to facilitate an assessment of aesthetics risk and the sensitivity of the proposed land use. The risk screening is presented in Appendix C Section C5. The historical records review, observations made during the site walkover and results of the preliminary risk screening did not identify a potential for unacceptable aesthetics risks to be present on the site.	Not Warranted.
Groundwater	Groundwater contamination risks may require consideration if significant and leachable soil contamination is identified. Refer to Appendix C Section C6.	Not warranted
Terrestrial Ecosystem	Site history information and walkover observations indicated a potential for contaminants, which may present an ecological risk, to be present on site. Refer to Appendix C Section C7. However, given the proposed commercial development it is considered that the site will not comprise of open space landscaping. As such the ecological risks are not considered.	Warranted
Petroleum Hydrocarbon Exposure Routes	Refer to info presented in Appendix C Section C8. Site history information and walkover observations did not indicate a potential for petroleum hydrocarbon contamination to be present on site.	Not warranted

8.5 Source, Receptor and Pathway Model

A conceptual site model (CSM) is a representation of site-related information regarding contamination sources and receptors, and exposure pathways between those sources and receptors.

DRM has prepared the CSM presented in Table 8.5-1 based on:

- the areas of environmental concern (AEC) at the site where sources of contamination may be present. Please refer to Figure-3;
- the contaminants of potential concern (COPC) identified for the site;
- receptors identified for the site; and
- the exposure pathways between those sources and receptors assessed as being potentially or actually complete.

Table 8.5-1 Source, Receptor and Pathway Model

ID	AEC	COPC	Exposure Pathway	Receptor	Potential Unacceptable Risk
DRM - AEC 01	Potential fill material and land disturbance across North Western portion	Petroleum hydrocarbons, pesticides, PCB, metals, asbestos	Dermal contact Dust inhalation Ingestion Direct Uptake	Future site workers Terrestrial Ecosystems	Moderate to Low Based on the information reviewed and observations made, DRM considers that there is a potential, for the site to contain fill material that could pose an unacceptable risk to human health or the environment. The site walkover encountered PACM to be spread over at the middle portion and two stockpiles with demolition rubble. Therese is a potential for presence of asbestos in the form of bonded or fibrous (AF/FA) on the surface and deeper fill (if any). Further assessment is warranted.
DRM - AEC 02	Central OSO portion	Asbestos	Dermal contact Dust inhalation Ingestion Direct Uptake	Future site workers	Moderate Following the observations of asbestos impacted soils being imported to the central portion of the OSO. Since the preparation of the ARP in 2021, aerial photographs of the site suggests potential disturbance of the remediation areas, as well as importation of new stockpiles and removal of such soils. It is therefore likely that the asbestos impacted areas identified by CS (2021 and 2021a) have been disturbed and areas previously identified as not impacted may have been impacted by asbestos. Further assessment is warranted

9. DATA QUALITY OBJECTIVES

Appendix B in NEPC (2013b) provides guidance on the data quality objective (DQO) process, which is a seven step iterative planning approach that can be used to define the type, quantity and quality of data needed to inform decisions relating to the environmental condition of a site.

The DQOs adopted for this project are specified in Appendix D.

10. FIELD AND ANALYTICAL WORKS CONDUCTED

10.1 Soil Sampling

Soil sampling works were undertaken by DRM on 10th, 11th, 12th,13th,16th and 17th September 2024. These works included excavation of 253 test pits (TP401 to TP488 and TP490 to TP653), and 3 surface samples (SS1 to SS3) using a rubber tracked 5 tonne hydraulic excavator. Soil samples were collected at selected sampling points, at the surface and at regular intervals thereafter, or where visual or olfactory evidence of contamination was observed. Samples were collected either directly from excavated soils, or from the centre of soils while still in the excavator bucket (to avoid cross contamination), as grab samples, using a fresh pair of nitrile gloves. Samples were placed in suitable laboratory prepared containers and labelled.

Test pits were backfilled with excavated soils and track rolled.

Duplicate and triplicate samples were collected by splitting the primary sample across three sample containers (without homogenising, to avoid loss of volatiles.

Sampling point locations were confirmed on a site plan. The sampling point location plan is presented in Figure 4.

10.2 Laboratory Analysis Conducted

The samples were transported to the analytical laboratory using chain of custody protocols. A selection of those samples were scheduled for laboratory analysis as shown below, taking into consideration the laboratory analytical schedule presented in Table D7.7-1 in Appendix D and observations made in the field.

Table 10.5-1 Analytical Schedule

ID	AEC	Sampling Point ID	TRH / BTEX	PAH	OCP/PCB	Metals (8)	Asbestos (ID)	Asbestos (0.001%)
DRM - AEC01	Potential fill material and land disturbance across entire site	TP591 to TP633, TP635, TP636, TP637, TP639 to TP641, TP643, TP644, TP646, TP649, TP650, PACM1, PACM2, PACM3, PACM4	15	17	5	17	4	44
DRM - AEC02	Central OSO portion	TP401 to TP488, TP490 to TP590, TP651 to TP653, SS2, SS3, PACM5, PACM6	-	-	-	-	2	84
General Coverage		TP634, TP638, TP642, TP645, TP647, TP648	6	6	1	6	-	3

11. RESULTS

11.1 Soil Field Observations

11.1.1 Site Specific Geology

Observations made of soils encountered during intrusive investigation works were recorded on logs. These logs are presented in Appendix E.

NW Portion of OSO

A summary of subsurface conditions encountered in the NW Portion is presented below.

Table 11.1.1-1 Summary of Subsurface Conditions in NW Portion

Layer	Description	Depth (m)
Fill	Gravelly Clay, low-medium plasticity, red brown, fine to medium sized gravel, broken glass, brick concrete, moist Sandy Clay, low plasticity, dark brown, fine-grained sand, demolition rubble, moist	0.0 to 0.6
Topsoil	Clay, low plasticity, light brown	0 to 0.3
Natural	Clay, medium plasticity, yellow brown with red - grey mottled	From 0.1

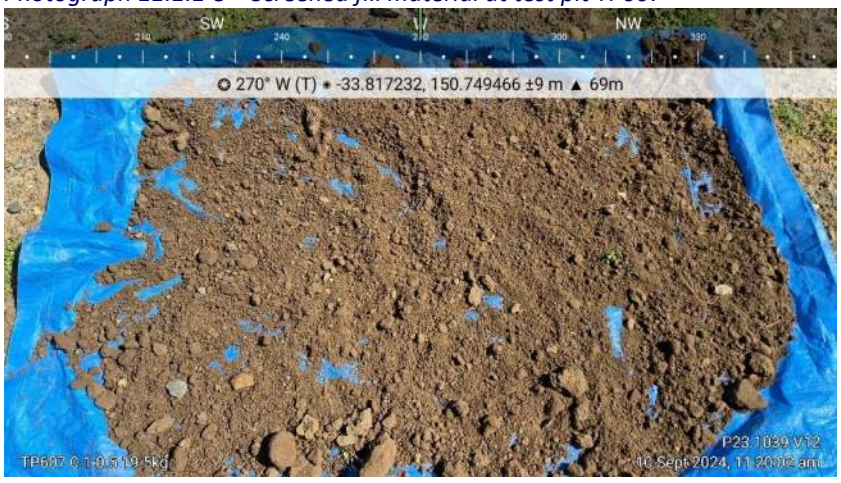
A rubber carpet like material was encountered at TP599 and TP599a. It appears, it was laid between the two test pits at 0.4m.

Representative photographs are presented below. All photographs during field work can be accessed via DRM SharePoint.

Photograph 11.1.1-1 Asbestos on the surface near to the test pit TP611

Photograph 11.1.1-2 Excavated test pit TP632 with two layers of fill material

Photograph 11.1.1-3 Screened fill material at test pit TP607



Photograph 11.1.1-4 Excavated test pit TP635 with topsoil undelayed by orange brown natural clay

Central OSO

Table 11.1.1-2 Summary of Subsurface Conditions in Central Portion

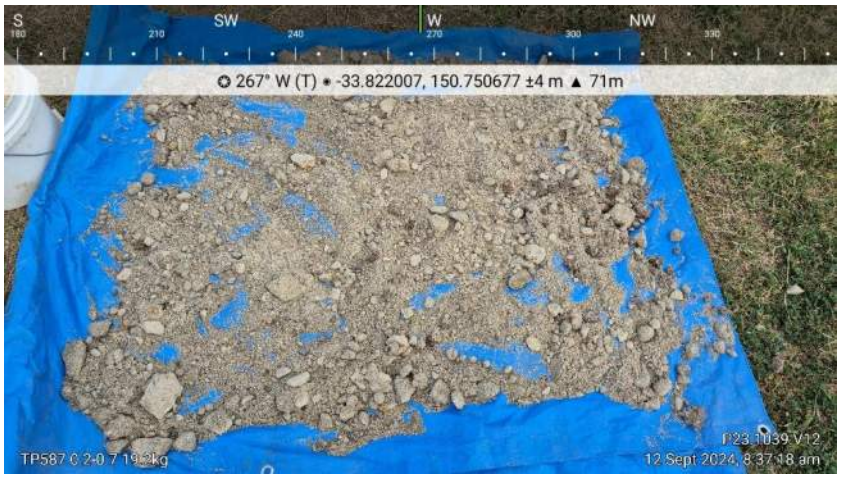
Layer	Description	Depth (m)
Fill	Fill comprising of Gravelly CLAY, Gravelly SAND, Sandy Clay, Clayey SAND, low plasticity, brown, fine to medium grained, shale, sandstones	0-0.9
Topsoil	CLAY, low plasticity, light brown	0 to 0.3
Natural	CLAY, medium plasticity, yellow brown with red mottled CLAY, medium plasticity, red brown	From 0.3

Representative photographs are presented below. All photographs during field work can be accessed via DRM SharePoint.

Photograph 11.1.1-5 Spread of demolition rubble at the south of central portion

Photograph 11.1.1-6 Excavated test pit TP467 with demolition rubble including ACMs

Photograph 11.1.1-7 Screened fill material (0.2-0.7) at test pit TP587



11.1.2 Asbestos Containing Materials

North Western Portion of OSO

Visual evidence of potential asbestos containing materials (ACM) was encountered at 11 test pits out of 60 test pits in the form of fibrous cement sheeting fragments. Four samples of these potential ACM were collected and analysed at the lab to confirm the presence of asbestos.

The bulk 10L soil samples collected from the fill material at each test pit, where evidence of asbestos or potential for asbestos was observed in, were screened for the presence of visible asbestos containing materials. Material suspected of being ACM were collected and weighed, and the weights recorded on the relevant sampling point log.

Visual presence of asbestos results are presented in Table T1. Test pits (near on the surface or in test pits) where asbestos is observed are summarised below.

Table 11.1.2-1 Potential or actual asbestos containing materials in or near test pits on north western portion of OSO

				ACM Present			
Test Pit ID	Depth	Observation method	ACM Mass (g)	In Test Pit	Near Test Pit	ACM Percentage[18]	PACM/ACM
TP596	0-0.1	Surface Tyning	-	N	Y	-	ACM
TP603	0-0.1	Surface Tyning	-	N	N	-	PACM4
TP606	0-0.1	Surface Tyning	-	N	Y	-	PACM2
TP611	0-0.1	Surface Tyning	-	N	Y	-	PACM1
TP613	0-0.1	Surface Tyning	-	N	Y	-	ACM
TP614	0-0.1	Surface Tyning	-	N	Y	-	ACM
TP615	0-0.1	Surface Tyning	-	N	Y	-	ACM
TP616	0-0.1	Surface Tyning	-	N	Y	-	ACM
TP625	0 - 0.5	10L bulk - 17.9kg	17.3	Y	N	0.0145%	ACM
TP628	0-0.1	Surface Tyning	-	N	Y	-	PACM3
TP629	0-0.1	Surface Tyning	-	N	Y	-	ACM

[18] According to WA DOH (2021) ACM percentage was calculated from the equation - ACM weight (g) x asbestos content (15%)/ 10L bulk soil weight (g).

Representative photographs are shown below

Photograph 11.1.2-1 ACM near pit at test pit TP611

Photograph 11.1.2-2 Screened stockpile material at test pit TP625

Central Portion of OSO

Visual evidence of potential asbestos containing materials (ACM) was encountered at 5 test pits out of 193 test pits in the form of fibrous cement sheeting fragments. Two samples of these potential ACM were collected.

The bulk 10L soil samples were screened for the presence of visible asbestos. Material suspected of being ACM were collected and weighed, and the weights recorded on the relevant sampling point log (TP423 and TP467).

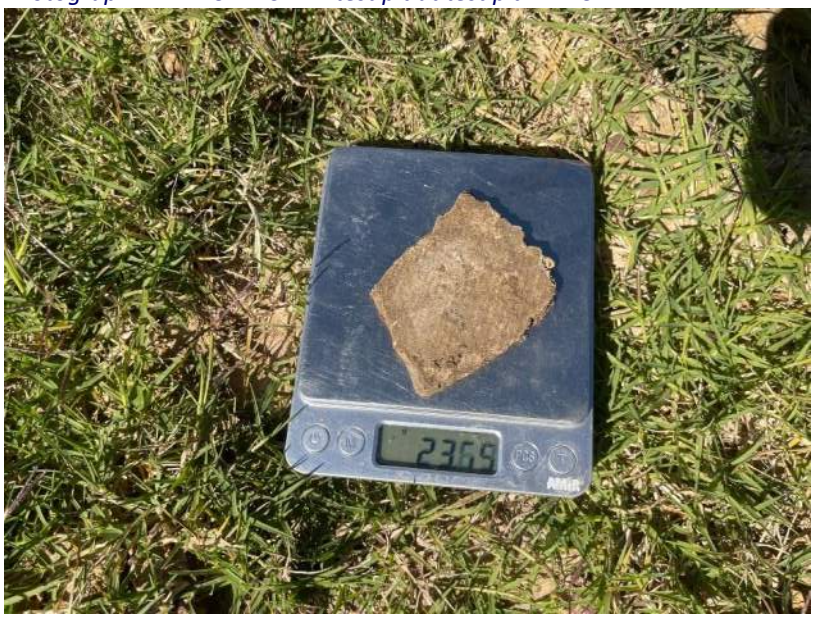
Visual presence of asbestos results are presented in Table T3. Test pits (near on the surface or in test pits) where asbestos is observed are summarised below.

Table 11.1.2-2 Potential or actual asbestos containing materials in or near test pits on central portion of OSO

Test Pit ID	Depth	Observation method	ACM Present				
			ACM Mass (g)	In Test Pit	Near Test Pit	ACM Percentage	ACM/PACM
TP401	0 - 0.1	Surface Tyning	-	N	Y	-	PACM 6
TP410	0 - 0.2	Surface	-	N	Y	-	ACM
TP423	0 - 0.5	10L bulk - 17.7kg	23.7	Y	Y	0.02%	ACM
TP425	0 - 0.1	Surface	-	N	Y	-	ACM
TP467	0 - 0.7	10L bulk - 13.6kg	6	Y	Y	0.0066%	PACM 5

Representative photographs are shown below

Photograph 11.1.2-3 ACM in test pit at test pit TP423



Photograph 11.1.2-4 Screened fill material at test pit TP423

11.1.3 Odours

No olfactory evidence of odours was observed.

11.1.4 Staining

There was no visual evidence of staining observed in the soil samples collected.

11.1.5 Headspace Screening

Headspace screening was not undertaken given that volatile organics were not suspected by the site history or field observations.

11.2 Laboratory Analytical Results

Laboratory analytical certificates are attached in Appendix G.

11.2.1 North Western Portion

The soil analytical results, which are summarised in Table T1 and Table T2 indicate the following:

- Asbestos Fines (AF – i.e. fibro fragments less than 7mm diameter) were reported in sample TP604_0.1-0.3 (0.0003%), less than the adopted criterion of 0.001% w/w. Asbestos was not reported in the other 43 samples analysed.
- Four PACM samples (PACM1 to PACM4) reported as ACM containing Chrysotile asbestos;

  All test pit locations that encountered ACM or reported asbestos, irrespective of the nature and concentration, are illustrated in Figure 5;
- Concentrations of metals (As, Cd, Cr, Cd, Cu, Pb, Hg, Ni and Zn) were less than the adopted Health investigation levels (HIL D) and Ecological Investigation Level (EILs) for industrial / commercial land use;
- The concentrations of OCP, PCB and BTEX were less than the laboratory limit of reporting (LOR); and
- The concentration of TRH (F2 - C10-C16) exceeded adopted EILs criterion of 120 for sample SS1 (130 mg/kg);

11.2.2 Asbestos in Central OSO

The soil analytical results, which are summarised in Table T3 indicated the following:

- Asbestos Fines (AF – i.e. fibro fragments less than 7mm diameter) were reported in sample TP423_0-0.5 (0.00059%) and TP473_0.3-0.4 (0.00002%), less than the adopted criterion of 0.001% w/w. Asbestos was not reported in the other ??? samples analysed; and
- Two PACM samples (PACM5 and PACM6) reported as ACM containing Chrysotile asbestos.

  All test pit location that encountered ACM or reported asbestos, irrespective of the nature and concentration, are illustrated in Figure 6.

11.3 Assessment of Data Quality Indicators

An assessment of the data quality indicators (DQIs) against the DQOs established in Section 9 was conducted, and the results are presented in Appendix I. The results of the DQI assessment indicated that the data obtained is satisfactorily:

- Complete;
- Comparable;
- Representative;
- Precise; and
- Accurate.

Therefore, suitable for the purpose of this investigation.

12. DISCUSSION

12.1 Contamination Status

12.1.1 North Western Portion

Chemical contamination

The results did not identify significant widespread chemical contamination (Heavy metals, total PAH, OCP, PCB). The marginal exceedance of TRH (F2 - C10-C16) concentration in one sample (SS1) is unlikely to pose an unacceptable risk to the environment. Whilst the potential for the site to contain significant widespread chemical contamination is low, the potential for isolated patches or hotspots of chemical contamination to be present within the imported fill material cannot be precluded.

Asbestos Contamination

The site walkover and the asbestos field screening during intrusive works identified visible asbestos in the form of ACM. However, the laboratory analysis identified asbestos in only 1 sample (from 60 distinct test pits). The detected concentration was less than the adopted criterion. ACM was encountered on the stockpile at the north portion and uncontrolled fill pad in the middle portion.

DRM notes that the concentration of asbestos estimated by the laboratory cannot be relied upon to determine whether an area contain unacceptable asbestos or not, due to the heterogeneity of the identified fill material along the uncontrolled fill pad and the consistent presence of crushed demolition rubble. Analysis of samples collected from just 1m away could yield entirely different results, for example. As such, it is prudent to assume that fill material containing demolition rubble that reported **any level of asbestos**, as being asbestos (bonded) impacted (i.e. irrespective of the concentration of asbestos). The bonded asbestos identified in this portion requires remediation.

Waste Materials

The site walkover identified waste material (metal pipes and wires, crushed concrete and road base, and household waste materials) in the northern and central portion. No visible evidence of asbestos was identified. Furthermore client advised these waste materials will be removed from site. DRM considers validation of surface soils after removal of these waste materials.

12.1.2 Central Portion of OSO

The intrusive assessment with 193 test pits was conducted across the central portion of OSO. Among these test pits only 5 test pits encountered ACM in the form of fibrous cement sheeting fragments. Two samples TP423_0-0.5 (0.00059%) and TP473_0.3-0.4 (0.00002%) reported AF which was less than the adopted criterion of 0.001%. The locations where DRM encountered ACM or laboratory reported AF were near the proximity of CS test pit (CS, 2021) locations OR02, OR08 and OR49. Refer to Figure 6.

Based on the desktop review, visual observation during site works and laboratory analysis the remediation extent (lateral and vertical) specified in the ARP (CS, 2021a) appears to be remain same. It does not appear that asbestos impacted soils have been spread to other parts of the central OSO.

12.2 Site suitability for Proposed Land Use

Based on the above mentioned potential health risks to future site workers, DRM considers that the **site can be made suitable** for the proposed commercial land use, from a contamination perspective, subject to appropriate remediation or management of the identified asbestos impacted fill material.

A remedial action plan (RAP) will need to be prepared and implemented to appropriately remediate or manage the identified contamination. The SEPP (Resilience & Hazards, 2021) requires that the RAP be submitted with the

development application to demonstrate to the regulatory authority that the site can be made suitable for the proposed land use.

13. UPDATED CSM

Based on the above data, DRM has updated the conceptual site model presented in Section 8.5 as shown below.

Table 13-1 Updated CSM (adopted from Section 8.5)

ID	AEC	COPC	Exposure Pathway	Receptor	Potential Unacceptable Risk
DRM - AEC 01	Fill material and land disturbance across Northwestern portion	Asbestos	Dust inhalation	Future site workers	Remediation for asbestos impacted soils required
DRM - AEC 02	Central OSO portion				

14. DUTY TO REPORT CONTAMINATION

Section 1.3 of NSW EPA (2020b) advises that contaminated land consultants should take reasonable steps to draw the client's attention to their potential duty to report contamination under the section 60 of the *Contaminated Land Management Act 1997*.

Section 2 in NSW EPA (2015) provides guidance on addressing obligations under section 60 of the *Contaminated Land Management Act 1997*, regarding who is required to notify EPA as soon as practical after they become aware of contamination, which includes:

- Anyone whose activities have contaminated land; or
- An owner of land that has been contaminated.

On the basis that DRM understands that the client is:

- not the occupier of the land, and consequently has not undertaken activities on the site that have contaminated the land, or
- not the owner of the land that may have been contaminated.

and so further assessment in the context of guidance provided in NSW EPA (2015) is considered not warranted.

However, if the client was to become the owner and/or occupier of the land that the site is located on, and

- the client undertakes activities on the site that contaminates the land; or
- the client is the owner of the land that may have been contaminated;

then NSW EPA (2015) provides guidance on when the client should seek further advice about site contamination and its duty to report. Further information on the client's duty to report can be found at www.epa.nsw.gov.au.

15. CONCLUSIONS AND RECOMMENDATIONS

Based on DRM's assessment of desktop review information, field results and analytical results, DRM makes the following conclusions:

- The potential for significant unacceptable **chemical contamination** to be present at the northwestern portion is low, but the potential to encounter isolated patches of contamination cannot be precluded;
- Asbestos identified on the surface of uncontrolled fill pad and stockpiles in the north western portion requires remediation;
- Waste material present in the north western portion requires removal; and
- The lateral extent of asbestos contamination in the central portion of OSO remains consistent with that previously proposed by CS (2021a). Asbestos does not appear to have been spread to other areas of the Central OSO portion.

As such, DRM makes the following recommendations:

- Preparation of a remedial action plan (RAP) for northwestern portion to remove the identified bonded asbestos;
- Remediation of NW portion of OSO in accordance with the new RAP and remediation of the Central portion of OSO in accordance with the ARP (CS, 2021a);
- If isolated pockets of unexpected contamination are encountered during construction works, DRM recommends preparing and implementing an Unexpected Finds Protocol (UFP) to manage such instances; and
- Incorporation of the validation works into a revised final validation report for the site.

This report must be read in conjunction with the *Limitations and General Notes* page at the front of this report.

16. REFERENCES

CS, 2020. “Asbestos Assessment of Surface Soils, 221-227 and 289-317 Luddenham Rd, Orchard Hills, NSW, 2748” (ref: 10791EV.P.68-R02 dated 15 December 2020)

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CS, 2021a. “Asbestos Remedial Plan, 221-227 Luddenham Rd, Orchard Hills, NSW, ‘Portion of Lot 1, IN DP 1099147’ ” (ref: 10791EV.P.68-R08 dated 17 February 2021)

DRM, 2024. “Final Validation Report, 221-227 & 289-311 Luddenham Rd, Orchard Hills, NSW” (ref: DRM P23.1039-R05r1 dated 23 August 2024)

DRM, 2024a. “Stage 2 Detailed Site Investigation Proposed Flood Basins, 221-227 Luddenham Rd, Orchard Hills, NSW” (ref: DRM P23.1039-R06 dated 5 May 2024

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HEPA 2020, ‘PFAS National Environmental Management Plan’, dated January 2020, version 2.0

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National Environment Protection Council (NEPC) 2013b, ‘Schedule B(2) Guideline on Site Characterisation’, National Environment Protection (Assessment of Site Contamination) Measure (NEPM) as amended in May 2013.

National Environment Protection Council (NEPC) 2013c, ‘Schedule B(4) Guideline on Site-Specific Health Risk Assessment Methodology’, National Environment Protection (Assessment of Site Contamination) Measure (NEPM) as amended in May 2013.

National Environment Protection Council (NEPC) 2013d, ‘Schedule B(6) Guideline on The Framework for Risk-Based Assessment of Groundwater Contamination’, National Environment Protection (Assessment of Site Contamination) Measure (NEPM) as amended in May 2013.

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NSW EPA 1986, ‘Chemical Control Order In Relation to Dioxin-Contaminated Waste Materials’ dated 14 March 1986

NSW EPA 1989, ‘Chemical Control Order In Relation to Organotin Wastes’ dated 11 March 1989

NSW EPA 1995, ‘Contaminated Sites: Sampling Design Guidelines’, dated September 1995, ref: EPA 95/59.

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NSW EPA 2015, ‘Guidelines on the Duty to Report Contamination under the Contaminated Land Management Act 1997’ dated September 2015, ref: EPA 2015/0164.

NSW EPA 2017, 'Contaminated Land Management, Guidelines for the NSW Site Auditor Scheme (3rd edition)', dated October 2017, ref: EPA 2017P0269.

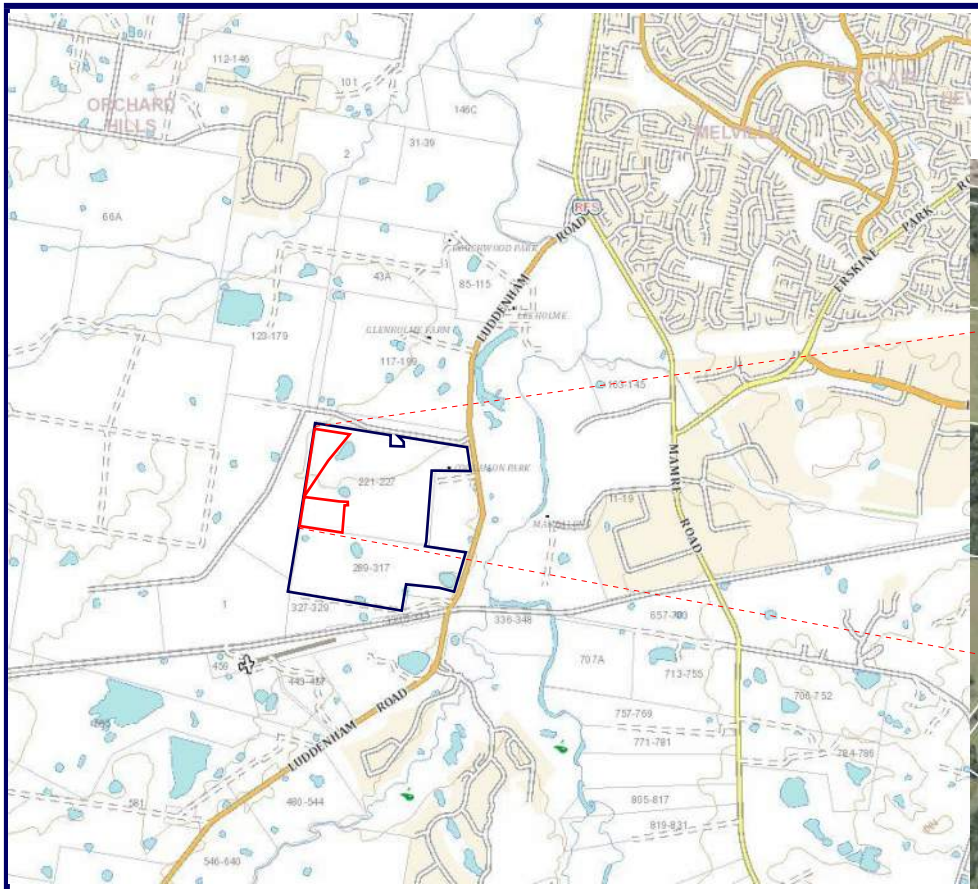
NSW EPA 2020a, 'Assessment and management of hazardous ground gases' dated May 2020, ref: EPA 2019P2047

NSW EPA 2020b, 'Contaminated Land Guidelines: Consultants reporting on contaminated land' dated May 2020, ref: EPA2020P2233.

SPCC 1986, 'Chemical Control Order In Relation to Aluminium Smelter Wastes Containing Fluoride and/or Cyanide' dated 21 March 1986

WA DOH 2021, 'Guidelines for the Assessment, Remediation and Management of Asbestos Contaminated Sites in Western Australia', dated August 2021.

FIGURES



Legend

Approximate Site Extent

N

Development Risk Management Pty Ltd

Scale: 500 m

Date: 27 September 2024

Drawn By: DP

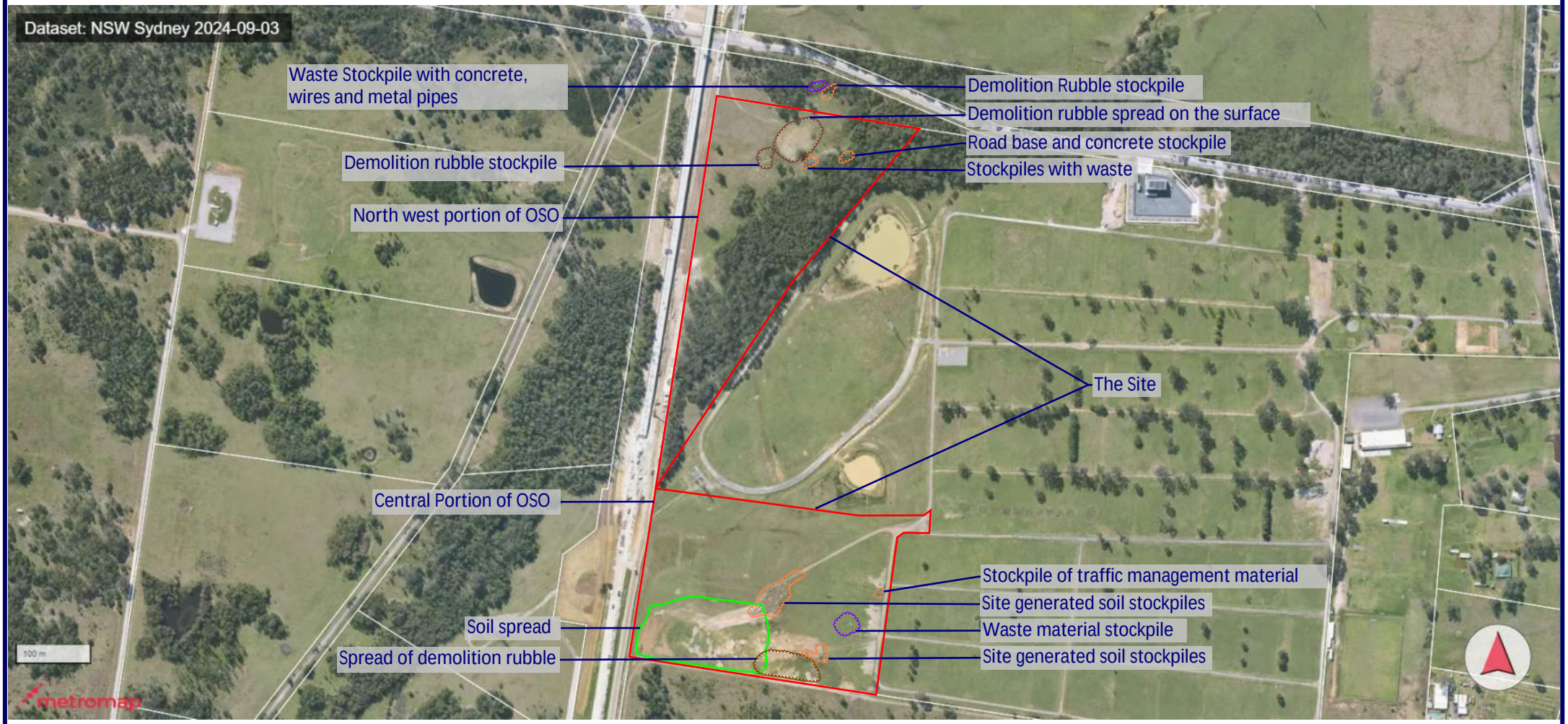
Drawing Number: P23.1039.V12-R01.F1

Client: HBB Property Pty Ltd

Project: Stage 2 Detailed Site Investigations

Location: 221-227 and 289-311 Luddenham Road, Orchard Hills

Title: Figure 1 - Site Location Plan



Legend

- Approximate Site Extent
- Stockpiles
- Demolition rubble spread
- Waste material stockpiles
- Soil spread

Development Risk Management Pty Ltd

Scale: 350 m

Date: 20 September 2024

Drawn By: DP

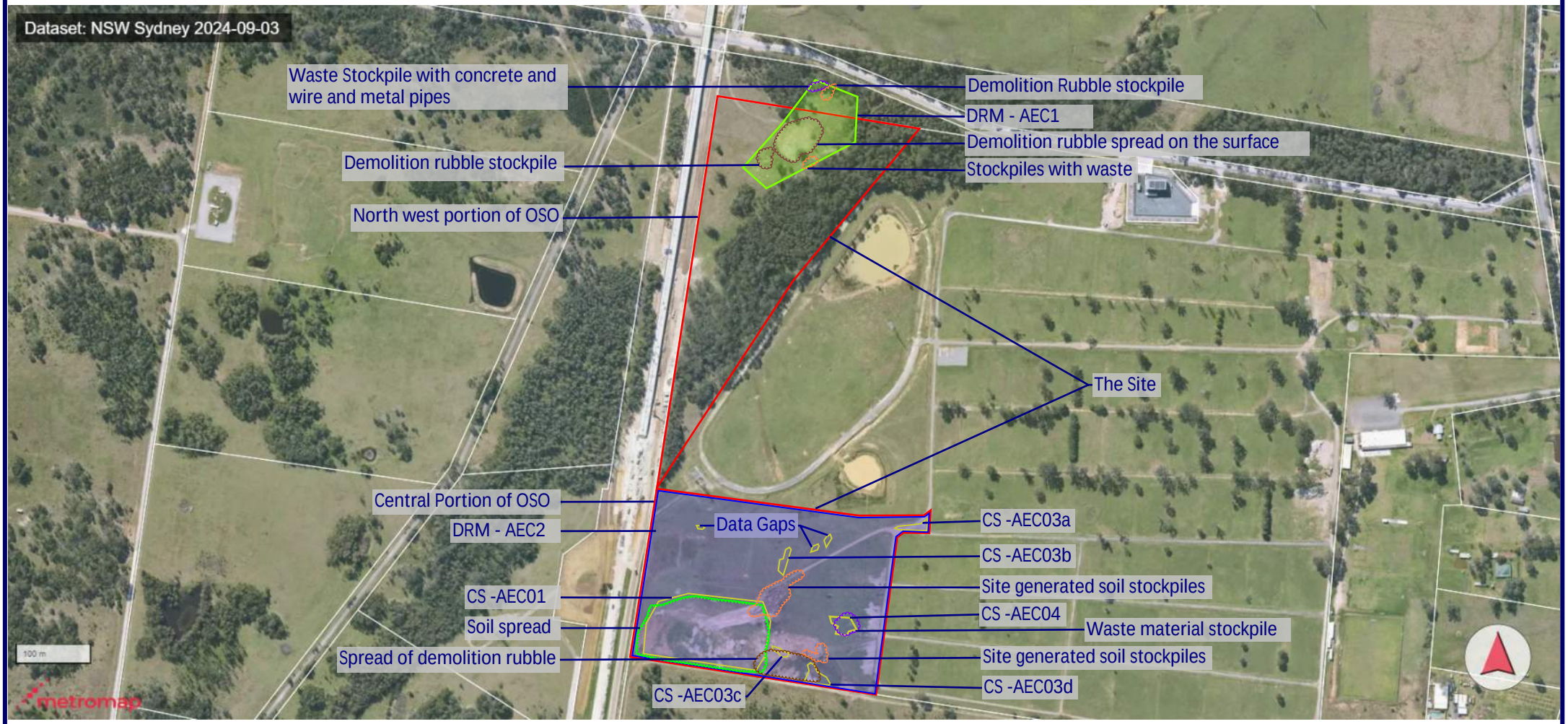
Drawing Number: P23.1039.V12-R01.F2

Client: HBB Property Pty Ltd

Project: Stage 2 Detailed Site Investigation

Location: 221-227 and 289-311 Luddenham Road, Orchard Hills

Title: Figure 2 - Site Layout Plan



Legend

- Approximate Site Extent
- DRM AEC1
- DRM AEC2
- CS Areas of concern
- Stockpiles
- Demolition rubble spread
- Waste material stockpiles

Development Risk Management Pty Ltd

Scale: 350 m

Date: 20 September 2024

Drawn By: DP

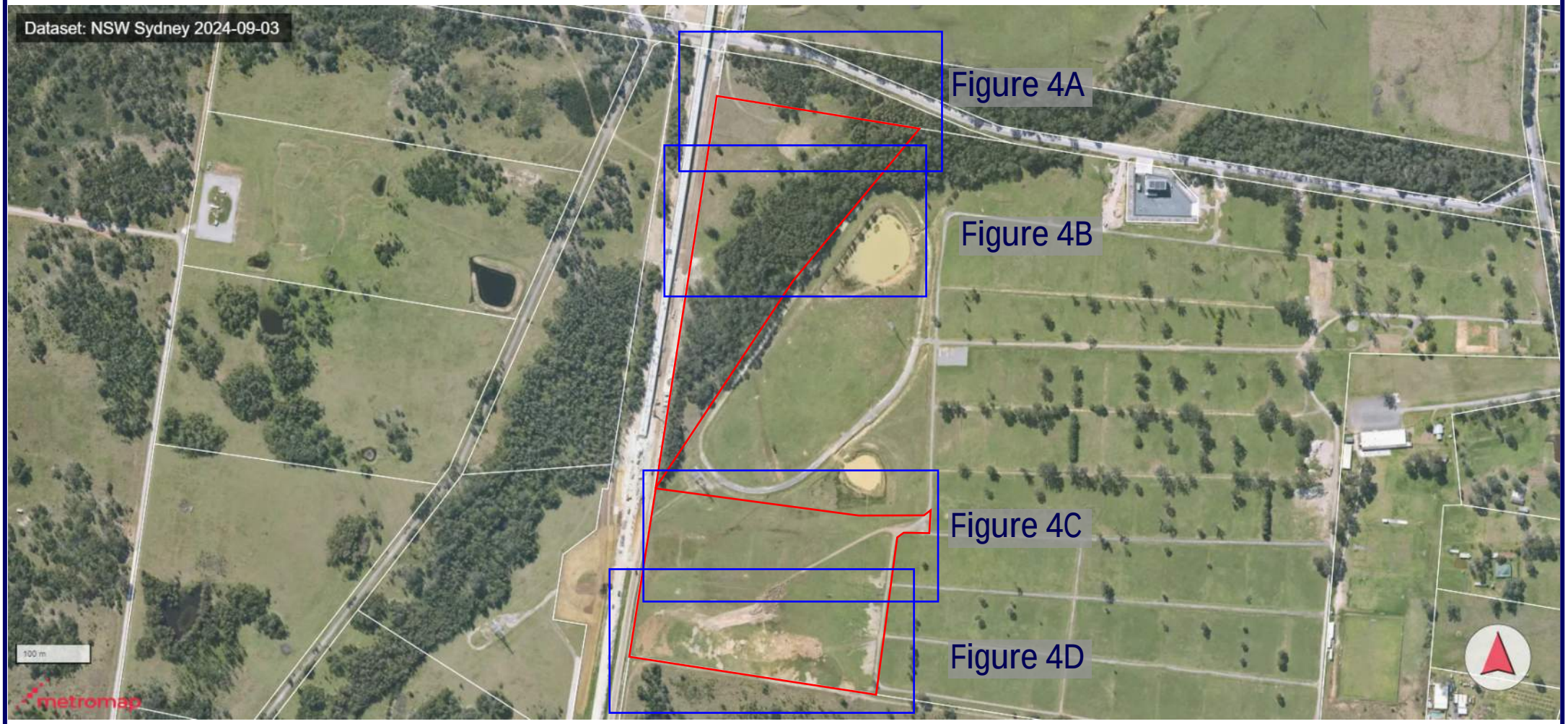
Drawing Number: P23.1039.V12-R01.F3

Client: HBB Property Pty Ltd

Project: Stage 2 Detailed Site Investigation

Location: 221-227 and 289-311 Luddenham Road, Orchard Hills

Title: Figure 3 - Areas of Concern



Legend

Approximate Site Extent

Development Risk Management Pty Ltd

Scale: 350 m

Date: 20 September 2024

Drawn By: DP

Drawing Number: P23.1039.V12-R01.F4

Client: HBB Property Pty Ltd

Project: Stage 2 Detailed Site Investigation

Location: 221-227 and 289-311 Luddenham Road, Orchard Hills

Title: Figure 4 - Sample Location Plan

Legend

- Approximate Site Extent
- Approximate Test pit location

Development Risk Management Pty Ltd

Scale: 50 m

Date: 20 September 2024

Drawn By: DP

Drawing Number: P23.1039.V12-R01.F4A

Client: HBB Property Pty Ltd

Project: Stage 2 Detailed Site Investigation

Location: 221-227 and 289-311 Luddenham Road, Orchard Hills

Title: Figure 4A - Sample Location Plan A

Legend

- Approximate Site Extent
- Approximate Test pit location

Development Risk Management Pty Ltd

Scale: 50 m

Date: 20 September 2024

Drawn By: DP

Drawing Number: P23.1039.V12-R01.F4B

Client: HBB Property Pty Ltd

Project: Stage 2 Detailed Site Investigation

Location: 221-227 and 289-311 Luddenham Road, Orchard Hills

Title: Figure 4B - Sample Location Plan B

Legend

- Approximate Site Extent
- Approximate Test pit location

N

Development Risk Management Pty Ltd

Scale: 50 m

Date: 20 September 2024

Drawn By: DP

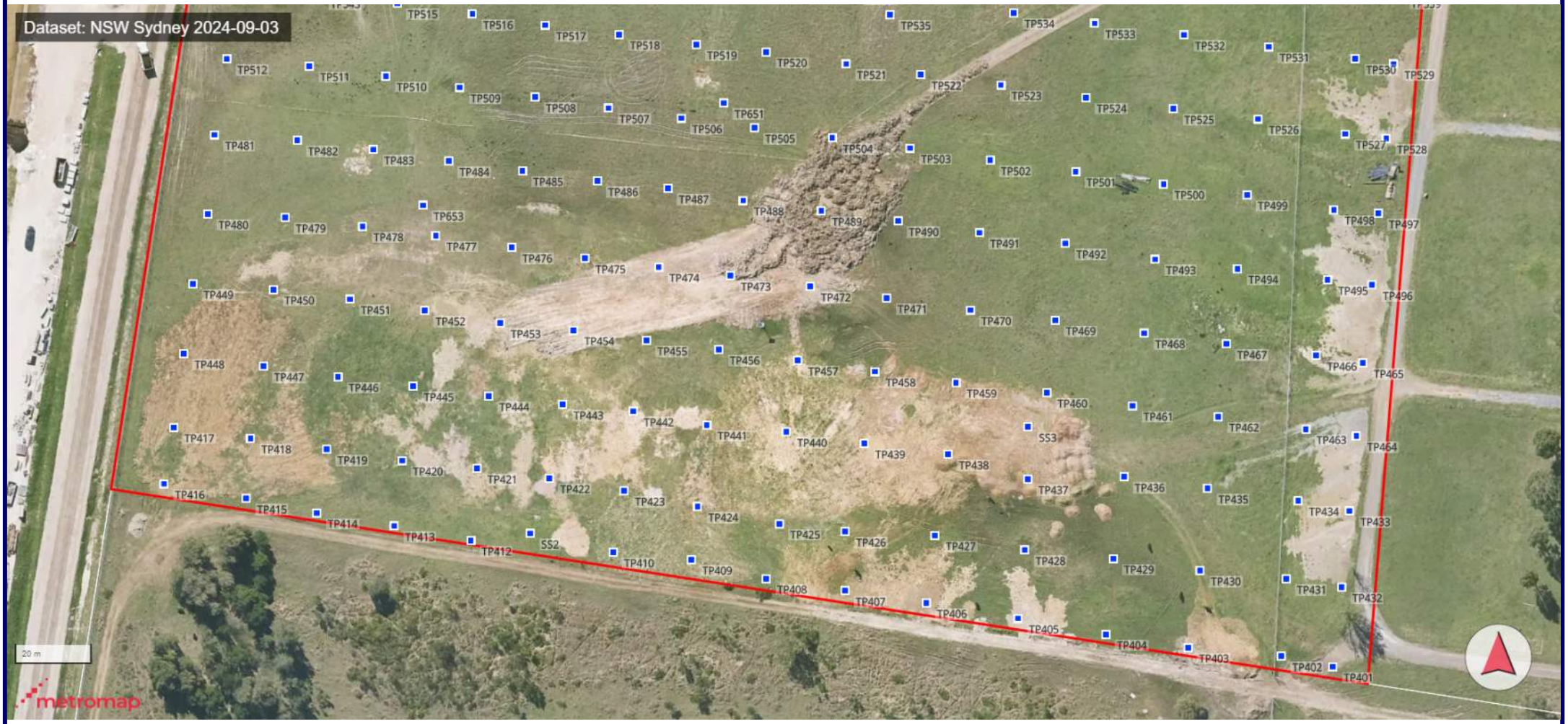
Drawing Number: P23.1039.V12-R01.F4C

Client: HBB Property Pty Ltd

Project: Stage 2 Detailed Site Investigation

Location: 221-227 and 289-311 Luddenham Road, Orchard Hills

Title: Figure 4C - Sample Location Plan C



Legend

- Approximate Site Extent
- Approximate Test pit location

Development Risk Management Pty Ltd

Scale: 50 m

Date: 20 September 2024

Drawn By: DP

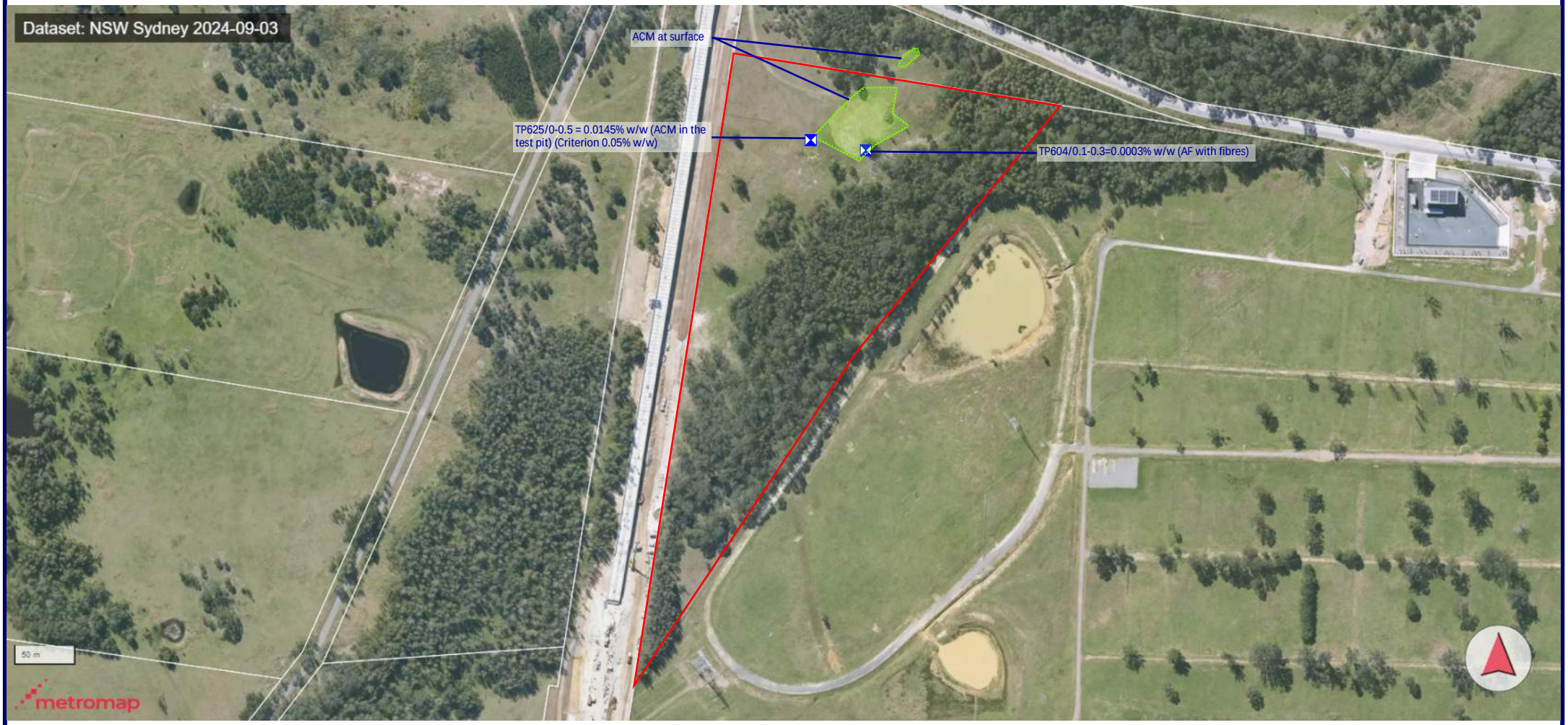
Drawing Number: P23.1039.V12-R01.F4D

Client: HBB Property Pty Ltd

Project: Stage 2 Detailed Site Investigation

Location: 221-227 and 289-311 Luddenham Road, Orchard Hills

Title: Figure 4D - Sample Location Plan D



Legend

- Approximate Site Extent
- ACM at surface
- Approximate test pit location

Development Risk Management Pty Ltd

Scale: 180 m

Date: 25 September 2024

Drawn By: DP

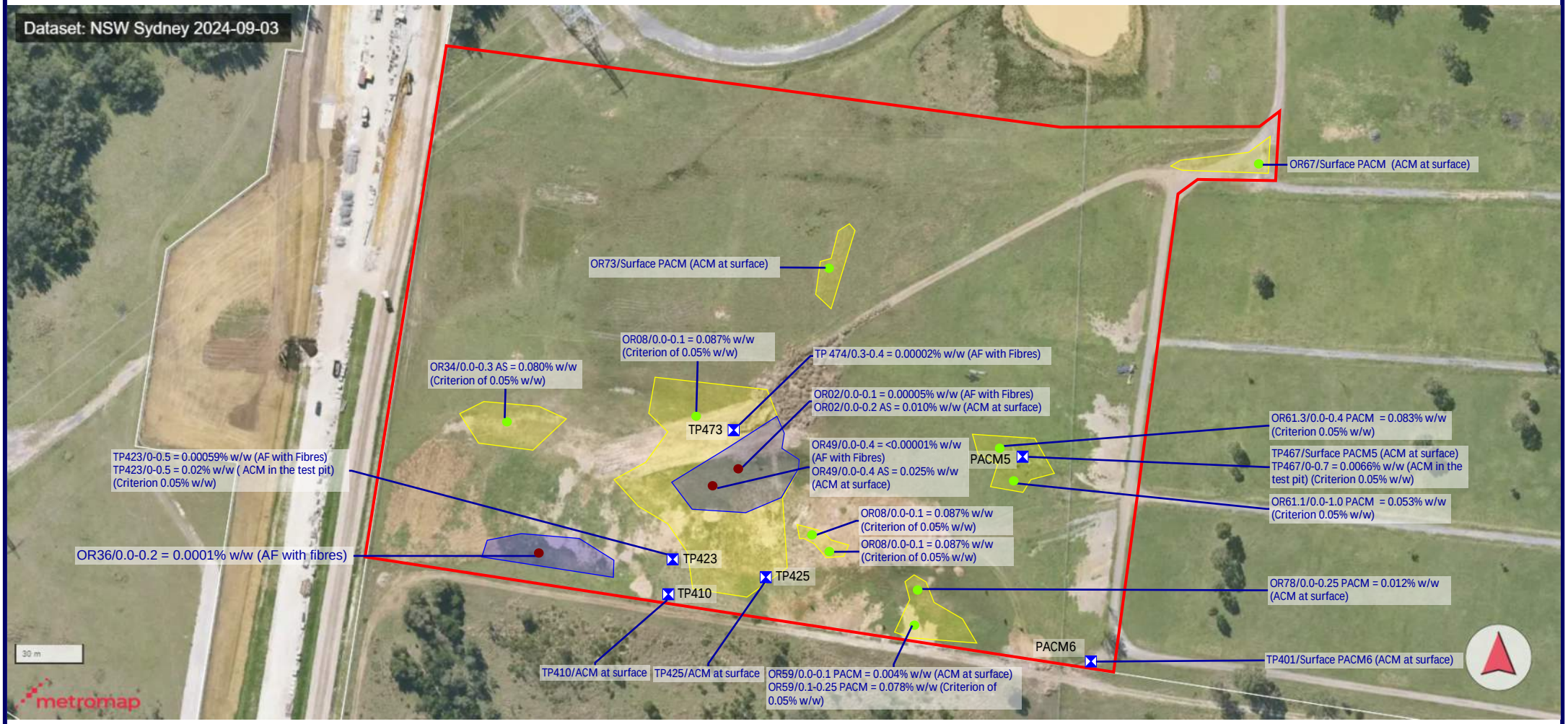
Drawing Number: P23.1039.V12-R01.F5

Client: HBB Property Pty Ltd

Project: Stage 2 Detailed Site Investigation

Location: 221-227 and 289-311 Luddenham Road, Orchard Hills

Title: Figure 5 - ACM Exceedances - North western Portion



Legend

- Approximate Site Extent
- CS - AF/FA Infered remediation extent
- CS - Bonded ACM Infered remediation extent
- DRM -Approximate test pit location
- CS -Exceeds AF/FA Site Criteria
- CS -Exceeds Bonded ACM Site Criteria

Development Risk Management Pty Ltd

Scale: 100 m

Date: 25 September 2024

Drawn By: DP

Drawing Number: P23.1039.V12-R01.F6

Client: HBB Property Pty Ltd

Project: Stage 2 Detailed Site Investigation

Location: 221-227 and 289-311 Luddenham Road, Orchard Hills

Title: Figure 6 - ACM Exceedances - Central Portion of OSO

TABLES

Table T1
Screening Results and Laboratory Results for Asbestos
Stage 2 Detailed Site Investigation - North Western Portion
221-227 and 289-311 Luddenham Road, Orchard Hills

Field Screening for Bonded Asbestos									Laboratory Analysis	
Sample ID		Mass of Soil in 10L bucket (Kg)	ACM Present in 10L?	Mass of ACM? (g)	In Test pit	Near Test pit	PACM/ACM	% of Bonded Asbestos In Soil	% of ACM Reported by the lab	% of AF/FA Reported by Lab
TP591	0 - 0.5	12.9	NO	-	-	-	-	-	NAD	NAD
TP592	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NAD	NAD
TP592	0.1 - 0.4	16.5	NO	-	-	-	-	-	NAD	NAD
TP593	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP594	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP595	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP596	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	Yes	-	-	NAD	NAD
TP596	0.1 - 0.6	18.15	NO	-	-	-	-	-	NAD	NAD
TP597	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP598	0 - 0.5	17	NO	-	-	-	-	-	NAD	NAD
TP599	0 - 0.7	16.4	NO	-	-	-	-	-	NAD	NAD
TP600	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP601	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP602	0 - 0.6	Field screening not conducted due to no ACM or demolition rubble observed			-	-	-	-	NAD	NAD
TP603	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	PACM 4	-	NAD	NAD
TP603	0.1 - 0.3	16.3	NO	-	-	-	-	-	NAD	NAD
TP604	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NAD	NAD
TP604	0.1 - 0.3	17	NO	-	-	-	-	-	0.0003%	0.0003%
TP604	0.3 - 0.4	Field screening not conducted due to no ACM or demolition rubble observed			-	-	-	-	NAD	NAD
TP605	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NAD	NAD
TP605	0.1 - 0.2	18.95	NO	-	-	-	-	-	NAD	NAD
TP605	0.2 - 0.4	Field screening not conducted due to no ACM or demolition rubble observed			-	-	-	-	NAD	NAD
TP606	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	Yes	PACM 2	-	NA	NA
TP606	0.1 - 0.4	17.14	NO	-	-	-	-	-	NAD	NAD
TP606	0.4 - 0.6	16.7	NO	-	-	-	-	-	NAD	NAD
TP606	0.6 - 0.8	Field screening not conducted due to no ACM or demolition rubble observed			-	-	-	-	NAD	NAD
TP607	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NAD	NAD
TP607	0.1 - 0.5	19.8	NO	-	-	-	-	-	NAD	NAD
TP608	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP609	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP610	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP610	0.1 - 0.7	16.2	NO	-	-	-	-	-	NA	NA
TP610	0.7 - 1	19.5	NO	-	-	-	-	-	NA	NA
TP611	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	Yes	PACM 1	-	NAD	NAD
TP611	0.1 - 0.4	18.4	NO	-	-	-	-	-	NAD	NAD
TP611	0.4 - 0.8	18.3	NO	-	-	-	-	-	NAD	NAD
TP612	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA

Table T1
Screening Results and Laboratory Results for Asbestos
Stage 2 Detailed Site Investigation - North Western Portion
221-227 and 289-311 Luddenham Road, Orchard Hills

Field Screening for Bonded Asbestos									Laboratory Analysis	
Sample ID		Mass of Soil in 10L bucket (Kg)	ACM Present in 10L?	Mass of ACM? (g)	In Test pit	Near Test pit	PACM/ACM	% of Bonded Asbestos In Soil	% of ACM Reported by the lab	% of AF/FA Reported by Lab
TP613	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	Yes	-	-	NA	NA
TP613	0.1 - 0.4	16.6	NO	-	-	-	-	-	NAD	NAD
TP614	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	Yes	-	-	NA	NA
TP614	0.1 - 0.3	16.8	NO	-	-	-	-	-	NAD	NAD
TP614	0.3 - 0.5	Field screening not conducted due to no ACM or demolition rubble observed			-	-	-	-	NAD	NAD
TP615	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	Yes	-	-	NA	NA
TP615	0.1 - 0.4	16.9	NO	-	-	-	-	-	NAD	NAD
TP616	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	Yes	-	-	NA	NA
TP616	0.1 - 0.3	19.1	NO	-	-	-	-	-	NAD	NAD
TP617	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NAD	NAD
TP617	0.1 - 0.3	18.1	NO	-	-	-	-	-	NAD	NAD
TP618	0 - 0.5	17.6	NO	-	-	-	-	-	NAD	NAD
TP619	0 - 0.7	Field screening not conducted due to no ACM or demolition rubble observed			-	-	-	-	NAD	NAD
TP620	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP621	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP622	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP623	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP624	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP625	0 - 0.5	17.9	Yes	17.3	Yes	-	-	0.01%	NA	NA
TP626	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP627	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NAD	NAD
TP627	0.1 - 0.3	16.6	NO	-	-	-	-	-	NAD	NAD
TP628	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	Yes	PACM 3	-	NAD	NAD
TP628	0.1 - 0.2	18	NO	-	-	-	-	-	NAD	NAD
TP628	0.2 - 0.4	Field screening not conducted due to no ACM or demolition rubble observed			-	-	-	-	NAD	NAD
TP629	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	Yes	-	-	NA	NA
TP629	0.1 - 0.4	17	NO	-	-	-	-	-	NAD	NAD
TP630	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP631	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP632	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NAD	NAD
TP632	0.1 - 0.5	19.6	NO	-	-	-	-	-	NAD	NAD
TP632	0.5 - 1	20.2	NO	-	-	-	-	-	NA	NA
TP633	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP634	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP635	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP636	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP637	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA

Table T1
Screening Results and Laboratory Results for Asbestos
Stage 2 Detailed Site Investigation - North Western Portion
221-227 and 289-311 Luddenham Road, Orchard Hills

Field Screening for Bonded Asbestos									Laboratory Analysis	
Sample ID		Mass of Soil in 10L bucket (Kg)	ACM Present in 10L?	Mass of ACM? (g)	In Test pit	Near Test pit	PACM/ACM	% of Bonded Asbestos In Soil	% of ACM Reported by the lab	% of AF/FA Reported by Lab
TP638	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP639	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP640	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP641	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP642	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NAD	NAD
TP642	0.1 - 0.3	Field screening not conducted due to no ACM or demolition rubble observed			-	-	-	-	NAD	NAD
TP643	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP644	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP645	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP646	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP647	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP648	0.05 - 0.2	Field screening not conducted due to no ACM or demolition rubble observed			-	-	-	-	NAD	NAD
TP649	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP650	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
PACM1		-	-	-	-	-	-	-	Detected	Not Detected
PACM2		-	-	-	-	-	-	-	Detected	Not Detected
PACM3		-	-	-	-	-	-	-	Detected	Not Detected
PACM4		-	-	-	-	-	-	-	Detected	Not Detected

NAD - No Asbestos Detected

NA - Not Analysed

Exceeding criterion for Asbestos Containing Material (ACM) for residential land use with accessible soils - 0.01%

Exceeding criterion for Asbestos Fines (AF) for residential land use with accessible soils - 0.001%

* - Average weight of 10L sample

Table T2
Soil Analytical Results
North Western Portion of OSO
221-227 And 289-311 Luddenham Road, Orchard Hills, NSW

	LOR	Units	HIL D	EILs	TP591_0-0.5	TP592_0-0.1	TP597_0-0.1	TP597_0.2-0.4	TP598_0-0.5	TP599_0.1-0.7	TP602_0-0.6	TP611_0-0.1	TP613_0.1-0.4	TP613_0.6-0.8	TP618_0-0.5	TP619_0-0.7
					10/09/2024	10/09/2024	11/09/2024	11/09/2024	11/09/2024	11/09/2024	11/09/2024	10/09/2024	11/09/2024	11/09/2024	11/09/2024	11/09/2024
BTEXN																
Benzene	mg/kg	0.1	4	65	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1		125	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1		105	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3		45	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Naphthalene (VOC)	mg/kg	0.1		370	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Recoverable Hydrocarbons																
TRH C6-C10 minus BTEX (F1)	mg/kg	25	310	180	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	1000	120	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	5000	1300	<90	<90	<90	<90	<90	<90	<90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	10000	5600	<120	<120	<120	<120	<120	<120	<120	<120	<120	<120	<120	<120
Polycyclic Aromatic Hydrocarbons																
Benzo(a)pyrene	mg/kg	0.1		0.7	<0.1	<0.1	<0.1	<0.1	0.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.3	40		<0.3	<0.3	<0.3	<0.3	0.4	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total PAH (18)	mg/kg	0.8	400		<0.8	<0.8	<0.8	<0.8	2.4	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Organochlorine Pesticides																
Total CLP OC Pesticides	mg/kg	1			--	--	<1	--	<1	<1	--	--	<1	--	--	<1
Polychlorinated Biphenyls																
Total PCBs (Arochlors)	mg/kg	1	7		--	--	<1	--	<1	<1	--	--	<1	--	--	<1
Heavy Metals																
Arsenic, As	mg/kg	1	3000	160	140	8	3	6	8	4	6	13	5	5	5	20
Cadmium, Cd	mg/kg	0.3	900		1.4	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	0.4
Chromium, Cr	mg/kg	0.5	3600	310-660	68	12	9.7	14	29	12	15	47	16	13	16	55
Copper, Cu	mg/kg	0.5	240000	85-340	120	31	35	19	9.1	13	15	11	6.8	16	17	13
Lead, Pb	mg/kg	1	1500	1800	22	20	20	11	16	8	19	30	15	8	12	77
Nickel, Ni	mg/kg	0.5	600	55-960	50	16	21	3.2	14	3.4	9	14	6.1	5.9	6.3	12
Zinc, Zn	mg/kg	2	400000	100-2000	130	71	81	17	45	16	90	93	16	13	46	240
Mercury	mg/kg	0.05	730		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05

HILs - Human Health Investigation levels for commercial/industrial land use

EILs - Ecological Investigation levels for commercial/industrial land use

Table T2
Soil Analytical Results
North Western Portion of OSO
221-227 And 289-311 Luddenham Road, Orchard Hills, NSW

	LOR	Units	HIL D	EILs	TP625_0-0.5	TP626_0-0.1	Intra lab duplicate DUP2	Interlab LOR	Interlab Units	Inter lab duplicate DUP2A	TP627_0.3-0.5	TP634_0-0.1	TP638_0-0.1	TP642_0.3-0.5	TP642_0.1-0.3	TP645_0-0.1
					11/09/2024	11/09/2024	11/09/2024			11/09/2024	11/09/2024	10/09/2024	10/09/2024	10/09/2024	10/09/2024	10/09/2024
BTEXN																
Benzene	mg/kg	0.1	4	65	<0.1	<0.1	--	--	--	--	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1		125	<0.1	<0.1	--	--	--	--	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1		105	<0.1	<0.1	--	--	--	--	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3		45	<0.3	<0.3	--	--	--	--	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Naphthalene (VOC)	mg/kg	0.1		370	<0.1	<0.1	--	--	--	--	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Recoverable Hydrocarbons																
TRH C6-C10 minus BTEX (F1)	mg/kg	25	310	180	<25	<25	--	--	--	--	<25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	1000	120	<25	<25	--	--	--	--	<25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	5000	1300	<90	<90	--	--	--	--	120	<90	<90	<90	<90	120
TRH >C34-C40 (F4)	mg/kg	120	10000	5600	<120	<120	--	--	--	--	<120	<120	<120	<120	<120	<120
Polycyclic Aromatic Hydrocarbons																
Benzo(a)pyrene	mg/kg	0.1		0.7	<0.1	<0.1	<0.1	0.5	mg/kg	< 0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.3	40		<0.3	<0.3	<0.3	0.5	mg/kg	0.6	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total PAH (18)	mg/kg	0.8	400		<0.8	<0.8	<0.8	0.5	mg/kg	< 0.5	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Organochlorine Pesticides																
Total CLP OC Pesticides	mg/kg	1			--	--	--	--	--	--	--	--	<1	--	--	--
Polychlorinated Biphenyls																
Total PCBs (Arochlors)	mg/kg	1	7		--	--	--	--	--	--	--	--	<1	--	--	--
Heavy Metals																
Arsenic, As	mg/kg	1	3000	160	17	6	6	2	mg/kg	11	6	7	9	5	8	6
Cadmium, Cd	mg/kg	0.3	900		<0.3	<0.3	<0.3	0.4	mg/kg	< 0.4	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	3600	310-660	67	13	14	5	mg/kg	20	12	20	18	14	24	14
Copper, Cu	mg/kg	0.5	240000	85-340	16	10	8.9	5	mg/kg	17	9.6	14	9	14	9.7	14
Lead, Pb	mg/kg	1	1500	1800	39	21	20	5	mg/kg	30	22	25	28	8	26	20
Nickel, Ni	mg/kg	0.5	600	55-960	33	7.9	5.4	5	mg/kg	9.9	5.6	17	6.5	7.5	7.8	7.7
Zinc, Zn	mg/kg	2	400000	100-2000	120	22	21	5	mg/kg	28	21	42	29	12	13	48
Mercury	mg/kg	0.05	730		<0.05	<0.05	<0.05	0.1	mg/kg	< 0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05

HILs - Human Health Investigation levels for commercial/industrial land use

EILs - Ecological Investigation levels for commercial/industrial land use

Table T2
Soil Analytical Results
North Western Portion of OSO
221-227 And 289-311 Luddenham Road, Orchard Hills, NSW

	LOR	Units	HIL D	EILs	DUP1	TP648_0-0.05	SS1
					10/09/2024	10/09/2024	11/09/2024
BTEXN							
Benzene	mg/kg	0.1	4	65	--	<0.1	<0.1
Toluene	mg/kg	0.1		125	--	<0.1	<0.1
Ethylbenzene	mg/kg	0.1		105	--	<0.1	<0.1
Total Xylenes	mg/kg	0.3		45	--	<0.3	<0.3
Naphthalene (VOC)	mg/kg	0.1		370	--	<0.1	<0.1
Total Recoverable Hydrocarbons							
TRH C6-C10 minus BTEX (F1)	mg/kg	25	310	180	--	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	1000	120	--	<25	130
TRH >C16-C34 (F3)	mg/kg	90	5000	1300	--	120	300
TRH >C34-C40 (F4)	mg/kg	120	10000	5600	--	<120	750
Polycyclic Aromatic Hydrocarbons							
Benzo(a)pyrene	mg/kg	0.1		0.7	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.3	40		<0.3	<0.3	<0.3
Total PAH (18)	mg/kg	0.8	400		<0.8	1.1	<0.8
Organochlorine Pesticides							
Total CLP OC Pesticides	mg/kg	1			--	--	--
Polychlorinated Biphenyls							
Total PCBs (Arochlors)	mg/kg	1	7		--	--	--
Heavy Metals							
Arsenic, As	mg/kg	1	3000	160	6	2	6
Cadmium, Cd	mg/kg	0.3	900		<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	3600	310-660	12	11	12
Copper, Cu	mg/kg	0.5	240000	85-340	14	20	13
Lead, Pb	mg/kg	1	1500	1800	20	28	13
Nickel, Ni	mg/kg	0.5	600	55-960	7.3	6	6.1
Zinc, Zn	mg/kg	2	400000	100-2000	58	73	31
Mercury	mg/kg	0.05	730		<0.05	<0.05	<0.05

HILs - Human Health Investigation levels for commercial/industrial land use

EILs - Ecological Investigation levels for commercial/industrial land use

Table T3
Screening Results and Laboratory Results for Asbestos
Stage 2 Detailed Site Investigation - Central OSO
221-227 and 289-311 Luddenham Road, Orchard Hills

Field Screening for Bonded Asbestos									Laboratory Analysis	
Sample ID		Mass of Soil in 10L bucket (Kg)	ACM Present in 10L?	Mass of ACM? (g)	In Test pit	Near Test pit	PACM/ACM	% of Bonded Asbestos In Soil	% of ACM Reported by the lab	% of AF/FA Reported by Lab
TP401	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	Yes	PACM 6	-	NAD	NAD
TP402	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NAD	NAD
TP402	0.1 - 0.2	17.8	NO	-	-	-	-	-	NA	NA
TP403	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NAD	NAD
TP405	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NAD	NAD
TP406	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP407	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NAD	NAD
TP407	0.1 - 0.2	18.4	NO	-	-	-	-	-	NA	NA
TP409	0 - 0.2	18.1	NO	-	-	-	-	-	NAD	NAD
TP410	0 - 0.2	17	NO	-	-	Yes	ACM	-	NAD	NAD
TP411	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP415	0 - 0.1	14.8	NO	-	-	-	-	-	NA	NA
TP416	0 - 0.2	16.5	NO	-	-	-	-	-	NAD	NAD
TP417	0 - 0.5	16.3	NO	-	-	-	-	-	NAD	NAD
TP418	0 - 0.5	16.7	NO	-	-	-	-	-	NAD	NAD
TP419	0 - 0.8	16.7	NO	-	-	-	-	-	NAD	NAD
TP420	0 - 0.2	16.7	NO	-	-	-	-	-	NAD	NAD
TP421	0 - 0.2	16.7	NO	-	-	-	-	-	NAD	NAD
TP422	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NAD	NAD
TP422	0.1 - 0.4	17.7	NO	-	-	-	-	-	NAD	NAD
TP423	0 - 0.5	17.7	Yes	23.7	Yes	Yes	ACM	0.02%	0.00059%	0.00059%
TP424	0 - 0.4	17.5	NO	-	-	-	-	-	NAD	NAD
TP425	0 - 0.4	20.5	NO	-	-	Yes	ACM	-	NAD	NAD
TP426	0 - 0.3	19.2	NO	-	-	-	-	-	NAD	NAD
TP427	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NAD	NAD
TP427	0.1 - 0.2	16.1	NO	-	-	-	-	-	NAD	NAD
TP428	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP432	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP433	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NAD	NAD
TP435	0 - 0.5	Field screening not conducted due to no ACM or demolition rubble observed			-	-	-	-	NAD	NAD
TP436	0 - 1	17.6	NO	-	-	-	-	-	NA	NA
TP437	0 - 0.8	17.7	NO	-	-	-	-	-	NAD	NAD
TP438	0 - 0.8	17.1	NO	-	-	-	-	-	NA	NA
TP439	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NAD	NAD
TP439	0.1 - 0.6	16.9	NO	-	-	-	-	-	NAD	NAD

Table T3
Screening Results and Laboratory Results for Asbestos
Stage 2 Detailed Site Investigation - Central OSO
221-227 and 289-311 Luddenham Road, Orchard Hills

Field Screening for Bonded Asbestos									Laboratory Analysis	
Sample ID		Mass of Soil in 10L bucket (Kg)	ACM Present in 10L?	Mass of ACM? (g)	In Test pit	Near Test pit	PACM/ACM	% of Bonded Asbestos In Soil	% of ACM Reported by the lab	% of AF/FA Reported by Lab
TP440	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NAD	NAD
TP440	0.1 - 0.4	18	NO	-	-	-	-	-	NAD	NAD
TP441	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP442	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NAD	NAD
TP442	0.1 - 0.2	17.8	NO	-	-	-	-	-	NAD	NAD
TP443	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NAD	NAD
TP443	0.1 - 0.3	18.5	NO	-	-	-	-	-	NAD	NAD
TP444	0 - 0.2	16.7	NO	-	-	-	-	-	NAD	NAD
TP445	0 - 0.4	16	NO	-	-	-	-	-	NAD	NAD
TP446	0 - 0.6	16.5	NO	-	-	-	-	-	NAD	NAD
TP447	0 - 0.4	16.8	NO	-	-	-	-	-	NAD	NAD
TP448	0 - 0.4	14.2	NO	-	-	-	-	-	NAD	NAD
TP450	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NAD	NAD
TP450	0.1 - 0.4	17.9	NO	-	-	-	-	-	NAD	NAD
TP451	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP452	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP453	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP454	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP455	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NAD	NAD
TP455	0.1 - 0.2	19.8	NO	-	-	-	-	-	NAD	NAD
TP456	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NAD	NAD
TP456	0.1 - 0.4	16.7	NO	-	-	-	-	-	NAD	NAD
TP456	0.4 - 0.6	18.9	NO	-	-	-	-	-	NAD	NAD
TP457	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NAD	NAD
TP457	0.1 - 0.3	17	NO	-	-	-	-	-	NAD	NAD
TP463	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP464	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP465	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP466	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP467	0 - 0.7	13.6	Yes	6	Yes	Yes	PACM 5 / ACM	0.01%	NAD	NAD
TP471	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP472	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NAD	NAD
TP472	0.1 - 0.3	17.9	NO	-	-	-	-	-	NAD	NAD
TP473	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NAD	NAD
TP473	0.3 - 0.4	17.9	NO	-	-	-	-	-	0.00002%	0.00002%
TP474	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NAD	NAD
TP474	0.1 - 0.2	16.9	NO	-	-	-	-	-	NAD	NAD
TP475	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA

Table T3
Screening Results and Laboratory Results for Asbestos
Stage 2 Detailed Site Investigation - Central OSO
221-227 and 289-311 Luddenham Road, Orchard Hills

Field Screening for Bonded Asbestos									Laboratory Analysis	
Sample ID		Mass of Soil in 10L bucket (Kg)	ACM Present in 10L?	Mass of ACM? (g)	In Test pit	Near Test pit	PACM/ACM	% of Bonded Asbestos In Soil	% of ACM Reported by the lab	% of AF/FA Reported by Lab
TP476	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP477	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP478	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP490	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP496	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP503	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP512	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP513	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NAD	NAD
TP514	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP523	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP528	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP529	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP534	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NAD	NAD
TP534	0.1 - 0.3	17.7	NO	-	-	-	-	-	NAD	NAD
TP535	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NAD	NAD
TP542	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NAD	NAD
TP542	0.1 - 0.3	19.1	NO	-	-	-	-	-	NA	NA
TP543	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP544	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP545	0 - 0.7	16.5	NO	-	-	-	-	-	NAD	NAD
TP546	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NAD	NAD
TP546	0.1 - 0.4	18.5	NO	-	-	-	-	-	NAD	NAD
TP557	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP560	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NAD	NAD
TP560	0.1 - 0.5	17.2	NO	-	-	-	-	-	NAD	NAD
TP562	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NAD	NAD
TP563	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP564	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NAD	NAD
TP564	0.1 - 0.2	Field screening not conducted due to no ACM or demolition rubble observed			-	-	-	-	NA	NA
TP565	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NAD	NAD
TP566	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NAD	NAD
TP567	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP568	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP569	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP570	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP571	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP572	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP573	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NAD	NAD

Table T3
Screening Results and Laboratory Results for Asbestos
Stage 2 Detailed Site Investigation - Central OSO
221-227 and 289-311 Luddenham Road, Orchard Hills

Field Screening for Bonded Asbestos									Laboratory Analysis	
Sample ID		Mass of Soil in 10L bucket (Kg)	ACM Present in 10L?	Mass of ACM? (g)	In Test pit	Near Test pit	PACM/ACM	% of Bonded Asbestos In Soil	% of ACM Reported by the lab	% of AF/FA Reported by Lab
TP574	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NAD	NAD
TP574	0.3 - 0.5	Field screening not conducted due to no ACM or demolition rubble observed			-	-	-	-	NA	NA
TP575	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP576	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP577	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP578	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP579	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP580	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP581	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP582	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP583	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP584	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP585	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NAD	NAD
TP585	0.1 - 0.4	20.1	NO	-	-	-	-	-	NAD	NAD
TP586	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NAD	NAD
TP586	0.1 - 0.9	20.8	NO	-	-	-	-	-	NAD	NAD
TP587	0 - 0.2	Field screening not conducted due to no ACM or demolition rubble observed			-	-	-	-	NAD	NAD
TP587	0.2 - 0.7	19.2	NO	-	-	-	-	-	NAD	NAD
TP588	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NAD	NAD
TP588	0.1 - 0.8	21.2	NO	-	-	-	-	-	NAD	NAD
TP588	0.8 - 1.1	Field screening not conducted due to no ACM or demolition rubble observed			-	-	-	-	NAD	NAD
TP589	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
TP590	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NAD	NAD
TP590	0.1 - 0.3	17.3	NO	-	-	-	-	-	NAD	NAD
TP651	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NAD	NAD
TP651	0.1 - 0.4	20	NO	-	-	-	-	-	NA	NA
TP652	0 - 0.4	Field screening not conducted due to no ACM or demolition rubble observed			-	-	-	-	NAD	NAD
TP653	0 - 0.1	Tyning and no ACM or demolition rubble observered			-	-	-	-	NA	NA
SS2		-	-	-	-	-	-	-	NAD	NAD
SS3		-	-	-	-	-	-	-	NAD	NAD
PACM5		-	-	-	-	-	-	-	Detected	Not Detected
PACM6		-	-	-	-	-	-	-	Detected	Not Detected

NAD - No Asbestos Detected

NA - Not Analysed

Exceeding criterion for Asbestos Containing Material (ACM) for residential land use with accessible soils - 0.01%

Exceeding criterion for Asbestos Fines (AF) for residential land use with accessible soils - 0.001%

* - Average weight of 10L sample

Table T4
Soil Analytical Results - Relative Percentage Difference
North Western Portion of OSO
221-227 And 289-311 Luddenham Road, Orchard Hills, NSW

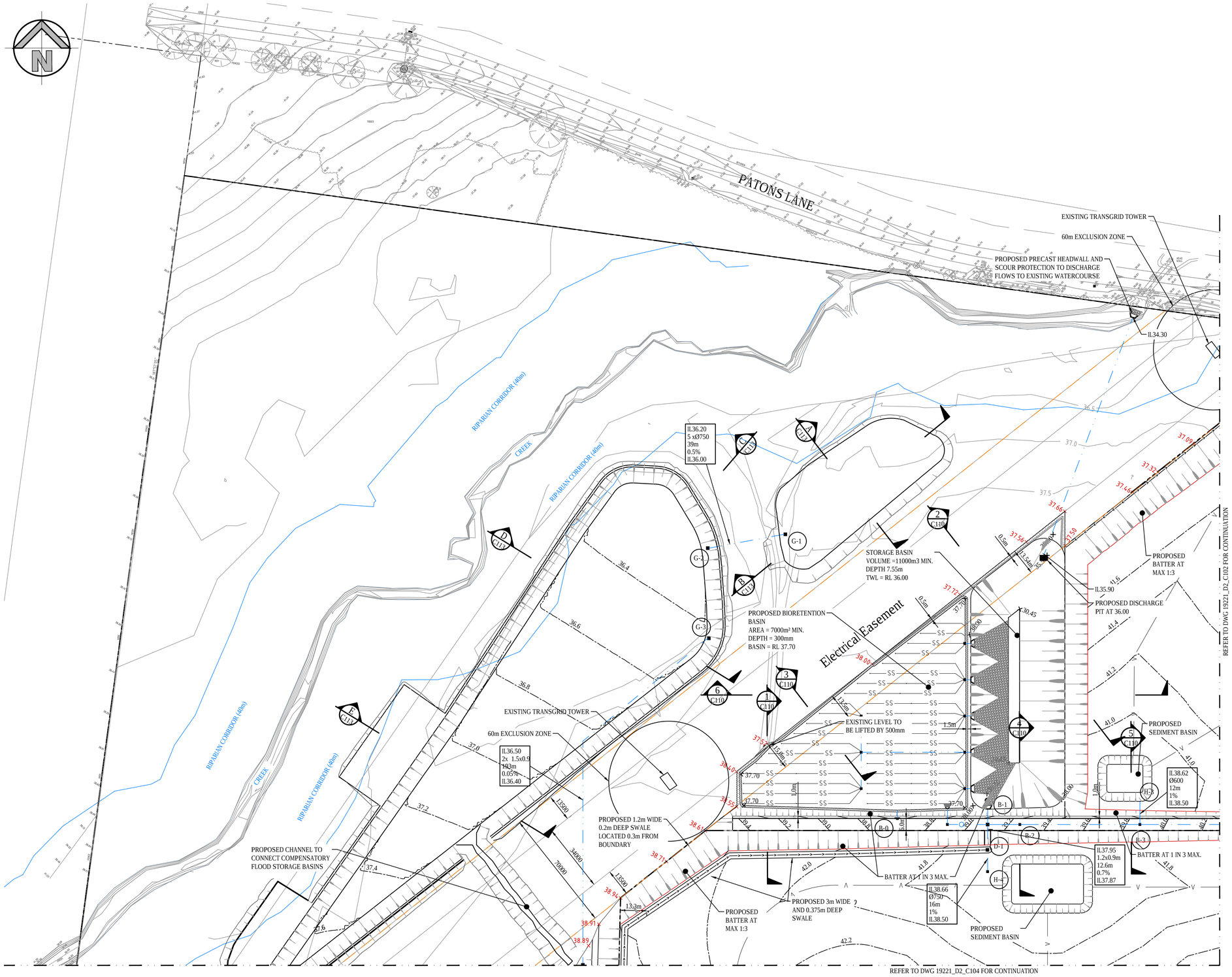
	LOR	Units	HIL D	EILs	TP626_0-0.1	Intra lab duplicate DUP2	RPD	Interlab LOR	Interlab Units	Inter lab duplicate DUP2A	RPD
					11/09/2024	11/09/2024				11/09/2024	
Polycyclic Aromatic Hydrocarbons											
Benzo(a)pyrene	mg/kg	0.1		0.7	<0.1	<0.1	NA	0.5	mg/kg	< 0.5	NA
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.3	40		<0.3	<0.3	NA	0.5	mg/kg	0.6	NA
Total PAH (18)	mg/kg	0.8	400		<0.8	<0.8	NA	0.5	mg/kg	< 0.5	NA
Heavy Metals											
Arsenic, As	mg/kg	1	3000	160	6	6	0	2	mg/kg	11	59%
Cadmium, Cd	mg/kg	0.3	900		<0.3	<0.3	NA	0.4	mg/kg	< 0.4	NA
Chromium, Cr	mg/kg	0.5	3600	310-660	13	14	7%	5	mg/kg	20	42%
Copper, Cu	mg/kg	0.5	240000	85-340	10	8.9	12%	5	mg/kg	17	52%
Lead, Pb	mg/kg	1	1500	1800	21	20	5%	5	mg/kg	30	35%
Nickel, Ni	mg/kg	0.5	600	55-960	7.9	5.4	38%	5	mg/kg	9.9	22%
Zinc, Zn	mg/kg	2	400000	100-2000	22	21	5%	5	mg/kg	28	24%
Mercury	mg/kg	0.05	730		<0.05	<0.05	NA	0.1	mg/kg	< 0.1	NA

HILs - Human Health Investigation levels for commercial/industrial land use

EILs - Ecological Investigation levels for commercial/industrial land use

APPENDIX A

SITE SURVEY



DETAIL PLAN

SCALE: 1:1000

0 20 40 60 80 100m

20 15 10 5

SCALE 1:1000

LEGEND

- PROPOSED STORMWATER PIPE
- PROPOSED BOUNDARY
- PROPOSED CONTOURS (47.00)
- EXISTING CONTOURS (47.0)
- PROPOSED LINTEL ONGRADE & SAG PITS
- PROPOSED SPOT LEVEL "BY OTHERS" (37.50)
- EXISTING SPOT LEVEL (36.55)
- PROPOSED SUBSOIL LINE (SS)
- IL97.19 / Ø300 / 30m / 1% / IL96.89
  - STORMWATER UPSTREAM INVERT RL.
  - STORMWATER PIPE DIAMETER & CLASS
  - STORMWATER PIPE LENGTH
  - STORMWATER PIPE GRADE
  - STORMWATER DOWNSTREAM INVERT RL.
- PROPOSED SURFACE INLET PITS
- PROPOSED JUNCTION PITS
- PROPOSED PIT TAG (A-1: LINE LETTER, PIT NUMBER)
- PROPOSED BATTER LINE

NOTE:

LEVELS AND SITE GRADING SHOWN ARE PRELIMINARY ONLY AND ARE SUBJECT TO CHANGE DURING THE DESIGN DEVELOPMENT PHASE.

FOR DA ONLY

SURVEY INFORMATION
SURVEYED BY
WATSDON BUCHAN
DATUM: A.H.D.
ORIGIN OF LEVELS: SSM 22740 RL41.10

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
06	ISSUED FOR DA ONLY	AFe	NH	12.10.2023
05	ISSUED FOR PRELIMINARY	LC	NH	06.09.2023
04	ISSUED FOR PRELIMINARY	MP	NH	24.08.2023
03	ISSUED FOR REVIEW	NH	NH	19.04.2023
02	ISSUED FOR REVIEW	NH	NH	06.04.2023
01	ISSUED FOR REVIEW	NH	NH	27.03.2023

Client: HB & B PROPERTY PTY LTD

Architect: NETTLETONTRIBE

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henry&hymas

Project: PROPOSED INDUSTRIAL BUSINESS PARK
221-227 & 289-317 LUDDENHAM ROAD ORCHARD HIILS

Title: DETAIL PLAN
SHEET 1 OF 6

Drawn	Designed	Date
I.Khachab	N.Heazlewod	MARCH 2019
Checked	Approved	Scale @A1
N.Heazlewod	A.Francis	1:1000

Drawing number: 19221_D2_C101

Revision: 06

LEGEND

- PROPOSED STORMWATER PIPE
- PROPOSED BOUNDARY
- PROPOSED CONTOURS (47.00)
- EXISTING CONTOURS (47.0)
- PROPOSED LINTEL ONGRADE & SAG PITS
- PROPOSED SPOT LEVEL "BY OTHERS" (37.50)
- EXISTING SPOT LEVEL (36.55)
- PROPOSED SUBSOIL LINE (SS)
- STORMWATER UPSTREAM INVERT RL. (Il.97.19)
- STORMWATER PIPE DIAMETER & CLASS (Ø300)
- STORMWATER PIPE LENGTH (30m)
- STORMWATER PIPE GRADE (1%)
- STORMWATER DOWNSTREAM INVERT RL. (Il.96.89)
- PROPOSED SURFACE INLET PITS
- PROPOSED JUNCTION PITS
- PROPOSED PIT TAG (A-1: LINE LETTER, PIT NUMBER)
- PROPOSED BATTER LINE

EXISTING ROAD

GRADING AND DESIGN OF THE PATONS LANE INTERSECTION TO FUTURE DA SUBMISSION

PATONS LANE

PROPOSED SUBSTATION

PAD LEVELS "BY OTHERS"

PROPOSED 1.2m WIDE 0.2m DEEP SWALE LOCATED 0.3m FROM BOUNDARY

PROPOSED BATTER AT MAX 1:3

PROPOSED BATTER AT MAX 1:5

PROPOSED SEDIMENT BASIN

PROPOSED BIORETENTION BASIN
AREA = 400m² MIN.
DEPTH = 300mm
BASIN = RL 40.00

PROPOSED OSD +STORAGE BASIN
VOLUME =1065m³
BASIN TWL = RL 38.55

Il40.18 Ø600 18m 1% Il40.00

Il40.30 Ø600 30m 1% Il40.00

Il40.20 Ø900 12.7m 1.5% Il40.00

PROPOSED RIDGE

FOOTPATH CROSSFALL VARIES

PROPOSED DRIVEWAY

REVERSED CROSSFALL

BATTER AT 1 IN 3 MAX.

LOT BOUNDARY

SITE BOUNDARY

EXISTING TREES TO BE REMOVED

20m SETBACK

LUDDENHAM ROAD

REFER TO DWG 19221_D2_C101 FOR CONTINUATION

REFER TO DWG 19221_D2_C103 FOR CONTINUATION

0 20 40 60 80 100m

20 15 10 5

SCALE 1:1000

DETAIL PLAN

SCALE: 1:1000

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221-227 & 289-317 LUDDENHAM ROAD ORCHARD HIILS

Title: DETAIL PLAN
SHEET 2 OF 6

Drawn	Designed	Date
I.Khachab	N.Heazlewod	MARCH 2019
Checked	Approved	Scale @A1
N.Heazlewod	A.Francis	1:1000

Drawing number: 19221_D2_C102

Revision: 06

REFER TO DWG 19221_D2_C102 FOR CONTINUATION

REFER TO DWG 19221_D2_C104 FOR CONTINUATION

REFER TO DWG 19221_D2_C106 FOR CONTINUATION

0.2m DEEP SWALE
MAX 1:5
PROPOSED BATTER AT MAX 1:5
PROPOSED 1.2m WIDE 0.2m DEEP SWALE
SITE BOUNDARY
PROPOSED BATTER AT MAX 1:3
IL43.24 Ø600 24m 1% IL43.00
PROPOSED SEDIMENT BASIN
IL44.20 Ø600 20m 1% IL44.00
IL46.20 Ø450 20m< 1% IL46.00
SHED
BRICK COTTAGE

LEGEND

- PROPOSED STORMWATER PIPE
- PROPOSED BOUNDARY
- PROPOSED CONTOURS (47.00)
- EXISTING CONTOURS (47.0)
- PROPOSED LINTEL ONGRADE & SAG PITS
- PROPOSED SPOT LEVEL "BY OTHERS" (37.50)
- EXISTING SPOT LEVEL (36.55)
- PROPOSED SUBSOIL LINE (SS)
- IL97.19 / Ø300 / 30m / 1% / IL96.89 — STORMWATER UPSTREAM INVERT RL. / STORMWATER PIPE DIAMETER & CLASS / STORMWATER PIPE LENGTH / STORMWATER PIPE GRADE / STORMWATER DOWNSTREAM INVERT RL.
- PROPOSED SURFACE INLET PITS
- PROPOSED JUNCTION PITS
- A-1 — LINE LETTER / PIT NUMBER — PROPOSED PIT TAG
- PROPOSED BATTER LINE

NOTE:

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0 20 40 60 80 100m
20 15 10 5
SCALE 1:1000

DETAIL PLAN

SCALE: 1:1000

FOR DA ONLY

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SURVEYED BY
WATSDON BUCHAN
DATUM: A.H.D.
ORIGIN OF LEVELS: SSM 22740 RL41.10

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01	ISSUED FOR REVIEW	NH	NH	27.03.2023

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Project: PROPOSED INDUSTRIAL BUSINESS PARK
221-227 & 289-317 LUDDENHAM ROAD ORCHARD HIILS

Title: DETAIL PLAN
SHEET 3 OF 6

Drawn	Designed	Date
I.Khachab	N.Heazlewod	MARCH 2019
Checked	Approved	Scale @A1
N.Heazlewod	A.Francis	1:1000

Drawing number: 19221_D2_C103
Revision: 04

REFER TO DWG 19221_D2_C101 FOR CONTINUATION

EXISTING TRANSGRID TOWER

60m EXCLUSION ZONE

PROPOSED BATTER AT MAX 1:3

PROPOSED 3m WIDE AND 0.375m DEEP SWALE

IL43.58
Ø600
28m
1%
IL43.20

PROPOSED BATTER AT MAX 1:3

3m

PROPOSED SEDIMENT BASIN

SITE BOUNDARY

PROPOSED 3m WIDE AND 0.375m DEEP SWALE

IL46.10
Ø450
16m
5%
IL45.02

PROPOSED SEDIMENT BASIN

PROPOSED BATTER AT MAX 1:3

SITE BOUNDARY

PROPOSED BATTER AT MAX 1:3

PROPOSED BATTER AT MAX 1:3

REFER TO DWG 19221_D2_C105 FOR CONTINUATION

REFER TO DWG 19221_D2_C103 FOR CONTINUATION

LEGEND

- PROPOSED STORMWATER PIPE
- PROPOSED BOUNDARY
- 47.00 PROPOSED CONTOURS
- 47.0 EXISTING CONTOURS
- PROPOSED LINTEL ONGRADE & SAG PITS
- 37.50 PROPOSED SPOT LEVEL "BY OTHERS"
- 36.55 EXISTING SPOT LEVEL
- SS SS PROPOSED SUBSOIL LINE
- IL97.19 / Ø300 / 30m / 1% / IL96.89 — STORMWATER UPSTREAM INVERT RL. / STORMWATER PIPE DIAMETER & CLASS / STORMWATER PIPE LENGTH / STORMWATER PIPE GRADE / STORMWATER DOWNSTREAM INVERT RL.
- PROPOSED SURFACE INLET PITS
- PROPOSED JUNCTION PITS
- A-1 — LINE LETTER / PIT NUMBER — PROPOSED PIT TAG
- PROPOSED BATTER LINE

NOTE:

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DETAIL PLAN

SCALE: 1:1000

0 20 40 60 80 100m

20 15 10 5

SCALE 1:1000

FOR DA ONLY

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SURVEYED BY
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DATUM: A.H.D.
ORIGIN OF LEVELS: SSM 22740 RL41.10

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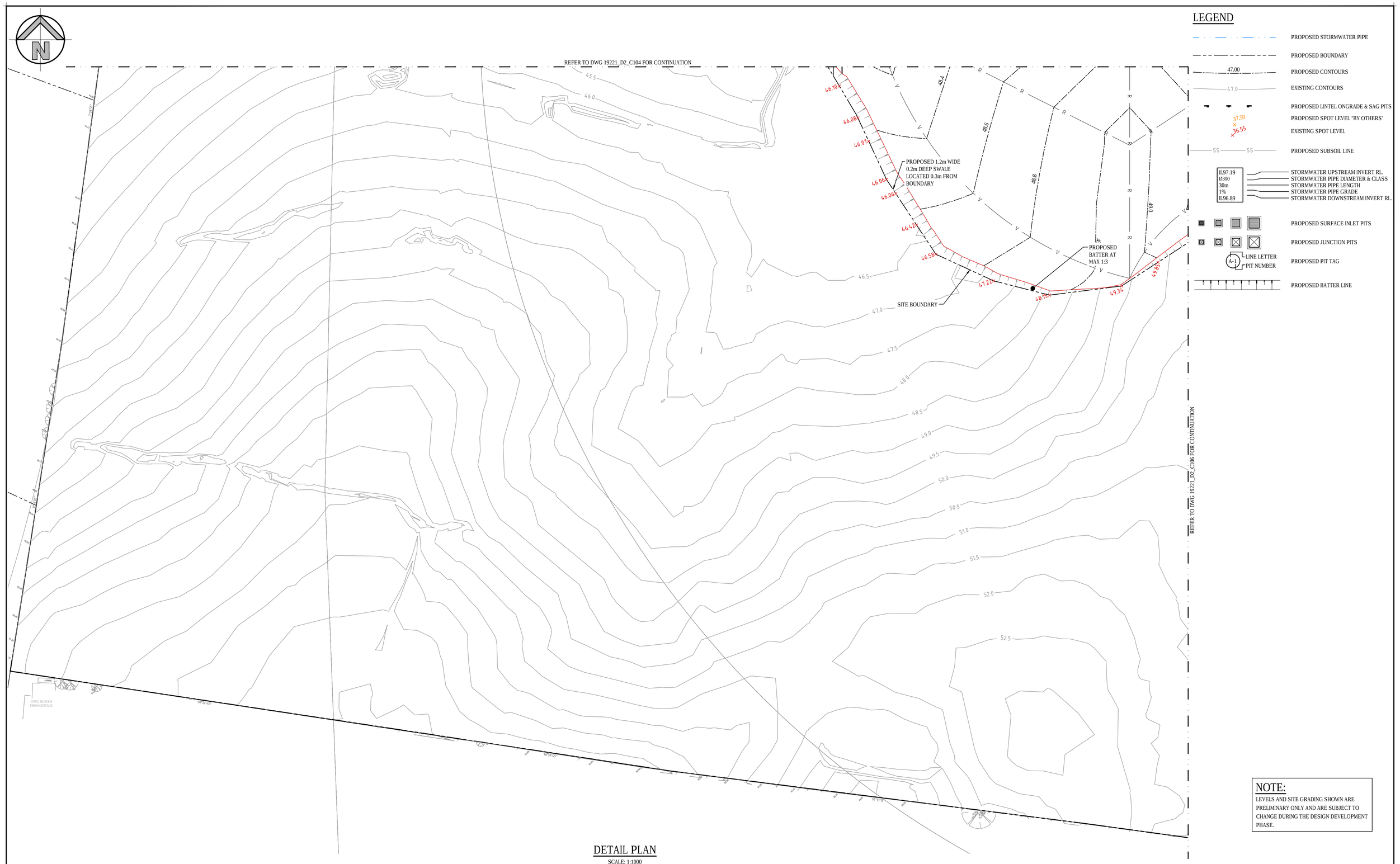
Title: DETAIL PLAN
SHEET 4 OF 6

Drawn	Designed	Date
I.Khachab	N.Heazlewod	MARCH 2019
Checked	Approved	Scale @A1
N.Heazlewod	A.Francis	1:1000

Drawing number: 19221_D2_C104

Revision: 06



LEGEND

- PROPOSED STORMWATER PIPE
- PROPOSED BOUNDARY
- PROPOSED CONTOURS (47.00)
- EXISTING CONTOURS (47.0)
- PROPOSED LINTEL ONGRADE & SAG PITS
- PROPOSED SPOT LEVEL "BY OTHERS" (37.50)
- EXISTING SPOT LEVEL (+36.55)
- PROPOSED SUBSOIL LINE (SS)
- IL97.19 / Ø300 / 30m / 1% / IL96.89
  - STORMWATER UPSTREAM INVERT RL.
  - STORMWATER PIPE DIAMETER & CLASS
  - STORMWATER PIPE LENGTH
  - STORMWATER PIPE GRADE
  - STORMWATER DOWNSTREAM INVERT RL.
- PROPOSED SURFACE INLET PITS
- PROPOSED JUNCTION PITS
- A-1 — LINE LETTER / PIT NUMBER — PROPOSED PIT TAG
- PROPOSED BATTER LINE

DETAIL PLAN

SCALE: 1:1000

0 20 40 60 80 100m

20 15 10 5

SCALE 1:1000

NOTE:

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Title: DETAIL PLAN
SHEET 5 OF 6

Drawn	Designed	Date
I.Khachab	N.Heazlewod	MARCH 2019
Checked	**Approved**	**Scale @A1**
N.Heazlewod	A.Francis	1:1000

Drawing number: 19221_D2_C105

Revision: 04

N

REFER TO DWG 19221_D2_C103 FOR CONTINUATION

REFER TO DWG 19221_D2_C105 FOR CONTINUATION

LEGEND

- PROPOSED STORMWATER PIPE
- PROPOSED BOUNDARY
- 47.00 — PROPOSED CONTOURS
- 47.0 — EXISTING CONTOURS
- PROPOSED LINTEL ONGRADE & SAG PITS
- 37.50 × 36.55 — PROPOSED SPOT LEVEL "BY OTHERS" / EXISTING SPOT LEVEL
- SS — SS — PROPOSED SUBSOIL LINE
- IL97.19 Ø300 30m 1% IL96.89 — STORMWATER UPSTREAM INVERT RL. / STORMWATER PIPE DIAMETER & CLASS / STORMWATER PIPE LENGTH / STORMWATER PIPE GRADE / STORMWATER DOWNSTREAM INVERT RL.
- PROPOSED SURFACE INLET PITS
- PROPOSED JUNCTION PITS
- A-1 — LINE LETTER / PIT NUMBER — PROPOSED PIT TAG
- PROPOSED BATTER LINE

PROPOSED 1.2m WIDE 0.2m DEEP SWALE

PROPOSED BATTER AT MAX 1:5

PROPOSED BATTER AT MAX 1:3

PROPOSED SEDIMENT BASIN

IL44.00 Ø600 22m 6.8% IL42.50

IL41.35 Ø750 20m 2% IL40.95

IL40.00 Ø900 18m 9% IL38.40

IL39:27V Ø750 20m 1% IL39.07

SITE BOUNDARY

PROPOSED RETAINING WALL

H 2.7m

H 3.05m

H 0.9m

15 C112

16 C112

10 C112

PROPOSED ROAD TO TIE INTO EXISTING ROAD LEVELS

GRADING AND DESIGN OF THE LUDDENHAM ROAD INTERSECTION TO FUTURE DA SUBMISSION

EXISTING TOE OF BATTER TO BE RETAINED

STORAGE BASIN VOLUME =3000m³ MIN. DEPTH 2.5m TOP OF BASIN = RL 39.15

PROPOSED 1.2m WIDE 0.2m DEEP SWALE LOCATED 0.3m FROM BOUNDARY

PROPOSED SPILL WAY RL 38.95

PROPOSED STORMWATER CONNECTION POINT AT HEADWALL IN ROAD RESERVE.

LUDDENHAM ROAD

0 20 40 60 80 100m

20 15 10 5

SCALE 1:1000

DETAIL PLAN

SCALE: 1:1000

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Title: DETAIL PLAN
SHEET 6 OF 6

Drawn	Designed	Date
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N.Heazlewod	A.Francis	1:1000

Drawing number: 19221_D2_C106

Revision: 05

APPENDIX B

EMERGING CONTAMINANTS & CHEMICAL CONTROL ORDERS

B1. Per and Poly-Fluoroalkyl Substances

Per and Poly-Fluoroalkyl Substances (PFAS) are a group of chemicals that are manufactured for their unique properties. There are numerous PFASs that may be present in the environment. Perfluoro octane sulfonate (PFOS) and perfluorooctanoic acid (PFOA) are two major PFASs, that were originally found as components in products used to provide stain resistance or as firefighting foams.

Some PFASs have been recognised as highly persistent, potentially bio-accumulative and toxic, and have been detected in the environment, wildlife, people and food.

DRM also considered guidance in HEPA (2020). Section 6 of HEPA (2020) advises that consideration should be given to identifying the presence of:

- Major primary sources of PFAS, including major commercial, industrial and government facilities, infrastructure and activities that historically or currently use or store PFAS containing products, nothing that all PFAS formulations should be considered, such as surfactants used in chrome plating or firefighting, hydraulic fluids and lubricants, and wastes and liquid wastes;
- Other primary sources where PFAS is or has been used, such as firefighting training facilities, foam deluge system installations, metal plating works, car washes, and electricity generation and distribution facilities;
- Secondary sources where diffuse PFAS inputs are or have been received, such as landfills, wastewater treatment facilities, liquid waste treatment facilities, and bio-solids stockpiles.

B2. Chemical Control Orders

Chemical control orders (CCO) are created under Part 3, Division 5 of the Environmentally Hazardous Chemicals Act 1985, and are used to selectively and specifically control particular chemicals or chemical wastes to limit their potential or actual impact on the environment.

APPENDIX C

SUPPORTING INFORMATION – SECTION 8 CSM

C1. Assumptions on Land Use Scenario

Commercial and Industrial

Section 3 of NEPC (2013e) advises that the commercial/industrial land use scenario, which assumes typical commercial or light industrial properties, consisting of single or multistorey buildings where work areas are on the ground floor (constructed on a ground level slab) or above subsurface structures (such as basement car parks or storage areas).

The outdoor areas of the commercial/industrial facilities are largely covered by hardstand, with some limited areas of landscaping or lawns and facilities. Opportunities for direct access to soil by employees using these facilities are likely to be minimal, but there may be potential for employees to inhale, ingest or come into direct dermal contact with dust particulates derived from the soil on the site.

The land use scenario does not include more sensitive uses that may be permitted under relevant commercial or industrial zonings. These more sensitive uses include childcare, educational facilities, caretaker residences and hotels and hostels, etc. Information on uses permitted under local council zoning schemes for commercial/industrial land use can be obtained from local council planning zones/schemes. Should these more sensitive uses be permitted, then 'residential with accessible soil', 'residential with minimal access to soil', or 'public open space' land use scenarios should be considered.

C2. Assumptions for Identified Receptors

Commercial and Industrial

The human receptors at a commercial/industrial site are adult employees, who are largely involved in office-based or light indoor industrial activities. The employees who are most susceptible to health risks associated with volatile soil contaminants are the employees who work in offices on the ground floor, as the greatest potential for vapour intrusion occurs with workspaces immediately overlying contaminated soil.

Employees may make use of outdoor areas of a commercial/industrial premises for activities such as meal breaks. Opportunities for direct access to soil by employees using these facilities are likely to be minimal, but there may be potential for employees to inhale, ingest or come into direct dermal contact with dust particulates derived from the soil on the site.

C3. Asbestos Categories and Risks

Bonded asbestos containing materials (ACM) comprises asbestos, which is in sound condition, although possibly broken or fragmented, and where the asbestos is bound in a matrix such as cement or resin.

Fibrous asbestos (FA) comprises friable asbestos material and includes severely weathered cement sheet, insulation products and woven asbestos material, which can be broken or crumbled by hand pressure.

Asbestos fines (AF) include free fibres, small fibre bundles and small fragments of bonded ACM that can pass through a 7mm x 7mm sieve.

Asbestos poses a risk to human health when asbestos fibres are made airborne and inhaled. The assessment of sites contaminated with asbestos in soil should aim to describe the nature and quantity of asbestos in soil in sufficient detail to enable a risk management plan to be developed for the proposed land use scenario.

C4. Information on Hazardous Ground Gases

Based on the desktop review and the site walkover, DRM did not identify potential sources of hazardous ground gases. As such, further assessment hazardous ground gases is not warranted.

C5. Aesthetics Screening

DRM screened for the potential for aesthetic risk as follows.

Preliminary Aesthetics Risk Screening Questions	Potential
Is there a potential for highly malodorous soils or extracted groundwater (e.g. strong residual petroleum hydrocarbon odours, hydrogen sulphide in soil or extracted groundwater, organosulfur compounds) to be present on site?	No
Is there a hydrocarbon sheen on surface waters on site?	No
Is there potential for discoloured chemical deposits or soil staining with chemical waste other than of a very minor nature, on be present in site soils;	No
Is there potential for large monolithic deposits of otherwise low risk material, e.g. gypsum as powder or plasterboard or cement kiln dust, to be present in site soils;	No
Is there potential for the presence of putrescible refuse including material that may generate hazardous levels of methane such as a deep fill profile of green waste or large quantities of timber waste, in site soils?	No
Is there potential for soils containing residue from animal burial (e.g. former abattoir sites) to be onsite.	No
Is there a potential for large quantities of non-hazardous inert material to be present in site soils?	No
Is there a potential for high odour residue material to be present in site soils?	No
Is there a potential for large quantities of various fill types and demolition rubble to be present in site soils proposed for residential land use?	No

C6. Groundwater

Groundwater contamination risks are not considered as significant as potential for leachable soil contamination was not identified through desktop review. Further, the previous assessments conducted at the property did not identify groundwater contamination.

C7. Terrestrial Ecosystems

Section 3.4.2 of NEPC (2013a) indicates that:

- A pragmatic risk-based approach should be taken when assessing ecological risk in residential and commercial / industrial land use settings;
- In existing residential and urban development sites, there are often practical considerations that enable soil properties to be improved by addition of ameliorants with a persistent modifying effect or by the common practice of backfilling or top dressing with clean soil;
- In other cases, all of the site soils will be removed during site development works or relocated for the formation of new landforms;
- Sites may also be backfilled with clean soil/fill and the fate of any excavated contaminated soil should be considered in process; and

- Commercial and industrial sites may have large building structures and extensive areas covered with concrete, other pavement or hardstand materials and may have limited environmental values requiring consideration while in operational use.

The proposed land use scenario is likely to include unsealed, open space and landscaped areas, where an ecological exposure pathway may be complete in the north western portion.

C8. Hydrocarbon Exposure Routes

Section 2.9 of NEPC (2013a) indicates that there are a number of policy considerations which reflect the nature and properties of petroleum hydrocarbons:

- Formation of observable light non-aqueous phase liquids (LNAPL);
- Fire and explosive hazards; and
- Effects on buried infrastructure e.g. penetration of, or damage to, in-ground services by hydrocarbons.

Section 2.9 of NEPC (2013a) notes that CME (2008) includes management limits to avoid or minimise these potential effects. Application of management limits requires consideration of site specific factors such as depth of building basements and services, and depth to groundwater, to determine the maximum depth to which the limits should apply. NEPC (2013a) also states that:

- Management limits may have less relevance at operating industrial sites (including mine sites) which have no or limited sensitive receptors in the area of potential impact.

The presence of site total petroleum hydrocarbon (TPH) contamination at the levels of the management limits does not imply that there is no need for administrative notification or controls in accordance with jurisdiction requirements.

APPENDIX D

DATA QUALITY OBJECTIVES

Data Quality Objectives

Appendix B in NEPC (2013b) provides guidance on the data quality objective (DQO) process, which is a seven-step iterative planning approach that can be used to define the type, quantity and quality of data needed to inform decisions relating to the environmental condition of a site.

D1. Step 1: State the problem

The reason the project is being undertaken, is set out in Section 1.1 of this report.

The objective of this project is set out in Section 1.2 of this report.

The project team and technical support experts identified for the project include the DRM project director, DRM project manager, DRM field staff and DRM's subcontractors.

The design and undertaking of this project will be constrained by the client's financial and time budgets.

The regulatory authorities associated with this project include NSW EPA, the local planning authority, and SafeWork NSW.

D2. Step 2: Identify the decision/goal of the study

The decisions that need to be made during this project, to address the project objectives, include:

- Is the data collected for the project, suitable for assessing land contamination exposure risks?
- Do the detected concentrations of contaminants of potential concern identified in the CSM, present an unacceptable exposure risk to the receptors identified in the CSM, based on the proposed land use scenario?
- Is the site suitable, in the context of land contamination, for the proposed land use scenario?

D3. Step 3: Identify the information inputs

The information inputs required to make the decisions for the project set out in Section D1 include:

- Data obtained during the site history review and site walkover;
- Identification of sample media that needs to be collected, as set out in Section D7;
- Parameters that will be measured in each relevant sample, as set out in Section D7;
- The analytical methods required for each identified COPC, so that assessment can be made relative to adopted site criteria. These are set out in Section D7.7 of this report; and
- The basis for decisions to be made from field screening, including photo-ionisation detector (PID) data, and what action is to be taken if a defined concentration is attained, as set out in Section D7.3; and
- The site criteria for the media of concern. These criteria are set out in Table D3-1 and will be adopted based on the proposed land use scenario19 and identified receptors.

[19] The land use scenarios in Section 2.2 of NEPC (2013a) will be considered when adopting human health assessment criteria. The land use scenarios in Section 2.5 of NEPC (2013a) will be considered when adopting ecological assessment criteria.

Table D3-1 Adopted Site Assessment Criteria

Exposure Pathway	Land Use Setting[20]	Reference
Human health direct contact	HIL D - Commercial / industrial	Table 1A(1) in NEPC (2013a) Table B4 in Friebel, E & Nadebaum P (2011) Table 3-5 in NSW EPA (2000) Table 2 in HEPA (2020)
Human health inhalation/intrusion	HSL D / Commercial / Industrial D	Table 1A(2) in NEPC (2013a) Table 1A(3) in NEPC (2013a)[21] Table 1A(4) in NEPC (2013a) Table 1A(5) in NEPC (2013a)
Ground gases including methane	--	Section 3.6.2 in NSW EPA (2020a)
Human health (asbestos)	Commercial / Industrial D	Table 7 in NEPC (2013a)[22]
Human health (aesthetics)	All	Characteristics and processes in Section 3.6.2 and 3.6.3 in NEPC (2013a)
Ecological	Commercial / industrial Ecological direct exposure (PFAS) – All land uses Ecological indirect exposure (PFAS) – All land uses	Table 1B(1) in NEPC (2013a) Table 1B(2) in NEPC (2013a) Table 1B(3) in NEPC (2013a) Table 1B(4) in NEPC (2013a) Table 1B(5) in NEPC (2013a) Table 1B(6) in NEPC (2013a) Table 3 in HEPA (2020)
Management Limits (petroleum hydrocarbons)	Commercial / industrial	Table 1B(7) in NEPC (2013a)

D4. Step 4: Define the boundaries of the study

The geographical and spatial extent of the project will be limited to:

- the site as defined by the boundaries set out in Section D2; and
- any physical constraints or existing infrastructure on site that prevents safe and reasonable access by the project team and/or typical industry equipment used for projects of this nature.

The time and budget constraints of the project will be as per those set out in the contract (and subsequent variations) between DRM and the client.

The temporal boundaries of the project will include:

- Weather conditions including rain, wind, heat and cold, which may adversely affect execution of fieldwork tasks and/or data quality;

[20] Consideration will be given to soil type, soil texture, soil depth, groundwater depth and appropriate species protection levels.
[21] Secondary school buildings should be assessed using the Residential A / Residential B HILs for vapour intrusion purposes.
[22] A depth of up to 10cm below ground level is adopted to define 'surface soil'.

- Availability of the site for access to execute fieldwork tasks; and
- Availability of project team members to execute the project.

The lateral and vertical intervals in which contamination distribution is believed to be uniformly distributed, based on the CSM, will be:

- The inferred lateral boundaries of each AEC;
- The inferred vertical extent of each AEC, likely to be to the base of fill material and to the base of stockpiled material.

The scale of the decisions required will be based on the site, as defined by its boundaries.

D5. Step 5: Develop the analytical approach

D5.1 Duplicates and Triplicates

Field duplicates and triplicates will be collected at a rate of one set per 20 samples collected (an equivalent of 5%), and one set per 10 samples collected (an equivalent of 10%) where PFAS is a contaminant of concern. Sample collection will include splitting of one bulk sample across three separate sample containers. Soil samples will not be homogenised, particularly where the COPC are volatile or semi volatile in nature.

Analysis of the duplicate and triplicates will be based on at least one of the analytes that the parent sample is being analysed for (excluding asbestos).

The relative percent difference (RPD) of the detected concentrations in the parent and duplicate, and the parent and triplicate, will be calculated.

D5.2 Trip Blanks and Trip Spikes

Trip blank and trip spike will not be used for this project as volatile compounds is not suspected

D5.3 Rinsate Blanks

A rinsate blank is deemed not required for this project.

D5.4 Field Blanks

Field blanks will not be collected for this project.

D5.5 Laboratory Quality Assurance and Quality Control

The quality assurance and quality control (QA/QC) program of the primary analytical laboratory will typically include analysis of method blanks, matrix spikes, surrogate spikes, laboratory control samples and laboratory duplicates. The laboratory will report on whether the QA/QC analysis meets the laboratory's adopted data quality objectives.

D5.6 Data Quality Indicators

Data quality indicators (DQI) will be adopted to facilitate an assessment of the completeness, comparability, representativeness, precision and accuracy (bias) of the field and laboratory data collected. These DQI are set out in Table D5.6-1.

Table D5.6-1 Data Quality Indicators

Completeness			
Field Considerations	**Target**	**Laboratory Considerations**	**Target**
Experienced sampling team used	Yes	Complete SRA and COA attached	Yes
Sampling devices and equipment set out in sampling plan were used (refer Section D7.1).	Yes	Critical samples identified in sampling plan, analysed	Yes
Critical locations in sampling plan, sampled (refer Section D7.1).	Yes	Analysis undertaken addresses COPC in sampling plan (refer Section D7.7)	Yes
Critical samples in sampling plan, collected (refer Section D7.1).	Yes	Analytical methods reported in laboratory documentation and appropriate LOR used	Yes
Completed field and calibration logs attached	Yes	Sample holding times met (refer Section D7.8)	Yes
Completed COC attached	Yes		

Comparability			
Field Considerations	**Target**	**Laboratory Considerations**	**Target**
Same sampling team used for all work.	Yes	Same laboratory used for all analysis (refer Section D7.6).	Yes
Weather conditions suitable for sampling.	Yes	Comparable methods if different laboratories used Refer Section D7.8).	Yes
Same sample types collected and preserved in same way (refer Section D7.5).	Yes	Comparable LORs if different laboratories used.	Yes
Relevant samples stored in insulated containers and chilled (refer Section D7.5).	Yes	Comparable units of measure if different laboratories used (refer Section D7.8).	Yes

Representativeness			
Field Considerations	**Target**	**Laboratory Considerations**	**Target**
Media identified in sampling plan, sampled (refer Section D7.1).	Yes	Samples identified in sampling plan, analysed.	Yes
Samples required by sampling plan, collected (refer Section D7.1).	Yes		

Precision			
Field Considerations	**Target**	**Laboratory Considerations**	**Target**
Minimum 5% duplicates and triplicates collected and analysed (refer Section D5.1).	Yes	All laboratory duplicate RPDs within laboratory acceptance criteria (refer Section D5.5).	Yes

Precision			
Field Considerations	Target	Laboratory Considerations	Target
Minimum 10% duplicates and triplicates collected and analysed where PFAS is a contaminant of concern (refer Section D5.1).	Yes		
RPD unlimited where detected concentrations are <10 times the LOR.	Yes		
RPD within 50% where detected concentrations are 10-20 times the LOR.	Yes		
RPD within 30% where detected concentrations are >20 times the LOR.	Yes		

Accuracy (bias)			
Field Considerations	Target	Laboratory Considerations	Target
~~Trip blank analyte results less than LOR (refer Section D5.1).~~	~~Yes~~	~~Laboratory method blank results within laboratory acceptance limits (refer Section D5.5).~~	~~Yes~~
~~Trip spike analyte results less between 60% and 140% (refer Section D5.2).~~	~~Yes~~	~~Laboratory control sample results within laboratory acceptance limits (refer Section D5.5).~~	~~Yes~~
~~Rinsate blank analyte results less than LOR (refer SectionD5.3).~~	~~Yes~~	Laboratory spike sample results within laboratory acceptance limits.	Yes
~~Field (PFAS) blank analyte results less than LOR (refer Section D5.4).~~	~~Yes~~		

D5.7 If/Then Statements

If field and laboratory analytical dataset is within the DQI assessment parameters, then the data may be considered to be adequately complete, comparable, representative, precise and accurate, for decision making within the objectives of this project.

If field and laboratory analytical dataset is outside the DQI assessment parameters, then additional data may be collected to address identified data gaps.

If field and laboratory analytical results are within adopted contamination assessment criteria, then the site may be considered suitable for the proposed land use scenario.

If field and laboratory analytical results are outside adopted contamination assessment criteria, then the site may be considered unsuitable for the proposed land use scenario, or additional data collected to further inform the decision-making process.

D6. Step 6: Specify the performance or acceptance criteria

D6.1 If / Then Decisions

There are two types of decision error:

- Sampling errors occur when the sampling program does not adequately detect the variability of a contaminant from point to point across the site. That is, the samples collected are not representative of site conditions (e.g. an

appropriate number of representative samples have not been collected from each stratum to account for estimated variability); and

- Measurement errors occur during sample collection, handling, preparation, analysis and data reduction.

In the assessment of land contamination, these errors can result in either:

- A Type I error, where contamination exposure risks are considered to be acceptable, when they are not; or
- A Type II error, where contamination exposure risks are considered to be not acceptable, when they are.

In order for decision rules to be sound, they should be designed to minimise decision errors. The risk of decision error will be mitigated by:

- Ensuring fieldwork tasks are undertaken by suitably experienced field staff and sub-contractors, with reference to the DQO presented in this report;
- Ensuring laboratory analyses are undertaken by NATA accredited laboratories; and
- Ensuring interpretation of data is undertaken by suitably experienced environmental consultants and/or outsourcing interpretation to technical experts (if warranted).

D7. Step 7: Develop the plan for obtaining data

D7.1 Sampling Point Density and Locations

Table A in NSW EPA (1995) includes guidance on minimum sampling point densities required characterising a site, based on detecting circular hot spots by using a systematic sampling pattern. Application of this guidance is recommended when:

- There is little knowledge about the probable locations of the contamination;
- The distribution of the contamination is expected to be random (e.g. landfill sites); or
- The distribution of the contamination is expected to be fairly homogenous (e.g. agricultural lands).

Section 3.1 of NSW EPA (1995) states that judgemental or stratified sampling methods can be used if there is sufficient information about the probable distribution of the contamination. Additionally, Section 6.2.1 in NEPC (2013b) states that judgemental sampling, the selection of samples (number, location, timing, etc) is based on knowledge of the site and professional judgement. Sampling would be expected to be localised to known or potentially contaminated areas identified from knowledge of the site either from the site history or an earlier phase of site assessment. Judgemental sampling can be used to investigate sub-surface contamination issues in site assessment.

Section 7.5 of NEPC (2013b) and VIC EPA (2009) provides guidance on sampling methods and sample numbers for stockpiles.

Section 4.1 and Table 1 of WA DOH (2009) provides guidance on asbestos in soil sampling densities, relative to the likelihood of asbestos being present on the site.

Section 5.3 of HEPA (2020) requires site specific sampling to consider:

- The features of the surrounding land;
- That some environmental media act as temporary or permanent PFAS sinks (e.g. PFAS concentrations in sediments in surface water bodies (including drainage lines) are important to consider when assessing transport via wastewater and surface water pathways; and
- Other known or potential sources of PFAS contamination.

Table 6.1 of Sullivan et al (2018) provides guidance on acid sulphate soil sampling densities, relative to the type of soil disturbance proposed, the volume of soil to be disturbed, and the extent of the site.

Section A4.2 of NSW EPA (2019) notes that ground gas monitoring network design is a compromise between coverage and cost, however an adequate number of rationally placed sampling points is fundamental to a credible investigation. The design should be based on desktop review data, site reconnaissance and an adequate conceptual site model, and should consider the three dimensionality of gas flow. Further guidance is provided in Table 19 of NSW EPA (2020a) and Sections 5.2 and 5.3 of NSW EPA (2016).

The scope of this project has included collection of data that provides an understanding of:

- site history;
- the locations of potentially contaminated areas;
- the identified COPC;
- laydown mechanisms for COPC in each AEC;
- the likely lateral and vertical extent of potential contamination in each AEC; and
- constraints on site which may restrict the use of certain sampling techniques.

On that basis, it is considered reasonable to adopt a judgemental sampling pattern, using the sampling point densities set out in Table D7.1-1 (also shown in Figure 4).

Table D7.1-1 Sampling Point Densities and Locations

ID	AEC	Sampling Point ID	Method	Target Depth (mbgl)
AEC01	Potential fill material and land disturbance across Northwestern portion	TP591 to TP650	Test Pits	100mm into natural soils or practical refusal
AEC02	Central OSO portion	TP401 to TP488, TP490 to TP590, TP651 to TP653, SS2, SS3		

D7.2 Sampling Method – Soils

Soil samples will be collected from relevant sampling points at the surface, and at regular intervals thereafter, or where there is a change in lithology, or where there is visual/olfactory evidence of potential contamination.

When identified COPC include volatiles (e.g. BTEX, TRH or VOC), collected soil samples will be screening for ionisable volatile organic compounds using a photo-ionisation detector (PID). A sub sample from each sample collected at each sampling point will be placed in a zip lock bag, sealed, and shaken. Each zip lock bag will then be pierced with the tip of a PID, and the results recorded on the relevant sampling point log.

Samples requiring asbestos gravimetric screening will be 10L in volume and will be collected and screened with reference to Table 5 in WA DOH (2009) if demolition rubble is encountered.

Samples requiring calculation of asbestos fines (AF) and fibrous asbestos (FA), will be collected as separate samples to the 10L bulk samples.

D7.3 Field Screening

Headspace screening will not be undertaken given that volatile organics as not expected at this site.

D7.4 Decontamination

Non-disposable sampling equipment will be decontaminated between sampling points to mitigate potential for cross contamination of samples. The decontamination method to be used will be Cleaning the equipment with microfibre towel.

D7.5 Sample Identification, Preservation, Handling and Transport

Soil samples will be identified using the DRM project number, sampling point identification number and sampling depth interval (e.g. TP01/0.0-0.1 or BH04/0.2-0.4), and date the sample was collected.

Samples will be placed in laboratory prepared containers (containing preservatives as appropriate), bulk sample bags and zip lock bags.

Soil samples will be stored in insulated containers with ice.

Samples will be transported to the analytical laboratory by DRM field staff or a third-party courier, using the analytical laboratory's chain of custody (COC) documentation.

D7.6 Laboratory Selection

Analytical laboratories used for this project will be NATA accredited for the analytical methods used.

D7.7 Laboratory Analytical Schedule

Samples scheduled for laboratory analysis will be selected based on:

- The COPC identified for the AEC the sample was collected from;
- Observations made of the sample when collected (including staining, odour and discolouration); and
- The results of PID headspace screening (if applicable).

The proposed laboratory analytical schedule (including upper limiting sample quantities) for the project is set out in Table D7.7-1.

Table D7.7-1 Proposed Laboratory Analytical Schedule

ID	AEC	Sampling Point ID	TRH / BTEX	PAH	OCP/PCB	Metals (8)	Asbestos (ID)	Asbestos (0.001%)
DRM - AEC01	Potential fill material and land disturbance across entire site	TP591 to TP633, TP635, TP636, TP637, TP639 to TP641, TP643, TP644, TP646, TP649, TP650, PACM1, PACM2, PACM3, PACM4	15	17	5	17	4	44
DRM - AEC02	Central OSO portion	TP401 to TP488, TP490 to TP590, TP651 to TP653, SS2, SS3, PACM5, PACM6	-	-	-	-	2	84
General Coverage		TP634, TP638, TP642, TP645, TP647, TP648	6	6	1	6	-	3

D7.8 Laboratory Holding Times, Analytical Methods and Limits of Reporting

Sample holding times, laboratory analytical methods and limits of reporting applicable to this project, are set out in Table D7.8-1.

Table D7.8-1 Laboratory Holding Times, Analytical Methods and Limits of Reporting

Analyte	Holding Time	Method	LOR (mg/kg)	LOR (µg/L)
BTEX and TRH C6-C10	14 days	USEPA 5030, 8260B and 8020	0.2-0.5	1-2 and 50
TRH C10-C40	14 days	USEPA 8015B & C	20-100	50-500
VOC	14 days	USEPA 8260	0.1-0.5	-
PAH	14 days	USEPA 8270	0.1-0.2	0.5-10
OCP	14 days	USEPA 8081	0.2	-
PCB	14 days	USEPA 8270	0.2	-
Metals	6 months	USEPA 8015B & C	0.05-2	0.1-5
Asbestos ID	No limit	AS4926	Absence / presence	-
Asbestos (WA DOH)	No limit	Inhouse	0.001% w/w	-

APPENDIX E

TEST PIT LOGS

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP401

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.824092	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.750410	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 44.49(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 17/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	D	F	B	1 fragment of asbestos on TP surface and 1 fragment near TP
	1			**TP401 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP402

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.824017	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.750260	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 44.25(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 17/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CI	Fill: CLAY: medium plasticity, with fine to medium sized gravel, light brown, gravel and stones.	D	F		
			CI	CLAY: medium plasticity, brown, topsoil.	M	F		
	1			**TP402 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP403

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.823992	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749978	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 44.05(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 17/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
							B	
			CI	CLAY: medium plasticity, brown, with gravel (white and yellow) on surface.	M	F		
	1			**TP403 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP404

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.823975	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749767	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 43.96(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.3 m	**Date**	: 17/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	F		
	1			**TP404 Terminated at 0.3m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP405

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.823969	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749500	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 44.06(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.3 m	**Date**	: 17/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL-CI	Fill: CLAY: low to medium plasticity, light brown, dried mud.	D	F		
			CI	CLAY: medium plasticity, dark brown, topsoil.	M	F		
	1			**TP405 Terminated at 0.3m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP406

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.823912	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749220	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 43.79(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.3 m	**Date**	: 17/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL-CI	Fill: CLAY: low to medium plasticity, light brown, dried mud.	D	F		
			CI	CLAY: medium plasticity, dark brown, topsoil.	M	F		
	1			**TP406 Terminated at 0.3m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP407

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.823909	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.748972	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 44.50(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.5 m	**Date**	: 17/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL-CI	Fill: Gravelly CLAY: low to medium plasticity, medium sized gravel, brown, concrete and blue metal.	D	F		
			CL-CI	CLAY: low to medium plasticity, brown, topsoil.	M	F		
	1			**TP407 Terminated at 0.5m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP408

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815835	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.764471	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 32.45(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 16/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CL	Fill: CLAY: low plasticity, brown.	D	F		
			CI	CLAY: medium plasticity, brown, topsoil.	D	F		
	1			**TP408 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP409

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.823808	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.748504	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 44.53(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.5 m	**Date**	: 16/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	Fill: CLAY: low plasticity, brown, mixed with demolition rubble.	D	F		
			CI	CLAY: medium plasticity, brown, topsoil.	M	F		
			CL-CI	CLAY: low to medium plasticity, orange.	M	F		
	1			**TP409 Terminated at 0.5m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP410

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815835	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.764471	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 32.45(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.5 m	**Date**	: 16/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	Fill: CLAY: low plasticity, brown.	D	F		fragments of PACM on surface
			CI	CLAY: medium plasticity, brown, topsoil.	M	F		
			CL-CI	CLAY: low to medium plasticity, orange.	M	F		
	1			**TP410 Terminated at 0.5m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP411

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815835	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.764471	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 32.45(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.5 m	**Date**	: 16/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	Fill: Gravelly CLAY: low plasticity, fine to medium sized gravel, light brown, possible mud splash.	D	F		
			CI	CLAY: medium plasticity, dark brown, topsoil.	M	S		
			CI	CLAY: medium plasticity, red brown.	M	F		
	1			**TP411 Terminated at 0.5m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP412

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.823733	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.747917	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 43.15(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 16/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			Cl	CLAY: medium plasticity, brown, topsoil.	D	F		
	1			**TP412 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP413

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815835	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.764471	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 32.45(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 16/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			Cl	CLAY: medium plasticity, brown, topsoil.	D	F		
	1			**TP413 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP414

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815835	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.764471	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 32.45(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 16/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	D	F		
	1			**TP414 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP415

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815835	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.764471	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 32.45(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.7 m	**Date**	: 16/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	Fill: Gravelly CLAY: low plasticity, fine to medium sized gravel, yellow orange, stockpile with gravel, timber and clay.	D	F		
			Cl	CLAY: medium plasticity, dark brown, topsoil with decayed tree root .	M	S		
			Cl	CLAY: medium plasticity, red brown.	M	F		
	1			**TP415 Terminated at 0.7m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP416

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815835	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.764471	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 32.45(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.7 m	**Date**	: 16/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	Fill: Gravelly CLAY: low plasticity, fine to medium sized gravel, brown to dark brown, stockpile with gravel, timber and clay.	D	F		
			CI	CLAY: medium plasticity, dark brown, topsoil.	M	S		
			CL-CI	CLAY: low to medium plasticity, red brown.	M	F		
	1			**TP416 Terminated at 0.7m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP417

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.823511	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.747106	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 42.35(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.7 m	**Date**	: 16/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	Fill: Gravelly CLAY: low plasticity, fine to medium sized gravel, brown, stockpile with clay.	D	F		
			CI	CLAY: medium plasticity, brown, topsoil.	M	F		
	1			**TP417 Terminated at 0.7m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP418

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.838078	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.748127	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 53.98(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.7 m	**Date**	: 16/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	Fill: Gravelly CLAY: low plasticity, fine to medium sized gravel, brown to dark brown, stockpile with gravel, concrete, shale, sandstone and clay.	D	F		
			CI	CLAY: medium plasticity, dark brown, topsoil with decayed tree root.	M	S		
	1			**TP418 Terminated at 0.7m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP419

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815835	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.764471	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 32.45(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.9 m	**Date**	: 16/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	Fill: Gravelly CLAY: low plasticity, fine to medium sized gravel, brown, stockpile with gravel, concrete, tiles and clay.	D	F		
			CI	CLAY: medium plasticity, red brown, possible topsoil mixed with shale.	M	F		
			CL-CI	CLAY: low to medium plasticity, red brown.	M	S		
	1			**TP419 Terminated at 0.9m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP420

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815835	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.764471	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 32.45(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.5 m	**Date**	: 16/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	Fill: Gravelly CLAY: low plasticity, fine to medium sized gravel, brown, stockpile with gravel and clay.	D	F		
			CI	CLAY: medium plasticity, dark brown, topsoil.	M	S		
			CI	CLAY: medium plasticity, red brown.	M	F		
	1			**TP420 Terminated at 0.5m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP421

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815835	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.764471	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 32.45(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.6 m	**Date**	: 16/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	Fill: Gravelly CLAY: low plasticity, fine to medium sized gravel, light brown, plastic and clay.	D	F		
			CI	CLAY: medium plasticity, dark brown, topsoil.	M	S		
			CI	CLAY: medium plasticity, red brown.	M	F		
	1			**TP421 Terminated at 0.6m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP422

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.823589	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.748192	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 43.33(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.6 m	**Date**	: 16/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	Fill: Gravelly CLAY: low plasticity, fine to medium sized gravel, light brown, possible mud splash.	D	F		
			CI	CLAY: medium plasticity, dark brown, topsoil with shale, gravel and one plastic sheet.	M	S		
			CI	CLAY: medium plasticity, red brown.	M	F		
	1			**TP422 Terminated at 0.6m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP423

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.823643	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.748408	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 43.56(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.7 m	**Date**	: 16/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	Fill: CLAY: low plasticity, yellow orange.	D	F		fragments of PACM on surface
			CI	CLAY: medium plasticity, red brown.	M	F		
	1			**TP423 Terminated at 0.7m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP424

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815835	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.764471	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 32.45(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.7 m	**Date**	: 16/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	Fill: CLAY: low plasticity, brown.	D	F		
			CI	CLAY: medium plasticity, brown, topsoil.	D	F		
			CL-CI	Fill: CLAY: low to medium plasticity, red brown.	M	F		
	1			**TP424 Terminated at 0.7m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP425

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815835	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.764471	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 32.45(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.7 m	**Date**	: 16/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	Fill: CLAY: low plasticity, brown.	D	F		1 asbestos on surface
			CI	CLAY: medium plasticity, brown, topsoil.	M	F		
	1			**TP425 Terminated at 0.7m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP426

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.823695	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749025	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 43.58(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.5 m	**Date**	: 17/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	Fill: CLAY: low plasticity, brown, stockpile.	D	F		
			CI	CLAY: medium plasticity, brown, topsoil .	M	F		
	1			**TP426 Terminated at 0.5m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP427

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.823729	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749279	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 43.22(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.5 m	**Date**	: 17/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL-CI	Fill: CLAY: low to medium plasticity, with fine to medium sized gravel, brown, with gravel, blue metal, shale.	D	F		
			CL-CI	CLAY: low to medium plasticity, dark brown, topsoil.	M	F		
			CL-CI	CLAY: low to medium plasticity, yellow brown.	M	F		
	1			**TP427 Terminated at 0.5m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP428

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.823779	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749509	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 43.49(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 17/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	Fill: CLAY: low plasticity, brown, with gravels, broken bricks and imported yellow with red mottled clay.	D	S		
			CI	CLAY: medium plasticity, dark brown, topsoil.	M	F		
	1			**TP428 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP429

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.823815	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749792	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 43.44(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.3 m	**Date**	: 17/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	F		
	1			**TP429 Terminated at 0.3m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP430

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.823815	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749792	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 43.44(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 17/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	F		
	1			**TP430 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP431

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.823828	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.750273	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 44.17(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 17/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	F		
	1			**TP431 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP432

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.823846	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.750413	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 44.82(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.5 m	**Date**	: 17/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	Fill: CLAY: low plasticity, light brown, dried mud.	D	F		
			CL-CI	CLAY: low to medium plasticity, dark brown, topsoil .	M	F		
			CL-CI	CLAY: low to medium plasticity, red brown.	M	F		
	1			**TP432 Terminated at 0.5m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP433

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.823668	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.750475	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 45.06(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.5 m	**Date**	: 17/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	Fill: CLAY: low plasticity, light brown, dried mud .	D	F		
			CI	CLAY: medium plasticity, dark brown, topsoil.	M	F		
			CL-CI	CLAY: low to medium plasticity, grey with red mottled.	M	F		
	1			**TP433 Terminated at 0.5m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP434

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.823664	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.750279	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 44.00(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.5 m	**Date**	: 17/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	F		
			CI	CLAY: medium plasticity, grey with red mottled.	M	F		
	1			**TP434 Terminated at 0.5m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP435

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.823687	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.750081	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 43.76(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.5 m	**Date**	: 17/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			ML	Fill: SILT: non-plastic, brown, small stockpile with metal wire, pvc pipe and plastic sheet.	D	S		
	1			**TP435 Terminated at 0.5m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP436

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.823624	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749781	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 43.27(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 1 m	**Date**	: 17/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CL	Fill: Gravelly CLAY: low plasticity, fine to medium sized gravel, light brown, stockpile with gravel, sandstone, metal wire, blue metals, tree root.	D	S	B	
				TP436 Terminated at 1m				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP437

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.823613	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749539	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 43.33(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.8 m	**Date**	: 17/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CL	Fill: Gravelly CLAY: low plasticity, fine to medium sized gravel, light brown, stockpile with gravel, sandstone, metal wire, blue metals.	D	S	B	
	1			**TP437 Terminated at 0.8m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP438

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.823526	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749323	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 42.70(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.8 m	**Date**	: 17/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	Fill: Gravelly CLAY: low plasticity, fine to medium sized gravel, light brown, stockpile with gravel, sandstone, metal wire, blue metals.	D	S		
	1			**TP438 Terminated at 0.8m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP439

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815835	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.764471	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 32.45(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.8 m	**Date**	: 16/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	Fill: Gravelly CLAY: low plasticity, fine to medium sized gravel, light brown, possible mud splash on the surface with gravel and concrete.	D	F		
			CL-CI	CLAY: low to medium plasticity, brown, topsoil.	M	F		
	1			**TP439 Terminated at 0.8m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP440

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815835	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.764471	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 32.45(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.7 m	**Date**	: 16/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	Fill: Gravelly CLAY: low plasticity, fine to medium sized gravel, light brown, possible mud splash with one broken glass piece.	D	F		
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		
			CI	CLAY: medium plasticity, red brown.	M	F		
	1			**TP440 Terminated at 0.7m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP441

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815835	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.764471	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 32.45(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.5 m	**Date**	: 16/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	Fill: Gravelly CLAY: low plasticity, fine to medium sized gravel, brown, possible mud splash with one broken glass piece.	D	F		
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		
			CI	CLAY: medium plasticity, red brown.	M	F		
	1			**TP441 Terminated at 0.5m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP442

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.823456	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.748377	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 42.92(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.5 m	**Date**	: 16/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	Fill: Gravelly CLAY: low plasticity, fine to medium sized gravel, brown to dark brown.	D	F		
			CL-CI	Fill: CLAY: low to medium plasticity, dark brown, shale, gravel and one plastic sheet.	M	F		
			CL-CI	CLAY: low to medium plasticity, brown, topsoil.	M	S		
			CL-CI	CLAY: low to medium plasticity, red brown.	M	F		
	1			**TP442 Terminated at 0.5m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP443

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.823413	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.748199	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 42.76(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.6 m	**Date**	: 16/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL-CI	Fill: CLAY: low to medium plasticity, brown, with shale, sandstones, gravel.	D	F		
			CL-CI	Fill: CLAY: low to medium plasticity, brown.	M	F		
			CL-CI	CLAY: low to medium plasticity, red.	M	F		
	1			**TP443 Terminated at 0.6m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP444

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815835	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.764471	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 32.45(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.5 m	**Date**	: 16/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	Fill: Gravelly CLAY: low plasticity, fine to medium sized gravel, light brown, gravel and clay.	D	F		
			CI	CLAY: medium plasticity, dark brown, topsoil.	M	S		
			CI	CLAY: medium plasticity, red brown.	M	F		
	1			**TP444 Terminated at 0.5m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP445

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.823333	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.747820	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 42.24(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.7 m	**Date**	: 16/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	Fill: Gravelly CLAY: low plasticity, fine to medium sized gravel, brown to dark brown, stockpile with gravel and clay.	D	F		
			CL-CI	CLAY: low to medium plasticity, dark brown, topsoil.	M	F		
			CL-CI	CLAY: low to medium plasticity, red brown.	M	F		
	1			**TP445 Terminated at 0.7m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP446

UTM	**: 56H**	**Excavator**	**: 5T**	**Job Number**	**: P23.1039-V12**
Latitude	**: -33.815835**	**Excavator Supplier**	**: Luke s Excavator & Bobcat Hire**	**Client**	**: HB&B Property Pty Ltd**
Longitude	**: 150.764471**	**Logged By**	**: Dilanka Premadasa**	**Project**	**: Stage 2 DSI**
Elevation	**: 32.45(m)**	**Reviewed By**	**: NDS**	**Location**	**: 221-227 Luddenham Road, Orchard Hills NSW, Australia**
Total Depth	**: 0.9 m**	**Date**	**: 16/09/2024**	**Loc Comment**	**:**

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	Fill: Gravelly CLAY: low plasticity, fine to medium sized gravel, brown to dark brown, stockpile with gravel, concrete, tiles and clay.	D	F		
			CL-CI	CLAY: low to medium plasticity, dark brown, topsoil decayed tree root.	M	S-F		
			CI	CLAY: medium plasticity, red brown.	M	F		
	1			**TP446 Terminated at 0.9m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP447

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815835	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.764471	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 32.45(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.7 m	**Date**	: 16/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	Fill: Gravelly CLAY: low plasticity, fine to medium sized gravel, brown, stockpile with gravel, concrete and clay.	D	F		
			CI	CLAY: medium plasticity, dark brown, topsoil with decayed tree root.	M	S		
			CI	CLAY: medium plasticity, red brown.	M	F		
	1			**TP447 Terminated at 0.7m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP448

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.823331	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.747106	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 41.89(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.6 m	**Date**	: 16/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	Fill: Gravelly CLAY: low plasticity, fine to medium sized gravel, brown, stockpile with gravel and clay.	D	F		
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		
	1			**TP448 Terminated at 0.6m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP449

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.823127	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.747136	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 41.68(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 16/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CL-CI	Fill: CLAY: low to medium plasticity, brown, topsoil.	D	F		
			CL-CI	CLAY: low to medium plasticity, red brown.	M	F		
	1			**TP449 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP450

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.823164	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.747405	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 41.73(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.7 m	**Date**	: 16/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	Fill: CLAY: low plasticity, brown, with concrete, shale and gravels on surface.	D	F		
			CI	CLAY: medium plasticity, brown.	M			
	1			**TP450 Terminated at 0.7m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP451

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.823217	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.747775	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 42.24(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 16/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	Fill: CLAY: low plasticity, brown, with concrete, shale and gravel on surface.	D	F		
			CL-CI	CLAY: low to medium plasticity, brown, topsoil.	M	F		
			CL-CI	CLAY: low to medium plasticity, brown.	M	F		
	1			**TP451 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP452

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.823217	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.747775	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 42.24(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.6 m	**Date**	: 16/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL-CI	CLAY: low to medium plasticity, brown, with shale and gravel on the surface.	D	F		
			CL-CI	CLAY: low to medium plasticity, yellow brown.	M	F		
	1			**TP452 Terminated at 0.6m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP453

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.823249	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.747972	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 42.27(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.5 m	**Date**	: 16/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	Fill: CLAY: low plasticity, brown, one plastic sheet, gravels.	D	F		
			CI	CLAY: medium plasticity, brown, topsoil.	M			
			CL-CI	CLAY: low to medium plasticity, yellow brown.	M	F		
	1			**TP453 Terminated at 0.5m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP454

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.823252	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.748230	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 42.34(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 16/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	Fill: CLAY: low plasticity, brown.	D	F		
			CI	CLAY: medium plasticity, brown, topsoil.	M			
	1			**TP454 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP455

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.823301	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.748445	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 42.26(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.6 m	**Date**	: 16/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	Fill: CLAY: low plasticity, brown, with shale, sandstones, gravel.	D	F		
			CI	CLAY: medium plasticity, brown, topsoil.	M			
	1			**TP455 Terminated at 0.6m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP456

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.823277	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.748661	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 42.12(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.8 m	**Date**	: 13/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	Fill: CLAY: low plasticity, brown, with concrete pices, tiles, glass.	D	F		
			CL	Fill: Gravelly CLAY: low plasticity, fine to medium sized gravel, dark brown, with shale greater than 50mm.	D	F		
			CI	CLAY: medium plasticity, yellow brown.	M			
	1			**TP456 Terminated at 0.8m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP457

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815835	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.764471	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 32.45(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.7 m	**Date**	: 13/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL-CI	Fill: CLAY: low to medium plasticity, orange brown.	D	S-F		
			CL-CI	Fill: CLAY: low to medium plasticity, black, shale.	M	F		
			CL-CI	CLAY: low to medium plasticity, brown, topsoil.	M	F		
	1			**TP457 Terminated at 0.7m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP458

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815835	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.764471	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 32.45(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 13/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		
	1			**TP458 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP459

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815835	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.764471	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 32.45(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 13/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		
	1			**TP459 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP460

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815835	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.764471	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 32.45(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 13/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		
	1			**TP460 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP461

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.814009	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.752485	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 45.60(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.3 m	**Date**	: 13/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		
	1			**TP461 Terminated at 0.3m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP462

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815835	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.764471	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 32.45(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.3 m	**Date**	: 13/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		
	1			**TP462 Terminated at 0.3m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP463

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.823482	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.750369	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 44.57(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 17/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	Fill: CLAY: low plasticity, light brown, dried mud.	D	F		
			CL-CI	CLAY: low to medium plasticity, dark brown, topsoil.	M	F		
			CL-CI	Fill: CLAY: low to medium plasticity, grey with red mottled.	M	F		
	1			**TP463 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP464

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.823521	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.750518	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 45.23(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 17/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL-CI	Fill: CLAY: low to medium plasticity, light brown, dried mud.	D	F		
			CI	CLAY: medium plasticity, dark brown, topsoil.	M	F		
			CL-CI	CLAY: low to medium plasticity, grey with red mottled.	M	F		
	1			**TP464 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP465

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.823340	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.750492	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 45.38(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 17/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL-CI	Fill: CLAY: low to medium plasticity, light brown, dried mud.	D	F		
			CL-CI	CLAY: low to medium plasticity, dark brown, topsoil.	M	F		
			CL-CI	CLAY: low to medium plasticity, red with grey mottled.	M	F		
	1			**TP465 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP466

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815835	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.764471	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 32.45(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 17/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	Fill: CLAY: low plasticity, brown, with black shale, near shale layer of 0.1.	D	F		
			CI	CLAY: medium plasticity, brown, topsoil.	M	F		
			CL-CI	CLAY: low to medium plasticity, red orange with grey mottled.	M	F		
	1			**TP466 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP467

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.823269	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.750105	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 44.53(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.7 m	**Date**	: 13/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	Fill: Sandy CLAY: low plasticity, fine grained sand, dark brown, stockpile, asbestos fragments more than 50 piceses on the side..	D	S		stockpile, asbestos fragments more than 50 piceses on the side.
	1			**TP467 Terminated at 0.7m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP468

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.823276	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749896	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 43.82(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.3 m	**Date**	: 13/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		
	1			**TP468 Terminated at 0.3m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP469

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815835	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.764471	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 32.45(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.3 m	**Date**	: 13/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		
	1			**TP469 Terminated at 0.3m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP470

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815835	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.764471	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 32.45(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 13/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		
	1			**TP470 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP471

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815835	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.764471	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 32.45(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.5 m	**Date**	: 13/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil with with sandstone, concrete, tiles on surface.	M	S		
	1			**TP471 Terminated at 0.5m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP472

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815835	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.764471	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 32.45(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.7 m	**Date**	: 13/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CI	Fill: CLAY: medium plasticity, brown, site generated material.	M	S		
			CL-CI	Fill: CLAY: low to medium plasticity, black, shale and concrete .	M	F		
			CL-CI	CLAY: low to medium plasticity, brown, topsoil.	M	F		
	1			**TP472 Terminated at 0.7m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP473

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.823098	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.748650	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 41.94(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.7 m	**Date**	: 13/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL-CI	Fill: CLAY: low to medium plasticity, brown, with shale.	M	F		fill Black shale encountered, terracotta pipe, pvc, tiles, glass
								fill shale layer
			CL-CI	CLAY: low to medium plasticity, brown, topsoil.	M	F		
	1			**TP473 Terminated at 0.7m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP474

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.823057	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.748072	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 42.17(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.7 m	**Date**	: 13/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL-CI	Fill: CLAY: low to medium plasticity, dark brown, fill with shale .	M	S-F		fill Black shale encountered, terracotta pipe, pvc,
								fill shale layer
			CL-CI	CLAY: low to medium plasticity, brown, topsoil.	M	F		
	1			**TP474 Terminated at 0.7m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP475

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.823057	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.748072	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 42.17(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.3 m	**Date**	: 13/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CI	Fill: CLAY: medium plasticity, black, with shale.	M	S		
			CL-CI	CLAY: low to medium plasticity, brown, topsoil.	M	F		
	1			**TP475 Terminated at 0.3m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP476

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.823101	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.748061	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 42.21(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 13/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CI	Fill: CLAY: medium plasticity, brown, with black shale.	M	S		
			CL-CI	CLAY: low to medium plasticity, brown, topsoil.	M	F		
	1			**TP476 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP477

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.822922	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.747821	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 41.57(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 13/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CI	Fill: CLAY: medium plasticity, brown, with black shale.	M	S		
			CL-CI	CLAY: low to medium plasticity, brown, topsoil.	M	F		
	1			**TP477 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP478

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815835	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.764471	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 32.45(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 13/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CI	Fill: CLAY: medium plasticity, brown, shale, sandstone, concrete fragments.	M	S		
			CL-CI	CLAY: low to medium plasticity, brown, topsoil.	M	F		
	1			**TP478 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP479

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.822965	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.747380	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 41.45(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.3 m	**Date**	: 13/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		
	1			**TP479 Terminated at 0.3m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP480

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815835	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.764471	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 32.45(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.3 m	**Date**	: 13/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		
	1			**TP480 Terminated at 0.3m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP481

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815835	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.764471	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 32.45(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.5 m	**Date**	: 13/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		
	1			**TP481 Terminated at 0.5m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP482

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815835	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.764471	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 32.45(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 13/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		
	1			**TP482 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP483

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815835	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.764471	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 32.45(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 13/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		
	1			**TP483 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP484

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.822856	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.747838	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 41.48(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 13/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		
	1			**TP484 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP485

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.822881	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.748074	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 41.55(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.3 m	**Date**	: 13/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		
	1			**TP485 Terminated at 0.3m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP486

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815835	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.764471	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 32.45(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.3 m	**Date**	: 13/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		
	1			**TP486 Terminated at 0.3m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP487

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.822912	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.748491	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 41.64(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 13/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			Cl	CLAY: medium plasticity, brown, topsoil.	M	S		
	1			**TP487 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP488

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815835	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.764471	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 32.45(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 13/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		
	1			**TP488 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP490

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.822995	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749170	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 42.19(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 13/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		3 pieces of shale fragments on surface
	1			**TP490 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP491

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.823023	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749413	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 42.99(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.3 m	**Date**	: 13/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		
	1			**TP491 Terminated at 0.3m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP492

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815835	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.764471	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 32.45(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 13/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		
	1			**TP492 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP493

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.814009	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.752485	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 45.60(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.3 m	**Date**	: 13/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		
	1			**TP493 Terminated at 0.3m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP494

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.823125	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.750139	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 44.06(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.3 m	**Date**	: 13/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		
	1			**TP494 Terminated at 0.3m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP495

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.823123	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.750350	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 44.40(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 17/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CL-CI	CLAY: low to medium plasticity, dark brown, topsoil.	D	F		
			CI	CLAY: medium plasticity, grey with red mottled.	M	F		
	1			**TP495 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP496

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.823171	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.750647	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 45.12(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 17/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL-CI	Fill: CLAY: low to medium plasticity, light brown, dried mud.	D	F		
			CL-CI	CLAY: low to medium plasticity, dark brown, topsoil.	M	F		
			CL-CI	CLAY: low to medium plasticity, red with grey mottled.	M	F		
	1			**TP496 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP497

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815835	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.764471	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 32.45(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 17/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CL-CI	CLAY: low to medium plasticity, dark brown, topsoil.	M	F		
			CL-CI	CLAY: low to medium plasticity, orange red with grey mottled.	M	F		
	1			**TP497 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP498

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.814009	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.752485	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 45.60(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 17/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CL-CI	CLAY: low to medium plasticity, dark brown, topsoil.	D	F		
			CL-CI	CLAY: low to medium plasticity, orange with red mottled.	M	F		
	1			**TP498 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP499

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.814009	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.752485	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 45.60(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 13/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		
	1			**TP499 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP500

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.814009	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.752485	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 45.60(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 13/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		
	1			**TP500 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP501

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815835	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.764471	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 32.45(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.3 m	**Date**	: 13/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		
	1			**TP501 Terminated at 0.3m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP502

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815835	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.764471	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 32.45(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 13/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		
	1			**TP502 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP503

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.814009	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.752485	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 45.60(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 13/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		few pieces of shale fragments on surface
	1			**TP503 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP504

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815835	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.764471	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 32.45(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.3 m	**Date**	: 13/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		
	1			**TP504 Terminated at 0.3m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP505

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.822781	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.748766	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 41.17(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 13/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		
	1			**TP505 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP506

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.822767	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.748559	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 41.18(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.3 m	**Date**	: 13/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		
	1			**TP506 Terminated at 0.3m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP507

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.822723	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.748362	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 41.27(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 13/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		
	1			**TP507 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP508

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.822661	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.748141	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 41.38(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.3 m	**Date**	: 13/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		
	1			**TP508 Terminated at 0.3m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP509

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.822664	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.747900	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 41.20(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 13/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		
	1			**TP509 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP510

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.822649	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.747719	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 41.09(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.3 m	**Date**	: 13/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		
	1			**TP510 Terminated at 0.3m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP511

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.822648	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.747505	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 41.19(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.3 m	**Date**	: 13/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		
	1			**TP511 Terminated at 0.3m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP512

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.822639	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.747240	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 41.07(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.5 m	**Date**	: 13/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL-CI	CLAY: low to medium plasticity, brown, topsoil.	M	F-St		sandstone on surface
	1			**TP512 Terminated at 0.5m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP513

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.822215	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.747367	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 41.08(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.5 m	**Date**	: 13/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
							B	
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		sandstone on surface
	1			**TP513 Terminated at 0.5m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP514

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.822258	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.747591	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 41.20(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 13/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		sandstone on surface
	1			**TP514 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP515

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.822445	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.747778	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 40.96(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 13/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			Cl	CLAY: medium plasticity, brown, topsoil.	M	S		
	1			**TP515 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP516

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815835	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.764471	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 32.45(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 13/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		
	1			**TP516 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP517

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815835	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.764471	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 32.45(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 13/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		
	1			**TP517 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP518

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.822605	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.748592	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 40.86(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 13/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		
	1			**TP518 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP519

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.822605	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.748592	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 40.86(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 13/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		
	1			**TP519 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP520

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.822606	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.748762	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 40.87(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.5 m	**Date**	: 13/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		
	1			**TP520 Terminated at 0.5m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP521

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.822654	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749006	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 41.20(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 13/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		
	1			**TP521 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP522

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.822671	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749236	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 41.55(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.3 m	**Date**	: 13/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		
	1			**TP522 Terminated at 0.3m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP523

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.822680	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749488	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 42.28(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.5 m	**Date**	: 13/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		1 sandstone and rock piece on surface
	1			**TP523 Terminated at 0.5m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP524

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.822718	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749677	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 42.96(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 13/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		
	1			**TP524 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP525

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.822739	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749877	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 42.91(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 12/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		
	1			**TP525 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP526

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.814009	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.752485	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 45.60(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 12/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CL-CI	CLAY: low to medium plasticity, brown, topsoil.	M	F-St		broken bricks and concrete on surface
	1			**TP526 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP527

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.814009	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.752485	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 45.60(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 17/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CL-CI	CLAY: low to medium plasticity, dark brown, topsoil.	D	F		
			CL-CI	CLAY: low to medium plasticity, orange.	M	F-St		
	1			**TP527 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP528

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.814009	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.752485	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 45.60(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 17/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	Fill: CLAY: low plasticity, light brown, dried mud.	D	F		
			CL-CI	CLAY: low to medium plasticity, dark brown, topsoil.	M	F		
			CL-CI	CLAY: low to medium plasticity, orange with grey mottled.	M	F-St		
	1			**TP528 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP529

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.814009	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.752485	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 45.60(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 17/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	Fill: CLAY: low plasticity, light brown, dried mud.	D	F		
			CI	CLAY: medium plasticity, dark brown, topsoil.	M	F		
			CL-CI	CLAY: low to medium plasticity, red orange with grey mottled.	M	F		
	1			**TP529 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP530

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.822566	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.750405	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 43.49(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 17/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CL	CLAY: low plasticity, brown, topsoil.	D	F		
			CL-CI	CLAY: low to medium plasticity, orange with grey mottled.	M	F		
	1			**TP530 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP531

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815835	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.764471	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 32.45(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 12/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		
	1			**TP531 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP532

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.822583	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.750027	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 42.95(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 12/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		
	1			**TP532 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP533

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.822511	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749704	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 42.32(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 12/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			Cl	CLAY: medium plasticity, brown, topsoil.	M	S		
	1			**TP533 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP534

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815835	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.764471	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 32.45(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.6 m	**Date**	: 12/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	Fill: Gravelly CLAY: low plasticity, fine to medium sized gravel, brown, with shale and sandstone.	M	S		
								pieces of shale fragments
			CI	CLAY: medium plasticity, orange with grey mottled.	M	S-F		
	1			**TP534 Terminated at 0.6m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP535

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.822506	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749108	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 40.97(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 12/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	Fill: Sandy CLAY: low plasticity, fine grained sand, light brown with red mottled, crushed sandstone mixed with surface .	D	F		
			CI	CLAY: medium plasticity, dark brown.	M	S-F		
	1			**TP535 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP536

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815835	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.764471	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 32.45(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.5 m	**Date**	: 12/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		
	1			**TP536 Terminated at 0.5m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP537

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.814009	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.752485	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 45.60(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.5 m	**Date**	: 12/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		
	1			**TP537 Terminated at 0.5m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP538

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815835	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.764471	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 32.45(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 12/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		
	1			**TP538 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP539

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815835	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.764471	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 32.45(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.3 m	**Date**	: 12/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		
	1			**TP539 Terminated at 0.3m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP540

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815835	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.764471	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 32.45(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 12/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		
	1			**TP540 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP541

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.822259	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.747912	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 40.94(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.3 m	**Date**	: 12/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		
	1			**TP541 Terminated at 0.3m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP542

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.822155	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.747899	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 40.87(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 12/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
				Fill: Sandy SAND: fine grained, trace medium sized gravel, grey, with sandstone.	D	MD		
			CL-CI	CLAY: low to medium plasticity, yellow brown.	M	F		
	1			**TP542 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP543

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815835	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.764471	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 32.45(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.3 m	**Date**	: 12/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	Fill: CLAY: low plasticity, dark brown, crushed concrete and sandstone on surface.	W	S		water logged on surface
			CL-CI	Fill: CLAY: low to medium plasticity, brown, topsoil.	W-M	F		
	1			**TP543 Terminated at 0.3m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP544

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815835	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.764471	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 32.45(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 12/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		crushed sandstone pieces on surface
	1			**TP544 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP545

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.822092	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.747884	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 40.78(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.7 m	**Date**	: 12/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CL	Fill: Sandy CLAY: low plasticity, fine grained sand, light brown, stockpile mixed with sandstone.	D	S		
	1			**TP545 Terminated at 0.7m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP546

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.822171	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.748215	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 41.08(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.7 m	**Date**	: 12/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
				Fill: Sandy SAND: fine grained, trace medium sized gravel, grey, with sandstone.	D	MD		
			CI	CLAY: medium plasticity, brown.	D	F		
	1			**TP546 Terminated at 0.7m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP547

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.822117	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.748020	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 40.95(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.7 m	**Date**	: 12/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil, stockpile.	M	S		
	1			**TP547 Terminated at 0.7m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP548

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.822171	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.748215	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 41.08(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 12/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		
	1			**TP548 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP549

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.822199	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.748417	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 40.66(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 12/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		
	1			**TP549 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP550

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.822206	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.748636	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 40.91(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 12/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		
	1			**TP550 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP551

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.814234	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.752122	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 46.21(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 12/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		
	1			**TP551 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP552

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815741	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.764108	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 33.53(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.3 m	**Date**	: 12/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		
	1			**TP552 Terminated at 0.3m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP553

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.822289	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749319	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 40.96(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.3 m	**Date**	: 12/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		
	1			**TP553 Terminated at 0.3m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP554

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.814234	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.752122	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 46.21(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 12/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		
	1			**TP554 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP555

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.822432	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.750012	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 42.53(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 12/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		
	1			**TP555 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP556

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.822432	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.750012	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 42.53(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 12/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		
	1			**TP556 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP557

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.814234	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.752122	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 46.21(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.9 m	**Date**	: 12/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		
			CI	CLAY: medium plasticity, brown with red mottled.	D	F		
	1			**TP557 Terminated at 0.9m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP558

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.814009	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.752485	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 45.60(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 17/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CL	CLAY: low plasticity, brown.	D	F		
			CI	CLAY: medium plasticity, red orange.	M	F		
	1			**TP558 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP559

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.814009	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.752485	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 45.60(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 17/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CL-CI	CLAY: low to medium plasticity, brown, topsoil.	D	F		
			CI	CLAY: medium plasticity, red.	M	F		
	1			**TP559 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP560

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.814009	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.752485	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 45.60(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.8 m	**Date**	: 17/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	Fill: CLAY: low plasticity, brown, mix with topsoil, crushed glass and tree root.	M	F		
			CI	CLAY: medium plasticity, orange.	M	F		
	1			**TP560 Terminated at 0.8m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP561

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.822267	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.750486	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 42.20(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.6 m	**Date**	: 17/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CL	Fill: CLAY: low plasticity, brown, topsoil.	D	F		
			CI	CLAY: medium plasticity, red orange.	M	F		
	1			**TP561 Terminated at 0.6m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP562

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.814234	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.752122	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 46.21(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.8 m	**Date**	: 12/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	CLAY: low plasticity, light brown, topsoil.	M	F		
								1 piece of sandstone at 0.1
			CI	CLAY: medium plasticity, red brown.	M	S		
	1			**TP562 Terminated at 0.8m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP563

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.822189	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.750068	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 41.69(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.7 m	**Date**	: 12/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	CLAY: low plasticity, light brown, topsoil.	M	F		
			CI	CLAY: medium plasticity, red brown.	M	S		
	1			**TP563 Terminated at 0.7m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP564

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815741	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.764108	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 33.53(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.7 m	**Date**	: 12/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			ML	Fill: Sandy SILT: non-plastic, fine to medium grained sand, grey, with concrete stones at surface.	D	F		
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		
			CI	CLAY: medium plasticity, brown with red mottled.	D	F		
	1			**TP564 Terminated at 0.7m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP565

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.814234	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.752122	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 46.21(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.7 m	**Date**	: 12/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	CLAY: low plasticity, light brown, topsoil.	M	F		
			CI	CLAY: medium plasticity, yellow brown with red mottled.	M	S		
	1			**TP565 Terminated at 0.7m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP566

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815741	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.764108	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 33.53(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.6 m	**Date**	: 12/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	CLAY: low plasticity, light brown, topsoil.	M	F		
			CI	CLAY: medium plasticity, red brown.	M	S		
	1			**TP566 Terminated at 0.6m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP567

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815741	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.764108	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 33.53(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.6 m	**Date**	: 12/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	CLAY: low plasticity, light brown, topsoil.	M	F		
			CI	CLAY: medium plasticity, red brown.	M	S		
	1			**TP567 Terminated at 0.6m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP568

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815741	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.764108	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 33.53(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.9 m	**Date**	: 12/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	CLAY: low plasticity, light brown, topsoil.	M	F		
			CI	CLAY: medium plasticity, yellow brown with red mottled.	M	S		
	1			**TP568 Terminated at 0.9m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP569

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.822029	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.748719	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 40.48(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.8 m	**Date**	: 12/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CL	CLAY: low plasticity, light brown, topsoil.	M	F	B	
			CI	CLAY: medium plasticity, yellow brown with red mottled.	M	S		
	1			**TP569 Terminated at 0.8m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP570

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.822004	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.748437	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 40.51(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 1.1 m	**Date**	: 12/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	CLAY: low plasticity, light brown, topsoil.	M	F		
	1		CI	CLAY: medium plasticity, yellow brown with red mottled.	M	S		
				TP570 Terminated at 1.1m				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP571

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.814234	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.752122	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 46.21(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.9 m	**Date**	: 12/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	CLAY: low plasticity, light brown, topsoil.	M	F		
			CI	CLAY: medium plasticity, yellow brown with red mottled.	M	S		
	1			**TP571 Terminated at 0.9m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP572

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.821981	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.748049	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 40.98(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.8 m	**Date**	: 12/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	CLAY: low plasticity, light brown, topsoil.	M	F		
			CI	CLAY: medium plasticity, yellow brown with red mottled.	M	S		
	1			**TP572 Terminated at 0.8m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP573

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815741	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.764108	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 33.53(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.9 m	**Date**	: 12/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	CLAY: low plasticity, light brown, topsoil.	M	F		
								1 piece of tree root
			CI	CLAY: medium plasticity, yellow brown with red mottled.	M	S		
	1			**TP573 Terminated at 0.9m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP574

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815741	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.764108	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 33.53(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.9 m	**Date**	: 12/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	CLAY: low plasticity, light brown, topsoil.	M-D	S		
			CI	Sandy CLAY: medium plasticity, fine grained sand, light brown.	M	S		
			CI	CLAY: medium plasticity, yellow brown with grey mottled.	M	S		
	1			**TP574 Terminated at 0.9m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP575

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815741	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.764108	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 33.53(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.9 m	**Date**	: 12/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	CLAY: low plasticity, light brown, topsoil.	M-D	S		
			CI	CLAY: medium plasticity, yellow brown with grey mottled.	M	S		
	1			**TP575 Terminated at 0.9m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP576

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815741	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.764108	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 33.53(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 1 m	**Date**	: 12/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	CLAY: low plasticity, light brown, topsoil.	M-D	S		
			CI	CLAY: medium plasticity, yellow brown with grey mottled.	M	S		
				TP576 Terminated at 1m				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP577

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.814234	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.752122	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 46.21(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 1.2 m	**Date**	: 12/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	CLAY: low plasticity, light brown, topsoil.	M	F		
	1		CI	CLAY: medium plasticity, yellow brown with grey mottled.	M	S		
				TP577 Terminated at 1.2m				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP578

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.821876	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.748933	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 40.60(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 1 m	**Date**	: 12/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	CLAY: low plasticity, light brown, topsoil.	M	F		
			CI	CLAY: medium plasticity, yellow brown with red mottled.	M	S		
				TP578 Terminated at 1m				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP579

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.821920	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749148	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 40.23(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.9 m	**Date**	: 12/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	CLAY: low plasticity, light brown, topsoil.	M	F		
			CI	CLAY: medium plasticity, yellow brown with red mottled.	M	S		
	1			**TP579 Terminated at 0.9m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP580

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.821948	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749341	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 39.94(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.9 m	**Date**	: 12/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CL	CLAY: low plasticity, light brown, topsoil.	M	F	B	
			CI	CLAY: medium plasticity, yellow brown with red mottled.	M	S		
	1			**TP580 Terminated at 0.9m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP581

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.821966	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749605	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 40.58(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 1.1 m	**Date**	: 12/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	CLAY: low plasticity, light brown, topsoil.	M	F		
	1		CI	CLAY: medium plasticity, yellow brown with red mottled.	M	S		
				TP581 Terminated at 1.1m				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP582

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.821962	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749813	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 40.56(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 1.2 m	**Date**	: 12/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	CLAY: low plasticity, light brown, topsoil.	M	F		
	1		CI	CLAY: medium plasticity, yellow brown with red mottled.	M	S		
				TP582 Terminated at 1.2m				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP583

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.822035	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.750105	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 41.36(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.8 m	**Date**	: 12/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	CLAY: low plasticity, light brown, topsoil .	M	F		1 piece of sandstone on surface
			CI	CLAY: medium plasticity, yellow brown with red mottled.	M	S		
	1			**TP583 Terminated at 0.8m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP584

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815083	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749434	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 41.23(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.7 m	**Date**	: 12/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	CLAY: low plasticity, light brown, topsoil .	M	F		1 piece of sandstone on surface
			CI	CLAY: medium plasticity, yellow brown.	M	F		
	1			**TP584 Terminated at 0.7m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP585

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.822047	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.750552	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 41.68(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.9 m	**Date**	: 12/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			GM	Fill: Gravelly SILT: non-plastic, fine to medium sized gravel, grey, with shale fragments.	D	F		
			GW	Fill: Sandy GRAVEL: medium to coarse sized, light grey with brown mottled.	D	D		
			CI	CLAY: medium plasticity, brown with red mottled.	D	F		
	1			**TP585 Terminated at 0.9m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP586

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.822109	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.750649	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 42.07(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 1.1 m	**Date**	: 17/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			SP	Fill: Gravelly SAND: fine grained, fine to medium sized gravel, light grey, with gravel and shale.	D			
			SC	Fill: Clayey SAND: low plasticity clay, fine grained, light grey, sandstone layer.	D	MD		
	1		CI	CLAY: medium plasticity, brown with red mottled.	M	F		
				TP586 Terminated at 1.1m				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP587

UTM	**: 56H**	**Excavator**	**: 5T**	**Job Number**	**: P23.1039-V12**
Latitude	**: -33.822095**	**Excavator Supplier**	**: Luke s Excavator & Bobcat Hire**	**Client**	**: HB&B Property Pty Ltd**
Longitude	**: 150.750755**	**Logged By**	**: Dilanka Premadasa**	**Project**	**: Stage 2 DSI**
Elevation	**: 42.31(m)**	**Reviewed By**	**: NDS**	**Location**	**: 221-227 Luddenham Road, Orchard Hills NSW, Australia**
Total Depth	**: 1.3 m**	**Date**	**: 12/09/2024**	**Loc Comment**	**:**

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			GM	Fill: Gravelly SILT: non-plastic, fine to medium sized gravel, grey, with shale fragments.	D	F		
			GW	Fill: Sandy GRAVEL: medium to coarse sized, light grey with brown mottled.	D	D		
	1		CI	CLAY: medium plasticity, brown with red mottled.	D	F		
				TP587 Terminated at 1.3m				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP588

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.814234	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.752122	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 46.21(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 1.4 m	**Date**	: 11/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
				Roadbase.	D	F		
			GM	Fill: Gravelly SILT: low plasticity, fine to medium sized gravel, light red brown.	D	F		
	1		CL	CLAY: low plasticity, light brown, topsoil.	M	F		
			CI	CLAY: medium plasticity, brown with red mottled.	D	F		
				TP588 Terminated at 1.4m				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP589

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.822143	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.750702	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 42.39(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.5 m	**Date**	: 17/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	Fill: CLAY: low plasticity, with fine to medium sized gravel, light grey, with shale, sandstones and blue metals.	D	F		
			Cl	CLAY: medium plasticity, brown, topsoil.	D	S		
			Cl	CLAY: medium plasticity, red brown.	M	F		
	1			**TP589 Terminated at 0.5m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP590

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.822203	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.750851	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 42.70(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.7 m	**Date**	: 17/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	Fill: CLAY: low plasticity, with fine sized gravel, dark brown, with shale and gravel.	D	S		
			CI	CLAY: medium plasticity, topsoil.	M	S		
			CI	CLAY: medium plasticity, yellow brown.	D	F		
	1			**TP590 Terminated at 0.7m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP591

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.817572	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749992	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 40.16(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.5 m	**Date**	: 10/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
				Fill: SILT: low plasticity, light brown, stockpile approximately 5m cubes, with timber, roadbase, metal.	D	S		
	1			**TP591 Terminated at 0.5m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP592

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.817447	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.750038	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 39.22(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.7 m	**Date**	: 10/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples		Remarks & Other Observations
							B J	B	
				Fill: SILT: low plasticity, light grey, with a piece of broken tile on surface possible from adjacent waste stockpile, roadbase.	M-D	F			
			CI	CLAY: medium plasticity, yellow brown.	M	F			
	1			**TP592 Terminated at 0.7m**					

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP593

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.817171	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749972	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 38.27(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 10/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	CLAY: low plasticity, light grey, topsoil.	M	F		
			CI	CLAY: medium plasticity, yellow brown.	M	F		
	1			**TP593 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP594

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.817291	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749876	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 38.06(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 10/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	CLAY: low plasticity, light grey, topsoil.	M	F		
			CI	CLAY: medium plasticity, yellow brown.	M	F		
	1			**TP594 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP595

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.817412	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749776	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 38.44(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.5 m	**Date**	: 10/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	CLAY: low plasticity, light grey, possible topsoil.	M-D	F		
			CI	CLAY: medium plasticity, grey with red mottled.	M	F		
	1			**TP595 Terminated at 0.5m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP596

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.816859	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749764	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 38.33(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 1.1 m	**Date**	: 10/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
				Fill: SILT: low plasticity, brown, with 1 plastic pipe, broken glass,bricks concrete .	D	S		>10pieces of asbestos fragments around the TP surface
	1		CI	CLAY: medium plasticity, yellow brown.	M	F		
				TP596 Terminated at 1.1m				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP597

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.817597	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749602	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 38.97(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.8 m	**Date**	: 11/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B J	Samples J	Remarks & Other Observations
			CL	CLAY: low plasticity, light brown, topsoil.	M	F			plastic sheet, metal pieces on surface due to adjacent waste stock pile
			CI	CLAY: medium plasticity, light yellow brown with red grey mottled.	M	F			
	1			**TP597 Terminated at 0.8m**					

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP598

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.817621	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749458	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 38.69(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.5 m	**Date**	: 11/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Samples J	Remarks & Other Observations
			CL	Fill: Gravelly CLAY: low plasticity, fine to medium sized gravel, brown, stockpile less than 20 cube.	D	S			
	1			**TP598 Terminated at 0.5m**					

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP599

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.817744	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749385	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 38.84(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 1.2 m	**Date**	: 11/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Samples J	Remarks & Other Observations
			CL	Fill: CLAY: low plasticity, light brown, stockpile, with metal pieces. inorganic.	M	F			plastic sheet on surface due to the adjacent waste stockpile
									Rubber carpet like material
	1		CI	CLAY: medium plasticity, light yellow brown with red grey mottled.	M	F			
				TP599 Terminated at 1.2m					

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP599a

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.817765	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749368	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 38.98(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 1.3 m	**Date**	: 11/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CL	Fill: CLAY: low plasticity, light brown, stockpile, with metal pieces. inorganic.	M	F		plastic sheet on surface due to adjacent waste stock pile a rubber carpet like material was encountered in TP599 and also in TP599a. it appears it was laid between the 2 TPs
	1		CI	CLAY: medium plasticity, light yellow brown with red grey mottled.	M	F		
				TP599a Terminated at 1.3m				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP600

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.817910	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.748935	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 39.00(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.6 m	**Date**	: 11/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	CLAY: low plasticity, light brown, topsoil.	D	F		
			CI	CLAY: medium plasticity, light yellow brown with red grey mottled.	D	F		
	1			**TP600 Terminated at 0.6m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP601

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.817829	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749051	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 39.02(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.6 m	**Date**	: 11/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	CLAY: low plasticity, light brown, topsoil.	M	F		
			CI	CLAY: medium plasticity, light yellow brown with red grey mottled.	M	F		
	1			**TP601 Terminated at 0.6m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP602

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.817780	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749170	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 39.11(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 1.3 m	**Date**	: 11/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Samples J	Remarks & Other Observations
			CL	Fill: Gravelly CLAY: low plasticity, fine to medium sized gravel, red brown.	D	S			
			CL	CLAY: low plasticity, light brown, topsoil.	M	F			
	1		CI	CLAY: medium plasticity, light yellow brown with red grey mottled.	M	F			
				TP602 Terminated at 1.3m					

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP603

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.817636	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749311	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 38.59(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.8 m	**Date**	: 11/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
				Fill: SILT: low plasticity, brown, with broken glass,bricks concrete, glass.	D	S		1 fragment of PACM
			CI	CLAY: medium plasticity, light grey, topsoil.	M	S-F		
			CI	CLAY: medium plasticity, yellow brown.	M	F		
	1			**TP603 Terminated at 0.8m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP604

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.817589	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749357	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 38.74(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.8 m	**Date**	: 11/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
				Fill: SILT: low plasticity, brown, with broken glass,bricks concrete, glass, metal pipes.	D	S		1 piece of asbestos near TP
			CI	CLAY: medium plasticity, light grey, topsoil.	M	F		
			CI	CLAY: medium plasticity, yellow brown with red mottled.	M	F		
	1			**TP604 Terminated at 0.8m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP605

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.817482	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749452	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 38.30(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.9 m	**Date**	: 11/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
				Fill: SILT: low plasticity, brown, with broken glass,bricks concrete, glass, metal pipes.	D	S		
			CI	CLAY: medium plasticity, light grey, topsoil.	M	F		
			CI	CLAY: medium plasticity, yellow brown with red mottled.	M	F		
	1			**TP605 Terminated at 0.9m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP606

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.817398	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749563	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 38.06(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.9 m	**Date**	: 10/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
				Fill: SILT: low plasticity, brown, with broken glass,bricks concrete .	D	S		>10pieces of asbestos fragments around the TP surface
			CI	Fill: Gravelly CLAY: medium plasticity, fine to medium sized gravel, dark brown.	M	F		
			CI	CLAY: medium plasticity, yellow brown.	M	F		
	1			**TP606 Terminated at 0.9m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP607

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.817248	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749575	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 37.93(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.9 m	**Date**	: 10/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
				Fill: SILT: low plasticity, brown, with broken glass,bricks concrete .	D	S		
			CI	CLAY: medium plasticity, yellow brown.	M	F		
	1			**TP607 Terminated at 0.9m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP608

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.817192	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749755	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 38.03(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.5 m	**Date**	: 10/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	CLAY: low plasticity, light grey, topsoil.	M	F		
			CI	CLAY: medium plasticity, yellow brown.	M	F		
	1			**TP608 Terminated at 0.5m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP609

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.817073	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749834	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 38.05(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.5 m	**Date**	: 10/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	CLAY: low plasticity, light grey, topsoil.	M	F		
			CI	CLAY: medium plasticity, yellow brown.	M	F		
	1			**TP609 Terminated at 0.5m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP610

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.816805	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749941	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 39.93(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 1.4 m	**Date**	: 10/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
				Fill: SILT: low plasticity, brown, with broken glass,bricks concrete .	M	S		1 fragment of MDF on surface
			CL	Fill: CLAY: low plasticity, light grey, with timber piece and plastic sheet.	M	F		
	1		CI	CLAY: medium plasticity, yellow brown.	M	F		
				TP610 Terminated at 1.4m				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP611

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.816859	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749764	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 38.33(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 1.3 m	**Date**	: 10/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples		Remarks & Other Observations
							B J	B	
				Fill: SILT: low plasticity, brown, with broken glass,bricks concrete .	D	S			>10pieces of asbestos fragments around the TP surface
			CL	Fill: CLAY: low plasticity, dark grey, with timber piece and plastic sheet.	M	F			
	1		CI	CLAY: medium plasticity, yellow brown.	M	F			
				TP611 Terminated at 1.3m					

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP612

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.817040	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749619	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 37.94(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 10/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	CLAY: low plasticity, light grey, topsoil.	M	F		
			CI	CLAY: medium plasticity, yellow brown.	M	F		
	1			**TP612 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP613

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.817173	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749471	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 37.97(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.9 m	**Date**	: 11/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B J	Samples J	Samples B	Remarks & Other Observations
				Fill: SILT: low plasticity, brown, with broken glass,bricks concrete .	D	S				1 piece of asbestos fragments around the TP surface
			CI	CLAY: medium plasticity, topsoil.	M	F				
			CI	CLAY: medium plasticity, yellow brown.	M	F				
	1			**TP613 Terminated at 0.9m**						

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP614

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.817294	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749442	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 38.00(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.9 m	**Date**	: 11/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
				Fill: SILT: low plasticity, brown, with broken glass,bricks concrete, glass.	D	S		1 piece of asbestos fragments around the TP surface
			CI	CLAY: medium plasticity, topsoil.	M	F		
			CI	CLAY: medium plasticity, yellow brown.	M	F		
	1			**TP614 Terminated at 0.9m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP615

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.817395	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749291	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 38.05(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.8 m	**Date**	: 11/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
				Fill: SILT: low plasticity, brown, with broken glass,bricks concrete, glass.	D	S		1 piece of asbestos fragments around the TP surface
								one piece of foil sheet
			CI	CLAY: medium plasticity, yellow brown.	M	F		
	1			**TP615 Terminated at 0.8m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP616

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.817426	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749292	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 38.07(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.8 m	**Date**	: 11/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
				Fill: SILT: low plasticity, brown, with broken glass,bricks concrete, glass.	D	S		1 piece of asbestos fragments on the TP surface
			CI	CLAY: medium plasticity, light grey, topsoil.	M	S-F		
			CI	CLAY: medium plasticity, yellow brown.	M	F		
	1			**TP616 Terminated at 0.8m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP617

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.817426	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749292	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 38.07(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.9 m	**Date**	: 11/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
				Fill: SILT: low plasticity, brown, with broken glass,bricks concrete, glass.	D	S		
			CI	CLAY: medium plasticity, light grey, topsoil.	M	S-F		
			CI	CLAY: medium plasticity, yellow brown.	M	F		
	1			**TP617 Terminated at 0.9m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP618

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.808794	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.755754	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 40.79(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.5 m	**Date**	: 11/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Samples J	Remarks & Other Observations
			CL	Fill: Sandy CLAY: low plasticity, fine grained sand, dark brown, stockpile.	D	S			
	1			**TP618 Terminated at 0.5m**					

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP619

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.817726	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.748932	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 38.40(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.7 m	**Date**	: 11/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Samples J	Remarks & Other Observations
			CL	Fill: Sandy CLAY: low plasticity, fine grained sand, dark brown, stockpile.	D	S			
	1			**TP619 Terminated at 0.7m**					

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP620

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815096	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749434	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 41.24(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.6 m	**Date**	: 11/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B J	Remarks & Other Observations
			CL	CLAY: low plasticity, light brown, topsoil.	D	F		waste scattered around TP
			CI	CLAY: medium plasticity, light yellow brown with red grey mottled.	D	F		
	1			**TP620 Terminated at 0.6m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP621

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.817885	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.748758	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 38.57(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.6 m	**Date**	: 11/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	CLAY: low plasticity, light brown, topsoil.	D	F		
			CI	CLAY: medium plasticity, light yellow brown with red grey mottled.	D	F		
	1			**TP621 Terminated at 0.6m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP622

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815087	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749435	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 41.24(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.5 m	**Date**	: 11/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	CLAY: low plasticity, light brown, topsoil.	D	F		
			CI	CLAY: medium plasticity, light yellow brown with red grey mottled.	D	F		
	1			**TP622 Terminated at 0.5m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP623

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.808794	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.755754	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 40.79(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.6 m	**Date**	: 11/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	CLAY: low plasticity, light brown, topsoil.	M	F		
			CI	CLAY: medium plasticity, light yellow brown with red grey mottled.	D	F		
	1			**TP623 Terminated at 0.6m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP624

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815079	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749434	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 41.23(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.6 m	**Date**	: 11/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	CLAY: low plasticity, light brown, topsoil.	M	F		
			CI	CLAY: medium plasticity, light yellow brown with red grey mottled.	D	F		
	1			**TP624 Terminated at 0.6m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP625

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.808794	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.755754	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 40.79(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.5 m	**Date**	: 11/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Samples J	Remarks & Other Observations
			CL	Fill: Sandy CLAY: low plasticity, fine grained sand, dark brown, stockpile with demolition rubble glass, metal sheets, plastic.	D	S			
	1			**TP625 Terminated at 0.5m**					

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP626

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.817487	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.748990	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 38.32(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.7 m	**Date**	: 11/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B J	Samples J	Samples DUP	Remarks & Other Observations
			CL	CLAY: low plasticity, light brown, topsoil.	M	F				
			CI	CLAY: medium plasticity, orange brown.	M	F				
	1			**TP626 Terminated at 0.7m**						

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP627

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.817361	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749108	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 38.31(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.8 m	**Date**	: 11/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples J	Samples B	Remarks & Other Observations
				Fill: SILT: low plasticity, brown, with broken glass,bricks concrete, glass, terracotta tiles.	D	S			
			CI	CLAY: medium plasticity, light grey, topsoil.	M	S			
			CI	CLAY: medium plasticity, yellow brown.	M	F			
	1			**TP627 Terminated at 0.8m**					

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP628

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.817294	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749442	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 38.00(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.8 m	**Date**	: 11/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
				Fill: SILT: low plasticity, brown, with broken glass,bricks concrete, glass.	D	S		1 fragment of PACM near test pit
			CI	CLAY: medium plasticity, light grey, topsoil.	M	F		
			CI	CLAY: medium plasticity, yellow brown with red mottled.	M	F		
	1			**TP628 Terminated at 0.8m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP629

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.817174	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749309	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 38.31(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.7 m	**Date**	: 10/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
				Fill: SILT: low plasticity, brown, with broken glass,bricks concrete .	D	S		1 piece of asbestos fragments around the TP surface
			CI	CLAY: medium plasticity, yellow brown.	M	F		
	1			**TP629 Terminated at 0.7m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP630

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.816971	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749418	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 39.40(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.7 m	**Date**	: 10/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	CLAY: low plasticity, light brown, topsoil.	M	F		
			CI	CLAY: medium plasticity, yellow brown.	M	F		
	1			**TP630 Terminated at 0.7m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP631

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.816971	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749418	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 39.40(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.7 m	**Date**	: 10/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	CLAY: low plasticity, light grey, topsoil.	M	F		
			CI	CLAY: medium plasticity, yellow brown with red mottled.	M	F		
	1			**TP631 Terminated at 0.7m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP632

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.816844	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749832	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 38.80(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 1.3 m	**Date**	: 10/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
				Fill: SILT: low plasticity, brown, with broken glass,bricks concrete .	M	S		1 fragment of MDF on surface
			CL	Fill: CLAY: low plasticity, light grey, with timber piece and plastic sheet.	M	F		
	1		CI	CLAY: medium plasticity, yellow brown.	M	F		
				TP632 Terminated at 1.3m				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP633

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815083	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749434	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 41.23(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.5 m	**Date**	: 10/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	CLAY: low plasticity, light brown, topsoil.	M	F		
			CI	CLAY: medium plasticity, yellow brown.	M	F		
	1			**TP633 Terminated at 0.5m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP634

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815096	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749434	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 41.24(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.5 m	**Date**	: 10/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Samples J	Remarks & Other Observations
			CL	CLAY: low plasticity, light brown, topsoil.	M	F			
			CI	CLAY: medium plasticity, yellow brown.	M	F			
	1			**TP634 Terminated at 0.5m**					

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP635

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.816971	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749418	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 39.40(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.5 m	**Date**	: 10/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	CLAY: low plasticity, light brown, topsoil.	M	F		
			CI	CLAY: medium plasticity, yellow brown.	M	F		
	1			**TP635 Terminated at 0.5m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP636

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.816971	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749418	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 39.40(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.6 m	**Date**	: 10/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	CLAY: low plasticity, light brown, topsoil.	M	F		
			CI	CLAY: medium plasticity, orange brown.	M	F		
	1			**TP636 Terminated at 0.6m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP637

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815091	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749434	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 41.24(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.5 m	**Date**	: 10/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	CLAY: low plasticity, light brown, topsoil.	M	F		
			CI	CLAY: medium plasticity, yellow brown.	M	F		
	1			**TP637 Terminated at 0.5m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP638

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.814566	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.749094	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 42.66(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.5 m	**Date**	: 10/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Samples J	Remarks & Other Observations
			CL	CLAY: low plasticity, light brown, topsoil.	M	F			
			CI	CLAY: medium plasticity, light yellow brown.	M	F			
	1			**TP638 Terminated at 0.5m**					

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP639

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.808794	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.755754	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 40.79(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.6 m	**Date**	: 10/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	CLAY: low plasticity, light brown, topsoil.	M	F		
			CI	CLAY: medium plasticity, light yellow brown.	M	F		
	1			**TP639 Terminated at 0.6m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP640

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.816023	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.765197	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 30.57(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.5 m	**Date**	: 10/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	CLAY: low plasticity, light brown, topsoil.	M	F		
			CI	CLAY: medium plasticity, light yellow brown.	M	F		
	1			**TP640 Terminated at 0.5m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP641

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.808794	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.755754	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 40.79(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.6 m	**Date**	: 10/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	CLAY: low plasticity, light brown, topsoil.	M	F		
			CI	CLAY: medium plasticity, light yellow brown.	M	F		
	1			**TP641 Terminated at 0.6m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP642

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815741	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.764108	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 33.53(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.5 m	**Date**	: 10/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B J	Samples J	Remarks & Other Observations
			CL	CLAY: low plasticity, light brown, topsoil.	M	F			
			CI	CLAY: medium plasticity, light yellow brown, black marks on the top.	M	F			
	1			**TP642 Terminated at 0.5m**					

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP643

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.816023	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.765197	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 30.57(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.5 m	**Date**	: 10/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	CLAY: low plasticity, light brown, topsoil.	M	F		
			CI	CLAY: medium plasticity, light yellow brown.	M	F		
	1			**TP643 Terminated at 0.5m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP644

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.808794	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.755754	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 40.79(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.5 m	**Date**	: 10/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	CLAY: low plasticity, light brown, topsoil.	M	F		
			CI	CLAY: medium plasticity, light yellow brown.	M	F		
	1			**TP644 Terminated at 0.5m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP645

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.816023	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.765197	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 30.57(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.5 m	**Date**	: 10/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples		Remarks & Other Observations
							B J	DUP	
			CL	CLAY: low plasticity, light brown, topsoil.	M	F			
			CI	CLAY: medium plasticity, light yellow brown.	M	F			
	1			**TP645 Terminated at 0.5m**					

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP646

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.808794	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.755754	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 40.79(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.5 m	**Date**	: 10/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	CLAY: low plasticity, light brown, topsoil.	M	F		
			CI	CLAY: medium plasticity, light yellow brown with red mottled.	M	F		
	1			**TP646 Terminated at 0.5m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP647

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815741	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.764108	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 33.53(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.6 m	**Date**	: 10/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Samples J	Remarks & Other Observations
			CL	CLAY: low plasticity, light brown, topsoil with plastic lid.	M	F			
			CI	CLAY: medium plasticity, light yellow brown with grey mottled.	M	F			
	1			**TP647 Terminated at 0.6m**					

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP648

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815741	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.764108	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 33.53(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.7 m	**Date**	: 10/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples J	Samples B	Remarks & Other Observations
			SP	Fill: Gravelly SAND: fine grained, fine to medium sized gravel, white, sand layer.	D	L			
			CL	CLAY: low plasticity, light brown, topsoil with plastic lid.	M	F			
			CI	CLAY: medium plasticity, light yellow brown with grey mottled.	M	F			
	1			**TP648 Terminated at 0.7m**					

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP649

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.814234	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.752122	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 46.21(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.5 m	**Date**	: 10/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	CLAY: low plasticity, light brown, topsoil.	M	F		
			CI	CLAY: medium plasticity, light yellow brown with red mottled.	M	F		
	1			**TP649 Terminated at 0.5m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP650

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.814234	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.752122	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 46.21(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.5 m	**Date**	: 10/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CL	CLAY: low plasticity, light brown, topsoil.	M	F		
			CI	CLAY: medium plasticity, light yellow brown with red mottled.	M	F		
	1			**TP650 Terminated at 0.5m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP651

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.822724	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.748595	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 41.00(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.6 m	**Date**	: 13/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			ML	Fill: Sandy SILT: non-plastic, fine grained sand, grey, crushed concrete, shale and sandstone layer.	D	F		
			CI	CLAY: medium plasticity, brown.	M	F		
	1			**TP651 Terminated at 0.6m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP652

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.815835	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.764471	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 32.45(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.4 m	**Date**	: 13/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		
	1			**TP652 Terminated at 0.4m**				

DEVELOPMENT RISK MANAGEMENT

Testpit No: TP653

UTM	: 56H	**Excavator**	: 5T	**Job Number**	: P23.1039-V12
Latitude	: -33.822923	**Excavator Supplier**	: Luke s Excavator & Bobcat Hire	**Client**	: HB&B Property Pty Ltd
Longitude	: 150.747821	**Logged By**	: Dilanka Premadasa	**Project**	: Stage 2 DSI
Elevation	: 41.57(m)	**Reviewed By**	: NDS	**Location**	: 221-227 Luddenham Road, Orchard Hills NSW, Australia
Total Depth	: 0.3 m	**Date**	: 13/09/2024	**Loc Comment**	:

Drilling Method	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture	Consistency	Samples B	Remarks & Other Observations
			CI	CLAY: medium plasticity, brown, topsoil.	M	S		Black shale encountered
	1			**TP653 Terminated at 0.3m**				

APPENDIX F

EQUIPMENT CALIBRATION CERTIFICATES

APPENDIX G

LABORATORY ANALYTICAL CERTIFICATES

AUSTRALIAN SAFER ENVIRONMENT & TECHNOLOGY PTY LTD
SUITE 710 / 90 GEORGE STREET, HORNSBY NSW 2077 – PO BOX 1644 HORNSBY WESTFIELD NSW 1635
PHONE: (02) 9987 2183 FAX: (02)9987 2151 EMAIL: info@ausset.com.au
WEBSITE: www.Ausset.com.au

CHAIN OF CUSTODY RECORD

ASET JOB NO: ASET 121221/124401/1-135

Name/ Company Name: DEVELOPMENT Risk Management Pty Ltd (DRM)

Address: 37 Mount Pleasant Avenue, Normanhurst NSW 2076

Contact Ph: 0450 715 562

Contact Name: Nalin De Silva

Job No: DRM P23.1039.V12

Project Name: OSO, Orchard Hills

Purchase Order:

Email Results to: rahabar_alam@drm.ltd
results@drm.ltd

		Sample ID	Date	Type	Container	Sample Location	Asbestos in Material	Asbestos in Soil (+/-)	Asbestos WA/ NEPM 500mL	Asbestos Fibre Count	Asbestos in Water	Asbestos in Dust	Lead Analysis
1	1	TP401 0 - 0.1	17/09/2024	S	500ml Bag				X				
2	2	TP402 0 - 0.1	17/09/2024	S	500ml Bag				X				
	3	TP402 0.1 - 0.2	17/09/2024	S	500ml Bag								
3	4	TP403 0 - 0.1	17/09/2024	S	500ml Bag				X				
4	5	TP405 0 - 0.1	17/09/2024	S	500ml Bag				X				
	6	TP406 0 - 0.1	17/09/2024	S	500ml Bag								
5	7	TP407 0 - 0.1	17/09/2024	S	500ml Bag				X				
	8	TP407 0.1 - 0.2	17/09/2024	S	500ml Bag								
6	9	TP409 0 - 0.2	16/09/2024	S	500ml Bag				X				
7	10	TP410 0 - 0.2	16/09/2024	S	500ml Bag				X				
	11	TP411 0 - 0.1	16/09/2024	S	500ml Bag								
	12	TP415 0 - 0.1	16/09/2024	S	500ml Bag								
8	13	TP416 0 - 0.2	16/09/2024	S	500ml Bag				X				
9	14	TP417 0 - 0.5	16/09/2024	S	500ml Bag				X				
10	15	TP418 0 - 0.5	16/09/2024	S	500ml Bag				X				
11	16	TP419 0 - 0.8	16/09/2024	S	500ml Bag				X				
12	17	TP420 0 - 0.2	16/09/2024	S	500ml Bag				X				
13	18	TP421 0 - 0.2	16/09/2024	S	500ml Bag				X				
14	19	TP422 0 - 0.1	16/09/2024	S	500ml Bag				X				
15	20	TP422 0.1 - 0.4	16/09/2024	S	500ml Bag				X				
16	21	TP423 0 - 0.5	16/09/2024	S	500ml Bag				X				
17	22	TP424 0 - 0.4	16/09/2024	S	500ml Bag				X				
18	23	TP425 0 - 0.4	16/09/2024	S	500ml Bag				X				
19	24	TP426 0 - 0.3	17/09/2024	S	500ml Bag				X				
20	25	TP427 0 - 0.1	17/09/2024	S	500ml Bag				X				
21	26	TP427 0.1 - 0.2	17/09/2024	S	500ml Bag				X				
	27	TP428 0 - 0.1	17/09/2024	S	500ml Bag								
	28	TP432 0 - 0.1	17/09/2024	S	500ml Bag								
22	29	TP433 0 - 0.1	17/09/2024	S	500ml Bag				X				
23	30	TP435 0 - 0.5	17/09/2024	S	500ml Bag				X				
	31	TP436 0 - 1	17/09/2024	S	500ml Bag								
24	32	TP437 0 - 0.8	17/09/2024	S	500ml Bag				X				
	33	TP438 0 - 0.8	17/09/2024	S	500ml Bag								
25	34	TP439 0 - 0.1	16/09/2024	S	500ml Bag				X				
26	35	TP439 0.1 - 0.6	16/09/2024	S	500ml Bag				X				
27	36	TP440 0 - 0.1	16/09/2024	S	500ml Bag				X				
28	37	TP440 0.1 - 0.4	16/09/2024	S	500ml Bag				X				
	38	TP441 0 - 0.1	16/09/2024	S	500ml Bag								
29	39	TP442 0 - 0.1	16/09/2024	S	500ml Bag				X				
30	40	TP442 0.1 - 0.2	16/09/2024	S	500ml Bag				X				
31	41	TP443 0 - 0.1	16/09/2024	S	500ml Bag				X				
32	42	TP443 0.1 - 0.3	16/09/2024	S	500ml Bag				X				
33	43	TP444 0 - 0.2	16/09/2024	S	500ml Bag				X				
34	44	TP445 0 - 0.4	16/09/2024	S	500ml Bag				X				
35	45	TP446 0 - 0.6	16/09/2024	S	500ml Bag				X				
36	46	TP447 0 - 0.4	16/09/2024	S	500ml Bag				X				
37	47	TP448 0 - 0.4	16/09/2024	S	500ml Bag				X				
38	48	TP450 0 - 0.1	16/09/2024	S	500ml Bag				X				
39	49	TP450 0.1 - 0.4	16/09/2024	S	500ml Bag				X				
	50	TP451 0 - 0.1	16/09/2024	S	500ml Bag								
	51	TP452 0 - 0.1	16/09/2024	S	500ml Bag								
	52	TP453 0 - 0.1	16/09/2024	S	500ml Bag								
	53	TP454 0 - 0.1	16/09/2024	S	500ml Bag								
40	54	TP455 0 - 0.1	16/09/2024	S	500ml Bag				X				
41	55	TP455 0.1 - 0.2	16/09/2024	S	500ml Bag				X				
42	56	TP456 0.1 - 0.4	13/09/2024	S	500ml Bag				X				
43	57	TP456 0 - 0.1	13/09/2024	S	500ml Bag				X				
44	58	TP456 0.4 - 0.6	13/09/2024	S	500ml Bag				X				

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19 SEP 2024
BY: ...

ASET JOB NO:

Name/ Company Name: DEVELOPMENT Risk Management Pty Ltd (DRM)

Address: 37 Mount Pleasant Avenue, Normanhurst NSW 2076

Contact Ph: 0450 715 562

Contact Name: Nalin De Silva

Job No: DRM P23.1039.V12

Project Name: OSO, Orchard Hills

Purchase Order:

Email Results to: rahabar_alam@drm.ltd
results@drm.ltd

		Sample ID	Date	Type	Container	Sample Location	Asbestos in Material	Asbestos in Soil (+/-)	Asbestos WA/ NEPM 500mL	Asbestos Fibre Count	Asbestos in Water	Asbestos in Dust	Lead Analysis
45	59	TP457 0 - 0.1	13/09/2024	S	500ml Bag				X				
46	60	TP457 0.1 - 0.3	13/09/2024	S	500ml Bag				X				
	61	TP463 0 - 0.1	17/09/2024	S	500ml Bag								
	62	TP464 0 - 0.1	17/09/2024	S	500ml Bag								
47	63	TP465 0 - 0.1	17/09/2024	S	500ml Bag				X				
	64	TP466 0 - 0.1	17/09/2024	S	500ml Bag								
48	65	TP467 0 - 0.7	13/09/2024	S	500ml Bag				X				
	66	TP471 0 - 0.1	13/09/2024	S	500ml Bag								
49	67	TP472 0 - 0.1	13/09/2024	S	500ml Bag				X				
50	68	TP472 0.1 - 0.3	13/09/2024	S	500ml Bag				X				
51	69	TP473 0 - 0.1	13/09/2024	S	500ml Bag				X				
52	70	TP473 0.3 - 0.4	13/09/2024	S	500ml Bag				X				
53	71	TP474 0 - 0.1	13/09/2024	S	500ml Bag				X				
54	72	TP474 0.1 - 0.2	13/09/2024	S	500ml Bag				X				
	73	TP475 0 - 0.1	13/09/2024	S	500ml Bag								
	74	TP476 0 - 0.1	13/09/2024	S	500ml Bag								
	75	TP477 0 - 0.1	13/09/2024	S	500ml Bag								
	76	TP478 0 - 0.1	13/09/2024	S	500ml Bag								
	77	TP490 0 - 0.1	13/09/2024	S	500ml Bag								
	78	TP496 0 - 0.1	17/09/2024	S	500ml Bag								
	79	TP503 0 - 0.1	13/09/2024	S	500ml Bag								
	80	TP512 0 - 0.1	13/09/2024	S	500ml Bag								
55	81	TP513 0 - 0.1	13/09/2024	S	500ml Bag				X				
	82	TP514 0 - 0.1	13/09/2024	S	500ml Bag								
	83	TP523 0 - 0.1	13/09/2024	S	500ml Bag								
	84	TP528 0 - 0.1	17/09/2024	S	500ml Bag								
	85	TP529 0 - 0.1	17/09/2024	S	500ml Bag								
56	86	TP534 0 - 0.1	12/09/2024	S	500ml Bag				X				
57	87	TP534 0.1 - 0.3	12/09/2024	S	500ml Bag				X				
58	88	TP535 0 - 0.1	12/09/2024	S	500ml Bag				X				
59	89	TP542 0 - 0.1	12/09/2024	S	500ml Bag				X				
	90	TP542 0.1 - 0.3	12/09/2024	S	500ml Bag								
60	91	TP543 0 - 0.1	12/09/2024	S	500ml Bag				X				
	92	TP544 0 - 0.1	12/09/2024	S	500ml Bag								
61	93	TP545 0 - 0.7	12/09/2024	S	500ml Bag				X				
62	94	TP546 0 - 0.1	12/09/2024	S	500ml Bag				X				
63	95	TP546 0.1 - 0.4	12/09/2024	S	500ml Bag				X				
	96	TP557 0 - 0.1	12/09/2024	S	500ml Bag								
64	97	TP560 0 - 0.1	17/09/2024	S	500ml Bag				X				
65	98	TP560 0.1 - 0.5	17/09/2024	S	500ml Bag				X				
66	99	TP562 0 - 0.1	12/09/2024	S	500ml Bag				X				
	100	TP563 0 - 0.1	12/09/2024	S	500ml Bag								
67	101	TP564 0 - 0.1	12/09/2024	S	500ml Bag				X				
	102	TP564 0.1 - 0.2	12/09/2024	S	500ml Bag								
68	103	TP565 0 - 0.1	12/09/2024	S	500ml Bag				X				
69	104	TP566 0 - 0.1	12/09/2024	S	500ml Bag				X				
	105	TP567 0 - 0.1	12/09/2024	S	500ml Bag								
	106	TP568 0 - 0.1	12/09/2024	S	500ml Bag								
	107	TP569 0 - 0.1	12/09/2024	S	500ml Bag								
	108	TP570 0 - 0.1	12/09/2024	S	500ml Bag								
	109	TP571 0 - 0.1	12/09/2024	S	500ml Bag								
	110	TP572 0 - 0.1	12/09/2024	S	500ml Bag								
70	111	TP573 0 - 0.1	12/09/2024	S	500ml Bag				X				
71	112	TP574 0 - 0.1	12/09/2024	S	500ml Bag				X				
	113	TP574 0.3 - 0.5	12/09/2024	S	500ml Bag								
	114	TP575 0 - 0.1	12/09/2024	S	500ml Bag								
	115	TP576 0 - 0.1	12/09/2024	S	500ml Bag								
	116	TP577 0 - 0.1	12/09/2024	S	500ml Bag								

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ASET JOB NO:

Name/ Company Name: DEVELOPMENT Risk Management Pty Ltd (DRM)

Address: 97 Mount Pleasant Avenue, Normanhurst NSW 2076

Contact Ph: 0450 715 562

Contact Name: Nalin De Silva

Job No: DRM P23.1039.V12

Project Name: OSO, Orchard Hills

Purchase Order:

Email Results to: rahabar_alam@drm.ltd
results@drm.ltd

	Sample ID	Date	Type	Container	Sample Location	Asbestos in Material	Asbestos in Soil (+/-)	Asbestos WA/ NEPM 500mL	Asbestos Fibre Count	Asbestos in Water	Asbestos in Dust	Lead Analysis
117	TP578 0 - 0.1	12/09/2024	S	500ml Bag								
118	TP579 0 - 0.1	12/09/2024	S	500ml Bag								
119	TP580 0 - 0.1	12/09/2024	S	500ml Bag								
120	TP581 0 - 0.1	12/09/2024	S	500ml Bag								
121	TP582 0 - 0.1	12/09/2024	S	500ml Bag								
122	TP583 0 - 0.1	12/09/2024	S	500ml Bag								
123	TP584 0 - 0.1	12/09/2024	S	500ml Bag								
72 124	TP585 0 - 0.1	12/09/2024	S	500ml Bag				X				
73 125	TP585 0.1 - 0.4	12/09/2024	S	500ml Bag				X				
74 126	TP586 0.1 - 0.9	17/09/2024	S	500ml Bag				X				
75 127	TP586 0 - 0.1	17/09/2024	S	500ml Bag				X				
76 128	TP587 0 - 0.2	12/09/2024	S	500ml Bag				X				
77 129	TP587 0.2 - 0.7	12/09/2024	S	500ml Bag				X				
78 130	TP588 0 - 0.1	12/09/2024	S	500ml Bag				X				
79 131	TP588 0.1 - 0.8	12/09/2024	S	500ml Bag				X				
780 132	TP588 0.8 - 1.1	12/09/2024	S	500ml Bag				X				
133	TP589 0 - 0.1	17/09/2024	S	500ml Bag								
81 134	TP590 0 - 0.1	17/09/2024	S	500ml Bag				X				
82 135	TP590 0.1 - 0.3	17/09/2024	S	500ml Bag				X				
83 136	TP591 0 - 0.5	10/09/2024	S	500ml Bag				X				
84 137	TP592 0.1 - 0.4	10/09/2024	S	500ml Bag				X				
85 138	TP592 0 - 0.1	10/09/2024	S	500ml Bag				X				
86 139	TP592 0.1 - 0.4	10/09/2024	S	500ml Bag				X				
140	TP593 0 - 0.1	10/09/2024	S	500ml Bag								
141	TP594 0 - 0.1	10/09/2024	S	500ml Bag								
142	TP595 0 - 0.1	10/09/2024	S	500ml Bag								
87 143	TP596 0.1 - 0.6	10/09/2024	S	500ml Bag				X				
88 144	TP596 0 - 0.1	10/09/2024	S	500ml Bag				X				
145	TP597 0 - 0.1	11/09/2024	S	500ml Bag								
89 146	TP598 0 - 0.5	11/09/2024	S	500ml Bag				X				
90 147	TP599 0 - 0.7	11/09/2024	S	500ml Bag				X				
148	TP600 0 - 0.1	11/09/2024	S	500ml Bag								
149	TP601 0 - 0.1	11/09/2024	S	500ml Bag								
91 150	TP602 0 - 0.6	11/09/2024	S	500ml Bag				X				
92 151	TP603 0 - 0.1	11/09/2024	S	500ml Bag				X				
93 152	TP603 0.1 - 0.3	11/09/2024	S	500ml Bag				X				
94 153	TP604 0 - 0.1	11/09/2024	S	500ml Bag				X				
95 154	TP604 0.1 - 0.3	11/09/2024	S	500ml Bag				X				
96 155	TP604 0.3 - 0.4	11/09/2024	S	500ml Bag				X				
97 156	TP605 0 - 0.1	11/09/2024	S	500ml Bag				X				
98 157	TP605 0.1 - 0.2	11/09/2024	S	500ml Bag				X				
99 158	708 TP605 0-0.1	11/09/2024	S	500ml Bag				X				
100 159	TP606 0.1 - 0.4	10/09/2024	S	500ml Bag				X				
160	TP606 0 - 0.1	10/09/2024	S	500ml Bag								
101 161	TP606 0.4 - 0.6	10/09/2024	S	500ml Bag				X				
162	TP606 0.6 - 0.8	10/09/2024	S	500ml Bag				X				
102 163	TP607 0.1 - 0.5	10/09/2024	S	500ml Bag				X				
103 164	TP607 0 - 0.1	10/09/2024	S	500ml Bag				X				
165	TP608 0 - 0.1	10/09/2024	S	500ml Bag								
166	TP609 0 - 0.1	10/09/2024	S	500ml Bag								
167	TP610 0 - 0.1	10/09/2024	S	500ml Bag								
104 168	TP610 0.1 - 0.7	10/09/2024	S	500ml Bag				X				
169	TP610 0.7 - 1	10/09/2024	S	500ml Bag								
105 170	TP611 0 - 0.1	10/09/2024	S	500ml Bag				X				
106 171	TP611 0.1 - 0.4	10/09/2024	S	500ml Bag				X				
107 172	TP611 0.4 - 0.8	10/09/2024	S	500ml Bag				X				
173	TP612 0 - 0.1	10/09/2024	S	500ml Bag								
174	TP613 0 - 0.1	11/09/2024	S	500ml Bag								
108 175	TP613 0.1 - 0.4	11/09/2024	S	500ml Bag				X				
176	TP614 0 - 0.1	11/09/2024	S	500ml Bag								
109 177	TP614 0.1 - 0.3	11/09/2024	S	500ml Bag				X				

RECEIVED
19 SEP 2024

ASET JOB NO:

Name/ Company Name: DEVELOPMENT Risk Management Pty Ltd (DRM)

Address: 37 Mount Pleasant Avenue, Normanhurst NSW 2076

Contact Ph: 0450 715 562

Contact Name: Nalin De Silva

Job No: DRM P23.1039.V12

Project Name: OSO, Orchard Hills

Purchase Order:

Email Results to: rahabar_alam@drm.ltd
results@drm.ltd

	Sample ID	Date	Type	Container	Sample Location	Asbestos in Material	Asbestos in Soil (+/-)	Asbestos WA/ NEPM 500mL	Asbestos Fibre Count	Asbestos in Water	Asbestos in Dust	Lead Analysis
178	TP614 0.3 - 0.5	11/09/2024	S	500ml Bag				X				
179	TP615 0 - 0.1	11/09/2024	S	500ml Bag								
180	TP615 0.1 - 0.4	11/09/2024	S	500ml Bag				X				
181	TP616 0 - 0.1	11/09/2024	S	500ml Bag								
182	TP616 0.1 - 0.3	11/09/2024	S	500ml Bag				X				
183	TP617 0 - 0.1	11/09/2024	S	500ml Bag				X				
184	TP617 0.1 - 0.3	11/09/2024	S	500ml Bag				X				
185	TP618 0 - 0.5	11/09/2024	S	500ml Bag				X				
186	TP619 0 - 0.7	11/09/2024	S	500ml Bag				X				
187	TP620 0 - 0.1	11/09/2024	S	500ml Bag								
188	TP621 0 - 0.1	11/09/2024	S	500ml Bag								
189	TP622 0 - 0.1	11/09/2024	S	500ml Bag								
190	TP623 0 - 0.1	11/09/2024	S	500ml Bag								
191	TP624 0 - 0.1	11/09/2024	S	500ml Bag								
192	TP625 0 - 0.5	11/09/2024	S	500ml Bag								
193	TP626 0 - 0.1	11/09/2024	S	500ml Bag								
194	TP627 0 - 0.1	11/09/2024	S	500ml Bag				X				
195	TP627 0.1 - 0.3	11/09/2024	S	500ml Bag				X				
196	TP628 0 - 0.1	11/09/2024	S	500ml Bag								
197	TP628 0.1 - 0.2	11/09/2024	S	500ml Bag				X				
198	TP628 0.2 - 0.4	11/09/2024	S	500ml Bag				X				
199	TP629 0.1 - 0.4	11/09/2024	S	500ml Bag				X				
200	TP629 0 - 0.1	10/09/2024	S	500ml Bag								
201	TP630 0 - 0.1	10/09/2024	S	500ml Bag								
202	TP631 0 - 0.1	10/09/2024	S	500ml Bag								
203	TP632 0 - 0.1	10/09/2024	S	500ml Bag				X				
204	TP632 0.5 - 1	10/09/2024	S	500ml Bag								
205	TP632 0.1 - 0.5	10/09/2024	S	500ml Bag				X				
206	TP633 0 - 0.1	10/09/2024	S	500ml Bag								
207	TP634 0 - 0.1	10/09/2024	S	500ml Bag								
208	TP635 0 - 0.1	10/09/2024	S	500ml Bag								
209	TP636 0 - 0.1	10/09/2024	S	500ml Bag								
210	TP637 0 - 0.1	10/09/2024	S	500ml Bag								
211	TP638 0 - 0.1	10/09/2024	S	500ml Bag								
212	TP639 0 - 0.1	10/09/2024	S	500ml Bag								
213	TP640 0 - 0.1	10/09/2024	S	500ml Bag								
214	TP641 0 - 0.1	10/09/2024	S	500ml Bag								
215	TP642 0 - 0.1	10/09/2024	S	500ml Bag				X				
216	TP642 0.1 - 0.3	10/09/2024	S	500ml Bag				X				
217	TP643 0 - 0.1	10/09/2024	S	500ml Bag								
218	TP644 0 - 0.1	10/09/2024	S	500ml Bag								
219	TP645 0 - 0.1	10/09/2024	S	500ml Bag								
220	TP646 0 - 0.1	10/09/2024	S	500ml Bag								
221	TP647 0 - 0.1	10/09/2024	S	500ml Bag								
222	TP648 0.05 - 0.2	10/09/2024	S	500ml Bag				X				
223	TP649 0 - 0.1	10/09/2024	S	500ml Bag								
224	TP650 0 - 0.1	10/09/2024	S	500ml Bag								
225	TP651 0 - 0.1	13/09/2024	S	500ml Bag				X				
226	TP651 0.1 - 0.4	13/09/2024	S	500ml Bag								
227	TP653 0 - 0.1	13/09/2024	S	500ml Bag								
228	PACM1	10/09/2024	S	100ml Bag		X						
229	PACM2	10/09/2024	S	100ml Bag		X						
230	PACM3	11/09/2024	S	100ml Bag		X						
231	PACM4	11/09/2024	S	100ml Bag		X						
232	PACM5	16/09/2024	S	100ml Bag		X						
233	PACM6	17/09/2024		100ml Bag		X						
234	SS1	10/09/2024	S	500ml Bag				X				
235	SS2	16/09/2024	S	500ml Bag				X				
236	SS3	17/09/2024	S	500ml Bag				X				

RECEIVED
19 SEP 2024
By:

Relinquished By: Nalin De Silva & Dilanka Premadasa

Date & Time: 16/09/2024 & 18/09/2024

Received By:

Date & Time: 4pm

Turn around time					Shipment Method
Same Day	24 hrs	48 hrs	3 Days	5 days	

AUSTRALIAN SAFER ENVIRONMENT & TECHNOLOGY PTY LTD

ABN 36 088 095 112

Our ref : ASET121221 / 124401 / 1 – 71 out of 135
Your ref : DRM P23.1039.V12 – OSO Orchard Hills
NATA Accreditation No: 14484

25 September 2024

Development Risk Management
37 Mount Pleasant Avenue
Normanhurst NSW 2076

Accredited for compliance with ISO/IEC 17025 - Testing.

Attn: Mr Nalin De Silva

Dear Nalin

Asbestos Identification
This report presents the results of seventy one samples out of one hundred and thirty five samples, forwarded by Development Risk Management on 19 September 2024, for analysis for asbestos.

1.Introduction: Seventy one samples out of one hundred and thirty five samples forwarded were examined and analysed for the presence of asbestos on 23 & 24 September 2024.

2. Methods: The samples were examined under a Stereo Microscope and selected fibres were analysed by Polarized Light Microscopy in conjunction with Dispersion Staining method **(Australian Standard AS 4964 - 2004 and Safer Environment Method 1 as the supplementary work instruction) (Qualitative Analysis only).**

The report also provides approximate weights and percentages, categories of asbestos forms appearing in the sample, such as **AF** (Asbestos Fines), **FA** (Friable Asbestos) and **ACM** (Asbestos Containing Material), also satisfying the requirements of the NEPM Guidelines.

3. Results : **Sample No. 1. ASET121221 / 124401 / 1. P23.1039.V12 - TP401 - 0 - 0.1.**
Approx dimensions 10.0 cm x 10.0 cm x 5.2 cm
Approximate total dry weight of soil = 635.0g.
The sample consisted of a mixture of sandy soil, stones, organic fibres and plant matter.
No asbestos detected.

Sample No. 2. ASET121221 / 124401 / 2. P23.1039.V12 - TP402 - 0 - 0.1.
Approx dimensions 10.0 cm x 10.0 cm x 7.8 cm
Approximate total dry weight of soil = 935.0g.
The sample consisted of a mixture of sandy soil, stones, sandstones, organic fibres and plant matter.
No asbestos detected.

Sample No. 3. ASET121221 / 124401 / 3. P23.1039.V12 - TP403 - 0 - 0.1.
Approx dimensions 10.0 cm x 10.0 cm x 5.2 cm
Approximate total dry weight of soil = 656.0g.
The sample consisted of a mixture of sandy soil, stones, organic fibres, sandstones and plant matter.
No asbestos detected.

Sample No. 4. ASET121221 / 124401 / 4. P23.1039.V12 - TP405 - 0 - 0.1.
Approx dimensions 10.0 cm x 10.0 cm x 8.8 cm
Approximate total dry weight of soil = 978.0g.
The sample consisted of a mixture of clayish sandy soil, stones, organic fibres, sandstones and plant matter.
No asbestos detected.

Sample No. 5. ASET121221 / 124401 / 5. P23.1039.V12 - TP407 - 0 - 0.1.
Approx dimensions 10.0 cm x 10.0 cm x 8.8 cm
Approximate total dry weight of soil = 902.0g.
The sample consisted of a mixture of clayish sandy soil, stones, organic fibres, sandstones and plant matter.
No asbestos detected.

Sample No. 6. ASET121221 / 124401 / 6. P23.1039.V12 - TP409 - 0 - 0.2.
Approx dimensions 10.0 cm x 10.0 cm x 8.0 cm
Approximate total dry weight of soil = 814.0g.
The sample consisted of a mixture of sandy soil, stones, cement like material, organic fibres, sandstones and plant matter.
No asbestos detected.

Sample No. 7. ASET121221 / 124401 / 7. P23.1039.V12 - TP410 - 0 - 0.2.
Approx dimensions 10.0 cm x 10.0 cm x 7.5 cm
Approximate total dry weight of soil = 784.0g.
The sample consisted of a mixture of sandy soil, stones, organic fibres, sandstones and plant matter.
No asbestos detected.

Sample No. 8. ASET121221 / 124401 / 8. P23.1039.V12 - TP416 - 0 - 0.2.
Approx dimensions 10.0 cm x 10.0 cm x 6.9 cm
Approximate total dry weight of soil = 663.0g.
The sample consisted of a mixture of clayish sandy soil, stones, sandstones, organic fibres and plant matter.
No asbestos detected.

Sample No. 9. ASET121221 / 124401 / 9. P23.1039.V12 - TP417 - 0 - 0.5.
Approx dimensions 10.0 cm x 10.0 cm x 6.2 cm
Approximate total dry weight of soil = 624.0g.
The sample consisted of a mixture of clayish sandy soil, stones, sandstones, organic fibres and plant matter.
No asbestos detected.

Sample No. 10. ASET121221 / 124401 / 10. P23.1039.V12 - TP418 - 0 - 0.5.
Approx dimensions 10.0 cm x 10.0 cm x 8.0 cm
Approximate total dry weight of soil = 814.0g. The sample consisted of a mixture of clayish sandy soil, stones, sandstones, organic fibres and plant matter.
No asbestos detected.

Sample No. 11. ASET121221 / 124401 / 11. P23.1039.V12 - TP419 - 0 - 0.8.
Approx dimensions 10.0 cm x 10.0 cm x 6.6 cm
Approximate total dry weight of soil = 606.0g.
The sample consisted of a mixture of clayish sandy soil, stones, organic fibres, sandstones and plant matter.
No asbestos detected.

Sample No. 12. ASET121221 / 124401 / 12. P23.1039.V12 - TP420 - 0 - 0.2.
Approx dimensions 10.0 cm x 10.0 cm x 7.0 cm
Approximate total dry weight of soil = 73.1.0g.
The sample consisted of a mixture of clayish sandy soil, stones, sandstones, organic fibres and plant matter.
No asbestos detected.

Sample No. 13. ASET121221 / 124401 / 13. P23.1039.V12 - TP421 - 0 - 0.2.
Approx dimensions 10.0 cm x 10.0 cm x 6.5 cm
Approximate total dry weight of soil = 721.0g.
The sample consisted of a mixture of sandy soil, stones, organic fibres, sandstones and plant matter.
No asbestos detected.

Sample No. 14. ASET121221 / 124401 / 14. P23.1039.V12 - TP422 - 0 - 0.1.
Approx dimensions 10.0 cm x 10.0 cm x 7.3 cm
Approximate total dry weight of soil = 771.0g.
The sample consisted of a mixture of sandy soil, stones, organic fibres, sandstones and plant matter.
No asbestos detected.

Sample No. 15. ASET121221 / 124401 / 15. P23.1039.V12 - TP422 - 0.1 - 0.4.
Approx dimensions 10.0 cm x 10.0 cm x 6.0 cm
Approximate total dry weight of soil = 651.0g.
The sample consisted of a mixture of sandy soil, stones, sandstones, organic fibres and plant matter.
No asbestos detected.

Sample No. 16. ASET121221 / 124401 / 16. P23.1039.V12 - TP423 - 0 - 0.5.
Approx dimensions 10.0 cm x 10.0 cm x 8.6 cm
The sample consisted of a mixture of sandy soil, stones, soft plaster material, cement like material, glass pieces, a fragment of fibre cement# (AF), sandstones, organic fibres and plant matter.
Chrysotile# (Approximate estimated weight = 0.0057g) asbestos detected.
Approximate total dry weight of soil = 972.0g.
Approximate estimated weight of asbestos in soil in the form of AF = 0.0057g.
Approximate w/w percentage of asbestos in soil in the form of AF = 0.00059%.

Sample No. 17. ASET121221 / 124401 / 17. P23.1039.V12 - TP424 - 0 - 0.4.
Approx dimensions 10.0 cm x 10.0 cm x 8.5 cm
Approximate total dry weight of soil = 846.0g.
The sample consisted of a mixture of clayish sandy soil, stones, organic fibres, sandstones and plant matter.
No asbestos detected.

Sample No. 18. ASET121221 / 124401 / 18. P23.1039.V12 - TP425 - 0 - 0.4.
Approx dimensions 10.0 cm x 10.0 cm x 7.8 cm
Approximate total dry weight of soil = 1061.0g.
The sample consisted of a mixture of sandy soil, stones, sandstones, organic fibres and plant matter.
No asbestos detected.

Sample No. 19. ASET121221 / 124401 / 19. P23.1039.V12 - TP426 - 0 - 0.3.
Approx dimensions 10.0 cm x 10.0 cm x 7.6 cm
Approximate total dry weight of soil = 942.0g.
The sample consisted of a mixture of clayish sandy soil, stones, sandstones, cement like material, organic fibres and plant matter.
No asbestos detected.

Sample No. 20. ASET121221 / 124401 / 20. P23.1039.V12 - TP427 - 0 - 0.1.
Approx dimensions 10.0 cm x 10.0 cm x 8.0 cm
Approximate total dry weight of soil = 854.0g.
The sample consisted of a mixture of clayish sandy soil, stones, sandstones, organic fibres and plant matter.
No asbestos detected.

Sample No. 21. ASET121221 / 124401 / 21. P23.1039.V12 - TP427 - 0.1 - 0.2.
Approx dimensions 10.0 cm x 10.0 cm x 7.4 cm
Approximate total dry weight of soil = 836.0g.
The sample consisted of a mixture of clayish sandy soil, stones, organic fibres, sandstones and plant matter.
No asbestos detected.

Sample No. 22. ASET121221 / 124401 / 22. P23.1039.V12 - TP433 - 0 - 0.1.
Approx dimensions 10.0 cm x 10.0 cm x 8.5 cm
Approximate total dry weight of soil = 1006.0g.
The sample consisted of a mixture of clayish sandy soil, stones, sandstones, organic fibres and plant matter.
No asbestos detected.

Sample No. 23. ASET121221 / 124401 / 23. P23.1039.V12 - TP435 - 0 - 0.5.
Approx dimensions 10.0 cm x 10.0 cm x 6.8 cm
Approximate total dry weight of soil = 893.0g.
The sample consisted of a mixture of sandy soil, stones, organic fibres, sandstones and plant matter.
No asbestos detected.

Sample No. 24. ASET121221 / 124401 / 24. P23.1039.V12 - TP437 - 0 - 0.8.
Approx dimensions 10.0 cm x 10.0 cm x 6.0 cm
Approximate total dry weight of soil = 788.0g.
The sample consisted of a mixture of sandy soil, stones, organic fibres, sandstones and plant matter.
No asbestos detected.

Sample No. 25. ASET121221 / 124401 / 25. P23.1039.V12 - TP439 - 0 - 0.1.
Approx dimensions 10.0 cm x 10.0 cm x 7.7 cm
Approximate total dry weight of soil = 885.0g.
The sample consisted of a mixture of clayish sandy soil, stones, organic fibres, sandstones and plant matter.
No asbestos detected.

Sample No. 26. ASET121221 / 124401 / 26. P23.1039.V12 - TP439 - 0.1 - 0.6.
Approx dimensions 10.0 cm x 10.0 cm x 8.2 cm
Approximate total dry weight of soil = 940.0g.
The sample consisted of a mixture of clayish sandy soil, stones, organic fibres and plant matter.
No asbestos detected.

Sample No. 27. ASET121221 / 124401 / 27. P23.1039.V12 - TP440 - 0 - 0.1.
Approx dimensions 10.0 cm x 10.0 cm x 7.2 cm
Approximate total dry weight of soil = 853.0g.
The sample consisted of a mixture of clayish sandy soil, stones, organic fibres and plant matter.
No asbestos detected.

Sample No. 28. ASET121221 / 124401 / 28. P23.1039.V12 - TP440 - 0.1 - 0.4.
Approx dimensions 10.0 cm x 10.0 cm x 7.2 cm
Approximate total dry weight of soil = 794.0g.
The sample consisted of a mixture of clayish sandy soil, stones, organic fibres, sandstones and plant matter.
No asbestos detected.

Sample No. 29. ASET121221 / 124401 / 29. P23.1039.V12 - TP442 - 0 - 0.1.
Approx dimensions 10.0 cm x 10.0 cm x 7.0 cm
Approximate total dry weight of soil = 781.0g.
The sample consisted of a mixture of clayish sandy soil, stones, sandstones, organic fibres and plant matter.
No asbestos detected.

Sample No. 30. ASET121221 / 124401 / 30. P23.1039.V12 - TP442 - 0.1 - 0.2.
Approx dimensions 10.0 cm x 10.0 cm x 6.8 cm
Approximate total dry weight of soil = 744.0g.
The sample consisted of a mixture of sandy soil, stones, organic fibres, sandstones and plant matter.
No asbestos detected.

Sample No. 31. ASET121221 / 124401 / 31. P23.1039.V12 - TP443 - 0 - 0.1.
Approx dimensions 10.0 cm x 10.0 cm x 6.0 cm
Approximate total dry weight of soil = 610.0g.
The sample consisted of a mixture of clayish sandy soil, stones, organic fibres, sandstones and plant matter.
No asbestos detected.

Sample No. 32. ASET121221 / 124401 / 32. P23.1039.V12 - TP443 - 0.1 - 0.3.
Approx dimensions 10.0 cm x 10.0 cm x 7.1 cm
Approximate total dry weight of soil = 746.0g.
The sample consisted of a mixture of clayish sandy soil, stones, organic fibres, sandstones and plant matter.
No asbestos detected.

Sample No. 33. ASET121221/ 124401/ 33. P23.1039.V12 - TP444 - 0 - 0.2.
Approx dimensions 10.0 cm x 10.0 cm x 7.6 cm
Approximate total dry weight of soil = 807.0g.
The sample consisted of a mixture of clayish sandy soil, stones, sandstones, organic fibres and plant matter.
No asbestos detected.

Sample No. 34. ASET121221 / 124401 / 34. P23.1039.V12 - TP445 - 0 - 0.4.
Approx dimensions 10.0 cm x 10.0 cm x 6.9 cm
Approximate total dry weight of soil = 697.0g.
The sample consisted of a mixture of clayish sandy soil, stones, sandstones, organic fibres and plant matter.
No asbestos detected.

Sample No. 35. ASET121221 / 124401 / 35. P23.1039.V12 - TP446 - 0 - 0.6.
Approx dimensions 10.0 cm x 10.0 cm x 5.5 cm
Approximate total dry weight of soil = 645.0g.
The sample consisted of a mixture of clayish sandy soil, stones, sandstones, organic fibres and plant matter.
No asbestos detected.

Sample No. 36. ASET121221 / 124401 / 36. P23.1039.V12 - TP447 - 0 - 0.4.
Approx dimensions 10.0 cm x 10.0 cm x 6.6 cm
Approximate total dry weight of soil = 675.0g.
The sample consisted of a mixture of clayish sandy soil, stones, organic fibres, sandstones and plant matter.
No asbestos detected.

Sample No. 37. ASET121221 / 124401 / 37. P23.1039.V12 - TP448 - 0 - 0.4.
Approx dimensions 10.0 cm x 10.0 cm x 6.0 cm
Approximate total dry weight of soil = 643.0g.
The sample consisted of a mixture of clayish sandy soil, stones, organic fibres, sandstones and plant matter.
No asbestos detected.

Sample No. 38. ASET121221 / 124401 / 38. P23.1039.V12 - TP450 - 0 - 0.1.
Approx dimensions 10.0 cm x 10.0 cm x 6.7 cm
Approximate total dry weight of soil = 756.0g.
The sample consisted of a mixture of clayish sandy soil, stones, sandstones, organic fibres and plant matter.
No asbestos detected.

Sample No. 39. ASET121221 / 124401 / 39. P23.1039.V12 - TP450 - 0.1 - 0.4.
Approx dimensions 10.0 cm x 10.0 cm x 7.0 cm
Approximate total dry weight of soil = 870.0g.
The sample consisted of a mixture of sandy soil, stones, organic fibres, sandstones and plant matter.
No asbestos detected.

Sample No. 40. ASET121221 / 124401 / 40. P23.1039.V12 - TP455 - 0 - 0.1.
Approx dimensions 10.0 cm x 10.0 cm x 7.6 cm
Approximate total dry weight of soil = 822.0g.
The sample consisted of a mixture of sandy soil, stones, sandstones, organic fibres and plant matter.
No asbestos detected.

Sample No. 41. ASET121221 / 124401 / 41. P23.1039.V12 - TP455 - 0.1 - 0.2.
Approx dimensions 10.0 cm x 10.0 cm x 7.0 cm
Approximate total dry weight of soil = 750.0g.
The sample consisted of a mixture of sandy soil, stones, organic fibres, sandstones and plant matter.
No asbestos detected.

Sample No. 42. ASET121221 / 124401 / 42. P23.1039.V12 - TP456 - 0.1 - 0.4.
Approx dimensions 10.0 cm x 10.0 cm x 7.8 cm
Approximate total dry weight of soil = 825.0g.
The sample consisted of a mixture of sandy soil, stones, organic fibres, sandstones and plant matter.
No asbestos detected.

Sample No. 43. ASET121221 / 124401 / 43. P23.1039.V12 - TP456 - 0 - 0.1.
Approx dimensions 10.0 cm x 10.0 cm x 7.0 cm
Approximate total dry weight of soil = 767.0g.
The sample consisted of a mixture of sandy soil, stones, organic fibres, glass pieces and plant matter.
No asbestos detected.

Sample No. 44. ASET121221 / 124401 / 44. P23.1039.V12 - TP456 - 0.4 - 0.6.
Approx dimensions 10.0 cm x 10.0 cm x 7.3 cm
Approximate total dry weight of soil = 759.0g.
The sample consisted of a mixture of sandy soil, stones, sandstones, organic fibres and plant matter.
No asbestos detected.

Sample No. 45. ASET121221 / 124401 / 45. P23.1039.V12 - TP457 - 0 - 0.1.
Approx dimensions 10.0 cm x 10.0 cm x 6.7 cm
Approximate total dry weight of soil = 724.0g.
The sample consisted of a mixture of sandy soil, stones, sandstones, organic fibres and plant matter.
No asbestos detected.

Sample No. 46. ASET121221 / 124401 / 46. P23.1039.V12 - TP457 - 0.1 - 0.3.
Approx dimensions 10.0 cm x 10.0 cm x 6.0 cm
Approximate total dry weight of soil = 633.0g.
The sample consisted of a mixture of clayish sandy soil, stones, organic fibres, sandstones and plant matter.
No asbestos detected.

Sample No. 47. ASET121221 / 124401 / 47. P23.1039.V12 - TP465 - 0 - 0.1.
Approx dimensions 10.0 cm x 10.0 cm x 5.8 cm
Approximate total dry weight of soil = 730.0g.
The sample consisted of a mixture of sandy soil, stones, organic fibres, sandstones and plant matter.
No asbestos detected.

Sample No. 48. ASET121221 / 124401 / 48. P23.1039.V12 - TP467 - 0 - 0.7.
Approx dimensions 10.0 cm x 10.0 cm x 6.6 cm
Approximate total dry weight of soil = 720.0g.
The sample consisted of a mixture of sandy soil, stones, soft plaster material, synthetic mineral fibres, glass pieces, paint flakes, ceramic tiles, wood chips, organic fibres and plant matter.
No asbestos detected.

Sample No. 49. ASET121221 / 124401 / 49. P23.1039.V12 - TP472 - 0 - 0.1.
Approx dimensions 10.0 cm x 10.0 cm x 7.0 cm
Approximate total dry weight of soil = 829.0g.
The sample consisted of a mixture of clayish sandy soil, stones, organic fibres, sandstones and plant matter.
No asbestos detected.

Sample No. 50. ASET121221 / 124401 / 50. P23.1039.V12 - TP472 - 0.1 - 0.3.
Approx dimensions 10.0 cm x 10.0 cm x 6.5 cm
Approximate total dry weight of soil = 768.0g.
The sample consisted of a mixture of sandy soil, stones, sandstones, organic fibres and plant matter.
No asbestos detected.

Sample No. 51. ASET121221 / 124401 / 51. P23.1039.V12 - TP473 - 0 - 0.1.
Approx dimensions 10.0 cm x 10.0 cm x 7.2 cm
Approximate total dry weight of soil = 871.0g.
The sample consisted of a mixture of sandy soil, stones, glass pieces, sandstones, ceramic tiles, organic fibres and plant matter.
No asbestos detected.

Sample No. 52. ASET121221 / 124401 / 52. P23.1039.V12 - TP473 - 0.3 - 0.4.
Approx dimensions 10.0 cm x 10.0 cm x 8.6 cm
The sample consisted of a mixture of clayish sandy soil, stones, fibres^ (AF), sandstones, organic fibres and plant matter.
Chrysotile^ (Approximate weight = 0.0002g) asbestos detected.
Approximate total dry weight of soil = 928.0g.
Approximate estimated weight of asbestos in soil in the form of AF = 0.0002g.
Approximate w/w percentage of asbestos in soil in the form of AF = 0.00002%.

Sample No. 53. ASET121221 / 124401 / 53. P23.1039.V12 - TP474 - 0 - 0.1.
Approx dimensions 10.0 cm x 10.0 cm x 8.5 cm
Approximate total dry weight of soil = 962.0g.
The sample consisted of a mixture of clayish sandy soil, stones, sandstones, brick like material, organic fibres and plant matter.
No asbestos detected.

Sample No. 54. ASET121221 / 124401 / 54. P23.1039.V12 - TP474 - 0.1 - 0.2.
Approx dimensions 10.0 cm x 10.0 cm x 8.0 cm
Approximate total dry weight of soil = 879.0g.
The sample consisted of a mixture of clayish sandy soil, stones, sandstones, organic fibres and plant matter.
No asbestos detected.

Sample No. 55. ASET121221 / 124401 / 55. P23.1039.V12 - TP513 - 0 - 0.1.
Approx dimensions 10.0 cm x 10.0 cm x 5.8 cm
Approximate total dry weight of soil = 734.0g.
The sample consisted of a mixture of sandy soil, stones, organic fibres, sandstones and plant matter.
No asbestos detected.

Sample No. 56. ASET121221 / 124401 / 56. P23.1039.V12 - TP534 - 0 - 0.1.
Approx dimensions 10.0 cm x 10.0 cm x 8.0 cm
Approximate total dry weight of soil = 887.0g.
The sample consisted of a mixture of sandy soil, stones, organic fibres and plant matter.
No asbestos detected.

Sample No. 57. ASET121221 / 124401 / 57. P23.1039.V12 - TP534 - 0.1 - 0.3.
Approx dimensions 10.0 cm x 10.0 cm x 7.6 cm
Approximate total dry weight of soil = 679.0g.
The sample consisted of a mixture of sandy soil, stones, organic fibres, sandstones and plant matter.
No asbestos detected.

Sample No. 58. ASET121221 / 124401 / 58. P23.1039.V12 - TP535 - 0 - 0.1.
Approx dimensions 10.0 cm x 10.0 cm x 7.2 cm
Approximate total dry weight of soil = 802.0g.
The sample consisted of a mixture of clayish sandy soil, stones, organic fibres and plant matter.
No asbestos detected.

Sample No. 59. ASET121221 / 124401 / 59. P23.1039.V12 - TP542 - 0 - 0.1.
Approx dimensions 10.0 cm x 10.0 cm x 8.6 cm
Approximate total dry weight of soil = 1036.0g.
The sample consisted of a mixture of sandy soil, stones, sandstones, organic fibres and plant matter.
No asbestos detected.

Sample No. 60. ASET121221 / 124401 / 60. P23.1039.V12 - TP543 - 0 - 0.1.
Approx dimensions 10.0 cm x 10.0 cm x 8.6 cm
Approximate total dry weight of soil = 909.0g.
The sample consisted of a mixture of sandy soil, stones, organic fibres, sandstones and plant matter.
No asbestos detected.

Sample No. 61. ASET121221 / 124401 / 61. P23.1039.V12 - TP545 - 0 - 0.7.
Approx dimensions 10.0 cm x 10.0 cm x 8.0 cm
Approximate total dry weight of soil = 831.0g.
The sample consisted of a mixture of sandy soil, stones, sandstones, organic fibres and plant matter.
No asbestos detected.

Sample No. 62. ASET121221 / 124401 / 62. P23.1039.V12 - TP546 - 0 - 0.1.
Approx dimensions 10.0 cm x 10.0 cm x 8.6 cm
Approximate total dry weight of soil = 1036.0g.
The sample consisted of a mixture of sandy soil, stones, organic fibres, sandstones and plant matter.
No asbestos detected.

Sample No. 63. ASET121221 / 124401 / 63. P23.1039.V12 - TP546 - 0.1 - 0.4.
Approx dimensions 10.0 cm x 10.0 cm x 8.4 cm
Approximate total dry weight of soil = 966.0g.
The sample consisted of a mixture of sandy soil, stones, sandstones, organic fibres and plant matter.
No asbestos detected.

Sample No. 64. ASET121221 / 124401 / 64. P23.1039.V12 - TP560 - 0 - 0.1.
Approx dimensions 10.0 cm x 10.0 cm x 6.6 cm
Approximate total dry weight of soil = 691.0g.
The sample consisted of a mixture of clayish sandy soil, stones, sandstones, organic fibres and plant matter.
No asbestos detected.

Sample No. 65. ASET121221 / 124401 / 65. P23.1039.V12 - TP560 - 0.1 - 0.5.
Approx dimensions 10.0 cm x 10.0 cm x 5.8 cm
Approximate total dry weight of soil = 636.0g.
The sample consisted of a mixture of sandy soil, stones, organic fibres, sandstones and plant matter.
No asbestos detected.

Sample No. 66. ASET121221 / 124401 / 66. P23.1039.V12 - TP562 - 0 - 0.1.
Approx dimensions 10.0 cm x 10.0 cm x 8.7 cm
Approximate total dry weight of soil = 994.0g.
The sample consisted of a mixture of sandy soil, stones, sandstones, organic fibres and plant matter.
No asbestos detected.

Sample No. 67. ASET121221 / 124401 / 67. P23.1039.V12 - TP564 - 0 - 0.1.
Approx dimensions 10.0 cm x 10.0 cm x 7.7 cm
Approximate total dry weight of soil = 850.0g.
The sample consisted of a mixture of sandy soil, stones, sandstones, organic fibres and plant matter.
No asbestos detected.

Sample No. 68. ASET121221 / 124401 / 68. P23.1039.V12 - TP565 - 0 - 0.1.
Approx dimensions 10.0 cm x 10.0 cm x 8.6 cm
Approximate total dry weight of soil = 881.0g.
The sample consisted of a mixture of clayish sandy soil, stones, organic fibres, sandstones and plant matter.
No asbestos detected.

Sample No. 69. ASET121221 / 124401 / 69. P23.1039.V12 - TP566 - 0 - 0.1.
Approx dimensions 10.0 cm x 10.0 cm x 6.1 cm
Approximate total dry weight of soil = 668.0g.
The sample consisted of a mixture of sandy soil, stones, organic fibres, sandstones and plant matter.
No asbestos detected.

Sample No. 70. ASET121221 / 124401 / 70. P23.1039.V12 - TP573 - 0 - 0.1.
Approx dimensions 10.0 cm x 10.0 cm x 6.2 cm
Approximate total dry weight of soil = 657.0g.
The sample consisted of a mixture of sandy soil, stones, sandstones, organic fibres and plant matter.
No asbestos detected.

Sample No. 71. ASET121221 / 124401 / 71. P23.1039.V12 - TP574 - 0 - 0.1.
Approx dimensions 10.0 cm x 10.0 cm x 6.7 cm
Approximate total dry weight of soil = 688.0g.
The sample consisted of a mixture of sandy soil, stones, organic fibres, sandstones and plant matter.
No asbestos detected.

Reported by,

Mahen De Silva. BSc, MSc, Grad Dip (Occ Hyg)
Occupational Hygienist / Approved Identifier.
Approved Signatory

Accredited for compliance with ISO/IEC 17025 - Testing.

This report is consistent with the analytical procedures and reporting recommendations in the Western Australia Guidelines for the Assessment Remediation and Management of Asbestos contaminated sites

in Western Australia and it also satisfies the requirements of the current NEPM Guidelines. NATA Accreditation does not cover the performance of this service.

Disclaimers;

The approx; weights given above can be used only as a guide. They do not represent absolute weights of each kind of asbestos, as it is impossible to extract all loose fibres from soil and other asbestos containing building material samples using this method. However above figures may be used as closest approximations to the exact values in each case. Estimation and/ or reporting of asbestos fibre weights in asbestos containing materials and soil is out of the Scope of the NATA Accreditation. NATA Accreditation only covers the qualitative part of the results reported. This weight disclaimer also covers weight / weight percentages if given.

ACM - Asbestos Containing Material - Products or materials that contain asbestos in an inert bound matrix such as cement or resin. Here taken to be sound material, even as fragments and not fitting through a 7mm X 7 mm sieve.

AF -Includes asbestos free fibres, small fibre bundles and also ACM fragments that pass through a 7mm X 7 mm sieve.

FA -Friable asbestos material such as severely weathered ACM, and asbestos in the form of loose fibrous material such as insulation products.

^ denotes loose fibres of relevant asbestos types detected in soil/dust.
*** denotes asbestos detected in ACM in bonded form.**
 # denotes friable asbestos as soft fibro plaster, fragments of ACM smaller than 7mm which are considered as friable and / or highly weathered ACM that will easily crumble.
λ denotes samples that have been analysed only in accordance to AS 4964 – 2004.
Ω Sample volume criteria of 500mL have not been satisfied.

The results contained in this report relate only to the sample/s submitted for testing. Australian Safer Environment & Technology accepts no responsibility for whether or not the submitted sample/s is/are representative. Results indicating "No asbestos detected" indicates a reporting limit specified in AS4964 -2004 which is 0.1g/ Kg (0.01%). Any amounts detected at assumed lower level than that would be reported, however those assumed lower levels may be treated as "No asbestos detected" as specified and recommended by A4964-2004. Trace / respirable level asbestos will be reported only when detected and trace analysis have been performed on each sample as required by AS4964-2004. When loose asbestos fibres/ fibre bundles are detected and reported that means they are larger handpicked fibres/ fibre bundles, and they do not represent respirable fibres. Dust/soil samples are always subjected to trace analysis except where the amounts involved are extremely minute and trace analysis is not possible to be carried out. When trace analysis is not performed on dust samples it will be indicated in the report that trace analysis has not been carried out due to the volume of the sample being extremely minute.

Estimation of asbestos weights involves the use of following assumptions;
Volume of each kind of Asbestos present in broken edges have been visually estimated and its been assumed that volumes remain similar throughout the binding matrix and those volumes are only approximate and not exact. Material densities have been assumed to be similar to commonly found similar materials and may not be exact.

All samples indicating "No asbestos detected" are assumed to be less than 0.001% for friable AF and FA portions detected and 0.01 % for ACM detected unless the approximate weight is given.

AUSTRALIAN SAFER ENVIRONMENT & TECHNOLOGY PTY LTD
ABN 36 088 095 112

Our ref : ASET121221 / 124401 / 72 - 135 out of 135
Your ref : DRM P23.1039.V12 – OSO Orchard Hills
NATA Accreditation No: 14484

25 September 2024

Development Risk Management Pty Ltd
37 Mount Pleasnat Avenue
Normanhurst NSW 2076

Attn: Mr Nalin De Silva

Accredited for compliance with ISO/IEC 17025 - Testing.

Dear Nalin

Asbestos Identification
This report presents the results of sixty four samples out of one hundred and thirty five samples, forwarded by Development Risk Management Pty Ltd on 19 September 2024, for analysis for asbestos.

1.Introduction: Sixty four samples out of one hundred and thirty five samples forwarded were examined and analysed for the presence of asbestos on 25 September 2024.

2. Methods: The samples were examined under a Stereo Microscope and selected fibres were analysed by Polarized Light Microscopy in conjunction with Dispersion Staining method **(Australian Standard AS 4964 - 2004 and Safer Environment Method 1 as the supplementary work instruction) (Qualitative Analysis only).**

The report also provides approximate weights and percentages, categories of asbestos forms appearing in the sample, such as **AF** (Asbestos Fines), **FA** (Friable Asbestos) and **ACM** (Asbestos Containing Material), also satisfying the requirements of the NEPM Guidelines.

3. Results : **Sample No. 72. ASET121221 / 124401 / 72. P23.1039.V12 - TP585 - 0 - 0.1.**
Approx dimensions 10.0 cm x 10.0 cm x 8.2 cm
Approximate total dry weight of soil = 917.0 g.
The sample consisted of a mixture of sandy soil, stone, sandstone, plant matter and organic fibres.
No asbestos detected.

Sample No. 73. ASET121221 / 124401 / 73. P23.1039.V12 - TP585 - 0.1 - 0.4.
Approx dimensions 10.0 cm x 10.0 cm x 9.4 cm
Approximate total dry weight of soil = 1052.0 g.
The sample consisted of a mixture of sandy soil, stone, sandstone, plant matter and organic fibres.
No asbestos detected.

Sample No. 74. ASET121221 / 124401 / 74. P23.1039.V12 - TP586 - 0.1 - 0.9.
Approx dimensions 10.0 cm x 10.0 cm x 7.2 cm
Approximate total dry weight of soil = 806.0 g.
The sample consisted of a mixture of sandy soil, stone, sandstone, plant matter and organic fibres.
No asbestos detected.

Sample No. 75. ASET121221 / 124401 / 75. P23.1039.V12 - TP586 - 0 - 0.1.
Approx dimensions 10.0 cm x 10.0 cm x 9.5 cm
Approximate total dry weight of soil = 1077.0 g.
The sample consisted of a mixture of sandy soil, stone, sandstone, plant matter, animal matter and organic fibres.
No asbestos detected.

Sample No. 76. ASET121221 / 124401 / 76. P23.1039.V12 - TP587 - 0 - 0.2.
Approx dimensions 10.0 cm x 10.0 cm x 9.1 cm
Approximate total dry weight of soil = 1010.0 g.
The sample consisted of a mixture of sandy soil, stone, sandstone, plant matter, animal matter and organic fibres.
No asbestos detected.

Sample No. 77. ASET121221 / 124401 / 77. P23.1039.V12 - TP587 - 0.2 - 0.7.
Approx dimensions 10.0 cm x 10.0 cm x 8.9 cm
Approximate total dry weight of soil = 982.0 g.
The sample consisted of a mixture of sandy soil, stone, sandstone, plant matter and organic fibres.
No asbestos detected.

Sample No. 78. ASET121221 / 124401 / 78. P23.1039.V12 - TP588 - 0 - 0.1.
Approx dimensions 10.0 cm x 10.0 cm x 8.8 cm
Approximate total dry weight of soil = 978.0 g.
The sample consisted of a mixture of sandy soil, stone, sandstone, plant matter and organic fibres.
No asbestos detected.

Sample No. 79. ASET121221 / 124401 / 79. P23.1039.V12 - TP588 - 0.1 - 0.8.
Approx dimensions 10.0 cm x 10.0 cm x 9.4 cm
Approximate total dry weight of soil = 1050.0 g.
The sample consisted of a mixture of sandy soil, stone, sandstone, plant matter and organic fibres.
No asbestos detected.

Sample No. 80. ASET121221 / 124401 / 80. P23.1039.V12 - TP588 - 0.8 - 1.1.
Approx dimensions 10.0 cm x 10.0 cm x 7.7 cm
Approximate total dry weight of soil = 850.0 g.
The sample consisted of a mixture of sandy soil, stone, sandstone, plant matter and organic fibres.
No asbestos detected.

Sample No. 81. ASET121221 / 124401 / 81. P23.1039.V12 - TP590 - 0 - 0.1.
Approx dimensions 10.0 cm x 10.0 cm x 7.4 cm
Approximate total dry weight of soil = 815.0 g.
The sample consisted of a mixture of sandy soil, stone, sandstone, plant matter and organic fibres.
No asbestos detected.

Sample No. 82. ASET121221 / 124401 / 82. P23.1039.V12 -TP590 - 0.1 - 0.3.
Approx dimensions 10.0 cm x 10.0 cm x 6.8 cm
Approximate total dry weight of soil = 755.0 g.
The sample consisted of a mixture of sandy soil, stone, sandstone, plant matter and organic fibres.
No asbestos detected.

Sample No. 83. ASET121221 / 124401 / 83. P23.1039.V12 - TP591 - 0.0 - 0.5.
Approx dimensions 10.0 cm x 10.0 cm x 6.1 cm
Approximate total dry weight of soil = 674.0 g.
The sample consisted of a mixture of sandy soil, stone, sandstone, plant matter, animal matter and organic fibres.
No asbestos detected.

Sample No. 84. ASET121221 / 124401 / 84. P23.1039.V12 - TP592 - 0.1 - 0.4.
Approx dimensions 10.0 cm x 10.0 cm x 6.2 cm
Approximate total dry weight of soil = 690.0 g.
The sample consisted of a mixture of sandy soil, stone, sandstone, plant matter and organic fibres.
No asbestos detected.

Sample No. 85. ASET121221 / 124401 / 85. P23.1039.V12 - TP592 - 0 - 0.1.
Approx dimensions 10.0 cm x 10.0 cm x 6.3 cm
Approximate total dry weight of soil = 704.0 g.
The sample consisted of a mixture of sandy soil, stone, sandstone, plant matter and organic fibres.
No asbestos detected.

Sample No. 86. ASET121221 / 124401 / 86. P23.1039.V12 - TP592 - 0.1 - 0.4.
Approx dimensions 10.0 cm x 10.0 cm x 6.5 cm
Approximate total dry weight of soil = 721.0 g.
The sample consisted of a mixture of sandy soil, stone, sandstone, plant matter and organic fibres.
No asbestos detected.

Sample No. 87. ASET121221 / 124401 / 87. P23.1039.V12 - TP596 - 0.1 - 0.6.
Approx dimensions 10.0 cm x 10.0 cm x 8.0 cm
Approximate total dry weight of soil = 887.0 g.
The sample consisted of a mixture of clayish sandy soil, stone, sandstone, plant matter and organic fibres.
No asbestos detected.

Sample No. 88. ASET121221 / 124401 / 88. P23.1039.V12 - TP596 - 0 - 0.1.
Approx dimensions 10.0 cm x 10.0 cm x 8.6 cm
Approximate total dry weight of soil = 952.0 g.
The sample consisted of a mixture of clayish sandy soil, stone, sandstone, plant matter and organic fibres.
No asbestos detected.

Sample No. 89. ASET121221 / 124401 / 89. P23.1039.V12 - TP598 - 0 - 0.5.
Approx dimensions 10.0 cm x 10.0 cm x 6.3 cm
Approximate total dry weight of soil = 709.0 g.
The sample consisted of a mixture of clayish sandy soil, stone, sandstone, plant matter and organic fibres.
No asbestos detected.

Sample No. 90. ASET121221 / 124401 / 90. P23.1039.V12 - TP599 - 0 - 0.7.
Approx dimensions 10.0 cm x 10.0 cm x 6.3 cm
Approximate total dry weight of soil = 712.0 g.
The sample consisted of a mixture of sandy soil, stone, sandstone, plant matter and organic fibres.
No asbestos detected.

Sample No. 91. ASET121221 / 124401 / 91. P23.1039.V12 - TP602 - 0- 0.6.
Approx dimensions 10.0 cm x 10.0 cm x 8.0 cm
Approximate total dry weight of soil = 884.0 g.
The sample consisted of a mixture of clayish sandy soil, stone, sandstone, plant matter and organic fibres.
No asbestos detected.

Sample No. 92. ASET121221 / 124401 / 92. P23.1039.V12 - TP603 - 0 - 0.1.
Approx dimensions 10.0 cm x 10.0 cm x 7.3 cm
Approximate total dry weight of soil = 799.0 g.
The sample consisted of a mixture of sandy soil, stone, sandstone, plant matter and organic fibres.
No asbestos detected.

Sample No. 93. ASET121221 / 124401 / 93. P23.1039.V12 - TP603 - 0.1 - 0.3.
Approx dimensions 10.0 cm x 10.0 cm x 7.3 cm
Approximate total dry weight of soil = 818.0 g.
The sample consisted of a mixture of sandy soil, stone, sandstone, plant matter and organic fibres.
No asbestos detected.

Sample No. 94. ASET121221 / 124401 / 94. P23.1039.V12 - TP604 - 0 - 0.1.
Approx dimensions 10.0 cm x 10.0 cm x 6.8 cm
Approximate total dry weight of soil = 751.0 g.
The sample consisted of a mixture of clayish sandy soil, stone, sandstone, glass pieces, paint flakes, plant matter, organic fibres and synthetic mineral fibres.
No asbestos detected.

Sample No. 95. ASET121221 / 124401 / 95. P23.1039.V12 - TP604 - 0.1 - 0.3.
Approx dimensions 10.0 cm x 10.0 cm x 8.8 cm
The sample consisted of a mixture of clayish sandy soil, stone, sandstone, glass pieces, a fragment of fibre cement# (AF), plant matter, organic fibres and synthetic mineral fibres.
Chrysotile# (Approximate estimated weight = 0.0025 g) asbestos detected.
Approximate total dry weight of soil = 970.0 g.
Approximate estimated weight of asbestos in soil in the form of AF = 0.0025 g.
Approximate w/w percentage of asbestos in soil in the form of AF = 0.0003 %.

Sample No. 96. ASET121221 / 124401 / 96. P23.1039.V12 - TP604 - 0.3 - 0.4.
Approx dimensions 10.0 cm x 10.0 cm x 6.0 cm
Approximate total dry weight of soil = 668.0 g.
The sample consisted of a mixture of sandy soil, stone, sandstone, plant matter and organic fibres.
No asbestos detected.

Sample No. 97. ASET121221 / 124401 / 97. P23.1039.V12 - TP605 - 0 - 0.1.
Approx dimensions 10.0 cm x 10.0 cm x 9.6 cm
Approximate total dry weight of soil = 1084.0 g.
The sample consisted of a mixture of sandy soil, stone, sandstone, brick-like pieces, ceramic-like pieces, plant matter and organic fibres.
No asbestos detected.

Sample No. 98. ASET121221 / 124401 / 98. P23.1039.V12 - TP605 - 0.1 - 0.2.
Approx dimensions 10.0 cm x 10.0 cm x 9.2 cm
Approximate total dry weight of soil = 1027.0 g.
The sample consisted of a mixture of sandy soil, stone, sandstone, plant matter and organic fibres.
No asbestos detected.

Sample No. 99. ASET121221 / 124401 / 99. P23.1039.V12 - TP408 - 0 - 0.1.
Approx dimensions 10.0 cm x 10.0 cm x 7.8 cm
Approximate total dry weight of soil = 862.0 g.
The sample consisted of a mixture of clayish sandy soil, stone, sandstone, plant matter, animal matter and organic fibres.
No asbestos detected.

Sample No. 100. ASET121221 / 124401 / 100. P23.1039.V12 - TP606 - 0.1 - 0.4.
Approx dimensions 10.0 cm x 10.0 cm x 7.1 cm
Approximate total dry weight of soil = 839.0g.
The sample consisted of a mixture of sandy soil, stones, sandstones, organic fibres and plant matter.
No asbestos detected.

Sample No. 101. ASET121221 / 124401 / 101. P23.1039.V12 - TP606 - 0.4 - 0.6.
Approx dimensions 10.0 cm x 10.0 cm x 6.8 cm
Approximate total dry weight of soil = 727.0g.
The sample consisted of a mixture of sandy soil, stones, sandstones, organic fibres and plant matter.
No asbestos detected.

Sample No. 102. ASET121221 / 124401 / 102. P23.1039.V12 - TP607 - 0.1 - 0.5.
Approx dimensions 10.0 cm x 10.0 cm x 6.8 cm
Approximate total dry weight of soil = 747.0g. The sample consisted of a mixture of sandy soil, stones, organic fibres, sandstones and plant matter.
No asbestos detected.

Sample No. 103. ASET121221 / 124401 / 103. P23.1039.V12 - TP607 - 0 - 0.1.
Approx dimensions 10.0 cm x 10.0 cm x 8.3 cm
Approximate total dry weight of soil = 1029.0g.
The sample consisted of a mixture of sandy soil, stones, sandstones, organic fibres and plant matter.
No asbestos detected.

Sample No. 104. ASET121221 / 124401 / 104. P23.1039.V12 - TP610 - 0.1 - 0.7.
Approx dimensions 10.0 cm x 10.0 cm x 8.0 cm
Approximate total dry weight of soil = 983.0g.
The sample consisted of a mixture of sandy soil, stones, brick like material, metal pieces, glass pieces, sandstones, organic fibres, paint flakes and plant matter.
No asbestos detected.

Sample No. 105. ASET121221 / 124401 / 105. P23.1039.V12 - TP611 - 0 - 0.1.
Approx dimensions 10.0 cm x 10.0 cm x 7.9 cm
Approximate total dry weight of soil = 882.0g.
The sample consisted of a mixture of sandy soil, stones, paint flakes, organic fibres, sandstones and plant matter.
No asbestos detected.

Sample No. 106. ASET121221 / 124401 / 106. P23.1039.V12 - TP611 - 0.1 - 0.4.
Approx dimensions 10.0 cm x 10.0 cm x 8.0 cm
Approximate total dry weight of soil = 925.0g.
The sample consisted of a mixture of sandy soil, stones, sandstones, organic fibres and plant matter.
No asbestos detected.

Sample No. 107. ASET121221 / 124401 / 107. P23.1039.V12 - TP611 - 0.4 - 0.8.
Approx dimensions 10.0 cm x 10.0 cm x 7.2 cm
Approximate total dry weight of soil = 789.0g.
The sample consisted of a mixture of clayish sandy soil, stones, sandstones, organic fibres and plant matter.
No asbestos detected.

Sample No. 108. ASET121221 / 124401 / 108. P23.1039.V12 - TP613 - 0.1 - 0.4.
Approx dimensions 10.0 cm x 10.0 cm x 6.2 cm
Approximate total dry weight of soil = 697.0g.
The sample consisted of a mixture of sandy soil, stones, sandstones, organic fibres and plant matter.
No asbestos detected.

Sample No. 109. ASET121221 / 124401 / 109. P23.1039.V12 - TP614 - 0.1 - 0.3.
Approx dimensions 10.0 cm x 10.0 cm x 7.9 cm
Approximate total dry weight of soil = 860.0g.
The sample consisted of a mixture of sandy soil, stones, sandstones, organic fibres and plant matter.
No asbestos detected.

Sample No. 110. ASET121221 / 124401 / 110. P23.1039.V12 - TP614 - 0.3 - 0.5.
Approx dimensions 10.0 cm x 10.0 cm x 6.2 cm
Approximate total dry weight of soil = 676.0g.
The sample consisted of a mixture of sandy soil, stones, sandstones, organic fibres and plant matter.
No asbestos detected.

Sample No. 111. ASET121221 / 124401 / 111. P23.1039.V12 - TP615 - 0.1 - 0.4.
Approx dimensions 10.0 cm x 10.0 cm x 8.7 cm
Approximate total dry weight of soil = 1033.0g.
The sample consisted of a mixture of sandy soil, stones, sandstones, glass pieces, organic fibres and plant matter.
No asbestos detected.

Sample No. 112. ASET121221 / 124401 / 112. P23.1039.V12 - TP616 - 0.1 - 0.3.
Approx dimensions 10.0 cm x 10.0 cm x 8.0 cm
Approximate total dry weight of soil = 906.0g.
The sample consisted of a mixture of sandy soil, stones, sandstones, organic fibres and plant matter.
No asbestos detected.

Sample No. 113. ASET121221 / 124401 / 113. P23.1039.V12 - TP617 - 0 - 0.1.
Approx dimensions 10.0 cm x 10.0 cm x 7.3 cm
Approximate total dry weight of soil = 797.0g.
The sample consisted of a mixture of sandy soil, stones, sandstones, organic fibres and plant matter.
No asbestos detected.

Sample No. 114. ASET121221 / 124401 / 114. P23.1039.V12 - TP617 - 0.1 - 0.3.
Approx dimensions 10.0 cm x 10.0 cm x 7.3 cm
Approximate total dry weight of soil = 782.0g.
The sample consisted of a mixture of sandy soil, stones, sandstones, ceramic tiles, organic fibres and plant matter.
No asbestos detected.

Sample No. 115. ASET121221 / 124401 / 115. P23.1039.V12 - TP618 - 0 - 0.5.
Approx dimensions 10.0 cm x 10.0 cm x 8.0 cm
Approximate total dry weight of soil = 813.0g.
The sample consisted of a mixture of sandy soil, stones, sandstones, paint flakes, synthetic mineral fibres, organic fibres and plant matter.
No asbestos detected.

Sample No. 116. ASET121221 / 124401 / 116. P23.1039.V12 - TP619 - 0 - 0.7.
Approx dimensions 10.0 cm x 10.0 cm x 8.6 cm
Approximate total dry weight of soil = 1052.0g.
The sample consisted of a mixture of sandy soil, stones, sandstones, glass pieces, brick like material, organic fibres and plant matter.
No asbestos detected.

Sample No. 117. ASET121221 / 124401 / 117. P23.1039.V12 - TP627 - 0 - 0.1.
Approx dimensions 10.0 cm x 10.0 cm x 8.2 cm
Approximate total dry weight of soil = 972.0g.
The sample consisted of a mixture of sandy soil, stones, sandstones, organic fibres and plant matter.
No asbestos detected.

Sample No. 118. ASET121221 / 124401 / 118. P23.1039.V12 - TP627 - 0.1 - 0.3.
Approx dimensions 10.0 cm x 10.0 cm x 7.9 cm
Approximate total dry weight of soil = 808.0g.
The sample consisted of a mixture of sandy soil, stones, sandstones, organic fibres and plant matter.
No asbestos detected.

Sample No. 119. ASET121221 / 124401 / 119. P23.1039.V12 - TP628 - 0.1 - 0.2.
Approx dimensions 10.0 cm x 10.0 cm x 8.1 cm
Approximate total dry weight of soil = 872.0g.
The sample consisted of a mixture of sandy soil, stones, sandstones, ceramic tiles, soft mastic like material, organic fibres and plant matter.
No asbestos detected.

Sample No. 120. ASET121221 / 124401 / 120. P23.1039.V12 - TP628 - 0.2 - 0.4.
Approx dimensions 10.0 cm x 10.0 cm x 7.3 cm
Approximate total dry weight of soil = 785.0g.
The sample consisted of a mixture of sandy soil, stones, sandstones, organic fibres and plant matter.
No asbestos detected.

Sample No. 121. ASET121221 / 124401 / 121. P23.1039.V12 - TP629 - 0.1 - 0.4.
Approx dimensions 10.0 cm x 10.0 cm x 6.3 cm
Approximate total dry weight of soil = 707.0g.
The sample consisted of a mixture of sandy soil, stones, sandstones, organic fibres and plant matter.
No asbestos detected.

Sample No. 122. ASET121221 / 124401 / 122. P23.1039.V12 - TP632 - 0 - 0.1.
Approx dimensions 10.0 cm x 10.0 cm x 7.7 cm
Approximate total dry weight of soil = 851.0g.
The sample consisted of a mixture of sandy soil, stones, sandstones, glass pieces, organic fibres and plant matter.
No asbestos detected.

Sample No. 123. ASET121221 / 124401 / 123. P23.1039.V12 - TP632 - 0.1 - 0.5.
Approx dimensions 10.0 cm x 10.0 cm x 7.2 cm
Approximate total dry weight of soil = 853.0g.
The sample consisted of a mixture of sandy soil, stones, sandstones, organic fibres and plant matter.
No asbestos detected.

Sample No. 124. ASET121221 / 124401 / 124. P23.1039.V12 - TP642 - 0 - 0.1.
Approx dimensions 10.0 cm x 10.0 cm x 6.0 cm
Approximate total dry weight of soil = 705.0g.
The sample consisted of a mixture of sandy soil, stones, sandstones, organic fibres and plant matter.
No asbestos detected.

Sample No. 125. ASET121221 / 124401 / 125. P23.1039.V12 - TP642 - 0.1 - 0.3.
Approx dimensions 10.0 cm x 10.0 cm x 6.1 cm
Approximate total dry weight of soil = 728.0g.
The sample consisted of a mixture of sandy soil, stones, sandstones, organic fibres and plant matter.
No asbestos detected.

Sample No. 126. ASET121221 / 124401 / 126. P23.1039.V12 - TP648 - 0.05 - 0.2.
Approx dimensions 10.0 cm x 10.0 cm x 6.8 cm
Approximate total dry weight of soil = 757.0g.
The sample consisted of a mixture of sandy soil, stones, sandstones, organic fibres and plant matter.
No asbestos detected.

Sample No. 127. ASET121221 / 124401 / 127. P23.1039.V12 - TP651 - 0 - 0.1.
Approx dimensions 10.0 cm x 10.0 cm x 8.5 cm
Approximate total dry weight of soil = 1003.0g.
The sample consisted of a mixture of sandy soil, stones, sandstones, organic fibres and plant matter.
No asbestos detected.

λ Sample No. 128. ASET121221 / 124401 / 128. P23.1039.V12 - PACM1.
Approx dimensions 5.8 cm x 5.4 cm x 0.5 cm
The sample consisted of a fragment of a fibre cement material.
Chrysotile asbestos detected.
Approximate total weight of fibre cement = 19.2g.

λ Sample No. 129. ASET121221 / 124401 / 129. P23.1039.V12 - PACM2.
Approx dimensions 5.0 cm x 3.6 cm x 0.5 cm
The sample consisted of a fragment of a fibre cement material.
Chrysotile asbestos detected.
Approximate total weight of fibre cement = 11.2g.

λ Sample No. 130. ASET121221 / 124401 / 130. P23.1039.V12 - PACM3.
Approx dimensions 4.5 cm x 3.2 cm x 0.5 cm
The sample consisted of a fragment of a fibre cement material.
Chrysotile asbestos detected.
Approximate total weight of fibre cement = 7.8g.

λ Sample No. 131. ASET121221 / 124401 / 131. P23.1039.V12 - PACM4.
Approx dimensions 6.3 cm x 3.0 cm x 0.5 cm
The sample consisted of a fragment of a fibre cement material.
Chrysotile asbestos detected.
Approximate total weight of fibre cement = 10.0g.

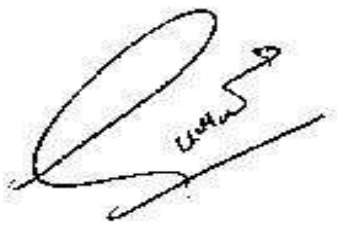
λ Sample No. 132. ASET121221 / 124401 / 132. P23.1039.V12 - PACM5.
Approx dimensions 6.8 cm x 4.5 cm x 0.5 cm
The sample consisted of a fragment of a fibre cement material.
Chrysotile asbestos detected.
Approximate total weight of fibre cement = 26.4g.

λ Sample No. 133. ASET121221/ 124401/ 133. P23.1039.V12 - PACM6.
Approx dimensions 12.0 cm x 8.7 cm x 0.5 cm
The sample consisted of a fragment of a fibre cement material.
Chrysotile asbestos detected.
Approximate total weight of fibre cement = 29.5g.

Sample No. 134. ASET121221 / 124401 / 134. P23.1039.V12 - SS2.
Approx dimensions 10.0 cm x 10.0 cm x 8.2 cm
Approximate total dry weight of soil = 894.0g.
The sample consisted of a mixture of sandy soil, stones, sandstones, organic fibres and plant matter.
No asbestos detected.

Sample No. 135. ASET121221 / 124401 / 135. P23.1039.V12 - SS3.
Approx dimensions 10.0 cm x 10.0 cm x 7.8 cm
Approximate total dry weight of soil = 858.0g.
The sample consisted of a mixture of sandy soil, stones, sandstones, organic fibres and plant matter.
No asbestos detected.

Reported by,



Mahen De Silva. BSc, MSc, Grad Dip (Occ Hyg)
Occupational Hygienist / Approved Identifier.
Approved Signatory

NATA
WORLD RECOGNISED ACCREDITATION

Accredited for compliance with ISO/IEC 17025 - Testing.

This report is consistent with the analytical procedures and reporting recommendations in the Western Australia Guidelines for the Assessment Remediation and Management of Asbestos contaminated sites in Western Australia and it also satisfies the requirements of the current NEPM Guidelines. NATA Accreditation does not cover the performance of this service.

Disclaimers;

The approx; weights given above can be used only as a guide. They do not represent absolute weights of each kind of asbestos, as it is impossible to extract all loose fibres from soil and other asbestos containing building material samples using this method. However above figures may be used as closest approximations to the exact values in each case. Estimation and/ or reporting of asbestos fibre weights in asbestos containing materials and soil is out of the Scope of the NATA Accreditation. NATA Accreditation only covers the qualitative part of the results reported. This weight disclaimer also covers weight / weight percentages if given.

ACM - Asbestos Containing Material - Products or materials that contain asbestos in an inert bound matrix such as cement or resin. Here taken to be sound material, even as fragments and not fitting through a 7mm X 7 mm sieve.

AF -Includes asbestos free fibres, small fibre bundles and also ACM fragments that pass through a 7mm X 7 mm sieve.

FA -Friable asbestos material such as severely weathered ACM, and asbestos in the form of loose fibrous material such as insulation products.

^ denotes loose fibres of relevant asbestos types detected in soil/dust.
*** denotes asbestos detected in ACM in bonded form.**
 # denotes friable asbestos as soft fibro plaster, fragments of ACM smaller than 7mm which are considered as friable and / or highly weathered ACM that will easily crumble.
λ denotes samples that have been analysed only in accordance to AS 4964 – 2004.
Ω Sample volume criteria of 500mL have not been satisfied.

The results contained in this report relate only to the sample/s submitted for testing. Australian Safer Environment & Technology accepts no responsibility for whether or not the submitted sample/s is/are representative. Results indicating "No asbestos detected" indicates a reporting limit specified in AS4964 -2004 which is 0.1g/ Kg (0.01%). Any amounts detected at assumed lower level than that would be reported, however those assumed lower levels may be treated as "No asbestos detected" as specified and recommended by A4964-2004. Trace / respirable level asbestos will be reported only when detected and trace analysis have been performed on each sample as required by AS4964-2004. When loose asbestos fibres/ fibre bundles are detected and reported that means they are larger handpicked fibres/ fibre bundles, and they do not represent respirable fibres. Dust/soil samples are always subjected to trace analysis except where the amounts involved are extremely minute and trace analysis is not possible to be carried out. When trace analysis is not performed on dust samples it will be indicated in the report that trace analysis has not been carried out due to the volume of the sample being extremely minute.

Estimation of asbestos weights involves the use of following assumptions;
Volume of each kind of Asbestos present in broken edges have been visually estimated and its been assumed that volumes remain similar throughout the binding matrix and those volumes are only approximate and not exact. Material densities have been assumed to be similar to commonly found similar materials and may not be exact.

All samples indicating "No asbestos detected" are assumed to be less than 0.001% for friable AF and FA portions detected and 0.01 % for ACM detected unless the approximate weight is given.

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	Rahabar Alam
Client	DEVELOPMENT RISK MANAGEMENT PTY LTD
Address	37 MOUNT PLEASANT AVENUE NORMANHURST NSW 2076
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Email	rahabar_alam@drm.ltd
Project	**DRM P23.1039.V12 - Orchard Hills**
Order Number	**DRM P23.1039.V12**
Samples	24

LABORATORY DETAILS

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Address	Unit 16, 33 Maddox St Alexandria NSW 2015
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SGS Reference	**SE270919 R0**
Date Received	11/9/2024
Date Reported	19/9/2024

COMMENTS

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

SIGNATORIES

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VOC's in Soil [AN433] Tested: 13/9/2024

PARAMETER	UOM	LOR	TP591_0-0.5 SOIL - 10/9/2024 SE270919.001	TP592_0-0.1 SOIL - 10/9/2024 SE270919.002	TP597_0-0.1 SOIL - 11/9/2024 SE270919.003	TP597_0.2-0.4 SOIL - 11/9/2024 SE270919.004	TP598_0-0.5 SOIL - 11/9/2024 SE270919.005
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes*	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX*	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1

PARAMETER	UOM	LOR	TP599_0.1-0.7 0-0.8 SOIL - 11/9/2024 SE270919.006	TP602_0-0.6 SOIL - 11/9/2024 SE270919.007	TP611_0-0.1 SOIL - 10/9/2024 SE270919.008	TP613_0.1-0.4 SOIL - 11/9/2024 SE270919.009	TP613_0.6-0.8 SOIL - 11/9/2024 SE270919.010
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes*	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX*	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1

PARAMETER	UOM	LOR	TP618_0-0.5 SOIL - 11/9/2024 SE270919.011	TP619_0-0.7 SOIL - 11/9/2024 SE270919.012	TP625_0-0.5 SOIL - 11/9/2024 SE270919.013	TP626_0-0.1 SOIL - 11/9/2024 SE270919.014	TP627_0.3-0.5 SOIL - 11/9/2024 SE270919.015
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes*	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX*	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1

PARAMETER	UOM	LOR	TP634_0-0.1 SOIL - 10/9/2024 SE270919.016	TP638_0-0.1 SOIL - 10/9/2024 SE270919.017	TP642_0.3-0.5 SOIL - 10/9/2024 SE270919.018	TP642_0.1-0.3 SOIL - 10/9/2024 SE270919.019	TP645_0-0.1 SOIL - 10/9/2024 SE270919.020
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes*	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX*	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1

VOC's in Soil [AN433] Tested: 13/9/2024 (continued)

PARAMETER	UOM	LOR	TP648_0-0.05 SOIL - 10/9/2024 SE270919.021	SS1 SOIL - 11/9/2024 SE270919.024
Benzene	mg/kg	0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1
Total Xylenes*	mg/kg	0.3	<0.3	<0.3
Total BTEX*	mg/kg	0.6	<0.6	<0.6
Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 13/9/2024

PARAMETER	UOM	LOR	TP591_0-0.5 SOIL - 10/9/2024 SE270919.001	TP592_0-0.1 SOIL - 10/9/2024 SE270919.002	TP597_0-0.1 SOIL - 11/9/2024 SE270919.003	TP597_0.2-0.4 SOIL - 11/9/2024 SE270919.004	TP598_0-0.5 SOIL - 11/9/2024 SE270919.005
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	TP599_0.1-0.7 0-0.8 SOIL - 11/9/2024 SE270919.006	TP602_0-0.6 SOIL - 11/9/2024 SE270919.007	TP611_0-0.1 SOIL - 10/9/2024 SE270919.008	TP613_0.1-0.4 SOIL - 11/9/2024 SE270919.009	TP613_0.6-0.8 SOIL - 11/9/2024 SE270919.010
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	TP618_0-0.5 SOIL - 11/9/2024 SE270919.011	TP619_0-0.7 SOIL - 11/9/2024 SE270919.012	TP625_0-0.5 SOIL - 11/9/2024 SE270919.013	TP626_0-0.1 SOIL - 11/9/2024 SE270919.014	TP627_0.3-0.5 SOIL - 11/9/2024 SE270919.015
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	TP634_0-0.1 SOIL - 10/9/2024 SE270919.016	TP638_0-0.1 SOIL - 10/9/2024 SE270919.017	TP642_0.3-0.5 SOIL - 10/9/2024 SE270919.018	TP642_0.1-0.3 SOIL - 10/9/2024 SE270919.019	TP645_0-0.1 SOIL - 10/9/2024 SE270919.020
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	TP648_0-0.05 SOIL - 10/9/2024 SE270919.021	SS1 SOIL - 11/9/2024 SE270919.024
TRH C6-C9	mg/kg	20	<20	<20
Benzene (F0)	mg/kg	0.1	<0.1	<0.1
TRH C6-C10	mg/kg	25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 13/9/2024

PARAMETER	UOM	LOR	TP591_0-0.5 SOIL - 10/9/2024 SE270919.001	TP592_0-0.1 SOIL - 10/9/2024 SE270919.002	TP597_0-0.1 SOIL - 11/9/2024 SE270919.003	TP597_0.2-0.4 SOIL - 11/9/2024 SE270919.004	TP598_0-0.5 SOIL - 11/9/2024 SE270919.005
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	**56**	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	**81**	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	**140**	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	TP599_0.1-0.7 0-0.8 SOIL - 11/9/2024 SE270919.006	TP602_0-0.6 SOIL - 11/9/2024 SE270919.007	TP611_0-0.1 SOIL - 10/9/2024 SE270919.008	TP613_0.1-0.4 SOIL - 11/9/2024 SE270919.009	TP613_0.6-0.8 SOIL - 11/9/2024 SE270919.010
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	TP618_0-0.5 SOIL - 11/9/2024 SE270919.011	TP619_0-0.7 SOIL - 11/9/2024 SE270919.012	TP625_0-0.5 SOIL - 11/9/2024 SE270919.013	TP626_0-0.1 SOIL - 11/9/2024 SE270919.014	TP627_0.3-0.5 SOIL - 11/9/2024 SE270919.015
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	**58**
TRH C29-C36	mg/kg	45	<45	**52**	**64**	<45	**76**
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	**120**
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	**130**
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 13/9/2024 (continued)

PARAMETER	UOM	LOR	TP634_0-0.1 SOIL - 10/9/2024 SE270919.016	TP638_0-0.1 SOIL - 10/9/2024 SE270919.017	TP642_0.3-0.5 SOIL - 10/9/2024 SE270919.018	TP642_0.1-0.3 SOIL - 10/9/2024 SE270919.019	TP645_0-0.1 SOIL - 10/9/2024 SE270919.020
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	**53**
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	**95**
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	**120**
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	**150**
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	TP648_0-0.05 SOIL - 10/9/2024 SE270919.021	SS1 SOIL - 11/9/2024 SE270919.024
TRH C10-C14	mg/kg	20	<20	**120**
TRH C15-C28	mg/kg	45	**70**	**140**
TRH C29-C36	mg/kg	45	**84**	**370**
TRH C37-C40	mg/kg	100	<100	**540**
TRH >C10-C16	mg/kg	25	<25	**130**
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	**130**
TRH >C16-C34 (F3)	mg/kg	90	**120**	**300**
TRH >C34-C40 (F4)	mg/kg	120	<120	**750**
TRH C10-C36 Total	mg/kg	110	**150**	**630**
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	**1200**

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 13/9/2024

PARAMETER	UOM	LOR	TP591_0-0.5 SOIL - 10/9/2024 SE270919.001	TP592_0-0.1 SOIL - 10/9/2024 SE270919.002	TP597_0-0.1 SOIL - 11/9/2024 SE270919.003	TP597_0.2-0.4 SOIL - 11/9/2024 SE270919.004	TP598_0-0.5 SOIL - 11/9/2024 SE270919.005
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	**0.4**
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	**0.5**
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	**0.2**
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	**0.2**
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	**0.2**
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	**0.2**
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	**0.3**
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	**0.2**
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	**0.3**
Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	**0.3**
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	**0.4**
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	**0.4**
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	**2.4**
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	**2.4**

PARAMETER	UOM	LOR	TP599_0.1-0.7 0-0.8 SOIL - 11/9/2024 SE270919.006	TP602_0-0.6 SOIL - 11/9/2024 SE270919.007	TP611_0-0.1 SOIL - 10/9/2024 SE270919.008	TP613_0.1-0.4 SOIL - 11/9/2024 SE270919.009	TP613_0.6-0.8 SOIL - 11/9/2024 SE270919.010
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 13/9/2024 (continued)

PARAMETER	UOM	LOR	TP618_0-0.5 SOIL - 11/9/2024 SE270919.011	TP619_0-0.7 SOIL - 11/9/2024 SE270919.012	TP625_0-0.5 SOIL - 11/9/2024 SE270919.013	TP626_0-0.1 SOIL - 11/9/2024 SE270919.014	TP627_0.3-0.5 SOIL - 11/9/2024 SE270919.015
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PARAMETER	UOM	LOR	TP634_0-0.1 SOIL - 10/9/2024 SE270919.016	TP638_0-0.1 SOIL - 10/9/2024 SE270919.017	TP642_0.3-0.5 SOIL - 10/9/2024 SE270919.018	TP642_0.1-0.3 SOIL - 10/9/2024 SE270919.019	TP645_0-0.1 SOIL - 10/9/2024 SE270919.020
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 13/9/2024 (continued)

PARAMETER	UOM	LOR	TP648_0-0.05 SOIL - 10/9/2024 SE270919.021	DUP1 SOIL - 10/9/2024 SE270919.022	DUP2 SOIL - 11/9/2024 SE270919.023	SS1 SOIL - 11/9/2024 SE270919.024
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.1**
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.3**
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	**0.2**	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	**0.2**	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	**0.2**	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	**0.2**	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	**0.1**	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	**0.1**	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.2**
Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	**1.1**	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	**1.1**	<0.8	<0.8	<0.8

OC Pesticides in Soil [AN420] Tested: 13/9/2024

PARAMETER	UOM	LOR	TP597_0-0.1 SOIL - 11/9/2024 SE270919.003	TP598_0-0.5 SOIL - 11/9/2024 SE270919.005	TP599_0.1-0.7 0-0.8 SOIL - 11/9/2024 SE270919.006	TP613_0.1-0.4 SOIL - 11/9/2024 SE270919.009	TP619_0-0.7 SOIL - 11/9/2024 SE270919.012
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane (gamma BHC)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE*	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD*	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT*	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1
Total OC VIC EPA	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 13/9/2024 (continued)

PARAMETER	UOM	LOR	TP638_0-0.1 SOIL - 10/9/2024 SE270919.017
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1
Lindane (gamma BHC)	mg/kg	0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1
Aldrin	mg/kg	0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1
o,p'-DDE*	mg/kg	0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2
Endrin	mg/kg	0.2	<0.2
o,p'-DDD*	mg/kg	0.1	<0.1
o,p'-DDT*	mg/kg	0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1
Endrin aldehyde	mg/kg	0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1
Endrin ketone	mg/kg	0.1	<0.1
Isodrin	mg/kg	0.1	<0.1
Mirex	mg/kg	0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1
Total OC VIC EPA	mg/kg	1	<1

PCBs in Soil [AN420] Tested: 13/9/2024

PARAMETER	UOM	LOR	TP597_0-0.1 SOIL - 11/9/2024 SE270919.003	TP598_0-0.5 SOIL - 11/9/2024 SE270919.005	TP599_0.1-0.7 0-0.8 SOIL - 11/9/2024 SE270919.006	TP613_0.1-0.4 SOIL - 11/9/2024 SE270919.009	TP619_0-0.7 SOIL - 11/9/2024 SE270919.012
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	TP638_0-0.1 SOIL - 10/9/2024 SE270919.017
Arochlor 1016	mg/kg	0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 13/9/2024

PARAMETER	UOM	LOR	TP591_0-0.5 SOIL - 10/9/2024 SE270919.001	TP592_0-0.1 SOIL - 10/9/2024 SE270919.002	TP597_0-0.1 SOIL - 11/9/2024 SE270919.003	TP597_0.2-0.4 SOIL - 11/9/2024 SE270919.004	TP598_0-0.5 SOIL - 11/9/2024 SE270919.005
Arsenic, As	mg/kg	1	140	8	3	6	8
Cadmium, Cd	mg/kg	0.3	1.4	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	68	12	9.7	14	29
Copper, Cu	mg/kg	0.5	120	31	35	19	9.1
Lead, Pb	mg/kg	1	22	20	20	11	16
Nickel, Ni	mg/kg	0.5	50	16	21	3.2	14
Zinc, Zn	mg/kg	2	130	71	81	17	45

PARAMETER	UOM	LOR	TP599_0.1-0.7 0-0.8 SOIL - 11/9/2024 SE270919.006	TP602_0-0.6 SOIL - 11/9/2024 SE270919.007	TP611_0-0.1 SOIL - 10/9/2024 SE270919.008	TP613_0.1-0.4 SOIL - 11/9/2024 SE270919.009	TP613_0.6-0.8 SOIL - 11/9/2024 SE270919.010
Arsenic, As	mg/kg	1	4	6	13	5	5
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	12	15	47	16	13
Copper, Cu	mg/kg	0.5	13	15	11	6.8	16
Lead, Pb	mg/kg	1	8	19	30	15	8
Nickel, Ni	mg/kg	0.5	3.4	9.0	14	6.1	5.9
Zinc, Zn	mg/kg	2	16	90	93	16	13

PARAMETER	UOM	LOR	TP618_0-0.5 SOIL - 11/9/2024 SE270919.011	TP619_0-0.7 SOIL - 11/9/2024 SE270919.012	TP625_0-0.5 SOIL - 11/9/2024 SE270919.013	TP626_0-0.1 SOIL - 11/9/2024 SE270919.014	TP627_0.3-0.5 SOIL - 11/9/2024 SE270919.015
Arsenic, As	mg/kg	1	5	20	17	6	6
Cadmium, Cd	mg/kg	0.3	<0.3	0.4	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	16	55	67	13	12
Copper, Cu	mg/kg	0.5	17	13	16	10	9.6
Lead, Pb	mg/kg	1	12	77	39	21	22
Nickel, Ni	mg/kg	0.5	6.3	12	33	7.9	5.6
Zinc, Zn	mg/kg	2	46	240	120	22	21

PARAMETER	UOM	LOR	TP634_0-0.1 SOIL - 10/9/2024 SE270919.016	TP638_0-0.1 SOIL - 10/9/2024 SE270919.017	TP642_0.3-0.5 SOIL - 10/9/2024 SE270919.018	TP642_0.1-0.3 SOIL - 10/9/2024 SE270919.019	TP645_0-0.1 SOIL - 10/9/2024 SE270919.020
Arsenic, As	mg/kg	1	7	9	5	8	6
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	20	18	14	24	14
Copper, Cu	mg/kg	0.5	14	9.0	14	9.7	14
Lead, Pb	mg/kg	1	25	28	8	26	20
Nickel, Ni	mg/kg	0.5	17	6.5	7.5	7.8	7.7
Zinc, Zn	mg/kg	2	42	29	12	13	48

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 13/9/2024 (continued)

PARAMETER	UOM	LOR	TP648_0-0.05 SOIL - 10/9/2024 SE270919.021	DUP1 SOIL - 10/9/2024 SE270919.022	DUP2 SOIL - 11/9/2024 SE270919.023	SS1 SOIL - 11/9/2024 SE270919.024
Arsenic, As	mg/kg	1	2	6	6	6
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	11	12	14	12
Copper, Cu	mg/kg	0.5	20	14	8.9	13
Lead, Pb	mg/kg	1	28	20	20	13
Nickel, Ni	mg/kg	0.5	6.0	7.3	5.4	6.1
Zinc, Zn	mg/kg	2	73	58	21	31

Mercury in Soil [AN312] Tested: 13/9/2024

PARAMETER	UOM	LOR	TP591_0-0.5 SOIL - 10/9/2024 SE270919.001	TP592_0-0.1 SOIL - 10/9/2024 SE270919.002	TP597_0-0.1 SOIL - 11/9/2024 SE270919.003	TP597_0.2-0.4 SOIL - 11/9/2024 SE270919.004	TP598_0-0.5 SOIL - 11/9/2024 SE270919.005
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	TP599_0.1-0.7 0-0.8 SOIL - 11/9/2024 SE270919.006	TP602_0-0.6 SOIL - 11/9/2024 SE270919.007	TP611_0-0.1 SOIL - 10/9/2024 SE270919.008	TP613_0.1-0.4 SOIL - 11/9/2024 SE270919.009	TP613_0.6-0.8 SOIL - 11/9/2024 SE270919.010
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	TP618_0-0.5 SOIL - 11/9/2024 SE270919.011	TP619_0-0.7 SOIL - 11/9/2024 SE270919.012	TP625_0-0.5 SOIL - 11/9/2024 SE270919.013	TP626_0-0.1 SOIL - 11/9/2024 SE270919.014	TP627_0.3-0.5 SOIL - 11/9/2024 SE270919.015
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	TP634_0-0.1 SOIL - 10/9/2024 SE270919.016	TP638_0-0.1 SOIL - 10/9/2024 SE270919.017	TP642_0.3-0.5 SOIL - 10/9/2024 SE270919.018	TP642_0.1-0.3 SOIL - 10/9/2024 SE270919.019	TP645_0-0.1 SOIL - 10/9/2024 SE270919.020
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	TP648_0-0.05 SOIL - 10/9/2024 SE270919.021	DUP1 SOIL - 10/9/2024 SE270919.022	DUP2 SOIL - 11/9/2024 SE270919.023	SS1 SOIL - 11/9/2024 SE270919.024
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05

Moisture Content [AN002] Tested: 13/9/2024

PARAMETER	UOM	LOR	TP591_0-0.5 SOIL - 10/9/2024 SE270919.001	TP592_0-0.1 SOIL - 10/9/2024 SE270919.002	TP597_0-0.1 SOIL - 11/9/2024 SE270919.003	TP597_0.2-0.4 SOIL - 11/9/2024 SE270919.004	TP598_0-0.5 SOIL - 11/9/2024 SE270919.005
% Moisture	%w/w	1	9.3	18.5	8.1	19.4	10.9

PARAMETER	UOM	LOR	TP599_0.1-0.7 0-0.8 SOIL - 11/9/2024 SE270919.006	TP602_0-0.6 SOIL - 11/9/2024 SE270919.007	TP611_0-0.1 SOIL - 10/9/2024 SE270919.008	TP613_0.1-0.4 SOIL - 11/9/2024 SE270919.009	TP613_0.6-0.8 SOIL - 11/9/2024 SE270919.010
% Moisture	%w/w	1	11.5	13.7	29.4	15.1	17.1

PARAMETER	UOM	LOR	TP618_0-0.5 SOIL - 11/9/2024 SE270919.011	TP619_0-0.7 SOIL - 11/9/2024 SE270919.012	TP625_0-0.5 SOIL - 11/9/2024 SE270919.013	TP626_0-0.1 SOIL - 11/9/2024 SE270919.014	TP627_0.3-0.5 SOIL - 11/9/2024 SE270919.015
% Moisture	%w/w	1	13.0	9.8	16.9	17.6	17.3

PARAMETER	UOM	LOR	TP634_0-0.1 SOIL - 10/9/2024 SE270919.016	TP638_0-0.1 SOIL - 10/9/2024 SE270919.017	TP642_0.3-0.5 SOIL - 10/9/2024 SE270919.018	TP642_0.1-0.3 SOIL - 10/9/2024 SE270919.019	TP645_0-0.1 SOIL - 10/9/2024 SE270919.020
% Moisture	%w/w	1	19.3	18.7	19.1	15.8	13.9

PARAMETER	UOM	LOR	TP648_0-0.05 SOIL - 10/9/2024 SE270919.021	DUP1 SOIL - 10/9/2024 SE270919.022	DUP2 SOIL - 11/9/2024 SE270919.023	SS1 SOIL - 11/9/2024 SE270919.024
% Moisture	%w/w	1	1.2	13.7	19.9	16.5

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

FOOTNOTES

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

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

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

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

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

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

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

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

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

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STATEMENT OF QA/QC PERFORMANCE

SE270919 R0

CLIENT DETAILS

Contact	Rahabar Alam
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Email	rahabar_alam@drm.ltd
Project	**DRM P23.1039.V12 - Orchard Hills**
Order Number	**DRM P23.1039.V12**
Samples	24

LABORATORY DETAILS

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SGS Reference	**SE270919 R0**
Date Received	11 Sep 2024
Date Reported	19 Sep 2024

COMMENTS

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

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

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

Surrogate	VOC's in Soil	4 items
	Volatile Petroleum Hydrocarbons in Soil	4 items
Duplicate	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	1 item
Matrix Spike	TRH (Total Recoverable Hydrocarbons) in Soil	2 items

SAMPLE SUMMARY

Sample counts by matrix	24 Soil	Type of documentation received	COC
Date documentation received	12/09/2024@12:36F	Samples received in good order	Yes
Samples received without headspace	Yes	Sample temperature upon receipt	1.2°C
Sample container provider	SGS	Turnaround time requested	Standard
Samples received in correct containers	Yes	Sufficient sample for analysis	Yes
Sample cooling method	Ice	Samples clearly labelled	Yes
Complete documentation received	Yes		

HOLDING TIME SUMMARY

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

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

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

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

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP591_0-0.5	SE270919.001	LB323648	10 Sep 2024	11 Sep 2024	08 Oct 2024	13 Sep 2024	08 Oct 2024	17 Sep 2024
TP592_0-0.1	SE270919.002	LB323648	10 Sep 2024	11 Sep 2024	08 Oct 2024	13 Sep 2024	08 Oct 2024	17 Sep 2024
TP597_0-0.1	SE270919.003	LB323648	11 Sep 2024	11 Sep 2024	09 Oct 2024	13 Sep 2024	09 Oct 2024	17 Sep 2024
TP597_0.2-0.4	SE270919.004	LB323648	11 Sep 2024	11 Sep 2024	09 Oct 2024	13 Sep 2024	09 Oct 2024	17 Sep 2024
TP598_0-0.5	SE270919.005	LB323648	11 Sep 2024	11 Sep 2024	09 Oct 2024	13 Sep 2024	09 Oct 2024	17 Sep 2024
TP599_0.1-0.7 0-0.8	SE270919.006	LB323648	11 Sep 2024	11 Sep 2024	09 Oct 2024	13 Sep 2024	09 Oct 2024	17 Sep 2024
TP602_0-0.6	SE270919.007	LB323648	11 Sep 2024	11 Sep 2024	09 Oct 2024	13 Sep 2024	09 Oct 2024	17 Sep 2024
TP611_0-0.1	SE270919.008	LB323648	10 Sep 2024	11 Sep 2024	08 Oct 2024	13 Sep 2024	08 Oct 2024	17 Sep 2024
TP613_0.1-0.4	SE270919.009	LB323648	11 Sep 2024	11 Sep 2024	09 Oct 2024	13 Sep 2024	09 Oct 2024	17 Sep 2024
TP613_0.6-0.8	SE270919.010	LB323648	11 Sep 2024	11 Sep 2024	09 Oct 2024	13 Sep 2024	09 Oct 2024	17 Sep 2024
TP618_0-0.5	SE270919.011	LB323648	11 Sep 2024	11 Sep 2024	09 Oct 2024	13 Sep 2024	09 Oct 2024	17 Sep 2024
TP619_0-0.7	SE270919.012	LB323648	11 Sep 2024	11 Sep 2024	09 Oct 2024	13 Sep 2024	09 Oct 2024	17 Sep 2024
TP625_0-0.5	SE270919.013	LB323648	11 Sep 2024	11 Sep 2024	09 Oct 2024	13 Sep 2024	09 Oct 2024	17 Sep 2024
TP626_0-0.1	SE270919.014	LB323648	11 Sep 2024	11 Sep 2024	09 Oct 2024	13 Sep 2024	09 Oct 2024	17 Sep 2024
TP627_0.3-0.5	SE270919.015	LB323648	11 Sep 2024	11 Sep 2024	09 Oct 2024	13 Sep 2024	09 Oct 2024	17 Sep 2024
TP634_0-0.1	SE270919.016	LB323648	10 Sep 2024	11 Sep 2024	08 Oct 2024	13 Sep 2024	08 Oct 2024	17 Sep 2024
TP638_0-0.1	SE270919.017	LB323648	10 Sep 2024	11 Sep 2024	08 Oct 2024	13 Sep 2024	08 Oct 2024	17 Sep 2024
TP642_0.3-0.5	SE270919.018	LB323648	10 Sep 2024	11 Sep 2024	08 Oct 2024	13 Sep 2024	08 Oct 2024	17 Sep 2024
TP642_0.1-0.3	SE270919.019	LB323648	10 Sep 2024	11 Sep 2024	08 Oct 2024	13 Sep 2024	08 Oct 2024	17 Sep 2024
TP645_0-0.1	SE270919.020	LB323680	10 Sep 2024	11 Sep 2024	08 Oct 2024	13 Sep 2024	08 Oct 2024	16 Sep 2024
TP648_0-0.05	SE270919.021	LB323680	10 Sep 2024	11 Sep 2024	08 Oct 2024	13 Sep 2024	08 Oct 2024	16 Sep 2024
DUP1	SE270919.022	LB323680	10 Sep 2024	11 Sep 2024	08 Oct 2024	13 Sep 2024	08 Oct 2024	16 Sep 2024
DUP2	SE270919.023	LB323680	11 Sep 2024	11 Sep 2024	09 Oct 2024	13 Sep 2024	09 Oct 2024	16 Sep 2024
SS1	SE270919.024	LB323680	11 Sep 2024	11 Sep 2024	09 Oct 2024	13 Sep 2024	09 Oct 2024	16 Sep 2024

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

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP591_0-0.5	SE270919.001	LB323646	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	18 Sep 2024	16 Sep 2024
TP592_0-0.1	SE270919.002	LB323646	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	18 Sep 2024	16 Sep 2024
TP597_0-0.1	SE270919.003	LB323646	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	18 Sep 2024	16 Sep 2024
TP597_0.2-0.4	SE270919.004	LB323646	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	18 Sep 2024	16 Sep 2024
TP598_0-0.5	SE270919.005	LB323646	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	18 Sep 2024	16 Sep 2024
TP599_0.1-0.7 0-0.8	SE270919.006	LB323646	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	18 Sep 2024	16 Sep 2024
TP602_0-0.6	SE270919.007	LB323646	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	18 Sep 2024	16 Sep 2024
TP611_0-0.1	SE270919.008	LB323646	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	18 Sep 2024	16 Sep 2024
TP613_0.1-0.4	SE270919.009	LB323646	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	18 Sep 2024	16 Sep 2024
TP613_0.6-0.8	SE270919.010	LB323646	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	18 Sep 2024	16 Sep 2024
TP618_0-0.5	SE270919.011	LB323646	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	18 Sep 2024	16 Sep 2024
TP619_0-0.7	SE270919.012	LB323646	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	18 Sep 2024	16 Sep 2024
TP625_0-0.5	SE270919.013	LB323646	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	18 Sep 2024	16 Sep 2024
TP626_0-0.1	SE270919.014	LB323646	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	18 Sep 2024	16 Sep 2024
TP627_0.3-0.5	SE270919.015	LB323646	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	18 Sep 2024	16 Sep 2024
TP634_0-0.1	SE270919.016	LB323646	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	18 Sep 2024	16 Sep 2024
TP638_0-0.1	SE270919.017	LB323646	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	18 Sep 2024	16 Sep 2024
TP642_0.3-0.5	SE270919.018	LB323646	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	18 Sep 2024	16 Sep 2024
TP642_0.1-0.3	SE270919.019	LB323646	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	18 Sep 2024	16 Sep 2024
TP645_0-0.1	SE270919.020	LB323677	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	18 Sep 2024	16 Sep 2024
TP648_0-0.05	SE270919.021	LB323677	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	18 Sep 2024	16 Sep 2024
DUP1	SE270919.022	LB323677	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	18 Sep 2024	16 Sep 2024
DUP2	SE270919.023	LB323677	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	18 Sep 2024	16 Sep 2024
SS1	SE270919.024	LB323677	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	18 Sep 2024	16 Sep 2024

OC Pesticides in Soil — Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP591_0-0.5	SE270919.001	LB323644	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	23 Oct 2024	18 Sep 2024
TP592_0-0.1	SE270919.002	LB323644	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	23 Oct 2024	18 Sep 2024
TP597_0-0.1	SE270919.003	LB323644	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	23 Oct 2024	17 Sep 2024
TP597_0.2-0.4	SE270919.004	LB323644	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	23 Oct 2024	18 Sep 2024
TP598_0-0.5	SE270919.005	LB323644	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	23 Oct 2024	17 Sep 2024
TP599_0.1-0.7 0-0.8	SE270919.006	LB323644	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	23 Oct 2024	17 Sep 2024
TP602_0-0.6	SE270919.007	LB323644	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	23 Oct 2024	18 Sep 2024

HOLDING TIME SUMMARY

SE270919 R0

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

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

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

OC Pesticides in Soil (continued) — Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP611_0-0.1	SE270919.008	LB323644	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	23 Oct 2024	18 Sep 2024
TP613_0.1-0.4	SE270919.009	LB323644	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	23 Oct 2024	17 Sep 2024
TP613_0.6-0.8	SE270919.010	LB323644	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	23 Oct 2024	18 Sep 2024
TP618_0-0.5	SE270919.011	LB323644	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	23 Oct 2024	18 Sep 2024
TP619_0-0.7	SE270919.012	LB323644	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	23 Oct 2024	17 Sep 2024
TP625_0-0.5	SE270919.013	LB323644	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	23 Oct 2024	18 Sep 2024
TP626_0-0.1	SE270919.014	LB323644	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	23 Oct 2024	18 Sep 2024
TP627_0.3-0.5	SE270919.015	LB323644	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	23 Oct 2024	18 Sep 2024
TP634_0-0.1	SE270919.016	LB323644	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	23 Oct 2024	18 Sep 2024
TP638_0-0.1	SE270919.017	LB323644	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	23 Oct 2024	17 Sep 2024
TP642_0.3-0.5	SE270919.018	LB323644	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	23 Oct 2024	18 Sep 2024
TP642_0.1-0.3	SE270919.019	LB323644	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	23 Oct 2024	18 Sep 2024
TP645_0-0.1	SE270919.020	LB323675	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	23 Oct 2024	18 Sep 2024
TP648_0-0.05	SE270919.021	LB323675	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	23 Oct 2024	18 Sep 2024
DUP1	SE270919.022	LB323675	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	23 Oct 2024	18 Sep 2024
DUP2	SE270919.023	LB323675	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	23 Oct 2024	18 Sep 2024
SS1	SE270919.024	LB323675	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	23 Oct 2024	18 Sep 2024

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

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP591_0-0.5	SE270919.001	LB323644	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	23 Oct 2024	17 Sep 2024
TP592_0-0.1	SE270919.002	LB323644	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	23 Oct 2024	17 Sep 2024
TP597_0-0.1	SE270919.003	LB323644	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	23 Oct 2024	17 Sep 2024
TP597_0.2-0.4	SE270919.004	LB323644	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	23 Oct 2024	17 Sep 2024
TP598_0-0.5	SE270919.005	LB323644	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	23 Oct 2024	17 Sep 2024
TP599_0.1-0.7 0-0.8	SE270919.006	LB323644	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	23 Oct 2024	17 Sep 2024
TP602_0-0.6	SE270919.007	LB323644	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	23 Oct 2024	17 Sep 2024
TP611_0-0.1	SE270919.008	LB323644	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	23 Oct 2024	17 Sep 2024
TP613_0.1-0.4	SE270919.009	LB323644	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	23 Oct 2024	17 Sep 2024
TP613_0.6-0.8	SE270919.010	LB323644	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	23 Oct 2024	17 Sep 2024
TP618_0-0.5	SE270919.011	LB323644	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	23 Oct 2024	17 Sep 2024
TP619_0-0.7	SE270919.012	LB323644	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	23 Oct 2024	17 Sep 2024
TP625_0-0.5	SE270919.013	LB323644	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	23 Oct 2024	17 Sep 2024
TP626_0-0.1	SE270919.014	LB323644	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	23 Oct 2024	17 Sep 2024
TP627_0.3-0.5	SE270919.015	LB323644	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	23 Oct 2024	17 Sep 2024
TP634_0-0.1	SE270919.016	LB323644	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	23 Oct 2024	17 Sep 2024
TP638_0-0.1	SE270919.017	LB323644	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	23 Oct 2024	17 Sep 2024
TP642_0.3-0.5	SE270919.018	LB323644	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	23 Oct 2024	17 Sep 2024
TP642_0.1-0.3	SE270919.019	LB323644	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	23 Oct 2024	17 Sep 2024
TP645_0-0.1	SE270919.020	LB323675	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	23 Oct 2024	17 Sep 2024
TP648_0-0.05	SE270919.021	LB323675	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	23 Oct 2024	17 Sep 2024
DUP1	SE270919.022	LB323675	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	23 Oct 2024	17 Sep 2024
DUP2	SE270919.023	LB323675	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	23 Oct 2024	17 Sep 2024
SS1	SE270919.024	LB323675	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	23 Oct 2024	17 Sep 2024

PCBs in Soil — Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP591_0-0.5	SE270919.001	LB323644	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	23 Oct 2024	18 Sep 2024
TP592_0-0.1	SE270919.002	LB323644	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	23 Oct 2024	18 Sep 2024
TP597_0-0.1	SE270919.003	LB323644	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	23 Oct 2024	17 Sep 2024
TP597_0.2-0.4	SE270919.004	LB323644	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	23 Oct 2024	18 Sep 2024
TP598_0-0.5	SE270919.005	LB323644	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	23 Oct 2024	17 Sep 2024
TP599_0.1-0.7 0-0.8	SE270919.006	LB323644	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	23 Oct 2024	17 Sep 2024
TP602_0-0.6	SE270919.007	LB323644	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	23 Oct 2024	18 Sep 2024
TP611_0-0.1	SE270919.008	LB323644	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	23 Oct 2024	18 Sep 2024
TP613_0.1-0.4	SE270919.009	LB323644	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	23 Oct 2024	17 Sep 2024
TP613_0.6-0.8	SE270919.010	LB323644	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	23 Oct 2024	18 Sep 2024
TP618_0-0.5	SE270919.011	LB323644	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	23 Oct 2024	18 Sep 2024
TP619_0-0.7	SE270919.012	LB323644	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	23 Oct 2024	17 Sep 2024
TP625_0-0.5	SE270919.013	LB323644	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	23 Oct 2024	18 Sep 2024
TP626_0-0.1	SE270919.014	LB323644	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	23 Oct 2024	18 Sep 2024

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

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

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

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

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP627_0.3-0.5	SE270919.015	LB323644	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	23 Oct 2024	18 Sep 2024
TP634_0-0.1	SE270919.016	LB323644	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	23 Oct 2024	18 Sep 2024
TP638_0-0.1	SE270919.017	LB323644	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	23 Oct 2024	17 Sep 2024
TP642_0.3-0.5	SE270919.018	LB323644	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	23 Oct 2024	18 Sep 2024
TP642_0.1-0.3	SE270919.019	LB323644	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	23 Oct 2024	18 Sep 2024
TP645_0-0.1	SE270919.020	LB323675	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	23 Oct 2024	18 Sep 2024
TP648_0-0.05	SE270919.021	LB323675	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	23 Oct 2024	18 Sep 2024
DUP1	SE270919.022	LB323675	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	23 Oct 2024	18 Sep 2024
DUP2	SE270919.023	LB323675	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	23 Oct 2024	18 Sep 2024
SS1	SE270919.024	LB323675	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	23 Oct 2024	18 Sep 2024

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

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP591_0-0.5	SE270919.001	LB323647	10 Sep 2024	11 Sep 2024	09 Mar 2025	13 Sep 2024	09 Mar 2025	16 Sep 2024
TP592_0-0.1	SE270919.002	LB323647	10 Sep 2024	11 Sep 2024	09 Mar 2025	13 Sep 2024	09 Mar 2025	16 Sep 2024
TP597_0-0.1	SE270919.003	LB323647	11 Sep 2024	11 Sep 2024	10 Mar 2025	13 Sep 2024	10 Mar 2025	16 Sep 2024
TP597_0.2-0.4	SE270919.004	LB323647	11 Sep 2024	11 Sep 2024	10 Mar 2025	13 Sep 2024	10 Mar 2025	16 Sep 2024
TP598_0-0.5	SE270919.005	LB323647	11 Sep 2024	11 Sep 2024	10 Mar 2025	13 Sep 2024	10 Mar 2025	16 Sep 2024
TP599_0.1-0.7 0-0.8	SE270919.006	LB323647	11 Sep 2024	11 Sep 2024	10 Mar 2025	13 Sep 2024	10 Mar 2025	16 Sep 2024
TP602_0-0.6	SE270919.007	LB323647	11 Sep 2024	11 Sep 2024	10 Mar 2025	13 Sep 2024	10 Mar 2025	16 Sep 2024
TP611_0-0.1	SE270919.008	LB323647	10 Sep 2024	11 Sep 2024	09 Mar 2025	13 Sep 2024	09 Mar 2025	16 Sep 2024
TP613_0.1-0.4	SE270919.009	LB323647	11 Sep 2024	11 Sep 2024	10 Mar 2025	13 Sep 2024	10 Mar 2025	16 Sep 2024
TP613_0.6-0.8	SE270919.010	LB323647	11 Sep 2024	11 Sep 2024	10 Mar 2025	13 Sep 2024	10 Mar 2025	16 Sep 2024
TP618_0-0.5	SE270919.011	LB323647	11 Sep 2024	11 Sep 2024	10 Mar 2025	13 Sep 2024	10 Mar 2025	16 Sep 2024
TP619_0-0.7	SE270919.012	LB323647	11 Sep 2024	11 Sep 2024	10 Mar 2025	13 Sep 2024	10 Mar 2025	16 Sep 2024
TP625_0-0.5	SE270919.013	LB323647	11 Sep 2024	11 Sep 2024	10 Mar 2025	13 Sep 2024	10 Mar 2025	16 Sep 2024
TP626_0-0.1	SE270919.014	LB323647	11 Sep 2024	11 Sep 2024	10 Mar 2025	13 Sep 2024	10 Mar 2025	16 Sep 2024
TP627_0.3-0.5	SE270919.015	LB323647	11 Sep 2024	11 Sep 2024	10 Mar 2025	13 Sep 2024	10 Mar 2025	16 Sep 2024
TP634_0-0.1	SE270919.016	LB323647	10 Sep 2024	11 Sep 2024	09 Mar 2025	13 Sep 2024	09 Mar 2025	16 Sep 2024
TP638_0-0.1	SE270919.017	LB323647	10 Sep 2024	11 Sep 2024	09 Mar 2025	13 Sep 2024	09 Mar 2025	16 Sep 2024
TP642_0.3-0.5	SE270919.018	LB323647	10 Sep 2024	11 Sep 2024	09 Mar 2025	13 Sep 2024	09 Mar 2025	16 Sep 2024
TP642_0.1-0.3	SE270919.019	LB323647	10 Sep 2024	11 Sep 2024	09 Mar 2025	13 Sep 2024	09 Mar 2025	16 Sep 2024
TP645_0-0.1	SE270919.020	LB323679	10 Sep 2024	11 Sep 2024	09 Mar 2025	13 Sep 2024	09 Mar 2025	16 Sep 2024
TP648_0-0.05	SE270919.021	LB323679	10 Sep 2024	11 Sep 2024	09 Mar 2025	13 Sep 2024	09 Mar 2025	16 Sep 2024
DUP1	SE270919.022	LB323679	10 Sep 2024	11 Sep 2024	09 Mar 2025	13 Sep 2024	09 Mar 2025	16 Sep 2024
DUP2	SE270919.023	LB323679	11 Sep 2024	11 Sep 2024	10 Mar 2025	13 Sep 2024	10 Mar 2025	16 Sep 2024
SS1	SE270919.024	LB323679	11 Sep 2024	11 Sep 2024	10 Mar 2025	13 Sep 2024	10 Mar 2025	16 Sep 2024

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

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP591_0-0.5	SE270919.001	LB323644	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	23 Oct 2024	18 Sep 2024
TP592_0-0.1	SE270919.002	LB323644	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	23 Oct 2024	18 Sep 2024
TP597_0-0.1	SE270919.003	LB323644	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	23 Oct 2024	18 Sep 2024
TP597_0.2-0.4	SE270919.004	LB323644	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	23 Oct 2024	18 Sep 2024
TP598_0-0.5	SE270919.005	LB323644	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	23 Oct 2024	18 Sep 2024
TP599_0.1-0.7 0-0.8	SE270919.006	LB323644	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	23 Oct 2024	18 Sep 2024
TP602_0-0.6	SE270919.007	LB323644	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	23 Oct 2024	18 Sep 2024
TP611_0-0.1	SE270919.008	LB323644	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	23 Oct 2024	18 Sep 2024
TP613_0.1-0.4	SE270919.009	LB323644	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	23 Oct 2024	18 Sep 2024
TP613_0.6-0.8	SE270919.010	LB323644	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	23 Oct 2024	18 Sep 2024
TP618_0-0.5	SE270919.011	LB323644	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	23 Oct 2024	18 Sep 2024
TP619_0-0.7	SE270919.012	LB323644	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	23 Oct 2024	18 Sep 2024
TP625_0-0.5	SE270919.013	LB323644	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	23 Oct 2024	18 Sep 2024
TP626_0-0.1	SE270919.014	LB323644	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	23 Oct 2024	19 Sep 2024
TP627_0.3-0.5	SE270919.015	LB323644	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	23 Oct 2024	19 Sep 2024
TP634_0-0.1	SE270919.016	LB323644	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	23 Oct 2024	19 Sep 2024
TP638_0-0.1	SE270919.017	LB323644	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	23 Oct 2024	19 Sep 2024
TP642_0.3-0.5	SE270919.018	LB323644	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	23 Oct 2024	19 Sep 2024
TP642_0.1-0.3	SE270919.019	LB323644	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	23 Oct 2024	19 Sep 2024
TP645_0-0.1	SE270919.020	LB323675	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	23 Oct 2024	17 Sep 2024
TP648_0-0.05	SE270919.021	LB323675	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	23 Oct 2024	17 Sep 2024

HOLDING TIME SUMMARY

SE270919 R0

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

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

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

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

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
DUP1	SE270919.022	LB323675	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	23 Oct 2024	19 Sep 2024
DUP2	SE270919.023	LB323675	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	23 Oct 2024	19 Sep 2024
SS1	SE270919.024	LB323675	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	23 Oct 2024	17 Sep 2024

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

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP591_0-0.5	SE270919.001	LB323645	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	24 Sep 2024	17 Sep 2024
TP592_0-0.1	SE270919.002	LB323645	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	24 Sep 2024	17 Sep 2024
TP597_0-0.1	SE270919.003	LB323645	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	25 Sep 2024	17 Sep 2024
TP597_0.2-0.4	SE270919.004	LB323645	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	25 Sep 2024	17 Sep 2024
TP598_0-0.5	SE270919.005	LB323645	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	25 Sep 2024	17 Sep 2024
TP599_0.1-0.7 0-0.8	SE270919.006	LB323645	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	25 Sep 2024	17 Sep 2024
TP602_0-0.6	SE270919.007	LB323645	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	25 Sep 2024	17 Sep 2024
TP611_0-0.1	SE270919.008	LB323645	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	24 Sep 2024	17 Sep 2024
TP613_0.1-0.4	SE270919.009	LB323645	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	25 Sep 2024	17 Sep 2024
TP613_0.6-0.8	SE270919.010	LB323645	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	25 Sep 2024	17 Sep 2024
TP618_0-0.5	SE270919.011	LB323645	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	25 Sep 2024	17 Sep 2024
TP619_0-0.7	SE270919.012	LB323645	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	25 Sep 2024	17 Sep 2024
TP625_0-0.5	SE270919.013	LB323645	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	25 Sep 2024	17 Sep 2024
TP626_0-0.1	SE270919.014	LB323645	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	25 Sep 2024	17 Sep 2024
TP627_0.3-0.5	SE270919.015	LB323645	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	25 Sep 2024	17 Sep 2024
TP634_0-0.1	SE270919.016	LB323645	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	24 Sep 2024	17 Sep 2024
TP638_0-0.1	SE270919.017	LB323645	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	24 Sep 2024	17 Sep 2024
TP642_0.3-0.5	SE270919.018	LB323645	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	24 Sep 2024	17 Sep 2024
TP642_0.1-0.3	SE270919.019	LB323645	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	24 Sep 2024	17 Sep 2024
TP645_0-0.1	SE270919.020	LB323676	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	24 Sep 2024	17 Sep 2024
TP648_0-0.05	SE270919.021	LB323676	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	24 Sep 2024	17 Sep 2024
SS1	SE270919.024	LB323676	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	25 Sep 2024	17 Sep 2024

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

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP591_0-0.5	SE270919.001	LB323645	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	24 Sep 2024	17 Sep 2024
TP592_0-0.1	SE270919.002	LB323645	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	24 Sep 2024	17 Sep 2024
TP597_0-0.1	SE270919.003	LB323645	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	25 Sep 2024	17 Sep 2024
TP597_0.2-0.4	SE270919.004	LB323645	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	25 Sep 2024	17 Sep 2024
TP598_0-0.5	SE270919.005	LB323645	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	25 Sep 2024	17 Sep 2024
TP599_0.1-0.7 0-0.8	SE270919.006	LB323645	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	25 Sep 2024	17 Sep 2024
TP602_0-0.6	SE270919.007	LB323645	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	25 Sep 2024	17 Sep 2024
TP611_0-0.1	SE270919.008	LB323645	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	24 Sep 2024	17 Sep 2024
TP613_0.1-0.4	SE270919.009	LB323645	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	25 Sep 2024	17 Sep 2024
TP613_0.6-0.8	SE270919.010	LB323645	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	25 Sep 2024	17 Sep 2024
TP618_0-0.5	SE270919.011	LB323645	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	25 Sep 2024	17 Sep 2024
TP619_0-0.7	SE270919.012	LB323645	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	25 Sep 2024	17 Sep 2024
TP625_0-0.5	SE270919.013	LB323645	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	25 Sep 2024	17 Sep 2024
TP626_0-0.1	SE270919.014	LB323645	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	25 Sep 2024	17 Sep 2024
TP627_0.3-0.5	SE270919.015	LB323645	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	25 Sep 2024	17 Sep 2024
TP634_0-0.1	SE270919.016	LB323645	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	24 Sep 2024	17 Sep 2024
TP638_0-0.1	SE270919.017	LB323645	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	24 Sep 2024	17 Sep 2024
TP642_0.3-0.5	SE270919.018	LB323645	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	24 Sep 2024	17 Sep 2024
TP642_0.1-0.3	SE270919.019	LB323645	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	24 Sep 2024	17 Sep 2024
TP645_0-0.1	SE270919.020	LB323676	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	24 Sep 2024	17 Sep 2024
TP648_0-0.05	SE270919.021	LB323676	10 Sep 2024	11 Sep 2024	24 Sep 2024	13 Sep 2024	24 Sep 2024	17 Sep 2024
SS1	SE270919.024	LB323676	11 Sep 2024	11 Sep 2024	25 Sep 2024	13 Sep 2024	25 Sep 2024	17 Sep 2024

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

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

OC Pesticides in Soil — Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	TP597_0-0.1	SE270919.003	%	60 - 130%	98
	TP598_0-0.5	SE270919.005	%	60 - 130%	93
	TP599_0.1-0.7 0-0.8	SE270919.006	%	60 - 130%	107
	TP613_0.1-0.4	SE270919.009	%	60 - 130%	112
	TP619_0-0.7	SE270919.012	%	60 - 130%	95
	TP638_0-0.1	SE270919.017	%	60 - 130%	110

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

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	TP591_0-0.5	SE270919.001	%	70 - 130%	99
	TP592_0-0.1	SE270919.002	%	70 - 130%	99
	TP597_0-0.1	SE270919.003	%	70 - 130%	92
	TP597_0.2-0.4	SE270919.004	%	70 - 130%	93
	TP598_0-0.5	SE270919.005	%	70 - 130%	101
	TP599_0.1-0.7 0-0.8	SE270919.006	%	70 - 130%	102
	TP602_0-0.6	SE270919.007	%	70 - 130%	98
	TP611_0-0.1	SE270919.008	%	70 - 130%	90
	TP613_0.1-0.4	SE270919.009	%	70 - 130%	98
	TP613_0.6-0.8	SE270919.010	%	70 - 130%	100
	TP618_0-0.5	SE270919.011	%	70 - 130%	99
	TP619_0-0.7	SE270919.012	%	70 - 130%	89
	TP625_0-0.5	SE270919.013	%	70 - 130%	88
	TP626_0-0.1	SE270919.014	%	70 - 130%	101
	TP627_0.3-0.5	SE270919.015	%	70 - 130%	93
	TP634_0-0.1	SE270919.016	%	70 - 130%	95
	TP638_0-0.1	SE270919.017	%	70 - 130%	93
	TP642_0.3-0.5	SE270919.018	%	70 - 130%	96
	TP642_0.1-0.3	SE270919.019	%	70 - 130%	98
	TP645_0-0.1	SE270919.020	%	70 - 130%	92
	TP648_0-0.05	SE270919.021	%	70 - 130%	99
	DUP1	SE270919.022	%	70 - 130%	100
	DUP2	SE270919.023	%	70 - 130%	101
	SS1	SE270919.024	%	70 - 130%	93
d14-p-terphenyl (Surrogate)	TP591_0-0.5	SE270919.001	%	70 - 130%	99
	TP592_0-0.1	SE270919.002	%	70 - 130%	103
	TP597_0-0.1	SE270919.003	%	70 - 130%	106
	TP597_0.2-0.4	SE270919.004	%	70 - 130%	96
	TP598_0-0.5	SE270919.005	%	70 - 130%	110
	TP599_0.1-0.7 0-0.8	SE270919.006	%	70 - 130%	102
	TP602_0-0.6	SE270919.007	%	70 - 130%	103
	TP611_0-0.1	SE270919.008	%	70 - 130%	107
	TP613_0.1-0.4	SE270919.009	%	70 - 130%	106
	TP613_0.6-0.8	SE270919.010	%	70 - 130%	101
	TP618_0-0.5	SE270919.011	%	70 - 130%	108
	TP619_0-0.7	SE270919.012	%	70 - 130%	105
	TP625_0-0.5	SE270919.013	%	70 - 130%	105
	TP626_0-0.1	SE270919.014	%	70 - 130%	111
	TP627_0.3-0.5	SE270919.015	%	70 - 130%	103
	TP634_0-0.1	SE270919.016	%	70 - 130%	105
	TP638_0-0.1	SE270919.017	%	70 - 130%	106
	TP642_0.3-0.5	SE270919.018	%	70 - 130%	106
	TP642_0.1-0.3	SE270919.019	%	70 - 130%	108
	TP645_0-0.1	SE270919.020	%	70 - 130%	106
	TP648_0-0.05	SE270919.021	%	70 - 130%	106
	DUP1	SE270919.022	%	70 - 130%	106
	DUP2	SE270919.023	%	70 - 130%	105
	SS1	SE270919.024	%	70 - 130%	106
d5-nitrobenzene (Surrogate)	TP591_0-0.5	SE270919.001	%	70 - 130%	94
	TP592_0-0.1	SE270919.002	%	70 - 130%	99
	TP597_0-0.1	SE270919.003	%	70 - 130%	105
	TP597_0.2-0.4	SE270919.004	%	70 - 130%	93

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

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

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

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d5-nitrobenzene (Surrogate)	TP598_0-0.5	SE270919.005	%	70 - 130%	102
	TP599_0.1-0.7 0-0.8	SE270919.006	%	70 - 130%	100
	TP602_0-0.6	SE270919.007	%	70 - 130%	97
	TP611_0-0.1	SE270919.008	%	70 - 130%	108
	TP613_0.1-0.4	SE270919.009	%	70 - 130%	100
	TP613_0.6-0.8	SE270919.010	%	70 - 130%	98
	TP618_0-0.5	SE270919.011	%	70 - 130%	98
	TP619_0-0.7	SE270919.012	%	70 - 130%	97
	TP625_0-0.5	SE270919.013	%	70 - 130%	95
	TP626_0-0.1	SE270919.014	%	70 - 130%	103
	TP627_0.3-0.5	SE270919.015	%	70 - 130%	100
	TP634_0-0.1	SE270919.016	%	70 - 130%	98
	TP638_0-0.1	SE270919.017	%	70 - 130%	99
	TP642_0.3-0.5	SE270919.018	%	70 - 130%	100
	TP642_0.1-0.3	SE270919.019	%	70 - 130%	99
	TP645_0-0.1	SE270919.020	%	70 - 130%	103
	TP648_0-0.05	SE270919.021	%	70 - 130%	102
	DUP1	SE270919.022	%	70 - 130%	102
	DUP2	SE270919.023	%	70 - 130%	103
	SS1	SE270919.024	%	70 - 130%	101

PCBs in Soil — Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
TCMX (Surrogate)	TP597_0-0.1	SE270919.003	%	60 - 130%	99
	TP598_0-0.5	SE270919.005	%	60 - 130%	93
	TP599_0.1-0.7 0-0.8	SE270919.006	%	60 - 130%	108
	TP613_0.1-0.4	SE270919.009	%	60 - 130%	113
	TP619_0-0.7	SE270919.012	%	60 - 130%	95
	TP638_0-0.1	SE270919.017	%	60 - 130%	111

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

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	TP591_0-0.5	SE270919.001	%	60 - 130%	70
	TP592_0-0.1	SE270919.002	%	60 - 130%	76
	TP597_0-0.1	SE270919.003	%	60 - 130%	84
	TP597_0.2-0.4	SE270919.004	%	60 - 130%	59 ①
	TP598_0-0.5	SE270919.005	%	60 - 130%	89
	TP599_0.1-0.7 0-0.8	SE270919.006	%	60 - 130%	87
	TP602_0-0.6	SE270919.007	%	60 - 130%	86
	TP611_0-0.1	SE270919.008	%	60 - 130%	79
	TP613_0.1-0.4	SE270919.009	%	60 - 130%	83
	TP613_0.6-0.8	SE270919.010	%	60 - 130%	67
	TP618_0-0.5	SE270919.011	%	60 - 130%	95
	TP619_0-0.7	SE270919.012	%	60 - 130%	89
	TP625_0-0.5	SE270919.013	%	60 - 130%	81
	TP626_0-0.1	SE270919.014	%	60 - 130%	80
	TP627_0.3-0.5	SE270919.015	%	60 - 130%	72
	TP634_0-0.1	SE270919.016	%	60 - 130%	71
	TP638_0-0.1	SE270919.017	%	60 - 130%	55 ①
	TP642_0.3-0.5	SE270919.018	%	60 - 130%	80
	TP642_0.1-0.3	SE270919.019	%	60 - 130%	57 ①
	TP645_0-0.1	SE270919.020	%	60 - 130%	103
	TP648_0-0.05	SE270919.021	%	60 - 130%	99
	SS1	SE270919.024	%	60 - 130%	87
d4-1,2-dichloroethane (Surrogate)	TP591_0-0.5	SE270919.001	%	60 - 130%	104
	TP592_0-0.1	SE270919.002	%	60 - 130%	101
	TP597_0-0.1	SE270919.003	%	60 - 130%	116
	TP597_0.2-0.4	SE270919.004	%	60 - 130%	77
	TP598_0-0.5	SE270919.005	%	60 - 130%	127
	TP599_0.1-0.7 0-0.8	SE270919.006	%	60 - 130%	122
	TP602_0-0.6	SE270919.007	%	60 - 130%	121
	TP611_0-0.1	SE270919.008	%	60 - 130%	111

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

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

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

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d4-1,2-dichloroethane (Surrogate)	TP613_0.1-0.4	SE270919.009	%	60 - 130%	113
	TP613_0.6-0.8	SE270919.010	%	60 - 130%	90
	TP618_0-0.5	SE270919.011	%	60 - 130%	134 ①
	TP619_0-0.7	SE270919.012	%	60 - 130%	89
	TP625_0-0.5	SE270919.013	%	60 - 130%	116
	TP626_0-0.1	SE270919.014	%	60 - 130%	112
	TP627_0.3-0.5	SE270919.015	%	60 - 130%	98
	TP634_0-0.1	SE270919.016	%	60 - 130%	97
	TP638_0-0.1	SE270919.017	%	60 - 130%	80
	TP642_0.3-0.5	SE270919.018	%	60 - 130%	109
	TP642_0.1-0.3	SE270919.019	%	60 - 130%	77
	TP645_0-0.1	SE270919.020	%	60 - 130%	100
	TP648_0-0.05	SE270919.021	%	60 - 130%	97
	SS1	SE270919.024	%	60 - 130%	82
d8-toluene (Surrogate)	TP591_0-0.5	SE270919.001	%	60 - 130%	102
	TP592_0-0.1	SE270919.002	%	60 - 130%	95
	TP597_0-0.1	SE270919.003	%	60 - 130%	115
	TP597_0.2-0.4	SE270919.004	%	60 - 130%	84
	TP598_0-0.5	SE270919.005	%	60 - 130%	119
	TP599_0.1-0.7 0-0.8	SE270919.006	%	60 - 130%	116
	TP602_0-0.6	SE270919.007	%	60 - 130%	120
	TP611_0-0.1	SE270919.008	%	60 - 130%	121
	TP613_0.1-0.4	SE270919.009	%	60 - 130%	113
	TP613_0.6-0.8	SE270919.010	%	60 - 130%	95
	TP618_0-0.5	SE270919.011	%	60 - 130%	128
	TP619_0-0.7	SE270919.012	%	60 - 130%	91
	TP625_0-0.5	SE270919.013	%	60 - 130%	115
	TP626_0-0.1	SE270919.014	%	60 - 130%	108
	TP627_0.3-0.5	SE270919.015	%	60 - 130%	96
	TP634_0-0.1	SE270919.016	%	60 - 130%	95
	TP638_0-0.1	SE270919.017	%	60 - 130%	83
	TP642_0.3-0.5	SE270919.018	%	60 - 130%	115
	TP642_0.1-0.3	SE270919.019	%	60 - 130%	81
	TP645_0-0.1	SE270919.020	%	60 - 130%	103
	TP648_0-0.05	SE270919.021	%	60 - 130%	99
	SS1	SE270919.024	%	60 - 130%	85

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

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	TP591_0-0.5	SE270919.001	%	60 - 130%	70
	TP592_0-0.1	SE270919.002	%	60 - 130%	76
	TP597_0-0.1	SE270919.003	%	60 - 130%	84
	TP597_0.2-0.4	SE270919.004	%	60 - 130%	59 ①
	TP598_0-0.5	SE270919.005	%	60 - 130%	89
	TP599_0.1-0.7 0-0.8	SE270919.006	%	60 - 130%	87
	TP602_0-0.6	SE270919.007	%	60 - 130%	86
	TP611_0-0.1	SE270919.008	%	60 - 130%	79
	TP613_0.1-0.4	SE270919.009	%	60 - 130%	83
	TP613_0.6-0.8	SE270919.010	%	60 - 130%	67
	TP618_0-0.5	SE270919.011	%	60 - 130%	95
	TP619_0-0.7	SE270919.012	%	60 - 130%	89
	TP625_0-0.5	SE270919.013	%	60 - 130%	81
	TP626_0-0.1	SE270919.014	%	60 - 130%	80
	TP627_0.3-0.5	SE270919.015	%	60 - 130%	72
	TP634_0-0.1	SE270919.016	%	60 - 130%	71
	TP638_0-0.1	SE270919.017	%	60 - 130%	55 ①
	TP642_0.3-0.5	SE270919.018	%	60 - 130%	80
	TP642_0.1-0.3	SE270919.019	%	60 - 130%	57 ①
	TP645_0-0.1	SE270919.020	%	60 - 130%	103
	TP648_0-0.05	SE270919.021	%	60 - 130%	99
	SS1	SE270919.024	%	60 - 130%	87

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

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

Volatile Petroleum Hydrocarbons in Soil (continued) Method: ME-(AU)-[ENV]AN133

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d4-1,2-dichloroethane (Surrogate)	TP591_0-0.5	SE270919.001	%	60 - 130%	104
	TP592_0-0.1	SE270919.002	%	60 - 130%	101
	TP597_0-0.1	SE270919.003	%	60 - 130%	116
	TP597_0.2-0.4	SE270919.004	%	60 - 130%	77
	TP598_0-0.5	SE270919.005	%	60 - 130%	127
	TP599_0.1-0.7 0-0.8	SE270919.006	%	60 - 130%	122
	TP602_0-0.6	SE270919.007	%	60 - 130%	121
	TP611_0-0.1	SE270919.008	%	60 - 130%	111
	TP613_0.1-0.4	SE270919.009	%	60 - 130%	113
	TP613_0.6-0.8	SE270919.010	%	60 - 130%	90
	TP618_0-0.5	SE270919.011	%	60 - 130%	134 ①
	TP619_0-0.7	SE270919.012	%	60 - 130%	89
	TP625_0-0.5	SE270919.013	%	60 - 130%	116
	TP626_0-0.1	SE270919.014	%	60 - 130%	112
	TP627_0.3-0.5	SE270919.015	%	60 - 130%	98
	TP634_0-0.1	SE270919.016	%	60 - 130%	97
	TP638_0-0.1	SE270919.017	%	60 - 130%	80
	TP642_0.3-0.5	SE270919.018	%	60 - 130%	109
	TP642_0.1-0.3	SE270919.019	%	60 - 130%	77
	TP645_0-0.1	SE270919.020	%	60 - 130%	100
	TP648_0-0.05	SE270919.021	%	60 - 130%	97
	SS1	SE270919.024	%	60 - 130%	82
d8-toluene (Surrogate)	TP591_0-0.5	SE270919.001	%	60 - 130%	102
	TP592_0-0.1	SE270919.002	%	60 - 130%	95
	TP597_0-0.1	SE270919.003	%	60 - 130%	115
	TP597_0.2-0.4	SE270919.004	%	60 - 130%	84
	TP598_0-0.5	SE270919.005	%	60 - 130%	119
	TP599_0.1-0.7 0-0.8	SE270919.006	%	60 - 130%	116
	TP602_0-0.6	SE270919.007	%	60 - 130%	120
	TP611_0-0.1	SE270919.008	%	60 - 130%	121
	TP613_0.1-0.4	SE270919.009	%	60 - 130%	113
	TP613_0.6-0.8	SE270919.010	%	60 - 130%	95
	TP618_0-0.5	SE270919.011	%	60 - 130%	128
	TP619_0-0.7	SE270919.012	%	60 - 130%	91
	TP625_0-0.5	SE270919.013	%	60 - 130%	115
	TP626_0-0.1	SE270919.014	%	60 - 130%	108
	TP627_0.3-0.5	SE270919.015	%	60 - 130%	96
	TP634_0-0.1	SE270919.016	%	60 - 130%	95
	TP638_0-0.1	SE270919.017	%	60 - 130%	83
	TP642_0.3-0.5	SE270919.018	%	60 - 130%	115
	TP642_0.1-0.3	SE270919.019	%	60 - 130%	81
	TP645_0-0.1	SE270919.020	%	60 - 130%	103
	TP648_0-0.05	SE270919.021	%	60 - 130%	99
	SS1	SE270919.024	%	60 - 130%	85

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

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

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

Sample Number	Parameter	Units	LOR	Result
LB323648.001	Mercury	mg/kg	0.05	<0.05
LB323680.001	Mercury	mg/kg	0.05	<0.05

OC Pesticides in Soil — Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB323644.001		Alpha BHC	mg/kg	0.1	<0.1
		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Lindane (gamma BHC)	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.2	<0.2
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Endrin	mg/kg	0.2	<0.2
		Beta Endosulfan	mg/kg	0.2	<0.2
		p,p'-DDD	mg/kg	0.1	<0.1
		Endrin aldehyde	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endrin ketone	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	94

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

Sample Number		Parameter	Units	LOR	Result
LB323644.001		Naphthalene	mg/kg	0.1	<0.1
		2-methylnaphthalene	mg/kg	0.1	<0.1
		1-methylnaphthalene	mg/kg	0.1	<0.1
		Acenaphthylene	mg/kg	0.1	<0.1
		Acenaphthene	mg/kg	0.1	<0.1
		Fluorene	mg/kg	0.1	<0.1
		Phenanthrene	mg/kg	0.1	<0.1
		Anthracene	mg/kg	0.1	<0.1
		Fluoranthene	mg/kg	0.1	<0.1
		Pyrene	mg/kg	0.1	<0.1
		Benzo(a)anthracene	mg/kg	0.1	<0.1
		Chrysene	mg/kg	0.1	<0.1
		Benzo(a)pyrene	mg/kg	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	103
		2-fluorobiphenyl (Surrogate)	%	-	104
		d14-p-terphenyl (Surrogate)	%	-	105
LB323675.001		Naphthalene	mg/kg	0.1	<0.1
		2-methylnaphthalene	mg/kg	0.1	<0.1
		1-methylnaphthalene	mg/kg	0.1	<0.1
		Acenaphthylene	mg/kg	0.1	<0.1
		Acenaphthene	mg/kg	0.1	<0.1
		Fluorene	mg/kg	0.1	<0.1
		Phenanthrene	mg/kg	0.1	<0.1
		Anthracene	mg/kg	0.1	<0.1
		Fluoranthene	mg/kg	0.1	<0.1

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

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

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

Sample Number		Parameter	Units	LOR	Result
LB323675.001		Pyrene	mg/kg	0.1	<0.1
		Benzo(a)anthracene	mg/kg	0.1	<0.1
		Chrysene	mg/kg	0.1	<0.1
		Benzo(a)pyrene	mg/kg	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	110
		2-fluorobiphenyl (Surrogate)	%	-	101
		d14-p-terphenyl (Surrogate)	%	-	110

PCBs in Soil — Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB323644.001		Arochlor 1016	mg/kg	0.2	<0.2
		Arochlor 1221	mg/kg	0.2	<0.2
		Arochlor 1232	mg/kg	0.2	<0.2
		Arochlor 1242	mg/kg	0.2	<0.2
		Arochlor 1248	mg/kg	0.2	<0.2
		Arochlor 1254	mg/kg	0.2	<0.2
		Arochlor 1260	mg/kg	0.2	<0.2
		Arochlor 1262	mg/kg	0.2	<0.2
		Arochlor 1268	mg/kg	0.2	<0.2
		Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates	TCMX (Surrogate)	%	-	95

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

Sample Number		Parameter	Units	LOR	Result
LB323647.001		Arsenic, As	mg/kg	1	<1
		Cadmium, Cd	mg/kg	0.3	<0.3
		Chromium, Cr	mg/kg	0.5	<0.5
		Copper, Cu	mg/kg	0.5	<0.5
		Nickel, Ni	mg/kg	0.5	<0.5
		Lead, Pb	mg/kg	1	<1
		Zinc, Zn	mg/kg	2	<2.0
LB323679.001		Arsenic, As	mg/kg	1	<1
		Cadmium, Cd	mg/kg	0.3	<0.3
		Chromium, Cr	mg/kg	0.5	<0.5
		Copper, Cu	mg/kg	0.5	<0.5
		Nickel, Ni	mg/kg	0.5	<0.5
		Lead, Pb	mg/kg	1	<1
		Zinc, Zn	mg/kg	2	<2.0

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

Sample Number		Parameter	Units	LOR	Result
LB323644.001		TRH C10-C14	mg/kg	20	<20
		TRH C15-C28	mg/kg	45	<45
		TRH C29-C36	mg/kg	45	<45
		TRH C37-C40	mg/kg	100	<100
		TRH C10-C36 Total	mg/kg	110	<110
LB323675.001		TRH C10-C14	mg/kg	20	<20
		TRH C15-C28	mg/kg	45	<45
		TRH C29-C36	mg/kg	45	<45
		TRH C37-C40	mg/kg	100	<100
		TRH C10-C36 Total	mg/kg	110	<110

VOCs in Soil — Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB323645.001	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1

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

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

VOCs in Soil (continued) Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB323645.001	Polycyclic VOCs	Naphthalene (VOC)*	mg/kg	0.1	<0.1
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	120
		d8-toluene (Surrogate)	%	-	110
		Bromofluorobenzene (Surrogate)	%	-	83
	Totals	Total BTEX*	mg/kg	0.6	<0.6
LB323676.001	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
	Polycyclic VOCs	Naphthalene (VOC)*	mg/kg	0.1	<0.1
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	105
		d8-toluene (Surrogate)	%	-	106
		Bromofluorobenzene (Surrogate)	%	-	107
	Totals	Total BTEX*	mg/kg	0.6	<0.6

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

Sample Number		Parameter	Units	LOR	Result
LB323645.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	120
LB323676.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	105

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

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

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

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

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

Mercury in Soil

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

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE270903.022	LB323680.014	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE270903.033	LB323680.024	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE270919.010	LB323648.014	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE270919.019	LB323648.024	Mercury	mg/kg	0.05	<0.05	<0.05	200	0

Moisture Content

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

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE270903.022	LB323677.011	% Moisture	%w/w	1	16.2	20.6	35	24
SE270903.033	LB323677.022	% Moisture	%w/w	1	21.2	24.9	34	16
SE270919.010	LB323646.011	% Moisture	%w/w	1	17.1	17.0	36	0
SE270919.019	LB323646.021	% Moisture	%w/w	1	15.8	14.9	37	6

OC Pesticides in Soil

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

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE270919.017	LB323644.026		Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane (gamma BHC)	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDE*	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDD*	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDT*	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
			Total OC VIC EPA	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.17	0.15	30	11

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

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

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE270903.022	LB323675.014	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
		Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
		Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
		Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
		Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

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

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

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

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

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued) Method: ME-(AU)-[ENV]AN120

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE270903.022	LB323675.014		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0*	mg/kg	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	mg/kg	0.2	<0.2	<0.2	175	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR*	mg/kg	0.3	<0.3	<0.3	134	0
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	30	5
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	10
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	4
SE270903.032	LB323675.026		Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
			Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
			Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluoranthene	mg/kg	0.1	0.2	0.3	72	39
			Pyrene	mg/kg	0.1	0.2	0.3	74	36
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	157	0
			Chrysene	mg/kg	0.1	0.1	0.1	112	32
			Benzo(b&j)fluoranthene	mg/kg	0.1	0.1	0.2	98	40
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	151	0
			Benzo(a)pyrene	mg/kg	0.1	0.1	0.2	101	43
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	0.1	0.2	105	33
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	0.1	0.2	101	32
			Carcinogenic PAHs, BaP TEQ <LOR=0*	mg/kg	0.2	<0.2	0.2	128	8
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	mg/kg	0.2	<0.2	0.3	97	30
			Carcinogenic PAHs, BaP TEQ <LOR=LOR*	mg/kg	0.3	<0.3	0.3	113	9
			Total PAH (18)	mg/kg	0.8	0.8	1.5	39	56 ②
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	30	2
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	7
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	2
SE270919.010	LB323644.014		Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
			Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
			Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0*	mg/kg	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	mg/kg	0.2	<0.2	<0.2	175	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR*	mg/kg	0.3	<0.3	<0.3	134	0
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	30	5
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	4
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.6	30	9
SE270919.017	LB323644.026		Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

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

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

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

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

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

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE270919.017	LB323644.026		2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
			Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
			Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0*	mg/kg	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	mg/kg	0.2	<0.2	<0.2	175	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR*	mg/kg	0.3	<0.3	<0.3	134	0
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	30	2
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	5
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	1

PCBs in Soil — Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE270919.017	LB323644.027		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates	TCMX (Surrogate)	mg/kg	-	0	0	30	11

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

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE270903.022	LB323679.014	Arsenic, As	mg/kg	1	9	8	41	9
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	21	18	33	17
		Copper, Cu	mg/kg	0.5	<0.5	<0.5	200	0
		Nickel, Ni	mg/kg	0.5	1.2	1.2	73	1
		Lead, Pb	mg/kg	1	6	6	47	0
		Zinc, Zn	mg/kg	2	7.6	5.9	60	25
SE270903.033	LB323679.024	Arsenic, As	mg/kg	1	10	10	40	3
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	29	28	32	4
		Nickel, Ni	mg/kg	0.5	1.5	1.5	63	4
		Lead, Pb	mg/kg	1	10	10	40	4
		Zinc, Zn	mg/kg	2	10	11	49	9
SE270919.010	LB323647.014	Arsenic, As	mg/kg	1	5	4	52	7
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	13	13	34	1
		Copper, Cu	mg/kg	0.5	16	15	33	5
		Nickel, Ni	mg/kg	0.5	5.9	5.8	39	1
		Lead, Pb	mg/kg	1	8	8	43	4
		Zinc, Zn	mg/kg	2	13	13	45	4
SE270919.019	LB323647.024	Arsenic, As	mg/kg	1	8	10	41	14

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

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

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

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

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

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

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE270919.019	LB323647.024	Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	24	22	32	6
		Copper, Cu	mg/kg	0.5	9.7	9.7	35	1
		Nickel, Ni	mg/kg	0.5	7.8	6.8	37	14
		Lead, Pb	mg/kg	1	26	30	34	16
		Zinc, Zn	mg/kg	2	13	13	45	1

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

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE270903.022	LB323675.014		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE270903.032	LB323675.026		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE270919.010	LB323644.014		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE270919.017	LB323644.026		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0

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

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE270903.024	LB323676.014	Monocyclic Aromatic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
			Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
		Polycyclic	Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.9	9.9	50	0
			d8-toluene (Surrogate)	mg/kg	-	10.2	10.3	50	1
			Bromofluorobenzene (Surrogate)	mg/kg	-	10.5	10.4	50	1
		Totals	Total BTEX*	mg/kg	0.6	<0.6	<0.6	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

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

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

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

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

VOCs in Soil (continued) — Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE270903.024	LB323676.014	Totals	Total Xylenes*	mg/kg	0.3	<0.3	<0.3	200	0
SE270903.033	LB323676.024	Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
		Polycyclic	Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.5	11.0	50	14
			d8-toluene (Surrogate)	mg/kg	-	9.9	11.5	50	15
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.8	8.8	50	12
		Totals	Total BTEX*	mg/kg	0.6	<0.6	<0.6	200	0
			Total Xylenes*	mg/kg	0.3	<0.3	<0.3	200	0
SE270919.010	LB323645.014	Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
		Polycyclic	Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.0	8.6	50	5
			d8-toluene (Surrogate)	mg/kg	-	9.5	8.9	50	7
			Bromofluorobenzene (Surrogate)	mg/kg	-	6.7	9.2	50	32
		Totals	Total BTEX*	mg/kg	0.6	<0.6	<0.6	200	0
			Total Xylenes*	mg/kg	0.3	<0.3	<0.3	200	0
SE270919.019	LB323645.024	Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
		Polycyclic	Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	7.7	7.2	50	6
			d8-toluene (Surrogate)	mg/kg	-	8.1	7.4	50	9
			Bromofluorobenzene (Surrogate)	mg/kg	-	5.7	7.4	50	26
		Totals	Total BTEX*	mg/kg	0.6	<0.6	<0.6	200	0
			Total Xylenes*	mg/kg	0.3	<0.3	<0.3	200	0

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

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE270903.024	LB323676.014		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.9	9.9	50	0
			d8-toluene (Surrogate)	mg/kg	-	10.2	10.3	50	1
			Bromofluorobenzene (Surrogate)	mg/kg	-	10.5	10.4	50	1
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE270903.033	LB323676.024		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.5	11.0	50	14
			d8-toluene (Surrogate)	mg/kg	-	9.9	11.5	50	15
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.8	8.8	50	12
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE270919.010	LB323645.014		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.0	8.6	50	5
			d8-toluene (Surrogate)	mg/kg	-	9.5	8.9	50	7
			Bromofluorobenzene (Surrogate)	mg/kg	-	6.7	9.2	50	32
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE270919.019	LB323645.024		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	7.7	7.2	50	6

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

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

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

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

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

Volatile Petroleum Hydrocarbons in Soil (continued) Method: ME-(AU)-[ENV]AN133

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE270919.019	LB323645.024	Surrogates	d8-toluene (Surrogate)	mg/kg	-	8.1	7.4	50	9
			Bromofluorobenzene (Surrogate)	mg/kg	-	5.7	7.4	50	26
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0

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

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

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

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB323648.002	Mercury	mg/kg	0.05	0.21	0.2	80 - 120	105
LB323680.002	Mercury	mg/kg	0.05	0.23	0.2	80 - 120	115

OC Pesticides in Soil — Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB323644.002		Delta BHC	mg/kg	0.1	0.2	0.2	60 - 140	108
		Heptachlor	mg/kg	0.1	0.2	0.2	60 - 140	97
		Aldrin	mg/kg	0.1	0.2	0.2	60 - 140	106
		Dieldrin	mg/kg	0.2	<0.2	0.2	60 - 140	96
		Endrin	mg/kg	0.2	0.2	0.2	60 - 140	109
		p,p'-DDT	mg/kg	0.1	0.2	0.2	60 - 140	122
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.15	40 - 130	100

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

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB323644.002		Naphthalene	mg/kg	0.1	4.5	4	60 - 140	114
		Acenaphthylene	mg/kg	0.1	4.2	4	60 - 140	106
		Acenaphthene	mg/kg	0.1	4.4	4	60 - 140	111
		Phenanthrene	mg/kg	0.1	4.4	4	60 - 140	109
		Anthracene	mg/kg	0.1	4.9	4	60 - 140	122
		Fluoranthene	mg/kg	0.1	4.4	4	60 - 140	111
		Pyrene	mg/kg	0.1	4.8	4	60 - 140	119
		Benzo(a)pyrene	mg/kg	0.1	4.8	4	60 - 140	120
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	96
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	99
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	107
LB323675.002		Naphthalene	mg/kg	0.1	4.5	4	60 - 140	112
		Acenaphthylene	mg/kg	0.1	4.4	4	60 - 140	109
		Acenaphthene	mg/kg	0.1	4.3	4	60 - 140	108
		Phenanthrene	mg/kg	0.1	4.4	4	60 - 140	109
		Anthracene	mg/kg	0.1	4.8	4	60 - 140	121
		Fluoranthene	mg/kg	0.1	5.0	4	60 - 140	125
		Pyrene	mg/kg	0.1	5.6	4	60 - 140	140
		Benzo(a)pyrene	mg/kg	0.1	4.8	4	60 - 140	120
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	95
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	91
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.6	0.5	40 - 130	126

PCBs in Soil — Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB323644.002	Arochlor 1260	mg/kg	0.2	0.5	0.4	60 - 140	117

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

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB323647.002	Arsenic, As	mg/kg	1	290	318.22	80 - 120	92
	Cadmium, Cd	mg/kg	0.3	4.1	4.81	70 - 130	85
	Chromium, Cr	mg/kg	0.5	36	38.31	80 - 120	94
	Copper, Cu	mg/kg	0.5	260	290	80 - 120	89
	Nickel, Ni	mg/kg	0.5	170	187	80 - 120	89
	Lead, Pb	mg/kg	1	84	89.9	80 - 120	93
	Zinc, Zn	mg/kg	2	250	273	80 - 120	93
LB323679.002	Arsenic, As	mg/kg	1	340	318.22	80 - 120	108
	Cadmium, Cd	mg/kg	0.3	5.0	4.81	70 - 130	105
	Chromium, Cr	mg/kg	0.5	43	38.31	80 - 120	112
	Copper, Cu	mg/kg	0.5	310	290	80 - 120	107
	Nickel, Ni	mg/kg	0.5	200	187	80 - 120	106
	Lead, Pb	mg/kg	1	100	89.9	80 - 120	111
	Zinc, Zn	mg/kg	2	310	273	80 - 120	112

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

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

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

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB323644.002		TRH C10-C14	mg/kg	20	47	40	60 - 140	118
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	108
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	72
	TRH F Bands	TRH >C10-C16	mg/kg	25	47	40	60 - 140	117
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	91
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	76
LB323675.002		TRH C10-C14	mg/kg	20	52	40	60 - 140	130
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	108
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	83
	TRH F Bands	TRH >C10-C16	mg/kg	25	52	40	60 - 140	129
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	92
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	85

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

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB323645.002	Monocyclic Aromatic	Benzene	mg/kg	0.1	4.9	5	60 - 140	99
		Toluene	mg/kg	0.1	4.8	5	60 - 140	97
		Ethylbenzene	mg/kg	0.1	4.9	5	60 - 140	97
		m/p-xylene	mg/kg	0.2	9.4	10	60 - 140	94
		o-xylene	mg/kg	0.1	4.9	5	60 - 140	98
LB323676.002	Monocyclic Aromatic	Benzene	mg/kg	0.1	4.8	5	60 - 140	96
		Toluene	mg/kg	0.1	4.8	5	60 - 140	97
		Ethylbenzene	mg/kg	0.1	4.9	5	60 - 140	98
		m/p-xylene	mg/kg	0.2	9.6	10	60 - 140	96
		o-xylene	mg/kg	0.1	4.9	5	60 - 140	99

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

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB323645.002		TRH C6-C10	mg/kg	25	81	92.5	60 - 140	88
		TRH C6-C9	mg/kg	20	71	80	60 - 140	89
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	52	62.5	60 - 140	83
LB323676.002		TRH C6-C10	mg/kg	25	70	92.5	60 - 140	76
		TRH C6-C9	mg/kg	20	65	80	60 - 140	81
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	41	62.5	60 - 140	66

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

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

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

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE270812.001	LB323680.004	Mercury	mg/kg	0.05	0.27	<0.05	0.2	118
SE270919.001	LB323648.004	Mercury	mg/kg	0.05	0.21	<0.05	0.2	97

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

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE270812.001	LB323675.004		Naphthalene	mg/kg	0.1	4.5	<0.1	4	112
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
			Acenaphthylene	mg/kg	0.1	4.4	<0.1	4	110
			Acenaphthene	mg/kg	0.1	4.3	<0.1	4	106
			Fluorene	mg/kg	0.1	<0.1	<0.1	-	-
			Phenanthrene	mg/kg	0.1	4.6	<0.1	4	114
			Anthracene	mg/kg	0.1	4.3	<0.1	4	108
			Fluoranthene	mg/kg	0.1	4.5	<0.1	4	110
			Pyrene	mg/kg	0.1	4.7	<0.1	4	116
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
			Chrysene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(b&j)fluoranthene	mg/kg	0.1	0.1	0.1	-	-
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(a)pyrene	mg/kg	0.1	4.5	<0.1	4	113
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	4.5	<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	4.6	<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	4.7	<0.3	-	-
			Total PAH (18)	mg/kg	0.8	36	<0.8	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.6	-	109
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.6	-	100
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.6	0.6	-	112
SE270919.001	LB323644.004		Naphthalene	mg/kg	0.1	4.5	<0.1	4	113
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
			Acenaphthylene	mg/kg	0.1	4.4	<0.1	4	109
			Acenaphthene	mg/kg	0.1	4.5	<0.1	4	113
			Fluorene	mg/kg	0.1	<0.1	<0.1	-	-
			Phenanthrene	mg/kg	0.1	4.2	<0.1	4	105
			Anthracene	mg/kg	0.1	4.4	<0.1	4	110
			Fluoranthene	mg/kg	0.1	4.0	<0.1	4	101
			Pyrene	mg/kg	0.1	4.1	<0.1	4	103
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
			Chrysene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(a)pyrene	mg/kg	0.1	2.7	<0.1	4	68
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	2.7	<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	2.8	<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	2.9	<0.3	-	-
			Total PAH (18)	mg/kg	0.8	33	<0.8	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	-	98
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	-	97
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	-	105

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

QC Sample	Sample Number	Parameter	Units	LOR

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

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

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

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE270812.001	LB323679.004	Arsenic, As	mg/kg	1	59	6	50	106
		Cadmium, Cd	mg/kg	0.3	46	<0.3	50	92
		Chromium, Cr	mg/kg	0.5	67	16	50	102
		Copper, Cu	mg/kg	0.5	60	6.8	50	107
		Nickel, Ni	mg/kg	0.5	56	3.4	50	106
		Lead, Pb	mg/kg	1	82	27	50	109
		Zinc, Zn	mg/kg	2	93	36	50	114
SE270919.001	LB323647.004	Arsenic, As	mg/kg	1	190	140	50	104
		Cadmium, Cd	mg/kg	0.3	59	1.4	50	116
		Chromium, Cr	mg/kg	0.5	120	68	50	104
		Copper, Cu	mg/kg	0.5	180	120	50	108
		Nickel, Ni	mg/kg	0.5	89	50	50	78
		Lead, Pb	mg/kg	1	82	22	50	121
		Zinc, Zn	mg/kg	2	180	130	50	102

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

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE270812.001	LB323675.004		TRH C10-C14	mg/kg	20	130	93	40	100
			TRH C15-C28	mg/kg	45	510	470	40	114
			TRH C29-C36	mg/kg	45	590	510	40	201 ⑨
			TRH C37-C40	mg/kg	100	120	100	-	-
			TRH C10-C36 Total	mg/kg	110	1200	1100	-	-
			TRH >C10-C40 Total (F bands)	mg/kg	210	1300	1200	-	-
		TRH F Bands	TRH >C10-C16	mg/kg	25	200	160	40	93
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	200	160	-	-
			TRH >C16-C34 (F3)	mg/kg	90	820	750	40	164 ⑨
			TRH >C34-C40 (F4)	mg/kg	120	320	260	-	-
SE270919.001	LB323644.004		TRH C10-C14	mg/kg	20	57	<20	40	134
			TRH C15-C28	mg/kg	45	63	<45	40	131
			TRH C29-C36	mg/kg	45	46	<45	40	79
			TRH C37-C40	mg/kg	100	<100	<100	-	-
			TRH C10-C36 Total	mg/kg	110	170	<110	-	-
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	-	-
		TRH F Bands	TRH >C10-C16	mg/kg	25	58	<25	40	131
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	58	<25	-	-
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	40	104
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	-	-

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

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE270812.001	LB323676.004	Monocyclic Aromatic	Benzene	mg/kg	0.1	4.7	<0.1	5	94
			Toluene	mg/kg	0.1	4.9	<0.1	5	98
			Ethylbenzene	mg/kg	0.1	5.0	<0.1	5	100
			m/p-xylene	mg/kg	0.2	9.7	<0.2	10	96
			o-xylene	mg/kg	0.1	4.9	<0.1	5	98
		Polycyclic	Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.6	9.4	-	106
			d8-toluene (Surrogate)	mg/kg	-	10.7	9.7	-	107
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.9	10.2	-	99
		Totals	Total BTEX*	mg/kg	0.6	29	<0.6	-	-
			Total Xylenes*	mg/kg	0.3	15	<0.3	-	-
SE270919.001	LB323645.004	Monocyclic Aromatic	Benzene	mg/kg	0.1	5.0	<0.1	5	99
			Toluene	mg/kg	0.1	5.0	<0.1	5	99
			Ethylbenzene	mg/kg	0.1	4.9	<0.1	5	99
			m/p-xylene	mg/kg	0.2	9.6	<0.2	10	96
			o-xylene	mg/kg	0.1	5.0	<0.1	5	100
		Polycyclic	Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.9	10.4	-	89
			d8-toluene (Surrogate)	mg/kg	-	9.1	10.2	-	91
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.5	7.0	-	95
		Totals	Total BTEX*	mg/kg	0.6	29	<0.6	-	-
			Total Xylenes*	mg/kg	0.3	15	<0.3	-	-

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

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

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN133

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE270812.001	LB323676.004		TRH C6-C10	mg/kg	25	72	<25	92.5	75
			TRH C6-C9	mg/kg	20	58	<20	80	70
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.6	9.4	-	106
			d8-toluene (Surrogate)	mg/kg	-	10.7	9.7	-	107
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.9	10.2	-	99
		VPH F	Benzene (F0)	mg/kg	0.1	4.7	<0.1	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	43	<25	62.5	64
SE270919.001	LB323645.004		TRH C6-C10	mg/kg	25	84	<25	92.5	90
			TRH C6-C9	mg/kg	20	74	<20	80	93
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.9	10.4	-	89
			d8-toluene (Surrogate)	mg/kg	-	9.1	10.2	-	91
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.5	7.0	-	95
		VPH F	Benzene (F0)	mg/kg	0.1	5.0	<0.1	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	54	<25	62.5	87

MATRIX SPIKE DUPLICATES

SE270919 R0

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

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

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

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

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

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

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

#UNKNOWN!

CHAIN OF CUSTODY & ANALYSIS REQUEST

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

Company Name:	Development Risk Management	Project Name/No:	DRM P23.1039.V12 - Orchard Hills
Address:	Suite 7, 265-271 Pennant Hills Road	Purchase Order No:	NA
	Thornleigh, NSW 2120	Results Required By:	Results by COB 19 Sept
		Telephone:	0450 356 834
Contact Name:	RAHABAR ALAM	Facsimile:	NA
		Email Results:	results@drm.ltd RAHABAR_ALAM@DRM.LTD

Relinquished By: RAHABAR ALAM	Date/Time: 11/09/2024 Courier Ref:	Received By:	Date/Time
Relinquished By:	Date/Time: E-MAILED 12/9/24 @ 12:36pm	Received By:	Date/Time
Samples Intact: Yes/ No	Temperature: Ambient / Chilled	Sample Cooler Sealed: Yes/ No	Laboratory Quotation No: 1772515 and 1654186V2

Client Sample ID	Date Sampled	Lab Sample ID	WATER / SOIL / PRESERVATIVE / ASS tags / Jar samples	DRM1 TRH/ BTEXN/ PAH/ 8 Metals	DRM8 CL2T 8 Metals (Total)	DRM3A TRH/ BTEXN/ PAH/ OC/ PCB/ 8 Metals	PAH	COMMENTS
TP591 _ 0 - 0.5	10/09/2024	1	X 1	X				
TP592 _ 0 - 0.1	10/09/2024	2	X 1	X				
TP597 _ 0 - 0.1	11/09/2024	3	X 1			X		
TP597 _ 0.2 - 0.4	11/09/2024	4	X 1	X				
TP598 _ 0 - 0.5	11/09/2024	5	X 1			X		
TP599 _ 0.1 - 0.7 0-0.8	11/09/2024	6	X 1			X		
TP602 _ 0 - 0.6	11/09/2024	7	X 1	X				
TP611 _ 0 - 0.1	10/09/2024	8	X 1	X				
TP613 _ 0.1 - 0.4	11/09/2024	9	X 1			X		
TP613 _ 0.6 - 0.8	11/09/2024	10	X 1	X				
TP618 _ 0 - 0.5	11/09/2024	11	X 1	X				
TP619 _ 0 - 0.7	11/09/2024	12	X 1			X		
TP620 _ 0 - 0.1	11/09/2024		X 1					

SGS EHS Sydney COC
SE270919

#UNKNOWN!

CHAIN OF CUSTODY & ANALYSIS REQUEST

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Telephone No: (02) 85940400
Facsimile No: (02) 85940499
Email: au.samplereceipt.sydney@sgs.com

Company Name:	Development Risk Management	Project Name/No:	DRM P23.1039.V12 - Orchard Hills
Address:	Suite 7, 265-271 Pennant Hills Road	Purchase Order No:	NA
	Thornleigh, NSW 2120	Results Required By:	Results by COB 19 Sept
		Telephone:	0450 356 834
Contact Name:	RAHABAR ALAM	Facsimile:	NA
		Email Results:	results@drm.ltd RAHABAR_ALAM@DRM.LTD

Relinquished By: RAHABAR ALAM	Date/Time: 11/09/2024 Courier Ref:	Received By:	Date/Time
Relinquished By:	Date/Time:	Received By:	Date/Time
Samples Intact: Yes/ No	Temperature: Ambient / Chilled	Sample Cooler Sealed: Yes/ No	Laboratory Quotation No: 1772515 and 1654186V2

Client Sample ID	Date Sampled	Lab Sample ID	WATER	SOIL	PRESERVATIVE	ASS bags	Jar samples	DRM1 TRH/ BTEXN/ PAH/ 8 Metals	DRM8 CL2T 8 Metals (Total)	DRM3A TRH/ BTEXN/ PAH/ OC/ PCB/ 8 Metals	PAH	COMMENTS
TP625 _ 0 - 0.5	11/09/2024	13		x			1	X				
TP626 _ 0 - 0.1	11/09/2024	14		x			1	X				
TP626 _ 0.2 - 0.5	11/09/2024			x			1					
TP627 _ 0.3 - 0.5	11/09/2024	15		x			1	X				
TP634 _ 0 - 0.1	10/09/2024	16		x			1	X				
TP638 _ 0 - 0.1	10/09/2024	17		x			1			X		
TP642 _ 0 - 0.1	10/09/2024			x			1					
TP642 _ 0.3 - 0.5	10/09/2024	18		x			1	X				
TP642 _ 0.1 - 0.3	10/09/2024	19		x			1	X				
TP645 _ 0 - 0.1	10/09/2024	20		x			1	X				
TP647 _ 0 - 0.1	10/09/2024			x			1					
TP648 _ 0 - 0.05	10/09/2024	21		x			1	X				
DUP1	10/09/2024	22		x			1		X		X	

#UNKNOWN!

CHAIN OF CUSTODY & ANALYSIS REQUEST

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

Company Name:	Development Risk Management	Project Name/No:	DRM P23.1039.V12 - Orchard Hills
Address:	Suite 7, 265-271 Pennant Hills Road Thornleigh, NSW 2120	Purchase Order No:	NA
		Results Required By:	Results by COB 19 Sept
		Telephone:	0450 356 834
Contact Name:	RAHABAR ALAM	Facsimile:	NA
		Email Results:	results@drm.ltd RAHABAR_ALAM@DRM.LTD

Relinquished By: RAHABAR ALAM	Date/Time: 11/09/2024 Courier Ref:	Received By:	Date/Time
Relinquished By:	Date/Time:	Received By:	Date/Time
Samples Intact: Yes/ No	Temperature: Ambient / Chilled	Sample Cooler Sealed: Yes/ No	Laboratory Quotation No: 1772515 and 1654186V2

Client Sample ID	Date Sampled	Lab Sample ID	WATER	SOIL	PRESERVATIVE	ASS bags	Jar samples	DRM1 TRH/ BTEXN/ PAH/ 8 Metals	DRM8 CL2T 8 Metals (Total)	DRM3A TRH/ BTEXN/ PAH/ OC/ PCB/ 8 Metals	PAH	COMMENTS
DUP2	11/09/2024	23	X				1		X		X	
DUP2A	11/09/2024		X				1		X		X	Send to Eurofins

Received SGS 11/9/24 @ 4 pm

Yin, Emily (Alexandria)

From: Nalin De Silva <nalin_desilva@drm.ltd>
Sent: Thursday, 12 September 2024 1:29 PM
To: AU.SampleReceipt.Sydney, AU (Sydney); Rahabar Alam
Cc: AU.Environmental.Sydney, AU (Sydney); AU.SampleReceipt.Sydney, AU (Sydney)
Subject: Re: [EXTERNAL] DRM P23.1039.V12 CoC for samples delivered to lab by Rahabar on 11 Sept

Hi
Please analyse for DRM1.

NALIN DE SILVA
PRINCIPAL ENVIRONMENTAL ENGINEER

DEVELOPMENT RISK MANAGEMENT PTY LTD

From: AU.SampleReceipt.Sydney, AU (Sydney) <AU.SampleReceipt.Sydney@sgs.com>
Sent: Thursday, September 12, 2024 1:17:54 PM
To: Nalin De Silva <nalin_desilva@drm.ltd>; Rahabar Alam <rahabar_alam@drm.ltd>
Cc: AU.Environmental.Sydney, AU (Sydney) <AU.Environmental.Sydney@sgs.com>; AU.SampleReceipt.Sydney, AU (Sydney) <AU.SampleReceipt.Sydney@sgs.com>
Subject: RE: [EXTERNAL] DRM P23.1039.V12 CoC for samples delivered to lab by Rahabar on 11 Sept

Hi All,

SS1 (1 soil jar) also received. It was not listed in the COC. Please advise how to proceed. Thank you.

Kind regards,

Please kindly Reply to All for a timely response. Thank you!

Van Luong
Industries & Environment
Sample Receipt Team Lead

SAMPLE RECEIPT ADVICE

SE270919

CLIENT DETAILS

Contact	Rahabar Alam
Client	DEVELOPMENT RISK MANAGEMENT PTY LTD
Address	37 MOUNT PLEASANT AVENUE NORMANHURST NSW 2076
Telephone	(Not specified)
Facsimile	(Not specified)
Email	rahabar_alam@drm.ltd
Project	**DRM P23.1039.V12 - Orchard Hills**
Order Number	**DRM P23.1039.V12**
Samples	24

LABORATORY DETAILS

Manager	Shane McDermott
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Wed 11/9/2024
Report Due	Thu 19/9/2024
SGS Reference	**SE270919**

SUBMISSION DETAILS

This is to confirm that 24 samples were received on Wednesday 11/9/2024. Results are expected to be ready by COB Thursday 19/9/2024.
Please quote SGS reference SE270919 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Sample counts by matrix	24 Soil	Type of documentation received	COC
Date documentation received	12/09/2024@12:36PM	Samples received in good order	Yes
Samples received without headspace	Yes	Sample temperature upon receipt	1.2°C
Sample container provider	SGS	Turnaround time requested	Standard
Samples received in correct containers	Yes	Sufficient sample for analysis	Yes
Sample cooling method	Ice	Samples clearly labelled	Yes
Complete documentation received	Yes		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

4 samples have been placed on hold as no tests have been assigned for them. These samples will not be processed.
DUP2A - Forwarded to Eurofins.

SAMPLE RECEIPT ADVICE

SE270919

CLIENT DETAILS

Client DEVELOPMENT RISK MANAGEMENT PTY LTD

Project DRM P23.1039.V12 - Orchard Hills

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	Total Recoverable Elements in Soil/Waste	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
001	TP591_0-0.5	-	26	-	7	10	11	7
002	TP592_0-0.1	-	26	-	7	10	11	7
003	TP597_0-0.1	30	26	11	7	10	11	7
004	TP597_0.2-0.4	-	26	-	7	10	11	7
005	TP598_0-0.5	30	26	11	7	10	11	7
006	TP599_0.1-0.7 0-0.8	30	26	11	7	10	11	7
007	TP602_0-0.6	-	26	-	7	10	11	7
008	TP611_0-0.1	-	26	-	7	10	11	7
009	TP613_0.1-0.4	30	26	11	7	10	11	7
010	TP613_0.6-0.8	-	26	-	7	10	11	7
011	TP618_0-0.5	-	26	-	7	10	11	7
012	TP619_0-0.7	30	26	11	7	10	11	7
013	TP625_0-0.5	-	26	-	7	10	11	7
014	TP626_0-0.1	-	26	-	7	10	11	7
015	TP627_0.3-0.5	-	26	-	7	10	11	7
016	TP634_0-0.1	-	26	-	7	10	11	7
017	TP638_0-0.1	30	26	11	7	10	11	7
018	TP642_0.3-0.5	-	26	-	7	10	11	7
019	TP642_0.1-0.3	-	26	-	7	10	11	7
020	TP645_0-0.1	-	26	-	7	10	11	7
021	TP648_0-0.05	-	26	-	7	10	11	7
022	DUP1	-	26	-	7	-	-	-
023	DUP2	-	26	-	7	-	-	-
024	SS1	-	26	-	7	10	11	7

CONTINUED OVERLEAF

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

SAMPLE RECEIPT ADVICE

SE270919

CLIENT DETAILS

Client DEVELOPMENT RISK MANAGEMENT PTY LTD

Project DRM P23.1039.V12 - Orchard Hills

SUMMARY OF ANALYSIS

No.	Sample ID	Mercury in Soil	Moisture Content
001	TP591_0-0.5	1	1
002	TP592_0-0.1	1	1
003	TP597_0-0.1	1	1
004	TP597_0.2-0.4	1	1
005	TP598_0-0.5	1	1
006	TP599_0.1-0.7 0-0.8	1	1
007	TP602_0-0.6	1	1
008	TP611_0-0.1	1	1
009	TP613_0.1-0.4	1	1
010	TP613_0.6-0.8	1	1
011	TP618_0-0.5	1	1
012	TP619_0-0.7	1	1
013	TP625_0-0.5	1	1
014	TP626_0-0.1	1	1
015	TP627_0.3-0.5	1	1
016	TP634_0-0.1	1	1
017	TP638_0-0.1	1	1
018	TP642_0.3-0.5	1	1
019	TP642_0.1-0.3	1	1
020	TP645_0-0.1	1	1
021	TP648_0-0.05	1	1
022	DUP1	1	1
023	DUP2	1	1
024	SS1	1	1

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

#UNKNOWN!

CHAIN OF CUSTODY & ANALYSIS REQUEST

SGS Environmental Services Sydney

Unit 16, 33 Maddox Street

Alexandria NSW 2015

Telephone No: (02) 85940400

Facsimile No: (02) 85940499

Email: au.samplereceipt.sydney@sgs.com

Company Name:	Development Risk Management
Address:	Suite 7, 265-271 Pennant Hills Road Thornleigh, NSW 2120
Contact Name:	RAHABAR ALAM
Project Name/No:	DRM P23.1039.V12 - Orchard Hills
Purchase Order No:	NA
Results Required By:	Results by COB 19 Sept
Telephone:	0450 356 834
Facsimile:	NA
Email Results:	results@drm.ltd RAHABAR_ALAM@DRM.LTD

Relinquished By: RAHABAR ALAM	Date/Time: 11/09/2024 Courier Ref:	Received By: Brendan C	Date/Time 12/9
Relinquished By:	Date/Time:	Received By:	Date/Time 2:37 PM
Samples Intact: Yes/ No	Temperature: Ambient / Chilled	Sample Cooler Sealed: Yes/ No	Laboratory Quotation No: 1772515 and 1654186V2

Client Sample ID	Date Sampled	Lab Sample ID	WATER	SOIL	PRESERVATIVE	ASS [illegible]	Jar samples	DRM1 TRH/ BTEXN/ PAH/ 8 Metals	DRM8 CL2T 8 Metals (Total)	DRM3A TRH/ BTEXN/ PAH/ OC/ PCB/ 8 Metals	PAH	COMMENTS 11.9 °C CR ~~EI~~ CHL
TP591 _ 0 - 0.5	10/09/2024			x			1	X				
TP592 _ 0 - 0.1	10/09/2024			x			1	X				
TP597 _ 0 - 0.1	11/09/2024			x			1			X		
TP597 _ 0.2 - 0.4	11/09/2024			x			1	X				
TP598 _ 0 - 0.5	11/09/2024			x			1			X		
TP599 _ 0.1 - 0.7	11/09/2024			x			1			X		
TP602 _ 0 - 0.6	11/09/2024			x			1	X				
TP611 _ 0 - 0.1	10/09/2024			x			1	X				
TP613 _ 0.1 - 0.4	11/09/2024			x			1			X		
TP613 _ 0.6 - 0.8	11/09/2024			x			1	X				
TP618 _ 0 - 0.5	11/09/2024			x			1	X				
TP619 _ 0 - 0.7	11/09/2024			x			1			X		
TP620 _ 0 - 0.1	11/09/2024			x			1					

1138611

#UNKNOWN!

CHAIN OF CUSTODY & ANALYSIS REQUEST

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

Company Name:	Development Risk Management	Project Name/No:	DRM P23.1039.V12 - Orchard Hills
Address:	Suite 7, 265-271 Pennant Hills Road	Purchase Order No:	NA
	Thornleigh, NSW 2120	Results Required By:	Results by COB 19 Sept
		Telephone:	0450 356 834
Contact Name:	RAHABAR ALAM	Facsimile:	NA
		Email Results:	results@drm.ltd RAHABAR_ALAM@DRM.LTD

Relinquished By: RAHABAR ALAM	Date/Time: 11/09/2024 Courier Ref:	Received By:	Date/Time
Relinquished By:	Date/Time:	Received By:	Date/Time
Samples Intact: Yes/ No	Temperature: Ambient / Chilled	Sample Cooler Sealed: Yes/ No	Laboratory Quotation No: 1772515 and 1654186V2

Client Sample ID	Date Sampled	Lab Sample ID	WATER	SOIL	PRESERVATIVE	ASS bags	Jar Sample	DRM1 TRH/ BTEXN/ PAH/ 8 Metals	DRM8 CL2T 8 Metals (Total)	DRM3A TRH/ BTEXN/ PAH/ OC/ PCB/ 8 Metals	PAH	COMMENTS
TP625 _ 0 - 0.5	11/09/2024			X			1	X				
TP626 _ 0 - 0.1	11/09/2024			X			1	X				
TP626 _ 0.2 - 0.5	11/09/2024			X			1					
TP627 _ 0.3 - 0.5	11/09/2024			X			1	X				
TP634 _ 0 - 0.1	10/09/2024			X			1	X				
TP638 _ 0 - 0.1	10/09/2024			X			1			X		
TP642 _ 0 - 0.1	10/09/2024			X			1					
TP642 _ 0.3 - 0.5	10/09/2024			X			1	X				
TP642 _ 0.1 - 0.3	10/09/2024			X			1	X				
TP645 _ 0 - 0.1	10/09/2024			X			1	X				
TP647 _ 0 - 0.1	10/09/2024			X			1					
TP648 _ 0 - 0.05	10/09/2024			X			1	X				
DUP1	10/09/2024			X			1		X		X	

#UNKNOWN!

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Alexandria NSW 2015
Telephone No: (02) 85940400
Facsimile No: (02) 85940499
Email: au.samplereceipt.sydney@sgs.com

Company Name:	**Development Risk Management**	Project Name/No:	**DRM P23.1039.V12 - Orchard Hills**
Address:	Suite 7, 265-271 Pennant Hills Road Thornleigh, NSW 2120	Purchase Order No:	NA
		Results Required By:	**Results by COB 19 Sept**
		Telephone:	0450 356 834
Contact Name:	**RAHABAR ALAM**	Facsimile:	NA
		Email Results:	results@drm.ltd RAHABAR_ALAM@DRM.LTD

Relinquished By: **RAHABAR ALAM**	Date/Time: **11/09/2024** Courier Ref:	Received By:	Date/Time
Relinquished By:	Date/Time:	Received By:	Date/Time
Samples Intact: Yes/ No	Temperature: Ambient / Chilled	Sample Cooler Sealed: Yes/ No	Laboratory Quotation No: **1772515 and 1654186V2**

Client Sample ID	Date Sampled	Lab Sample ID	WATER	SOIL	PRESERVATIVE	ASS BAG	Jar Sample Type	DRM1 TRH/ BTEXN/ PAH/ 8 Metals	DRM8 CL2T 8 Metals (Total)	DRM3A TRH/ BTEXN/ PAH/ OC/ PCB/ 8 Metals	PAH												COMMENTS
DUP2	11/09/2024		X				1		X		X												
DUP2A	11/09/2024		X				1		X		X												Send to Eurofins

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www.eurofins.com.au EnviroSales@eurofins.com

Eurofins Environment Testing Australia Pty Ltd

ABN: 50 005 085 521

Melbourne	Geelong	Sydney	Canberra	Brisbane	Newcastle
6 Monterey Road	19/8 Lewalan Street	179 Magowar Road	Unit 1,2 Dacre Street	1/21 Smallwood Place	1/2 Frost Drive
Dandenong South	Grovedale	Girraween	Mitchell	Murarrie	Mayfield West
VIC 3175	VIC 3216	NSW 2145	ACT 2911	QLD 4172	NSW 2304
+61 3 8564 5000	+61 3 8564 5000	+61 2 9900 8400	+61 2 6113 8091	T: +61 7 3902 4600	+61 2 4968 8448
NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261
Site# 1254	Site# 25403	Site# 18217	Site# 25466	Site# 20794 & 2780	Site# 25079

Eurofins ARL Pty Ltd **Eurofins ProMicro Pty Ltd**

ABN: 91 05 0159 898	ABN: 47 009 120 549
Perth	**Perth ProMicro**
46-48 Banksia Road	46-48 Banksia Road
Welshpool	Welshpool
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+61 8 6253 4444	+61 8 6253 4444
NATA# 2377	NATA# 2561
Site# 2370	Site# 2554

Eurofins Environment Testing NZ Ltd

NZBN: 9429046024954

Auckland	Auckland (Focus)	Christchurch	Tauranga
35 O'Rorke Road	Unit C1/4 Pacific Rise,	43 Detroit Drive	1277 Cameron Road,
Penrose,	Mount Wellington,	Rolleston,	Gate Pa,
Auckland 1061	Auckland 1061	Christchurch 7675	Tauranga 3112
+64 9 526 4551	+64 9 525 0568	+64 3 343 5201	+64 9 525 0568
IANZ# 1327	IANZ# 1308	IANZ# 1290	IANZ# 1402

Sample Receipt Advice

Company name: Development Risk Management Pty Ltd
Contact name: Rahabar Alam
Project name: ORCHARD HILLS
Project ID: DRM P23.1039V12
Turnaround time: 5 Day
Date/Time received Sep 12, 2024 2:17 PM
Eurofins reference 1138611

Sample Information

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

Notes

Contact

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

Asim Khan on phone : or by email: AsimKhan@eurofins.com

Results will be delivered electronically via email to Rahabar Alam - rahabar_alam@drm.ltd.

Note: A copy of these results will also be delivered to the general Development Risk Management Pty Ltd email address.

Global Leader - Results you can trust

eurofins

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

Eurofins Environment Testing Australia Pty Ltd
ABN: 50 005 085 521

Melbourne	Geelong	Sydney	Canberra	Brisbane	Newcastle
6 Monterey Road	19/8 Lewalan Street	179 Magowar Road	Unit 1,2 Dacre Street	1/21 Smallwood Place	1/2 Frost Drive
Dandenong South	Grovedale	Girraween	Mitchell	Murarrie	Mayfield West
VIC 3175	VIC 3216	NSW 2145	ACT 2911	QLD 4172	NSW 2304
+61 3 8564 5000	+61 3 8564 5000	+61 2 9900 8400	+61 2 6113 8091	T: +61 7 3902 4600	+61 2 4968 8448
NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261
Site# 1254	Site# 25403	Site# 18217	Site# 25466	Site# 20794 & 2780	Site# 25079

Eurofins ARL Pty Ltd
ABN: 91 05 0159 898

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

Eurofins ProMicro Pty Ltd
ABN: 47 009 120 549

Perth ProMicro
46-48 Banksia Road
Welshpool
WA 6106
+61 8 6253 4444
NATA# 2561
Site# 2554

Eurofins Environment Testing NZ Ltd
NZBN: 9429046024954

Auckland	Auckland (Focus)	Christchurch	Tauranga
35 O'Rorke Road	Unit C1/4 Pacific Rise,	43 Detroit Drive	1277 Cameron Road,
Penrose,	Mount Wellington,	Rolleston,	Gate Pa,
Auckland 1061	Auckland 1061	Christchurch 7675	Tauranga 3112
+64 9 526 4551	+64 9 525 0568	+64 3 343 5201	+64 9 525 0568
IANZ# 1327	IANZ# 1308	IANZ# 1290	IANZ# 1402

Company Name: Development Risk Management Pty Ltd
Address: 37 Mount Pleasant Avenue
Normanhurst
NSW 2076

Project Name: ORCHARD HILLS
Project ID: DRM P23.1039V12

Order No.:
Report #: 1138611
Phone: 0450 715 562
Fax:

Received: Sep 12, 2024 2:17 PM
Due: Sep 19, 2024
Priority: 5 Day
Contact Name: Rahabar Alam

Eurofins Analytical Services Manager : Asim Khan

Sample Detail						Polycyclic Aromatic Hydrocarbons	Metals M8	Moisture Set
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X
External Laboratory								
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**			
1	DUP2A	Sep 11, 2024		Soil	S24-Se0031851	X	X	X
Test Counts						1	1	1

Development Risk Management Pty Ltd
37 Mount Pleasant Avenue
Normanhurst
NSW 2076

Attention: **Rahabar Alam**

Report **1138611-S**
Project name ORCHARD HILLS
Project ID DRM P23.1039V12
Received Date Sep 12, 2024

Client Sample ID			**DUP2A**
Sample Matrix			**Soil**
Eurofins Sample No.			**S24-Se0031851**
Date Sampled			**Sep 11, 2024**
Test/Reference	LOR	Unit	
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	%	75
p-Terphenyl-d14 (surr.)	1	%	81
Heavy Metals			
Arsenic	2	mg/kg	11
Cadmium	0.4	mg/kg	< 0.4
Chromium	5	mg/kg	20
Copper	5	mg/kg	17
Lead	5	mg/kg	30
Mercury	0.1	mg/kg	< 0.1
Nickel	5	mg/kg	9.9
Zinc	5	mg/kg	28
Sample Properties			
% Moisture	1	%	19

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
Polycyclic Aromatic Hydrocarbons	Sydney	Sep 14, 2024	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Metals M8	Sydney	Sep 14, 2024	28 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
% Moisture	Sydney	Sep 12, 2024	14 Days
- Method: LTM-GEN-7080 Moisture			

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email: EnviroSales@eurofins.com

Eurofins Environment Testing Australia Pty Ltd
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Melbourne	Geelong	Sydney	Canberra	Brisbane	Newcastle
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Company Name: Development Risk Management Pty Ltd
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Sample Detail						Polycyclic Aromatic Hydrocarbons	Metals M8	Moisture Set
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X
External Laboratory								
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**			
1	DUP2A	Sep 11, 2024		Soil	S24-Se0031851	X	X	X
Test Counts						1	1	1

Internal Quality Control Review and Glossary

General

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

Holding Times

Please refer to the '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 before sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and despite any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the sampling date; therefore, compliance with these may be outside the laboratory's control.

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

Units

mg/kg: milligrams per kilogram	**mg/L:** milligrams per litre	**ppm:** parts per million
µg/L: micrograms per litre	**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	**Colour:** Pt-Co Units (CU)	

Terms

APHA	American Public Health Association
CEC	Cation Exchange Capacity
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 moisture has been determined on a solid sample, the result is expressed on a dry weight 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 represents 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 similar compound to the analyte target is reported as percentage recovery. See below for acceptance criteria.
TBTO	Tributyltin oxide (*bis*-tributyltin oxide) - individual tributyltin compounds cannot be identified separately in the environment; however, free tributyltin was measured, and its values were converted stoichiometrically into tributyltin oxide for comparison with regulatory limits.
TCLP	Toxicity Characteristic Leaching Procedure
TEQ	Toxic Equivalency Quotient or Total Equivalence
QSM	US Department of Defense Quality Systems Manual Version 6.0
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 only be used as a guide 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. SVOCs recoveries 20 – 150%, VOC recoveries 50 – 150%

PFAS field samples containing surrogate recoveries above the QC limit designated in QSM 6.0, where no positive PFAS results have been reported or reviewed, and no data was affected.

QC Data General Comments

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

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
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	
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	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	92			70-130	Pass	
Acenaphthylene	%	84			70-130	Pass	
Anthracene	%	88			70-130	Pass	
Benz(a)anthracene	%	94			70-130	Pass	
Benzo(a)pyrene	%	100			70-130	Pass	
Benzo(b&j)fluoranthene	%	101			70-130	Pass	
Benzo(g.h.i)perylene	%	99			70-130	Pass	
Benzo(k)fluoranthene	%	103			70-130	Pass	
Chrysene	%	101			70-130	Pass	
Dibenz(a.h)anthracene	%	95			70-130	Pass	
Fluoranthene	%	90			70-130	Pass	
Fluorene	%	94			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	99			70-130	Pass	
Naphthalene	%	89			70-130	Pass	
Phenanthrene	%	92			70-130	Pass	
Pyrene	%	90			70-130	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	109			80-120	Pass	
Cadmium	%	104			80-120	Pass	
Chromium	%	103			80-120	Pass	
Copper	%	103			80-120	Pass	

Test			Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Lead			%	105			80-120	Pass	
Mercury			%	109			80-120	Pass	
Nickel			%	102			80-120	Pass	
Zinc			%	103			80-120	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	S24-Se0025447	NCP	%	97			75-125	Pass	
Cadmium	S24-Se0025447	NCP	%	94			75-125	Pass	
Chromium	S24-Se0025447	NCP	%	90			75-125	Pass	
Copper	S24-Se0036156	NCP	%	109			75-125	Pass	
Lead	S24-Se0025447	NCP	%	83			75-125	Pass	
Mercury	S24-Se0025447	NCP	%	98			75-125	Pass	
Nickel	S24-Se0025447	NCP	%	90			75-125	Pass	
Zinc	S24-Se0025447	NCP	%	87			75-125	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	N24-Se0033739	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	N24-Se0033739	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	N24-Se0033739	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	N24-Se0033739	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	N24-Se0033739	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&j)fluoranthene	N24-Se0033739	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	N24-Se0033739	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	N24-Se0033739	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	N24-Se0033739	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	N24-Se0033739	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	N24-Se0033739	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	N24-Se0033739	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	N24-Se0033739	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	N24-Se0033739	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	N24-Se0033739	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	N24-Se0033739	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	S24-Se0036145	NCP	mg/kg	8.0	5.5	37	30%	Fail	Q15
Cadmium	S24-Se0036145	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	S24-Se0036145	NCP	mg/kg	18	12	40	30%	Fail	Q15
Copper	S24-Se0031796	NCP	mg/kg	15	20	26	30%	Pass	
Lead	S24-Se0036145	NCP	mg/kg	17	16	5.0	30%	Pass	
Mercury	S24-Se0036145	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Nickel	S24-Se0036145	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
Zinc	S24-Se0036145	NCP	mg/kg	35	57	48	30%	Fail	Q15
Duplicate									
Sample Properties				Result 1	Result 2	RPD			
% Moisture	S24-Se0031796	NCP	%	16	17	2.0	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
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
Fang Yee Tan	Senior Analyst-Metal
Roopesh Rangarajan	Senior Analyst-Organic
Roopesh Rangarajan	Senior Analyst-Sample Properties

Glenn Jackson
Managing Director

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.

APPENDIX H

SECTION 10.7 (2 & 5) PLANNING CERTIFICATE

PENRITH CITY COUNCIL

Civic Centre
601 High Street, Penrith

PO Box 60 Penrith NSW 2751
Telephone: 02 4732 7777
Facsimile: 02 4732 7958
Email: pencit@penrithcity.nsw.gov.au

PLANNING CERTIFICATE UNDER SECTION 10.7

Environmental Planning and Assessment Act, 1979

Property No: 805372
Your Reference: DRM P23.1039
Contact No.

Issue Date: 20 March 2024
Certificate No: 24/01488

Issued to: Development Risk Management Pty Ltd
Suite 7 265-271 Pennant Hills Road
THORNLEIGH NSW 2120

PRECINCT 2010

DESCRIPTION OF LAND

County: CUMBERLAND **Parish: CLAREMONT**

Location: Coolamon Park 211-227 Luddenham Road ORCHARD HILLS NSW 2748
Land Description: Lot 1 DP 1293805

- PART 1 PRESCRIBED MATTERS –

In accordance with the provisions of Section 10.7 of the Act the following information is furnished in respect of the abovementioned land:

1 *NAMES OF RELEVANT PLANNING INSTRUMENTS AND DCPs*

1(1) The name of each environmental planning instrument and development control plan that applies to the carrying out of development on the land:

The following Local environmental planning instruments apply to the land:

Penrith Local Environmental Plan 2010, published 22nd September 2010, as amended, applies to the land.

The following State environmental planning instruments apply to the land:

State Environmental Planning Policy (Biodiversity and Conservation) 2021, Chapter 2 - *Vegetation in non-rural* areas.
State Environmental Planning Policy (Biodiversity and Conservation) 2021, Chapter 6 - *Water Catchments* - (Note: This policy does not apply to land to which State Environmental Planning Policy (Precincts - Western Parkland City) 2021, Chapter 5 - *Penrith Lakes Scheme*, applies.)
State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.
State Environmental Planning Policy (Housing) 2021.
State Environmental Planning Policy (Industry and Employment) 2021, Chapter 3 - *Advertising and signage.*
State Environmental Planning Policy No.65 - Design Quality of Residential Apartment Development.
State Environmental Planning Policy (Planning Systems) 2021, Chapter 2 - *State and regional development.*

PENRITH CITY COUNCIL

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601 High Street, Penrith

PO Box 60 Penrith NSW 2751
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Facsimile: 02 4732 7958
Email: pencit@penrithcity.nsw.gov.au

PLANNING CERTIFICATE UNDER SECTION 10.7

Environmental Planning and Assessment Act, 1979

State Environmental Planning Policy (Precincts - Western Parkland City) 2021, Chapter 2 - *State Significant Precincts.*
State Environmental Planning Policy (Precincts - Western Parkland City) 2021, Chapter 4 - *Western Sydney Aerotropolis.*
State Environmental Planning Policy (Primary Production) 2021, Chapter 2 - *Primary production and rural development.*
State Environmental Planning Policy (Resilience and Hazards) 2021, Chapter 3 - *Hazardous and offensive development.*
State Environmental Planning Policy (Resilience and Hazards) 2021, Chapter 4 - *Remediation of land.*
State Environmental Planning Policy (Resources and Energy) 2021, Chapter 2 - *Mining, petroleum production and extractive industries.*
State Environmental Planning Policy (Resources and Energy) 2021, Chapter 3 - *Extractive industries in Sydney area*.
State Environmental Planning Policy (Transport and Infrastructure) 2021, Chapter 2 - *Infrastructure*.
State Environmental Planning Policy (Transport and Infrastructure) 2021, Chapter 3 - *Educational establishments and childcare facilities.*
State Environmental Planning Policy (Sustainable Buildings) 2022
State Environmental Planning Policy (Biodiversity and Conservation) 2021, *Chapter 13 - Strategic Conservation Planning* applies to the land.

The following Development Control Plans apply to the land:

Penrith Development Control Plan 2014 applies to the land.
A draft amendment to Penrith Development Control Plan 2014 for 221- 325 Luddenham Road, Orchard Hills applies to the land. Please visit Council's website via www.penrithcity.nsw.gov.au for more information.

1(2) The name of each proposed environmental planning instrument and draft development control plan, which is or has been the subject of community consultation or on public exhibition under the Act, that will apply to the carrying out of development on the land:

(Information is provided in this section only if a proposed environmental planning instrument that is or has been the subject of community consultation or on public exhibition under the Act will apply to the carrying out of development on the land.)

A Planning Proposal for 221-325 Luddenham Road, Orchard Hills applies to certain land. The 221-325 Luddenham Road Planning Proposal seeks to rezone the site under Penrith Local Environmental Plan 2010 from RU2 Rural Landscape to part E4 General Industrial (Formerly IN1 General Industrial and IN2 Light Industrial).

The Planning Proposal will also apply a maximum height of building control of 24 metres, a minimum lot size control of 1000sq.m, and minimum lot density provisions. (See www.penrithcity.nsw.gov.au for details).- Exhibition 16/12/2022 to 06/02/2023.
Draft State Environmental Planning Policy (Housing) 2021 applies to this land.
Draft State Environmental Planning Policy (Transport and Infrastructure) 2021 applies to this land.
Draft State Environmental Planning Policy (Planning Systems) 2021 applies to this land.
Draft State Environmental Planning Policy No 65 - Design Quality of Residential Apartment Development applies to this land.

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Draft State Environmental Planning Policy (Precincts - Western Parkland City) 2021 applies to this land.

2 *ZONING AND LAND USE UNDER RELEVANT PLANNING INSTRUMENTS*

For each environmental planning instrument or draft environmental planning instrument referred that includes the land in a zone (however described):

2(a)-(b) the identity of the zone; the purposes for which development in the zone may be carried out without development consent; the purposes for which development in the zone may not be carried out except with development consent; and the purposes for which development in the zone is prohibited. Any zone(s) applying to the land is/are listed below and/or in annexures.

Zone C2 Environmental Conservation
(Penrith Local Environmental Plan 2010)

1 Objectives of zone

- To protect, manage and restore areas of high ecological, scientific, cultural or aesthetic values.
- To prevent development that could destroy, damage or otherwise have an adverse effect on those values.
- To protect, manage, restore and enhance the ecology, hydrology and scenic values of riparian corridors and waterways, wetlands, groundwater resources, biodiversity corridors, areas of remnant indigenous vegetation and dependent ecosystems.
- To allow for low impact passive recreational and ancillary land uses that are consistent with the retention of the natural ecological significance.

2 Permitted without consent

Nil

3 Permitted with consent

Environmental facilities; Environmental protection works; Flood mitigation works; Oyster aquaculture; Recreation areas; Roads

4 Prohibited

Business premises; Hotel or motel accommodation; Industries; Multi dwelling housing; Pond-based aquaculture; Recreation facilities (major); Residential flat buildings; Restricted premises; Retail premises; Seniors housing; Service stations; Tank-based aquaculture; Warehouse or distribution centres; Any other development not specified in item 2 or 3

Note: On 1 December 2021, the NSW Government made changes to clause 2.1 Land use zones of the *Standard Instrument - Principal Local Environmental Plan*. All Environment Protection zones E1, E2, E3 or E4 have now been renamed to Conservation zones C1, C2, C3 or C4 respectively. The prefix and the zone category are the only changes, the objectives and land use tables remain the same. This change occurred across all standardised local environmental plans that are in place across New South Wales.

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PLANNING CERTIFICATE UNDER SECTION 10.7

Environmental Planning and Assessment Act, 1979

Zone RU2 Rural Landscape
(Penrith Local Environmental Plan 2010)

1 Objectives of zone

- To encourage sustainable primary industry production by maintaining and enhancing the natural resource base.
- To maintain the rural landscape character of the land.
- To provide for a range of compatible land uses, including extensive agriculture.
- To minimise conflict between land uses within the zone and land uses within adjoining zones.
- To preserve and improve natural resources through appropriate land management practices.
- To ensure development is compatible with the environmental capabilities of the land and does not unreasonably increase the demand for public services or public facilities.

2 Permitted without consent

Extensive agriculture; Home occupations

3 Permitted with consent

Agricultural produce industries; Agriculture; Animal boarding or training establishments; Aquaculture; Building identification signs; Business identification signs; Cellar door premises; Cemeteries; Community facilities; Crematoria; Dual occupancies; Dwelling houses; Environmental facilities; Environmental protection works; Farm buildings; Flood mitigation works; Forestry; Funeral homes; Helipads; Home-based child care; Home businesses; Home industries; Information and education facilities; Places of public worship; Public administration buildings; Recreation areas; Recreation facilities (outdoor); Roads; Roadside stalls; Rural supplies; Schools; Secondary dwellings; Stock and sale yards; Tourist and visitor accommodation; Veterinary hospitals

4 Prohibited

Hotel or motel accommodation; Serviced apartments; Any other development not specified in item 2 or 3

Under the provisions of the Planning Proposal for 221-325 Luddenham Road, Orchard Hills, the land is affected by the following draft zone:

Zone E4 General Industrial
(Penrith Local Environmental Plan 2010)

1 Objectives of zone

- To provide a range of industrial, warehouse, logistics and related land uses.
- To ensure the efficient and viable use of land for industrial uses.
- To minimise any adverse effect of industry on other land uses.
- To encourage employment opportunities.
- To enable limited non-industrial land uses that provide facilities and services to meet the needs of businesses and workers.

2 Permitted without consent.

Nil

3 Permitted with consent.

Animal boarding or training establishments; Boat building and repair facilities; Car parks; Depots; Environmental facilities; Environmental protection works; Flood mitigation works; Freight transport facilities; Garden centres; General industries; Goods repair and reuse

premises; Hardware and building supplies; Industrial retail outlets; Industrial training facilities; Industries; Kiosks; Landscaping material supplies; Light industries; Local distribution premises; Neighbourhood shops; Oyster aquaculture; Places of public worship; Plant nurseries; Recreation areas; Roads; Rural industries; Signage; Storage premises; Take away food and drink premises; Tank-based aquaculture; Timber yards; Transport depots; Truck depots; Vehicle body repair workshops; Vehicle repair stations; Warehouse or distribution centres.

4 Prohibited

Hazardous industries; Offensive industries; Any development not specified in item 2 or 3

Note: On 26 April 2023, the NSW Government made changes to clause 2.1 Land use zones of the Standard Instrument - Principal Local Environmental Plan (2006). All Business zones B1, B2, B3, B4, B5, B6, B7 and B8 along with Industrial zones IN1, IN2, IN3 and IN4 have now been replaced with Employment zones E1, E2, E3, E4, E5, MU1, SP4, SP5 and W4 respectively. This change occurred across all standardised local environmental plans that are in force across New South Wales.

2(c) whether additional permitted uses apply to the land,

(Information is provided in this section only if environmental planning instruments apply additional permitted use provisions to this land.)

Rural subdivision

Under the terms of Clause 4.2 of Penrith Local Environmental Plan 2010 land in Zone RU1 Primary Production, Zone RU2 Rural Landscape, Zone RU4 Primary Production Small Lots or Zone RU6 Transition may, with development consent, be subdivided for the purpose of primary production to create a lot of a size that is less than the minimum size shown on the Penrith Local Environmental Plan 2010 Lot Size Map in relation to that land. Such a lot cannot be created if an existing dwelling would, as a result of the subdivision, be situated on the lot; and a dwelling cannot be erected on such a lot.

Residential development and subdivision prohibited in certain rural, residential and environment protection zones

Under the terms of Clause 4.2A of Penrith Local Environmental Plan 2010 (PLEP 2010) on land within Zone RU1 Primary Production, Zone RU2 Rural Landscape, Zone RU4 Primary Production Small Lots, Zone RU5 Village, Zone R5 Large Lot Residential, Zone C3 Environmental Management or Zone C4 Environmental Living development consent must not be granted for the erection of a dwelling house on a lot resulting from the closure of part or all of a road, whether before or after the commencement of this Plan. This requirement does not apply to a lot created by the consolidation of a lot resulting from a road closure with an adjoining lot that did not result from a road closure.

Additional information relating to Penrith Local Environmental Plan 2010

Note 1: Under the terms of Clause 2.4 of Penrith Local Environmental Plan 2010 development may be carried out on unzoned land only with development consent.

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Note 2: Under the terms of Clause 2.6 of Penrith Local Environmental Plan 2010 land may be subdivided but only with development consent, except for the exclusions detailed in the clause.

Note 3: Under the terms of Clause 2.7 of Penrith Local Environmental Plan 2010 the demolition of a building or work may be carried out only with development consent.

Note 4: A temporary use may be permitted with development consent subject to the requirements of Clause 2.8 of Penrith Local Environmental Plan 2010.

Note 5: Under the terms of Clause 4.1A of Penrith Local Environmental Plan 2010, despite any other provision of this plan, development consent must not be granted for dual occupancy on an internal lot in Zone R2 Low Density Residential.

Note 6: Under the terms of Clause 5.1 of Penrith Local Environmental Plan 2010 development on land acquired by an authority of the State under the owner-initiated acquisition provisions may, before it is used for the purpose for which it is reserved, be carried out, with development consent, for any purpose.

Note 7: Under the terms of Clause 5.3 of Penrith Local Environmental Plan 2010 development consent may be granted to development of certain land for any purpose that may be carried out in an adjoining zone.

Note 8: Clause 5.10 of Penrith Local Environmental Plan 2010 details when development consent is required/not required in relation to heritage conservation.

Note 9: Under the terms of Clause 5.11 of Penrith Local Environmental Plan 2010 bush fire hazard reduction work authorised by the *Rural Fires Act 1997* may be carried out on any land without development consent.

Note 10: Under the terms of Clause 7.1 of Penrith Local Environmental Plan 2010 (PLEP 2010) development consent is required for earthworks unless the work is exempt development under PLEP 2010 or another applicable environmental planning instrument, or the work is ancillary to other development for which development consent has been given.

Note 11: Sex services premises and restricted premises may only be permitted subject to the requirements of Clause 7.23 of Penrith Local Environmental Plan 2010.

2(d) whether development standards applying to the land fix minimum land dimensions for the erection of a dwelling house on the land and, if so, the fixed minimum land dimensions.

(Information is provided in this section only if any development standards applying to the land fix minimum land dimensions for the erection of a dwelling-house on the land and, if so, the minimum land dimensions so fixed.)

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2(e) whether the land is in an area of outstanding biodiversity value under the Biodiversity Conservation Act 2016

(Information is provided in this section only if the land is identified in an area of outstanding biodiversity value under the Biodiversity Conservation Act 2016.)

2(f) whether the land is in a conservation area, however described:

(Information is provided in this section only if the land is in a conservation area, however described.)

2(g) whether an item of environmental heritage, however described, is situated on the land:

(Information is provided in this section only if an item of environmental heritage, however described, is situated on the land.)

3 CONTRIBUTIONS PLANS

The name of each contributions plan under the Act, Division 7.1 applying to the land, including draft contributions plans:

The Cultural Facilities Development Contributions Plan applies anywhere residential development is permitted within the City of Penrith.

The Penrith City Local Open Space Development Contributions Plan applies anywhere residential development is permitted within the City of Penrith, excluding industrial areas and the release areas identified in Appendix B of the Plan (Penrith Lakes, Cranebrook, State Environmental Planning Policy (Precincts - Western Parkland City) 2021, Chapter 6 - *St Marys*, Waterside, Thornton, the WELL Precinct, Glenmore Park and Erskine Park).

The Penrith City District Open Space Facilities Development Contributions Plan applies anywhere residential development is permitted within the City of Penrith, with the exclusion of industrial lands and the Penrith Lakes development site.

Penrith Citywide Section 7.12 Development Contributions Plan for non-residential development applies to non-residential development across Penrith Local Government Area, with the exception of the Mamre and Aerotropolis Precincts.

The Environmental Planning and Assessment (Housing and Productivity Contribution) Order 2023 applies to the Greater Sydney region which includes the Penrith Local Government Area, with the exception of the Western Sydney Aerotropolis Precinct. Please refer to www.legislation.nsw.gov.au for further information.

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4 COMPLYING DEVELOPMENT

HOUSING CODE

(The Housing Code only applies if the land is within Zones R1, R2, R3, R4 or RU5 under Penrith Local Environmental Plan 2010 or an equivalent zone in a non standard template planning instrument.)

- The land is affected by environmentally sensitive land identified by an environmental planning instrument. If the land is within the relevant zones complying development under the Housing Code **may not** be carried out on any part of the land identified by an environmental planning instrument as being environmentally sensitive land. Complying development **may** be carried out on any part of the land that is not identified by an environmental planning instrument as being environmentally sensitive land. For the purposes of this section "environmentally sensitive land" means any land that is identified in Schedule 5 of State Environmental Planning Policy (Resources and Energy) 2021, Chapter 3 - *Extractive industries in Sydney area*, any land defined as "environmentally sensitive areas" in State Environmental Planning Policy (Biodiversity and Conservation) 2021, Chapter 6 - *Water Catchments*; any land zoned Zone C2 Environmental Conservation under State Environmental Planning Policy (Industry and Employment) 2021, Chapter 2 - *Western Sydney employment area*; any Natural Resources Sensitive Land under Penrith Local Environmental Plan 2010; and any land zoned either Zone C1 National Parks and Nature Reserves, Zone C2 Environmental Conservation, Zone W1 Natural Waterways or Zone W2 Recreational Waterways under Penrith Local Environmental Plan 2010.

RURAL HOUSING CODE

(The Rural Housing Code only applies if the land is within Zones RU1, RU2, RU3, RU4, RU6 or R5 under Penrith Local Environmental Plan 2010 or an equivalent zone in a non standard template planning instrument.)

- The land is affected by environmentally sensitive land identified by an environmental planning instrument. If the land is within the relevant zones complying development under the Rural Housing Code **may not** be carried out on any part of the land identified by an environmental planning instrument as being environmentally sensitive land. Complying development **may** be carried out on any part of the land that is not identified by an environmental planning instrument as being environmentally sensitive land. For the purposes of this section "environmentally sensitive land" means any land that is identified in Schedule 5 of State Environmental Planning Policy (Resources and Energy) 2021, Chapter 3 - *Extractive industries in Sydney area*, any land defined as "environmentally sensitive areas" in State Environmental Planning Policy (Biodiversity and Conservation) 2021, Chapter 6 - *Water Catchments*; any land zoned Zone E2 Environmental Conservation under State Environmental Planning Policy (Industry and Employment) 2021, Chapter 2 - *Western Sydney employment area*; any Natural Resources Sensitive Land under Penrith Local Environmental Plan 2010; and any land zoned either Zone C1 National Parks and Nature Reserves, Zone C2 Environmental Conservation, Zone W1 Natural Waterways or Zone W2 Recreational Waterways under Penrith Local Environmental Plan 2010.

LOW RISE HOUSING DIVERSITY CODE

(The Low Rise Housing Diversity Code only applies if the land is within Zones R1, R2, R3 or RU5 under Penrith Local Environmental Plan 2010 or an equivalent zone in a non standard template planning instrument.)

- The land is affected by environmentally sensitive land identified by an environmental planning instrument. If the land is within the relevant zones complying development under the Low Rise Housing Diversity Code **may not** be carried out on any part of the land identified by an environmental planning instrument as being environmentally sensitive land. Complying development **may** be carried out on any part of the land that is not identified by an environmental planning instrument as being environmentally sensitive land. For the purposes of this section "environmentally sensitive land" means any land that is identified in Schedule 5 of State Environmental Planning Policy (Resources and Energy) 2021, Chapter 3 - *Extractive industries in Sydney area*, any land defined as "environmentally sensitive areas" in State Environmental Planning Policy (Biodiversity and Conservation) 2021, Chapter 6 - *Water Catchments*; any land zoned Zone C2 Environmental Conservation under State Environmental Planning Policy (Industry and Employment) 2021, Chapter 2 - *Western Sydney employment area*; any Natural Resources Sensitive Land under Penrith Local Environmental Plan 2010; and any land zoned either Zone C1 National Parks and Nature Reserves, Zone C2 Environmental Conservation, Zone W1 Natural Waterways or Zone W2 Recreational Waterways under Penrith Local Environmental Plan 2010.

GREENFIELD HOUSING CODE

(The Greenfield Housing Code only applies if the land is within Zones R1, R2, R3, R4 or RU5 under Penrith Local Environmental Plan 2010 or an equivalent zone in a non standard template planning instrument, and if the land is identified as a Greenfield Housing Code Area by the Greenfield Housing Code Area Map.)

- The land is affected by environmentally sensitive land identified by an environmental planning instrument. If the land is within the relevant zones, and if the land is identified as a Greenfield Housing Code Area by the Greenfield Housing Code Area Map complying development under the Greenfield Housing Code **may not** be carried out on any part of the land identified by an environmental planning instrument as being environmentally sensitive land. Complying development **may** be carried out on any part of the land that is not identified by an environmental planning instrument as being environmentally sensitive land. For the purposes of this section "environmentally sensitive land" means any land that is identified in Schedule 5 of State Environmental Planning Policy (Resources and Energy) 2021, Chapter 3 - *Extractive industries in Sydney area*, any land defined as "environmentally sensitive areas" in State Environmental Planning Policy (Biodiversity and Conservation) 2021, Chapter 6 - *Water Catchments*; any land zoned Zone E2 Environmental Conservation under State Environmental Planning Policy (Industry and Employment) 2021, Chapter 2 - *Western Sydney employment area*; any Natural Resources Sensitive Land under Penrith Local Environmental Plan 2010; and any land zoned either Zone C1 National Parks and Nature Reserves, Zone C2

Environmental Conservation, Zone W1 Natural Waterways or Zone W2 Recreational Waterways under Penrith Local Environmental Plan 2010.

HOUSING ALTERATIONS CODE

Complying development under the Housing Alterations Code may be carried out on the land.

GENERAL DEVELOPMENT CODE

Complying development under the General Development Code may be carried out on the land

INDUSTRIAL AND BUSINESS BUILDINGS ALTERATIONS CODE

Complying development under the Industrial and Business Alterations Code may be carried out on the land.

INDUSTRIAL AND BUSINESS BUILDINGS CODE

(The Industrial and Business Buildings Code only applies if the land is within E1, E2, E3, E4, E5, MU1, B1, B2, B3, B4, B5, B6, B7, B8, IN1, IN2, IN3 IN4, SP1, SP2, SP3, SP5 or W4 under Penrith Local Environmental Plan 2010 or an equivalent zone in a non-standard template planning instrument.)

- The land is affected by environmentally sensitive land identified by an environmental planning instrument. If the land is within the relevant zones complying development under the Industrial and Business Buildings Alterations Code **may not** be carried out on any part of the land identified by an environmental planning instrument as being environmentally sensitive land. Complying development **may be** carried out on any part of the land that is not identified by an environmental planning instrument as being environmentally sensitive land. For the purposes of this section "environmentally sensitive land" means any land that is identified in Schedule 5 of State Environmental Planning Policy (Resources and Energy) 2021, Chapter 3 - *Extractive industries in Sydney area*, any land defined as "environmentally sensitive areas" in State Environmental Planning Policy (Biodiversity and Conservation) 2021, Chapter 6 - *Water Catchments*; any land zoned Zone E2 Environmental Conservation under State Environmental Planning Policy (Industry and Employment) 2021, Chapter 2 - *Western Sydney employment area*; any Natural Resources Sensitive Land under Penrith Local Environmental Plan 2010; and any land zoned either Zone C1 National Parks and Nature Reserves, Zone C2 Environmental Conservation, Zone W1 Natural Waterways or Zone W2 Recreational Waterways under Penrith Local Environmental Plan 2010.

CONTAINER RECYCLING FACILITIES CODE

(The Container Recycling Facilities Code only applies if the land is within Zones B1, B2, B3, B4, B5, B6, B7, B8, E1, E2, E3, E4, E5, MU1, IN1, IN2, IN3, IN4, SP3, SP5 or W4 under Penrith Local Environmental Plan 2010 or an equivalent zone in a non-standard template planning instrument.)

Complying development under the Container Recycling Facilities Code may be carried out on the land.

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PLANNING CERTIFICATE UNDER SECTION 10.7

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SUBDIVISIONS CODE

Complying development under the Subdivisions Code may be carried out on the land

DEMOLITION CODE

Complying development under the Demolition Code may be carried out on the land.

AGRITOURISM AND FARM STAY ACCOMMODATION CODE

(The Agritourism and Farm Stay Accommodation Code only applies if the land is within Zones RU1, RU2 and RU4 under Penrith Local Environmental Plan 2010 or an equivalent zone in a non-standard template planning instrument.)

- The land is affected by environmentally sensitive land identified by an environmental planning instrument. If the land is within the relevant zones complying development under the Agritourism and Farm Stay Accommodation Code **may not** be carried out on any part of the land identified by an environmental planning instrument as being environmentally sensitive land. Complying development **may** be carried out on any part of the land that is not identified by an environmental planning instrument as being environmentally sensitive land. For the purposes of this section "environmentally sensitive land" means any land that is identified in Schedule 5 of State Environmental Planning Policy (Resources and Energy) 2021, Chapter 3 - *Extractive industries in Sydney area*, any land defined as "environmentally sensitive areas" in State Environmental Planning Policy (Biodiversity and Conservation) 2021, Chapter 6 - *Water Catchments*; any land zoned Zone E2 Environmental Conservation under State Environmental Planning Policy (Industry and Employment) 2021, Chapter 2 - *Western Sydney employment area*; any Natural Resources Sensitive Land under Penrith Local Environmental Plan 2010; and any land zoned either Zone C1 National Parks and Nature Reserves, Zone C2 Environmental Conservation, Zone W1 Natural Waterways or Zone W2 Recreational Waterways under Penrith Local Environmental Plan 2010.

FIRE SAFETY CODE

Complying development under the Fire Safety Code may be carried out on the land.

NOTE:
(1) Council has relied on Planning and Infrastructure Circulars and Fact Sheets in the preparation of this information. Applicants should seek their own legal advice in relation to this matter with particular reference to State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.
(2) Penrith Local Environmental Plan 2010 (if it applies to the land) contains additional complying development not specified in State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.

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5 EXEMPT DEVELOPMENT

GENERAL EXEMPT DEVELOPMENT CODE

Exempt development under the General Exempt Development Code may be carried out on the land.

ADVERTISING AND SIGNAGE EXEMPT DEVELOPMENT CODE

Exempt development under the Advertising and Signage Exempt Development Code may be carried out on the land.

TEMPORARY USES AND STRUCTURES EXEMPT DEVELOPMENT CODE

Exempt development under the Temporary Use and Structures Exempt Development Code may be carried out on the land

6 AFFECTED BUILDING NOTICES AND BUILDING PRODUCT RECTIFICATION ORDERS

(Information is provided in this section only if Council is aware that an affected building notice or a building product rectification order in force for the land that has not been fully complied with, or a notice of intention to make a building product rectification order given in relation to the land is outstanding.)

7 LAND RESERVED FOR ACQUISITION

No environmental planning instrument or proposed environmental planning instrument referred to in clause 1 makes provision in relation to the acquisition of the land by an authority of the State, as referred to in the Act, section 3.15.

8 ROAD WIDENING AND ROAD REALIGNMENT

The land is not affected by any road widening or road realignment under:
(a) Division 2 of Part 3 of the Roads Act 1993, or
(b) an environmental planning instrument, or
(c) a resolution of council.

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9 FLOOD RELATED DEVELOPMENT CONTROLS INFORMATION

(1) If the land or part of the land is within the flood planning area and subject to flood related development controls.

Yes, the land or part of the land is within the flood planning area and subject to flood related development controls.

(2) If the land or part of the land is between the flood planning area and the probable maximum flood and subject to flood related development controls.

No, flood related development controls for land between the flood planning area and the probable maximum flood do not apply to the land or part of the land.

Note - The land is subject to Clause 5.21 in Penrith Local Environmental Plan 2010 and Penrith Development Control Plan 2014 Section C3.5 Flood Planning. On application and payment of the prescribed fee Council may be able to provide in writing a range of advice in regard to the extent of flooding affecting the property

10 COUNCIL AND OTHER PUBLIC AUTHORITY POLICIES ON HAZARD RISK RESTRICTIONS

(a) Council Policies
The land is affected by the Asbestos Policy adopted by Council.
The land is not affected by any other policy adopted by the council that restricts the development of the land because of the likelihood of land slip, bushfire, tidal inundation, subsidence, acid sulfate soils, contamination, aircraft noise, salinity, coastal hazards, sea level rise or another risk, other than flooding.

(b) Other Public Authority Policies
The Bush Fire Co-ordinating Committee has adopted a Bush Fire Risk Management Plan that covers the local government area of Penrith City Council, and includes public, private and Commonwealth lands.
The land is not affected by a policy adopted by any other public authority and notified to the council for the express purpose of its adoption by that authority being referred to in planning certificates issued by the council, that restricts the development of the land because of the likelihood of land slip, tidal inundation, subsidence, acid sulfate soils, contamination, aircraft noise, salinity, coastal hazards, sea level rise or another risk, other than flooding.

11 BUSH FIRE PRONE LAND

Some of the land is identified as bush fire prone land according to Council records. Guidance as to restrictions that may be placed on the land as a result of the land being bush fire prone can be obtained by contacting Council. Such advice would be subject to further requirements of the NSW Rural Fire Services.

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12 LOOSE FILL ASBESTOS INSULATION

(Information is provided in this section only if there is a residential premises listed on the register of residential premises that contain or have contained loose-fill asbestos insulation (as required by Division 1A of Part 8 of the Home Building Act 1989).)

13 MINE SUBSIDENCE

The land is not declared to be a mine subsidence district within the meaning of the Coal Mine Subsidence Compensation Act 2017.

14 PAPER SUBDIVISION INFORMATION

(Information is provided in this section only if a development plan adopted by a relevant authority applies to the land or is proposed to be subject to a consent ballot, or a subdivision order applies to the land.)

15 PROPERTY VEGETATION PLANS

(Information is provided in this section only where a property vegetation plan approved and in force under the Native Vegetation Act 2003, Part 3, but only where Council has been notified of the existence of a plan, by the person or body that approved the plan under that Act.)

16 BIODIVERSITY STEWARDSHIP SITES

(Information is provided in this section only if Council has been notified by the Chief Executive of the Office of Environment and Heritage that the land is land to which a biobanking stewardship agreement under Part 5 of the *Biodiversity Conservation Act 2016* relates.)

Note - Biodiversity stewardship agreements include biobanking agreements under the Threatened Species Conservation Act 1995, Part 7A that are taken to be biodiversity stewardship agreements under the Biodiversity Conservation Act 2016, Part 5.

17 BIODIVERSITY CERTIFIED LAND

The land is biodiversity certified land (within the meaning of Part 8 of the *Biodiversity Conservation Act 2016).*

Note - Biodiversity certified land includes land certified under the Threatened Species Conservation Act 1995, Part 7AA that is taken to be certified under the Biodiversity Conservation Act 2016, Part 8.

18 ORDERS UNDER TREES (DISPUTES BETWEEN NEIGHBOURS) ACT 2006

(Information is provided in this section only if Council has been notified that an order has been made under the Trees (Disputes Between Neighbours) Act 2006 to carry out work in relation to a tree on the land.)

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PLANNING CERTIFICATE UNDER SECTION 10.7

Environmental Planning and Assessment Act, 1979

19 ANNUAL CHARGES UNDER LOCAL GOVERNMENT ACT 1993 FOR COASTAL PROTECTION SERVICES THAT RELATE TO EXISTING COASTAL PROTECTION WORKS

(Information is provided in this section only If the Coastal Management Act 2016 applies to the council, whether the owner, or a previous owner, of the land has given written consent to the land being subject to annual charges under the Local Government Act 1993, section 496B, for coastal protection services that relate to existing coastal protection works.)

20 WESTERN SYDNEY AEROTROPOLIS

Whether the land is subject to planning considerations under *State Environmental Planning Policy (Precincts—Western Parkland City) 2021*, Chapter 4:

	Planning Control	Affected?
(a)	Subject to an ANEF or ANEC contour of 20 or greater	No
(b)	Shown on the Lighting Intensity and Wind Shear Map	No
(c)	Shown on the Obstacle Limitation Surface Map	Yes
(d)	In the "public safety area" on the Public Safety Area Map	No
(e)	In the "3km zone" or the "13km zone" of the Wildlife Buffer Zone Map	Yes

21 DEVELOPMENT CONSENT FOR SENIORS HOUSING

(Information is provided in this section only If State Environmental Planning Policy (Housing) 2021, Chapter 3, Part 5 applies to the land, any conditions of a development consent granted after 11 October 2007 in relation to the land that are of the kind set out in that Policy, clause 88(2).)

22 SITE COMPATIBILITY CERTIFICATES AND DEVELOPMENT CONSENT CONDITIONS FOR AFFORDABLE RENTAL HOUSING

(Information is provided in this section only if:

(1) there is a current site compatibility certificate under the State Environmental Planning Policy (Housing) 2021, or a former site compatibility certificate, of which the council is aware, in respect of proposed development on the land; and/or

(2) State Environmental Planning Policy (Housing) 2021, Chapter 2, Part 2, Division 1 or 5 applies to the land and a statement setting out terms of a kind referred to in the Policy, section 21(1) or 40(1) have been imposed as a condition of consent in relation to the land.

(3) Any conditions of a development consent in relation to land that are of a kind referred to in State Environmental Planning Policy (Affordable Rental Housing) 2009, clause 17(1) or 38(1).)

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PLANNING CERTIFICATE UNDER SECTION 10.7

Environmental Planning and Assessment Act, 1979

NOTE: The following matters are prescribed by section 59(2) of the Contaminated Land Management Act 1997 as additional matters to be specified in a planning certificate.

(a) (Information is provided in this section only if, as at the date of this certificate, the land (or part of the land) is significantly contaminated land within the meaning of the Contaminated Land Management Act 1997.)

(b) (Information is provided in this section only if, as at the date of this certificate, the land is subject to a management order within the meaning of the Contaminated Land Management Act 1997.)

(c) (Information is provided in this section only if, as at the date of this certificate, the land is the subject of an approved voluntary management proposal within the meaning of the Contaminated Land Management Act 1997.)

(d) (Information is provided in this section only if, at the date of this certificate, the land subject to an ongoing maintenance order within the meaning of the Contaminated Land Management Act 1997.)

(e) (Information is provided in this section only if the land is the subject of a site audit statement within the meaning of the Contaminated Land Management Act 1997 - a copy of which has been provided to Council.)

Note: Section 10.7(5) information for this property may contain additional information regarding contamination issues.

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10.7(5) Certificate
This Certificate is directed to the following relevant matters affecting the land

When information pursuant to section 10.7(5) is requested the Council is under no obligation to furnish any of the information supplied herein pursuant to that section. Council draws your attention to section 10.7(6) which states that a council shall not incur any liability in respect of any advice provided in good faith pursuant to sub-section (5). The absence of any reference to any matter affecting the land shall not imply that the land is not affected by any matter not referred to in this certificate.

Note:

- Council's 10.7(5) information does not include development consent or easement information. Details of development consents may be obtained by making enquiries with Council's Development Services Department pursuant to section 12 of the Local Government Act 1993 or (for development applications lodged after January 2007) by viewing the Online Services area at www.penrithcity.nsw.gov.au . Details of any easements may be obtained from a Title Search at Land and Property Information New South Wales.
- This certificate does not contain information relating to Complying Development Certificates.
- This certificate may not provide full details of development rights over the land.

* Biodiversity Conservation Act 2016
When considering any development application Council must have regard to the Biodiversity Conservation Act 2016. Please note that this legislation may have application to any land throughout the city. Interested persons should make their own enquiries in regard to the impact that this legislation could have on this land.

* Agricultural Activities Within Rural Areas
This property is located in a rural area and there may be certain agricultural activities occurring that some people may find offensive (for example noise, dust and odours). This should be considered if you purchase the subject property or build a dwelling thereon.
If you do purchase the subject property or build a dwelling, the potential impact that your activities (for example pets, inadequate fencing, drainage, litter and poor weed control) might have on the agricultural activities in the area should also be considered.

* Scenic and Landscape Values
The land is identified as "Land with Scenic and Landscape Values" on the Penrith Local Environmental Plan 2010 Scenic and Landscape Values Map. See Clause 7.5 of Penrith Local Environmental Plan 2010 and Chapter C1 Site Planning and Design of Penrith Development Control Plan 2014.

* Preservation of Trees and Vegetation
See Chapter C2 of Penrith Development Control Plan 2014 for specific controls relating to the preservation of trees and vegetation.

* Dual Occupancy and Secondary Dwellings Controls
See Clause 7.10 of Penrith Local Environmental Plan 2010 for specific controls relating to dual occupancy and secondary dwellings in Zones RU1, RU2, RU4, C3 and C4.

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* Development Control Plan General Information

Penrith Development Control Plan 2014 which applies to the land, sets out requirements for a range of issues that apply across the Penrith Local Government Area, including:

- Site Planning and Design Principles
- Vegetation Management
- Water Management
- Land Management
- Waste Management
- Landscape Design
- Culture and Heritage
- Public Domain
- Advertising and Signage
- Transport, Access and Parking
- Subdivision
- Noise and Vibration
- Infrastructure and Services, and
- Urban Heat Management.

The Development Control Plan also specifies requirements relating to various types of land uses including:

- Rural Land Uses
- Residential Development
- Commercial and Retail Development, and
- Industrial Development

as well as for a number of specific activities, including child care centres; health consulting rooms; educational establishments; parent friendly amenities; places of public worship; vehicle repair stations; cemeteries, crematoria and funeral homes; extractive industries; and telecommunication facilities.

The Development Control Plan also details requirements relating to key precincts within the Penrith Local Government Area, including:

- Caddens
- Claremont Meadows Stage 2
- Cranebrook
- Emu Heights
- Emu Plains
- Erskine Business Park
- Glenmore Park
- Kingswood
- Mulgoa Valley
- Orchard Hills
- Penrith
- Penrith Health and Education Precinct
- Riverlink Precinct
- St Clair,
- St Marys / St Marys North, and

- Sydney Science Park.

Penrith Development Control Plan 2014 may be accessed at https://www.penrithcity.nsw.gov.au/Building-and-Development/Planning-and-Zoning/Planning-Controls/Development-Control-Plans/

* Avoided Land under the *State Environmental Planning Policy (Biodiversity and Conservation) 2021 - Chapter 13 Strategic conservation planning*
The land is identified as Avoided Land under the *State Environmental Planning Policy (Biodiversity and Conservation) 2021 - Chapter 13 Strategic conservation planning*. This Chapter relates to the Cumberland Plain Conservation Plan. When considering any development application, Council must have regard to this legislation which includes planning controls to protect biodiversity values on avoided land. Interested persons should make their own enquiries regarding the impact that this legislation could have on this land.

*Council holds environmental report(s) relating to the subject property. Copies of the report(s) are available from Council for inspection by interested persons. Interested persons should satisfy themselves as to the state of the land and in relation to any matter or thing, including any documents referred to in, or disclosed by, this notation.

Report Title, Prepared by, Date
Stage 1 Preliminary Site Investigation: 221-227 and 289-311 Luddenham Road, Orchard Hill, NSW, 2748, prepared by Construction Sciences Pty Ltd, dated 1 July 2020 (Ref. 5046200067-R01).

Council Ref No.
ECM Document Set ID 9380357 RZ20/0004

*Western Sydney International (Nancy-Bird Walton) Airport
On 24 October 2023, the Australian Government released a draft Environmental Impact Statement for the preliminary flight paths for the Western Sydney International (Nancy-Bird Walton) Airport. The draft Environmental Impact Statement examines the environmental, health, social and economic impacts of the proposed flight paths.

The Australian Government has also released an Aircraft Overflight Noise Tool which indicates the preliminary flight path design and aircraft overflight and noise information.

Enquiries regarding the Western Sydney Airport should be made with the Australian Government (www.wsiflightpaths.gov.au).

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Notes:
The Environmental Planning and Assessment Amendment Act 2017 commenced operation on the 1 March 2018. As a consequence of this Act the information contained in this certificate needs to be read in conjunction with the provisions of the Environmental Planning and Assessment (Savings, Transitional and Other Provisions) Regulation 2017, and Environmental Planning and Assessment Regulation 2021.

This is a certificate under section 10.7 of the Environmental Planning and Assessment Act, 1979 and is only provided in accordance with that section of the Act.

Information is provided only to the extent that Council has been notified by the relevant government departments.

Andrew Moore
General Manager

per

APPENDIX I

ASSESSMENT OF DATA QUALITY INDICATORS

Data Quality Indicators

An assessment of performance against the data quality indicators (DQI) is set out in the tables below.

H1. Completeness DQI

Field Considerations	Target	Actual	Pass / Fail / Comment
Experienced sampling team used	Yes	Yes	Pass
Sampling devices and equipment set out in sampling plan were used	Yes	Yes	Pass
Critical locations in sampling plan, sampled	Yes	Yes	Pass TP489 could not be sampled due to access constraint. Site generated materials (client information) was placed at the middle portion which covered the test pit location and its near vicinity.
Critical samples in sampling plan, collected	Yes	Yes	Pass
Completed field logs attached	Yes	Yes	Pass
Completed calibration logs attached.	Yes	Yes	Pass
Completed sample COC attached	Yes	Yes	Pass
Laboratory Considerations	**Target**	**Actual**	**Pass / Fail / Comment**
Complete SRA and COA attached	Yes	Yes	Pass
Critical samples identified in sampling plan, analysed	Yes	Yes	Pass
Analysis undertaken addresses COPC in sampling plan	Yes	Yes	Pass
Analytical methods reported in laboratory documentation and appropriate LOR used	Yes	Yes	Pass
Sample holding times met	Yes	Yes	Pass

The data is considered to be adequately complete.

H2. Comparability DQI

Field Considerations	Target	Actual	Pass / Fail / Comment
Same sampling team used for all work.	Yes	Yes	Pass
Weather conditions suitable for sampling.	Yes	Yes	Pass
Relevant samples stored in insulated containers and chilled.	Yes	Yes	Pass
Laboratory Considerations	**Target**	**Actual**	**Pass / Fail / Comment**
Same laboratory used for all analysis.	Yes	Yes	Pass
Comparable methods if different laboratories used.	N/A	N/A	N/A
Comparable LORs if different laboratories used.	N/A	N/A	N/A
Comparable units of measure if different laboratories used.	N/A	N/A	N/A

The data is considered to be adequately comparable.

H3. Representativeness DQI

Field Considerations	Target	Actual	Pass / Fail / Comment
Media identified in sampling plan, sampled.	Yes	Yes	Pass
Samples required by sampling plan, collected.	Yes	Yes	Pass
Laboratory Considerations	**Target**	**Actual**	**Pass / Fail / Comment**
Samples identified in sampling plan, analysed.	Yes	Yes	Pass

The data is considered to be adequately representative.

H4. Precision DQI

Field Considerations Based on Table 4 of AS 4482.1-2005	Target	Actual	Pass / Fail / Comment
Minimum 5% duplicates collected and analysed.	Yes	Yes	Pass
Minimum 5% triplicates collected and analysed.	Yes	Yes	Pass
Minimum 10% duplicates collected and analysed (where PFAS is a COPC)	~~NA~~	~~NA~~	~~NA~~
RPD unlimited where detected concentrations are <10 times the LOR.	Yes	Yes	Pass Refer to Table T4
RPD within 30% where detected concentrations are 10-20 times the LOR.	Yes	NA	NA
RPD within 50% where detected concentrations are >20 times the LOR.	Yes	NA	NA
Laboratory Considerations	**Target**	**Actual**	**Pass / Fail / Comment**
All laboratory duplicate RPDs within laboratory acceptance criteria.	Yes	Yes	Pass

The data is considered to be adequately precise.

H5. Accuracy (bias) DQI

Field Considerations	Target	Actual	Pass / Fail / Comment
Trip blank analyte results less than LOR.	NA	NA	NA
Trip spike analyte results less between 60% and 140%.	NA	NA	NA
Rinsate blank analyte results less than LOR.	NA	NA	NA
Field blank analyte results less than LOR (where PFAS is a COPC),	NA	NA	NA
Laboratory Considerations	**Target**	**Actual**	**Pass / Fail / Comment**
Laboratory method blank results within laboratory acceptance limits.	Yes	Yes	Pass
Laboratory control sample results within laboratory acceptance limits.	Yes	Yes	Pass
Laboratory spike sample results within laboratory acceptance limits.	Yes	Yes	Pass

The data is considered to be adequately accurate.

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