

**LANE COVE DEVELOPMENTS NO. 1
PTY LTD**



**Preliminary Site Investigation
with Limited Sampling**

300 Burns Bay Road, Lane Cove, NSW

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Table of Contents

	Page Number
EXECUTIVE SUMMARY	I
1. INTRODUCTION	1
1.1 Purpose	1
1.2 Site Description	1
1.3 Overview of Proposed Development	2
1.4 Secretary's Environmental Assessment Requirements	2
1.5 Regulatory Framework	3
1.6 Project Objectives	3
1.7 Scope of Works	4
<i>Desktop Study</i>	4
<i>Fieldwork and Laboratory Analysis</i>	4
<i>Data Analysis and Reporting</i>	4
2. SITE DESCRIPTION	5
2.1 Property Identification, Location and Physical Setting	5
2.2 Surrounding Land Use	6
2.3 Regional Setting	6
2.4 Site Walkover Inspection	7
3. PREVIOUS INVESTIGATIONS AND SITE HISTORY	8
3.1 Previous Investigations	8
3.1.3 <i>PFAS Search</i>	9
3.1.4 <i>Groundwater Bore Records and Local Groundwater Use</i>	9
3.1.5 <i>Council Information</i>	9
3.2 SafeWork NSW Search	9
3.3 Search of Readily Available Databases	10
3.4 NSW EPA Online Records	11
4. CONCEPTUAL SITE MODEL	13
4.1.1 <i>Summary of Site History</i>	13
4.2 Subsurface Conditions	13
4.3 Potential Contamination Sources	13
4.4 Contaminants of Potential Concern (COPCs)	15
4.5 Identified Receptors	15
4.6 Risk Assessment	16
4.7 Data Gaps	16
5. METHODOLOGY	19
5.1 Sampling, Analytical and Quality Plan	19
5.2 Data Quality Objectives	19
5.3 Data Quality Indicators	22

5.4	Sampling Rationale	23
5.5	Assessment Criteria	23
5.5.1	<i>Soil Criteria</i>	23
5.6	Soil Sampling	23
6.	DATA QUALITY ASSESSMENT	25
7.	RESULTS	27
7.1	Soil Results	27
7.1.1	<i>Subsurface Conditions</i>	27
7.1.2	<i>Field Observations</i>	27
7.1.3	<i>Laboratory Analytical Results</i>	27
8.	SITE CHARACTERISATION	30
8.1	Soil	30
8.2	Review of Conceptual Site Model	30
9.	CONCLUSION	31
10.	RECOMMENDATIONS	32
11.	STATEMENT OF LIMITATIONS	33
	REFERENCES	34
	ABBREVIATIONS	36

Schedule of Tables

Table 1-1	Secretary's Environmental Assessment Requirements relevant to this report	3
Table 2-1	Site Identification, Location and Zoning	5
Table 2-2	Surrounding Land Uses	6
Table 2-3	Regional Setting Information	6
Table 3-1	Summary of Owners	8
Table 3-2	Summary of Registered Groundwater Bores within 500 m of the Site	9
Table 3-3	Summary of SafeWork NSW documentation of the Site	9
Table 4-1	PFAS Decision Tree	14
Table 4-2	Emerging or Controlled Chemicals	14
Table 4-3	Assessment of Potential Contamination Risk	16
Table 4-4	Preliminary Conceptual Site Model	18
Table 5-1	Summary of Project Data Quality Objectives	20
Table 5-2	Data Quality Indicators	22
Table 5-3	Adopted Investigation Levels for Soil	23
Table 5-4	Summary of Soil Sampling Methodology	23
Table 6-1	Quality Assurance Process	25
Table 7-1	Generalised Subsurface Profile	27
Table 7-2	Summary of Soil Analytical Results	27

Appendices

APPENDIX A - FIGURES

APPENDIX B - TABLES

APPENDIX C – PROPOSED DEVELOPMENT PLANS

APPENDIX D – SITE PHOTOGRAPHS

APPENDIX E - LOTSEARCH RESULTS

**APPENDIX F – CORRESPONDENCE FROM SAFEWORK NSW AND
GROUNDWATER BORE SEARCH**

APPENDIX G – BOREHOLE LOGS

APPENDIX H – CHAIN OF CUSTODY AND SAMPLE RECEIPT FORMS

APPENDIX I – LABORATORY ANALYTICAL REPORTS

APPENDIX J – LABORATORY QA/QC POLICIES AND DQOS

APPENDIX K – QA/QC ASSESSMENT

Executive Summary

Lane Cove Developments No. 1 Pty Ltd ('the client') engaged EI Australia to complete a Preliminary Site Investigation (PSI) with limited sampling for the property located at 300 Burns Bay Road, Lane Cove, NSW ('the site').

This PSI with limited sampling was conducted in support an Early works State Significant Development Application (SSDA) (SSD-100293708) being lodged with the Department of Planning, Housing and Infrastructure (DPHI) for the demolition of all existing buildings and structures, excavation, augmentation of existing services and ground works at 300 Burns Bay Road, Lane Cove (the site) to enable the proposed redevelopment of the site for a residential development.

The proposal aims to:

- Facilitate the early works required for Ministerial declared HDA site under SSD-87925706, which will result in the construction of 225 dwellings.
- Enable the demolition, excavation and ground works to ensure the site is suitable for development of a residential development.
- Ensure the expedient delivery of the HDA application at the site (SSD-87925706), as per the requirements of the HDA approval pathway.

Housing Delivery Authority On 26 May 2025, the HDA recommended the proposed development for the purpose of residential flat building development including the construction of circa 215 dwellings at 300 Burns Bay Road, Lane Cove be declared a State Significant Development (SSD) under s4.36(3) of the Environmental Planning and Assessment Act 1979 (EP&A Act). The main works SSD (Ref. SSD-87925706) will be lodged imminently with DPHI, with exhibition anticipated to commence in February 2026. This Early Works SSD is intended to facilitate the delivery of this residential flat building development through the following proposed works:

- Site establishment works including:
 - Erection of site hoarding, fencing and signage;
 - Installation of site office and amenities.
- The demolition of all existing structures at the site comprising:
 - Office Building
 - Warehouse
 - Car Parking structure
- Removal of 32 trees on the site;
- Shoring and bulk excavation works to enable the excavation of basement levels; and
- Extension and augmentation of services and infrastructure as required.

The scope of works involved:

- A desktop study to evaluate the potential for site contamination on the basis of historical land uses, anecdotal and documentary evidence of possible pollutant sources; and
- A limited intrusive sampling campaign, followed by laboratory analyses of selected samples for the contaminants of potential concern (COPCs).

The key findings of this PSI with limited sampling were as follows:

- The site covers approximately 7,595 m² and is currently occupied by a two-storey car park building in the north-western quadrant of the site, a four-storey brick building in the north-eastern quadrant and eastern end of the site, an open tennis court at the western end of the site and an at-grade asphalt surfaced car park in the remaining open areas of the site, which is suspended along its southern end, due to a southerly dipping terrain.
- The subsurface profile consists of gravelly sand, silty sand and clayey sand fill, followed by silty clay natural material, overlying sandstone bedrock.
- Contaminant concentrations in soil were generally compliant with the adopted criteria, with the following exceptions:
 - An asbestos fragment (labelled 'FCS1') was observed beneath the suspended slab, in the south-eastern section of the site;
 - Priority metals exceeded their respective ecological screening levels (ESLs) at locations BH1M_0.2-0.3 (nickel) and BH4_0.3-0.4 (zinc).
- The nickel and zinc exceedances were marginal and likely representative of disturbed urban background conditions, as opposed to site-specific impacts. Furthermore, they were identified within the basement footprint area and will eventually be disposed offsite as surplus soils, during basement construction.
- No exceeding concentrations of the monocyclic aromatic hydrocarbon compounds *benzene*, *toluene*, *ethyl-benzene* and *xylenes* (BTEX), polycyclic aromatic hydrocarbons (PAH), total recoverable hydrocarbons (TRH), organochlorine and organophosphorous pesticides (OCP / OPP), polychlorinated biphenyls (PCB) were reported for any of the analysed samples. Therefore, the potential risk posed by these contaminants to site receptors was considered to be low.

Based on the findings of this PSI and with consideration of EI's Statement of Limitations (**Section 11**), no environmental impacts were found on site that would limit its redevelopment for residential, recreational, commercial or industrial activities. However, the sample density was insufficient to adequately characterise the site in accordance with NSW EPA (2022a). As such, further Detailed site investigation will be necessary to fully characterise the site and provide a conclusion on the land suitability for its future use.

EI provides the following recommendations in relation to the proposed development:

- A Detailed Site Investigation (DSI) should be undertaken following demolition, to further assess soil and groundwater quality on the property. The DSI should include Sampling and associated laboratory analysis for the potential contaminants identified in **Section 4.4** and to close the remaining data gaps (**Section 4.7**). A sampling, analytical and quality plan (SAQP) should be prepared for the DSI, which should refer to EPA (2022) Sampling Design Guidelines.
- Should contamination be identified during the DSI, a Remedial Action Plan (RAP) must be prepared in accordance with the NSW EPA (2020) Guidelines for Consultants Reporting on Contaminated Land, detailing the methodology and procedures required for effective site remediation and subsequently implementation.
- A Hazardous Materials Survey (HMS) to identify any hazardous materials present within the existing building fabrics should be conducted prior demolition. All identified hazardous materials must be appropriately managed (including asbestos-containing materials (ACM) on the ground surface), to maintain worker health and safety during operation of the site and to prevent the spread of potentially hazardous substances onto the site and soil surfaces during demolition (where relevant).

- Following pavement and vegetation removal, an inspection of the exposed surfaces should be performed by a suitably qualified environmental consultant, to check for any visible signs of contamination (in particular fragments of Fibre Cement Sheeting (FCS)). An asbestos clearance inspection and certificate should be completed by a suitably qualified professional (SafeWork NSW Licensed Asbestos Assessor). Where (if) clearance inspection indicates the presence of hazardous materials remaining on the site, further removal and clearance inspection works must be undertaken.
- All soil materials that are designated for off-site disposal, including any *virgin excavated natural material* (VENM), should be managed in accordance with an appropriate waste management plan, which references the *POEO (Waste) Regulations 2014*. The waste classification process will require representative soil sampling and analysis, in accordance with the NSW EPA (2014) *Waste Classification Guidelines*, with the analytical suite to include the identified COPCs (**Section 4.4**). The soil analytical results from this PSI with limited sampling can be utilised for this purpose.
- Once appropriately classified, all waste materials are to be transported to NSW EPA-licensed waste facilities by the appointed waste contractors. All tipping dockets supplied by the landfill companies are to be retained, to confirm the appropriate (lawful) disposal of wastes.
- Any material being imported to the site should be pre-validated as suitable for the intended use, in accordance with NSW EPA guidelines. In particular, imported filling / landscaping material must be certified as meeting the VENM classification, prior to importation.

EI emphasise that these recommendations can be managed through the development application process, in accordance with *State Environmental Planning Policy (Resilience and Hazards) 2021*.

1. Introduction

This report supports an Early works State Significant Development Application (SSDA) (SSD-100293708) being lodged with the Department of Planning, Housing and Infrastructure (DPHI) for the demolition of all existing buildings and structures, excavation, augmentation of existing services and ground works at 300 Burns Bay Road, Lane Cove (the site) to enable the proposed redevelopment of the site for a residential development sought separately under SSD- 87925706. The proponent for the SSDA is Lane Cove Developments No 1 Pty Ltd.

The proposal aims to:

- Facilitate the early works required for Ministerial declared HDA site under SSD-87925706, which will result in the construction of 225 dwellings.
- Enable the demolition, excavation and ground works to ensure the site is suitable for development of a residential development.
- Ensure the expedient delivery of the HDA application at the site (SSD-87925706), as per the requirements of the HDA approval pathway.

1.1 Purpose

This PSI with limited sampling was conducted in support of an Early works State Significant Development Application (SSDA) (SSD-100293708) being lodged with the DHPI. As such, initial investigations needed to be completed to support the Development Application.

This PSI was prepared concomitantly with an acid sulfate soil assessment (ASSA) (EI, 2024a) and a groundwater monitoring event (GME) (EI, 2024b). These three reports should be read in conjunction.

1.2 Site Description

The site is irregular in shape and is legally described as Lot 15 DP 1230609, and has a site area of 7,595m². The site is located on the eastern side of the roundabout intersection between Burns Bay Road and Waterview Drive. Existing development on the site comprises an existing four (4) storey office building and warehouse, which is predominately sited on the eastern portion of the site

An aerial of the site illustrated in **Figure 1**.



Figure 1 Site aerial (highlighted in red)

Source: Source: Nearmap/ Colliers Urban Planning

1.3 Overview of Proposed Development

This SSDA (Ref. SSD-100293708) seeks approval for early works associated with the delivery of the residential development of the site under SSD-87925706 at 300 Burns Bay Road, Lane Cove. This SSD comprises the following proposed development:

- Site establishment works including:
 - Erection of site hoarding, fencing and signage;
 - Installation of site office and amenities.
- The demolition of all existing structures at the site comprising:
 - Office Building
 - Warehouse
 - Car Parking structure
- Removal of 32 trees on the site;
- Shoring and bulk excavation works to enable the excavation of basement levels; and
- Extension and augmentation of services and infrastructure as required.

Architectural drawings are presented in **Appendix C**.

1.4 Secretary's Environmental Assessment Requirements

In accordance with section 4.39 of the *Environmental Planning & Assessment Act 1979* (EP&A Act), Secretary's Industry-specific Housing Environmental Assessment Requirements (SEARs) (SSD-100293708) (Early Works SSDA) have been issued on 15 December 2025. Email correspondence was shared with DPHI officers to review and agree the relevant SEARs deliverables which would be necessary for the Early Works SSD. The SEARs outlined below reflect the SEARs requirements agreed with DPHI.

This report has been prepared to respond to the issued SEARs, as set out in the table below.

Table 1-1 Secretary's Environmental Assessment Requirements relevant to this report

SEARS	Issue and Assessment Requirements	SEARs Scope Agreed with DPHI	Report Name and Section
Contamination and Remediation	<i>In accordance with Chapter 4 of the State Environmental Planning Policy (Resilience and Hazards) 2021, assess and quantify any soil and groundwater contamination and demonstrate that the site is suitable (or will be suitable, after remediation) for the development.</i>	PSI and DSI will be submitted with the Early Works SSD.	PSI: Soil Results – Section 7.0 Conclusion – Section 9.0 Recommendations – Section 10.0

1.5 Regulatory Framework

The following regulatory framework and guidelines were considered during this PSI with limited sampling:

- *Contaminated Land Management Act 1997* (the CLM Act);
- *Protection of the Environment Operations Act 1997* (the POEO Act 1997);
- *Environmental Planning and Assessment Act 1979* (the EP&A Act 1979);
- *State Environment Protection Policy (Resilience and Hazards) 2021*;
- *Lane Cove Local Environmental Plan 2009*;
- NSW EPA (2017) *Guidelines for the NSW Site Auditor Scheme*;
- NSW EPA (2020) *Guidelines for Consultants Reporting on Contaminated Land*;
- NSW EPA (2022a) *Sampling Design Part 1 - Application*;
- NEPC (2013) *National Environmental Protection (Assessment of Site Contamination) Amendment Measure 1999*.

1.6 Project Objectives

The objectives of this investigation were to:

- Evaluate the potential for site contamination on the basis of historical land uses, anecdotal and documentary evidence of possible pollutant sources; and
- Investigate the degree of any potential contamination by means of intrusive sampling and laboratory analysis, for the relevant COPCs.

A further objective, should site contamination be confirmed, would be to provide recommendations on the appropriate management of any contaminated soils identified.

1.7 Scope of Works

In order to achieve the above objectives, the following scope of works was completed:

Desktop Study

- Preparation of a Work, Health, Safety and Environment Plan (WHSEP);
- A review of relevant topographical, geological and soil landscape maps for the project area;
- A review of all previous reports issued for the site;
- A search of SafeWork NSW records for information relating to possible dangerous goods and underground tank approvals and locations;
- A request to Council for information (owner approval required) relating to development and environmental complaints history (if available); and
- A review of existing underground services on site (based on a Before You Dig Australia (BYDA) search) and an underground service scan completed via handheld electromagnetic equipment.

Fieldwork and Laboratory Analysis

- A detailed site walkover inspection;
- Drilling of test boreholes at five locations using a geotechnical drilling rig, distributed in a triangular grid pattern across the site;
- Multiple level soil sampling within fill and natural soils; and
- Laboratory analysis of selected soil samples for relevant analytical parameters, as determined by the site history survey and field observations obtained during the investigation program; and
- Data interpretation and reporting.

Data Analysis and Reporting

This report documents the desk study findings, site observations made during the site inspection, data quality objectives, a conceptual site model, sampling methodologies and laboratory analytical results. It also provides a record of observations made during the site walkover inspections, test bore logs and a discussion of the results in regards to potential risks to human health and the environment. It concludes with a statement concerning the suitability of the site for the proposed mixed use development.

2. Site Description

2.1 Property Identification, Location and Physical Setting

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

Table 2-1 Site Identification, Location and Zoning

Attribute	Description
Street Address	300 Burns Bay Road, Lane Cove, NSW
Location Description	Located in a High Density Residential area, bounded by: - North: High density residential properties in the north-west, Hartman Hill Reserve in the north-east; - East: Adjoining clothes lines and garden area for residential property 300B Burns Bay Road (south of the site), followed by Burns Bay Reserve and Tannery Creek; - South: High density residential properties; and - West: Burns Bay Road and Waterview Drive roundabout intersection, followed by Hughes Park and high density residential properties.
Geographical Coordinates	Northern corner of site (GDA2020-MGA56): - Easting: 329102.05 - Northing: 6256188.207 (Source: http://maps.six.nsw.gov.au).
Lots and Deposited Plans (DP)	Lot 15 in DP1230609
Site Area	7,595 m ²
State Survey Marks	Two Permanent Marks (PM) and one State Survey (SS) mark are situated within close proximity (approximately 160 m) to the site: - PM51191: on the western side of Burns Bay Road (approximately 116m west); - PM51190: on the eastern side of Burns Bay Road (approximately 119m north); - SS84500: at the Kayak Shed, southern side of Kooyong Road, near Riverview Boat Ramp (approximately 159 m south); (Source: http://maps.six.nsw.gov.au)
Local Government Area (LGA)	Lane Cove Municipal Council
Parish	Willoughby
County	Cumberland
Current Zoning	R4: High Density Residential (Source: Lane Cove Local Environmental Plan, 2009).
Current Land Use	The site is currently occupied by a two-storey car park building in the north-western quadrant of the site, a four-storey brick building in the north-eastern quadrant and eastern end of the site, an open tennis court at the western end of the site and an at-grade asphalt surfaced car park in the remaining open areas of the site, which is suspended along its southern end, due to a southerly dipping terrain.

2.2 Surrounding Land Use

The site is situated within an area of High Density Residential use. The local sensitive receptors within close proximity to the site are identified in **Table 2-2**

Table 2-2 Surrounding Land Uses

Direction	Land Use Description	Sensitive Receptor (and distance from site)
North	- High density residential properties - Hartman Hill Reserve	- Local residents (immediately north) - Recreational park users and ecosystems supported by the reserve (immediately north)
South	- High density residential properties - Burns Bay	- Local residents (immediately south) - Ecosystems supported by the bay (144 m south)
East	- Tannery Creek - Burns Bay Reserve - Low density residential properties	- Ecosystems supported by the creek (36 m south-east) - Recreational park users and ecosystems supported by the reserve (37 m south east) - Local residents (145 m east)
West	- Burns Bay Road and Waterview Drive roundabout intersection - Waterview Community Centre - Hughes Park - Lane Cove Community Garden - High density residential properties - Childcare facility	- Road users (immediately west) - Community centre users (29 m south west) - Recreational park users and ecosystems supported by the park (29 m south-west) - Community garden users and consumers (63 m south-west) - Local residents (74 m west) - Users and workers of the childcare facility (80 m south-west)

2.3 Regional Setting

Regional topography, geology and landscape information is summarised in **Table 2-3**.

Table 2-3 Regional Setting Information

Attribute	Description
Topography	The site gently slopes from north to south, the high point at 22.15m (AHD) along the boundary with the properties to the north, sloping south to a low point of 18.83m (AHD) along the southern boundary, sandstone cut faces and cliffs are present at the southern and eastern boundaries of the site.
Site Drainage	Stormwater is likely to be diverted to the south-east of the site, collected in stormwater pits and piped to Tannery Creek.
Geology	Information on regional sub-surface conditions, referenced from the Department of Mineral Resources <i>Sydney 1:100,000 Geological Series Sheet 9130</i> (DMR, 1983), indicates that the site is underlain by the Hawkesbury Sandstone, which generally comprises medium to coarse grained quartz sandstone, very minor shale and laminate lenses.
Soil Landscape	<i>The NSW Government Department of Planning, Industry and Environment eSPADE v2.2</i> website indicates that the site overlies the Hawkesbury - Colluvial Landscape (ha) in the western portion and disturbed terrain (dt) in the east. - The Hawkesbury landscape consists of rugged, rolling to very steep hills on Hawkesbury Sandstone. - Disturbed terrain landscapes are level to hummocky terrain, extensively disturbed by

Attribute	Description
	human activity, including complete disturbance, removal or burial of soil.
Acid Sulfate Soil (ASS) Risk	With reference to the <i>Prospect/ Parramatta River Acid Sulfate Soil Risk Map</i> (1:25,000 scale; Murphy, 1997), the site lies within an area of 'No Known Occurrence'. In such cases, ASSs are not known or expected to occur and "land management activities are not likely to be affected by ASS materials." The site is located approximately 25 m west of a low elevated (around 2m) area, classified as disturbed terrain and 100 m north of a high probability estuarine bottom sediments area. The site is not included in the <i>Lane Cove Local Environmental Plan 2023 - Acid Sulfate Soil Map</i>. However, it is immediately north, west and east of a Class 5 area and approximately 6 m north of a Class 2 area. Based on the map information, further ASS investigations are warranted.
Nearest Surface Water Feature	Tannery Creek (49 m south-east), that joins Burns Bay (144 m south) and Lane Cove River (825 m south).
Inferred Groundwater Flow Direction	Groundwater flow direction in the vicinity of the site is inferred to be south-east, towards Tannery Creek.

2.4 Site Walkover Inspection

Observations were recorded during a walkover inspection of the site, conducted on 9 September 2024. These observations are summarised below. Refer also to photographs attached in **Appendix D**.

- The subject site is an irregularly shaped trapezoid of land occupied by an open tennis court, two-storey car parking building, a four-storey brick building and an at-grade asphalt surfaced car park (**Photographs 1 and 2**);
- The external building structures were observed to be in good condition and the site was operational. Some iron beam framing was noted cracking out of the concrete slab, beneath the building carpark (**Photograph 3**);
- The majority of the site is built as slabs on ground, however due to the southerly dipping terrain, its southern boundary and south-east corner were suspended, with a large crawl space beneath (**Photograph 4**);
- The vegetation was well maintained across the site, with accessible soil present in car park landscaping sections and around the tennis court;
- Asphalt and concrete were in good conditions, with no notable cracks and just some minor staining in the car parking area beneath the building (**Photograph 5**);
- No evidence of groundwater monitoring wells were observed;
- No evidence of petrochemical storage or use, including underground storage tanks (USTs), underground petrol storage systems (UPSS) and above ground storage tanks (ASTs) were observed on the site;
- No olfactory indicators of contamination (i.e. suspicious odours) were detected in any of the soil samples examined;
- No presence of waste, rubbish or stockpiles was observed on the slab surfaces. Some rubbish, fill and demolition waste were observed beneath the suspended slab, in the south-eastern section of the site (**Photograph 6 and 7**); and
- Fibre cement sheeting (FCS) fragments were observed beneath the suspended slab, in the south-eastern section of the site (**Photograph 8**).

3. Previous Investigations and Site History

3.1 Previous Investigations

Previous investigations were previously conducted on the site, documented under the following reports:

- DP (2023) Preliminary Site Investigation, prepared by Douglas Partners, Ref. 226027.01.R.001.Rev0, dated 22 December 2023; and
- DP (2024) Desktop Geotechnical Assessment, prepared by Douglas Partners Ref. 226027.00.R.001.Rev0, 8 January 2024.

The relevant findings obtained during these previous investigations are summarised below.

3.1.1 Historical Aerial Photograph Review

From at least 1943, a warehouse/industrial building was present in the central portion of the site, with trees and paving occupying the west and east portions of the site. There were no significant changes until 1970, when a building was constructed to the east of the site. Since at least 1991, all buildings on site were demolished and replaced by two new buildings in the east, the present day tennis court in the west and the open carpark in the remaining area of the site. In 2007, a warehouse was constructed at the central north portion of the site. There have been no significant changes since then.

In 1943, the surrounding lands consisted of scattered residential buildings to the north and south, vacant land immediately south-west of the site and a high density of trees to the east. Between 1951 and 1961, a few buildings were demolished to the south-west of the site and rebuilt. In 1965, the land immediately to the south-west of the site was developed into a park, the land to the south-east was significantly cleared of vegetation and some residential buildings were constructed to the north of the site. In 1970, there was additional clearing and a building to the immediate south was demolished. In 1978, medium to high density apartments were built to the immediate south and south-west. In 1986, a building was demolished in the north-east and replaced by two new buildings. In the north, there was a general increase in residential buildings. In 2016, a medium to high density apartment development was observed to the immediate north-east of the site. The current Waterview Drive was constructed to the immediate south-east and medium to high density apartment developments with open space parks were observed. In 2020, a medium to high density apartment building was constructed to the immediate west.

3.1.2 Land Titles

Based on historical information provided by the PSI (DP, 2023), a list of previous and current registered proprietors was compiled and is presented in **Table 3-1**.

Table 3-1 Summary of Owners

Period of Acquisition	Registered Proprietor(s) and Occupations
16.05.1927 (1927 to 1987)	Mangrovite Belting Limited (Now Mangrovite Industries Limited)
05.03.1987 (1987 to 1987)	Shanline Pty Limited
17.09.1987 (1987 to date)	SAS Software Pty Limited (Now SAS Institute Australia Pty Limited)

3.1.3 PFAS Search

The site was not listed or adjacent to a site listed under:

- NSW EPA PFAS Investigation Program;
- Defence PFAS Investigation Program;
- Defence PFAS Management Program; and
- Airservices Australia National PFAS Management Program.

Refer to **Section 4.3** for more information regarding PFAS.

3.1.4 Groundwater Bore Records and Local Groundwater Use

An online search for groundwater bores registered with WaterNSW was conducted on 21 October 2024 (<https://realtimedata.waternsw.com.au/water.stm>). The search revealed 5 registered bores within a 500m radius of the site. Details for the bores are presented in **Table 3-2**. Further detailed information is presented in **Appendix F**.

Table 3-2 Summary of Registered Groundwater Bores within 500 m of the Site

Bore	Date Drilled	Location relative to site	Bore Depth (mBGL)	SWL (mBGL)	Authorised Purpose
GW202406	27/08/2010	110m north west	6.0	2.1	Monitoring bore
GW114976	07/06/2011	390m north	8.3	-	Monitoring bore
GW114975	07/06/2011	390m north	7.3	-	Monitoring bore
GW114973	08/06/2011	390m north	8.5	2.77	Monitoring bore
GW114974	08/06/2011	410m north	8.5	-	Monitoring bore

As shown in **Table 3-2**, all five registered bores were authorised for monitoring purposes, with measured standing water levels ranging from 2.1 to 2.77 mBGL. No well yield or salinity information was available. It was therefore concluded that groundwater is not locally utilised for supply purposes in the vicinity of the site, particularly as a more reliable and convenient, reticulated potable water supply is readily available and preferred by domestic and commercial/industrial water users.

3.1.5 Council Information

An application to access property files archived by Lane Cove Municipal Council was initiated on 9 September 2024. Council was unable to provide associated documents, but confirmed the site was used for leather manufacturing between 1913 and 1990.

3.2 SafeWork NSW Search

A search of SafeWork NSW records relating to information on the storage of hazardous chemicals at the site was requested on 6 September 2024. Correspondence dated 13 September 2024 confirmed that SafeWork held documentation for potential dangerous goods for the subject site (**Table 3-3**). A copy of the response from SafeWork NSW is presented as **Appendix F**. In summary, the site held a license for Flammable Liquids and Dangerous Goods from at least 1967, until its cancellation in 1988.

Table 3-3 Summary of SafeWork NSW documentation of the Site

Document Date	Summary
26 April 1967	New licence was issued due to change in trading name (previously Mangrovite Belting Ltd, changed to Mangrovite Industries LTD), certificate of inspection.

Document Date	Summary
10 April 1969	Inspection record.
24 April 1967 – 15 March 1972	License record card for the premise, dated for 24/4/67, 4/4/68, 14/4/69, 3/4/70, 26/2/71, 15/3/72.
14 July 1972	Directive to display new larger flammable liquid signs.
6 July 1982	Letter detailing safety instructions (e.g. removal of combustible material, display danger signs etc.)
26 May 1988	All chemicals/dangerous goods removed, premises demolished. No further license renewals.
27 June 1988	Confirmation of license cancellation.

3.3 Search of Readily Available Databases

An environmental database search (Lotsearch, 2024) is provided in **Appendix E**, with key findings as follows:

- There were six properties within 674 m distance of the site, listed as NSW contaminated sites notified to NSW EPA (three of them being service stations).
- There were three properties within 115 m distance of the site, listed in the Record of Notices.
- There was one property within 970 m distance of the site, holding NSW EPA Notices.
- No former gasworks or waste management facilities were present within a 1 km radius of the site.
- Four liquid fuel facilities were found within a 1 km radius of the site.
- No NSW EPA PFAS investigation program, Department of Defence or Airservices were found within a 1 km radius of the site.
- No Department of Defence or regional contamination investigation areas were found within a 1 km radius of the site.
- Two listed properties with Delicensed Activities under the *Protection of the Environment Operations Act 1997* were identified within 828 m radius of the site.
- With respect to the site surroundings (≤ 150 m radius), the business directory records (1948-1993 inclusive) indicated that a diverse range of potentially contaminating commercial activities took place over the time period. These included manufactures, motor garaging, plastic manufactures, service stations furniture repairs, plumber/builders supplies, paint (industrial coating), medical equipment, chemical distributors, perfume, mechanical and others.
- Historical mining and exploration titles resourcing petroleum were identified for the site.
- The site and its surroundings were not recorded as having a “naturally occurring asbestos potential”.
- No dryland salinity assessment data were recorded for the site. No mining subsidence district was present within the surveyed area.
- No State Environmental Planning Policy Protected / Strategic Land Use Areas were present on or near the site.
- The land zoning applied to the site was reported to be *R4 High Density Residential*, under the *Lane Cove Local Environmental Plan 2009*.

- Hazards to nature (e.g. bush fire prone land) were identified on the site as vegetation category 2 and vegetation buffer. Vegetation category 1 is located 522 m away from the site.
- Ecological receptors (native vegetation) were present on site, including groundwater dependent ecosystems (≤ 940 m away) and inflow dependent ecosystems (≤ 990 m away).
- No wetland or bio-conservation constraints were applied to the site.

3.4 NSW EPA Online Records

Searches of public registers maintained by the NSW EPA for statutory notices and licensing agreements issued under the *Contaminated Land Management Act 1997* and *Protection of the Environment Operations Act 1997* were conducted by EI for this PSI.

Record of Notices Under Section 58 of CLM Act 1997

An on-line search of the contaminated land public record was conducted on 6 September 2024. The contaminated land public record is a searchable database of:

- Orders made under Part 3 of the CLM Act 1997;
- Notices available to the public under Section 58 of the CLM Act 1997;
- Approved voluntary management proposals under the CLM Act 1997 that have not been fully carried out and where the approval of the NSW EPA has not been revoked;
- Site audit statements provided to the NSW EPA under Section 53B of the CLM Act 1997 that relate to significantly contaminated land;
- Where practicable, copies of anything formerly required to be part of the public record; and
- Actions taken by the NSW EPA under Section 35 or 36 of the *Environmentally Hazardous Chemicals Act 1985* (EHC Act 1985).

The search confirmed that the site was not subject to any regulatory notices relevant to the above legislations. However three sites within 200m away from the site had former notices:

- 301B Burns Bay Road, Lovetts Reserve Walking Track, Lane Cove West, 101m west of the site had 7 former notices;
- 315-317 Burns Bay Road ,Lane Cove West, 102m west of the site had 2 former notices; and
- 331-335 Burns Bay Road, Lane Cove, 115m west of the site had 4 former notices.

List of NSW Contaminated Sites Notified to EPA

A search through the *List of NSW Contaminated Sites Notified to the EPA* under Section 60 of the CLM Act 1997 was conducted on 6 September 2024. This list is maintained by the NSW EPA and includes properties on which contamination has been identified, but not deemed to be impacted significantly enough to warrant regulation. The site was not notified as contaminated to the NSW EPA. However, five properties less than 500 m away from the site were identified:

- Lovetts Reserve Walking Track, 301B Burns Bay Road, Lane Cove West, 101m west of the site was listed as unclassified and contamination formerly regulated under the CLM Act;
- 315-317 Burns Bay Road ,Lane Cove West, 102m west of the site was listed as unclassified and regulation under the CLM Act not required;
- 331-335 Burns Bay Road, Lane Cove, 115m west of the site was listed as other industry and contamination formerly regulated under the CLM Act;

- Coles Express Service Station, 254 Burns Bay Road, Lane Cove, 344m north of the site was listed as a service station and regulation under the CLM Act not required; and
- Caltex Lane Cove West, 235-245 Burns Bay Road, Lane Cove West, 414m north of the site was listed as a service station and regulation under the CLM Act not required.

POEO Public Register

A search of the *Protection of the Environment Operations Act 1997* public register was conducted on 6 September 2024. This public register contains records related to environmental protection licences, applications, notices, audits, pollution studies and reduction programs. The search confirmed that neither the site nor any adjacent properties were subject to licensing agreements / notices / programs relevant to the above legislation.

4. Conceptual Site Model

In accordance with NEPC (2013) *Schedule B2 – Guideline on Site Characterisation*, EI developed a conceptual site model (CSM) that assessed plausible linkages between potential contamination sources, migration pathways and receptors. The CSM provides a framework for the review of the reliability and useability of the data collected and identifies gaps in the existing site characterisation.

4.1.1 Summary of Site History

The available historical information indicated that the original building was a leather processing and tanning factory that was present on the site before 1943 and demolished in the late 1980s. The present day SAS Institute Australia building was developed between 1988 and 1991, with the central warehouse added in 2007.

The local surroundings consisted of vegetated / scattered residential land, up to the 1960s, after which time surrounding land was increasingly (re)developed for medium to high density residential purposes.

4.2 Subsurface Conditions

The following is a summary of the sub-surface profile for the site, based on the most recent borehole logs (**Appendix G** – BH1M to BH5M):

- Asphalt (0.10 m thick); overlying
- Anthropogenic gravelly sand, silty sand and clayey sand fill, with sub-rounded to sub-angular to angular, fine to coarse gravels, trace of clay, brick fragments, sandstone cobbles, trace of weathered sandstone fragments (down to 0.10 - 2.3 mBGL); overlying
- Silty Clay (between 1.20 and 2.0 mBGL); overlying
- Sandstone bedrock (down to at least 15.12 mBGL and deeper).

Groundwater seepage (inflow) was encountered at boreholes BH2M (at 1.0 mBGL) and BH5M (at 1.9 mBGL).

4.3 Potential Contamination Sources

The available historical information indicated a low to medium potential presence of contamination on the site, derived from the following sources:

- Previous commercial activities, including leather processing and tanning;
- Imported fill materials of unknown quality and origin, used for site levelling;
- Weathering (current and previous site structures) and uncontrolled demolition of (exposed) building fabrics containing hazardous substances, including potential ACM, lead-based paints and metallic surfaces;
- Underground storage of fuel;
- Leakage from vehicles in parking areas;
- Application of pesticides beneath the building footprints and around footings;
- Acid Sulfate Soils within the saturated zone of the local aquifer; and
- Migration of contaminants from neighbouring, up- and cross-gradient commercial properties.

Per- and Poly- Fluoroalkyl Substances (PFAS)

NSW EPA (2017) requires that PFAS are considered when assessing land contamination. EI used the following decision tree (**Table 4-1**), based on the EnRisk (2016) *Proposed Decision Tree for Prioritising Sites Potentially Contaminated with PFAS* and HEPA (2020) *PFAS National Environmental Management Plan*, for determining the potential for PFAS to be present on site and whether PFAS sampling of soil and groundwater is required. In this instance, the potential for PFAS contamination was considered to be high and corresponding sampling / analysis of groundwater (at least) was deemed warranted.

Emerging Chemicals

The NSW EPA uses chemical control orders (CCOs) as a primary legislative tool under the *Environmentally Hazardous Chemicals Act 1985* to manage chemicals of concern and limit their potential impact on the environment. Considerations for chemicals controlled by CCOs and other potential emerging chemicals, are outlined in **Table 4-2**. In this instance, the potential for an emerging chemical of concern to be present on-site was limited to the pesticides (potentially used around building footings and/or present in materials imported to the site) and PCBs (potentially present in materials imported to the site).

Table 4-1 PFAS Decision Tree

Preliminary Screening	Probability of Occurrence ¹
Has an activity listed in HEPA (2020) ² as being associated with PFAS contamination occurred on-site? If so, list activity. Manufacturing of leather	H
Has an activity listed in HEPA (2020) ² as being associated with PFAS contamination occurred up-gradient or adjacent to the site? If so, list activity.	L
Did fire training involving the use of suppressants occur on-site between 1970 and 2010?	L
Did fire training occur up-gradient or adjacent to the site between 1970 and 2010? ³	L
Have “fuel” fires ever occurred on-site between 1970 and 2010? (e.g. ignition of fuel (solvent, petrol, diesel, kero) tanks?)	L
Have PFAS been used in manufacturing or stored on-site? ⁴	M
Could PFAS have been imported to the site in fill materials from a site with an activity listed in HEPA (2020)?	L-M
Could PFAS-contaminated groundwater or run-off have migrated on to the site?	L
Is the site or adjacent sites listed in the NSW EPA PFAS Investigation Program? ⁵	L
If the probability is medium or high in any of the rows, does the site analytical suite need to be optimised to include preliminary sampling and analysis for PFAS in soil (including ASLP testing)?	Yes
Notes: 1 Probability: L – low (all necessary documentation has been reviewed and there is no recorded instance or compelling rationale); M – moderate (all necessary documentation has been reviewed and there is potential evidence of a recorded instance with compelling rationale); H – high (all necessary documentation has been reviewed and there is evidence of a recorded instance with compelling rationale). 2 Activities listed in Appendix B of HEPA (2020). 3 Runoff from up-gradient PFAS use may impact surface water, soil, sediment and groundwater. 4 PFAS is used wide range of industrial processes and consumer products, including in the manufacture of non-stick cookware, specialised garments and textiles, Scotchguard™ and similar products (used to protect fabric, furniture, leather and carpets from oils and stains), metal plating and in some types of fire-fighting foam. (https://www.nicnas.gov.au/chemical-information/factsheets/chemical-name/perfluorinated-chemicals-pfas) 5 Refer to https://www.epa.nsw.gov.au/your-environment/contaminated-land/pfas-investigation-program.	

Table 4-2 Emerging or Controlled Chemicals

Chemicals of Concern (CCO or emerging)	Decision
Were aluminium smelter wastes used or stored on site (CCO, 1986)?	No

Chemicals of Concern (CCO or emerging)	Decision
Do dioxin contaminated wastes (CCO, 1986) have the potential to impact the site? ¹	No
Were organotin products (CCO, 1989) used or stored on site? ²	No
Were polychlorinated biphenyls (PCBs) used or PCB wastes (CCO, 1997) stored on-site? ³	Possibility for PCBs to be present in imported fill
Were scheduled chemical or wastes (CCO, 2004) used or stored? ⁴	Possibility for pesticides to be used around the building footings and present in imported fill
Are other emerging chemicals suspected? ⁵	No
If Yes to any questions, has site sampling suite been optimised to include sampling for these chemicals of concern?	Yes

Notes:

1 From burning of certain chemicals, smelting or chemical manufacturing or fire on or near the site.

2 From anti-fouling paints used or removed at boat and ship yards and marinas.

3 From older transformer oils and electrical capacitors.

4 Twenty-four mostly organochlorine pesticides and industrial by-products

5 Other chemicals considered as emerging (e.g. 1,4 dioxane; associated with some CVOC).

4.4 Contaminants of Potential Concern (COPCs)

Based on the information presented in **Section 4.3**, the following COPCs were considered for the site:

- Priority metals (PM) (arsenic, cadmium, chromium, copper, lead, mercury, nickel and zinc);
- Total recoverable hydrocarbons (TRH);
- The monocyclic aromatic hydrocarbon compounds *benzene*, *toluene*, *ethyl-benzene* and *xylenes* (BTEX);
- Polycyclic aromatic hydrocarbons (PAH);
- Organochlorine and organophosphorous pesticides (OCP / OPP);
- Polychlorinated biphenyls (PCB);
- Acid Sulfate Soils; and
- Asbestos.

4.5 Identified Receptors

Based on the information presented in **Section 4.3**, the following potential receptors were identified for the site:

- Current and future site users;
- Demolition / construction workers;
- Adjacent site users;
- Future intrusive workers;
- Ecological receptors in areas of exposed soil / landscaping;
- Ecological receptors at Tannery Creek (49 m south-east) and Burns Bay (144 m south);

A summary of the CSM, with identification of the potential pollutant linkages, is provided in **Table 4-4**.

4.6 Risk Assessment

A qualitative assessment of the potential contamination risks for the site is outlined in **Table 4-3**.

Table 4-3 Assessment of Potential Contamination Risk

Potential Sources	Impacted Media	COPCs	Risk of Contamination
Previous commercial activities, including leather processing and tanning	Soil and groundwater	PM, TRH, BTEX, VOC, PAH, PFAS	Moderate The site had been occupied by a variety of potentially contaminating businesses, such as leather manufacturing, between 1913 and 1990.
Importation of fill of unknown origin and quality	Soil	PM, TRH, BTEX, PAH, OCP, OPP, PCB, asbestos	Moderate Filling down to 2.3 mBGL was observed during the intrusive investigations at the site.
Hazardous building materials	Building fabrics Near surface soil	PM (lead), PCB, asbestos	Moderate Hazardous building materials (asbestos fragment) were observed in the fill beneath the suspended slab on site.
Application of pesticides	Near surface soil (building footing areas)	PM (arsenic and copper), OCP, OPP	Low If present, pesticides are expected to be limited to shallow, building footprint soils.
Underground storage of fuels	Soil and groundwater	PM, TRH, BTEX, PAH	Moderate SafeWork records indicated the site held a license for Flammable Liquids and Dangerous Goods from at least 1967 until its cancellation in 1988.
Leakage from parked vehicles	Near surface soil	PM, TRH, BTEX, PAH,	Low The surface pavements were noted to be in good condition, with minor staining.
Migration from neighbouring, up- and cross-gradient commercial properties.	Soil and groundwater	PM, TRH, BTEX, PAH, PFAS	Low-Moderate Up-gradient properties are commercial and residential. Migration restricted by relatively impervious soils. Petrol stations located cross-gradient of the site, at a distance of approximately 400 to 500 m.

4.7 Data Gaps

The previous PSI (DP, 2023) recommended additional investigations to further:

- Determine the degree and extent of fill present on site; and
- Characterise the soil within the site, which may have been impacted by historical use activities.

The limited intrusive investigations documented in this report have closed most of the data gaps above. However, the following will still require closure:

- The presence and extent of impacts related to PFAS and ASS are still unknown across the site;
- Additional sampling locations are necessary to fully characterise the site, according to NSW EPA (2022a), based on the area of the property.

The GME report (EI, 2024b) recommended additional GMEs prior to commencement of the development to confirm the local (quality) conditions. Groundwater samples complied with the adopted criteria, except for:

- Dissolved aluminium in samples collected from BH2M (120 µg/L) and BH5M (120 µg/L);
- Dissolved copper in samples collected from BH1M (2 µg/L), BH2M (6 µg/L) and BH5M (3 µg/L);
- Dissolved cobalt in the sample collected from BH3M (4 µg/L);
- Dissolved zinc in samples collected from BH1M (24 µg/L), BH2M (16 µg/L), BH3M (18 µg/L) and BH5M (27 µg/L); and
- Total oxidised nitrogen, total nitrogen and total phosphorus in the sample collected from BH3M (270 µg/L, 700 µg/L and 180 µg/L, respectively).

The reported metal concentrations are consistent with natural (background) levels for heavily urbanised parts of Sydney, including the suburb of Lane Cove. Hence, the metal levels were not considered to pose significant risks to human health or the surrounding environment. Nevertheless, treatment was warranted for any extracted groundwater, before discharge.

Traces of C10-C40 TRHs (BH3M: 650 µg/L), several VOCs (including toluene, chloroform and bromodichloromethane), perfluorooctanoic acid (PFOA; BH3M: 0.02 µg/L) and perfluorooctane sulfonic acid (PFOS; BH3M: 0.03 µg/L) were detected in the representative samples. Whilst all concentrations complied with their corresponding assessment criteria, the detection of organic compounds in the groundwater reinforced the need for further monitoring.

These data gaps will be close upon completion of the works recommended in **Section 10**.

Table 4-4 Preliminary Conceptual Site Model

Potential Sources	Impacted Media	Contaminants of Potential Concern	Transport mechanisms	Exposure pathways	Potential receptors	Source-Pathway-Receptor (SPR) Linkage
Previous commercial activities, including leather processing and tanning	Soil	PM, TRH, BTEX, PAH, PCB, OCP, OPP, PFAS and asbestos	Disturbance of surface and subsurface soils during site redevelopment, future site maintenance and future use of the site post redevelopment	Ingestion Dermal contact Inhalation of particulates	Current and future site users Demolition / construction workers Adjacent site users Future intrusive workers	Potentially complete. All COPC concentrations were reported below the human health criteria. However, the minimum NSW EPA (2022a) sampling density was not complied with.
Importation of fill of unknown origin and quality			Atmospheric dispersion from soil to outdoor and indoor air spaces			
Hazardous building materials		TRH, BTEX and PAH	Volatilisation of contamination from soil and diffusion to indoor air spaces.	Inhalation of vapours		
Application of pesticides						
Underground storage of fuels			PM, TRH, BTEX, PAH, PCB, OCP, OPP and PFAS	Roots absorption of bioavailable compounds from impacted soils.	Biota uptake	Ecological receptors in areas of exposed soil/landscaping
Leakage from parked vehicles						
Migration from neighbouring, up- and cross-gradient commercial properties.	Groundwater	TRH, BTEX, PAH, and PFAS	Volatilisation of contamination from groundwater to indoor or outdoor air spaces (onsite and offsite)	Inhalation of vapours	Current and future site users Demolition / construction workers Adjacent site users Future intrusive workers	Potentially complete. However, the use of personal protective equipment (PPE) is mandatory for construction workers and future building / service maintenance.
			Disturbance of surface soils during site redevelopment, future site maintenance and future use of the site post redevelopment	Ingestion Dermal contact	Demolition / Excavation/ construction workers Future intrusive workers	
			Migration of dissolved phase impacts in groundwater via diffusion and advection	Biota uptake	Ecological communities located down gradient of the site Tannery Creek (49 m south-east) which flows into Burns Bay (144 m south)	

5. Methodology

5.1 Sampling, Analytical and Quality Plan

The sampling, analytical and quality plan (SAQP) ensures that the data collected during environmental works at a site are representative and provide a robust basis for assessment decisions. The SAQP for this PSI with limited sampling included the following:

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

5.2 Data Quality Objectives

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

Table 5-1 Summary of Project Data Quality Objectives

DQO Step	Details
1. State the Problem Summarise the contamination problem that will require new environmental data and identify the resources available to resolve the problem; develop a conceptual site model.	The proposed development will demolition of the existing site structures, followed by the construction of a seven to fifteen -storey residential building, overlying a lower ground level and two levelled carpark basement. Previous investigations (DP, 2023) have identified potential for soil contamination to be present on the site. The degree of any site contamination was to be established, by means of intrusive sampling and laboratory analysis for the potential contaminants, so that the land suitability for the proposed development could be confirmed.
2. Identify the Goal of the Study (Identify the decisions) Identify the decisions that need to be made on the contamination problem and the new environmental data required to make them.	The decisions for this PSI with limited sampling concerned the following questions: ▪ Has the nature, extent and source of any soil contamination onsite been defined? ▪ What impact do the site specific, geologic and hydrogeological conditions have on the fate and transport of any impacts that may be identified? ▪ Does the level of impact coupled with the fate and transport of identified potential contaminants represent an unacceptable risk to identified human and/or environmental receptors on or offsite? ▪ Does the collected data provide sufficient information to allow the selection and design of an appropriate remedial strategy, if necessary?
3. Identify Information Inputs (Identify inputs to decision) Identify the information needed to support any decision and specify which inputs require new environmental measurements.	Inputs to the decision making process included: ▪ Proposed development plans and end land-use; ▪ Available site historical information; ▪ Assessment of soil analytical results in relation to the adopted human health and ecological criteria; and ▪ Visual observation and documentation (i.e. field notes, photographs) during site works. Decision rules for soil and groundwater and criteria exceedance are outlined as follows: At the end of the assessment, a decision had to be made regarding the suitability of soil for the proposed development, or if additional investigation or remedial works were required to make the site suitable for the proposed use.
4. Define the Boundaries of the Study Specify the spatial and temporal aspects of the environmental media that the data must represent to support decision.	<u>Lateral</u> – the investigation was conducted within the area shown in Figure 2, Appendix A. <u>Vertical</u> – From existing ground surface, underlying fill and natural soil horizons. <u>Temporal</u> – Results are valid on the day of data / sample collection and remain valid as long as no changes occur on site or contamination (if present) does not migrate on site or on to the site from off-site sources.
5. Develop the Analytic Approach (Develop a decision rule) To define the parameter of interest, specify the action level and integrate previous DQO outputs into a single statement that describes a logical basis for choosing from alternative actions.	Parameters of interest included the laboratory results for primary and quality control soil analyses. Laboratory analytical results would be accepted if: ▪ All contracted laboratories are accredited by NATA for the analyses undertaken; ▪ Laboratory methods are conducted in accordance with NEPC (2013) guidelines; ▪ Laboratory and field quality control sample results are within the adopted Data Quality Indicators; and ▪ Laboratory QA/QC protocols and results comply with NEPM requirements. Decision criteria for QA/QC measures are defined by the Data Quality Indicators (DQI) in Table 5-2.

DQO Step	Details
6. Specify Performance or Acceptance Criteria (Specify limits on decision errors) Specify the decision-maker's acceptable limits on decision errors, which are used to establish performance goals for limiting uncertainties in the data.	Specific limits for this project were in accordance with national and NSW EPA guidance and appropriate indicators of data quality and standard procedures for field sampling and handling. This included the following points to quantify tolerable limits: ▪ The null hypothesis for the investigation is that the 95% Upper Confidence Limits (UCL) of the mean for contaminants of concern exceed relevant commercial land use criteria across the site. ▪ The acceptance of the site will be based on the probability that: ▸ The 95% UCL of the mean of the data will satisfy the given site criteria. Therefore, a limit on the decision error will be 5% that a conclusive statement may be incorrect; ▸ The standard deviation of the results is less than 50% of the relevant remediation acceptance criterion; and ▸ No single results exceed the remediation acceptance criteria by 250% or more. ▪ Soil and groundwater concentrations for chemicals of concern that are below investigation criteria made or approved by the NSW EPA will be treated as acceptable and indicative of suitability for the proposed land use(s). ▪ If contaminant concentrations in soil and groundwater exceed the adopted criteria, further investigation will be considered prudent. If no contamination is detected, no further action is required.
7. Develop the Detailed Plan for Obtaining Data (Optimise the design for obtaining data) Identify the most resource-effective sampling and analysis design for general data that are expected to satisfy the DQOs.	In order to identify the most resource-effective sampling and analysis design for general data that are expected to satisfy the DQO: ▪ Written instructions were issued to guide field personnel in the required fieldwork activities. ▪ Given that the site covers an area of approximately 7,595 m², 18 soil sampling locations are required in accordance with the Minimum Sampling Points Required for Site Characterisation, published under <i>the NSW EPA (2022a) Sampling Design Part 1 – Application, Contaminated Land Guidelines</i>. However, for preliminary purposes, soil sampling was conducted at only five sampling locations (BH1M-BH5M), adopting a systematic grid pattern across accessible parts of the site. ▪ An upper soil profile sample was collected at each borehole location and analysed for the potential contaminants, to assess the condition of the fill/topsoil layer and impacts from activities at ground level. ▪ Further discrete, natural samples were analysed for the COPCs. Samples were selected based on field observations (including visual and olfactory evidence), whilst giving consideration to characterise the subsurface soil stratigraphy. ▪ Review of the results, to determine if further sampling was warranted (that being where soil concentrations were found to exceed the adopted criteria endorsed by the NSW EPA, relevant to the proposed land use(s)).

5.3 Data Quality Indicators

To ensure that the investigation data were of an acceptable quality, they were assessed against the data quality indicators (DQI) outlined in **Table 5-2**, which related to both field and laboratory-based procedures. The overall assessment of data quality is discussed in **Section 6** and **Appendix K**.

Table 5-2 Data Quality Indicators

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

5.4 Sampling Rationale

With reference to the CSM described in **Section 4**, soil investigation works were planned in accordance with the following rationale:

- Soil samples were collected from five locations (BH1M-BH5M), placed across accessible parts of the site (**Figure 2, Appendix A**).
- Laboratory analysis of representative soil samples for the contaminants of potential concern, identified in **Section 4.4**.

5.5 Assessment Criteria

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

5.5.1 Soil Criteria¹

The adopted soil assessment criteria are referred to as the Soil Investigation Levels (SILs). SILs are also presented alongside the analytical results in the corresponding summary table (**Table 1, Appendix B**).

Table 5-3 Adopted Investigation Levels for Soil

Medium	Adopted Guidelines	Rationale
Soil	NEPC (2013) HILs, HSLs and Management Limits for TRHs	Soil Health-based Investigation Levels (HILs) Assessment against NEPC (2013) <i>HIL-B</i> thresholds for residential settings with minimal opportunities for soil access Soil Health-based Screening Levels (HSLs) NEPC (2013) <i>HSL-A&B</i> thresholds for vapour intrusion at low to high density residential sites were applied (assuming coarse grained soil). Asbestos: ▪ No visible asbestos for surface soils. ▪ HSL- A&B: For bonded ACM. ▪ 0.001% w/w for friable asbestos in soil. Management Limits for Petroleum Hydrocarbons Where the HSLs and ESLs for petroleum hydrocarbons were exceeded, sample results were also assessed against the NEPC (2013) <i>Management Limits</i> for the F1-F4 TRH fractions, to assess propensity for phase-separated hydrocarbons, fire and explosive hazards and adverse effects on buried infrastructure.

5.6 Soil Sampling

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

Table 5-4 Summary of Soil Sampling Methodology

Activity/Item	Details
Fieldwork	Conducted on 9 September 2024. Five boreholes were drilled (BH1M, BH2M, BH3M, BH4 and BH105M), with samples collected from both the fill and natural soil layers, where permissible. Boreholes BH1M, BH2M, BH3M and BH105M were converted into groundwater monitoring wells (EI, 2024b).

¹ This report covers only soil characterisation results and criteria. For groundwater information, please refer to EI (2024b).

Activity/Item	Details
Drilling Method and Depth	Boreholes were drilled using a mechanical drilling rig, fitted with solid stem augers. The maximum drilling depth reached was 15.12 mBGL. Borehole logs are presented in Appendix G .
Soil Logging	Drilled / examined soils were logged in the field in accordance with Australian Standard AS1726-2017. Soil was evaluated on a qualitative basis for visual and olfactory signs of contamination. Soil descriptions are included in the borehole logs (Appendix G).
Soil Sampling	Soil samples were collected by dry grab method from the auger flights / auger bucket (the sampler wearing dedicated nitrile gloves) and placed into laboratory-supplied, acid-washed, solvent-rinsed glass jars and zip-lock, plastic bags (the latter for asbestos samples). Blind and split field duplicates were prepared by collecting a bulk amount of soil and dividing (post mixing) into separate glass jars. At each location, aliquots of soil were placed into separate zip-lock bags for laboratory asbestos analysis.
Decontamination Procedures	Nitrile sampling gloves were replaced between each sampling location. The augers were cleaned of all residual soil between each borehole location by washing with a mixture of detergent solution (Alconox®) and then rinsed with potable water until free of all residual materials, then rinsed with water.
Sample Preservation and Transport	Sealed sample containers were stored in an insulated chest (with ice packs), whilst on-site and in transit to the contracted laboratories. Chilled sample chests were transported to the primary laboratory (SGS Australia Pty Ltd (SGS)) using COC procedures. Signed COC certificates and sample receipt advice (SRA) were provided by SGS for confirmation purposes (Appendix H). A split (inter-laboratory) field duplicate was submitted to Envirolab Pty Ltd (the secondary laboratory) under strict COC procedures. Signed COC and sample receipt documentation were provided by Envirolab for confirmation purposes (Appendix H).
Laboratory Analysis and Quality Control	Soil samples were analysed by SGS and Envirolab for the COPC. All samples were analysed within the required holding period, as documented in the corresponding laboratory reports (Appendix I). In addition to the split (inter-laboratory) field duplicate analysed by Envirolab, QC analyses comprised a blind (intra-laboratory) field duplicate, an equipment rinsate blank, a laboratory-prepared, trip spike soil sample and a laboratory-prepared, trip blank soil sample, all analysed by SGS.

6. Data Quality Assessment

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

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

Table 6-1 Quality Assurance Process

Stage	Control	Conformance [Yes, Part, No]	Report Section(s)
Preliminaries	Data Quality Objectives established	Yes	See Sections 5.2
Field Work	Suitable documentation of fieldwork observations including borehole logs, field notes.	Yes	See Appendices J and K .
Sampling Plan	Use of relevant and appropriate sampling plan (density, type and location)	Part	See sample rationale – Section 5.4 .
	All media sampled and duplicates collected	Yes	See Tables 1 and 2 (Appendix B) and Appendices J and K .
	Use of approved and appropriate sampling methods (soil)	Yes	See methodology Section 5.6
	Selection of soil samples according to field PID readings (where VOC are present)	No	See methodology Section 5.6
	Preservation and storage of samples upon collection and during transport to the laboratory	Yes	See methodology Sections 5.6
	Appropriate rinsate, field and trip blanks taken	Yes	See methodology Sections 5.6 and Appendices H, J and K .
	Completed field and analytical laboratory sample COC procedures and documentation	Yes	See Appendix I .
Laboratory	Sample holding times within acceptable limits	Part	See Appendices J and K .
	Use of appropriate analytical procedures and NATA-accredited laboratories	Yes	See Appendices H, I and J .
	LOR/PQL low enough to meet adopted criteria	Yes	See laboratory reports – Appendix I, Appendix B (Tables 1 and 2) .
	Laboratory blanks	Yes	See laboratory QA/QC- Appendices J and K .
	Laboratory duplicates	Part	See laboratory QA/QC- Appendices J and K .

Stage	Control	Conformance [Yes, Part, No]	Report Section(s)
	Matrix spike/matrix spike duplicates	Part	See laboratory QA/QC- Appendices J and K.
	Surrogates (or System Monitoring Compounds)	Yes	See laboratory QA/QC- Appendices J and K.
	Analytical results for replicated samples, including field and laboratory duplicates and inter-laboratory duplicates, expressed as Relative Percentage Difference (RPD)	Yes	See Appendices J and K.
	Checking for the occurrence of apparently unusual or anomalous results, e.g. laboratory results that appear to be inconsistent with field observations or measurements	Yes	See Appendix I.
Reporting	Report reviewed by senior staff to assess project meets desired quality, NSW EPA guidelines and project outcomes.	Yes	See Report Distribution page at front of report.

7. Results

7.1 Soil Results

7.1.1 Subsurface Conditions

The lithology encountered during the drilling of the test boreholes and installation of the monitoring well was generalised as a layer of anthropogenic filling, overlying residual silty clay, overlying sandstone bedrock. More detailed information is presented in **Table 7-1** and the borehole logs in **Appendix G**.

Table 7-1 Generalised Subsurface Profile

Unit	Material	Comment
1	Asphalt	Hardstand (0.10 m thickness)
2	Fill	Grey, dark grey, pale grey, (gravelly) sand, fine to coarse, angular to sub-angular medium to coarse gravels, trace of clay, moist (0.10-0.6 mBGL) Yellow brown grey, dark brown/grey, brown/ pale grey- dark grey, silty sand, fine to medium grained, trace of fine to medium sub rounded to sub angular to angular, trace of clay, brick fragments, sandstone cobbles, trace of sandstone fragments, moist to wet (0.3-1.7 mBGL) Grey/dark grey, clayey sand, medium to coarse, trace of clay, trace of weathered sandstone, with fine to medium angular to sub angular gravel, moist to wet (0.6-2.3 mBGL)
3	Natural (Residual) Soil	Brown, silty clay, low plasticity, moist at sampling BH4 (1.20-2.00 mBGL)
4	Sandstone Bedrock	Grey, orange/ yellow/ brown/red, pale grey, weathered Sandstone fine to coarse grained, laminated, with dark grey shale (down to 15.12 mBGL, at least)

7.1.2 Field Observations

Soil samples were obtained from the test bores at various depths ranging between 0.2 and 2.5 mBGL. All examined soil samples were evaluated on a qualitative basis for odour and visual signs of contamination (e.g. hydrocarbon odours, oil staining, petrochemical filming, asbestos fragments, ash, charcoal, etc.) and the following observations were noted (**Appendix G**):

- Ash and slag were not observed in any of the examined soils;
- Fibre cement sheeting (FCS) fragments were observed beneath the suspended slab in the south eastern section of the site; and
- No olfactory indicator of contamination (i.e. suspicious odour) was detected within any of the soil samples examined.

7.1.3 Laboratory Analytical Results

A summary of the laboratory results for the collected soil samples, showing sample quantities, minimum/maximum analyte concentrations and samples found to exceed the SILs, is presented in **Table 7-2**. More detailed tabulation of the results, showing the concentrations for individual samples alongside the adopted soil criteria, is presented in **Table 1, Appendix B**.

Table 7-2 Summary of Soil Analytical Results

Number of Primary Samples	Analyte	Minimum Concentration (mg/kg)	Maximum Concentration (mg/kg)	Samples Exceeding SILs
---------------------------	---------	-------------------------------	-------------------------------	------------------------

Number of Primary Samples	Analyte	Minimum Concentration (mg/kg)	Maximum Concentration (mg/kg)	Samples Exceeding SILs
Priority Metals				
9	Arsenic	<1	7	None
9	Cadmium	<0.3	<0.3	None
9	Chromium	1	59	None
9	Copper	1.3	120	None
9	Lead	3	130	None
9	Mercury	<0.05	0.09	None
9	Nickel	<0.5	87	BH1M_0.2-0.3: 87 mg/kg Exceeded ecological criteria 35 mg/kg
9	Zinc	<2	280	BH4_0.3-0.4: 280 mg/kg Exceeded ecological criteria 250mg/kg
PAHs				
8	Naphthalene	<0.1	<0.1	None
8	Benzo(α)pyrene	<0.1	0.1	None
8	Carcinogenic PAHs (as B(α)P TEQ)	<0.2	<0.2	None
8	Total PAHs	<0.8	1.0	None
BTEX and TRHs				
8	Benzene	<0.1	<0.1	None
8	Toluene	<0.1	0.1	None
8	Ethyl benzene	<0.1	<0.1	None
8	Total Xylenes	<0.3	<0.3	None
8	F1 – TRHs	<25	<25	None
8	F2 – TRHs	<25	<25	None
8	F3 – TRHs	<90	<90	None
8	F4 – TRHs	<120	<120	None
Pesticides				
5	Total OCPs	<1	<1	None
5	Total OPPs	<1.7	<1.7	None
PCBs				
5	Total PCBs	<1	<1	None
Asbestos				
6	Asbestos	Detected	Detected	FCS1

Footnotes:

- B(α)P = benzo(α)prene
- TEQ = toxicity equivalent coefficient

As per **Table 7-2**, soil sample concentrations were reported below their corresponding human health-based criteria for residential settings, except for:

- Asbestos fragment found (FCS1).

Soil sample concentrations were also below their corresponding ecological-based criteria for urban residential settings, except for:

- Nickel at sampling location BH1M_0.2-0.3; and
- Zinc at sampling location BH4_0.3-0.4.

8. Site Characterisation

8.1 Soil

The field works established that the site subsurface consisted of asphalt pavement, capping a layer of anthropogenic filling (down to 0.10-2.3 mBGL), overlying natural silty clay (1.20 to 2.00 mBGL), overlying sandstone bedrock.

Analytical results for the potential contaminants in representative fill and natural soil samples were found to comply with the adopted SILs applicable to residential land use settings, with the exceptions of one asbestos fragment found (FCS1), nickel at sampling location BH1M_0.2-0.3 and zinc at sampling location BH4_0.3-0.4.

Nickel and zinc exceedances were marginal and related to ecological criteria. They are likely representative of disturbed urban background conditions, as opposed to site-specific impacts. Furthermore, they were identified within the basement footprint area and will eventually be disposed offsite as surplus soils, during basement construction.

Any soils to be disposed off-site will require pre-classification, in accordance with the NSW EPA (2014) *Waste Classification Guidelines*.

8.2 Review of Conceptual Site Model

On the basis of investigation findings, the CSM discussed in **Section 4** was considered to appropriately identify contamination sources, migration mechanisms and exposure pathways, as well as potential on-site and off-site receptors. Data gaps still remain (**Section 4.7**), however their closure can be achieved through the implementation of the recommendations provided in **Section 10**.

9. Conclusion

The site at 300 Burns Bay Road, Lane Cove, NSW was the subject of a preliminary site investigation with limited sampling, conducted in order to provide characterisation of soil conditions, thereby assessing the site suitability for residential use.

The key findings of this PSI with limited sampling were as follows:

- The site covers approximately 7,595 m² and is currently occupied by a two-storey car park building in the north-western quadrant of the site, a four-storey brick building in the north-eastern quadrant and eastern end of the site, an open tennis court at the western end of the site and an at-grade asphalt surfaced car park in the remaining open areas of the site, which is suspended along its southern end, due to a southerly dipping terrain.
- The subsurface profile consists of gravelly sand, silty sand and clayey sand fill, followed by silty clay natural material, overlying sandstone bedrock.
- Contaminant concentrations in soil were generally compliant with the adopted criteria, with the following exceptions:
 - An asbestos fragment (labelled 'FCS1') was observed beneath the suspended slab, in the south-eastern section of the site;
 - Priority metals exceeded their respective ecological screening levels (ESLs) at locations BH1M_0.2-0.3 (nickel) and BH4_0.3-0.4 (zinc).
- The nickel and zinc exceedances were marginal and likely representative of disturbed urban background conditions, as opposed to site-specific impacts. Furthermore, they were identified within the basement footprint area and will eventually be disposed offsite as surplus soils, during basement construction.
- No exceeding concentrations of BTEX, PAH, TRH, OCPs, OPPs or PCBs were reported for any of the analysed samples. Therefore, the potential risk posed by these contaminants to site receptors was considered to be low.

Based on the findings of this PSI and with consideration of EI's Statement of Limitations (**Section 11**), no environmental impacts were found on site that would limit its redevelopment for residential activities. However, the sample density was insufficient to adequately characterise the site in accordance with NSW EPA (2022a). As such, further recommendations for the future environmental management of the site are provided in **Section 10**.

10. Recommendations

EI provides the following recommendations in relation to the proposed development:

- A Detailed Site Investigation (DSI) should be undertaken following demolition, to further assess soil and groundwater quality on the property. The DSI should include Sampling and associated laboratory analysis for the potential contaminants identified in **Section 4.4** and to close the remaining data gaps (**Section 4.7**). A sampling, analytical and quality plan (SAQP) should be prepared for the DSI, which should refer to EPA (2022) Sampling Design Guidelines.
- Should contamination be identified during the DSI, a Remedial Action Plan (RAP) must be prepared in accordance with the NSW EPA (2020) Guidelines for Consultants Reporting on Contaminated Land, detailing the methodology and procedures required for effective site remediation and subsequently implementation.
- A Hazardous Materials Survey (HMS) to identify any hazardous materials present within the existing building fabrics should be conducted prior demolition. All identified hazardous materials must be appropriately managed (including asbestos-containing materials (ACM) on the ground surface), to maintain worker health and safety during operation of the site and to prevent the spread of potentially hazardous substances onto the site and soil surfaces during demolition (where relevant).
- Following pavement and vegetation removal, an inspection of the exposed surfaces should be performed by a suitably qualified environmental consultant, to check for any visible signs of contamination (in particular fragments of Fibre Cement Sheeting (FCS)). An asbestos clearance inspection and certificate should be completed by a suitably qualified professional (SafeWork NSW Licensed Asbestos Assessor). Where (if) clearance inspection indicates the presence of hazardous materials remaining on the site, further removal and clearance inspection works must be undertaken.
- All soil materials that are designated for off-site disposal, including any *virgin excavated natural material* (VENM), should be managed in accordance with an appropriate waste management plan, which references the *POEO (Waste) Regulations 2014*. The waste classification process will require representative soil sampling and analysis, in accordance with the NSW EPA (2014) *Waste Classification Guidelines*, with the analytical suite to include the identified COPCs (**Section 4.4**). The soil analytical results from this PSI with limited sampling can be utilised for this purpose.
- Once appropriately classified, all waste materials are to be transported to NSW EPA-licensed waste facilities by the appointed waste contractors. All tipping dockets supplied by the landfill companies are to be retained, to confirm the appropriate (lawful) disposal of wastes.
- Any material being imported to the site should be pre-validated as suitable for the intended use, in accordance with NSW EPA guidelines. In particular, imported filling / landscaping material must be certified as meeting the VENM classification, prior to importation.

EI emphasise that these recommendations can be managed through the development application process, in accordance with *State Environmental Planning Policy (Resilience and Hazards) 2021*.

11. Statement of Limitations

This report has been prepared for the exclusive use of Lane Cove Developments No. 1 Pty Ltd, whom is the only intended beneficiary of EI's work. The scope of the investigation carried out for the purpose of this report was limited to that agreed with Lane Cove Developments No. 1 Pty Ltd.

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

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

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

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

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

This report was prepared for Lane Cove Developments No. 1 Pty Ltd and no responsibility is accepted for use of any part of this report in any other context or for any other purpose or by other third parties. This report does not purport to provide legal advice.

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

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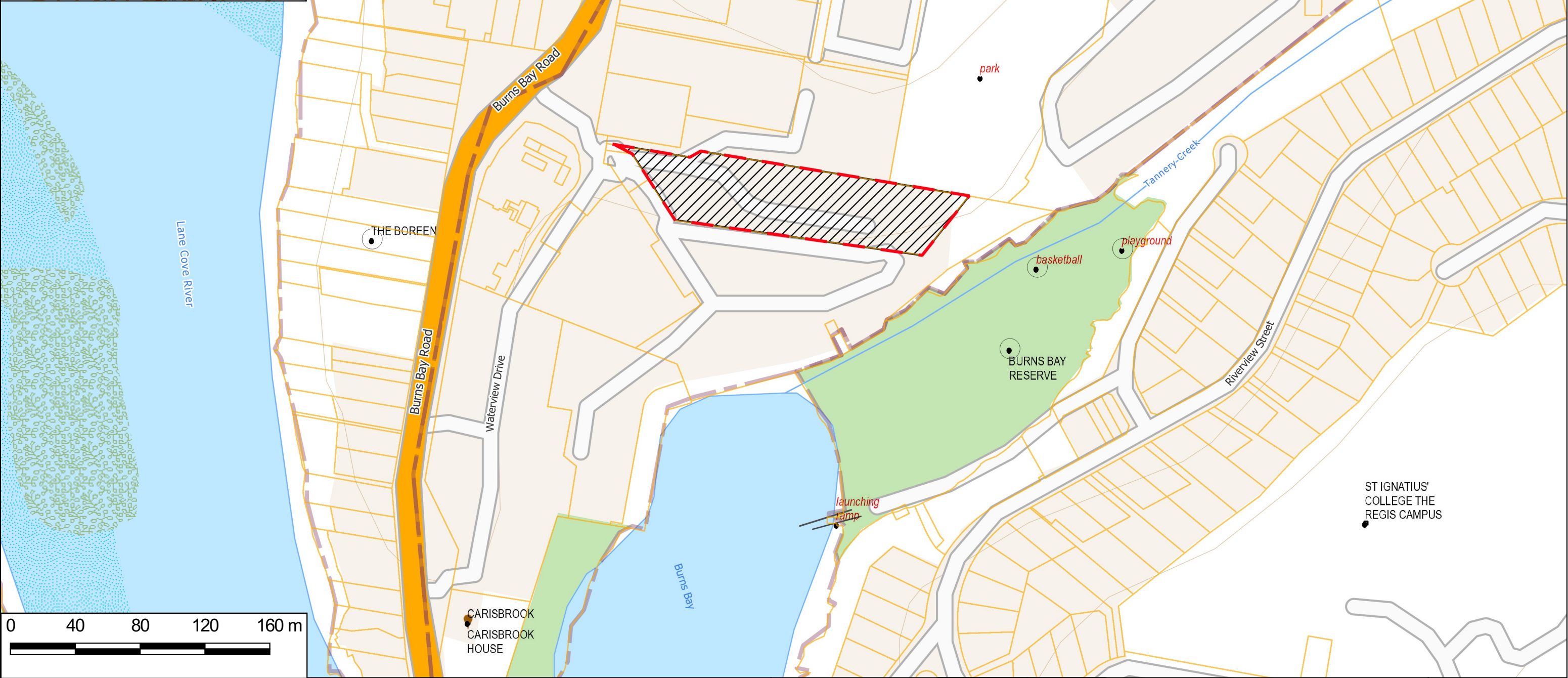
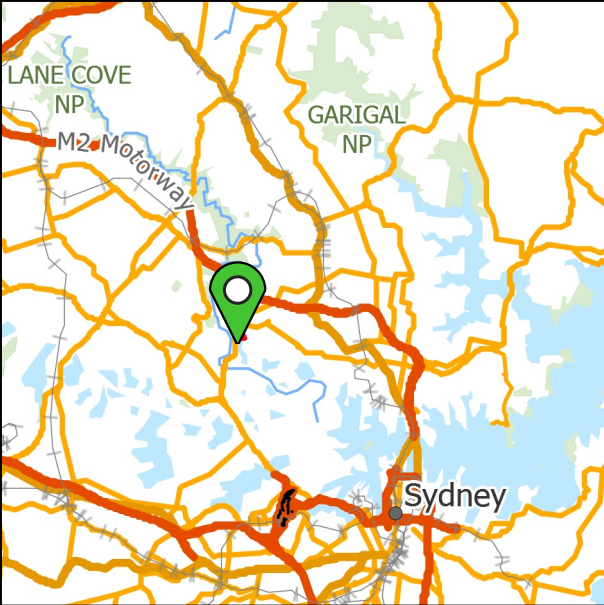
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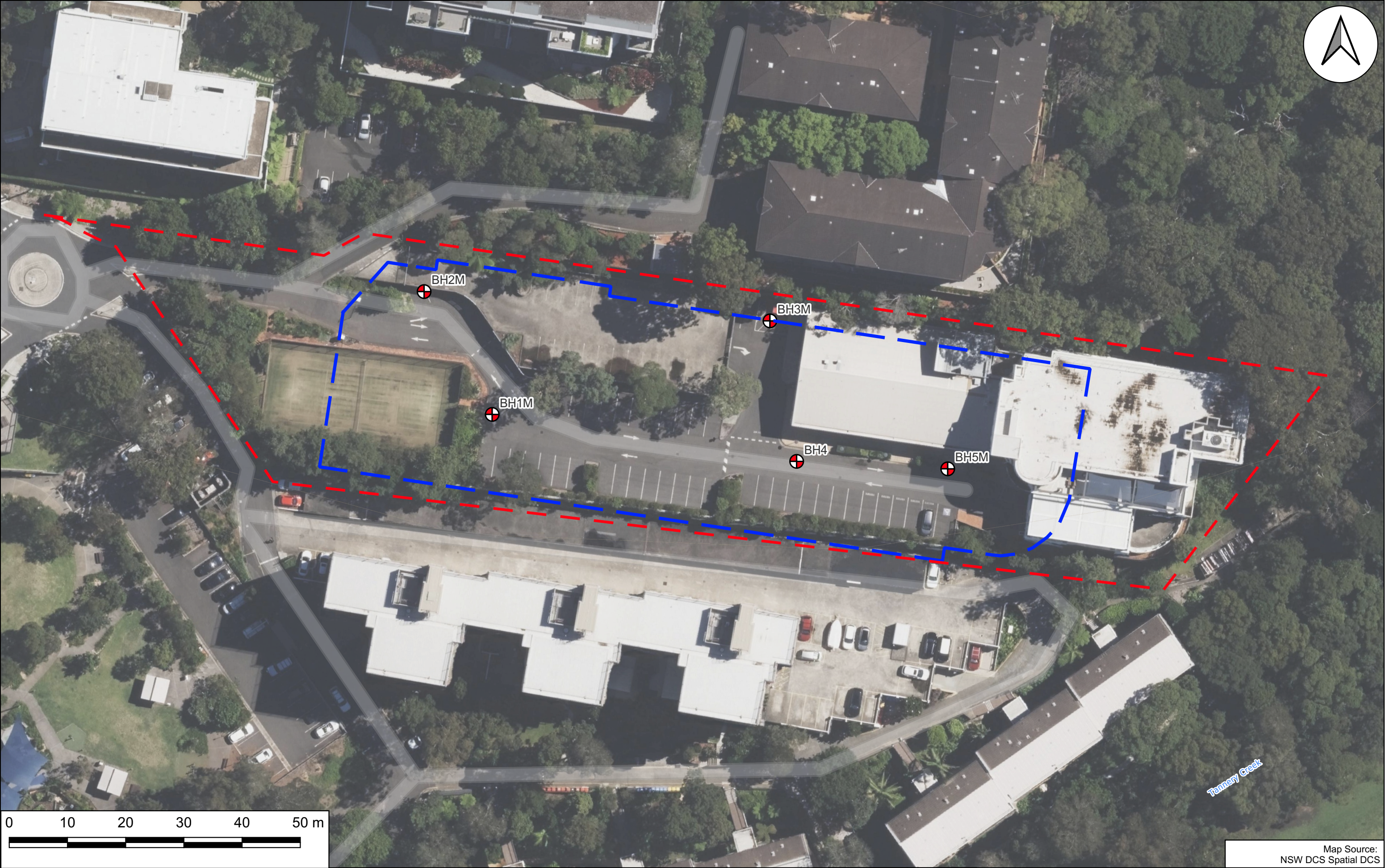
Abbreviations

ACM	Asbestos-containing materials
ASS	Acid sulfate soils
B(a)P	Benzo(a)pyrene (a PAH compound), - B(a)P TEQ Toxicity Equivalent Quotient
BH	Borehole
BTEX	Benzene, Toluene, Ethylbenzene, Xylene
COC	Chain of Custody
DA	Development Application
DCA	Data Acceptance Criteria
DO	Dissolved Oxygen
DP	Deposited Plan
EC	Electrical Conductivity
EIL	Ecological Investigation Level
NSW EPA	Environment Protection Authority
ESL	Ecological Screening Level
F1	C ₆ -C ₁₀ TRH less the sum of BTEX concentrations (Ref. NEPC (2013) Schedule B1)
F2	>C ₁₀ -C ₁₆ TRH less the concentration of naphthalene (Ref. NEPC (2013) Schedule B1)
GIL	Groundwater Investigation Level
GME	Groundwater Monitoring Event
HIL	Health-based Investigation Level
HSL	Health-based Screening Level
km	Kilometres
LOR	Limit of Reporting (quantitative limit for the respective laboratory analytical method)
m	Metres
mAHD	Metres Australian Height Datum
mBGL	Metres Below Ground Level
mg/L	Milligrams per Litre
µg/L	Micrograms per Litre
MW	Monitoring Well
NATA	National Association of Testing Authorities, Australia
NEPC	National Environmental Protection Council
NSW	New South Wales
PAHs	Polycyclic Aromatic Hydrocarbons
pH	Potential Hydrogen (measure of the acidity or basicity of an aqueous solution)
PQL	Practical Quantitation Limit (limit of detection for respective laboratory instruments)
PSH	Phase-Separated Hydrocarbons
QA/QC	Quality Assurance / Quality Control
RPD	Relative Percentage Difference
SRA	Sample Receipt Advice (document confirming laboratory receipt of samples)
SWL	Standing Water Level
TDS	Total Dissolved Solids (a measure of water salinity)
TCLP	Toxicity Characteristics Leaching Procedure
TPH	Total Petroleum Hydrocarbons (superseded term equivalent to TRH)
TRH	Total Recoverable Hydrocarbons
UCL	Upper Confidence Limit (of the arithmetic mean)
VOCs	Volatile Organic Compounds

Appendix A - Figures



LEGEND. Note: All locations are approximate  Site Boundary	 Suite 6.01, 55 Miller Street, PYRMONT 2009 Ph (02) 9516 0722 Fax (02) 9518 5088	Drawn:	M.C	Lane Cove Developments No.1 Pty Ltd Preliminary Site Investigation 300 Burns Bay Road, Lane Cove, NSW Site Locality Plan	Figure: 1
		Approved:			
		Date:	06/09/2024		Project: E26484.E01



LEGEND. Note: All locations are approximate		 Suite 6.01, 55 Miller Street, PYRMONT 2009 Ph (02) 9516 0722 Fax (02) 9518 5088	Drawn:	N.J.	Lane Cove Developments No.1 Pty Ltd Preliminary Site Investigation 300 Burns Bay Road, Lane Cove, NSW Sampling Location Plan	Figure: 2
 Site Boundary	 Borehole Location		Approved:	A.I.		Project: E26484.E01_Rev1
 Proposed Basement Boundary	 Monitoring Well Location		Date:	04/12/2025		

Map Source:
NSW DCS Spatial DCS

Appendix B - Tables

Table 1 – Summary of Soil Test Results

E26484.E01_Lane Cove

Sample ID	Sampling Date	Priority Metals								PAHs				BTEX				TRHs				Total OCPs	Total OPPs	PCBs	Asbestos	
		As	Cd	Cr	Cu	Pb	Hg	Ni	Zn	Carcinogenic PAHs (as B(a)P TEQ, <LOR= 0)	Benzo(a)pyrene	Total PAHs	Naphthalene	Benzene	Toluene	Ethylbenzene	Total Xylenes	F1	F2	F3	F4				Presence / absence	
Preliminary Site Investigation																										
BH1M_0.2-0.3	9/9/2024	1	<0.3	11	59	3	<0.05	87	51	<0.2	<0.1	<0.8	<0.1	<0.1	<0.1	<0.1	<0.3	<25	<25	<90	<120	<1	<1.7	<1	Absent	
BH1M_1.2-1.3	9/9/2024	7	<0.3	56	110	55	<0.05	18	95	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	
BH2M_0.6-0.7	11/9/2024	2	<0.3	24	7.0	9	<0.05	6.7	14	<0.2	0.1	1.0	<0.1	<0.1	<0.1	<0.1	<0.3	<25	<25	<90	<120	<1	<1.7	<1	Absent	
BH2M_1.1-1.28	11/9/2024	<1	<0.3	1.0	1.3	3	<0.05	<0.5	<2	<0.2	<0.1	<0.8	<0.1	<0.1	<0.1	<0.1	<0.3	<25	<25	<90	<120	N.A.	N.A.	N.A.	N.A.	
BH3M_0.2-0.3	9/9/2024	4	<0.3	19	8.2	13	<0.05	16	43	<0.2	<0.1	<0.8	<0.1	<0.1	<0.1	<0.1	<0.3	<25	<25	<90	<120	<1	<1.7	<1	Absent	
BH4_0.3-0.4	10/9/2024	4	<0.3	21	100	130	<0.05	9.9	280	<0.2	<0.1	<0.8	<0.1	<0.1	<0.1	<0.1	<0.3	<25	<25	<90	<120	<1	<1.7	<1	Absent	
BH4_1.6-1.7	10/9/2024	2	<0.3	5.6	1.8	11	<0.05	<0.5	5.2	<0.2	<0.1	<0.8	<0.1	<0.1	<0.1	<0.1	<0.3	<25	<25	<90	<120	N.A.	N.A.	N.A.	N.A.	
BH5M_0.7-0.8	10/9/2024	2	<0.3	59	17	36	0.09	9.0	78	<0.2	<0.1	<0.8	<0.1	<0.1	<0.1	<0.1	<0.3	<25	<25	<90	<120	<1	<1.7	<1	Absent	
BH5M-2.4-2.5	10/9/2024	2	<0.3	8.9	1.7	3	<0.05	<0.5	<2	<0.2	<0.1	<0.8	<0.1	<0.1	<0.1	<0.1	<0.3	<25	<25	<90	<120	N.A.	N.A.	N.A.	N.A.	
FCS1	9/9/2024	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	Chrysolite asbestos detected	
QD1	9/9/2024	5	<0.3	59	120	70	<0.05	14	120	N.A.	N.A.	N.A.	N.A.	<0.1	<0.1	<0.1	<0.3	<25	<25	270	<120	N.A.	N.A.	N.A.	N.A.	
Statistical Analysis																										
Maximum concentration		7	<LOR	59	120	130	0.09	87	280	<LOR	0.1	1	<LOR	<LOR	<LOR	<LOR	<LOR	<LOR	<LOR	270	<LOR	<LOR	<LOR	<LOR	N.A.	
NEPM (2013) Criteria																										
HIL B - Residential with minimal soil access		500	150	500 Cr(VI)	30,000	1,200	120	1,200	60,000	4		400											600		1	
HSL A&B- Low to high density residential Soil texture classification – Sand		Source depths (0 m to <1 m. BGL)											3	0.5	160	55	40	45	110					0.01 / 0.001		
		Source depths (1 m to <2 m. BGL)											NL	0.5	220	NL	60	70	240							
		Source depths (2 m to <4 m. BGL)											NL	0.5	310	NL	95	110	440							
		Source depths (4 m + BGL)											NL	0.5	540	NL	170	200	NL							
EILs / ESLs - Urban residential and public open space ^{1 2}		100		410	110	1,100		35	250		0.7		170	50	85	70	105	180	120	300	2,800	180				
Management Limits – Residential, parkland and public open space ¹																		700	1,000	2,500	10,000					

Notes:

	Highlighted values exceeded HIL / HSL
	Concentration exceeds highlighted criteria

Results are recorded in mg/kg

HIL B	NEPC 1999 Amendment 2013 'HIL B' - Health based Residential with minimal opportunities for soil access including dwellings with fully and permanenetty paved yard space such as high-rise buildings and apartments.
HSL A & B	NEPC 1999 Amendment 2013 'HSL A & B' Health Based Screening Levels applicable for vapour intrusion values applicable for low-high density residential settings.
EIL	Ecological Investigation Level for urban residential and public open space land use.
ESL	Ecology Screening Level for commercial and industrial land use.
*	Only detected concentrations were tabulated
NA	Not Analysed
NC	Not calculated
1	Coarse grained soil assessment criteria values were applied, as a conservative approach.
2	EIL criteria is derived from a site specific Added Contaminant Limit (ACL) with the Ambient Background Concentration (ABC) for a high traffic NSW suburb.
F1	F1 subtract the sum of BTEX concentrations from the C6-C10 fraction.
F2	F2 subtract naphthalene from the >C10-C16 fraction.
F3	(>C16-C34)
F4	(>C34-C40)

Table 2 - Summary of Results for the Field QA/QC samples

Sample Identification	Description	TRH				BTEX				Heavy Metals							
		F1*	F2**	F3 (>C ₁₆ - C ₃₄)	F4 (>C ₃₄ - C ₄₀)	Benzene	Toluene	Ethylbenzene	Xylene (total)	Arsenic	Cadmium	Chromium (Total)	Copper	Lead	Mercury	Nickel	Zinc
Intra-laboratory Duplicate - Soil Investigation																	
BH1M_1.2-1.3	Fill	-	-	-	-	-	-	-	-	7	<0.3	56	110	55	<0.05	18	95
QD1	Duplicate of BH1M_1.2-1.3	<25	<25	270	<120	<0.1	<0.1	<0.1	<0.3	5	<0.3	59	120	70	<0.05	14	120
RPD (%)		-	-	-	-	-	-	-	-	33.3	0.0	5.2	8.7	24.0	0.0	25.0	23.3
Inter-laboratory Duplicate- Soil Investigation																	
BH1M_1.2-1.3	Fill	-	-	-	-	-	-	-	-	7	<0.3	56	110	55	<0.05	18	95
QT1	Duplicate of BH1M_1.2-1.3	-	-	-	-	-	-	-	-	6	<0.4	69	130	63	<0.1	12	110
RPD (%)		-	-	-	-	-	-	-	-	15.4	NA	20.8	16.7	13.6	NA	40.0	14.6
Rinsate Blanks																	
QRB1	Soil Rinsate	<50	<60	<500	<500	<0.5	<0.5	<0.5	<1.5	<1	<0.1	<1	<1	<1	<0.1	<1	<5
Trip Blanks / Spikes																	
QTB1	Soil Trip Blank	-	-	-	-	<0.1	<0.1	<0.1	<0.3	-	-	-	-	-	-	-	-
QTS1	Soil Trip Spike	-	-	-	-	[95%]	[99%]	[100%]	-	-	-	-	-	-	-	-	-

NOTE:

All soil results are reported in mg/kg . All water results are reported in µg/L.

* - to obtain F1 subtract the sum of BTEX concentrations from the C₆-C₁₀ fraction

** - to obtain F2 subtract naphthalene from the > C₁₀-C₁₆ fraction

Appendix C – Proposed Development Plans

LEGEND:
AW: AWNING
AH: ACCESS HATCH
AC: A/C CONDENSER UNITS
FH: FIRE HYDRANT
FHR: FIRE HOSE REEL
FS: FIRE STAIRS
GC: GARBAGE CHUTE
HW: HIGHLIGHT WINDOW
MV: MECHANICAL RISER TO FUTURE DETAIL
MB: MAILBOX TO FUTURE DETAIL
SK: SKYLIGHT

STR: STORAGE
HWU: HOT WATER UNITS
(AH): AFFORDABLE HOUSING UNITS

MATERIALS LEGEND:
AFG: ALUMINUM FRAMED GLAZING
LV: ALUMINUM ELLIPTICAL FIXED LOUVERS
AW: AWNING (TO FUTURE DETAIL)
CONC: CONCRETE
GB: FRAMELESS TOUCHED-GLASS BALUSTRADE (TO BCA/AS/NZS STANDARDS)
MB: METAL BALUSTRADE
MC: METAL CLADDING
MP: METAL FENCING (TO FUTURE SELECTION)

PB: PRIVACY SCREEN (TO FUTURE SELECTION)
PTF: PAINT FINISH TYPE
RP: ROOF RIVER PASSES
RW: REDUCED FINISH-SELECTED PAINT FINISH

TREE LEGEND:
TREE TPZ

GENERAL NOTES:

- ALL WORKS TO COMPLY WITH BUILDING CODE OF AUSTRALIA, REQUIREMENTS OF RELEVANT STATUTORY AUTHORITIES/ LOCAL GOVERNMENT/ RELEVANT AUSTRALIAN BUILDING STANDARDS
- DRAWINGS FOR THE PURPOSES OF DA ONLY **ARE NOT FOR CONSTRUCTION**. FURTHER CONSULTANT/ AUTHORITY COORDINATION
- ONLY BE REQUIRED AFTER STAKEHOLDER/ MAY-BE REQUIRED FOR DESIGN AND PLANNING APPROVALS
- ARCHITECTURAL PLANS TO BE READ IN CONJUNCTION WITH CONSULTANT'S DRAWINGS, SPECIFICATIONS & REPORTS
- COMPONENT OF DESIGN SHOWN HEREON IS RETAINED BY PBD ARCHITECTS AND AUTHORITY IS REQUIRED FOR ANY REPRODUCTION
- RIBA SCHEDULES SUPPLIED ARE APPROXIMATE ONLY - FUTURE ALLOWANCE FOR VERTICAL SERVICE DUCTS, STRUCTURAL WALL SYSTEMS AND CONSULTANT INPUT WILL BE REQUIRED

Rev	Date	Description
01	30/01/2026	Draw For ESDA Submission



P - 02 0698 8140
E - info@pbdarchitects.com.au
W - pbdarchitects.com.au
Level 2, 52 Alison Street,
Sunny Hills NSW 2010
ABN 36 147 035 550
Not a legal entity
Paul Subject NSW 7768

PROJECT:
PROPOSED RESIDENTIAL FLAT BUILDING
300 Burns Bay Road, Lane Cove, NSW 2066

CLIENT:
Lane Cove Developments No.1 Pty Ltd

DRAWING TITLE:
Demolition Plan

DRAWING BY: ALHK	CHECKED BY: KS	DATE: 30/01/2026
SCALE: 1:300@A1	DRAWING NO: DA002	ISSUE: 01
PROJECT NO: 2424		

Appendix D – Site Photographs



Photograph 1: Site overview, building frontage, facing north-east (9 September 2024)



Photograph 2: Site overview, back of the on-grade car parking, two-storey parking lot and tennis court, facing west (9 September 2024).



Photograph 3: Iron support beams exposed from concrete slab in north eastern corner of building (9 September 2024).



Photograph 4: Photo of area beneath suspended slab, facing west (9 September 2024).



Photograph 5: Some staining in beneath building car parking area (9 September 2024).



Photograph 6: Photo of area beneath suspended slab under eastern end of car park area, facing north. (9 September 2024).



Photograph 7: View of fill material (containing demolition waste) beneath suspended slab under eastern end of car park area, facing north (9 September 2024).



Photograph 8: Area beneath suspended slab under eastern end of car park area, facing north east, FCS fragment in foreground (9 September 2024).

Appendix E - Lotsearch Results



LOTSEARCH

LOTSEARCH ENVIRO LITE

Date: 10 Oct 2024 10:15:31

Reference: LS062912 EL

Address: 300 Burns Bay Road, Lane Cove, NSW 2066

Disclaimer:

The purpose of this report is to provide an overview of some of the site history, environmental risk and planning information available, affecting an individual address or geographical area in which the property is located. It is not a substitute for an on-site inspection or review of other available reports and records. It is not intended to be, and should not be taken to be, a rating or assessment of the desirability or market value of the property or its features. You should obtain independent advice before you make any decision based on the information within the report. The detailed terms applicable to use of this report are set out at the end of this report.

Dataset Listing

Datasets contained within this report, detailing their source and data currency:

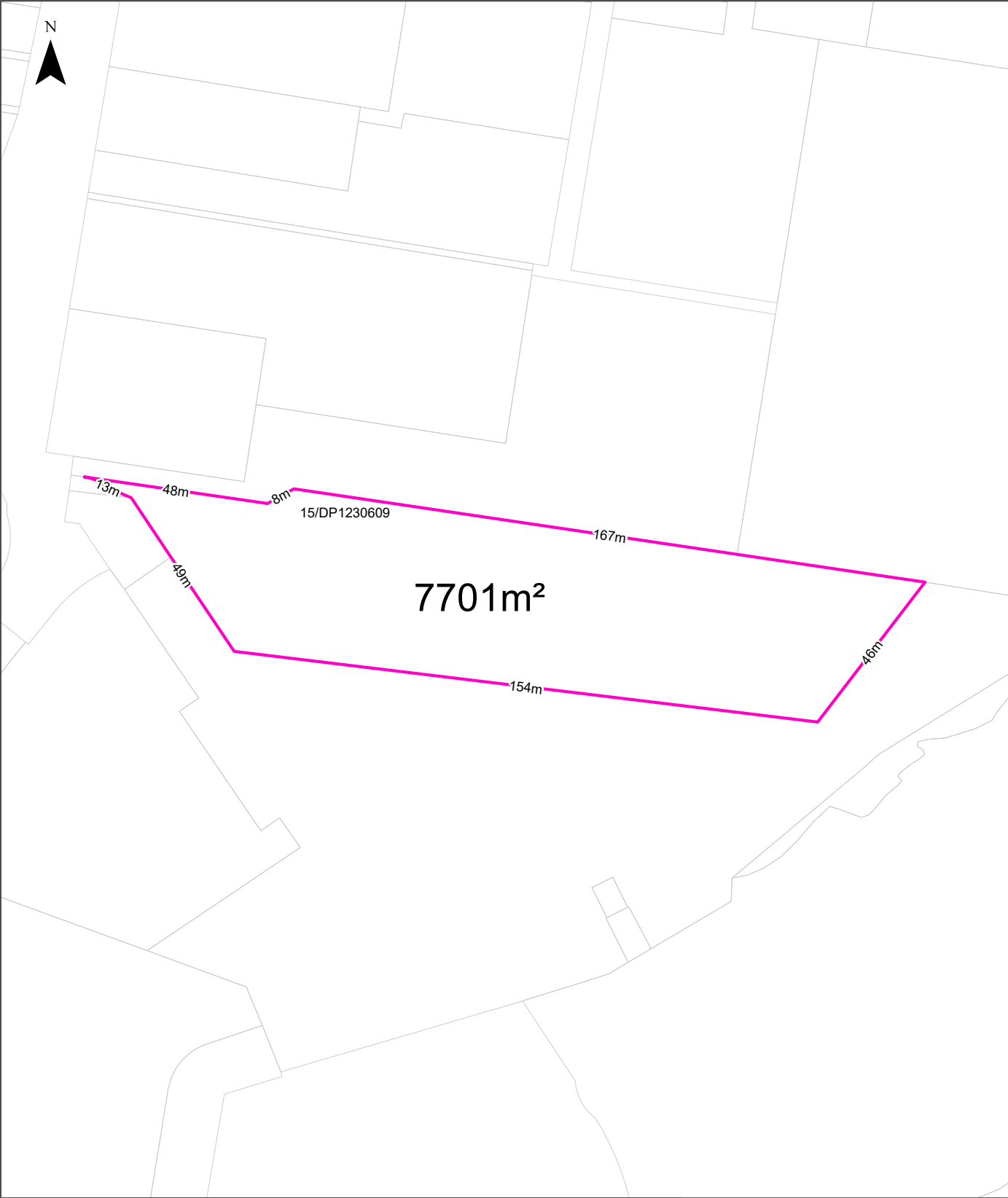
Dataset Name	Custodian	Supply Date	Currency Date	Update Frequency	Dataset Buffer (m)	No. Features On-site	No. Features within 100m	No. Features within Buffer
Cadastre Boundaries	NSW Department of Customer Service - Spatial Services	24/07/2024	24/07/2024	Quarterly	-	-	-	-
Topographic Data	NSW Department of Customer Service - Spatial Services	21/05/2024	21/05/2024	Annually	-	-	-	-
List of NSW contaminated sites notified to EPA	Environment Protection Authority NSW	02/09/2024	13/08/2024	Monthly	1000m	0	0	6
Contaminated Land Records of Notice	Environment Protection Authority NSW	02/09/2024	02/09/2024	Monthly	1000m	0	0	3
Former Gasworks	Environment Protection Authority NSW	06/08/2024	14/07/2021	Quarterly	1000m	0	0	0
Notices under the POEO Act 1997	Environment Protection Authority NSW	03/09/2024	03/09/2024	Monthly	1000m	0	0	4
National Waste Management Facilities Database	Geoscience Australia	29/04/2024	29/11/2022	Annually	1000m	0	0	0
National Liquid Fuel Facilities	Geoscience Australia	20/09/2023	07/09/2020	Annually	1000m	0	0	4
EPA PFAS Investigation Program	Environment Protection Authority NSW	24/09/2024	14/06/2024	Monthly	2000m	0	0	0
Defence PFAS Investigation & Management Program - Investigation Sites	Australian Department of Defence	24/09/2024	24/09/2024	Monthly	2000m	0	0	0
Defence PFAS Investigation & Management Program - Management Sites	Australian Department of Defence	24/09/2024	24/09/2024	Monthly	2000m	0	0	0
Airservices Australia National PFAS Management Program	Airservices Australia	24/09/2024	24/09/2024	Monthly	2000m	0	0	0
Defence Controlled Areas	Australian Department of Defence	17/07/2024	17/07/2024	Quarterly	2000m	0	0	0
Defence 3 Year Regional Contamination Investigation Program	Australian Department of Defence	05/08/2024	02/09/2022	Quarterly	2000m	0	0	0
National Unexploded Ordnance (UXO)	Australian Department of Defence	17/07/2024	17/07/2024	Quarterly	2000m	0	0	0
EPA Other Sites with Contamination Issues	Environment Protection Authority NSW	13/11/2023	15/12/2022	Annually	1000m	0	0	0
Licensed Activities under the POEO Act 1997	Environment Protection Authority NSW	26/08/2024	26/08/2024	Monthly	1000m	0	0	0
Delicensed POEO Activities still regulated by the EPA	Environment Protection Authority NSW	26/08/2024	26/08/2024	Monthly	1000m	0	0	2
Former POEO Licensed Activities now revoked or surrendered	Environment Protection Authority NSW	26/08/2024	26/08/2024	Monthly	1000m	0	3	4
UBD Business Directories (Premise & Intersection Matches)	Hardie Grant			Not required	100m	94	280	280
UBD Business Directories (Road & Area Matches)	Hardie Grant			Not required	100m	-	13	13
UBD Business Directory Dry Cleaners & Motor Garages/Service Stations (Premise & Intersection Matches)	Hardie Grant			Not required	250m	0	0	0
UBD Business Directory Dry Cleaners & Motor Garages/Service Stations (Road & Area Matches)	Hardie Grant			Not required	250m	-	30	30
Points of Interest	NSW Department of Customer Service - Spatial Services	18/07/2024	18/07/2024	Quarterly	1000m	0	4	48
Tanks (Areas)	NSW Department of Customer Service - Spatial Services	18/07/2024	18/07/2024	Quarterly	1000m	0	0	0
Tanks (Points)	NSW Department of Customer Service - Spatial Services	18/07/2024	18/07/2024	Quarterly	1000m	0	0	0
Major Easements	NSW Department of Customer Service - Spatial Services	09/08/2024	09/08/2024	Quarterly	1000m	0	0	8
State Forest	Forestry Corporation of NSW	12/12/2023	11/12/2023	Annually	1000m	0	0	0
Hydrogeology Map of Australia	Geoscience Australia	17/04/2024	19/08/2019	Annually	1000m	1	1	1

Dataset Name	Custodian	Supply Date	Currency Date	Update Frequency	Dataset Buffer (m)	No. Features On-site	No. Features within 100m	No. Features within Buffer
Temporary Water Restriction (Botany Sands Groundwater Source) Order 2018	NSW Department of Climate Change, Energy, the Environment and Water	28/05/2024	23/02/2018	Quarterly	1000m	0	0	0
National Groundwater Information System (NGIS) Boreholes	Bureau of Meteorology; Water NSW	28/05/2024	20/06/2023	Annually	2000m	0	1	23
NSW Seamless Geology Single Layer: Rock Units	NSW Department of Primary Industries and Regional Development	17/05/2024	01/05/2024	Annually	1000m	1	3	7
NSW Seamless Geology Single Layer: Geological Boundaries and Faults	NSW Department of Primary Industries and Regional Development	17/05/2024	01/05/2024	Annually	1000m	0	0	0
NSW Seamless Geology Single Layer: Trendlines	NSW Department of Primary Industries and Regional Development	17/05/2024	01/05/2024	Annually	1000m	0	0	0
NSW Seamless Geology Single Layer: Fold Axes	NSW Department of Primary Industries and Regional Development	17/05/2024	01/05/2024	Annually	1000m	0	0	0
Naturally Occurring Asbestos Potential	NSW Department of Regional NSW	26/04/2024	14/03/2024	Annually	1000m	0	0	0
Atlas of Australian Soils	Australian Bureau of Agriculture and Resource Economics and Sciences (ABARES)	12/01/2024	17/02/2011	Annually	1000m	1	1	2
Soil Landscapes of Central and Eastern NSW	NSW Department of Climate Change, Energy, the Environment and Water	12/12/2023	27/07/2020	Annually	1000m	2	3	7
Environmental Planning Instrument Acid Sulfate Soils	NSW Department of Planning, Housing and Infrastructure	13/09/2024	16/08/2024	Monthly	500m	1	-	-
Atlas of Australian Acid Sulfate Soils	CSIRO	12/01/2024	21/02/2013	Annually	1000m	1	2	3
Dryland Salinity - National Assessment	Australian Bureau of Agricultural and Resource Economics and Sciences	03/06/2024	24/05/2024	Annually	1000m	0	0	0
Mining Subsidence Districts	NSW Department of Customer Service	06/08/2024	06/08/2024	Quarterly	1000m	0	0	0
Current Mining Titles	NSW Department of Regional NSW	08/10/2024	08/10/2024	Monthly	1000m	0	0	0
Mining Title Applications	NSW Department of Regional NSW	08/10/2024	08/10/2024	Monthly	1000m	0	0	0
Historic Mining Titles	NSW Department of Regional NSW	08/10/2024	08/10/2024	Monthly	1000m	6	6	6
Environmental Planning Instrument SEPP State Significant Precincts	NSW Department of Planning, Housing and Infrastructure	13/09/2024	08/09/2023	Monthly	1000m	0	0	0
Environmental Planning Instrument Land Zoning	NSW Department of Planning, Housing and Infrastructure	13/09/2024	30/08/2024	Monthly	1000m	1	8	71
Commonwealth Heritage List	Australian Department of Climate Change, Energy, the Environment and Water	20/10/2023	13/04/2022	Annually	1000m	0	0	0
National Heritage List	Australian Department of Climate Change, Energy, the Environment and Water	20/10/2023	13/04/2022	Annually	1000m	0	0	0
State Heritage Register - Curtilages	NSW Department of Planning, Industry and Environment	29/07/2024	05/07/2024	Quarterly	1000m	0	0	2
Environmental Planning Instrument Local Heritage	NSW Department of Planning, Housing and Infrastructure	13/09/2024	30/08/2024	Monthly	1000m	0	3	26
Bush Fire Prone Land	NSW Rural Fire Service	26/08/2024	19/07/2024	Monthly	1000m	2	2	3
NSW Native Vegetation Type Map	NSW Department of Climate Change, Energy, the Environment and Water	02/09/2024	30/11/2023	Quarterly	1000m	2	5	249
Ramsar Wetlands of Australia	Australian Department of Climate Change, Energy, the Environment and Water	16/05/2024	11/04/2024	Annually	1000m	0	0	0
Collaborative Australian Protected Areas Database (CAPAD) 2022 - Terrestrial	Australian Department of Climate Change, Energy, The Environment and Water	04/03/2024	30/06/2022	Annually	1000m	0	0	1
Collaborative Australian Protected Areas Database (CAPAD) 2022 - Marine	Australian Department of Climate Change, Energy, The Environment and Water	04/03/2024	30/06/2022	Annually	1000m	0	0	0
Groundwater Dependent Ecosystems	Bureau of Meteorology	28/05/2024	28/05/2024	Annually	1000m	0	3	5

Dataset Name	Custodian	Supply Date	Currency Date	Update Frequency	Dataset Buffer (m)	No. Features On-site	No. Features within 100m	No. Features within Buffer
Inflow Dependent Ecosystems Likelihood	Bureau of Meteorology	28/05/2024	28/05/2024	Annually	1000m	0	1	9
NSW BioNet Species Sightings	NSW Department of Climate Change, Energy, the Environment and Water	10/09/2024	10/09/2024	Monthly	10000m	-	-	-

Site Diagram

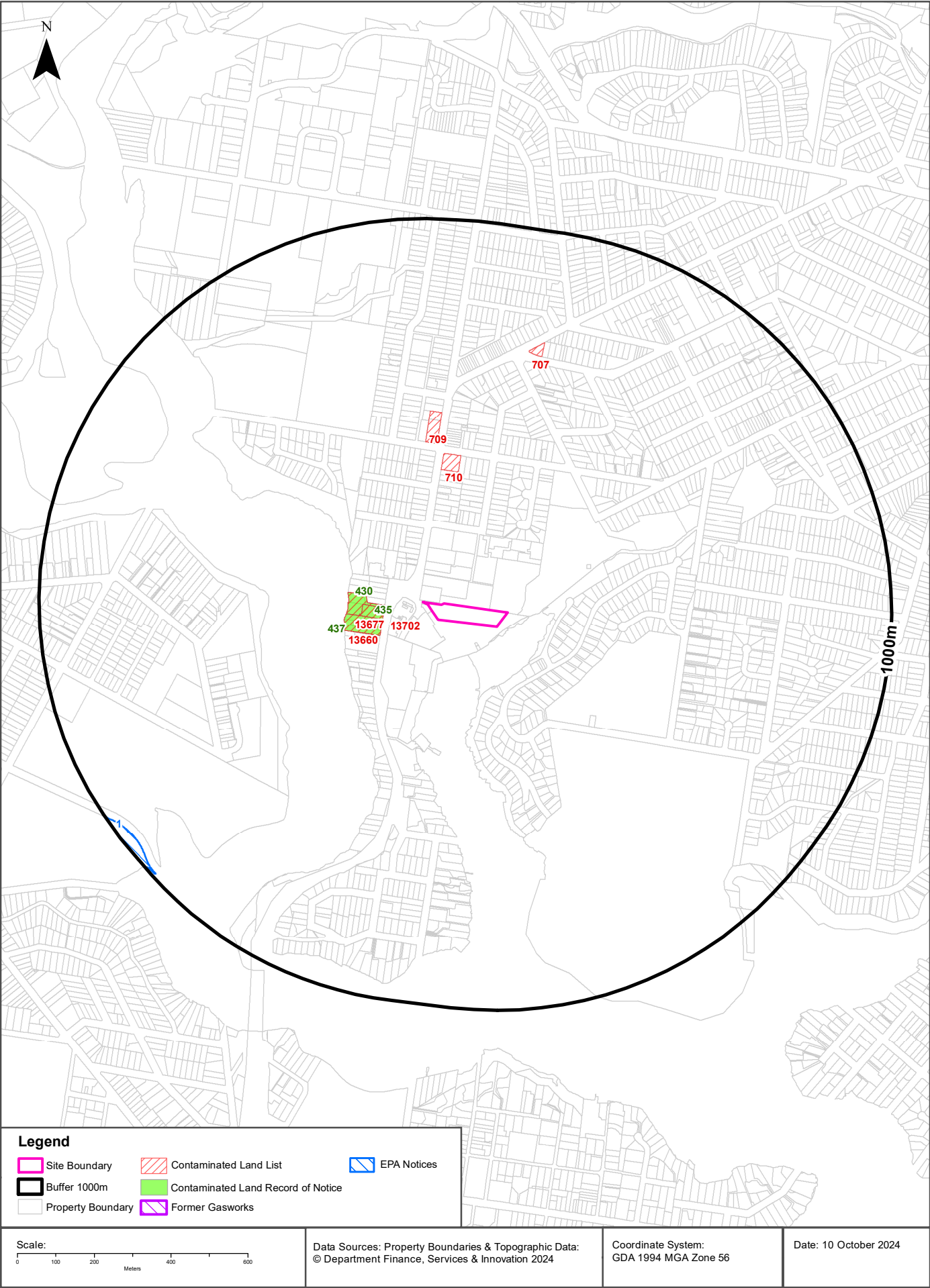
300 Burns Bay Road, Lane Cove, NSW 2066



Legend Site Boundary Internal Parcel Boundaries	Total Area: 7701m² Total Perimeter: 486m Disclaimers: Measurements are approximate only and may have been simplified or smaller lengths removed for readability. Parcels that make up a small percentage of the total site area have not been labelled for increased legibility.		Scale: 0 25 50 Meters Data Sources: Property Boundaries & Topographic Data: © Department Finance, Services & Innovation 2024 Coordinate System: GDA 1994 MGA Zone 56 Date: 08 October 2024	
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Contaminated Land

300 Burns Bay Road, Lane Cove, NSW 2066



Contaminated Land

300 Burns Bay Road, Lane Cove, NSW 2066

List of NSW contaminated sites notified to EPA

Records from the NSW EPA Contaminated Land list within the dataset buffer:

Map Id	Site	Address	Suburb	Activity	Management Class	Status	Location Confidence	Dist	Direction
13677	Lovetts Reserve Walking Track	301B Burns Bay ROAD	LANE COVE WEST	Unclassified	Contamination formerly regulated under the CLM Act	Current EPA List	Premise Match	101m	West
13702	315-317 Burns Bay Road, Lane Cove West	315-317 Burns Bay ROAD	LANE COVE WEST	Unclassified	Regulation under CLM Act not required	Current EPA List	Premise Match	102m	West
13660	331-335 Burns Bay Road, Lane Cove NSW 2066	331 and 333 - 335 Burns Bay ROAD	LANE COVE	Other Industry	Contamination formerly regulated under the CLM Act	Current EPA List	Premise Match	115m	West
710	Coles Express Service Station Burns Bay	254 Burns Bay Road	Lane Cove	Service Station	Regulation under CLM Act not required	Current EPA List	Premise Match	344m	North
709	Caltex Lane Cove West	235-245 Burns Bay Road	Lane Cove West	Service Station	Regulation under CLM Act not required	Current EPA List	Premise Match	414m	North
707	7-Eleven Service Station	203 Burns Bay Road	Lane Cove	Service Station	Regulation under CLM Act not required	Current EPA List	Premise Match	674m	North

The values within the EPA site management class in the table above, are given more detailed explanations in the table below:

EPA site management class	Explanation
Contamination being managed via the planning process (EP&A Act)	The EPA has completed an assessment of the contamination and decided that the contamination is significant enough to warrant regulation. The contamination of this site is managed by the consent authority under the Environmental Planning and Assessment Act 1979 (EP&A Act) planning approval process, with EPA involvement as necessary to ensure significant contamination is adequately addressed. The consent authority is typically a local council or the Department of Planning and Environment.
Contamination currently regulated under CLM Act	The EPA has completed an assessment of the contamination and decided that the contamination is significant enough to warrant regulation under the Contaminated Land Management Act 1997 (CLM Act). Management of the contamination is regulated by the EPA under the CLM Act. Regulatory notices are available on the EPA's Contaminated Land Public Record of Notices.
Contamination currently regulated under POEO Act	The EPA has completed an assessment of the contamination and decided that the contamination is significant enough to warrant regulation. Management of the contamination is regulated under the Protection of the Environment Operations Act 1997 (POEO Act). The EPA's regulatory actions under the POEO Act are available on the POEO public register.
Contamination formerly regulated under the CLM Act	The EPA has determined that the contamination is no longer significant enough to warrant regulation under the Contaminated Land Management Act 1997 (CLM Act). The contamination was addressed under the CLM Act.
Contamination formerly regulated under the POEO Act	The EPA has determined that the contamination is no longer significant enough to warrant regulation. The contamination was addressed under the Protection of the Environment Operations Act 1997 (POEO Act).
Contamination was addressed via the planning process (EP&A Act)	The EPA has determined that the contamination is no longer significant enough to warrant regulation. The contamination was addressed by the appropriate consent authority via the planning process under the Environmental Planning and Assessment Act 1979 (EP&A Act).
Ongoing maintenance required to manage residual contamination (CLM Act)	The EPA has determined that ongoing maintenance, under the Contaminated Land Management Act 1997 (CLM Act), is required to manage the residual contamination. Regulatory notices under the CLM Act are available on the EPA's Contaminated Land Public Record of Notices.

EPA site management class	Explanation
Regulation being finalised	The EPA has completed an assessment of the contamination and decided that the contamination is significant enough to warrant regulation under the Contaminated Land Management Act 1997. A regulatory approach is being finalised.
Regulation under the CLM Act not required	The EPA has completed an assessment of the contamination and decided that regulation under the Contaminated Land Management Act 1997 is not required.
Under assessment	The contamination is being assessed by the EPA to determine whether regulation is required. The EPA may require further information to complete the assessment. For example, the completion of management actions regulated under the planning process or Protection of the Environment Operations Act 1997. Alternatively, the EPA may require information via a notice issued under s77 of the Contaminated Land Management Act 1997 or issue a Preliminary Investigation Order.

NSW EPA Contaminated Land List Data Source: Environment Protection Authority

© State of New South Wales through the Environment Protection Authority

Contaminated Land

300 Burns Bay Road, Lane Cove, NSW 2066

Contaminated Land: Records of Notice

Record of Notices within the dataset buffer:

Map Id	Name	Address	Suburb	Notices	Area No	Location Confidence	Distance	Direction
430	Lovetts Reserve Walking Track	301B Burns Bay ROAD	Lane Cove West	7 former	3475	Premise Match	101m	West
435	315-317 Burns Bay Road, Lane Cove West	315-317 Burns Bay ROAD	LANE COVE WEST	2 former	3482	Premise Match	102m	West
437	331-335 Burns Bay Road, Lane Cove NSW 2066	331 and 333 - 335 Burns Bay ROAD	LANE COVE	4 former	3487	Premise Match	115m	West

Contaminated Land Records of Notice Data Source: Environment Protection Authority

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Terms of use and disclaimer for Contaminated Land: Record of Notices, please visit

<http://www.epa.nsw.gov.au/clm/clmdisclaimer.htm>

Former Gasworks

Former Gasworks within the dataset buffer:

Map Id	Location	Council	Further Info	Location Confidence	Distance	Direction
N/A	No records in buffer					

Former Gasworks Data Source: Environment Protection Authority

© State of New South Wales through the Environment Protection Authority

Contaminated Land

300 Burns Bay Road, Lane Cove, NSW 2066

EPA Notices

Penalty Notices, s.91 & s.92 Clean up Notices and s.96 Prevention Notices within the dataset buffer:

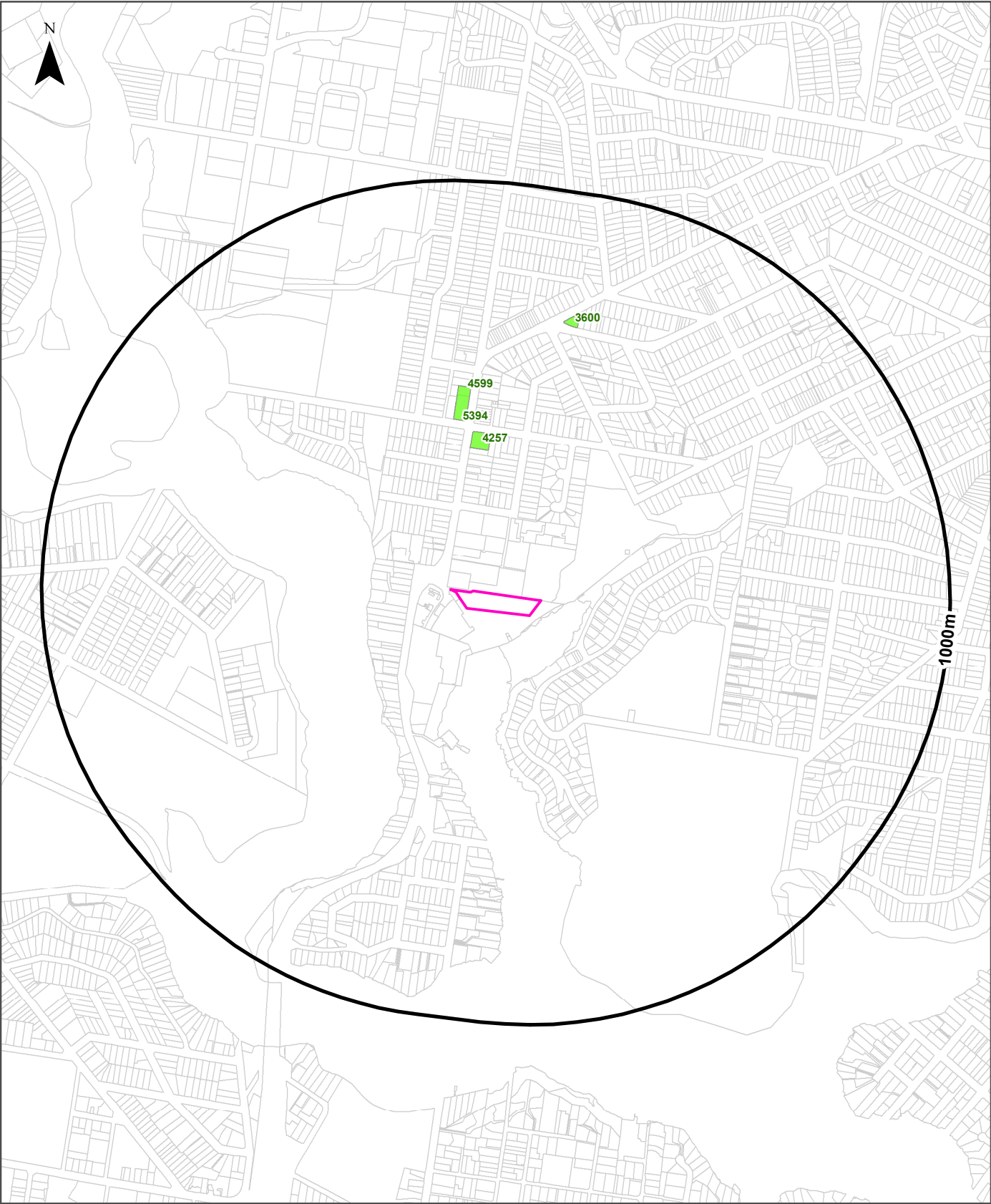
Map ID	Number	Type	Name	Address	Status	Issued Date	Act	Offence	Offence Date	Loc Conf	Dist	Dir
1	3085764276	Penalty Notice	Hunters Hill Rugby Union Club	P.O Box 78, HUNTERS HILL, NSW 2110	Issued	19/06/2012	Protection of the Environment Operations Act 1997 - 120(1)	Pollute waters - Corporation	06/06/2012	Premise Match	970m	South West
	3085766788	Penalty Notice	Hunters Hill Rugby Union Club	Park Road, HUNTERS HILL, NSW 2110	Issued	06/11/2012	Protection of the Environment Operations Act 1997 - 97	Fail to comply with prevention notice - Corporation	24/10/2012	Premise Match	970m	South West
	3085770124	Penalty Notice	Hunters Hill Rugby Union Club	Park Road, HUNTERS HILL, NSW 2110	Issued	23/04/2013	Protection of the Environment Operations Act 1997 - 97	Fail to comply with prevention notice - Corporation	08/04/2013	Premise Match	970m	South West
	1506742	s.96 Prevention Notice	Hunters Hill Rugby Union Club		Issued	14/06/2012				Premise Match	970m	South West

NSW EPA Notice Data Source: Environment Protection Authority

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Waste Management & Liquid Fuel Facilities

300 Burns Bay Road, Lane Cove, NSW 2066



Legend			
 Site Boundary	 Waste Management Facilities		
 Buffer 1000m	 National Liquid Fuel Facilities		
 Property Boundary			
Scale:  0 100 200 400 600 Meters		Data Sources: Property Boundaries & Topographic Data: © Department Finance, Services & Innovation 2024	Coordinate System: GDA 1994 MGA Zone 56
		Date: 10 October 2024	

Waste Management & Liquid Fuel Facilities

300 Burns Bay Road, Lane Cove, NSW 2066

National Waste Management Facilities Database

Sites on the National Waste Management Facilities Database within the dataset buffer:

Map ID	Owner	Name	Address	Management Type	Facility Type	Status	Loc Conf	Dist	Dir
N/A	No records in buffer								

Source: Waste Management Facilities Database
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National Liquid Fuel Facilities

National Liquid Fuel Facilities within the dataset buffer:

Map Id	Owner	Name	Address	Suburb	Class	Operational Status	Operator	Revision Date	Loc Conf	Dist	Direction
4257	SHELL	SHELL LANE COVE	254 BURNS BAY ROAD	LANE COVE	PETROL STATION	Operational		25/07/2011	Premise Match	344m	North
4599	Caltex	Caltex Woolworths Lane Cove	235 Burns Bay Road	Lane Cove West	Petrol Station	Operational		25/07/2011	Premise Match	414m	North
5394	AMPOL	AMPOL WOOLWORTHS METRO LANE COVE WEST	UNIT 1 237-245 BURNS BAY ROAD	LANE COVE	PETROL STATION	OPERATIONAL			Premise Match	414m	North
3600	INDEPENDENT	JACK & CO LANE COVE	203 BURNS BAY ROAD	LANE COVE	PETROL STATION	Operational		13/07/2012	Premise Match	674m	North

National Liquid Fuel Facilities Data Source: Geoscience Australia
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PFAS Investigation & Management Programs

300 Burns Bay Road, Lane Cove, NSW 2066

EPA PFAS Investigation Program

Sites that are part of the EPA PFAS investigation program, within the dataset buffer:

Map ID	Site	Address	Loc Conf	Dist	Dir
N/A	No records in buffer				

EPA PFAS Investigation Program: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority

Defence PFAS Investigation Program

Sites being investigated by the Department of Defence for PFAS contamination within the dataset buffer:

Map ID	Base Name	Address	Loc Conf	Dist	Dir
N/A	No records in buffer				

Defence PFAS Investigation Program Data Custodian: Department of Defence, Australian Government

Defence PFAS Management Program

Sites being managed by the Department of Defence for PFAS contamination within the dataset buffer:

Map ID	Base Name	Address	Loc Conf	Dist	Dir
N/A	No records in buffer				

Defence PFAS Management Program Data Custodian: Department of Defence, Australian Government

Airservices Australia National PFAS Management Program

Sites being investigated or managed by Airservices Australia for PFAS contamination within the dataset buffer:

Map ID	Site Name	Impacts	Loc Conf	Dist	Dir
N/A	No records in buffer				

Airservices Australia National PFAS Management Program Data Custodian: Airservices Australia

Defence Sites and Unexploded Ordnance

300 Burns Bay Road, Lane Cove, NSW 2066

Defence Controlled Areas (DCA)

Defence Controlled Areas provided by the Department of Defence within the dataset buffer:

Site ID	Location Name	Loc Conf	Dist	Dir
N/A	No records in buffer			

Defence Controlled Areas, Data Custodian: Department of Defence, Australian Government

Defence 3 Year Regional Contamination Investigation Program (RCIP)

Sites which have been assessed as part of the Defence 3 Year Regional Contamination Investigation Program within the dataset buffer:

Property ID	Base Name	Address	Known Contamination	Loc Conf	Dist	Dir
N/A	No records in buffer					

Defence 3 Year Regional Contamination Investigation Program, Data Custodian: Department of Defence, Australian Government

National Unexploded Ordnance (UXO)

Sites which have been assessed by the Department of Defence for the potential presence of unexploded ordnance within the dataset buffer:

Site ID	Location Name	Category	Area Description	Additional Information	Commonwealth	Loc Conf	Dist	Dir
N/A	No records in buffer							

National Unexploded Ordnance (UXO), Data Custodian: Department of Defence, Australian Government

EPA Other Sites with Contamination Issues

300 Burns Bay Road, Lane Cove, NSW 2066

EPA Other Sites with Contamination Issues

This dataset contains other sites identified on the EPA website as having contamination issues. This dataset currently includes:

- James Hardie asbestos manufacturing and waste disposal sites
- Radiological investigation sites in Hunter's Hill
- Pasminco Lead Abatement Strategy Area

Sites within the dataset buffer:

Site Id	Site Name	Site Address	Dataset	Comments	Location Confidence	Distance	Direction
N/A	No records in buffer						

EPA Other Sites with Contamination Issues: Environment Protection Authority
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EPA Activities

300 Burns Bay Road, Lane Cove, NSW 2066

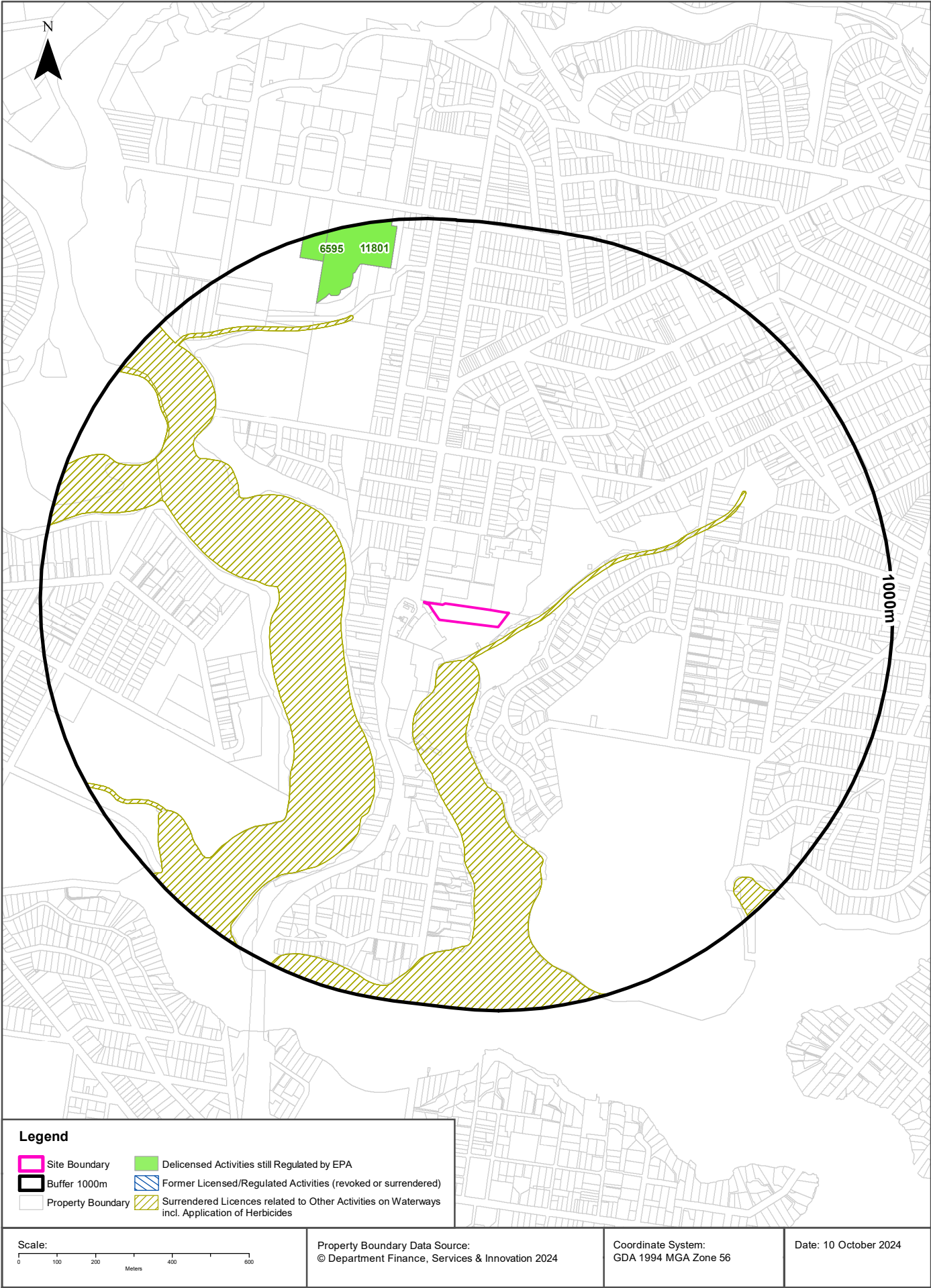
Licensed Activities under the POEO Act 1997

Licensed activities under the Protection of the Environment Operations Act 1997, within the dataset buffer:

EPL	Organisation	Name	Address	Suburb	Activity	Loc Conf	Distance	Direction
N/A	No records in buffer							

POEO Licence Data Source: Environment Protection Authority

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EPA Activities

300 Burns Bay Road, Lane Cove, NSW 2066

Delicensed Activities still regulated by the EPA

Delicensed activities still regulated by the EPA, within the dataset buffer:

Licence No	Organisation	Name	Address	Suburb	Activity	Loc Conf	Distance	Direction
11801	CAP-XX PTY LTD	CAP-XX	9-10/12 MARS ROAD	LANE COVE	Hazardous, Industrial or Group A Waste Generation or Storage	Premise Match	829m	North
6595	COCHLEAR LIMITED	COCHLEAR LIMITED	14 - 16 MARS ROAD	LANE COVE	Hazardous, Industrial or Group A Waste Generation or Storage	Premise Match	928m	North West

Delicensed Activities Data Source: Environment Protection Authority
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Former Licensed Activities under the POEO Act 1997, now revoked or surrendered

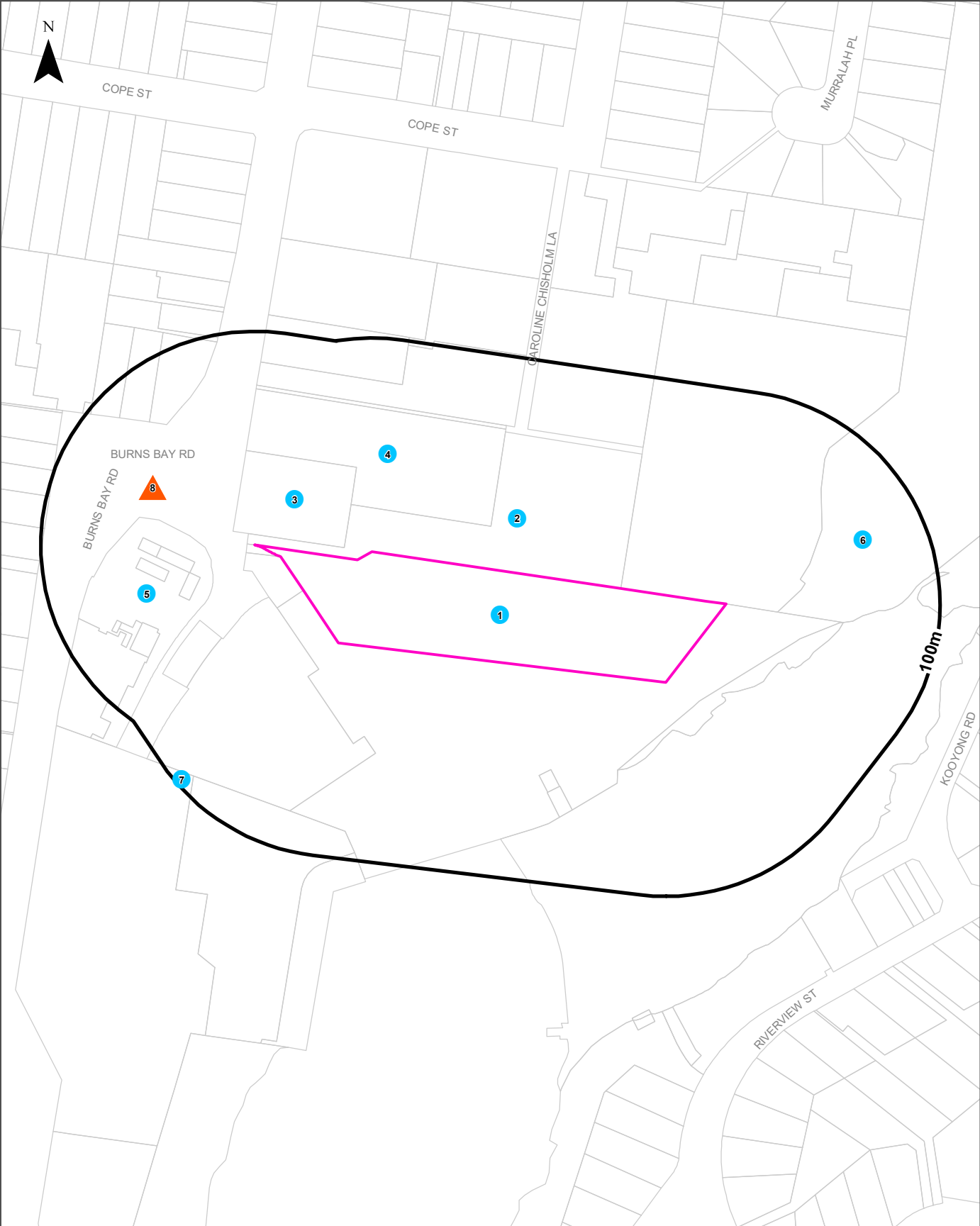
Former Licensed activities under the Protection of the Environment Operations Act 1997, now revoked or surrendered, within the dataset buffer:

Licence No	Organisation	Location	Status	Issued Date	Activity	Loc Conf	Distance	Direction
4653	LUHRMANN ENVIRONMENT MANAGEMENT PTY LTD	WATERWAYS THROUGHOUT NSW	Surrendered	06/09/2000	Other Activities / Non Scheduled Activity - Application of Herbicides	Network of Features	30m	South West
4838	Robert Orchard	Various Waterways throughout New South Wales - SYDNEY NSW 2000	Surrendered	07/09/2000	Other Activities / Non Scheduled Activity - Application of Herbicides	Network of Features	30m	South West
6630	SYDNEY WEED & PEST MANAGEMENT PTY LTD	WATERWAYS THROUGHOUT NSW - PROSPECT, NSW, 2148	Surrendered	09/11/2000	Other Activities / Non Scheduled Activity - Application of Herbicides	Network of Features	30m	South West
5030	CITY OF RYDE	AREAS REQUIRING MOSQUITO TREATMENT WITHIN THE LGA OF RYDE CITY COUNCIL - RYDE NSW 2112	Surrendered	11/08/2000	Miscellaneous licensed discharge to waters (at any time) - Pesticide application in areas requiring mosquito treatment	Network of Features	730m	West

Former Licensed Activities Data Source: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority

Historical Business Directories

300 Burns Bay Road, Lane Cove, NSW 2066



Legend		Scale: 0 30 60 90 120 Metres	Coordinate System: GDA 1994 MGA Zone 56
Site Boundary	Business directory records mapped to a specific premise		Date: 10 October 2024
Buffer 100m	Business directory records mapped to a road intersection	Data Sources: Reproduced with permission of UBD and Hardie Grant Media Pty Ltd DD 01/08/2018	
Property Boundary	Business directory records mapped to a road corridor		
	Business directory records mapped to a general area		

Historical Business Directories

300 Burns Bay Road, Lane Cove, NSW 2066

Business Directory Records 1950-1991 Premise or Road Intersection Matches

Potentially contaminative business activities extracted from Universal Business Directories from years 1991, 1986, 1982, 1978, 1975, 1970, 1965, 1961 & 1950, mapped to a premise or road intersection within the dataset buffer:

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Property Boundary or Road Intersection	Direction
1	CABINET MAKERS.	ACPI Pty, Ltd., 300 Burns Bay Rd., Lane Cove. 2066	10990	1986	Premise Match	0m	On-site
	CABINET MAKERS.	Eastment Joinery Pty. Ltd., 300 Burns Bay Rd., Lane Cove. 2066	11027	1986	Premise Match	0m	On-site
	JOINERY MANUFACTURERS.	Eastment Joinery Pty. Ltd., 300 Burns Bay Rd., Lane Cove. 2066	50129	1986	Premise Match	0m	On-site
	KITCHEN UNITS MFRS. &/OR DISTS. &/OR INSTALLERS.	Eastment Joinery Pty. Ltd., 300 Burns Bay Rd., Lane Cove. 2066	50370	1986	Premise Match	0m	On-site
	CABINET MAKERS.	Lane Cove Joinery, 300 Burns Bay Rd., Lane Cove. 2066	11065	1986	Premise Match	0m	On-site
	JOINERY MANUFACTURERS.	Lane Cove Joinery, 300 Burns Bay Rd., Lane Cove. 2066	50169	1986	Premise Match	0m	On-site
	KITCHEN UNITS MFRS. &/OR DISTS. &/OR INSTALLERS.	Lane Cove Joinery, 300 Burns Bay Rd., Lane Cove. 2066	50457	1986	Premise Match	0m	On-site
	BELTING MFRS. &/OR IMPS. &/OR DISTS.	Mangrovite Industries Australia Pty. Limited, 300 Burns Bay Rd., Lane Cove. 2066	5959	1986	Premise Match	0m	On-site
	ENGINEERS-TRANSMISSION.	Mangrovite Industries Australia Pty. Limited, 300 Burns Bay Rd., Lane Cove. 2066	31514	1986	Premise Match	0m	On-site
	GEAR BOX MFRS. &/OR DISTS.	Mangrovite Industries Australia Pty. Limited, 300 Burns Bay Rd., Lane Cove. 2066	38617	1986	Premise Match	0m	On-site
	MOTOR BRAKE LINING MFRS. &/OR DISTS. &/OR SUPPLIERS.	Mangrovite Industries Australia Pty. Limited, 300 Burns Bay Rd., Lane Cove. 2066	61474	1986	Premise Match	0m	On-site
	TRANSMISSION BELTING MFRS. &/OR DISTS.	Mangrovite Industries Australia Pty. Limited, 300 Burns Bay Rd., Lane Cove. 2066.	95089	1986	Premise Match	0m	On-site
	CLOCK &/OR BAROMETER MFRS. &/OR IMPS. &/OR DISTS.	Marlin, John, 300 Burns Bay Rd., Lane Cove. 2066	15559	1986	Premise Match	0m	On-site
	FURNITURE REPAIRERS &/OR REMODELLERS.	Marlin, John, 300 Burns Bay Rd., Lane Cove. 2066	38117	1986	Premise Match	0m	On-site
	POWER TRANSMISSION EQUIPMENT MFRS. &/OR DISTS.	Renovate Industries Australia Pty. Limited, 300 Burns Bay Rd. Lane Cove. 2066	75775	1986	Premise Match	0m	On-site
	EXPORTERS.	Weatherdon, R. & Co. Pty. Ltd., 300 Burns Bay Rd., Lane Cove. 2066	31832	1986	Premise Match	0m	On-site
	IMPORTERS.	Weatherdon, R. & Co. Pty. Ltd., 300 Burns Bay Rd., Lane Cove. 2066	47967	1986	Premise Match	0m	On-site
	MOTOR ENGINEERS.	Wright Place, The, 300 Burns Bay Rd., Lane Cove. 2066	63630	1986	Premise Match	0m	On-site
	CABINET MAKERS. (C0030)	Eastment Joinery Pty. Ltd., 300 Burns Bay Rd., Lane Cove. 2066.	12005	1982	Premise Match	0m	On-site
	JOINERY MANUFACTURERS. (J1050)	Eastment Joinery Pty. Ltd., 300 Burns Bay Rd., Lane Cove. 2066.	43937	1982	Premise Match	0m	On-site
	KITCHEN UNIT MANUFACTURERS. (K0500)	Eastment Joinery Pty. Ltd., 300 Burns Bay Rd., Lane Cove. 2066.	44161	1982	Premise Match	0m	On-site
	BELTING MFRS. &/OR IMPS. &/OR DISTS. (B2270)	Gandy-Forsyth Pty. Ltd., 300 Burns Bay Rd., Lane Cove. 2066.	6829	1982	Premise Match	0m	On-site

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Property Boundary or Road Intersection	Direction
1	MOTOR BRAKE LINING MFRS.&/OR DISTS. &/OR SUPPLIERS.(M5205)	Gandy-Forsyth Pty. Ltd., 300 Burns Bay Rd., Lane Cove. 2066.	54362	1982	Premise Match	0m	On-site
	TRANSMISSION BELTING MFRS.&/OR DISTS. (T7250)	Gandy-Forsyth Pty. Ltd., 300 Burns Bay Rd., Lane Cove. 2066.	81649	1982	Premise Match	0m	On-site
	CABINET MAKERS. (C0030)	Lane Cove Joinery, 300 Burns Bay Rd., Lane Cove. 2066.	12034	1982	Premise Match	0m	On-site
	JOINERY MANUFACTURERS. (J1050)	Lane Cove Joinery, 300 Burns Bay Rd., Lane Cove. 2066.	43982	1982	Premise Match	0m	On-site
	KITCHEN UNIT MANUFACTURERS.(K0500)	Lane Cove Joinery, 300 Burns Bay Rd., Lane Cove. 2066.	44216	1982	Premise Match	0m	On-site
	BELTING MFRS. &/OR IMPS. &/OR DISTS. (B2270)	Mangrovite Industries Ltd., 300 Burns Bay Rd., Lane Cove. 2066.	6839	1982	Premise Match	0m	On-site
	ENGINEERS - TRANSMISSION. (E8490)	Mangrovite Industries Ltd., 300 Burns Bay Rd., Lane Cove. 2066.	29546	1982	Premise Match	0m	On-site
	GEAR BOX MFRS. &/OR DISTS.(G2200)	Mangrovite Industries Ltd., 300 Burns Bay Rd., Lane Cove. 2066.	35923	1982	Premise Match	0m	On-site
	POWER TRANSMISSION EQUIPMENT MFRS. &/OR DISTS.(P7820)	Mangrovite Industries Ltd., 300 Burns Bay Rd., Lane Cove. 2066.	65784	1982	Premise Match	0m	On-site
	TRANSMISSION BELTING MFRS.&/OR DISTS. (T7250)	Mangrovite Industries Ltd., 300 Burns Bay Rd., Lane Cove. 2066.	81656	1982	Premise Match	0m	On-site
	CLOCK MFRS. &/OR IMPS. &/OR DISTS. (C5030)	Marlin, John, 300 Burns Bay Rd., Lane Cove. 2066.	16344	1982	Premise Match	0m	On-site
	FURNITURE REPAIRERS &/OR REMODELLERS. (F8975)	Marlin, John, 300 Burns Bay Rd., Lane Cove. 2066.	35525	1982	Premise Match	0m	On-site
	FURNITURE-GENERAL-MFRS.&/OR W/SALERS. (F7675)	Martin, John Woodcraft, 300 Burns Bay Rd., Lane Cove. 2066.	35069	1982	Premise Match	0m	On-site
	IMPORTERS. (I0750)	Nisco Pty. Ltd., 3/300 Burns Bay Rd., Lane Cove. 2066.	41713	1982	Premise Match	0m	On-site
	CONFECTIONERY MFRS. &/OR W/SALERS. (C7366)	Shay Distributors Pty. Ltd., 300 Burns Bay Rd., Lane Cove. 2066.	17845	1982	Premise Match	0m	On-site
	IMPORTERS. (I0750)	Shay Distributors Pty. Ltd., 300 Burns Bay Rd., Lane Cove. 2066.	41795	1982	Premise Match	0m	On-site
	IMPORTERS. (I0750)	Weatherdon, R. & Co. Pty. Ltd., 300 Burns Bay Rd., Lane Cove. 2060.	41858	1982	Premise Match	0m	On-site
	EXPORTERS. (E9270)	Weatherdon, R. & Co. Pty. Ltd., 300 Burns Bay Rd., Lane Cove. 2066.	29885	1982	Premise Match	0m	On-site
	MOTOR ENGINEERS. (M6660)	Wright Place, The, 300 Burns Bay Rd., Lane Cove. 2066.	55826	1982	Premise Match	0m	On-site
	BELTING MFRS. IMPS. &/OR DISTS.	Gandy - Forsyth Pty. Ltd., 300 Burns Bay Rd. Lane Cove. 2066	5810	1978	Premise Match	0m	On-site
	MOTOR BRAKE LINING MFRS. &/OR DISTS. &/OR SUPPLIERS.	Gandy Forsyth Pty. Ltd., 300 Burns Bay Rd., Lane Cove. 2066.	47902	1978	Premise Match	0m	On-site
	ENGINEERS-TRANSMISSION.	Mangrovite Industries Ltd., 300 Burns Bay Rd, Lane Cove. 2066	26642	1978	Premise Match	0m	On-site
	GEAR BOX MFRS. &/OR DISTS.	Mangrovite Industries Ltd., 300 Burns Bay Rd, Lane Cove. 2066.	32573	1978	Premise Match	0m	On-site
	BELT DRESSING MFRS.	Mangrovite Industries Ltd., 300 Burns Bay Rd., Lane Cove. 2066	5777	1978	Premise Match	0m	On-site
	BELTING MFRS. IMPS. &/OR DISTS.	Mangrovite Industries Ltd., 300 Burns Bay Rd., Lane Cove. 2066	5823	1978	Premise Match	0m	On-site
	POWER TRANSMISSION EQUIPMENT MFRS. &/OR DISTS.	Mangrovite Industries Ltd., 300 Burns Bay Rd., Lane Cove. 2066	58690	1978	Premise Match	0m	On-site
	V-BELT DRIVE SPECIALISTS	Mangrovite Industries Ltd., 300 Burns Bay Rd., Lane Cove.2066	73382	1978	Premise Match	0m	On-site
	TRANSMISSION BELTING MFRS. &/OR DISTS.	Sandy -Torsyth Pty. Ltd, 300 Burns Bay Rd, Lane Cove. 2066	72148	1978	Premise Match	0m	On-site
	BELTING MFRS. IMPS. &/OR DISTS.	Gandy Forsyth Pty. Ltd., 300 Burns Bay Rd., Lane Cove. 2066	6211	1975	Premise Match	0m	On-site
	MOTOR BRAKE LINING MFRS. &/OR DISTS. &/OR SUPPLIERS.	Gandy Forsyth Pty. Ltd., 300 Burns Bay Rd., Lane Cove. 2066	56737	1975	Premise Match	0m	On-site

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Property Boundary or Road Intersection	Direction
1	TRANSMISSION BELTING MFRS. &/OR DISTS.	Gandy-Forsyth Pty. Ltd., 300 Burns Bay Rd., Lane Cove. 2066	84891	1975	Premise Match	0m	On-site
	ENGINEERS-TRANSMISSION.	Mangrovite Industries Ltd. 300 Burns Bay Rd. Lane Cove. 2066.	30743	1975	Premise Match	0m	On-site
	BELT DRESSING MFR	Mangrovite Industries Ltd., 300 Burns Bay Rd., Lane Cove. 2066	6179	1975	Premise Match	0m	On-site
	BELTING MFRS. IMPS. &/OR DISTS.	Mangrovite Industries Ltd., 300 Burns Bay Rd., Lane Cove. 2066	6227	1975	Premise Match	0m	On-site
	GEAR BOX MFRS.	Mangrovite Industries Ltd., 300 Burns Bay Rd., Lane Cove. 2066	37831	1975	Premise Match	0m	On-site
	GEAR CUTTERS &/OR MFRS.	Mangrovite Industries Ltd., 300 Burns Bay Rd., Lane Cove. 2066	37870	1975	Premise Match	0m	On-site
	OIL SEAL MFR &/OR DISTS.	Mangrovite Industries Ltd., 300 Burns Bay Rd., Lane Cove. 2066	64772	1975	Premise Match	0m	On-site
	POWER TRANSMISSION EQUIPMENT MFRS. &/OR DISTS.	Mangrovite industries Ltd., 300 Burns Bay Rd., Lane Cove. 2066	69071	1975	Premise Match	0m	On-site
	V-BELT DRIVE SPECIALISTS	Mangrovite Industries Ltd., 300 Burns Bay Rd., Lane Cove. 2066	86051	1975	Premise Match	0m	On-site
	GEAR CUTTERS/MFRS. (G150)	Mangrovi Industries Ltd., 300 Burns Bay Rd., Lane Cove	310571	1970	Premise Match	0m	On-site
	BEARINGS & BUSHES-MFRS. &/OR DISTS. (B255)	Mangrovite Industries Ltd., 300 Burns Bay Rd., Lane Cove	265443	1970	Premise Match	0m	On-site
	BELT DRESSING MFRS. (B310)	Mangrovite Industries Ltd., 300 Burns Bay Rd., Lane Cove	266883	1970	Premise Match	0m	On-site
	BELTING-LEATHER, RUBBER, PLASTIC,ETC.-MFRS. &/OR DISTS. (B325)	Mangrovite Industries Ltd., 300 Burns Bay Rd., Lane Cove	266964	1970	Premise Match	0m	On-site
	ENGINEERS-HYDRAULIC (E645)	Mangrovite industries Ltd., 300 Burns Bay Rd., Lane Cove	300013	1970	Premise Match	0m	On-site
	ENGINEERS-PRECISION (E705)	Mangrovite industries Ltd., 300 Burns Bay Rd., Lane Cove	300345	1970	Premise Match	0m	On-site
	ENGINEERS-TRANSMISSION (E785)	Mangrovite Industries Ltd., 300 Burns Bay Rd., Lane Cove	301247	1970	Premise Match	0m	On-site
	GEAR BOX MANUFACTURERS (G145)	Mangrovite Industries Ltd., 300 Burns Bay Rd., Lane Cove	310540	1970	Premise Match	0m	On-site
	OIL SEAL MANUFACTURERS (O 150)	Mangrovite Industries Ltd., 300 Burns Bay Rd., Lane Cove	345069	1970	Premise Match	0m	On-site
	POWER TRANSMISSION EQUIP. MFRS. &/OR DISTRIUTORS (P732)	Mangrovite industries Ltd., 300 Burns Bay Rd., Lane Cove	351447	1970	Premise Match	0m	On-site
	RUBBER HOSE MANUFACTURERS &/OR DISTRIBUTORS (R490)	Mangrovite Industries Ltd., 300 Burns Bay Rd., Lane Cove	358132	1970	Premise Match	0m	On-site
	RUBBER MOULDED PRODUCTS-SYNTHETIC-MFRS. (R505)	Mangrovite Industries Ltd., 300 Burns Bay Rd., Lane Cove	358195	1970	Premise Match	0m	On-site
	V-BELT DRIVE SPECIALISTS (V080)	Mangrovite Industries Ltd., 300 Burns Bay Rd., Lane Cove	372452	1970	Premise Match	0m	On-site
	PATTERN MAKERS-ENGINEERING(P198)	Smith, D. F. Patterns Pty. Ltd., 300 Burns Bay Rd., Lane Cove	347389	1970	Premise Match	0m	On-site
	Engineers - Transmission	Glow Manufacturing Pty. Ltd., 300 Burns Bay Rd., Lane Cove	84637	1965	Premise Match	0m	On-site
	Engineers -Precision	Glow Manufacturing Pty. Ltd., 300 Burns Bay Rd., Lane Cove	83607	1965	Premise Match	0m	On-site
	Gear Box Mfrs.	Glow Manufacturing Pty. Ltd., 300 Burns Bay Rd., Lane COve	94697	1965	Premise Match	0m	On-site
	Glove Mfrs. - Industrial	Mangrovite Belting Ltd., 300 Burns Bay Rd., Lane Cove	95483	1965	Premise Match	0m	On-site
	Belt Dressing Mfrs.	Mangrovite industries Ltd., 300 Burns Bay Rd., Lane Cove	51408	1965	Premise Match	0m	On-site
	Electric Coil-Winding Machine Manufacturers	Mangrovite Industries Ltd., 300 Burns Bay Rd., Lane Cove	77288	1965	Premise Match	0m	On-site
	Engineers - Hydraulic	Mangrovite industries Ltd., 300 Burns Bay Rd., Lane Cove	83258	1965	Premise Match	0m	On-site
	Engineers - Transmission	Mangrovite Industries Ltd., 300 Burns Bay Rd., Lane Cove	84647	1965	Premise Match	0m	On-site

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Property Boundary or Road Intersection	Direction
1	Power Transmission Equip. Mfrs. &/or Dist.	Mangrovite Industries Ltd., 300 Burns Bay Rd., Lane Cove	135646	1965	Premise Match	0m	On-site
	Rubber Hose Mfrs. &/or Dist.	Mangrovite Industries Ltd., 300 Burns Bay Rd., Lane Cove	141424	1965	Premise Match	0m	On-site
	TANNERS/LEATHER MFRS.	Mangrovite Industries Ltd., 300 Burns Bay Rd., Lane Cove	150010	1965	Premise Match	0m	On-site
	BELT DRESSING MFRS.	Mangrovite Belting Ltd., 300 Burns Bay Rd., Lane Cove	272969	1961	Premise Match	0m	On-site
	BELTING-LEATHER, RUBBER, ETC. MFRS. &/OR DIST.	Mangrovite Belting Ltd., 300 Burns Bay Rd., Lane Cove	273051	1961	Premise Match	0m	On-site
	ENGINEERS-HYDRAULIC	Mangrovite Belting Ltd., 300 Burns Bay Rd., Lane Cove	307454	1961	Premise Match	0m	On-site
	GLOVE MFRS.-INDUSTRIAL	Mangrovite Belting Ltd., 300 Burns Bay Rd., Lane Cove	319432	1961	Premise Match	0m	On-site
	POWER TRANSMISSION EQUIP. MFRS. &/OR DISTRIBUTORS	Mangrovite Belting Ltd., 300 Burns Bay Rd., Lane Cove	361647	1961	Premise Match	0m	On-site
	RUBBER HOSE MANUFACTURERS &/OR DISTRIBUTORS	Mangrovite Belting Ltd., 300 Burns Bay Rd., Lane Cove	246997	1961	Premise Match	0m	On-site
	TANNERS/LEATHER MFRS.	Mangrovite Belting Ltd., 300 Burns Bay Rd., Lane Cove	255363	1961	Premise Match	0m	On-site
	COSMETIC MANUFACTURERS & WHOLESALERS	Acacia Products, 300 Burns Bay Rd., Lane Cove	29193	1950	Premise Match	0m	On-site
2	Plumbers Supplies	Chadwick Management Services Pty. Ltd., 292 Burns Bay Rd Lane Cove 2066	58244	1991	Premise Match	0m	North
	Acoustical Contractors	Chadwick Management Services Pty. Ltd., 292 Burns Bay Rd., Lane Cove 2066	33370	1991	Premise Match	0m	North
	ACOUSTICAL CONTRACTORS.	Chadwick Industries Pty. Ltd., 292 Burns Bay Rd., Lane Cove. 2066	1250	1986	Premise Match	0m	North
	BUILDERS SUPPLIERS.	Chadwick Industries Pty. Ltd., 292 Burns Bay Rd., Lane Cove. 2066	8518	1986	Premise Match	0m	North
	CEILING SYSTEMS &/OR CEILINGS-DOMESTIC &/OR INDUSTRIAL MFRS. &/OR CONTRACTORS.	Chadwick Industries Pty. Ltd., 292 Burns Bay Rd., Lane Cove. 2066	13256	1986	Premise Match	0m	North
	INSULATING MATERIALS MFRS. &/OR DIST. &/OR SUPPLIERS.	Chadwick Industries Pty. Ltd., 292 Burns Bay Rd., Lane Cove. 2066	48577	1986	Premise Match	0m	North
	INSULATION (INSULATING) CONTRACTORS.	Chadwick Industries Pty. Ltd., 292 Burns Bay Rd., Lane Cove. 2066	48637	1986	Premise Match	0m	North
	PAINT – INDUSTRIAL PROTECTIVE COATING.	Chadwick Industries Pty. Ltd., 292 Burns Bay Rd., Lane Cove. 2066	71567	1986	Premise Match	0m	North
	PLUMBERS SUPPLIES.	Chadwick Industries Pty. Ltd., 292 Burns Bay Rd., Lane Cove. 2066	75092	1986	Premise Match	0m	North
	WATERPROOFING MATERIALS MFRS. &/OR DIST.	Chadwick Industries Pty. Ltd., 292 Burns Bay Rd., Lane Cove. 2066	98459	1986	Premise Match	0m	North
	ROOFING CONTRACTORS &/OR REPAIRERS.	Chadwick Industries Pty. Ltd., 292 Burns Bay Rd., Lane Cove.2066	83613	1986	Premise Match	0m	North
	ACOUSTICAL CONTRACTORS. (A0780)	Chadwick Industries Pty. Ltd., 292 Burns Bay Rd., Lane Cove. 2066.	1103	1982	Premise Match	0m	North
	BUILDERS SUPPLIERS. (B7060)	Chadwick Industries Pty. Ltd., 292 Burns Bay Rd., Lane Cove. 2066.	9688	1982	Premise Match	0m	North
	CEILINGS-DOMESTIC &INDUSTRIAL. (C2840)	Chadwick Industries Pty. Ltd., 292 Burns Bay Rd., Lane Cove. 2066.	14088	1982	Premise Match	0m	North
	INSULATING MATERIALS MFRS.&/OR DIST. &/OR SUPPLIERS.(I3660)	Chadwick Industries Pty. Ltd., 292 Burns Bay Rd., Lane Cove. 2066.	42451	1982	Premise Match	0m	North
	INSULATION (INSULATING) CONTRACTORS. (I3850)	Chadwick Industries Pty. Ltd., 292 Burns Bay Rd., Lane Cove. 2066.	42499	1982	Premise Match	0m	North
	PAINT - INDUSTRIAL PROTECTIVECOATING. (P0400)	Chadwick Industries Pty. Ltd., 292 Burns Bay Rd., Lane Cove. 2066.	62430	1982	Premise Match	0m	North
	PLUMBERS SUPPLIES. (P6700)	Chadwick Industries Pty. Ltd., 292 Burns Bay Rd., Lane Cove. 2066.	65308	1982	Premise Match	0m	North

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Property Boundary or Road Intersection	Direction
2	ROOFING CONTRACTORS &/OR REPAIRERS. (R6475)	Chadwick Industries Pty. Ltd., 292 Burns Bay Rd., Lane Cove. 2066.	72338	1982	Premise Match	0m	North
	WATERPROOFING MATERIALS MFRS. &/OR DIST. (W2240)	Chadwick Industries Pty. Ltd., 292 Burns Bay Rd., Lane Cove. 2066.	83972	1982	Premise Match	0m	North
	PAINT-INDUSTRIAL PROTECTIVE COATING.	Cabal Pty. Ltd. 292 Burns Bay Road, Lane Cove 2066	55447	1978	Premise Match	0m	North
	ROOFING MATERIAL MFRS.&/OR DIST.	Cabal Pty. Ltd., 292 Burns Bay Rd., Lane Cove 2066	63911	1978	Premise Match	0m	North
	PAINT-INDUSTRIAL PROTECTIVE COATING.	Cabal Pty. Ltd., 292 Burns Bay Rd., Lane Cove. 2066	55458	1978	Premise Match	0m	North
	ROOFING MATERIAL MFRS.&/OR DIST.	Cabal Pty. Ltd., 292 Burns Bay Road, Lane Cove. 2066	63902	1978	Premise Match	0m	North
	ROOFING CONTRACTORS &/OR REPAIRSERS	Chadwick Industries Pty. Limited, 292 Burns Bay Rd, Lane Cove. 2066	63863	1978	Premise Match	0m	North
	ROOFING MATERIAL MFRS.&/OR DIST.	Chadwick Industries Pty. Limited, 292 Burns Bay Rd., Lane Cove. 2066	63903	1978	Premise Match	0m	North
	CEILING SYSTEMS.	Chadwick Industries Pty. Ltd. 292 Burns Bay Road, Lane Cove. 2066	12186	1978	Premise Match	0m	North
	ROOFING MATERIAL MFRS.&/OR DIST.	Chadwick Industries Pty. Ltd., 292 Burns Bay Rd., Lane Cove 2066	63912	1978	Premise Match	0m	North
	ROOFING CONTRACTORS &/OR REPAIRSERS	Chadwick Industries Pty. Ltd., 292 Burns Bay Rd., Lane Cove. 2066	63870	1978	Premise Match	0m	North
	CEILING SYSTEMS.	Chadwick Industries Pty. Ltd., 292 Burns Bay Rd., Lane Cove. 2066.	12189	1978	Premise Match	0m	North
	CEILINGS - DOMESTIC & INDUSTRIAL	Chadwick Industries Pty. Ltd., 292 Burns Bay Rd., Lane Cove. 2066.	12202	1978	Premise Match	0m	North
	PLUMBERS SUPPLIES.	Chadwick, R. P. Pty. Limited, 292 Burns Bay Road, Lane Cove. 2066	58273	1978	Premise Match	0m	North
	PLUMBERS SUPPLIES.	Chadwick, R. P. Pty. Ltd., 292 Burns Bay Rd., Lane Cove. 2066	58301	1978	Premise Match	0m	North
	INSULATION (INSULATING) CONTRACTORS	Specialised Building Material Pty. Ltd. 292 Burns Bay Rd. Lane Cove. 2066	37861	1978	Premise Match	0m	North
	ACOUSTICAL CONTRACTORS.	Specialised Building Materials Pty. Ltd., 292 Burns Bay Rd., Lane Cove. 2066	1024	1978	Premise Match	0m	North
	BUILDERS SUPPLIERS.	Specialised Building Materials Pty. Ltd., 292 Burns Bay Rd., Lane Cove. 2066	8337	1978	Premise Match	0m	North
	CEILINGS - DOMESTIC & INDUSTRIAL	Specialised Building Materials Pty. Ltd., 292 Burns Bay Rd., Lane Cove. 2066.	12213	1978	Premise Match	0m	North
	INSULATING MATERIALS MFRS. &/OR DIST. &/OR SUPPLIERS.	Specialised Building Materials Pty. Ltd., 292 Burns Bay Rd., Lane Cove. 2066.	37825	1978	Premise Match	0m	North
	CEILING SYSTEMS.	Chadwick Industries Pty. Limited., 292 Burns Bay Rd., Lane Cove, 2066	14107	1975	Premise Match	0m	North
	ROOFING CONTRACTORS &/OR REPAIRERS.	Chadwick Industries Pty. Limited., 292 Burns Bay Rd., Lane Cove, 2066	74578	1975	Premise Match	0m	North
	ROOFING MATERIAL MFRS &/OR DIST.	Chadwick Industries Pty. Limited., 292 Burns Bay Rd., Lane Cove, 2066	74630	1975	Premise Match	0m	North
	CEILINGS - DOMESTIC & INDUSTRIAL	Chadwick Industries Pty. Ltd., 292 Burns Bay Rd, Lane Cove. 2066	14115	1975	Premise Match	0m	North
	ROOFING CONTRACTORS &/OR REPAIRERS.	Chadwick Industries Pty. Ltd., 292 Burns Bay Rd., Lane Cove. 2066	74586	1975	Premise Match	0m	North
	ROOFING MATERIAL MFRS &/OR DIST.	Chadwick Industries Pty. Ltd., 292 Burns Bay Rd., Lane Cove. 2066	74641	1975	Premise Match	0m	North
	STEEL FLOORING-INDUSTRIAL-SUPPLIERS	Chadwick Structural Decking Pty. Ltd., 292 Burns Bay Rd., Lane Cove. 2066	80665	1975	Premise Match	0m	North
	MEDICAL EQUIP MFRS &/ OR DIST.	Medical Electronics Pty, Ltd., 296 Burns Bay Rd., Lane Cove. 2066.	49546	1975	Premise Match	0m	North
	ELECTRIC MEDICAL EQUIPMENT MFRS. &/OR DIST	Medical Teletronics Pty. Ltd., 296 Burns Bay Rd., Lane Cove. 2066	25321	1975	Premise Match	0m	North
	ACOUSTICAL CONTRACTORS.	Specialised Building Materials Pty. Ltd., 292 Burns Bay Rd., Lane Cove. 2066	743	1975	Premise Match	0m	North

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2	BUILDERS SUPPLIERS.	Specialised Building Materials Pty. Ltd., 292 Burns Bay Rd., Lane Cove. 2066	9372	1975	Premise Match	0m	North
	CEILINGS - DOMESTIC & INDUSTRIAL	Specialised Building Materials Pty. Ltd., 292 Burns Bay Rd., Lane Cove. 2066	14130	1975	Premise Match	0m	North
	INSULATING MATERIALS MFRS. &/OR DIST. &/OR SUPPLIERS.	Specialised Building Materials Pty. Ltd., 292 Burns Bay Rd., Lane Cove. 2066	44742	1975	Premise Match	0m	North
	INSULATION (INSULATING) CONTRACTORS.	Specialised Building Materials Pty. Ltd., 292 Burns Bay Rd., Lane Cove. 2066	44780	1975	Premise Match	0m	North
	ROOFING CONTRACTORS &/OR REPAIRERS.	Specialised Building Materials Pty. Ltd., 292 Burns Bay Rd., Lane Cove. 2066	74619	1975	Premise Match	0m	North
	WOOD WOOL MFRS.	Woodtex Manufacturing Pty. Limited, 292 Burns Bay Road, Lane Cove. 2066	87683	1975	Premise Match	0m	North
	CEILING SYSTEMS.	Woodtex Manufacturing Pty. Ltd., 292 Burns Bay Rd., Lane Cove. 2066	14110	1975	Premise Match	0m	North
	CEILING SYSTEMS	CHADWICK INDUSTRIES PTY LTD., 298 BURNS BAY RD., LANE COVE,	278846	1970	Premise Match	0m	North
	ROOFING CONTRACTORS/REPAIRERS	Chadwick Industries Pty. Ltd., 298 Burns Bay Rd., Lane Cove.2066.	357793	1970	Premise Match	0m	North
	PLUMBERS' SUPPLIES (P612)	CHADWICK R P PTY. LTD., 298 BURNS BAY Rd., LANE COVE	350234	1970	Premise Match	0m	North
	STEEL FLOORING- INDUSTRIAL SUPPLIERS (S676)	Chadwick Structural Decking Pty. Ltd., 292 Burns Bay Rd., Lane Cove, 2066	365401	1970	Premise Match	0m	North
	PLUMBERS' SUPPLIES (P612)	Chadwick, R. P. Pty. Ltd., 298 Burns Bay Rd., Lane Cove	350235	1970	Premise Match	0m	North
	ROOFING MATERIAL MFRS. &/OR DISTRIBUTORS (R415)	Chadwick, R. P. Pty. Ltd., 298 Burns Bay Rd., Lane Cove.2066.	357852	1970	Premise Match	0m	North
	BUILDERS' SUPPLIERS (B814)	Chadwick, R.P. Pty. Ltd., 298 Burns Bay Rd., Lane Cove 2066	271277	1970	Premise Match	0m	North
	Builders & Contractors	Australian Development Corporation Ltd., 296 Burns Bay Rd., Lane Cove	55092	1965	Premise Match	0m	North
	Builders' Equipment Hirers	Construction Plant Hire Pty. Ltd., 298 Burns Bay Rd., Lane Cove	55744	1965	Premise Match	0m	North
	Earth-Moving Mach. Hirers	Construction Plant Hire Pty. Ltd., 298 Burns Bay Rd., Lane Cove	76977	1965	Premise Match	0m	North
	Joinery Manufacturers	Joinery Fabrications, 298 Burns Bay Rd., Lane Cove	106490	1965	Premise Match	0m	North
	SHOP/OFFICE FITTERS	Shop & Office Fitters Pty. Ltd., 298 Burns Bay Rd., Lane Cove	144666	1965	Premise Match	0m	North
	Builders & Contractors	Sydney Fischer Building Co. Pty. Ltd., 298 Burns Bay Rd., Lane Cove	55663	1965	Premise Match	0m	North
3	Engineers Civil	Multicon Engineering Pty Ltd, 290 Burns Bay Rd Lane Cove 2066	43376	1991	Premise Match	5m	North West
	Engineers Constructional	Multicon Engineering Pty Ltd, 290 Burns Bay Rd Lane Cove 2066	43433	1991	Premise Match	5m	North West
	AIR COMPRESSORS &/OR EQUIPMENT FOR HIRE.	Wright, John A. Pty. Ltd., 290 Burns Bay Rd., Lane Cove. 2066	2040	1986	Premise Match	5m	North West
	AIR COMPRESSORS &/OR EQUIPMENT FOR HIRE. (A3420)	Wright, John A. Pty. Ltd., 290 Burns Bay Rd., Lane Cove. 2066.	1869	1982	Premise Match	5m	North West
	AIR COMPRESSORS &/OR EQUIPMENT FOR HIRE.	Wright, John A. Pty. Ltd., 290 Burns Bay Rd., Lane Cove. 2066	1887	1978	Premise Match	5m	North West
	BUILDERS EQUIPMENT HIRERS.	Wright, John A. Pty. Ltd., 290 Burns Bay Rd., Lane Cove. 2066	8018	1978	Premise Match	5m	North West
	HIRING SERVICES.	Wright, John A. Pty. Ltd., 290 Burns Bay Rd., Lane Cove. 2066.	35636	1978	Premise Match	5m	North West
	BUILDERS EQUIPMENT HIRERS.	Wright, J. A. Pty. Ltd., 290 Burns Bay Rd., Lane Cove 2066	9033	1975	Premise Match	5m	North West
	AIR COMPRESSORS &/OR EQUIPMENT FOR HIRE	Wright, J. A. Pty. Ltd., 290 Burns Bay Rd., Lane Cove. 2066	1644	1975	Premise Match	5m	North West
	HIRING SERVICES.	Wright, J. A. Pty. Ltd., 290 Burns Bay Rd., Lane Cove. 2066	42111	1975	Premise Match	5m	North West

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3	HIRING SERVICES (H436)	Wright, J. A. Pty. Ltd., 290 Burns Bay Rd., Lane Cove	316290	1970	Premise Match	5m	North West
	AIR COMPRESSOR & EQUIPMENT FOR HIRE	Wright, J.A. Pty. Ltd., 290 Burns Bay Rd., Lane Cove	261047	1970	Premise Match	5m	North West
	BUILDERS' EQUIPMENT HIRERS (B802)	Wright, J.A. Pty. Ltd., 290 Burns Bay Rd., Lane Cove	271000	1970	Premise Match	5m	North West
4	Chemical Mfrs &/or Imps &/or Dists	Bronson & Jacobs Pty. Ltd., 288 Burns Bay Rd., Lane Cove 2066	38844	1991	Premise Match	20m	North West
	Oil Essential Mfrs &/or Merchants	Bronson & Jacobs Pty. Ltd., 288 Burns Bay Rd., Lane Cove. 2066	56067	1991	Premise Match	20m	North West
	CHEMICAL MFRS. &/OR IMPS. &/OR DISTS.	Bronson & Jacobs Pty. Ltd., 288 Burns Bay Rd., Lane Cove. 2066	13599	1986	Premise Match	20m	North West
	IMPORTERS.	Bronson & Jacobs Pty. Ltd., 288 Burns Bay Rd., Lane Cove. 2066	47538	1986	Premise Match	20m	North West
	OIL ESSENTIAL MFRS &/OR MERCHANTS.	Bronson & Jacobs Pty. Ltd., 288 Burns Bay Rd., Lane Cove. 2066	70538	1986	Premise Match	20m	North West
	PERFUME MFRS. &/OR IMPS. &/OR W/SALERS.	Bronson & Jacobs Pty. Ltd., 288 Burns Bay Rd., Lane Cove. 2066	72452	1986	Premise Match	20m	North West
	CHEMICAL MFRS. &/OR IMPS.&/OR DISTS. (C3855)	Bronson & Jacobs Pty. Ltd., 288 Burns Bay Rd., Lane Cove. 2066.	14372	1982	Premise Match	20m	North West
	IMPORTERS. (I0750)	Bronson & Jacobs Pty. Ltd., 288 Burns Bay Rd., Lane Cove. 2066.	41453	1982	Premise Match	20m	North West
	OIL-ESSENTIAL-MERCHANTS. (O1710)	Bronson & Jacobs Pty. Ltd., 288 Burns Bay Rd., Lane Cove. 2066.	61575	1982	Premise Match	20m	North West
	PERFUME MFRS. &/OR DISTS.&/OR W/SALERS. (P2760)	Bronson & Jacobs Pty. Ltd., 288 Burns Bay Rd., Lane Cove. 2066.	63230	1982	Premise Match	20m	North West
	OIL - ESSENTIAL - MERCHANTS.	Bronson & Jacobs Pty Ltd, 288 Burns Bay Rd, Lane Cove 2066	54795	1978	Premise Match	20m	North West
	PERFUME MFRS. &/OR DISTS. &/OR W/SALERS.	Bronson & Jacobs Pty. Ltd., 288 Burns Bay Rd., Lane Cove. 2066	56332	1978	Premise Match	20m	North West
	CHEMICAL MFRS. &/OR DISTS. &/OR IMPS.	Bronson & Jacobs Pty. Ltd., 288 Burns Bay Rd., Lane Cove. 2066.	12509	1978	Premise Match	20m	North West
	IMPORTERS.	Bronson & Jacobs Pty. Ltd., 288 Burns Bay Rd., Lane Cove. 2066.	36759	1978	Premise Match	20m	North West
	OIL-ESSENTIAL-MERCHANTS.	Bronson & Jacob, Pty. Ltd., 288 Burns Bay Rd., Lane Cove. 2066	64662	1975	Premise Match	20m	North West
	IMPORTERS.	Bronson & Jacobs Pty. Ltd. 288 Burns Bay Rd. Lane Cove. 2066	43533	1975	Premise Match	20m	North West
	PERFUME MFRS. &/OR DISTS. &/OR W/SALERS.	Bronson & Jacobs Pty. Ltd., 288 Burns Bay Rd., Lane Cove 2066	66356	1975	Premise Match	20m	North West
	CHEMICAL MFRS. &/OR DISTS. &/OR IMPS	Bronson & Jacobs Pty. Ltd., 288 Burns Bay Rd., Lane Cove. 2066	14454	1975	Premise Match	20m	North West
	CHEMICAL IMPORTERS &/OR DISTRIBUTORS (C265)	Bronson & Jacobs Pty. Ltd., 288 Burns Bay Rd., Lane Cove	279193	1970	Premise Match	20m	North West
	IMPORTERS (I200)	Bronson & Jacobs Pty. Ltd., 288 Burns Bay Rd., Lane Cove	318128	1970	Premise Match	20m	North West
	OILS-ESSENTIAL-MERCH. (O 180)	Bronson & Jacobs Pty. Ltd., 288 Burns Bay Rd., Lane Cove	345126	1970	Premise Match	20m	North West
	PERFUME MFRS./DISTRIBUTORS (P236)	Bronson & Jacobs Pty. Ltd., 288 Burns Bay Rd., Lane Cove	347562	1970	Premise Match	20m	North West
5	ENGINEERS-CONSULTING (E550)	Crooks, Mitchell, Peacock & Stewart., 296 Burns Bay Rd., Lane Cove, 2066	297724	1970	Premise Match	22m	West
	Engineers - Civil	Fischer, Sydney Building Co. Pty. Ltd., 295 Burns Bay Rd., Lane Cove	80838	1965	Premise Match	22m	West
	Builders & Contractors - (M.M.B.A.)	Fischer, Sydney Building Co. Pty. Ltd., 296 Burns Bay Rd. Lane Cove	54808	1965	Premise Match	22m	West
6	ENGINEERING FLEXIBLES	LUDOWICI J C & SON LTD., 25 BEST St., LANE COVE, 2066	297100	1970	Premise Match	24m	East
	ENGINEERING FLEXIBLES	Ludowici J C & Son Ltd., 25 Best St., Lane Cove,2066	627825	1970	Premise Match	24m	East
	BEARINGS & BUSHES-MFRS. &/OR DISTS. (B255)	Ludowici, J. C & Son Ltd., 25 Best St., Lane Cove, 2066	265442	1970	Premise Match	24m	East
	BELT DRESSING MFRS. (B310)	Ludowici, J. C & Son Ltd., 25 Best St., Lane Cove. 2066.	266882	1970	Premise Match	24m	East

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6	BELTING-LEATHER, RUBBER, PLASTIC,ETC.-MFRS. &/OR DIST. (B325)	Ludowici, J. C & Son Ltd., 25 Best St., Lane Cove. 2066.	266963	1970	Premise Match	24m	East
	RUBBER TUBING MFRS. (R535)	Ludowici, J. C. & Son Ltd, 25 Best St, Lane Cove, 2066	358264	1970	Premise Match	24m	East
	ENGINEERS' SUPPLIES (E770)	Ludowici, J. C. & Son Ltd., 25 Best St. Lane Cove 2066	297187	1970	Premise Match	24m	East
	ELECTRIC MOTORS-DEALERS &/OR WHOLESALERS (E210)	Ludowici, J. C. & Son Ltd., 25 Best St., Lane Cove, 2066	294225	1970	Premise Match	24m	East
	ENGINE PACKING MFRS. (E450)	Ludowici, J. C. & Son Ltd., 25 Best St., Lane Cove, 2066	297037	1970	Premise Match	24m	East
	ENGINEERS-HYDRAULIC (E645)	Ludowici, J. C. & Son Ltd., 25 Best St., Lane Cove, 2066	300011	1970	Premise Match	24m	East
	GASKET MANUFACTURERS (G135)	Ludowici, J. C. & Son Ltd., 25 Best St., Lane Cove, 2066	310505	1970	Premise Match	24m	East
	GLOVE MFRS.-INDUSTRIAL (G340)	Ludowici, J. C. & Son Ltd., 25 Best St., Lane Cove, 2066	311420	1970	Premise Match	24m	East
	INSULATING TAPE MFRS. (I490)	Ludowici, J. C. & Son Ltd., 25 Best St., Lane Cove, 2066	319890	1970	Premise Match	24m	East
	PLASTIC EXTRUDERS (P554)	Ludowici, J. C. & Son Ltd., 25 Best St., Lane Cove, 2066	349494	1970	Premise Match	24m	East
	PLASTIC MFRS. &/OR MOULDERS(P580)	Ludowici, J. C. & Son Ltd., 25 Best St., Lane Cove, 2066	349886	1970	Premise Match	24m	East
	PLASTIC MFRS.-SHEETING (P582)	Ludowici, J. C. & SON Ltd., 25 Best St., Lane Cove, 2066	350097	1970	Premise Match	24m	East
	POWER TRANSMISSION EQUIP. MFRS. &/OR DISTRIBUTORS (P732)	Ludowici, J. C. & Son Ltd., 25 Best St., Lane Cove, 2066.	351446	1970	Premise Match	24m	East
	RUBBERS-MECHANICAL-MFRS.(R550)	Ludowici, J. C. & Son Ltd., 25 Best St., Lane Cove. 2066	358282	1970	Premise Match	24m	East
	RUBBER MOULDED PRODUCTS-SYNTHETIC-MFRS. (R505)	Ludowici, J. C. & Son Ltd., 25 Best St., Lane Cove. 2066.	358193	1970	Premise Match	24m	East
	RUBBER GLOVE MFRS. (R475)	Ludowici, J. C. & Son Ltd., 25 Best St., Lane Cove.2066	358048	1970	Premise Match	24m	East
	SAFETY EQUIPMENT MFRS. &/OR DIST. (S024)	Ludowici, J. C. & Son Ltd., 25 Best St., Lane Cove.2066.	358456	1970	Premise Match	24m	East
	PULLEY MFRS. &/OR DIST (P894)	Ludowici, J. C. & Son Pty. Ltd., 25 Best St., Lane Cove, 2066	353656	1970	Premise Match	24m	East
	ADHESIVE MFRS &/OR DIST (A120)	Ludowici, J.C & Son Ltd., 25 Best St., Lane Cove, 2066	259739	1970	Premise Match	24m	East
	CHAIN - HEAVY - MFRS. &/OR IMPS. &/OR DIST.	Ludowici, J.C. & Son Ltd., 25 Best St., Lane Cove, 2066	279077	1970	Premise Match	24m	East
	CHAIN DRIVE SPECIALISTS (C231)	Ludowici, J.C. & Son Ltd., 25 Best St., Lane Cove, 2066	279041	1970	Premise Match	24m	East
	TRANSMISSION BELTING MFRS. &/OR DIST	Ludowici, J.C.& Son Ltd, 25 Best St, Lane Cove, 2066.	370886	1970	Premise Match	24m	East
	ENGINEERS-TRANSMISSION (E785)	Ludowici, J.C.& Son Ltd., 25 Best St., Lane Cove, 2066	301246	1970	Premise Match	24m	East
	FLEXIBLE SHAFTING & TUBING MFRS. &/OR DIST.	Ludowici, J.C.& Son Ltd., 25 Best St., Lane Cove, 2066	304014	1970	Premise Match	24m	East
	TRANSMISSION EQUIPMENT MFRS. &/OR DISTRIBUTORS	Ludowici, J.C.& Son Ltd., 25 Best St., Lane Cove, 2066	370929	1970	Premise Match	24m	East
	V-BELT DRIVE SPECIALISTS (V080)	Ludowici, J.C. & Son Ltd., 25 Best St., Lane Cove, 2066	372451	1970	Premise Match	24m	East
	WASHER MANUFACTURERS (W050)	Ludowici, J.C.& Son Ltd., 25 Best St., Lane Cove, 2066	373026	1970	Premise Match	24m	East
	BALL & ROLLER BEARING MFRS., IMPS. &/OR DISTRIBUTORS	Ludowici, JC & Son Ltd., 25 Best St., Lane Cove, 2066	264657	1970	Premise Match	24m	East
7	Medical Equipment &/or Repairs	Tuta Laboratories (Australia) Pty Ltd, 318 Burns Bay Rd., Lane Cove 2066	51539	1991	Premise Match	92m	South West
	MEDICAL EQUIPMENT &/OR SUPPLIES MFRS. &/OR IMPS. &/OR DIST.	Tuta Laboratories (Australia) Pty. Ltd., 318 Burns Bay Rd., Lane Cove. 2066	53344	1986	Premise Match	92m	South West

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7	HOSPITAL EQUIPMENT &/OR SUPPLIES MFRS. &/OR IMPS. &/OR DIST.	Tutu Laboratories (Australia) Pty. Ltd., 318 Burns Bay Rd., Lane Cove. 2066	46318	1986	Premise Match	92m	South West
	SURGICAL INSTRUMENTS MFRS. &/OR SPECIALISTS. (S8025)	Tuta Laboratories (Australia) Pty. Ltd, 318 Burns Bay Rd., Lane Cove. 2066.	77691	1982	Premise Match	92m	South West
	HOSPITAL SUPPLIES & EQUIPMENT MFRS. &/OR DIST.(H6110)	Tuta Laboratories (Australia) Pty. Ltd., 310 Burns Bay Rd., Lane Cove. 2066.	40411	1982	Premise Match	92m	South West
	SURGICAL APPLIANCE MFRS.&/OR DIST. (S7890)	Tuta Laboratories (Australia) Pty. Ltd., 318 Burns Bay Rd., Lane Cove. 2066.	77632	1982	Premise Match	92m	South West
	SCIENTIFIC APPARATUS MFRS. &/OR DIST.	Townson & Mercer Dists. Pty. Ltd., 318 Burns Bay Rd., Lane Cove. 2066	65144	1978	Premise Match	92m	South West
	CHEMICAL MFRS. &/OR DIST. &/OR IMPS.	Townson & Mercer Dists. Pty. Ltd., 318 Burns Bay Rd., Lane Cove. 2066.	12669	1978	Premise Match	92m	South West
	INSTRUMENTS-SCIENTIFIC MFRS. &/OR DIST. &/OR IMPS.	Townson & Mercer Dists. Pty. Ltd., 318 Burns Bay Rd., Lane Cove. 2066.	37759	1978	Premise Match	92m	South West
	SURGICAL APPLIANCE MFRS. &/OR DIST.	Tuta Laboratories (Australia) Pty. Ltd., 332 Burns Bay Rd., Lane Cove. 2066	68776	1978	Premise Match	92m	South West
	HOSPITAL SUPPLIES & EQUIPMENT MFRS. &/OR DIST.	Tuta Laboratories (Australia) Pty. Ltd., 332 Burns Bay Rd., Lane Cove. 2066.	35815	1978	Premise Match	92m	South West
	SURGICAL INSTRUMENTS MFRS. &/OR SPECIALISTS.	Tuta Laboratories (Australia) Pty. Ltd., 332 Burns Bay Rd., Lane Cove. 2066	68831	1978	Premise Match	92m	South West
	CHEMICAL MFRS. &/OR DIST. &/OR IMPS	Townson & Mercer (N.S.W.) Pty. Ltd., 318 Burns Bay Rd., Lane Cove. 2066	14649	1975	Premise Match	92m	South West
	INSTRUMENTS-SCIENTIFIC MFRS- &/OR DIST. &/OR IMPS.	Townson & Mercer (N.S.W.) Pty. Ltd., 318 Burns Bay Rd., Lane Cove. 2066	44665	1975	Premise Match	92m	South West
	SCIENTIFIC APPARATUS MFRS &/OR DIST	Towson & Mercer (N.S.W.) Pty. Ltd., 318 Burns Bay Rd., Lane Cove. 2066	76100	1975	Premise Match	92m	South West
	HOSPITAL SUPPLIES & EQUIPMENT MFRS. &/OR DIST.	Tuta Laboratories (Australia) Pty. Ltd., 332 Burns Bay Rd., Lane Cove. 2066	42510	1975	Premise Match	92m	South West
	SURGICAL APPLIANCE MFRS. &/OR DIST.	Tuta Laboratories (Australia) Pty. Ltd., 332 Burns Bay Rd., Lane Cove. 2066.	81324	1975	Premise Match	92m	South West
	SURGICAL INSTRUMENTS MFRS. &/OR SPECIALISTS.	Tuta Laboratories (Australia) Pty. Ltd., 332 Burns Bay Rd., Lane Cove. 2066.	81380	1975	Premise Match	92m	South West
	CHEMICAL IMPORTERS &/OR DISTRIBUTORS (C265)	Townson & Mercer (N.S.W.) Pty. Ltd., 318 Burns Bay Rd., Lane Cove	279277	1970	Premise Match	92m	South West
	CHEMICAL MANUFACTURERS &/OR DISTRIBUTORS (C268)	Townson & Mercer (N.S.W.) Pty. Ltd., 318 Burns Bay Rd., Lane Cove	279507	1970	Premise Match	92m	South West
	CHEMICAL-HEAVY-SUPPLIERS (C262)	Townson & Mercer (N.S.W.) Pty. Ltd., 318 Burns Bay Rd., Lane Cove	279598	1970	Premise Match	92m	South West
	CHEMICALS-TECHNICAL-SUPPLIERS (C274)	Townson & Mercer (N.S.W.) Pty. Ltd., 318 Burns Bay Rd., Lane Cove	279623	1970	Premise Match	92m	South West
	ELECTRONIC EQUIPMENT MFRS.&/OR DISTRIBUTORS (E355)	Townson & Mercer (N.S.W.) Pty. Ltd., 318 Burns Bay Rd., Lane Cove	296454	1970	Premise Match	92m	South West
	INSTRUMENTS-SCIENTIFIC-IMPORTERS, MANUFACTURERS &/OR DISTRIBUTORS	Townson & Mercer (N.S.W.) Pty. Ltd., 318 Burns Bay Rd., Lane Cove	319773	1970	Premise Match	92m	South West
	SCIENTIFIC APPARATUS MFRS. &/OR DISTRIBUTORS (S155)	Townson & Mercer (N.S.W.) Pty. Ltd., 318 Burns Bay Rd., Lane Cove	359813	1970	Premise Match	92m	South West
	PLASTIC MFRS. &/OR MOULDERS(P580)	Tuta Laboratories Pty. Ltd., 332 Burns Bay Rd., Lane Cove	349948	1970	Premise Match	92m	South West
	Chemical Manufacturers &/or Distributors	Townson & Mercer (N.S.W.) Pty. Ltd., 318 Burns Bay Rd., Lane Cove	64270	1965	Premise Match	92m	South West
	Chemical - Heavy - Suppliers	Townson & Mercer (N.S.W.) Pty. Ltd., 318 Burns Bay Rd., Lane Cove	63966	1965	Premise Match	92m	South West
	Anaesthetic & Fine Chemicals Mfrs.	Townson & Mercer (N.S.W.) Pty. Ltd., 318 Burns Bay Rd., Lane Cove	46168	1965	Premise Match	92m	South West
	Chemical Importers &/or Distributors	Townson & Mercer (N.S.W.) Pty. Ltd., 318 Burns Bay Rd., Lane Cove	64070	1965	Premise Match	92m	South West

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Property Boundary or Road Intersection	Direction
7	Chemicals - Technical - Suppliers	Townson & Mercer (N.S.W.) Pty. Ltd., 318 Burns Bay Rd., Lane Cove	64352	1965	Premise Match	92m	South West
	Instruments - Scientific - Importers, Mfrs. &/or Dists.	Townson & Mercer (N.S.W.) Pty. Ltd., 318 Burns Bay Rd., Lane Cove	103921	1965	Premise Match	92m	South West
	Scientific Apparatus Mfrs. &/or Distributors	Townson & Mercer (N.S.W.) Pty. Ltd., 318 Burns Bay Rd., Lane Cove	143189	1965	Premise Match	92m	South West
	CONTRACTORS-GENERAL	Ashman & Hart Pty. Ltd., 332 Burns Bay Rd., Lane Cove	292831	1961	Premise Match	92m	South West
	ENGINEERS-CIVIL	Ashman & Hart Pty. Ltd., 332 Burns Bay Rd., Lane Cove	304816	1961	Premise Match	92m	South West
	TANNERS' SUPPLIERS	Australian Wood Pipe Co. Ltd. (The), 332 Burns Bay Rd., Lane Cove	255401	1961	Premise Match	92m	South West
	ENGINEERS-CIVIL	Fischer, Sydney Pty. Ltd., 332 Burns Bay Rd., Lane Cove	304841	1961	Premise Match	92m	South West
	BUILDERS & CONTRACTORS-(M.M.B.A.)	Fisher, Sydney Building Co. Pty. Ltd 332 Burns Bay Rd. LANE COVE	277088	1961	Premise Match	92m	South West
	INSTRUMENTS—SCIENTIFIC — IMPORTERS,	Towison & Mercer (N.S.W.) Pty. Ltd., 318 Burns Bay Rd., Lane Cove	327489	1961	Premise Match	92m	South West
	ANAESTHETICS & FINE CHEMICALS MANUFACTURERS	Townson & Mercer (N.S.W.) Pty. Ltd., 318 Burns Bay Rd., Lane Cove	267795	1961	Premise Match	92m	South West
	CHEMICAL IMPORTERS &/OR DISTRIBUTORS	Townson & Mercer (N.S.W.) Pty. Ltd., 318 Burns Bay Rd., Lane Cove	286502	1961	Premise Match	92m	South West
	CHEMICAL MANUFACTURERS &/OR DISTRIBUTORS	Townson & Mercer (N.S.W.) Pty. Ltd., 318 Burns Bay Rd., Lane Cove	286734	1961	Premise Match	92m	South West
	CHEMICALS-TECHNICAL-SUPPLIERS	Townson & Mercer (N.S.W.) Pty. Ltd., 318 Burns Bay Rd., Lane Cove	286839	1961	Premise Match	92m	South West
	INSTRUMENTS—OPTICAL—MFRS.	Townson & Mercer (N.S.W.) Pty. Ltd., 318 Burns Bay Rd., Lane Cove	327408	1961	Premise Match	92m	South West
	SCIENTIFIC APPARATUS MFRS. &/OR DISTRIBUTORS	Townson & Mercer (N.S.W.) Pty. Ltd., 318 Burns Bay Rd., Lane Cove	248616	1961	Premise Match	92m	South West
	CHEMICAL-HEAVY-SUPPLIERS	Townson A Mercer (N.S.W.) Pty. Ltd., 318 Burns Bay Rd., Lane Cove	286817	1961	Premise Match	92m	South West
	PIPE MANUFACTURERS-WOOD	Australian Wood Pipe Co. Ltd. (The), 318 Burns Bay Rd., lane Cove	93094	1950	Premise Match	92m	South West
	TANK MANUFACTURERS	Australian Wood Pipe Co. Ltd., 318 Burns Bay Rd., Lane Cove	106938	1950	Premise Match	92m	South West

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Business Directory Records 1950-1991

Road or Area Matches

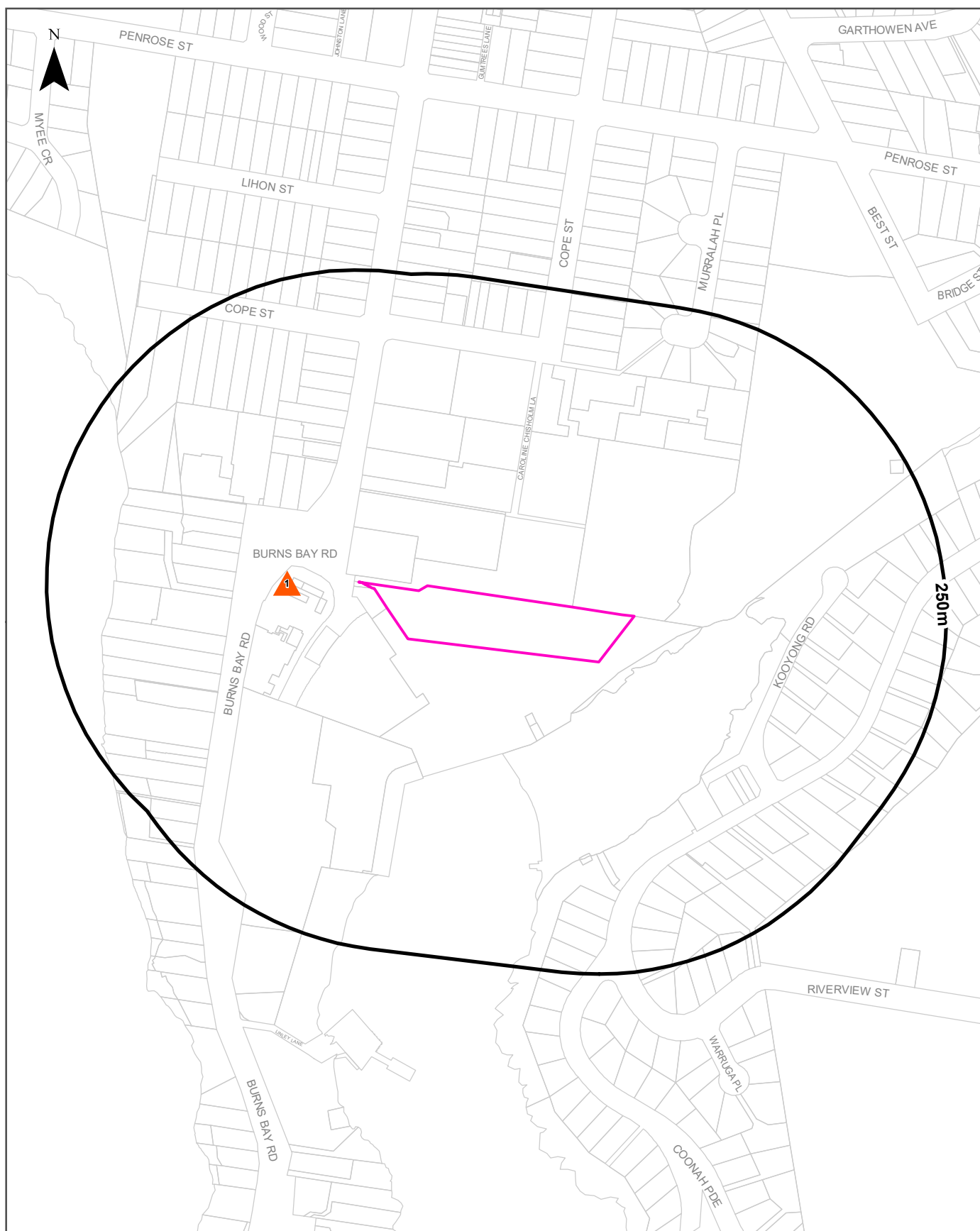
Potentially contaminative business activities extracted from Universal Business Directories from years 1991, 1986, 1982, 1978, 1975, 1970, 1965, 1961 & 1950, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published:

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Road Corridor or Area
8	MOTOR ELECTRICIANS, (M6580)	Lane Cove Auto Electrical Service, Burns Bay Rd., Lane Cove. 2066.	55536	1982	Road Match	4m
	Plastic Manufacturers &/or Moulders	Tuta Products Pty. Ltd., Burns Bay Rd., Lane Cove	134154	1965	Road Match	4m
	BUILDERS & CONTRACTORS	Gascoigne, H. F. & H., Burns Bay Rd., Lane Cove	276365	1961	Road Match	4m
	MOTOR GARAGES & ENGINEERS	Hutchison S. J., Burns Bay Rd. LANE COVE	347421	1961	Road Match	4m
	JOINERY MANUFACTURERS	Joinery Fabrications, Burns Bay Rd., Lane Cove	329902	1961	Road Match	4m
	SHOP/OFFICE FITTERS	Shop & office Fitters Pty. Ltd., Burns Bay Rd., Lane Cove	250128	1961	Road Match	4m
	BUILDERS & CONTRACTORS	Sydney Fischer Building Co. Pty. Ltd., Burns Bay Rd., Lane Cove	276672	1961	Road Match	4m
	MOTOR GARAGES &/OR ENGINEERS	Bennett's Corner Garage, Burns Bay Rd., Lane Cove	83448	1950	Road Match	4m
	BATTERY SERVICE STATIONS	Feiton's Service Station, Burns Bay Rd., Lane Cove	6599	1950	Road Match	4m
	MOTOR ACCESSORIES-DEALER	Felton's Service Station, Burns Bay Rd., Lane Cove	81588	1950	Road Match	4m
	MOTOR GARAGES &/OR ENGINEERS	Felton's Service Station, Burns Bay, Rd., Lane Cove	83738	1950	Road Match	4m
	MOTOR SERVICE STATIONS-PETROL, Etc.	Feltons Service Station, Burns Bay Rd., Lane Cove	85954	1950	Road Match	4m
	MOTOR GARAGES &/OR ENGINEERS	Hutchison, S. J., Burns Bay Rd., Lane Cove	83901	1950	Road Match	4m

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Dry Cleaners, Motor Garages & Service Stations

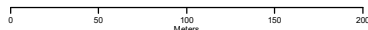
300 Burns Bay Road, Lane Cove, NSW 2066



Legend

- Site Boundary
- Buffer 250m
- Property Boundary
- Business directory records mapped to a specific premise
- Business directory records mapped to a road intersection
- ▲ Business directory records mapped to a road corridor
- ▨ Business directory records mapped to a general area

Scale:



Coordinate System:
GDA 1994 MGA Zone 56

Date: 10 October 2024

Data Sources: Reproduced with permission of UBD and Hardie Grant Media Pty Ltd DD 01/08/2018

Historical Business Directories

300 Burns Bay Road, Lane Cove, NSW 2066

Dry Cleaners, Motor Garages & Service Stations 1948-1993 Premise or Road Intersection Matches

Dry Cleaners, Motor Garages & Service Stations from UBD Business Directories, mapped to a premise or road intersection, within the dataset buffer.

Note: The Universal Business Directories were published between 1948 and 1993. Dry Cleaners, Motor Garages & Service Stations have been extracted from all of these directories except the following years 1951, 1955, 1957, 1960, 1963, 1973, 1974, 1977, 1987.

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Property Boundary or Road Intersection	Direction
N/A	No records in buffer						

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Dry Cleaners, Motor Garages & Service Stations 1948-1993

Road or Area Matches

Dry Cleaners, Motor Garages & Service Stations from UBD Business Directories, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published.

Note: The Universal Business Directories were published between 1948 and 1993. Dry Cleaners, Motor Garages & Service Stations have been extracted from all of these directories except the following years 1951, 1955, 1957, 1960, 1963, 1973, 1974, 1977, 1987.

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Road Corridor or Area
1	MOTOR GARAGES &/OR ENGINEERS &/OR SERVICE STATIONS.	Enterprise Service Station., Burns Bay Rd., Lane Cove West. 2066	3220	1981	Road Match	4m
	MOTOR GARAGES &/OR ENGINEERS &/OR SERVICE STATIONS.	Enterprise Service Station., Burns Bay Rd., Lane Cove West. 2066	52869	1980	Road Match	4m
	MOTOR GARAGES &/OR ENGINEERS &/OR SERVICE STATIONS.	Enterprise Service Station., Burns Bay Rd., Lane Cove West. 2066.	41412	1979	Road Match	4m
	MOTOR SERVICE STATIONS-PETROL, OIL, ETC.	Golden Fleece Service Station., Burns Bay Rd Lane Cove	16828	1972	Road Match	4m
	MOTOR GARAGES & ENGINEERS.	Hutchison S. J., Burns Bay Rd Lane Cove	32795	1962	Road Match	4m
	MOTOR GARAGES & ENGINEERS.	Styles, R., Burns Bay Rd & Centennial Ave., Lane Cove	32801	1962	Road Match	4m
	MOTOR GARAGES & ENGINEERS	Hutchison S. J., Burns Bay Rd. LANE COVE	347421	1961	Road Match	4m
	MOTOR GARAGES & ENGINEERS.	Hutchison S. J., Burns Bay Rd Lane Cove	19402	1959	Road Match	4m
	MOTOR GARAGES & ENGINEERS.	Styles R., Burns Bay Rd & Centennial Ave Lane Cove	19406	1959	Road Match	4m
	MOTOR GARAGE/ENGINEERS.	Hutchison S. J., Burns Bay Rd Lane Cove	4328	1958	Road Match	4m
	MOTOR GARAGE/ENGINEERS.	Styles R., Burns Bay Rd & Centennial Ave Lane Cove	5034	1958	Road Match	4m
	MOTOR GARAGES &/OR ENGINEERS.	Hutchison S. J., Burns Bay Rd Lane Cove	57853	1956	Road Match	4m
	MOTOR GARAGES &/OR ENGINEERS.	Bennet's Corner Garage., Burns Bay Rd Lane Cove	44817	1954	Road Match	4m
	MOTOR GARAGES &/OR ENGINEERS.	Felton's Service Station., Burns Bay Rd., Lane Cove	49247	1954	Road Match	4m
	MOTOR GARAGES &/OR ENGINEERS.	Hutchison S. J., Burns Bay Pd Lane Cove	49453	1954	Road Match	4m
	MOTOR GARAGES &/OR ENGINEERS.	Styles R., Burns Bay Rd & Centennial Ave Lane Cove	54174	1954	Road Match	4m
	MOTOR GARAGES &/OR ENGINEERS.	Barnet's Comer Garage., Burns Bay Rd., Lane Cove	36609	1953	Road Match	4m
	MOTOR GARAGES &/OR ENGINEERS.	Felton's Service Station., Burns Bay Rd Lane Cove	39981	1953	Road Match	4m
	MOTOR GARAGES &/OR ENGINEERS.	Hutchison S. J., Burns Bay Rd Lane Cove	40162	1953	Road Match	4m
	MOTOR GARAGES &/OR ENGINEERS.	Styles R., Burns Bay Rd & Centennial Ave Lane Cove	40747	1953	Road Match	4m
	MOTOR GARAGES &/OR ENGINEERS.	Bennet's Comer Garage., Burns Bay Rd Lane Cove	27518	1952	Road Match	4m
	MOTOR GARAGES &/OR ENGINEERS.	Felton's Service Station., Burns Bay Rd Lane Cove	31623	1952	Road Match	4m
	MOTOR GARAGES &/OR ENGINEERS.	Hutchison., S J., Burns Bay Rd., Lane Cove	31780	1952	Road Match	4m
	MOTOR GARAGES &/OR ENGINEERS	Bennett's Corner Garage, Burns Bay Rd., Lane Cove	83448	1950	Road Match	4m

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Road Corridor or Area
1	MOTOR GARAGES &/OR ENGINEERS	Felton's Service Station, Burns Bay, Rd., Lane Cove	83738	1950	Road Match	4m
	MOTOR SERVICE STATIONS-PETROL, Etc.	Feltons Service Station, Burns Bay Rd., Lane Cove	85954	1950	Road Match	4m
	MOTOR GARAGES &/OR ENGINEERS	Hutchison, S. J., Burns Bay Rd., Lane Cove	83901	1950	Road Match	4m
	MOTOR GARAGES &/OR ENGINEERS.	Bennet's Corner Garage., Burns Bay Rd Lane Cove	17779	1948-49	Road Match	4m
	MOTOR SERVICE STATIONS-PETROL, ETC.	Feltons Service Station., Burns Bay Rd Lane Cove	23248	1948-49	Road Match	4m
	MOTOR GARAGES &/OR ENGINEERS.	Hutchison S. J., Burns Bay Rd Lane Cove	22486	1948-49	Road Match	4m

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Topographic Map 2015

300 Burns Bay Road, Lane Cove, NSW 2066



Historical Map 1975

300 Burns Bay Road, Lane Cove, NSW 2066

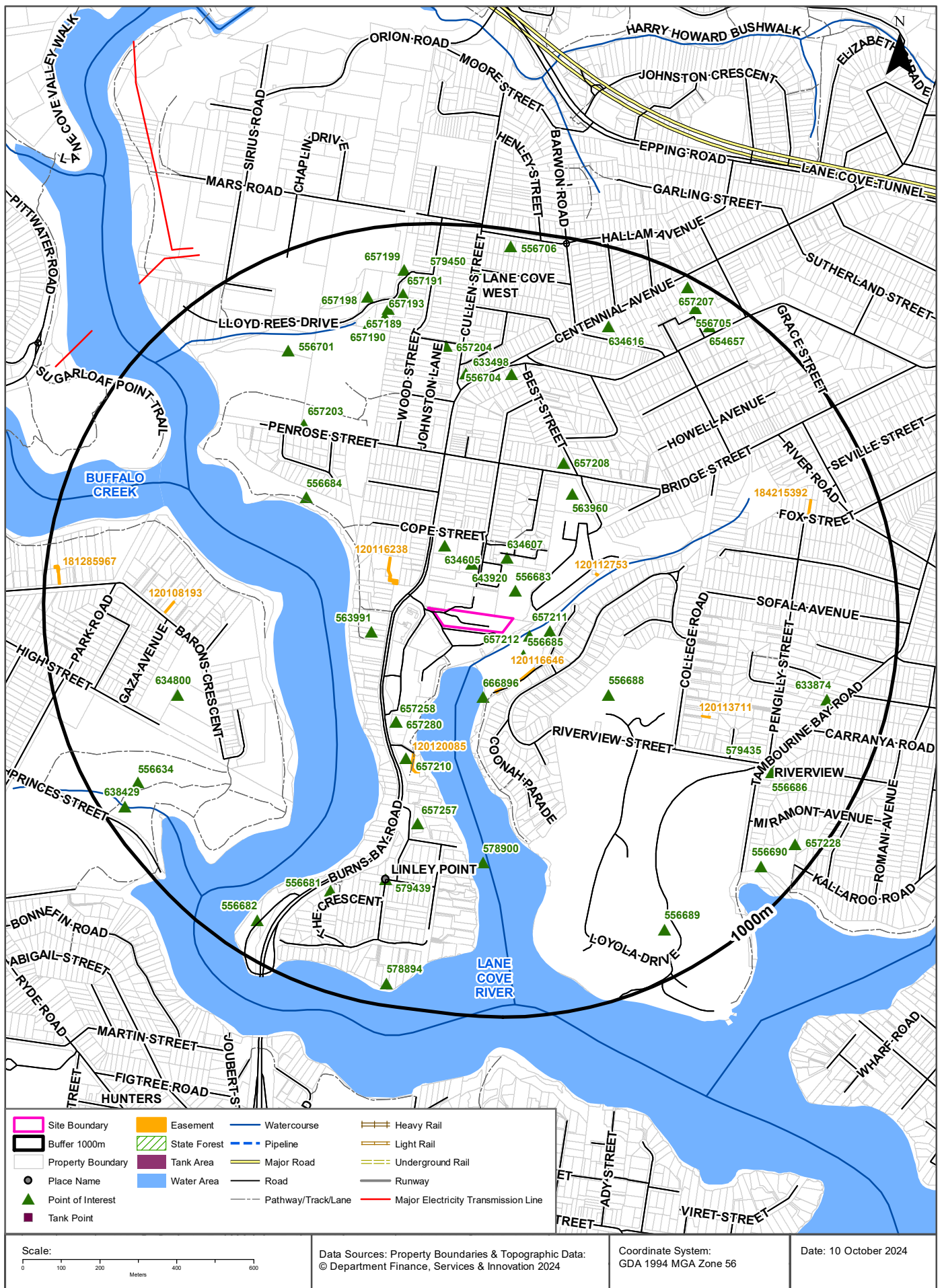






Topographic Features

300 Burns Bay Road, Lane Cove, NSW 2066



Topographic Features

300 Burns Bay Road, Lane Cove, NSW 2066

Points of Interest

What Points of Interest exist within the dataset buffer?

Map Id	Feature Type	Label	Distance	Direction
657212	Sports Court	BASKETBALL	61m	East
556683	Park	Park	72m	North East
556685	Sports Field	BURNS BAY RESERVE	79m	South East
657211	Park	PLAYGROUND	100m	East
643920	Retirement Village	CAROLINE CHISHOLM RETIREMENT VILLAGE	127m	North
634607	Retirement Village	CAROLINE CHISHOLM RETIREMENT VILLAGE	154m	North East
563991	Park	THE BOREEN	160m	West
634605	Nursing Home	CAROLINE CHISHOLM NURSING HOME	166m	North
666896	Launching Ramp	Launching Ramp	172m	South
657280	Museum	CARISBROOK HOUSE	279m	South West
657258	Historic Site	CARISBROOK	279m	South West
556688	Primary School	ST IGNATIUS' COLLEGE THE REGIS CAMPUS	317m	South East
657210	Park	LINLEY POINT RESERVE	358m	South West
563960	Park	LUDOWICI RESERVE	360m	North East
657208	Park	BEST RESERVE	427m	North East
556684	Park	LOVETTS RESERVE	428m	North West
657257	Historic Site	LINLEY	519m	South
657203	Park	BLACKMAN PARK AT PENROSE ST	577m	North West
578900	Bay / Inlet / Basin	BURNS BAY	600m	South
633498	Place Of Worship	BAPTIST CHURCH	616m	North
556704	Ambulance Station	LANE COVE AMBULANCE STATION	629m	North
579439	Suburb	LINLEY POINT	677m	South
657204	Park	CULLEN ST PLAYGROUND	685m	North
634800	Nursing Home	HUNTERS HILL MONTEFIORE HOME	690m	West
556681	Park	GARRAWAY LOOKOUT	750m	South West
657190	Community Facility	LANE COVE AND LONGUEVILLE GUIDE HALL	758m	North
579435	Suburb	RIVERVIEW	761m	South East
556701	Sports Field	BLACKMAN PARK	763m	North West
657193	Park	PLAYGROUND	765m	North
556686	Park	106 TAMBOURINE BAY RD	782m	South East
657189	Sports Court	TENNIS	785m	North

Map Id	Feature Type	Label	Distance	Direction
634616	Nursing Home	UNITING ST COLUMBA'S LANE COVE	799m	North East
657191	Community Facility	LANE COVE WEST TENNIS CLUB	820m	North
657198	Sports Court	SKATE PARK	826m	North
633874	Place Of Worship	BRETHREN CHURCH	842m	East
556689	High School	ST IGNATIUS COLLEGE	879m	South East
556634	Park	BORONIA PARK RESERVE	881m	South West
657199	Community Facility	1ST LANE COVE SCOUT HALL	883m	North
579450	Suburb	LANE COVE WEST	888m	North
556682	Picnic Area	CUNNINGHAMS REACH	906m	South West
556690	Picnic Area	TAMBOURINE PARK	906m	South East
654657	Club	LANE COVE BOWLING AND RECREATIONAL CLUB	915m	North East
556705	Sports Field	BOWLING GREENS	936m	North East
657228	Park	PLAYGROUND	939m	South East
578894	Headland	LINLEY POINT	942m	South
638429	Waterfall	TIPPERARY FALLS	943m	South West
556706	Sports Court	TENNIS COURTS	957m	North
657207	Park	CHARLISH PARK	975m	North East

Topographic Data Source: © Land and Property Information (2015)

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Topographic Features

300 Burns Bay Road, Lane Cove, NSW 2066

Tanks (Areas)

What are the Tank Areas located within the dataset buffer?

Note. The large majority of tank features provided by LPI are derived from aerial imagery & are therefore primarily above ground tanks.

Map Id	Tank Type	Status	Name	Feature Currency	Distance	Direction
N/A	No records in buffer					

Tanks (Points)

What are the Tank Points located within the dataset buffer?

Note. The large majority of tank features provided by LPI are derived from aerial imagery & are therefore primarily above ground tanks.

Map Id	Tank Type	Status	Name	Feature Currency	Distance	Direction
N/A	No records in buffer					

Tanks Data Source: © Land and Property Information (2015)

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Major Easements

What Major Easements exist within the dataset buffer?

Note. Easements provided by LPI are not at the detail of local governments. They are limited to major easements such as Right of Carriageway, Electrical Lines (66kVa etc.), Easement to drain water & Significant subterranean pipelines (gas, water etc.).

Map Id	Easement Class	Easement Type	Easement Width	Distance	Direction
120116238	Primary	Undefined		102m	North West
120116646	Primary	Undefined		123m	South East
120112753	Primary	Undefined		243m	East
120120085	Primary	Undefined		343m	South
120113711	Primary	Undefined		551m	East
120108193	Primary	Undefined		660m	West
184215392	Primary	Right of way	3m	813m	East
181285967	Primary	Right of way	VAR	959m	West

Easements Data Source: © Land and Property Information (2015)

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Topographic Features

300 Burns Bay Road, Lane Cove, NSW 2066

State Forest

What State Forest exist within the dataset buffer?

State Forest Number	State Forest Name	Distance	Direction
N/A	No records in buffer		

State Forest Data Source: © NSW Department of Finance, Services & Innovation (2018)

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Hydrogeology & Groundwater

300 Burns Bay Road, Lane Cove, NSW 2066

Hydrogeology

Description of aquifers within the dataset buffer:

Description	Distance	Direction
Porous, extensive aquifers of low to moderate productivity	0m	On-site

Hydrogeology Map of Australia : Commonwealth of Australia (Geoscience Australia)

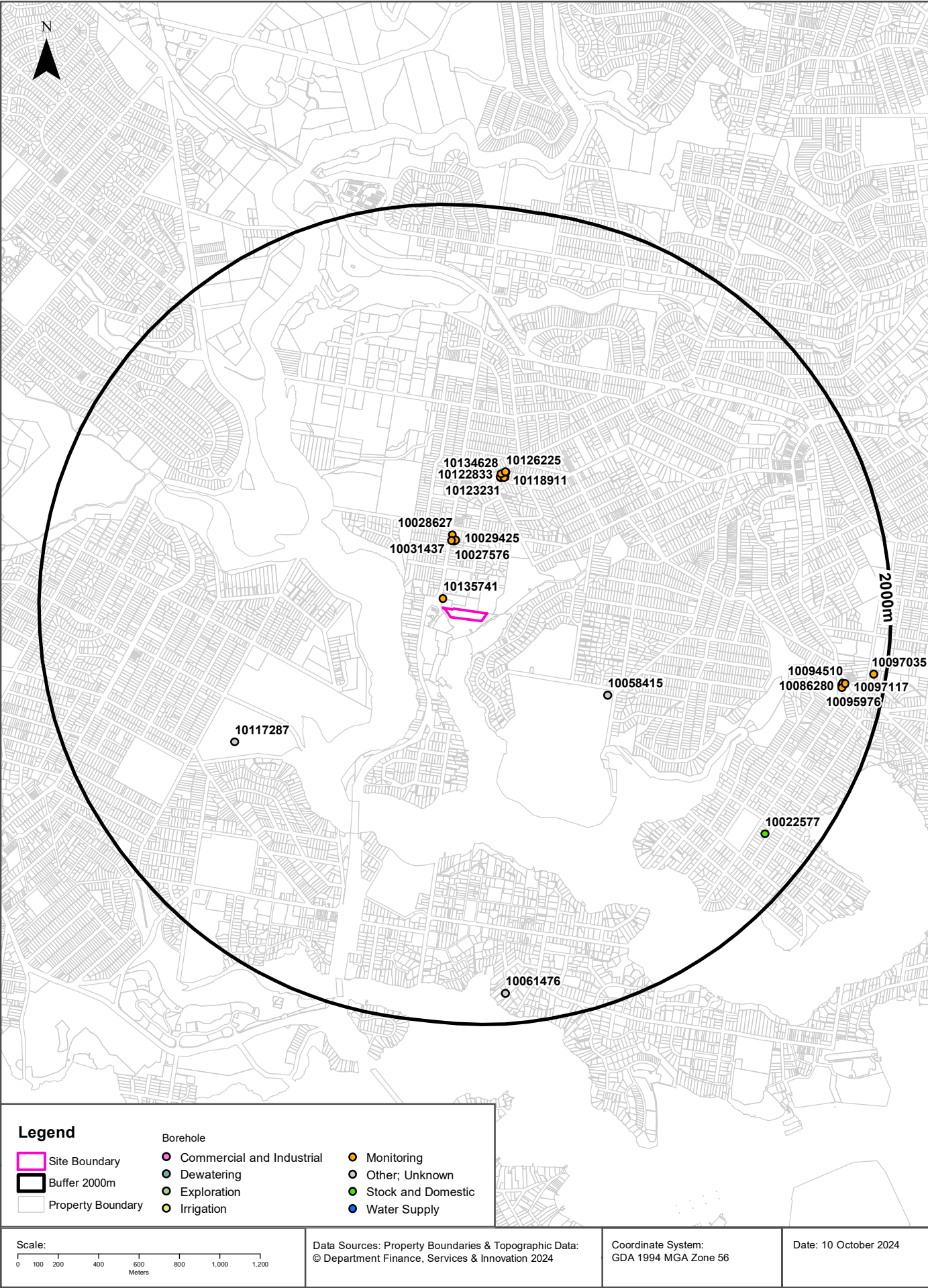
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Temporary Water Restriction (Botany Sands Groundwater Source) Order 2018

Temporary water restrictions relating to the Botany Sands aquifer within the dataset buffer:

Prohibition Area No.	Prohibition	Distance	Direction
N/A	No records in buffer		

Temporary Water Restriction (Botany Sands Groundwater Source) Order 2018 Data Source : NSW Department of Primary Industries



Hydrogeology & Groundwater

300 Burns Bay Road, Lane Cove, NSW 2066

Groundwater Boreholes

Boreholes within the dataset buffer:

NGIS Bore ID	NSW Bore ID	Bore Type	Status	Drill Date	Bore Depth (m)	Reference Elevation	Height Datum	Salinity (mg/L)	Yield (L/s)	SWL (mbgl)	Distance	Direction
10135741	GW202406	Monitoring	Functional	27/08/2010	6.00		AHD		40.000	2.10	46m	North West
10027576	GW114976	Monitoring	Functional	07/06/2011	8.30		AHD				334m	North
10031437	GW114975	Monitoring	Functional	07/06/2011	7.30		AHD				336m	North
10029425	GW114973	Monitoring	Functional	08/06/2011	8.50		AHD			2.77	339m	North
10028627	GW114974	Monitoring	Functional	08/06/2011	8.50		AHD				364m	North
10122833	GW113329	Monitoring	Functional	15/01/2009	6.00		AHD				677m	North
10124950	GW113328	Monitoring	Functional	15/01/2009	0.80		AHD				678m	North
10123231	GW113330	Monitoring	Functional	15/01/2009	6.00		AHD				679m	North
10118911	GW113327	Monitoring	Functional	15/01/2009	5.60		AHD				681m	North
10123993	GW113326	Monitoring	Functional	14/01/2009	6.00		AHD				691m	North
10124879	GW113325	Monitoring	Functional	04/12/2013	1.50		AHD				693m	North
10134628	GW113331	Monitoring	Functional	15/01/2009	0.80		AHD				693m	North
10126225	GW113323	Monitoring	Functional	14/01/2009	6.00		AHD				706m	North
10136603	GW113324	Monitoring	Functional	14/01/2009	6.00		AHD				706m	North
10058415	GW053747	Other	Unknown	01/10/1982	30.50		AHD	0-500 ppm			721m	South East
10117287	GW108901	Other	Unknown	06/06/2008	182.50		AHD	2600	0.750	38.00	1226m	South West
10022577	GW116462	Stock and Domestic	Functioning	29/09/2018	84.00		AHD				1759m	South East
10086280	GW109243	Monitoring	Unknown	20/08/2008	4.50		AHD				1793m	East
10094510	GW109242	Monitoring	Unknown	20/08/2008	4.50		AHD				1796m	East
10095976	GW109241	Monitoring	Unknown	20/08/2008	4.50		AHD				1796m	East
10097117	GW109244	Monitoring	Unknown	20/08/2008	4.50		AHD				1809m	East
10061476	GW107688	Unknown	Unknown	21/12/2006			AHD				1849m	South
10097035	GW072959	Monitoring	Unknown	03/02/1995	24.50		AHD	0-500 ppm			1939m	East

Borehole Data Source: Bureau of Meteorology; Water NSW. Creative Commons 3.0 © Commonwealth of Australia <http://creativecommons.org/licenses/by/3.0/au/deed.en>

Hydrogeology & Groundwater

300 Burns Bay Road, Lane Cove, NSW 2066

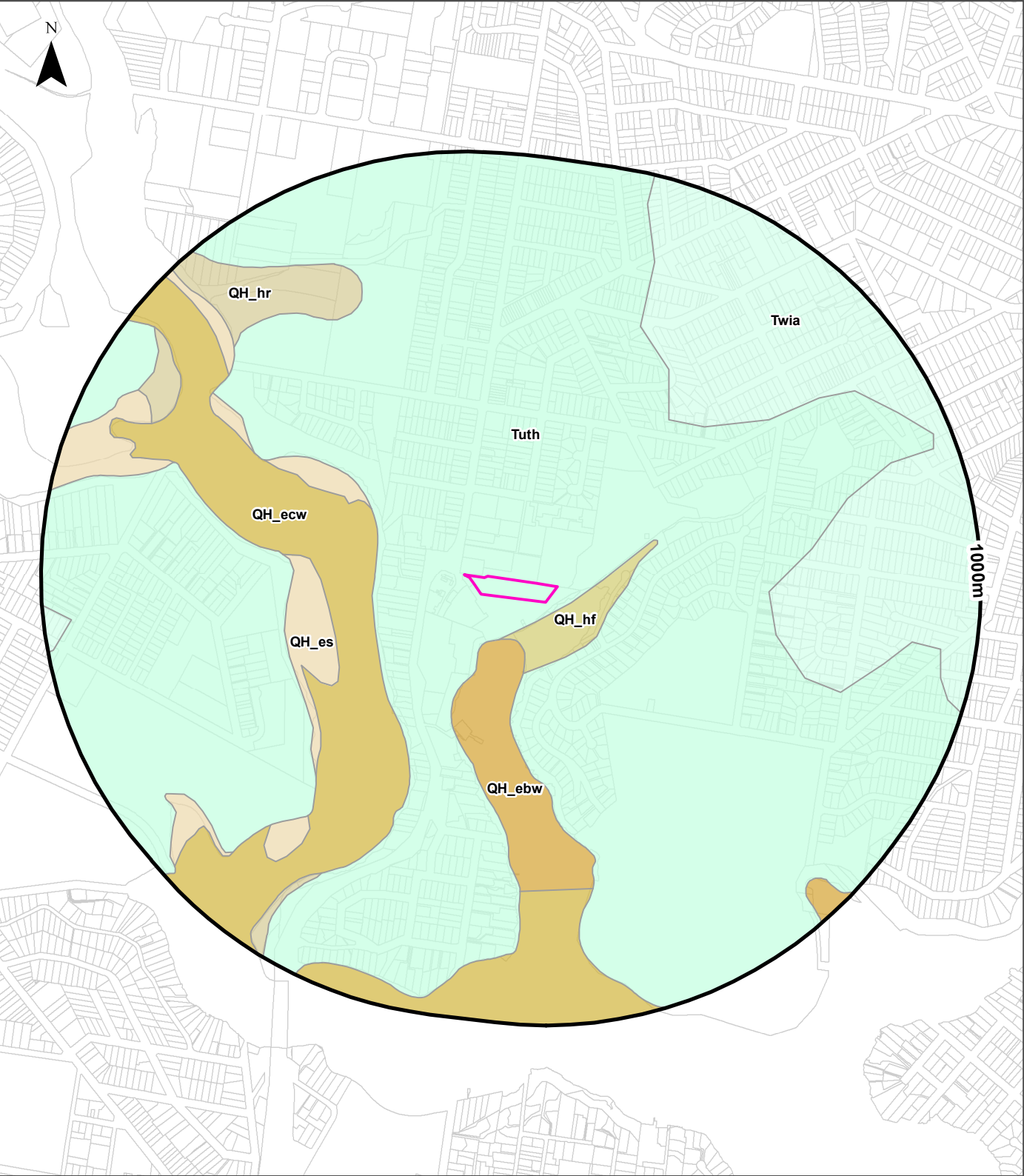
Driller's Logs

Drill log data relevant to the boreholes within the dataset buffer:

NGIS Bore ID	Drillers Log	Distance	Direction
10135741	0.00m-0.20m Fill; Concrete 0.20m-0.65m Fill; Silty Sandy Clay, low plasticity, dark brown, fine to medium grained sand, with igneous gravel 0.65m-2.50m Sandstone; fine to coarse grained, orange & yellow 2.50m-4.00m Sandstone; as above, but light grey, brown & orange 4.00m-6.00m Sandstone; as above, but orange & grey	46m	North West
10027576	0.00m-0.10m CONCRETE 0.10m-0.20m FILL, SAND LIGHT BROWN, DRY, ORGANIC MATERIALS 0.20m-0.90m FILL, CLAY, CRUSHED ASPHALT CHUNKS, GRAVELS, SAND DRY 0.90m-1.60m GRAVELLY CLAY, GREY WITH PURPLISH RED MOTTLING 1.60m-8.30m GRAVELLY CLAY GREY WITH DARK RED AND ORANGE MOTTLING, FIRM, DRY	334m	North
10031437	0.00m-0.10m CONCRETE 0.10m-0.20m FILL, SAND, LIGHT BROWN, M/GRAINED 0.20m-0.60m GRAVELLY CLAY, BROWN WITH GREY MOTTLING 0.60m-1.70m GRAVELLY CLAY GREY WITH PURPLISH RED MOTTLING 1.70m-7.30m GRAVELLY CLAY GREY WITH DARK RED AND ORANGE MOTTLING	336m	North
10028627	0.00m-0.10m CONCRETE 0.10m-0.20m FILL, SAND BROWN, M/GRAINED, DRY 0.20m-1.00m FILL, GRAVELLY CLAY BROWN SOFT, GRAVELS 1.00m-1.30m CLAY GREY WITH PURPLISH MOTTLING 1.30m-8.50m CLAY GREY WITH RED MOTTLING, DRY LOW PLASTICITY	364m	North
10058415	0.00m-0.18m Soil Sandy 0.18m-2.65m Sandstone Yellow Silty 2.65m-4.42m Sandstone Silty 4.42m-7.50m Sandstone Yellow Silty Water Supply 7.50m-11.55m Sandstone Grey 11.55m-11.89m Shale 11.89m-30.48m Sandstone Grey	721m	South East
10117287	0.00m-1.00m FILL, SAND AND ROCKS 1.00m-9.80m SANDSTONE L/BROWN 9.80m-9.90m SANDSTONE FRACTURED 9.90m-30.30m SANDSTONE GREY 30.30m-30.40m SANDSTONE FRACTURED 30.40m-41.00m SANDSTONE GREY 41.00m-43.00m SANDSTONE SHALE BEDDING 43.00m-111.00m SANDSTONE GREY 111.00m-114.00m SANDSTONE SHALE BEDDING 114.00m-133.00m SANDSTONE GREY 133.00m-133.50m SANDSTONE FINE QUARTZ 133.50m-169.00m SANDSTONE GREY 169.00m-174.50m SANDSTONE SHALE BEDDING 174.50m-178.00m SANDSTONE FINE QUARTZ 178.00m-179.50m SANDSTONE, QUARTZ VERY SOFT 179.50m-182.50m SANDSTONE GREY	1226m	South West
10086280	0.00m-0.50m CONCRETE, CLAY, BROWN GREY 0.50m-2.00m WEATHERED SANDSTONE, RED BROWN, DRY 2.00m-3.00m AS ABOVE, WHITE, YELLOW, DAMP 3.00m-4.50m WEATHERED SANDSTONE, BROWN, WET, DENSE	1793m	East
10094510	0.00m-1.00m CONCRETE, CLAY, BROWN YELLOW 1.00m-2.00m WEATHERED SANDSTONE, WHITE, BROWN 2.00m-3.00m AS ABOVE, RED BROWN, DAMP 3.00m-4.50m AS ABOVE, WHITE GREY	1796m	East
10095976	0.00m-1.00m CONCRETE, CLAY, WEATHERED SANDSTONE 1.00m-2.00m AS ABOVE, RED BROWN, (INCREASED DENSITY TO 1.5m) 2.00m-3.00m AS ABOVE, WHITE ORANGE, DAMP 3.00m-4.50m AS ABOVE, GREY WHITE, DAMP, BLACK LAYER 3.5, 3.8m	1796m	East
10097117	0.00m-1.00m CONCRETE, FILL, CLAY, SANDY, BROWN YELLOW 1.00m-2.00m WEATHERED SANDSTONE RED ORANGE 2.00m-4.50m WEATHERED SANDSTONE, RED WHITE, DAMP, ODOUR	1809m	East

NGIS Bore ID	Drillers Log	Distance	Direction
10097035	0.00m-0.80m Sandy Loam 0.80m-6.90m 6.90m-9.20m 9.20m-16.60m L/grey Med Grain Sandstone 16.60m-18.10m Light Grey Med Grain Sandstone Fractured Water Bearing Zones 18.10m-21.10m L/grey Med Grain Sandstone 21.10m-22.30m L/grey Med Grain Sandstone Fractured Water Bearing Zones 22.30m-24.50m Light Grey Marine Clay	1939m	East

Drill Log Data Source: Bureau of Meteorology; Water NSW. Creative Commons 3.0 © Commonwealth of Australia <http://creativecommons.org/licenses/by/3.0/au/deed.en>



Legend		Linear Geological Structures and Boundaries	
 Site Boundary	 Trendline	 Marker Bed	 Miscellaneous Boundary
 Report Buffer	 Fold Axis	 Faulted Boundary	 Water/Coastline Boundary
 Property Boundary	 Geological Boundary	 Shear Zone or Schist Zone Boundary	 State/Territory Border
Scale: 		Data Sources: Property Boundaries & Topographic Data: © Department Finance, Services & Innovation 2024	
		Coordinate System: GDA 1994 MGA Zone 56	
		Date: 10 October 2024	

Geology

300 Burns Bay Road, Lane Cove, NSW 2066

Geological Units

Geological units within the dataset buffer:

Code	Unit Name	Description	Stratigraphy	Age Range	Dominant Lithology	Dist	Dir
Tuth	Hawkesbury Sandstone	Medium- to coarse-grained quartz sandstone displaying small- to large-scale, high-angle cross-bedding; minor shale and laminite lenses.	/Ungrouped Triassic units//Hawkesbury Sandstone//	Anisian (base) to Anisian (top)	Sandstone	0m	On-site
QH_hf	Anthropogenic deposits - fill on Quaternary deposits	Land surface raised >1m above natural level by placement of fill on undifferentiated Quaternary deposits over an extensive area.	/Anthropogenic deposits//Anthropogenic deposits - fill on Quaternary deposits//	Holocene (base) to Now (top)	Anthropogenic material	30m	South East
QH_ebw	Estuarine basin and bay (subaqueous)	Clay, silt, shell, very fine- to fine-grained lithic-quartz ($\pm$ carbonate) sand (fluvially- and/or marine-deposited).	/Estuarine deposits//Estuarine basin and bay/Estuarine basin and bay (subaqueous)/	Holocene (base) to Now (top)	Clastic sediment	97m	South
QH_ecw	Estuarine channel deposits (subaqueous)	Fine- to medium-grained lithic-carbonate-quartz sand (marine-deposited), silt, clay, shell, gravel.	/Estuarine deposits//Estuarine channel deposits/Estuarine channel deposits (subaqueous)/	Holocene (base) to Now (top)	Clastic sediment	210m	South West
QH_es	Estuarine swamp	Organic-rich mud, peat, clay, silt, very fine- to fine-grained sand (marine-deposited), fine- to medium-grained sand (fluvially deposited).	/Estuarine deposits//Estuarine swamp//	Holocene (base) to Now (top)	Organic rich sediment	269m	North West
Twia	Ashfield Shale	Black to light grey shale and laminite.	/Wianamatta Group//Ashfield Shale//	Middle Triassic (base) to Middle Triassic (top)	Shale	474m	North East
QH_hr	Anthropogenic deposits - reclaimed estuarine areas	Natural surface elevation raised by placement of fill over former estuarine swamps and subaqueous estuarine margins (supratidal to subtidal zone); estuarine banks and islands formed from dredge spoil.	/Anthropogenic deposits//Anthropogenic deposits - reclaimed estuarine areas//	Holocene (base) to Now (top)	Anthropogenic material	672m	North West

Geology

300 Burns Bay Road, Lane Cove, NSW 2066

Linear Geological Structures

Fault and shear or schist zone boundaries within the dataset buffer:

Map ID	Boundary Type	Feature Description	Fault Dip Angle	Fault Dip Direction	Dist	Dir
NA	No records in buffer					

Trendlines within the dataset buffer:

Map ID	Feature Description	Observation Method	Structure Name	Dist	Dir
NA	No records in buffer				

Fold axes within the dataset buffer:

Map ID	Feature Description	Observation Method	Structure Name	Dist	Dir
NA	No records in buffer				

Marker beds within the dataset buffer:

Map ID	Feature Description	Rock Unit Description	Dist	Dir
NA	No records in buffer			

Geological Data Source: Statewide Seamless Geology v2.4, NSW Department of Primary Industries and Regional Development
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Naturally Occurring Asbestos Potential

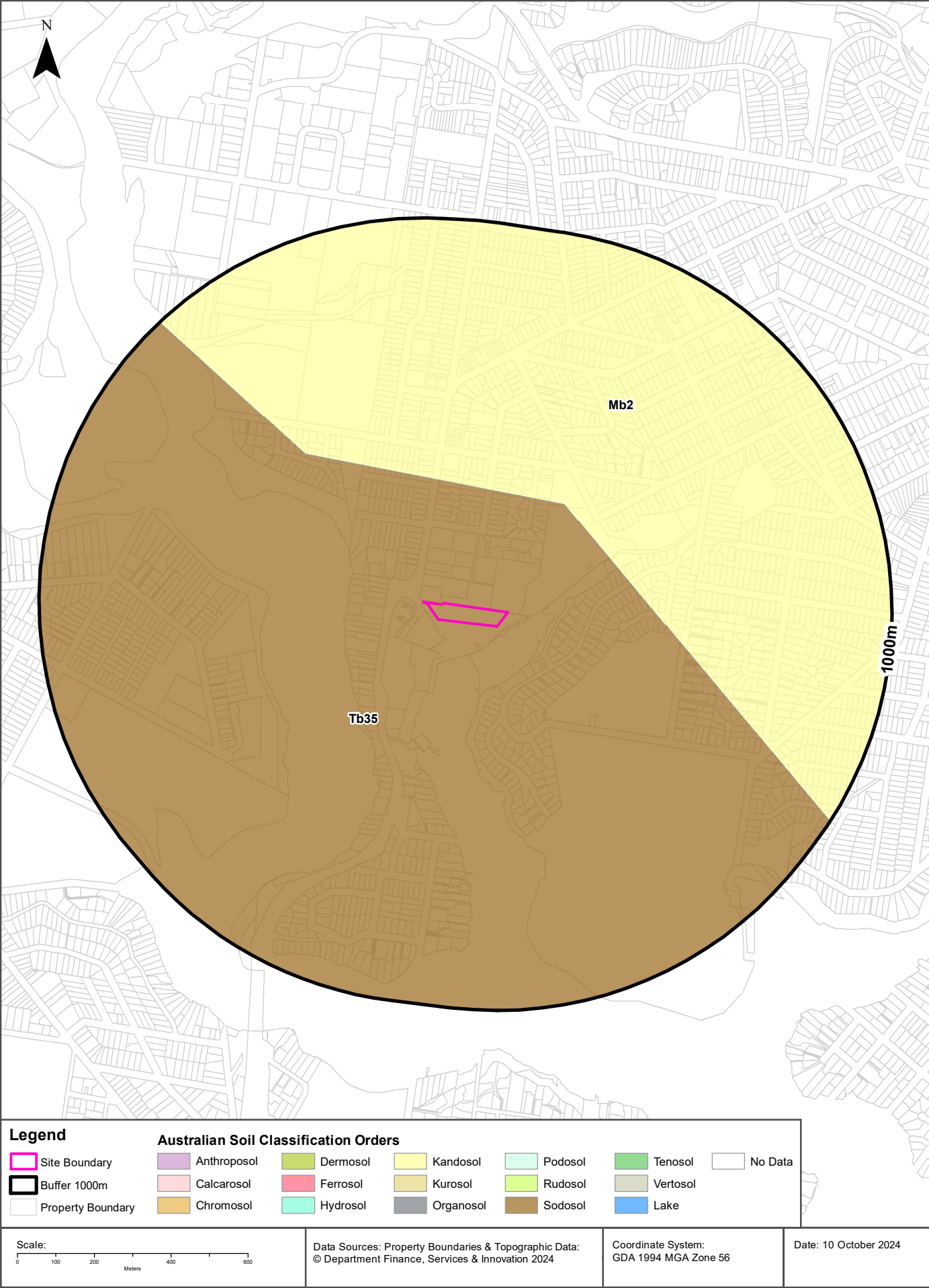
300 Burns Bay Road, Lane Cove, NSW 2066

Naturally Occurring Asbestos Potential

Naturally Occurring Asbestos Potential within the dataset buffer:

Potential	Sym	Strat Name	Group	Formation	Scale	Min Age	Max Age	Rock Type	Dom Lith	Description	Dist	Dir
No records in buffer												

Naturally Occurring Asbestos Potential Data Source: © State of New South Wales through NSW Department of Industry, Resources & Energy



Soils

300 Burns Bay Road, Lane Cove, NSW 2066

Atlas of Australian Soils

Soil mapping units and Australian Soil Classification orders within the dataset buffer:

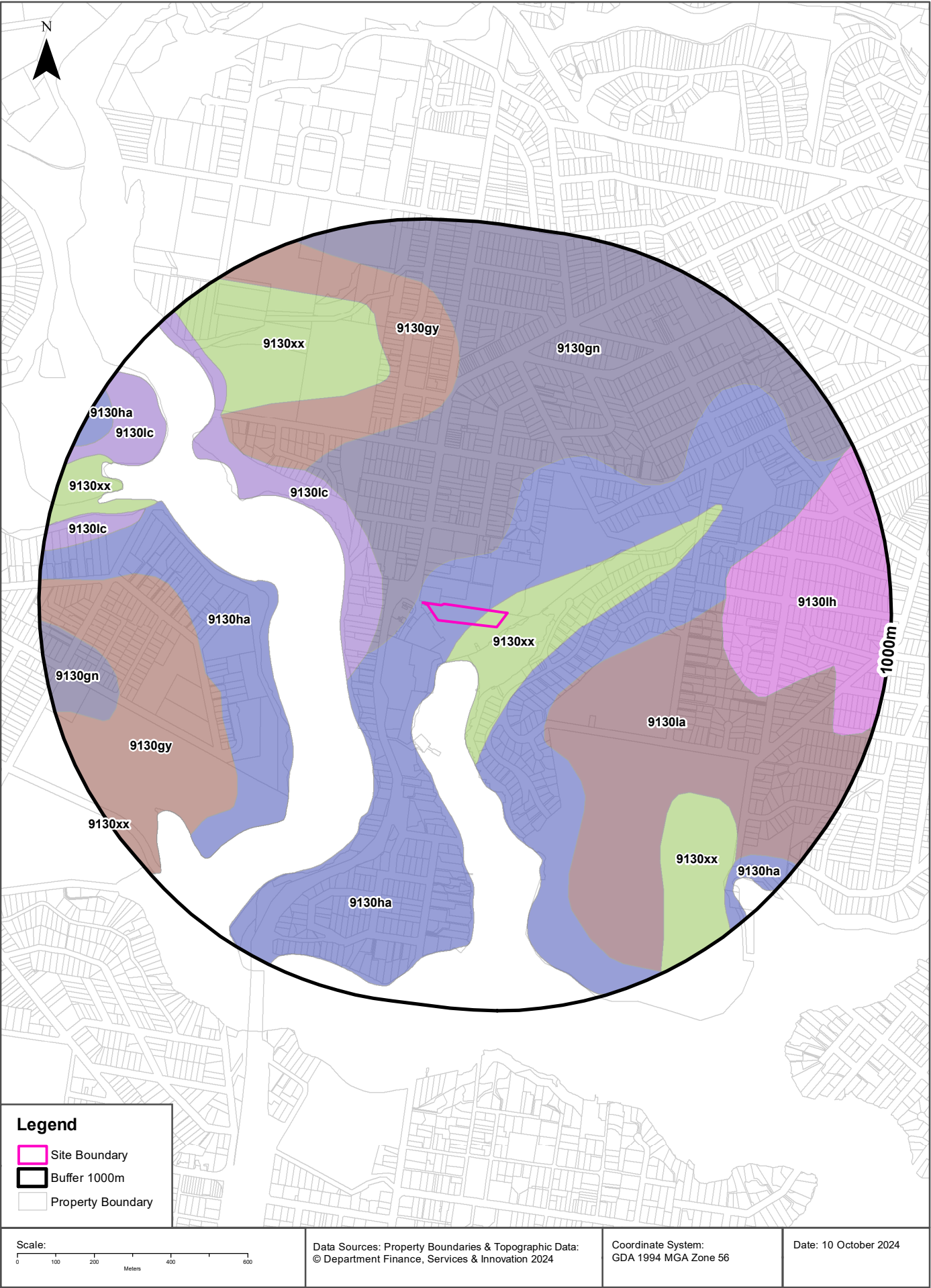
Map Unit Code	Soil Order	Map Unit Description	Distance	Direction
Tb35	Sodosol	Dissected plateau remnants--flat to undulating ridge tops with moderate to steep side slopes: chief soils are hard acidic yellow and yellow mottled soils (Dy3.41), (Dy2.21), and (Dy2.41) and hard acidic red soils (Dr2.21); many shallow profiles occur and profile thickness varies considerably over short distances. Associated are: (Gn3.54), (Gn3.14), and possibly other (Gn3) soils; (Db1.2) soils on some ridges; (Dy5.81) soils in areas transitional to unit Mb2; soils common to unit Mb2; and eroded lateritic remnants. Small areas of other soils are likely. Flat ferruginous shale or sandstone fragments are common on and/or in and/or below the soils of this unit.	0m	On-site
Mb2	Kandosol	Dissected sandstone plateau of moderate to strong relief with sandstone pillars, ledges, and slabs-- level to undulating ridges, irregularly benched slopes, steep ridges, cliffs, canyons, narrow sandy valleys: chief soils are (i) on areas of gentle to moderate relief, acid yellow leached earths (Gn2.74) and (Gn2.34) and acid leached yellow earths (Gn2.24)- sometimes these soils contain ironstone gravel; and (ii) on, or adjacent to, areas of strong relief, siliceous sands (Uc1.2), leached sands (Uc2.12) and (Uc2.2), and shallow forms of the above (Gn2) soils. Associated are: (i) on flat to gently undulating remnants of the original plateau surface, leached sands (Uc2.3), siliceous sands (Uc1.2), sandy earths (Uc5.22), and (Gn2) soils as for (i) above (these areas are in part comparable with unit Cb29); (ii) on flat ironstone gravelly remnants of the original plateau surface, (Gn2) soils as for unit Mb5(i); (iii) on gently undulating ridges where interbedded shales are exposed, shallow, often stony (Dy3.41), (Dr2.21), and related soils similar to unit Tb35; (iv) narrow valleys of (Uc2.3) soils flanked by moderate slopes of (Dy3.41) soils; (v) escarpments of steep hills with shallow (Dy) and (Dr) soils between sandstone pillars; and (vi) shallow (Um) soils, such as (Um6.21) on steep hills of basic rocks. As mapped, minor areas of units Mg20, Mm1, and Mw8 are included. Data are limited.	292m	North East

Atlas of Australian Soils Data Source: CSIRO

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Soil Landscapes of Central and Eastern NSW

300 Burns Bay Road, Lane Cove, NSW 2066



Soils

300 Burns Bay Road, Lane Cove, NSW 2066

Soil Landscapes of Central and Eastern NSW

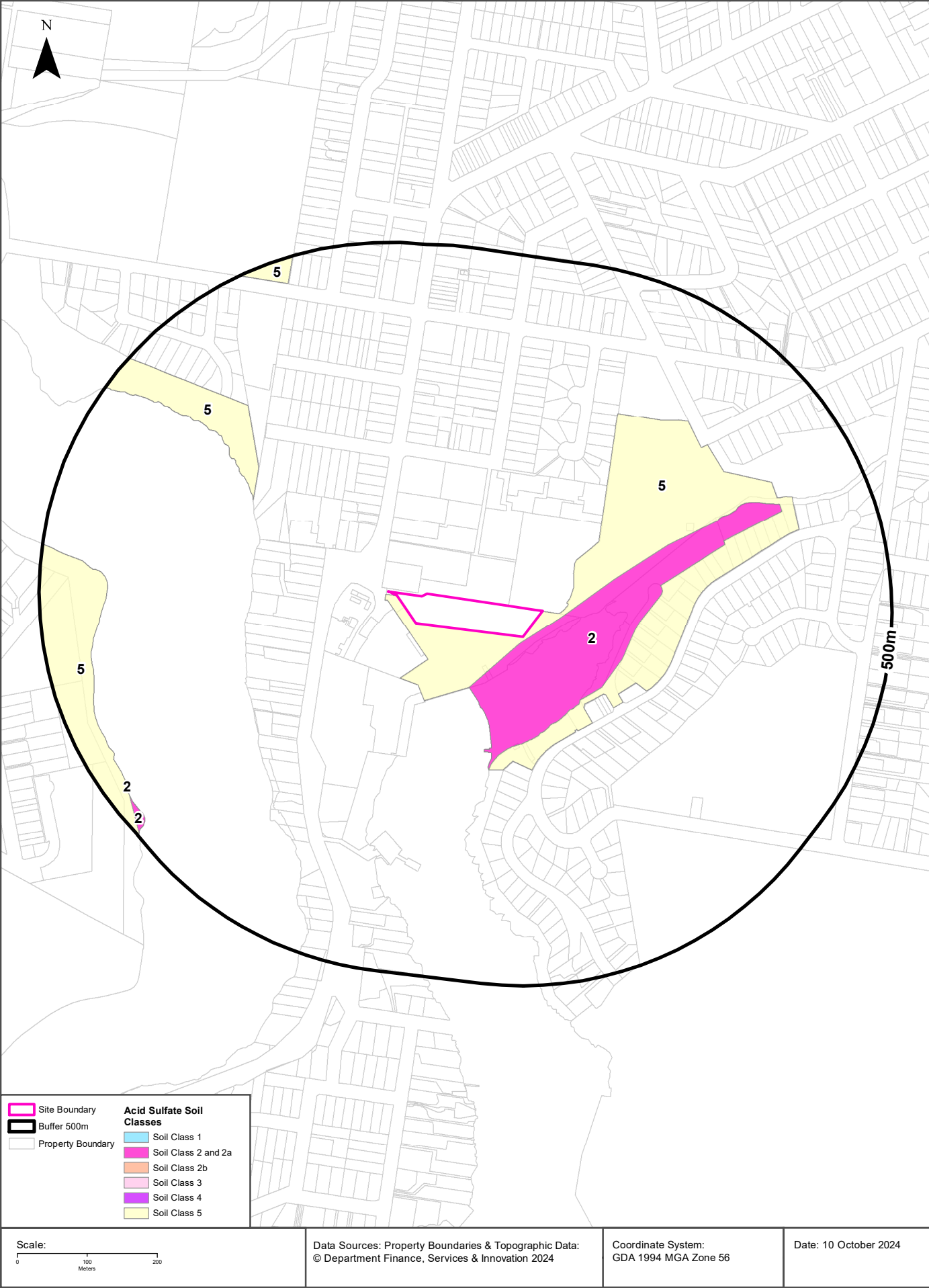
Soil Landscapes of Central and Eastern NSW within the dataset buffer:

Soil Code	Name	Distance	Direction
9130ha	Hawkesbury	0m	On-site
9130xx	Disturbed Terrain	0m	On-site
9130gn	Glenorie	20m	North
9130lc	Lane Cove	105m	North West
9130la	Lambert	236m	South East
9130gy	Gymea	458m	North West
9130lh	Lucas Heights	557m	East

Soil Landscapes of Central and Eastern NSW: NSW Department of Planning, Industry and Environment
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Acid Sulfate Soils

300 Burns Bay Road, Lane Cove, NSW 2066



Acid Sulfate Soils

300 Burns Bay Road, Lane Cove, NSW 2066

Environmental Planning Instrument - Acid Sulfate Soils

What is the on-site Acid Sulfate Soil Plan Class that presents the largest environmental risk?

Soil Class	Description	EPI Name
5	Works within 500 metres of adjacent Class 1, 2, 3, or 4 land that is below 5 metres AHD and by which the watertable is likely to be lowered below 1 metre AHD on adjacent Class 1, 2, 3 or 4 land, present an environmental risk	Lane Cove Local Environmental Plan 2009

If the on-site Soil Class is 5, what other soil classes exist within 500m?

Soil Class	Description	EPI Name	Distance	Direction
2	Works below natural ground surface present an environmental risk; Works by which the watertable is likely to be lowered present an environmental risk	Lane Cove Local Environmental Plan 2009	6m	East
2	Works below natural ground surface present an environmental risk; Works by which the watertable is likely to be lowered present an environmental risk	Hunters Hill Local Environmental Plan 2012	463m	South West

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Atlas of Australian Acid Sulfate Soils

300 Burns Bay Road, Lane Cove, NSW 2066



Acid Sulfate Soils

300 Burns Bay Road, Lane Cove, NSW 2066

Atlas of Australian Acid Sulfate Soils

Atlas of Australian Acid Sulfate Soil categories within the dataset buffer:

Class	Description	Distance	Direction
B	Low Probability of occurrence. 6-70% chance of occurrence.	0m	On-site
A	High Probability of occurrence. >70% chance of occurrence.	93m	South West
C	Extremely low probability of occurrence. 1-5% chance of occurrence with occurrences in small localised areas.	291m	North East

Atlas of Australian Acid Sulfate Soils Data Source: CSIRO

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Dryland Salinity

300 Burns Bay Road, Lane Cove, NSW 2066

Dryland Salinity - National Assessment

Is there Dryland Salinity - National Assessment data onsite?

No

Is there Dryland Salinity - National Assessment data within the dataset buffer?

No

What Dryland Salinity assessments are given?

Assessment 2000	Assessment 2020	Assessment 2050	Distance	Direction
N/A	N/A	N/A		

Dryland Salinity Data Source : National Land and Water Resources Audit

The Commonwealth and all suppliers of source data used to derive the maps of "Australia, Forecast Areas Containing Land of High Hazard or Risk of Dryland Salinity from 2000 to 2050" do not warrant the accuracy or completeness of information in this product. Any person using or relying upon such information does so on the basis that the Commonwealth and data suppliers shall bear no responsibility or liability whatsoever for any errors, faults, defects or omissions in the information. Any persons using this information do so at their own risk.

In many cases where a high risk is indicated, less than 100% of the area will have a high hazard or risk.

Mining

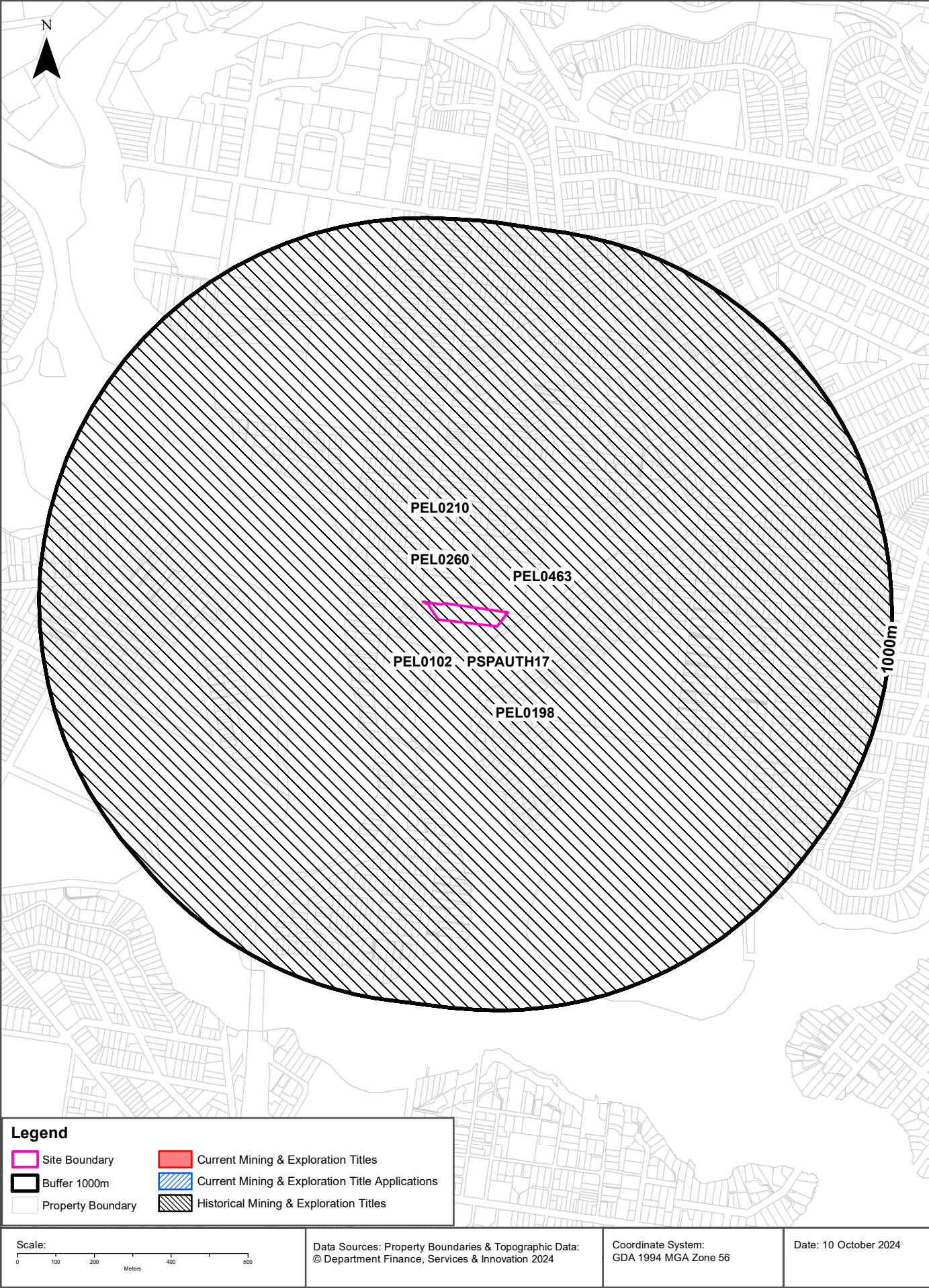
300 Burns Bay Road, Lane Cove, NSW 2066

Mining Subsidence Districts

Mining Subsidence Districts within the dataset buffer:

District	Distance	Direction
There are no Mining Subsidence Districts within the report buffer		

Mining Subsidence District Data Source: © Land and Property Information (2016)
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Mining

300 Burns Bay Road, Lane Cove, NSW 2066

Current Mining & Exploration Titles

Current Mining & Exploration Titles within the dataset buffer:

Title Ref	Holder	Grant Date	Expiry Date	Last Renewed	Operation	Resource	Minerals	Dist	Dir
N/A	No records in buffer								

Current Mining & Exploration Titles Data Source: © State of New South Wales through NSW Department of Industry

Current Mining & Exploration Title Applications

Current Mining & Exploration Title Applications within the dataset buffer:

Application Ref	Applicant	Application Date	Operation	Resource	Minerals	Dist	Dir
N/A	No records in buffer						

Current Mining & Exploration Title Applications Data Source: © State of New South Wales through NSW Department of Industry

Mining

300 Burns Bay Road, Lane Cove, NSW 2066

Historical Mining & Exploration Titles

Historical Mining & Exploration Titles within the dataset buffer:

Title Ref	Holder	Start Date	End Date	Resource	Minerals	Dist	Dir
PEL0198	JOHN STREVS (TERRIGAL) NL			PETROLEUM	Petroleum	0m	On-site
PEL0102	AUSTRALIAN OIL AND GAS CORPORATION LTD			PETROLEUM	Petroleum	0m	On-site
PEL0463	DART ENERGY (APOLLO) PTY LTD	20091010	20150603	PETROLEUM	Petroleum	0m	On-site
PEL0260	NORTH BULLI COLLIERIES PTY LTD, AGL PETROLEUM OPERATIONS PTY LTD, THE AUSTRALIAN GAS LIGHT CO.	19810909	19930803	PETROLEUM	Petroleum	0m	On-site
PSPAUTH17	MACQUARIE ENERGY PTY LTD	20070803	20080703	PETROLEUM	Petroleum	0m	On-site
PEL0210	THE AUSTRALIAN GAS LIGHT COMPANY (AGL), NORTH BULLI COLLIERIES PTY LTD			PETROLEUM	Petroleum	0m	On-site

Historical Mining & Exploration Titles Data Source: © State of New South Wales through NSW Department of Industry

State Environmental Planning Policy

300 Burns Bay Road, Lane Cove, NSW 2066

State Significant Precincts

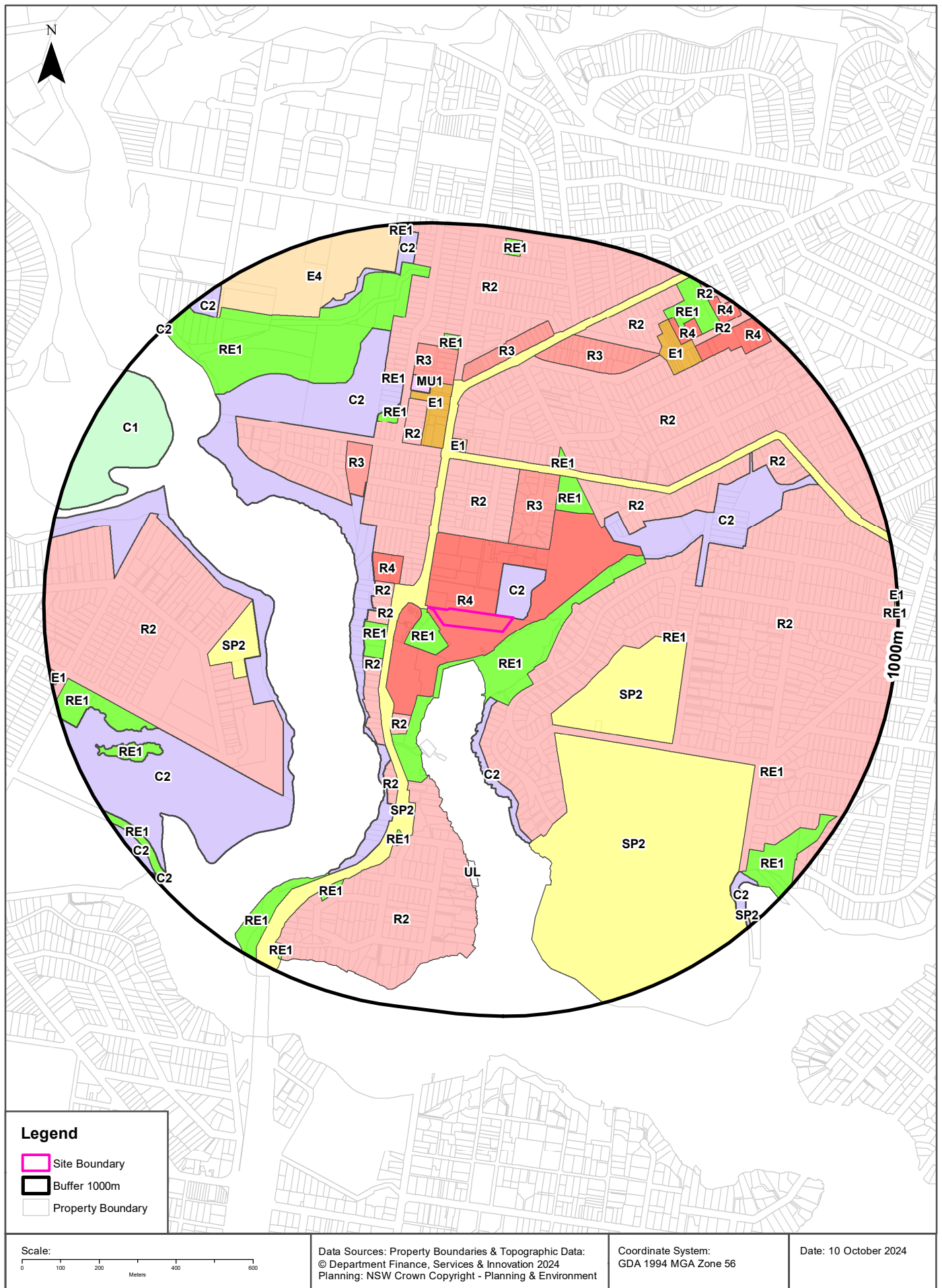
What SEPP State Significant Precincts exist within the dataset buffer?

Map Id	Precinct	EPI Name	Published Date	Commenced Date	Currency Date	Amendment	Distance	Direction
N/A	No records in buffer							

State Environment Planning Policy Data Source: NSW Crown Copyright - Planning & Environment
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EPI Planning Zones

300 Burns Bay Road, Lane Cove, NSW 2066



Environmental Planning Instrument

300 Burns Bay Road, Lane Cove, NSW 2066

Land Zoning

What EPI Land Zones exist within the dataset buffer?

Zone	Description	Purpose	EPI Name	Published Date	Commenced Date	Currency Date	Amendment	Distance	Direction
R4	High Density Residential		Lane Cove Local Environmental Plan 2009	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	0m	On-site
C2	Environmental Conservation		Lane Cove Local Environmental Plan 2009	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	0m	North East
SP2	Infrastructure	Classified Road	Lane Cove Local Environmental Plan 2009	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	4m	West
RE1	Public Recreation		Lane Cove Local Environmental Plan 2009	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	5m	West
RE1	Public Recreation		Lane Cove Local Environmental Plan 2009	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	17m	South East
R2	Low Density Residential		Lane Cove Local Environmental Plan 2009	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	70m	North
R2	Low Density Residential		Lane Cove Local Environmental Plan 2009	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	98m	West
R4	High Density Residential		Lane Cove Local Environmental Plan 2009	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	98m	North West
C2	Environmental Conservation		Lane Cove Local Environmental Plan 2009	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	101m	North West
R2	Low Density Residential		Lane Cove Local Environmental Plan 2009	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	102m	West
RE1	Public Recreation		Lane Cove Local Environmental Plan 2009	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	115m	West
R2	Low Density Residential		Lane Cove Local Environmental Plan 2009	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	122m	East
C2	Environmental Conservation		Lane Cove Local Environmental Plan 2009	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	172m	South
R2	Low Density Residential		Lane Cove Local Environmental Plan 2009	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	180m	South West
R2	Low Density Residential		Lane Cove Local Environmental Plan 2009	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	189m	North
R3	Medium Density Residential		Lane Cove Local Environmental Plan 2009	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	189m	North East
SP2	Infrastructure	Educational Establishment	Lane Cove Local Environmental Plan 2009	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	244m	South East
R2	Low Density Residential		Lane Cove Local Environmental Plan 2009	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	250m	South West
SP2	Infrastructure	Educational Establishment	Lane Cove Local Environmental Plan 2009	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	294m	South East
RE1	Public Recreation		Lane Cove Local Environmental Plan 2009	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	302m	North East

Zone	Description	Purpose	EPI Name	Published Date	Commenced Date	Currency Date	Amendment	Distance	Direction
R2	Low Density Residential		Lane Cove Local Environmental Plan 2009	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	326m	North East
C2	Environmental Conservation		Lane Cove Local Environmental Plan 2009	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	327m	North East
R3	Medium Density Residential		Lane Cove Local Environmental Plan 2009	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	336m	North West
R2	Low Density Residential		Lane Cove Local Environmental Plan 2009	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	377m	South West
R2	Low Density Residential		Lane Cove Local Environmental Plan 2009	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	393m	South
C2	Environmental Conservation		Hunters Hill Local Environmental Plan 2012	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	402m	West
RE1	Public Recreation		Lane Cove Local Environmental Plan 2009	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	405m	East
R2	Low Density Residential		Lane Cove Local Environmental Plan 2009	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	405m	North East
E1	Local Centre		Lane Cove Local Environmental Plan 2009	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	407m	North
RE1	Public Recreation		Lane Cove Local Environmental Plan 2009	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	408m	North East
E1	Local Centre		Lane Cove Local Environmental Plan 2009	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	414m	North
R2	Low Density Residential		Lane Cove Local Environmental Plan 2009	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	422m	North
SP2	Infrastructure	Sewerage System	Hunters Hill Local Environmental Plan 2012	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	451m	West
R2	Low Density Residential		Hunters Hill Local Environmental Plan 2012	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	459m	West
RE1	Public Recreation		Lane Cove Local Environmental Plan 2009	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	485m	North
RE1	Public Recreation		Lane Cove Local Environmental Plan 2009	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	546m	South
MU1	Mixed Use		Lane Cove Local Environmental Plan 2009	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	558m	North
R3	Medium Density Residential		Lane Cove Local Environmental Plan 2009	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	582m	North
RE1	Public Recreation		Lane Cove Local Environmental Plan 2009	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	590m	North
R3	Medium Density Residential		Lane Cove Local Environmental Plan 2009	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	592m	North
UL	Unzoned Land		Lane Cove Local Environmental Plan 2009	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	602m	South
RE1	Public Recreation		Lane Cove Local Environmental Plan 2009	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	625m	North West
R3	Medium Density Residential		Lane Cove Local Environmental Plan 2009	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	671m	North East
RE1	Public Recreation		Lane Cove Local Environmental Plan 2009	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	673m	North

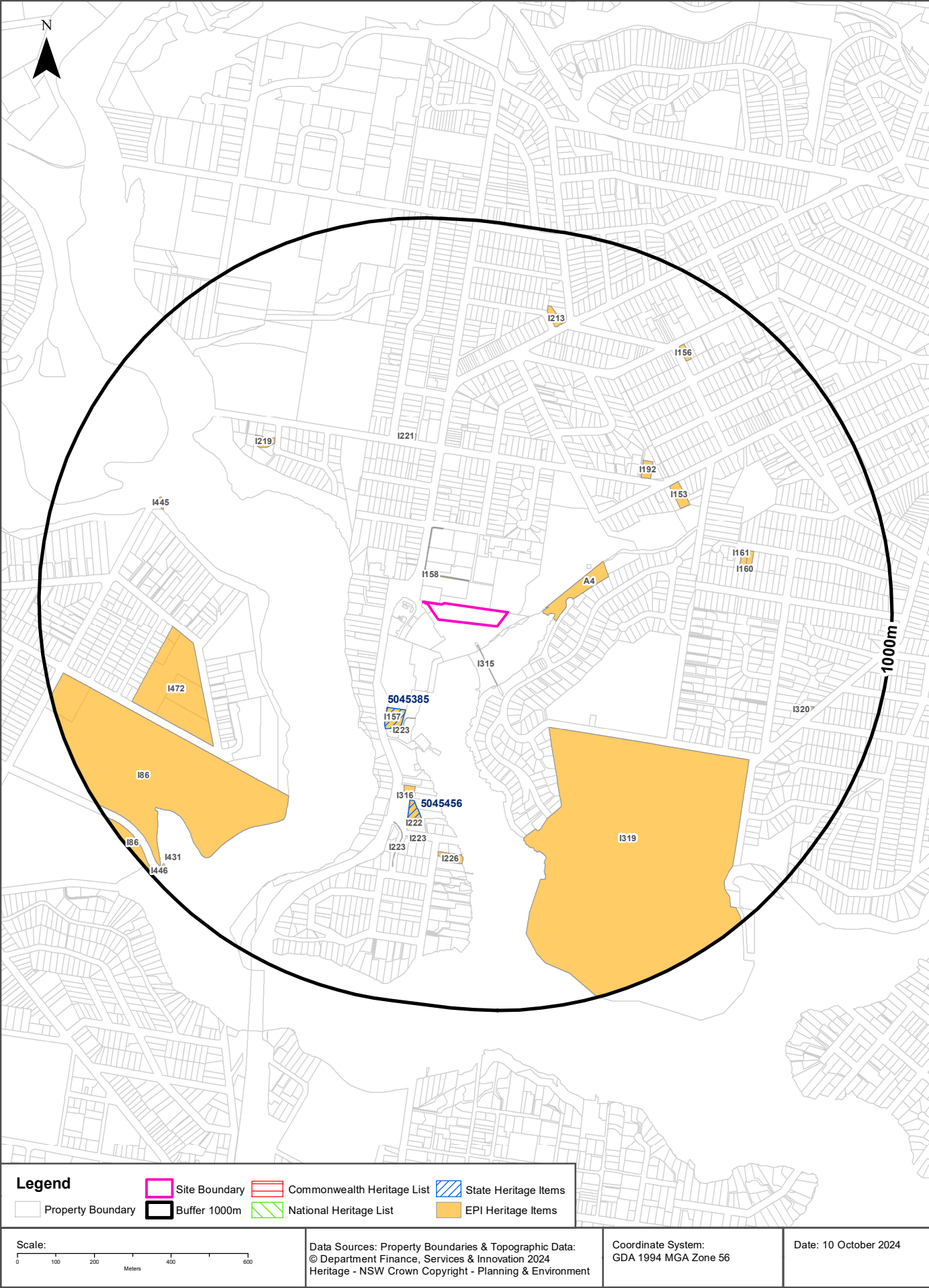
Zone	Description	Purpose	EPI Name	Published Date	Commenced Date	Currency Date	Amendment	Distance	Direction
RE1	Public Recreation		Lane Cove Local Environmental Plan 2009	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	711m	South West
RE1	Public Recreation		Lane Cove Local Environmental Plan 2009	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	712m	South West
R2	Low Density Residential		Lane Cove Local Environmental Plan 2009	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	728m	North East
R2	Low Density Residential		Lane Cove Local Environmental Plan 2009	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	752m	North East
E1	Local Centre		Lane Cove Local Environmental Plan 2009	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	756m	North East
RE1	Public Recreation		Lane Cove Local Environmental Plan 2009	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	759m	South East
RE1	Public Recreation		Hunters Hill Local Environmental Plan 2012	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	769m	West
RE1	Public Recreation		Hunters Hill Local Environmental Plan 2012	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	785m	West
C1	National Parks and Nature Reserves		Ryde Local Environmental Plan 2014	21/04/2023	26/04/2023	19/07/2024	Map Amendment No 2	793m	North West
E4	General Industrial		Lane Cove Local Environmental Plan 2009	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	808m	North West
C2	Environmental Conservation		Lane Cove Local Environmental Plan 2009	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	819m	North
R4	High Density Residential		Lane Cove Local Environmental Plan 2009	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	829m	North East
R4	High Density Residential		Lane Cove Local Environmental Plan 2009	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	833m	North East
RE1	Public Recreation		Lane Cove Local Environmental Plan 2009	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	854m	South East
RE1	Public Recreation		Lane Cove Local Environmental Plan 2009	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	866m	North East
C2	Environmental Conservation		Lane Cove Local Environmental Plan 2009	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	873m	South East
RE1	Public Recreation		Lane Cove Local Environmental Plan 2009	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	930m	South West
RE1	Public Recreation		Lane Cove Local Environmental Plan 2009	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	932m	North
R4	High Density Residential		Lane Cove Local Environmental Plan 2009	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	934m	North East
C2	Environmental Conservation		Lane Cove Local Environmental Plan 2009	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	934m	North West
RE1	Public Recreation		Hunters Hill Local Environmental Plan 2012	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	950m	South West
C2	Environmental Conservation		Hunters Hill Local Environmental Plan 2012	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	970m	South West
E1	Local Centre		Hunters Hill Local Environmental Plan 2012	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	974m	West
C2	Environmental Conservation		Hunters Hill Local Environmental Plan 2012	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	976m	South West

Zone	Description	Purpose	EPI Name	Published Date	Commenced Date	Currency Date	Amendment	Distance	Direction
RE1	Public Recreation		Lane Cove Local Environmental Plan 2009	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	980m	North
RE1	Public Recreation		Lane Cove Local Environmental Plan 2009	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	989m	East
E1	Local Centre		Lane Cove Local Environmental Plan 2009	14/04/2023	26/04/2023	26/04/2023	Map Amendment No 1	989m	East

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Heritage Items

300 Burns Bay Road, Lane Cove, NSW 2066



Heritage

300 Burns Bay Road, Lane Cove, NSW 2066

Commonwealth Heritage List

What are the Commonwealth Heritage List Items located within the dataset buffer?

Place Id	Name	Address	Place File No	Class	Status	Register Date	Distance	Direction
N/A	No records in buffer							

Heritage Data Source: Australian Government Department of the Environment and Energy - Heritage Branch
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National Heritage List

What are the National Heritage List Items located within the dataset buffer?

Note. Please click on Place Id to activate a hyperlink to online website.

Place Id	Name	Address	Place File No	Class	Status	Register Date	Distance	Direction
N/A	No records in buffer							

Heritage Data Source: Australian Government Department of the Environment and Energy - Heritage Branch
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State Heritage Register - Curtilages

What are the State Heritage Register Items located within the dataset buffer?

Map Id	Name	Address	LGA	Listing Date	Listing No	Plan No	Distance	Direction
5045385	Carisbrook	334 Burns Bay Road Lane Cove	LANE COVE	02/04/1999	00112	312	250m	South West
5045456	Linley	360 Burns Bay Road Linley Point	LANE COVE	02/04/1999	00350	835	476m	South

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Environmental Planning Instrument - Heritage

What are the EPI Heritage Items located within the dataset buffer?

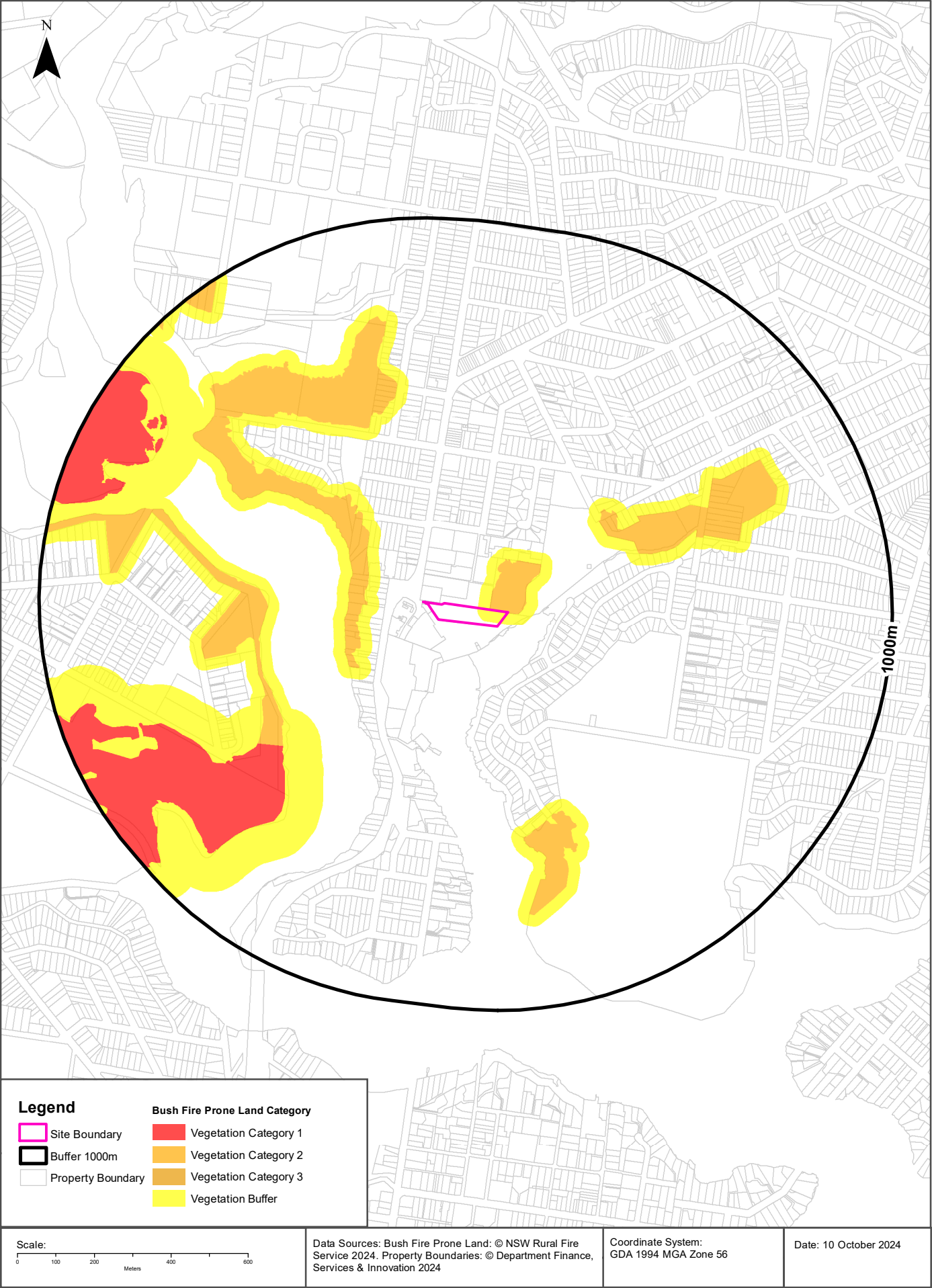
Map Id	Name	Classification	Significance	EPI Name	Published Date	Commenced Date	Currency Date	Distance	Direction
I315	Burns Bay Reserve Sewage Aqueduct (SHR 01319), Bridge Street	Item - General	Local	Lane Cove Local Environmental Plan 2009	19/02/2010	19/02/2010	15/12/2017	55m	South

Map Id	Name	Classification	Significance	EPI Name	Published Date	Commenced Date	Currency Date	Distance	Direction
I158	Stone walls to road frontages, 274 and 278 Burns Bay Road and 40A Cope Street	Item - General	Local	Lane Cove Local Environmental Plan 2009	19/02/2010	19/02/2010	15/12/2017	66m	North West
A4	Radke & Pioneer Tanneries, Burns Bay Reserve, Burns Bay Reserve	Item - Archaeological	Local	Lane Cove Local Environmental Plan 2009	19/02/2010	19/02/2010	15/12/2017	90m	East
I157	Carisbrook, 334 Burns Bay Road	Item - General	State	Lane Cove Local Environmental Plan 2009	19/02/2010	19/02/2010	15/12/2017	250m	South West
I223	Streetscape elements (stone steps, garden bed remnants and rocky outcrop), View Street and Burns Ba*	Item - General	Local	Lane Cove Local Environmental Plan 2009	19/02/2010	19/02/2010	15/12/2017	264m	South West
I319	St. Ignatius College, headland, 2/68 Riverview Street	Item - General	Local	Lane Cove Local Environmental Plan 2009	19/02/2010	19/02/2010	15/12/2017	294m	South East
I221	The Oaks, 1 Wood Street	Item - General	Local	Lane Cove Local Environmental Plan 2009	19/02/2010	19/02/2010	15/12/2017	422m	North
I316	Coralynn, 356C Burns Bay Road	Item - General	Local	Lane Cove Local Environmental Plan 2009	19/02/2010	19/02/2010	15/12/2017	439m	South
I222	Linley, formerly Grenaby, 360 Burns Bay Road	Item - General	State	Lane Cove Local Environmental Plan 2009	19/02/2010	19/02/2010	15/12/2017	476m	South
I192	Woodlands, 1 Penrose Street	Item - General	Local	Lane Cove Local Environmental Plan 2009	19/02/2010	19/02/2010	15/12/2017	493m	North East
I153	House, 72 Bridge Street	Item - General	Local	Lane Cove Local Environmental Plan 2009	19/02/2010	19/02/2010	15/12/2017	524m	North East
I223	Streetscape elements (stone steps, garden bed remnants and rocky outcrop), View Street and Burns Ba*	Item - Landscape	Local	Lane Cove Local Environmental Plan 2009	19/02/2010	19/02/2010	15/12/2017	540m	South
I219	Lane Cove House, 38 Myee Crescent	Item - General	Local	Lane Cove Local Environmental Plan 2009	19/02/2010	19/02/2010	15/12/2017	566m	North West
I223	Streetscape elements (stone steps, garden bed remnants and rocky outcrop), View Street and Burns Ba*	Item - General	Local	Lane Cove Local Environmental Plan 2009	19/02/2010	19/02/2010	15/12/2017	570m	South
I226	Rockcliffe, 4 Brooks Street	Item - General	Local	Lane Cove Local Environmental Plan 2009	19/02/2010	19/02/2010	15/12/2017	600m	South
I86	Boronia Park	Item - General	Local	Hunters Hill Local Environmental Plan 2012	01/02/2013	12/08/2013	20/11/2015	603m	South West
I472	Garden, 'Montefiore Home'	Item - General	Local	Hunters Hill Local Environmental Plan 2012	01/02/2013	12/08/2013	20/11/2015	608m	West
I161	House, 50 Hamilton Street	Item - General	Local	Lane Cove Local Environmental Plan 2009	19/02/2010	19/02/2010	15/12/2017	612m	East
I160	House, 48 Hamilton Street	Item - General	Local	Lane Cove Local Environmental Plan 2009	19/02/2010	19/02/2010	15/12/2017	626m	East
I445		Item - General	Local	Hunters Hill Local Environmental Plan 2012	01/02/2013	12/08/2013	20/11/2015	719m	West

Map Id	Name	Classification	Significance	EPI Name	Published Date	Commenced Date	Currency Date	Distance	Direction
I213	House, 125 Centennial Avenue	Item - General	Local	Lane Cove Local Environmental Plan 2009	19/02/2010	19/02/2010	15/12/2017	754m	North
I320	House - 99 Tambourine Bay Road	Item - General	Local	Lane Cove Local Environmental Plan 2009	19/02/2010	19/02/2010	15/12/2017	780m	East
I156	Retail building and house to the rear, 148 Burns Bay Road	Item - General	Local	Lane Cove Local Environmental Plan 2009	19/02/2010	19/02/2010	15/12/2017	802m	North East
I431		Item - General	Local	Hunters Hill Local Environmental Plan 2012	01/02/2013	12/08/2013	20/11/2015	956m	South West
I446	Wharf site	Item - General	Local	Hunters Hill Local Environmental Plan 2012	01/02/2013	12/08/2013	20/11/2015	968m	South West
I86	Boronia Park	Item - General	Local	Hunters Hill Local Environmental Plan 2012	01/02/2013	12/08/2013	20/11/2015	970m	South West

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Natural Hazards

300 Burns Bay Road, Lane Cove, NSW 2066

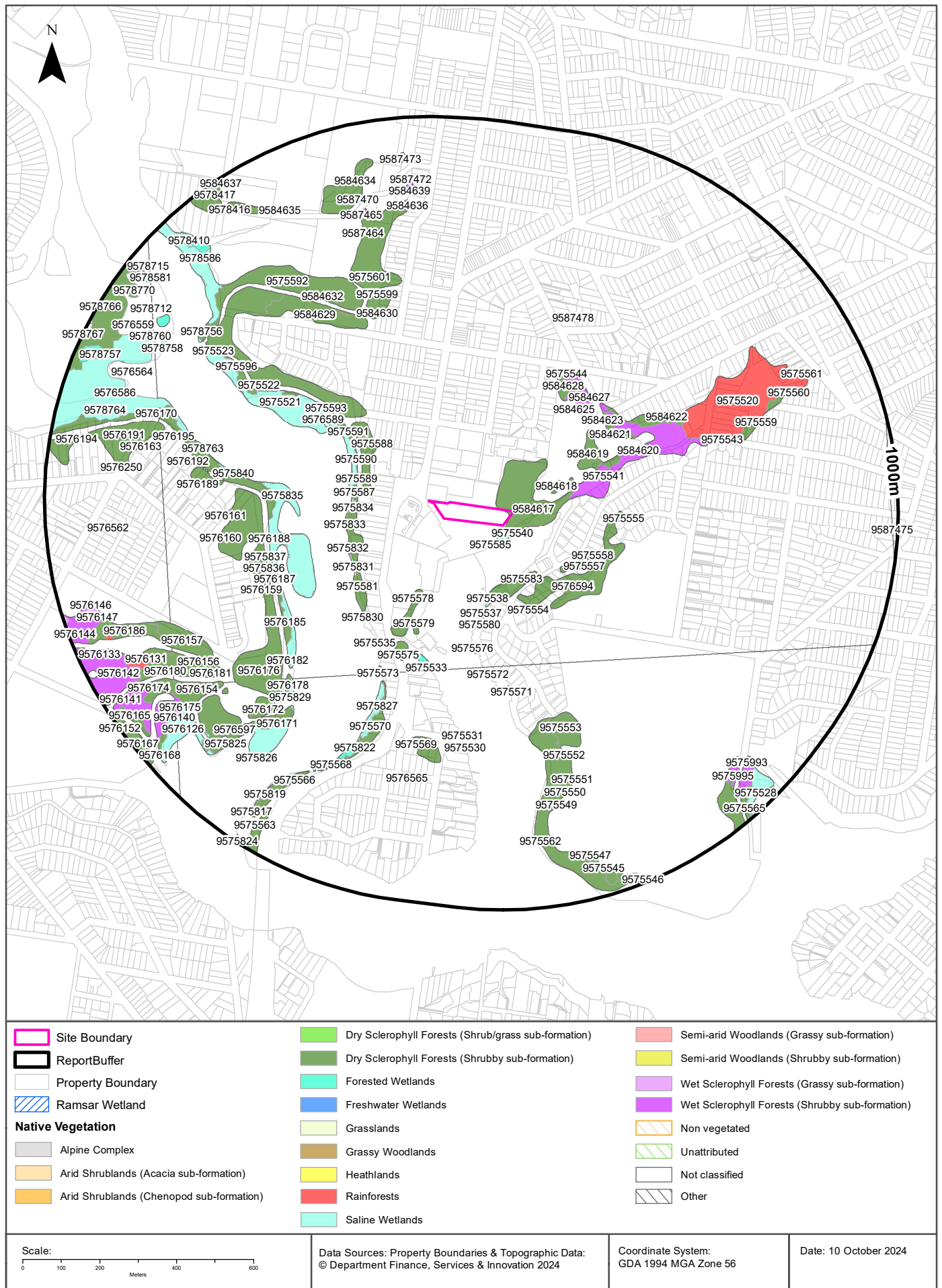
Bush Fire Prone Land

What are the nearest Bush Fire Prone Land Categories that exist within the dataset buffer?

Bush Fire Prone Land Category	Distance	Direction
Vegetation Category 2	0m	On-site
Vegetation Buffer	0m	On-site
Vegetation Category 1	522m	South West

NSW Bush Fire Prone Land - © NSW Rural Fire Service under Creative Commons 4.0 International Licence

300 Burns Bay Road, Lane Cove, NSW 2066



Ecological Constraints

300 Burns Bay Road, Lane Cove, NSW 2066

Native Vegetation

What native vegetation exists within the dataset buffer?

Map ID	Vegetation Formation	Plant Community Type and Vegetation Formation	Vegetation Class	Dist	Dir
9584617	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Enriched Sandstone Forest	Sydney Coastal Dry Sclerophyll Forests	0m	On-site
9587478	Not classified	(Not classified) Not classified	Not classified	0m	On-site
9575540	Saline Wetlands	(Saline Wetlands) Grey Mangrove-River Mangrove Forest	Mangrove Swamps	10m	South East
9575586	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	45m	South East
9575585	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	50m	South East
9584618	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Enriched Sandstone Forest	Sydney Coastal Dry Sclerophyll Forests	109m	East
9575583	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	135m	South East
9575541	Wet Sclerophyll Forests (Shrubby sub-formation)	(Wet Sclerophyll Forests (Shrubby sub-formation)) Sydney Enriched Sandstone Moist Forest	North Coast Wet Sclerophyll Forests	148m	East
9575588	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	159m	North West
9575555	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Enriched Sandstone Forest	Sydney Coastal Dry Sclerophyll Forests	169m	South East
9575539	Saline Wetlands	(Saline Wetlands) Grey Mangrove-River Mangrove Forest	Mangrove Swamps	181m	South
9575538	Saline Wetlands	(Saline Wetlands) Grey Mangrove-River Mangrove Forest	Mangrove Swamps	183m	South
9575556	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Enriched Sandstone Forest	Sydney Coastal Dry Sclerophyll Forests	184m	South East
9575584	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	184m	South East
9575587	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	186m	West
9575834	Saline Wetlands	(Saline Wetlands) Grey Mangrove-River Mangrove Forest	Mangrove Swamps	188m	West
9575581	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	189m	West
9575521	Saline Wetlands	(Saline Wetlands) Grey Mangrove-River Mangrove Forest	Mangrove Swamps	195m	North West
9575578	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	195m	South West
9575589	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	197m	West
9575557	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Enriched Sandstone Forest	Sydney Coastal Dry Sclerophyll Forests	198m	South East
9584619	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Enriched Sandstone Forest	Sydney Coastal Dry Sclerophyll Forests	202m	North East

Map ID	Vegetation Formation	Plant Community Type and Vegetation Formation	Vegetation Class	Dist	Dir
9575590	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	203m	North West
9575582	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	214m	South
9575580	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	217m	South
9575833	Saline Wetlands	(Saline Wetlands) Grey Mangrove-River Mangrove Forest	Mangrove Swamps	217m	West
9575537	Saline Wetlands	(Saline Wetlands) Grey Mangrove-River Mangrove Forest	Mangrove Swamps	221m	South
9575554	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Enriched Sandstone Forest	Sydney Coastal Dry Sclerophyll Forests	226m	South East
9575558	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Enriched Sandstone Forest	Sydney Coastal Dry Sclerophyll Forests	231m	East
9576594	Not classified	(Not classified) Not classified	Not classified	232m	South East
9575832	Saline Wetlands	(Saline Wetlands) Grey Mangrove-River Mangrove Forest	Mangrove Swamps	239m	West
9575591	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	246m	North West
9575831	Saline Wetlands	(Saline Wetlands) Grey Mangrove-River Mangrove Forest	Mangrove Swamps	251m	West
9575579	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	274m	South West
9575592	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	280m	North West
9584625	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Enriched Sandstone Forest	Sydney Coastal Dry Sclerophyll Forests	304m	North East
9575534	Saline Wetlands	(Saline Wetlands) Grey Mangrove-River Mangrove Forest	Mangrove Swamps	306m	South West
9575544	Wet Sclerophyll Forests (Shrubby sub-formation)	(Wet Sclerophyll Forests (Shrubby sub-formation)) Sydney Enriched Sandstone Moist Forest	North Coast Wet Sclerophyll Forests	309m	North East
9584621	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Enriched Sandstone Forest	Sydney Coastal Dry Sclerophyll Forests	309m	North East
9584628	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Enriched Sandstone Forest	Sydney Coastal Dry Sclerophyll Forests	316m	North East
9575576	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	317m	South
9576589	Not classified	(Not classified) Not classified	Not classified	324m	North West
9584623	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Enriched Sandstone Forest	Sydney Coastal Dry Sclerophyll Forests	328m	North East
9575830	Saline Wetlands	(Saline Wetlands) Grey Mangrove-River Mangrove Forest	Mangrove Swamps	329m	South West
9575835	Saline Wetlands	(Saline Wetlands) Grey Mangrove-River Mangrove Forest	Mangrove Swamps	329m	West
9575575	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	338m	South West
9575593	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	346m	North West
9584627	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Enriched Sandstone Forest	Sydney Coastal Dry Sclerophyll Forests	350m	North East
9584620	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Enriched Sandstone Forest	Sydney Coastal Dry Sclerophyll Forests	353m	East

Map ID	Vegetation Formation	Plant Community Type and Vegetation Formation	Vegetation Class	Dist	Dir
9584624	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Enriched Sandstone Forest	Sydney Coastal Dry Sclerophyll Forests	357m	North East
9575525	Forested Wetlands	(Forested Wetlands) Estuarine Swamp Oak Twig-rush Forest	Coastal Floodplain Wetlands	359m	South
9575577	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	360m	South West
9575535	Saline Wetlands	(Saline Wetlands) Grey Mangrove-River Mangrove Forest	Mangrove Swamps	361m	South West
9584626	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Enriched Sandstone Forest	Sydney Coastal Dry Sclerophyll Forests	365m	North East
9576565	Not classified	(Not classified) Not classified	Not classified	366m	South
9575533	Saline Wetlands	(Saline Wetlands) Grey Mangrove-River Mangrove Forest	Mangrove Swamps	371m	South
9584622	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Enriched Sandstone Forest	Sydney Coastal Dry Sclerophyll Forests	374m	North East
9575572	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	381m	South
9575574	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	381m	South
9575532	Saline Wetlands	(Saline Wetlands) Grey Mangrove-River Mangrove Forest	Mangrove Swamps	392m	South
9576170	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	399m	West
9575594	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	404m	North West
9575571	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	417m	South
9575536	Saline Wetlands	(Saline Wetlands) Grey Mangrove-River Mangrove Forest	Mangrove Swamps	419m	South West
9575573	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	419m	South West
9576188	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	427m	West
9576176	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	436m	West
9575595	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	437m	North West
9576187	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	446m	West
9575838	Saline Wetlands	(Saline Wetlands) Grey Mangrove-River Mangrove Forest	Mangrove Swamps	448m	West
9575837	Saline Wetlands	(Saline Wetlands) Grey Mangrove-River Mangrove Forest	Mangrove Swamps	449m	West
9575836	Saline Wetlands	(Saline Wetlands) Grey Mangrove-River Mangrove Forest	Mangrove Swamps	451m	West
9575570	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	452m	South West
9576185	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	455m	South West
9575827	Saline Wetlands	(Saline Wetlands) Grey Mangrove-River Mangrove Forest	Mangrove Swamps	456m	South West
9575839	Saline Wetlands	(Saline Wetlands) Grey Mangrove-River Mangrove Forest	Mangrove Swamps	463m	West
9575520	Rainforests	(Rainforests) Sydney Coastal Foreshores Gully Rainforest	Northern Warm Temperate Rainforests	477m	North East

Map ID	Vegetation Formation	Plant Community Type and Vegetation Formation	Vegetation Class	Dist	Dir
9584629	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Enriched Sandstone Forest	Sydney Coastal Dry Sclerophyll Forests	477m	North West
9575524	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Enriched Sandstone Forest	Sydney Coastal Dry Sclerophyll Forests	478m	North East
9576159	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Enriched Sandstone Forest	Sydney Coastal Dry Sclerophyll Forests	480m	West
9575597	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	488m	North West
9575840	Saline Wetlands	(Saline Wetlands) Grey Mangrove-River Mangrove Forest	Mangrove Swamps	493m	West
9584630	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Enriched Sandstone Forest	Sydney Coastal Dry Sclerophyll Forests	493m	North West
9575553	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Enriched Sandstone Forest	Sydney Coastal Dry Sclerophyll Forests	510m	South East
9575599	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	512m	North West
9575562	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	514m	South
9575598	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	525m	North West
9576161	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Enriched Sandstone Forest	Sydney Coastal Dry Sclerophyll Forests	526m	West
9575596	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	527m	North West
9575522	Saline Wetlands	(Saline Wetlands) Grey Mangrove-River Mangrove Forest	Mangrove Swamps	531m	North West
9584631	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Enriched Sandstone Forest	Sydney Coastal Dry Sclerophyll Forests	533m	North West
9576189	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	537m	West
9575841	Saline Wetlands	(Saline Wetlands) Grey Mangrove-River Mangrove Forest	Mangrove Swamps	538m	West
9576160	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Enriched Sandstone Forest	Sydney Coastal Dry Sclerophyll Forests	538m	West
9576606	Not classified	(Not classified) Not classified	Not classified	538m	West
9576182	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	545m	South West
9575531	Saline Wetlands	(Saline Wetlands) Grey Mangrove-River Mangrove Forest	Mangrove Swamps	551m	South
9576592	Not classified	(Not classified) Not classified	Not classified	559m	West
9584632	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Enriched Sandstone Forest	Sydney Coastal Dry Sclerophyll Forests	561m	North West
9575601	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	568m	North
9575543	Wet Sclerophyll Forests (Shrubby sub-formation)	(Wet Sclerophyll Forests (Shrubby sub-formation)) Sydney Enriched Sandstone Moist Forest	North Coast Wet Sclerophyll Forests	570m	East
9575569	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	571m	South
9576178	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	571m	South West

Map ID	Vegetation Formation	Plant Community Type and Vegetation Formation	Vegetation Class	Dist	Dir
9575829	Saline Wetlands	(Saline Wetlands) Grey Mangrove-River Mangrove Forest	Mangrove Swamps	573m	South West
9575530	Saline Wetlands	(Saline Wetlands) Grey Mangrove-River Mangrove Forest	Mangrove Swamps	580m	South
9576601	Not classified	(Not classified) Not classified	Not classified	582m	West
9578763	Saline Wetlands	(Saline Wetlands) Grey Mangrove-River Mangrove Forest	Mangrove Swamps	584m	West
9576595	Not classified	(Not classified) Not classified	Not classified	587m	West
9575542	Wet Sclerophyll Forests (Shrubby sub-formation)	(Wet Sclerophyll Forests (Shrubby sub-formation)) Sydney Enriched Sandstone Moist Forest	North Coast Wet Sclerophyll Forests	590m	East
9576162	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Enriched Sandstone Forest	Sydney Coastal Dry Sclerophyll Forests	591m	West
9575559	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Enriched Sandstone Forest	Sydney Coastal Dry Sclerophyll Forests	592m	East
9575552	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Enriched Sandstone Forest	Sydney Coastal Dry Sclerophyll Forests	599m	South
9576192	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	621m	West
9575828	Saline Wetlands	(Saline Wetlands) Grey Mangrove-River Mangrove Forest	Mangrove Swamps	627m	South West
9584633	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Enriched Sandstone Forest	Sydney Coastal Dry Sclerophyll Forests	629m	North West
9575600	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	633m	North West
9576171	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	633m	South West
9575822	Forested Wetlands	(Forested Wetlands) Estuarine Swamp Oak Twig-rush Forest	Coastal Floodplain Wetlands	634m	South West
9578764	Saline Wetlands	(Saline Wetlands) Grey Mangrove-River Mangrove Forest	Mangrove Swamps	643m	West
9576172	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	651m	South West
9575826	Saline Wetlands	(Saline Wetlands) Grey Mangrove-River Mangrove Forest	Mangrove Swamps	652m	South West
9575523	Saline Wetlands	(Saline Wetlands) Grey Mangrove-River Mangrove Forest	Mangrove Swamps	671m	North West
9575551	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Enriched Sandstone Forest	Sydney Coastal Dry Sclerophyll Forests	679m	South
9576164	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Enriched Sandstone Forest	Sydney Coastal Dry Sclerophyll Forests	682m	West
9576195	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	682m	West
9576157	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Enriched Sandstone Forest	Sydney Coastal Dry Sclerophyll Forests	686m	South West
9576156	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Enriched Sandstone Forest	Sydney Coastal Dry Sclerophyll Forests	688m	South West
9576562	Not classified	(Not classified) Not classified	Not classified	690m	West
9575560	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Enriched Sandstone Forest	Sydney Coastal Dry Sclerophyll Forests	697m	East
9575568	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	699m	South West
9576181	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	700m	South West

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9575550	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Enriched Sandstone Forest	Sydney Coastal Dry Sclerophyll Forests	701m	South
9578796	Not classified	(Not classified) Not classified	Not classified	709m	North West
9578797	Not classified	(Not classified) Not classified	Not classified	710m	North West
9576191	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	713m	West
9578795	Not classified	(Not classified) Not classified	Not classified	714m	North West
9578800	Not classified	(Not classified) Not classified	Not classified	714m	North West
9578802	Not classified	(Not classified) Not classified	Not classified	714m	North West
9576174	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	715m	South West
9587464	Wet Sclerophyll Forests (Shrubby sub-formation)	(Wet Sclerophyll Forests (Shrubby sub-formation)) Sydney Enriched Sandstone Moist Forest	North Coast Wet Sclerophyll Forests	716m	North
9576179	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	717m	South West
9578755	Saline Wetlands	(Saline Wetlands) Grey Mangrove-River Mangrove Forest	Mangrove Swamps	721m	North West
9578586	Saline Wetlands	(Saline Wetlands) Grey Mangrove-River Mangrove Forest	Mangrove Swamps	726m	North West
9575549	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Enriched Sandstone Forest	Sydney Coastal Dry Sclerophyll Forests	730m	South
9575567	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	735m	South West
9578756	Saline Wetlands	(Saline Wetlands) Grey Mangrove-River Mangrove Forest	Mangrove Swamps	736m	North West
9575566	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	746m	South West
9587465	Wet Sclerophyll Forests (Shrubby sub-formation)	(Wet Sclerophyll Forests (Shrubby sub-formation)) Sydney Enriched Sandstone Moist Forest	North Coast Wet Sclerophyll Forests	750m	North
9576180	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	756m	South West
9576564	Not classified	(Not classified) Not classified	Not classified	756m	West
9576163	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Enriched Sandstone Forest	Sydney Coastal Dry Sclerophyll Forests	757m	West
9576603	Not classified	(Not classified) Not classified	Not classified	758m	South West
9584636	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Enriched Sandstone Forest	Sydney Coastal Dry Sclerophyll Forests	759m	North
9576154	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Enriched Sandstone Forest	Sydney Coastal Dry Sclerophyll Forests	760m	South West
9576597	Not classified	(Not classified) Not classified	Not classified	769m	South West
9576158	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Enriched Sandstone Forest	Sydney Coastal Dry Sclerophyll Forests	772m	South West
9576186	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	775m	West
9587468	Wet Sclerophyll Forests (Shrubby sub-formation)	(Wet Sclerophyll Forests (Shrubby sub-formation)) Sydney Enriched Sandstone Moist Forest	North Coast Wet Sclerophyll Forests	775m	North

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9584634	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Enriched Sandstone Forest	Sydney Coastal Dry Sclerophyll Forests	780m	North
9587466	Wet Sclerophyll Forests (Shrubby sub-formation)	(Wet Sclerophyll Forests (Shrubby sub-formation)) Sydney Enriched Sandstone Moist Forest	North Coast Wet Sclerophyll Forests	780m	North West
9587467	Wet Sclerophyll Forests (Shrubby sub-formation)	(Wet Sclerophyll Forests (Shrubby sub-formation)) Sydney Enriched Sandstone Moist Forest	North Coast Wet Sclerophyll Forests	781m	North West
9578412	Rainforests	(Rainforests) Sydney Coastal Lilly Pilly-Palm Gallery Rainforest	Northern Warm Temperate Rainforests	794m	North West
9578758	Forested Wetlands	(Forested Wetlands) Estuarine Swamp Oak Twig-rush Forest	Coastal Floodplain Wetlands	794m	North West
9587469	Wet Sclerophyll Forests (Shrubby sub-formation)	(Wet Sclerophyll Forests (Shrubby sub-formation)) Sydney Enriched Sandstone Moist Forest	North Coast Wet Sclerophyll Forests	800m	North
9576250	Wet Sclerophyll Forests (Grassy sub-formation)	(Wet Sclerophyll Forests (Grassy sub-formation)) Sydney Turpentine Ironbark Forest	Northern Hinterland Wet Sclerophyll Forests	801m	West
9576155	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Enriched Sandstone Forest	Sydney Coastal Dry Sclerophyll Forests	802m	South West
9584639	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Enriched Sandstone Forest	Sydney Coastal Dry Sclerophyll Forests	802m	North
9587472	Wet Sclerophyll Forests (Shrubby sub-formation)	(Wet Sclerophyll Forests (Shrubby sub-formation)) Sydney Enriched Sandstone Moist Forest	North Coast Wet Sclerophyll Forests	802m	North
9587470	Wet Sclerophyll Forests (Shrubby sub-formation)	(Wet Sclerophyll Forests (Shrubby sub-formation)) Sydney Enriched Sandstone Moist Forest	North Coast Wet Sclerophyll Forests	804m	North
9575825	Saline Wetlands	(Saline Wetlands) Grey Mangrove-River Mangrove Forest	Mangrove Swamps	805m	South West
9587471	Wet Sclerophyll Forests (Shrubby sub-formation)	(Wet Sclerophyll Forests (Shrubby sub-formation)) Sydney Enriched Sandstone Moist Forest	North Coast Wet Sclerophyll Forests	808m	North
9575821	Forested Wetlands	(Forested Wetlands) Estuarine Swamp Oak Twig-rush Forest	Coastal Floodplain Wetlands	815m	South West
9578759	Forested Wetlands	(Forested Wetlands) Estuarine Swamp Oak Twig-rush Forest	Coastal Floodplain Wetlands	819m	North West
9576131	Rainforests	(Rainforests) Sydney Coastal Lilly Pilly-Palm Gallery Rainforest	Northern Warm Temperate Rainforests	821m	South West
9578760	Forested Wetlands	(Forested Wetlands) Estuarine Swamp Oak Twig-rush Forest	Coastal Floodplain Wetlands	821m	North West
9578761	Forested Wetlands	(Forested Wetlands) Estuarine Swamp Oak Twig-rush Forest	Coastal Floodplain Wetlands	821m	North West
9576126	Saline Wetlands	(Saline Wetlands) Grey Mangrove-River Mangrove Forest	Mangrove Swamps	823m	South West
9575820	Forested Wetlands	(Forested Wetlands) Estuarine Swamp Oak Twig-rush Forest	Coastal Floodplain Wetlands	825m	South West
9576600	Not classified	(Not classified) Not classified	Not classified	827m	South West
9576585	Not classified	(Not classified) Not classified	Not classified	828m	South West
9575561	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Enriched Sandstone Forest	Sydney Coastal Dry Sclerophyll Forests	829m	North East
9576140	Wet Sclerophyll Forests (Shrubby sub-formation)	(Wet Sclerophyll Forests (Shrubby sub-formation)) Sydney Enriched Sandstone Moist Forest	North Coast Wet Sclerophyll Forests	829m	South West
9576130	Saline Wetlands	(Saline Wetlands) Grey Mangrove-River Mangrove Forest	Mangrove Swamps	830m	South West
9576173	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	830m	South West
9576175	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	830m	South West
9578414	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	830m	North West

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9576145	Wet Sclerophyll Forests (Shrubby sub-formation)	(Wet Sclerophyll Forests (Shrubby sub-formation)) Sydney Enriched Sandstone Moist Forest	North Coast Wet Sclerophyll Forests	832m	West
9576605	Not classified	(Not classified) Not classified	Not classified	833m	South West
9575819	Forested Wetlands	(Forested Wetlands) Estuarine Swamp Oak Twig-rush Forest	Coastal Floodplain Wetlands	836m	South West
9584635	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Enriched Sandstone Forest	Sydney Coastal Dry Sclerophyll Forests	837m	North West
9576559	Not classified	(Not classified) Not classified	Not classified	839m	North West
9576570	Not classified	(Not classified) Not classified	Not classified	839m	South West
9578415	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	845m	North West
9578416	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	850m	North West
9575995	Wet Sclerophyll Forests (Shrubby sub-formation)	(Wet Sclerophyll Forests (Shrubby sub-formation)) Sydney Enriched Sandstone Moist Forest	North Coast Wet Sclerophyll Forests	852m	South East
9578712	Not classified	(Not classified) Not classified	Not classified	858m	North West
9576586	Not classified	(Not classified) Not classified	Not classified	859m	West
9576177	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	862m	South West
9578410	Forested Wetlands	(Forested Wetlands) Estuarine Swamp Oak Twig-rush Forest	Coastal Floodplain Wetlands	865m	North West
9575548	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Enriched Sandstone Forest	Sydney Coastal Dry Sclerophyll Forests	868m	South
9576142	Wet Sclerophyll Forests (Shrubby sub-formation)	(Wet Sclerophyll Forests (Shrubby sub-formation)) Sydney Enriched Sandstone Moist Forest	North Coast Wet Sclerophyll Forests	868m	South West
9575993	Wet Sclerophyll Forests (Shrubby sub-formation)	(Wet Sclerophyll Forests (Shrubby sub-formation)) Sydney Enriched Sandstone Moist Forest	North Coast Wet Sclerophyll Forests	874m	South East
9575547	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Enriched Sandstone Forest	Sydney Coastal Dry Sclerophyll Forests	875m	South
9575563	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	879m	South West
9576141	Wet Sclerophyll Forests (Shrubby sub-formation)	(Wet Sclerophyll Forests (Shrubby sub-formation)) Sydney Enriched Sandstone Moist Forest	North Coast Wet Sclerophyll Forests	879m	South West
9587473	Wet Sclerophyll Forests (Shrubby sub-formation)	(Wet Sclerophyll Forests (Shrubby sub-formation)) Sydney Enriched Sandstone Moist Forest	North Coast Wet Sclerophyll Forests	882m	North
9576184	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	886m	West
9575994	Wet Sclerophyll Forests (Shrubby sub-formation)	(Wet Sclerophyll Forests (Shrubby sub-formation)) Sydney Enriched Sandstone Moist Forest	North Coast Wet Sclerophyll Forests	894m	South East
9578411	Rainforests	(Rainforests) Sydney Coastal Lilly Pilly-Palm Gallery Rainforest	Northern Warm Temperate Rainforests	895m	North West
9576132	Rainforests	(Rainforests) Sydney Coastal Lilly Pilly-Palm Gallery Rainforest	Northern Warm Temperate Rainforests	896m	West
9576147	Wet Sclerophyll Forests (Grassy sub-formation)	(Wet Sclerophyll Forests (Grassy sub-formation)) Sydney Turpentine Ironbark Forest	Northern Hinterland Wet Sclerophyll Forests	896m	West
9575818	Forested Wetlands	(Forested Wetlands) Estuarine Swamp Oak Twig-rush Forest	Coastal Floodplain Wetlands	899m	South West
9576144	Wet Sclerophyll Forests (Shrubby sub-formation)	(Wet Sclerophyll Forests (Shrubby sub-formation)) Sydney Enriched Sandstone Moist Forest	North Coast Wet Sclerophyll Forests	902m	West
9575817	Forested Wetlands	(Forested Wetlands) Estuarine Swamp Oak Twig-rush Forest	Coastal Floodplain Wetlands	906m	South West

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9578766	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Gully Forest	Sydney Coastal Dry Sclerophyll Forests	906m	North West
9575528	Saline Wetlands	(Saline Wetlands) Grey Mangrove-River Mangrove Forest	Mangrove Swamps	907m	South East
9576169	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	911m	South West
9576146	Wet Sclerophyll Forests (Shrubby sub-formation)	(Wet Sclerophyll Forests (Shrubby sub-formation)) Sydney Enriched Sandstone Moist Forest	North Coast Wet Sclerophyll Forests	913m	West
9584638	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Enriched Sandstone Forest	Sydney Coastal Dry Sclerophyll Forests	918m	North West
9576134	Rainforests	(Rainforests) Sydney Coastal Lilly Pilly-Palm Gallery Rainforest	Northern Warm Temperate Rainforests	920m	West
9575565	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	922m	South East
9578417	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	922m	North West
9578581	Saline Wetlands	(Saline Wetlands) Grey Mangrove-River Mangrove Forest	Mangrove Swamps	922m	North West
9575545	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Enriched Sandstone Forest	Sydney Coastal Dry Sclerophyll Forests	923m	South
9576194	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	923m	West
9578762	Forested Wetlands	(Forested Wetlands) Estuarine Swamp Oak Twig-rush Forest	Coastal Floodplain Wetlands	925m	North West
9578770	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Gully Forest	Sydney Coastal Dry Sclerophyll Forests	925m	North West
9578757	Forested Wetlands	(Forested Wetlands) Estuarine Swamp Oak Twig-rush Forest	Coastal Floodplain Wetlands	926m	North West
9584637	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Enriched Sandstone Forest	Sydney Coastal Dry Sclerophyll Forests	928m	North West
9578715	Not classified	(Not classified) Not classified	Not classified	931m	North West
9576133	Rainforests	(Rainforests) Sydney Coastal Lilly Pilly-Palm Gallery Rainforest	Northern Warm Temperate Rainforests	933m	West
9576165	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	936m	South West
9576183	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	949m	West
9576168	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	960m	South West
9575546	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Enriched Sandstone Forest	Sydney Coastal Dry Sclerophyll Forests	961m	South East
9576167	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Foreshores Forest	Sydney Coastal Dry Sclerophyll Forests	967m	South West
9576153	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Enriched Sandstone Forest	Sydney Coastal Dry Sclerophyll Forests	972m	South West
9576598	Not classified	(Not classified) Not classified	Not classified	972m	South West
9576148	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Enriched Sandstone Forest	Sydney Coastal Dry Sclerophyll Forests	976m	South West
9587475	Not classified	(Not classified) Not classified	Not classified	978m	East
9576152	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Enriched Sandstone Forest	Sydney Coastal Dry Sclerophyll Forests	979m	South West

Map ID	Vegetation Formation	Plant Community Type and Vegetation Formation	Vegetation Class	Dist	Dir
9575824	Saline Wetlands	(Saline Wetlands) Grey Mangrove-River Mangrove Forest	Mangrove Swamps	982m	South West
9576248	Wet Sclerophyll Forests (Grassy sub-formation)	(Wet Sclerophyll Forests (Grassy sub-formation)) Sydney Turpentine Ironbark Forest	Northern Hinterland Wet Sclerophyll Forests	985m	West
9578799	Not classified	(Not classified) Not classified	Not classified	986m	North West
9576560	Not classified	(Not classified) Not classified	Not classified	987m	North West
9578801	Not classified	(Not classified) Not classified	Not classified	988m	North West
9578767	Dry Sclerophyll Forests (Shrubby sub-formation)	(Dry Sclerophyll Forests (Shrubby sub-formation)) Sydney Coastal Sandstone Gully Forest	Sydney Coastal Dry Sclerophyll Forests	989m	North West
9578794	Not classified	(Not classified) Not classified	Not classified	992m	North West
9575823	Saline Wetlands	(Saline Wetlands) Grey Mangrove-River Mangrove Forest	Mangrove Swamps	999m	South West

Native Vegetation Type Map : NSW Department of Planning and Environment 2022

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Ecological Constraints

300 Burns Bay Road, Lane Cove, NSW 2066

Ramsar Wetlands

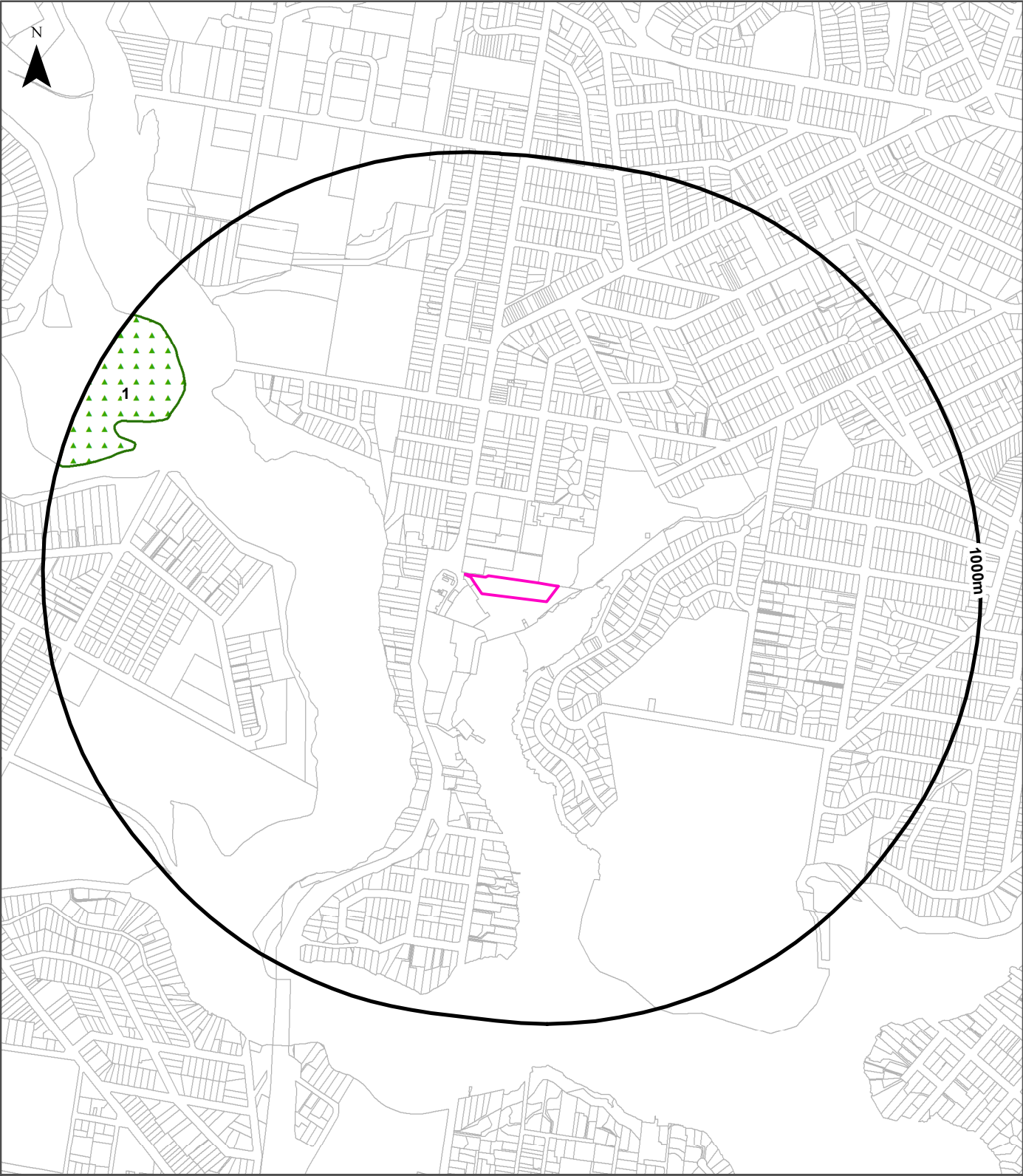
What Ramsar Wetland areas exist within the dataset buffer?

Map ID	Ramsar Name	Wetland Name	Designation Date	Source	Distance	Direction
N/A	No records in buffer					

Ramsar Wetlands Data Source: © Commonwealth of Australia - Department of Agriculture, Water and the Environment

Ecological Constraints - Protected Areas

300 Burns Bay Road, Lane Cove, NSW 2066



Legend		IUCN category					
	Site Boundary		Strict Nature Reserve		Natural Monument or Feature		Protected area sustainable use of natural resources
	Buffer 1000m		Wilderness Area		Habitat/Species Management Area		Uncategorised Protected Area
	Property Boundary		National Park		Protected Landscape/Seascape		

Scale:

0 100 200 400 600 Meters

Data Sources: Property Boundaries & Topographic Data:
© Department Finance, Services & Innovation 2024

Coordinate System:
GDA 1994 MGA Zone 56

Date: 10 October 2024

Ecological Constraints

300 Burns Bay Road, Lane Cove, NSW 2066

Collaborative Australian Protected Areas Database - Terrestrial

Protected areas in terrestrial environments identified by the CAPAD within the dataset buffer:

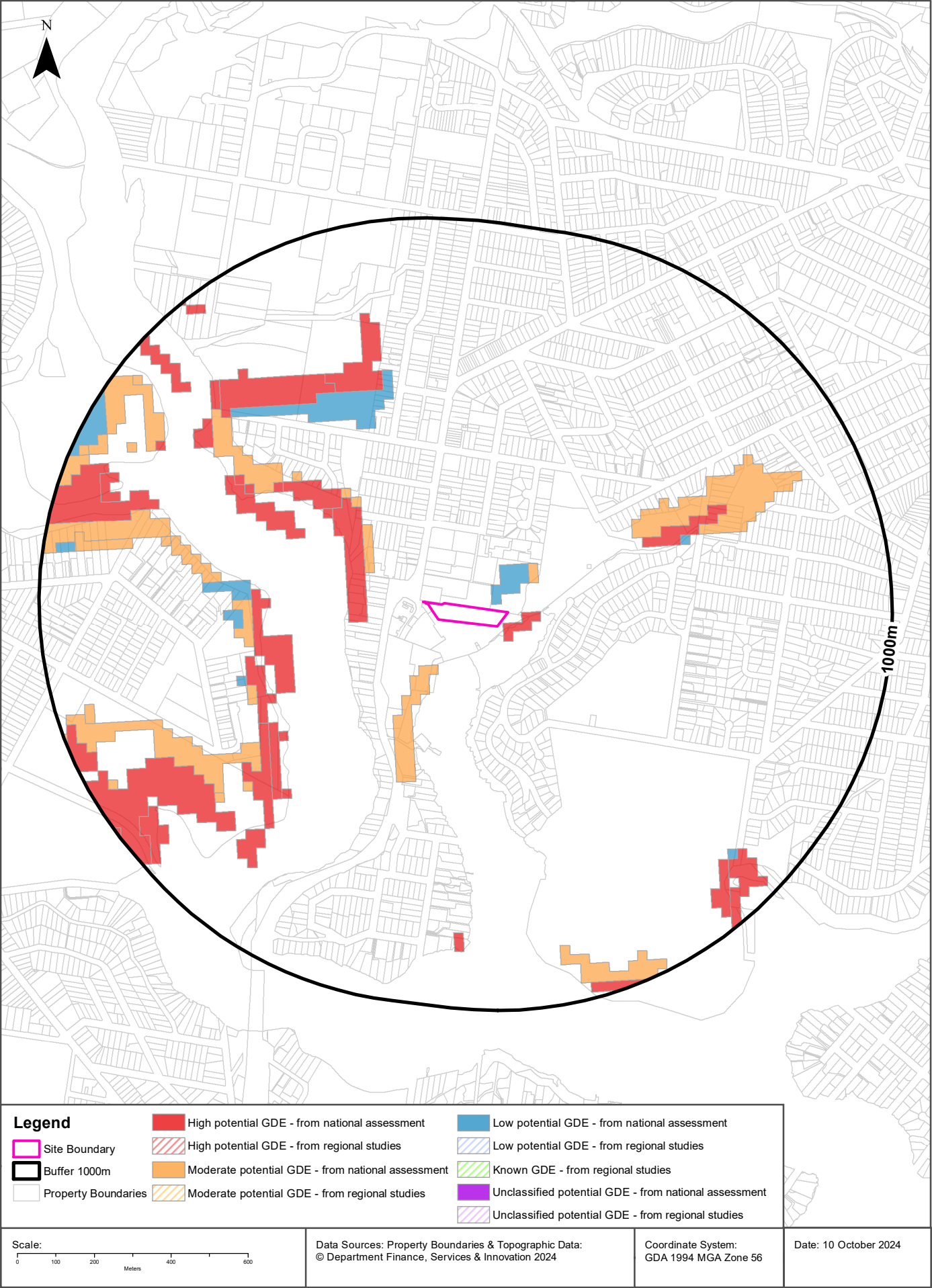
Map ID	Area Name	Area Details	Management Category	Authority	Jurisdiction	Dist	Dir
1	Lane Cove	National Park	National Park	NSW Department of Planning and Environment	State	793m	North West

Collaborative Australian Protected Areas Database - Marine

Protected areas in marine environments identified by the CAPAD within the dataset buffer:

Map ID	Area Name	Area Details	Management Category	Authority	Jurisdiction	Dist	Dir
N/A	No records in buffer						

Source: Collaborative Australian Protected Areas Database (CAPAD) 2022
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Ecological Constraints

300 Burns Bay Road, Lane Cove, NSW 2066

Groundwater Dependent Ecosystems Atlas

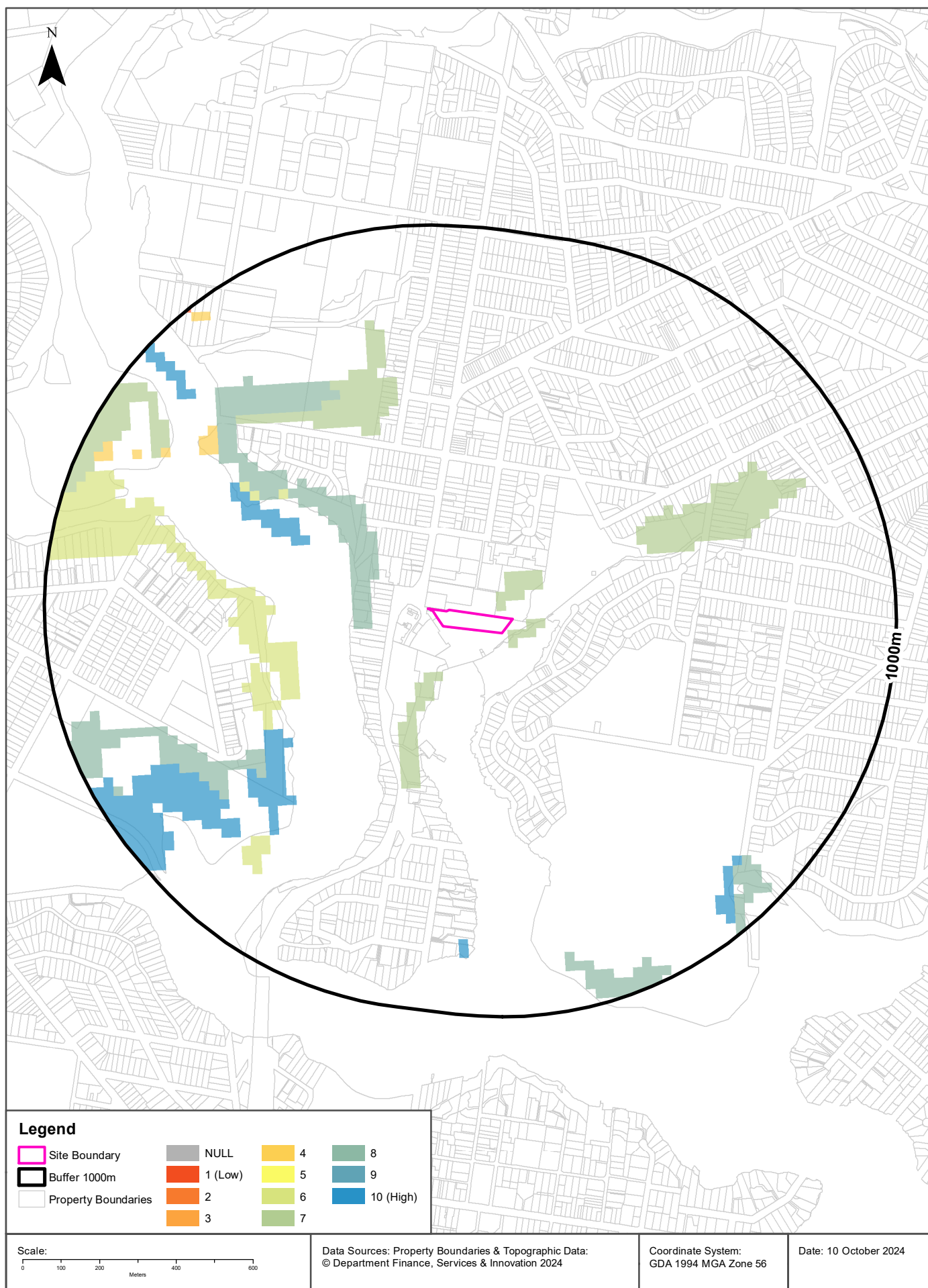
Type	GDE Potential	Geomorphology	Ecosystem Type	Aquifer Geology	Distance	Direction
Terrestrial	High potential GDE - from national assessment	Deeply dissected sandstone plateaus.	Vegetation	Consolidated sedimentary	4m	East
Terrestrial	Low potential GDE - from national assessment	Deeply dissected sandstone plateaus.	Vegetation	Consolidated sedimentary	16m	North East
Terrestrial	Moderate potential GDE - from national assessment	Deeply dissected sandstone plateaus.	Vegetation	Consolidated sedimentary	95m	North East
Terrestrial	High potential GDE - from national assessment	Deeply dissected sandstone plateaus.	Vegetation		350m	North West
Terrestrial	Moderate potential GDE - from national assessment	Deeply dissected sandstone plateaus.	Vegetation		940m	West

Groundwater Dependent Ecosystems Atlas Data Source: The Bureau of Meteorology

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Ecological Constraints - Inflow Dependent Ecosystems Likelihood

300 Burns Bay Road, Lane Cove, NSW 2066



Ecological Constraints

300 Burns Bay Road, Lane Cove, NSW 2066

Inflow Dependent Ecosystems Likelihood

Type	IDE Likelihood	Geomorphology	Ecosystem Type	Aquifer Geology	Distance	Direction
Terrestrial	7	Deeply dissected sandstone plateaus.	Vegetation	Consolidated sedimentary	4m	East
Terrestrial	8	Deeply dissected sandstone plateaus.	Vegetation	Consolidated sedimentary	148m	North West
Terrestrial	10	Deeply dissected sandstone plateaus.	Vegetation		350m	North West
Terrestrial	6	Deeply dissected sandstone plateaus.	Vegetation		354m	West
Terrestrial	6	Deeply dissected sandstone plateaus.	Vegetation	Consolidated sedimentary	445m	West
Terrestrial	10	Deeply dissected sandstone plateaus.	Vegetation	Consolidated sedimentary	488m	South West
Terrestrial	4	Deeply dissected sandstone plateaus.	Vegetation	Consolidated sedimentary	679m	North West
Terrestrial	7	Deeply dissected sandstone plateaus.	Vegetation		940m	West
Terrestrial	1	Deeply dissected sandstone plateaus.	Vegetation	Consolidated sedimentary	990m	North West

Inflow Dependent Ecosystems Likelihood Data Source: The Bureau of Meteorology

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Ecological Constraints

300 Burns Bay Road, Lane Cove, NSW 2066

NSW BioNet Species Sightings

Species sightings from the NSW BioNet Repository that have either a state or federal conservation status, or a sensitivity status, and are within 10 km of the site:

Note: This data does not include NSW Category 1 sensitive species.

Kingdom	Class	Scientific	Common	Sensitivity Class	State Conservation Status	Federal Conservation Status	Migratory Species Agreements
Animalia	Amphibia	Heleioporus australiacus	Giant Burrowing Frog	Not Sensitive	Vulnerable	Vulnerable	
Animalia	Amphibia	Litoria aurea	Green and Golden Bell Frog	Not Sensitive	Endangered	Vulnerable	
Animalia	Amphibia	Pseudophryne australis	Red-crowned Toadlet	Not Sensitive	Vulnerable	Not Listed	
Animalia	Aves	Actitis hypoleucos	Common Sandpiper	Not Sensitive	Not Listed	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Amaurornis moluccana	Pale-vented Bush-hen	Not Sensitive	Vulnerable	Not Listed	
Animalia	Aves	Anseranas semipalmata	Maggpie Goose	Not Sensitive	Vulnerable	Not Listed	
Animalia	Aves	Anthochaera phrygia	Regent Honeyeater	Category 2	Critically Endangered	Critically Endangered	
Animalia	Aves	Apus pacificus	Fork-tailed Swift	Not Sensitive	Not Listed	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Ardenna grisea	Sooty Shearwater	Not Sensitive	Not Listed	Not Listed	JAMBA
Animalia	Aves	Ardenna pacifica	Wedge-tailed Shearwater	Not Sensitive	Not Listed	Not Listed	JAMBA
Animalia	Aves	Ardenna tenuirostris	Short-tailed Shearwater	Not Sensitive	Not Listed	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Arenaria interpres	Ruddy Turnstone	Not Sensitive	Not Listed	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Artamus cyanopterus cyanopterus	Dusky Woodswallow	Not Sensitive	Vulnerable	Not Listed	
Animalia	Aves	Botaurus poiciloptilus	Australasian Bittern	Not Sensitive	Endangered	Endangered	
Animalia	Aves	Burhinus grallarius	Bush Stone-curlew	Not Sensitive	Endangered	Not Listed	
Animalia	Aves	Calidris acuminata	Sharp-tailed Sandpiper	Not Sensitive	Not Listed	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Calidris alba	Sanderling	Not Sensitive	Vulnerable	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Calidris canutus	Red Knot	Not Sensitive	Not Listed	Endangered	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Calidris ferruginea	Curlew Sandpiper	Not Sensitive	Critically Endangered	Critically Endangered	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Calidris melanotos	Pectoral Sandpiper	Not Sensitive	Not Listed	Not Listed	ROKAMBA;JAMBA
Animalia	Aves	Calidris ruficollis	Red-necked Stint	Not Sensitive	Not Listed	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Calidris tenuirostris	Great Knot	Not Sensitive	Vulnerable	Vulnerable	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Callocephalon fimbriatum	Gang-gang Cockatoo	Category 3	Endangered	Endangered	
Animalia	Aves	Calyptorhynchus banksii samueli	Red-tailed Black-Cockatoo (inland subspecies)	Category 2	Vulnerable	Not Listed	
Animalia	Aves	Calyptorhynchus lathami lathami	South-eastern Glossy Black-Cockatoo	Category 2	Vulnerable	Vulnerable	
Animalia	Aves	Certhionyx variegatus	Pied Honeyeater	Not Sensitive	Vulnerable	Not Listed	
Animalia	Aves	Charadrius leschenaultii	Greater Sand-plover	Not Sensitive	Vulnerable	Vulnerable	ROKAMBA;CAMBA; JAMBA

Kingdom	Class	Scientific	Common	Sensitivity Class	State Conservation Status	Federal Conservation Status	Migratory Species Agreements
Animalia	Aves	Chlidonias leucopterus	White-winged Black Tern	Not Sensitive	Not Listed	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Chthonicola sagittata	Speckled Warbler	Not Sensitive	Vulnerable	Not Listed	
Animalia	Aves	Circus assimilis	Spotted Harrier	Not Sensitive	Vulnerable	Not Listed	
Animalia	Aves	Climacteris picumnus victoriae	Brown Treecreeper (eastern subspecies)	Not Sensitive	Vulnerable	Vulnerable	
Animalia	Aves	Cuculus optatus	Oriental Cuckoo	Not Sensitive	Not Listed	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Daphoenositta chrysoptera	Varied Sittella	Not Sensitive	Vulnerable	Not Listed	
Animalia	Aves	Diomedea exulans	Wandering Albatross	Not Sensitive	Endangered	Vulnerable	
Animalia	Aves	Ephippiorhynchus asiaticus	Black-necked Stork	Not Sensitive	Endangered	Not Listed	
Animalia	Aves	Epthianura albifrons	White-fronted Chat	Not Sensitive	Endangered Population, Vulnerable	Not Listed	
Animalia	Aves	Erythrorhynchus radiatus	Red Goshawk	Category 2	Endangered	Endangered	
Animalia	Aves	Falco subniger	Black Falcon	Not Sensitive	Vulnerable	Not Listed	
Animalia	Aves	Gallinago hardwickii	Latham's Snipe	Not Sensitive	Vulnerable	Vulnerable	ROKAMBA;JAMBA
Animalia	Aves	Gelochelidon nilotica	Gull-billed Tern	Not Sensitive	Not Listed	Not Listed	CAMBA
Animalia	Aves	Glossopsitta pusilla	Little Lorikeet	Not Sensitive	Vulnerable	Not Listed	
Animalia	Aves	Grantiella picta	Painted Honeyeater	Not Sensitive	Vulnerable	Vulnerable	
Animalia	Aves	Haematopus longirostris	Pied Oystercatcher	Not Sensitive	Endangered	Not Listed	
Animalia	Aves	Haliaeetus leucogaster	White-bellied Sea-Eagle	Not Sensitive	Vulnerable	Not Listed	
Animalia	Aves	Hieraaetus morphnoides	Little Eagle	Not Sensitive	Vulnerable	Not Listed	
Animalia	Aves	Hirundapus caudacutus	White-throated Needletail	Not Sensitive	Vulnerable	Vulnerable	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Hydroprogne caspia	Caspian Tern	Not Sensitive	Not Listed	Not Listed	JAMBA
Animalia	Aves	Ixobrychus flavicollis	Black Bittern	Not Sensitive	Vulnerable	Not Listed	
Animalia	Aves	Lathamus discolor	Swift Parrot	Not Sensitive	Endangered	Critically Endangered	
Animalia	Aves	Limicola falcinellus	Broad-billed Sandpiper	Not Sensitive	Vulnerable	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Limosa lapponica	Bar-tailed Godwit	Not Sensitive	Not Listed	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Limosa limosa	Black-tailed Godwit	Not Sensitive	Vulnerable	Endangered	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Lophoictinia isura	Square-tailed Kite	Category 3	Vulnerable	Not Listed	
Animalia	Aves	Manorina melanotis	Black-eared Miner	Not Sensitive	Critically Endangered	Endangered	
Animalia	Aves	Menura alberti	Albert's Lyrebird	Not Sensitive	Vulnerable	Not Listed	
Animalia	Aves	Motacilla flava	Yellow Wagtail	Not Sensitive	Not Listed	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Neophema pulchella	Turquoise Parrot	Category 3	Vulnerable	Not Listed	
Animalia	Aves	Nettapus coromandelianus	Cotton Pygmy-Goose	Not Sensitive	Endangered	Not Listed	
Animalia	Aves	Ninox connivens	Barking Owl	Category 3	Vulnerable	Not Listed	
Animalia	Aves	Ninox strenua	Powerful Owl	Category 3	Vulnerable	Not Listed	

Kingdom	Class	Scientific	Common	Sensitivity Class	State Conservation Status	Federal Conservation Status	Migratory Species Agreements
Animalia	Aves	Numenius madagascariensis	Eastern Curlew	Not Sensitive	Not Listed	Critically Endangered	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Numenius minutus	Little Curlew	Not Sensitive	Not Listed	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Numenius phaeopus	Whimbrel	Not Sensitive	Not Listed	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Onychoprion fuscata	Sooty Tern	Not Sensitive	Vulnerable	Not Listed	
Animalia	Aves	Oxyura australis	Blue-billed Duck	Not Sensitive	Vulnerable	Not Listed	
Animalia	Aves	Pachycephala olivacea	Olive Whistler	Not Sensitive	Vulnerable	Not Listed	
Animalia	Aves	Pandion cristatus	Eastern Osprey	Category 3	Vulnerable	Not Listed	
Animalia	Aves	Petroica boodang	Scarlet Robin	Not Sensitive	Vulnerable	Not Listed	
Animalia	Aves	Petroica phoenicea	Flame Robin	Not Sensitive	Vulnerable	Not Listed	
Animalia	Aves	Phaethon lepturus	White-tailed Tropicbird	Not Sensitive	Not Listed	Not Listed	CAMBA;JAMBA
Animalia	Aves	Philomachus pugnax	Ruff	Not Sensitive	Not Listed	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Pluvialis fulva	Pacific Golden Plover	Not Sensitive	Not Listed	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Pluvialis squatarola	Grey Plover	Not Sensitive	Not Listed	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Polytelis anthopeplus monarchoides	Regent Parrot (eastern subspecies)	Category 3	Endangered	Vulnerable	
Animalia	Aves	Polytelis swainsonii	Superb Parrot	Category 3	Vulnerable	Vulnerable	
Animalia	Aves	Pterodroma leucoptera leucoptera	Gould's Petrel	Not Sensitive	Vulnerable	Endangered	
Animalia	Aves	Pterodroma solandri	Providence Petrel	Not Sensitive	Vulnerable	Not Listed	
Animalia	Aves	Ptilinopus magnificus	Wompoo Fruit-Dove	Not Sensitive	Vulnerable	Not Listed	
Animalia	Aves	Ptilinopus regina	Rose-crowned Fruit-Dove	Not Sensitive	Vulnerable	Not Listed	
Animalia	Aves	Ptilinopus superbus	Superb Fruit-Dove	Not Sensitive	Vulnerable	Not Listed	
Animalia	Aves	Rostratula australis	Australian Painted Snipe	Not Sensitive	Endangered	Endangered	
Animalia	Aves	Stercorarius pomarinus	Pomarine Jaeger	Not Sensitive	Not Listed	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Sterna hirundo	Common Tern	Not Sensitive	Not Listed	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Sternula albigula	Little Tern	Not Sensitive	Endangered	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Stictonetta naevosa	Freckled Duck	Not Sensitive	Vulnerable	Not Listed	
Animalia	Aves	Sula dactylatra	Masked Booby	Not Sensitive	Vulnerable	Not Listed	ROKAMBA;JAMBA
Animalia	Aves	Thalassarche melanophrys	Black-browed Albatross	Not Sensitive	Vulnerable	Vulnerable	
Animalia	Aves	Thalasseus bergii	Crested Tern	Not Sensitive	Not Listed	Not Listed	JAMBA
Animalia	Aves	Thinornis cucullatus cucullatus	Eastern Hooded Dotterel	Not Sensitive	Critically Endangered	Vulnerable	
Animalia	Aves	Tringa brevipes	Grey-tailed Tattler	Not Sensitive	Not Listed	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Tringa glareola	Wood Sandpiper	Not Sensitive	Not Listed	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Tringa nebularia	Common Greenshank	Not Sensitive	Not Listed	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Tringa stagnatilis	Marsh Sandpiper	Not Sensitive	Not Listed	Not Listed	ROKAMBA;CAMBA; JAMBA

Kingdom	Class	Scientific	Common	Sensitivity Class	State Conservation Status	Federal Conservation Status	Migratory Species Agreements
Animalia	Aves	Tyto longimembris	Eastern Grass Owl	Category 3	Vulnerable	Not Listed	
Animalia	Aves	Tyto novaehollandiae	Masked Owl	Category 3	Vulnerable	Not Listed	
Animalia	Aves	Tyto tenebricosa	Sooty Owl	Category 3	Vulnerable	Not Listed	
Animalia	Aves	Xenus cinereus	Terek Sandpiper	Not Sensitive	Vulnerable	Vulnerable	ROKAMBA; CAMBA; JAMBA
Animalia	Gastropoda	Pommerhelix duralensis	Dural Land Snail	Not Sensitive	Endangered	Endangered	
Animalia	Insecta	Petalura gigantea	Giant Dragonfly	Not Sensitive	Endangered	Not Listed	
Animalia	Mammalia	Arctocephalus forsteri	New Zealand Fur-seal	Not Sensitive	Vulnerable	Not Listed	
Animalia	Mammalia	Arctocephalus pusillus doriferus	Australian Fur-seal	Not Sensitive	Vulnerable	Not Listed	
Animalia	Mammalia	Balaenoptera musculus	Blue Whale	Not Sensitive	Endangered	Endangered	
Animalia	Mammalia	Cercartetus nanus	Eastern Pygmy-possum	Not Sensitive	Vulnerable	Not Listed	
Animalia	Mammalia	Chalinolobus dwyeri	Large-eared Pied Bat	Not Sensitive	Endangered	Endangered	
Animalia	Mammalia	Dasyurus maculatus	Spotted-tailed Quoll	Not Sensitive	Vulnerable	Endangered	
Animalia	Mammalia	Dasyurus viverrinus	Eastern Quoll	Not Sensitive	Endangered	Endangered	
Animalia	Mammalia	Eubalaena australis	Southern Right Whale	Not Sensitive	Endangered	Endangered	
Animalia	Mammalia	Falsistrellus tasmaniensis	Eastern False Pipistrelle	Not Sensitive	Vulnerable	Not Listed	
Animalia	Mammalia	Isodon obesulus obesulus	Southern Brown Bandicoot (eastern)	Not Sensitive	Endangered	Endangered	
Animalia	Mammalia	Macrotis lagotis	Bilby	Not Sensitive	Extinct	Vulnerable	
Animalia	Mammalia	Micronomus norfolkensis	Eastern Coastal Free-tailed Bat	Not Sensitive	Vulnerable	Not Listed	
Animalia	Mammalia	Miniopterus australis	Little Bent-winged Bat	Not Sensitive	Vulnerable	Not Listed	
Animalia	Mammalia	Miniopterus orianae oceanensis	Large Bent-winged Bat	Not Sensitive	Vulnerable	Not Listed	
Animalia	Mammalia	Myotis macropus	Southern Myotis	Not Sensitive	Vulnerable	Not Listed	
Animalia	Mammalia	Notomys cervinus	Fawn Hopping-mouse	Not Sensitive	Extinct	Not Listed	
Animalia	Mammalia	Notomys mitchellii	Mitchell's Hopping-mouse	Not Sensitive	Extinct	Not Listed	
Animalia	Mammalia	Perameles nasuta	Long-nosed Bandicoot	Not Sensitive	Endangered Population	Not Listed	
Animalia	Mammalia	Petauroides volans	Southern Greater Glider	Not Sensitive	Endangered	Endangered	
Animalia	Mammalia	Petaurus australis	Yellow-bellied Glider	Not Sensitive	Vulnerable	Vulnerable	
Animalia	Mammalia	Petaurus norfolkensis	Squirrel Glider	Not Sensitive	Vulnerable	Not Listed	
Animalia	Mammalia	Phascogale cinerea	Koala	Not Sensitive	Endangered	Endangered	
Animalia	Mammalia	Pseudomys gracilicaudatus	Eastern Chestnut Mouse	Not Sensitive	Vulnerable	Not Listed	
Animalia	Mammalia	Pseudomys novaehollandiae	New Holland Mouse	Not Sensitive	Not Listed	Vulnerable	
Animalia	Mammalia	Pteropus poliocephalus	Grey-headed Flying-fox	Not Sensitive	Vulnerable	Vulnerable	
Animalia	Mammalia	Saccolaimus flaviventris	Yellow-bellied Sheath-tail-bat	Not Sensitive	Vulnerable	Not Listed	
Animalia	Mammalia	Scoteanax rueppellii	Greater Broad-nosed Bat	Not Sensitive	Vulnerable	Not Listed	
Animalia	Mammalia	Vespadelus troughtoni	Eastern Cave Bat	Not Sensitive	Vulnerable	Not Listed	

Kingdom	Class	Scientific	Common	Sensitivity Class	State Conservation Status	Federal Conservation Status	Migratory Species Agreements
Animalia	Reptilia	Aspidites ramsayi	Woma	Not Sensitive	Vulnerable	Not Listed	
Animalia	Reptilia	Caretta caretta	Loggerhead Turtle	Not Sensitive	Endangered	Endangered	
Animalia	Reptilia	Chelonia mydas	Green Turtle	Not Sensitive	Vulnerable	Vulnerable	
Animalia	Reptilia	Dermochelys coriacea	Leatherback Turtle	Not Sensitive	Endangered	Endangered	
Animalia	Reptilia	Diplodactylus platyrus	Eastern Fat-tailed Gecko	Not Sensitive	Endangered	Not Listed	
Animalia	Reptilia	Eretmochelys imbricata	Hawksbill Turtle	Not Sensitive	Not Listed	Vulnerable	
Animalia	Reptilia	Hoplocephalus bitorquatus	Pale-headed Snake	Not Sensitive	Vulnerable	Not Listed	
Animalia	Reptilia	Myuchelys bellii	Western Sawshelled Turtle, Bell's Turtle	Not Sensitive	Endangered	Endangered	
Animalia	Reptilia	Pseudonaja modesta	Ringed Brown Snake	Not Sensitive	Endangered	Not Listed	
Animalia	Reptilia	Tiliqua occipitalis	Western Blue-tongued Lizard	Not Sensitive	Vulnerable	Not Listed	
Animalia	Reptilia	Uvidicolus sphyrurus	Border Thick-tailed Gecko	Not Sensitive	Vulnerable	Vulnerable	
Animalia	Reptilia	Varanus rosenbergi	Rosenberg's Goanna	Not Sensitive	Vulnerable	Not Listed	
Fungi	Flora	Camarophyllopsis kearneyi		Not Sensitive	Endangered	Not Listed	
Fungi	Flora	Hygrocybe anomala var. ianthinomarginata		Not Sensitive	Vulnerable	Not Listed	
Fungi	Flora	Hygrocybe aurantipes		Not Sensitive	Vulnerable	Not Listed	
Fungi	Flora	Hygrocybe austropratensis		Not Sensitive	Endangered	Not Listed	
Fungi	Flora	Hygrocybe collucera		Not Sensitive	Endangered	Not Listed	
Fungi	Flora	Hygrocybe griseoramosa		Not Sensitive	Endangered	Not Listed	
Fungi	Flora	Hygrocybe lanecovensensis		Not Sensitive	Endangered	Not Listed	
Fungi	Flora	Hygrocybe reesiaie		Not Sensitive	Vulnerable	Not Listed	
Fungi	Flora	Hygrocybe rubronivea		Not Sensitive	Vulnerable	Not Listed	
Plantae	Flora	Acacia bynoeana	Bynoe's Wattle	Not Sensitive	Endangered	Vulnerable	
Plantae	Flora	Acacia clunies-rossiae	Kanangra Wattle	Not Sensitive	Vulnerable	Not Listed	
Plantae	Flora	Acacia gordonii		Not Sensitive	Endangered	Endangered	
Plantae	Flora	Acacia pubescens	Downy Wattle	Not Sensitive	Vulnerable	Vulnerable	
Plantae	Flora	Acacia terminalis subsp. Eastern Sydney	Sunshine wattle	Not Sensitive	Endangered	Endangered	
Plantae	Flora	Allocasuarina portuensis	Nielsen Park She-oak	Category 3	Endangered	Endangered	
Plantae	Flora	Amperea xiphoclada var. pedicellata		Not Sensitive	Extinct	Extinct	
Plantae	Flora	Caladenia tessellata	Thick Lip Spider Orchid	Category 2	Vulnerable	Vulnerable	
Plantae	Flora	Callistemon linearifolius	Netted Bottle Brush	Category 3	Vulnerable	Not Listed	
Plantae	Flora	Darwinia biflora		Not Sensitive	Vulnerable	Vulnerable	
Plantae	Flora	Davidsonia jerseyana	Davidson's Plum	Category 2	Endangered	Endangered	

Kingdom	Class	Scientific	Common	Sensitivity Class	State Conservation Status	Federal Conservation Status	Migratory Species Agreements
Plantae	Flora	Deyeuxia appressa		Not Sensitive	Endangered	Endangered	
Plantae	Flora	Dichanthium setosum	Bluegrass	Not Sensitive	Vulnerable	Vulnerable	
Plantae	Flora	Dillwynia tenuifolia		Not Sensitive	Vulnerable	Not Listed	
Plantae	Flora	Epacris purpurascens var. purpurascens		Not Sensitive	Vulnerable	Not Listed	
Plantae	Flora	Epacris sparsa	Sparse Heath	Not Sensitive	Vulnerable	Vulnerable	
Plantae	Flora	Eucalyptus camfieldii	Camfield's Stringybark	Not Sensitive	Vulnerable	Vulnerable	
Plantae	Flora	Eucalyptus fracta	Broken Back Ironbark	Not Sensitive	Endangered	Not Listed	
Plantae	Flora	Eucalyptus leucoxylon subsp. pruinosa	Yellow Gum	Not Sensitive	Vulnerable	Not Listed	
Plantae	Flora	Eucalyptus nicholii	Narrow-leaved Black Peppermint	Not Sensitive	Vulnerable	Vulnerable	
Plantae	Flora	Eucalyptus pulverulenta	Silver-leafed Gum	Not Sensitive	Vulnerable	Vulnerable	
Plantae	Flora	Eucalyptus scoparia	Wallangarra White Gum	Not Sensitive	Endangered	Vulnerable	
Plantae	Flora	Genoplesium baueri	Bauer's Midge Orchid	Category 2	Endangered	Endangered	
Plantae	Flora	Grammitis stenophylla	Narrow-leaf Finger Fern	Category 3	Endangered	Not Listed	
Plantae	Flora	Grevillea beadleana	Beadle's Grevillea	Category 3	Endangered	Endangered	
Plantae	Flora	Grevillea caleyi	Caley's Grevillea	Category 3	Critically Endangered	Critically Endangered	
Plantae	Flora	Grevillea hillebrandii	White Yiel Yiel	Not Sensitive	Endangered	Not Listed	
Plantae	Flora	Grevillea juniperina subsp. juniperina	Juniper-leaved Grevillea	Not Sensitive	Vulnerable	Not Listed	
Plantae	Flora	Haloragodendron lucasii		Not Sensitive	Endangered	Endangered	
Plantae	Flora	Hibbertia spananthes	Julian's Hibbertia	Category 2	Critically Endangered	Critically Endangered	
Plantae	Flora	Isotoma fluviatilis subsp. fluviatilis		Category 3	Not Listed	Extinct	
Plantae	Flora	Lasiopetalum joyceae		Not Sensitive	Vulnerable	Vulnerable	
Plantae	Flora	Leptospermum deanei		Not Sensitive	Vulnerable	Vulnerable	
Plantae	Flora	Macadamia integrifolia	Macadamia Nut	Not Sensitive	Not Listed	Vulnerable	
Plantae	Flora	Macadamia tetraphylla	Rough-shelled Bush Nut	Not Sensitive	Vulnerable	Vulnerable	
Plantae	Flora	Melaleuca biconvexa	Biconvex Paperbark	Not Sensitive	Vulnerable	Vulnerable	
Plantae	Flora	Melaleuca deanei	Deane's Paperbark	Not Sensitive	Vulnerable	Vulnerable	
Plantae	Flora	Microtis angusii	Angus's Onion Orchid	Category 2	Endangered	Endangered	
Plantae	Flora	Persoonia hirsuta	Hairy Geebung	Category 3	Endangered	Endangered	
Plantae	Flora	Pimelea curviflora var. curviflora		Not Sensitive	Vulnerable	Vulnerable	
Plantae	Flora	Pomaderris prunifolia	Plum-leaf Pomaderris	Not Sensitive	Endangered Population	Not Listed	
Plantae	Flora	Prostanthera marifolia	Seaforth Mintbush	Category 3	Critically Endangered	Critically Endangered	
Plantae	Flora	Rhizanthella slateri	Eastern Australian Underground Orchid	Category 2	Vulnerable	Endangered	

Kingdom	Class	Scientific	Common	Sensitivity Class	State Conservation Status	Federal Conservation Status	Migratory Species Agreements
Plantae	Flora	Rhodamnia rubescens	Scrub Turpentine	Not Sensitive	Critically Endangered	Critically Endangered	
Plantae	Flora	Sarcophilus hartmannii	Hartman's Sarcophilus	Category 2	Vulnerable	Vulnerable	
Plantae	Flora	Syzygium paniculatum	Magenta Lilly Pilly	Not Sensitive	Endangered	Vulnerable	
Plantae	Flora	Tetratheca glandulosa		Not Sensitive	Vulnerable	Not Listed	
Plantae	Flora	Tetratheca juncea	Black-eyed Susan	Not Sensitive	Vulnerable	Vulnerable	
Plantae	Flora	Thesium australe	Austral Toadflax	Not Sensitive	Vulnerable	Vulnerable	
Plantae	Flora	Wahlenbergia multicaulis	Tadgell's Bluebell	Not Sensitive	Endangered Population	Not Listed	
Plantae	Flora	Wilsonia backhousei	Narrow-leafed Wilsonia	Not Sensitive	Vulnerable	Not Listed	
Plantae	Flora	Zannichellia palustris		Not Sensitive	Endangered	Not Listed	

Source: NSW BioNet Species Sightings

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Location Confidences

Where Lotsearch has had to georeference features from supplied addresses, a location confidence has been assigned to the data record. This indicates a confidence to the positional accuracy of the feature. Where applicable, a code is given under the field heading “LC” or “LocConf”. These codes lookup to the following location confidences:

LC Code	Location Confidence
Premise Match	Georeferenced to the site location / premise or part of site
Area Match	Georeferenced to an approximate or general area
Road Match	Georeferenced to a road or rail corridor
Road Intersection	Georeferenced to a road intersection
Buffered Point	A point feature buffered to x metres
Adjacent Match	Land adjacent to a georeferenced feature
Network of Features	Georeferenced to a network of features
Suburb Match	Georeferenced to a suburb boundary
As Supplied	Spatial data supplied by provider

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Appendix F – Correspondence from SafeWork NSW and Groundwater Bore Search

From: [Licensing](#)
To: [Linda Sweeney - EIAustralia](#)
Subject: SafeWork NSW: 01018566 –Site Search application – Result found [thread::RNAK2Nb2dk2XgomByfC9Nnw::]
Date: Friday, 13 September 2024 9:33:15 AM

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

[Contents of 300 Burns Bay Road, Lane Cove.pdf](#)

Security Classification: Sensitive Personal
Please do not amend the subject line of this email

Dear Linda

**Re: Site Search for Schedule 11 Hazardous Chemicals on premises
Application – Result found**

I refer to your application for a Site Search for Schedule 11 Hazardous Chemicals on premises, received by SafeWork NSW on 6 September 2024 for the following site: 300 Burns Bay Road, Lane Cove NSW 2066.

Please find attached copies of the documents that SafeWork NSW holds on record number 35/012600 relating to the storage of Hazardous Chemicals at the above-mentioned premises.

If you have any further information or if you have any questions, please use one of the following options, quoting the SafeWork NSW enquiry reference number: 01018566

- Email: licensing@safework.nsw.gov.au
- Phone: 13 10 50

Kind regards

Kim Brearley

Licensing Representative

SafeWork NSW | Better Regulation Division

Department of Customer Service

p- 13 10 50

e- licensing@safework.nsw.gov.au | www.customerservice.nsw.gov.au

Level 3, 32 Mann Street, Gosford, NSW 2250



**Customer
Service**

We are always looking for ways that we can improve our services. You may be contacted by email in the next few weeks to complete a short survey and provide us with your feedback on what we did well and where we can improve. If you do not wish to participate in our surveys, please email us at: licensingQA@customerservice.nsw.gov.au and we will ensure that you are not contacted.



thread::RNAK2Nb2dk2XgomByfC9Nnw::

INFLAMMABLE LIQUID ACT, 1915 (AS AMENDED)

*Application for Registration of Premises or Store License under Division A or for the transfer, alteration or amendment of any such Registration or License, for the keeping of Inflammable Liquid and/or Dangerous Goods, in accordance with the provisions of the Inflammable Liquid Act, 1915 (as amended), for the ensuing year.

EXPLANATORY

Inflammable Liquid—

Mineral Oil—includes kerosene, mineral turpentine and white spirit (for cleaning), and compositions containing same.
Mineral Spirit—includes petrol, benzene, benzolene, benzol and naphtha, and compositions containing same.

Dangerous Goods—

Class 1.—Acetone, amyl acetate, butyl acetate, carbon bisulphide; any combination of substances of an inflammable character suitable for use as an industrial solvent and having a true flashing point of less than 73 degrees Fahrenheit.
Class 2.—Nitro-cellulose (also known as "pyroxylin" and "collodion cotton") moistened with an alcohol, butyl alcohol (also known as "butanol"), methylated spirits, vegetable turpentine; and any liquid or solid containing methylated spirits, having a true flashing point of less than 150 degrees Fahrenheit.
Class 3.—Nitro-cellulose product.
Class 4.—Compressed or dissolved acetylene contained in a porous substance.

DIRECTIONS

1. Applications must be forwarded to the Chief Inspector of Inflammable Liquid, Explosives Department, Department of Mines, Sydney, and must be accompanied by the prescribed fee, as set out hereunder:—

Registration of Premises (Fee \$ 3.00 p.a.)—For quantities not exceeding 300 gallons of mineral oil and 100 gallons of mineral spirit, if kept together; or 800 gallons of mineral oil and 100 gallons of mineral spirit, if kept in separate depots; or 500 gallons of mineral spirit, if kept in an underground tank depot; or 800 gallons of mineral oil and 500 gallons of mineral spirit, if mineral spirit is kept in an underground tank depot.

In addition to, or in lieu of the above, similar quantities of Dangerous Goods of Classes 1 and 2 may be kept under the like conditions; reading Dangerous Goods of Class 1 for the words Mineral Spirit and Dangerous Goods of Class 2 for the words Mineral Oil.

Store License, Div. A (Fee, \$ 6.50 p.a.)—For quantities in excess of those stated above, but not exceeding 4,000 gallons mineral oil and/or mineral spirit, and/or Dangerous Goods of Classes 1 and 2.

Store License, Div. B (Fees, See Regulation 7)—For quantities exceeding 4,000 gallons of mineral and/or mineral spirit, and/or dangerous goods of Classes 1 and 2, and/or dangerous goods of Class 3.

For the keeping of Dangerous Goods of Classes 3 and/or 4. (\$ 15.00 p.a.).

2. The certificate of inspection at foot hereof must be signed by an Inspector under the Inflammable Liquid Act, 1915 (as amended), or Police Officer, or other officer duly authorised in that behalf, and where the premises are situated outside the Metropolitan Area of Sydney, it is requested that such certificate be obtained prior to forwarding application.

1. Name in full of occupier ... MANGROOITE INDUSTRIES LTD
2. Occupation ... TANNER
3. Locality of the premises in which the depot or depots are situated ... No. or Name 300 BURNS BAY RD
Street LANE COVE
Town NSW.
4. Nature of premises (Dwelling, Garage, Store, etc.) ... FACTORY
5. Will mineral spirit be kept in a prescribed underground tank depot?

6. Particulars of construction of depots and maximum quantities of inflammable liquid and/or Dangerous Goods to be kept at any one time.

Depot No.	Construction of Depots			Inflammable Liquid		Dangerous Goods			
	Walls	Roof	Floor	Mineral Spirit Gallons	Mineral Oil Gallons	Class 1 Gallons	Class 2 Gallons	Class 3 lb.	Class 4 cub. ft.
1	<u>Brick</u>	<u>Iron</u>	<u>Concrete</u>		<u>1000</u>				
2									
3									
4									
5									
6									
7									
8									
9									
10									

PUBLIC REVENUE A/C

chq \$ 6.50

(Date) 24/4/67

Receipt No. 2836

Signature of Applicant

Mangroote Industries Ltd

Date of Application 14-4-67 19

Postal Address

300 Box 15 PO

Lane Cove

CERTIFICATE OF INSPECTION

I, Harold Arthur Conroy, being an Inspector under the Inflammable Liquid Act, 1915 (as amended), do hereby certify that the premises or store herein referred to and described is suitable with regard to its situation and construction for the safe keeping of inflammable liquid and/or dangerous goods in quantity and nature specified.

Place

Sydney

Signature of Inspector

H. Conroy

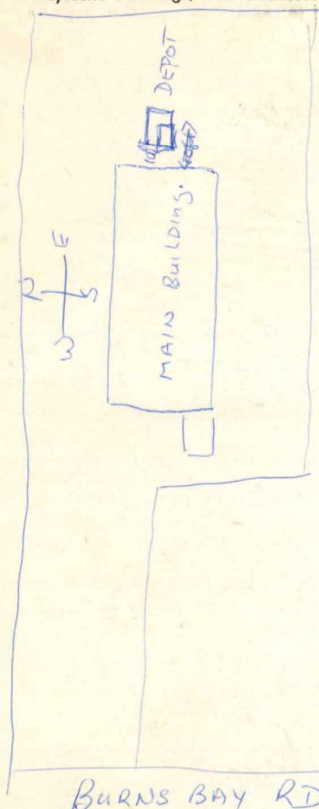
Date

26.4.67

[PLEASE TURN OVER]

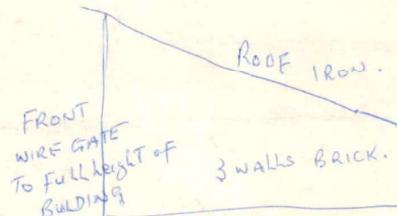
Make Rough Sketches showing—

Ground plans of premises showing position of depot or depots and adjacent buildings, also distances separating depots and buildings.



Sketch of depot or depots showing provision made for ventilation, also inside dimensions (length, width, and depth) of the pit or lower portion, designed to prevent outflow.

This sketch is not required for underground tanks.



TABLES SHOWING DISTANCES WHICH UNDER LICENSE MUST SEPARATE PROTECTED WORKS FROM DEPOTS

Table I.—Where Mineral Spirit and/or Dangerous Goods of Class 1 (with or without Mineral Oil and/or Dangerous Goods of Class 2) are kept or to be kept:—

In an underground Tank Depot, in quantity exceeding 500 gallons, but not exceeding—	In an aboveground Tank Depot or other Depot, separated from protected works by a screen wall, in quantity exceeding 100 gallons, but not exceeding—	In an aboveground Tank Depot or other Depot not separated from protected works by a screen wall, in quantity exceeding 100 gallons, but not exceeding—	Distance not less than—
Gallons	Gallons	Gallons	Feet
2,000	1,000	250	10
2,400	1,200	300	11
2,800	1,400	350	12
3,200	1,600	400	13
3,600	1,800	450	14
4,000	2,000	500	15
7,200	3,600	900	16
10,400	5,200	1,300	17
13,600	6,800	1,700	18
16,800	8,400	2,100	19
20,000	10,000	2,500	20
22,000	11,000	2,750	21
24,000	12,000	3,000	22
26,000	13,000	3,250	23
28,000	14,000	3,500	24
30,000	15,000	3,750	25
32,000	16,000	4,000	26
40,000	20,000	5,000	30
80,000	40,000	10,000	40
100,000 and over	80,000	20,000	50
	160,000	40,000	75
	320,000 and over	80,000	100
		120,000	115
		240,000	130
		400,000 and over	150

Table II.—Where Mineral Oil and/or Dangerous Goods of Class 2 only are kept or to be kept:—

In an underground Tank Depot, in quantity exceeding 800 gallons, but not exceeding—	In an aboveground Tank Depot or other Depot, separated from protected works by a screen wall, in quantity exceeding 800 gallons, but not exceeding—	In an aboveground Tank Depot or other Depot not separated from protected works by a screen wall, in quantity exceeding 800 gallons, but not exceeding—	Distance not less than—
Gallons	Gallons	Gallons	Feet
4,000	2,000	1,000	10
8,000	4,000	2,000	15
14,400	7,200	3,600	16
20,800	10,400	5,200	17
40,000	20,000	10,000	20
80,000	40,000	20,000	30
160,000	80,000	40,000	40
320,000 and over	160,000	80,000	50
	320,000 and over	160,000	75
		320,000 and over	100

Provided that the distances shown above may be altered proportionately for intermediate quantities.

Protected Work means:—

Building in which any person dwells or in which persons are accustomed to assemble for the purpose of public concourse, public religious worship, public entertainment or amusement, education or discussion, and public offices; stores (including bonded or free or bonded and free combined) warehouses and buildings in which persons are employed for the purpose of any trade or business, and which are not situated on the licensed store; dock, wharf, pier, or timber yard, and that part of a harbour, port or river where it is customary for ships to berth, moor or lie; other depot in which inflammable liquid or dangerous goods are kept.

INSPECTION RECORD

Licence No. _____

Licensee: Mangrove Industries

Address: 300. Burnis Bay Rd. Lane. Cove

Storage licensed: 1000 m.s. m.o. D.Y. 192.
B.I.C.

Sketch of Premises (Dimensions of depot and distance of same from adjoining "protected works" to be shown).

18'x18'x6"
Depot

Factory

Drive
Way

Burnis Bay Rd.

Inspected	Initials	Requisitions made or state of depot
10.4.69.	H.C.	Sat.

1 4										MANGROVITE INDUSTRIES LTD.										A 12600 86.50 89									
CALLING Tanner																													
ADDRESS LANE COVE										300 Burns Bay Rd. 2066																			
DESCRIPTION OF PREMISES Factory																				Box 15 P.O. Lane Cove									
Depot No.		Construction of Premises			Mineral Spirit		Mineral Oil		Dangerous Goods																				
		Walls	Roof	Floor	Gallons	Gallons	Class 1 Gallons	Class 2 Gallons	Class 3 Lbs.	Class 4 Cubic Feet	Class 5 Lbs.																		
1		Brick	Iron	Concrete			1,000																						
OBSOLETE										NEW CARD MADE OUT FILE																			
Fee Paid										Fee Paid										Remarks									
Date		Receipt No.		For Year Ending		Date		Receipt No.		For Year Ending																			
24-4-67		2836		31-3-68								New license [Signature]																	
4-4-68		0387		31-3-69																									
14-4-69		0077		15-4-70																									
3-4-70		6335		1971																									
26-2-71		7585		15-4-72																									
15-3-72		9736		15-4-73																									

5 11.61 St 5709-I V. C. N. Blight, Government Printer

Mangrove Ind. Ltd.
300 Burns Pine Rd.
Lane Cove
Factory

350126005

6-7-82

42

- OK (1) Remove all combustible material i.e. paper, leaves, dry forage etc. from within and at least 5 metres of the flammable liquid depot.
- (2) There shall be displayed in a conspicuous position on the depot the words "Danger - No Smoking - Keep Fire Away" in letters at least 50mm high on a red background, plus the red diamond flammable liquid sign No 3 ^{on order} this sign to measure 270mm on each side.
- OK (3) The fire extinguishers shall be serviced at regular six monthly inspections and be provided with a weather proof box.

R/S 1-9-82

Cal. Matheson
H.O. Sydney

A- 12600-4



EXPLOSIVES DEPARTMENT

ME 32

To Mr. Meng Louie Industries Ltd
Occupier of premises at Lone Cove.

Used for the Keeping of Explosives.
Inflammable Liquids.

Take notice that the following directions must be carried out to bring your premises specified above into conformity with the requirements of the "Explosives Act, 1905".

"Inflammable Liquid Act, 1915, as amended".
Time allowed 21 days. This notice to be returned, duly signed and directed as below, when directions have been carried out.

Re-paint sign on your
Inflammable Liquids Depot
display New Sign measuring
10 $\frac{3}{4}$ " on all sides

Sample here with

O.K.



Inspector H. Conway.

Date 14.7.72

The above directions have been carried out

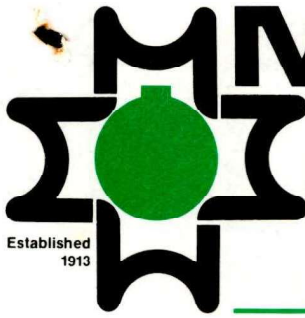
Signature Ameyston

Date 21.7.72

THE SUPERINTENDENT,
EXPLOSIVES DEPARTMENT,
P.O., BOX R. 216, ROYAL EXCHANGE, SYDNEY, N.S.W. 2001

M 12568

'QUALITY IS NO ACCIDENT'



M MANGROVITE

INDUSTRIES AUSTRALIA PTY. LIMITED
INCORPORATED IN NSW

HEAD OFFICE — Parsonage Street, Ryde NSW 2112 Australia
POSTAL ADDRESS — Private Mail Bag, Ryde NSW 2112 Australia
TELEPHONE — (02) 809 6188
FACSIMILE — (02) 809 6898
TELEX — AA25216 (WTCO)

Established
1913

26 May 1988

Department of Industrial
Relations
PO Box 847
DARLINGHURST NSW 2010

Dear Sir

We are in receipt of a final notice for a licence for the keeping of dangerous goods.

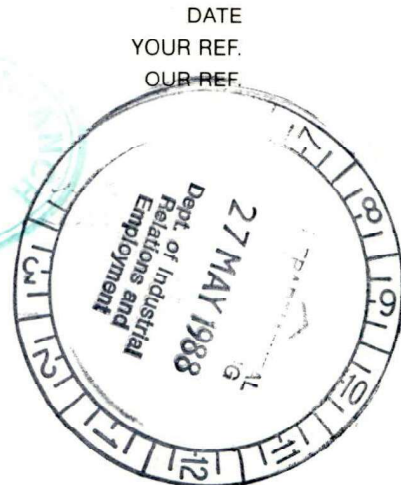
Our property that had a licenced depot was sold by us last September and has been subsequently demolished.

We are currently in rented premises and do not have any similar store.

Accordingly renewal of the licence is not applicable or required.

Yours faithfully

J A Mottram
Secretary



*All chemicals/dangerous goods removed
Premises demolished.*

*Cancel.
Hobbs
22-10-88*

DEPARTMENT OF INDUSTRIAL RELATIONS
1 OXFORD STREET, P.O. BOX 847, DARLINGHURST 2010, N.S.W.
TELEPHONE: 266 8111 (DX22, SYDNEY)



FINAL NOTICE

APPLICATION FOR
LICENCE FOR THE KEEPING OF DANGEROUS GOODS
UNDER AND SUBJECT TO THE PROVISIONS OF THE
DANGEROUS GOODS ACT, 1975
AND REGULATIONS THEREUNDER.

DEPOT TYPE	PRODUCT	UNITS (ABT)	CLASS	FEE
1 ROOFED	FLAMMABLE LIQUID	5,000	3	\$15

TO

BE

CANCELLED
Deleted
27/6/88

24 NOV 1988

PAID

DECLARATION: I certify that the details shown are correct (amend if necessary) and forward
herewith fee of \$..... (Signature)..... (Date).....

APPLICANT
MANGROVITE INDUSTRIES LTD
BOX 15 P.O.
LANE COVE 2066

AMOUNT PAYABLE

\$15.00

PREMISES TO BE LICENSED OR REGISTERED IF NOT AS ABOVE
300 BURNS BAY RD

RS1 Please confirm

35 0126005
LICENCE/REG. No.

15 APR 89
NEXT EXPIRY

CANCELLED

Rivers and Streams

[favourites](#) [search](#) [download sites](#)

[find a site](#)

[Real Time Data - Rivers And Streams](#)

Daily River Reports

[Daily River Reports](#)

Dams

[favourites](#) [search](#) [download sites](#)

[find a site](#)

[Real Time Data - Major Dams](#)

Groundwater (Telemetered data)

[favourites](#) [search](#) [download sites](#)

[find a site](#)

[Real Time Data - Bores](#)

All Groundwater Site details

[search](#) [download sites](#) [find a site](#)

[search by licence](#)

[All Groundwater Map](#)

Meteorology

[favourites](#) [search](#) [download sites](#)

[find a site](#)

[Real Time Data - Weather Stations](#)

Hunter River Salinity Trading Scheme

[Hunter River Salinity Trading Scheme](#)

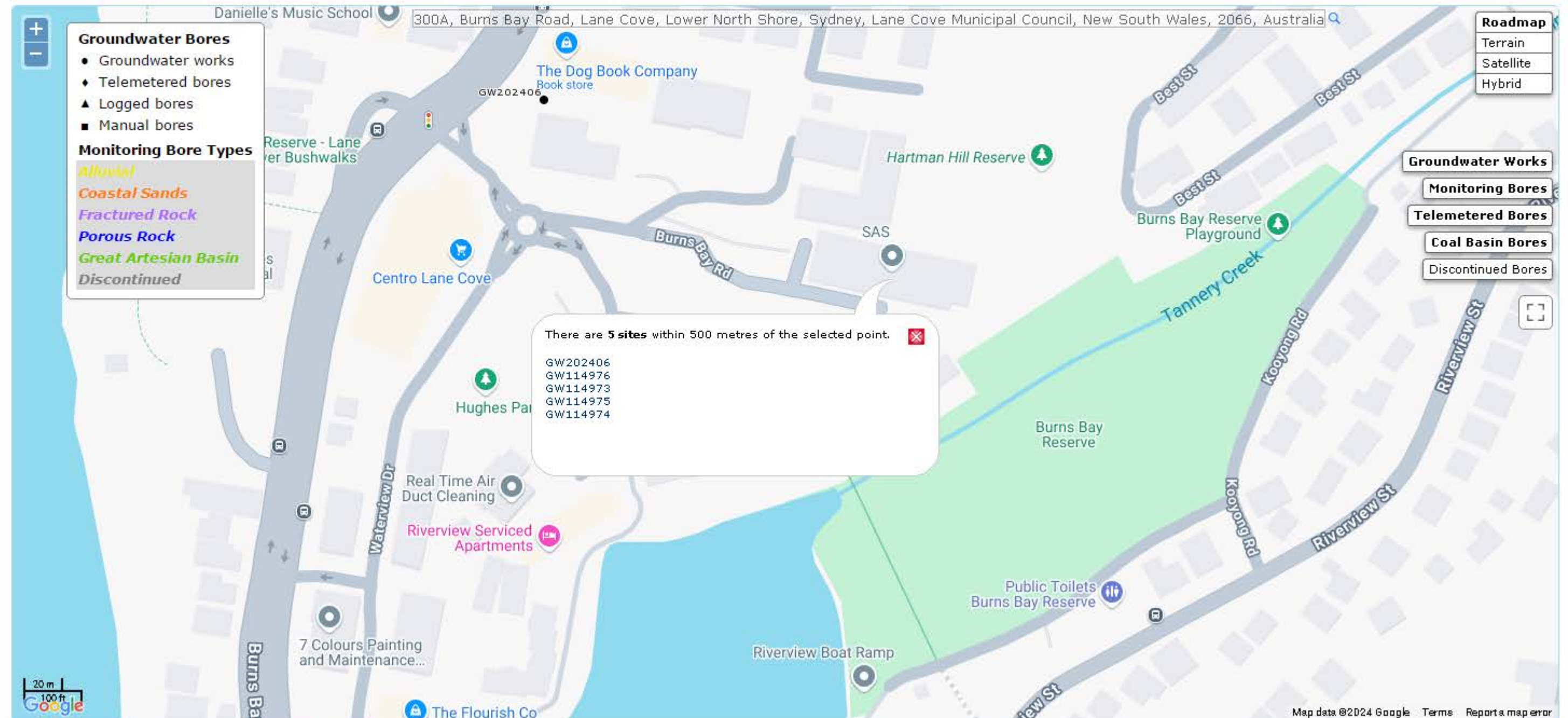
All Groundwater Site Details

ALL GROUNDWATER MAP

All data times are Eastern Standard Time

[Map](#) [Info](#)

[bookmark this page](#)



Scale = 1 : 1693

329065, 6256157, 56

WaterNSW

Work Summary

GW114973

Licence: 10BL604670

Licence Status: CANCELLED

Authorised Purpose(s): MONITORING BORE
Intended Purpose(s): MONITORING BORE

Work Type: Bore
Work Status: Equipped
Construct.Method: Auger - Solid
Owner Type: Private

Commenced Date:
Completion Date: 08/06/2011

Final Depth: 8.50 m
Drilled Depth: 8.50 m

Contractor Name: Numac
Driller: Matthew Stephen Moroney
Assistant Driller:

Property: WENZHOU PTY LIMITED 256 Burns
Bay Rd LANE COVE 2066 NSW

Standing Water Level (m): 2.770

GWMA:
GW Zone:

Salinity Description:
Yield (L/s):

Site Details

Site Chosen By:

County
Form A: CUMBERLAND
Licensed: CUMBERLA

Parish
WILLOUGHB
WILLOUGH

Cadastre
12//320317
Whole Lot 12//320317

Region: 10 - Sydney South Coast

River Basin: - Unknown
Area/District:

CMA Map:
Grid Zone:

Scale:

Elevation: 0.00 m (A.H.D.)
Elevation Source: Unknown

Northing: 6256550.000
Easting: 328949.000

Latitude: 33°49'02.8"S
Longitude: 151°09'06.6"E

GS Map: -

MGA Zone: 56

Coordinate Source: Unknown

Construction

Negative depths indicate Above Ground Level; C-Cemented; SL-Slot Length; A-Aperture; GS-Grain Size; Q-Quantity; PL-Placement of Gravel Pack; PC-Pressure Cemented; S-Sump; CE-Centralisers

Hole	Pipe	Component	Type	From (m)	To (m)	Outside Diameter (mm)	Inside Diameter (mm)	Interval	Details
1		Hole	Hole	0.00	8.39	0			Auger - Solid Flight
1	1	Casing	P.V.C.	0.00	0.00				

Remarks

08/06/2011: Form A Remarks:
Coordinates provided by LAS. L. Franchi.

12/08/2015: Nat Carling, 12-Aug-2015; Updated coordinate source & work type & added drilled depth to summary.

***** End of GW114973 *****

Warning To Clients: This raw data has been supplied to the WaterNSW by drillers, licensees and other sources. WaterNSW does not verify the accuracy of this data. The data is presented for use by you at your own risk. You should consider verifying this data before relying on it. Professional hydrogeological advice should be sought in interpreting and using this data.

WaterNSW

Work Summary

GW114974

Licence: 10BL604670

Licence Status: CANCELLED

Authorised Purpose(s): MONITORING BORE
Intended Purpose(s): MONITORING BORE

Work Type: Bore
Work Status: Equipped
Construct.Method: Auger - Solid
Owner Type: Private

Commenced Date:
Completion Date: 08/06/2011

Final Depth: 8.50 m
Drilled Depth: 8.50 m

Contractor Name: Numac
Driller: Matthew Stephen Moroney
Assistant Driller:

Property: WENZHOU PTY LIMITED 256 Burns
Bay Rd LANE COVE 2066 NSW

Standing Water Level (m):

GWMA:
GW Zone:

Salinity Description:
Yield (L/s):

Site Details

Site Chosen By:

County
Form A: CUMBERLAND
Licensed: CUMBERLA

Parish
WILLOUGHB
WILLOUGH

Cadastre
1//14919
Whole Lot 12//320317

Region: 10 - Sydney South Coast

River Basin: - Unknown
Area/District:

CMA Map:
Grid Zone:

Scale:

Elevation: 0.00 m (A.H.D.)
Elevation Source: Unknown

Northing: 6256575.000
Easting: 328933.000

Latitude: 33°49'02.0"S
Longitude: 151°09'05.9"E

GS Map: -

MGA Zone: 56

Coordinate Source: Unknown

Construction

Negative depths indicate Above Ground Level; C-Cemented; SL-Slot Length; A-Aperture; GS-Grain Size; Q-Quantity; PL-Placement of Gravel Pack; PC-Pressure Cemented; S-Sump; CE-Centralisers

Hole	Pipe	Component	Type	From (m)	To (m)	Outside Diameter (mm)	Inside Diameter (mm)	Interval	Details
1		Hole	Hole	0.00	8.50	100			Unknown
1	1	Casing	P.V.C.	0.00	0.00	50			

Drillers Log

From (m)	To (m)	Thickness (m)	Drillers Description	Geological Material	Comments
0.00	0.10	0.10	CONCRETE	Fill	

0.10	0.20	0.10	FILL, SAND BROWN,M/GRAINED,DRY	Fill	
0.20	1.00	0.80	FILL, GRAVELLY CLAY BROWN SOFT,GRAVELS	Fill	
1.00	1.30	0.30	CLAY GREY WITH PURPLISH MOTTLING	Clay	
1.30	8.50	7.20	CLAY GREY WITH RED MOTTLING,DRY LOW PLASTICITY	Clay	

Remarks

08/06/2011: Form A Remarks:
Coordinates from LAS. L. Franchi
12/08/2015: Nat Carling, 12-Aug-2015; Updated coordinate source & work type & fixed rock type errors.

*** End of GW114974 ***

Warning To Clients: This raw data has been supplied to the WaterNSW by drillers, licensees and other sources. WaterNSW does not verify the accuracy of this data. The data is presented for use by you at your own risk. You should consider verifying this data before relying on it. Professional hydrogeological advice should be sought in interpreting and using this data.

WaterNSW

Work Summary

GW114975

Licence: 10BL604670

Licence Status: CANCELLED

Authorised Purpose(s): MONITORING BORE
Intended Purpose(s): MONITORING BORE

Work Type: Bore
Work Status: Equipped
Construct.Method: Auger - Solid
Owner Type: Private

Commenced Date:
Completion Date: 07/06/2011

Final Depth: 7.30 m
Drilled Depth: 7.30 m

Contractor Name: Numac
Driller: Unkown Unknown
Assistant Driller:

Property: WENZHOU PTY LIMITED 256 Burns
Bay Rd LANE COVE 2066 NSW
GWMA:
GW Zone:

Standing Water Level (m):
Salinity Description:
Yield (L/s):

Site Details

Site Chosen By:

County	Parish	Cadastre
Form A: CUMBERLAND	WILLOUGHB	12//320317
Licensed: CUMBERLA	WILLOUGH	Whole Lot 12//320317

Region: 10 - Sydney South Coast
River Basin: - Unknown
Area/District:

CMA Map:
Grid Zone: Scale:

Elevation: 0.00 m (A.H.D.)	Northing: 6256547.000	Latitude: 33°49'02.9"S
Elevation Source: Unknown	Easting: 328928.000	Longitude: 151°09'05.7"E

GS Map: -	MGA Zone: 56	Coordinate Source: Unknown
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Construction

Negative depths indicate Above Ground Level; C-Cemented; SL-Slot Length; A-Aperture; GS-Grain Size; Q-Quantity; PL-Placement of Gravel Pack; PC-Pressure Cemented; S-Sump; CE-Centralisers

Hole	Pipe	Component	Type	From (m)	To (m)	Outside Diameter (mm)	Inside Diameter (mm)	Interval	Details
1		Hole	Hole	0.00	7.30	100			Unknown
1	1	Casing	P.V.C.	0.00	0.00	50			

Drillers Log

From (m)	To (m)	Thickness (m)	Drillers Description	Geological Material	Comments
0.00	0.10	0.10	CONCRETE	Fill	

0.10	0.20	0.10	FILL, SAND, LIGHT BROWN,M/GRAINED	Fill	
0.20	0.60	0.40	GRAVELLY CLAY, BROWN WITH GREY MOTTLING	Clay	
0.60	1.70	1.10	GRAVELLY CLAY GRET WHIT PURPLISH RED MOTTLING	Clay	
1.70	7.30	5.60	GRAVELLY CLAY GREY WITH DARK RED AND ORANGE MOTTLING	Clay	

Remarks

07/06/2011: Form A Remarks:
Coordinates provided by LAS.
12/08/2015: Nat Carling, 12-Aug-2015; Updated coordinate source & work type, fixed rock type errors & removed owner name from work name.

*** End of GW114975 ***

Warning To Clients: This raw data has been supplied to the WaterNSW by drillers, licensees and other sources. WaterNSW does not verify the accuracy of this data. The data is presented for use by you at your own risk. You should consider verifying this data before relying on it. Professional hydrogeological advice should be sought in interpreting and using this data.

WaterNSW

Work Summary

GW114976

Licence: 10BL604670

Licence Status: CANCELLED

Authorised Purpose(s): MONITORING BORE
Intended Purpose(s): MONITORING BORE

Work Type: Bore
Work Status: Equipped
Construct.Method: Auger - Solid
Owner Type: Private

Commenced Date:
Completion Date: 07/06/2011

Final Depth: 8.30 m
Drilled Depth: 8.30 m

Contractor Name: Numac
Driller: Unkown Unknown
Assistant Driller:

Property: WENZHOU PTY LIMITED 256 Burns
Bay Rd LANE COVE 2066 NSW
GWMA:
GW Zone:

Standing Water Level (m):
Salinity Description:
Yield (L/s):

Site Details

Site Chosen By:

County	Parish	Cadastre
Form A: CUMBERLAND	WILLOUGHB	12//320317
Licensed: CUMBERLA	WILLOUGH	Whole Lot 12//320317

Region: 10 - Sydney South Coast
River Basin: - Unknown
Area/District:

CMA Map:
Grid Zone: Scale:

Elevation: 0.00 m (A.H.D.) Elevation Source: Unknown	Northing: 6256545.000 Easting: 328940.000	Latitude: 33°49'02.9"S Longitude: 151°09'06.2"E
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GS Map: -	MGA Zone: 56	Coordinate Source: Unknown
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Construction

Negative depths indicate Above Ground Level; C-Cemented; SL-Slot Length; A-Aperture; GS-Grain Size; Q-Quantity; PL-Placement of Gravel Pack; PC-Pressure Cemented; S-Sump; CE-Centralisers

Hole	Pipe	Component	Type	From (m)	To (m)	Outside Diameter (mm)	Inside Diameter (mm)	Interval	Details
1		Hole	Hole	0.00	8.30	100			Unknown
1	1	Casing	P.V.C.	0.00	0.00	50			

Drillers Log

From (m)	To (m)	Thickness (m)	Drillers Description	Geological Material	Comments
0.00	0.10	0.10	CONCRETE	Fill	

0.10	0.20	0.10	FILL, SAND LIGHT BROWN,DRY,ORGANIC MATERIALS	Fill	
0.20	0.90	0.70	FILL,, CLAY, CRUSHED ASPHALT CHUNKS,GRAVELS,SAND DRY	Fill	
0.90	1.60	0.70	GRAVELLY CLAY,GREY WITH PURPLISH RED MOTTLING	Clay	
1.60	8.30	6.70	GRAVELLY CLAY GREY WITH DARK RED AND ORANGE MOTTLING,FIRM,DRY	Clay	

Remarks

07/06/2011: Form A Remarks:
Coordinates provided by LAS. L. Franchi
12/08/2015: Nat Carling, 12-Aug-2015; Updated coordinate source & work type, fixed rock type errors & removed owner name from work name.

*** End of GW114976 ***

Warning To Clients: This raw data has been supplied to the WaterNSW by drillers, licensees and other sources. WaterNSW does not verify the accuracy of this data. The data is presented for use by you at your own risk. You should consider verifying this data before relying on it. Professional hydrogeological advice should be sought in interpreting and using this data.

WaterNSW

Work Summary

GW202406

Licence: 10BL604362

Licence Status: CANCELLED

Authorised Purpose(s): MONITORING BORE
Intended Purpose(s): MONITORING BORE

Work Type: Bore
Work Status: Equipped
Construct.Method: Auger - Solid
Owner Type: Private

Commenced Date:
Completion Date: 27/08/2010

Final Depth: 6.00 m
Drilled Depth: 6.00 m

Contractor Name: (None)
Driller: Yoon Fook Chin
Assistant Driller:

Property: SEDIMENTARY 284-288 Burns Bay Rd
LANE COVE 2066 NSW
GWMA:
GW Zone:

Standing Water Level (m): 2.100
Salinity Description:
Yield (L/s): 40.000

Site Details

Site Chosen By:

County
Form A: CUMBERLAND
Licensed: CUMBERLA

Parish
WILLOUGHB
WILLOUGH

Cadastre
100//1176771
Whole Lot 11//843954

Region: 10 - Sydney South Coast
River Basin: - Unknown
Area/District:

CMA Map: 9130-3N
Grid Zone:
Scale:

Elevation: 0.00 m (A.H.D.)
Elevation Source: Unknown

Northing: 6256260.000
Easting: 328886.000

Latitude: 33°49'12.2"S
Longitude: 151°09'03.9"E

GS Map: -

MGA Zone: 56

Coordinate Source: GPS - Global

Construction

Negative depths indicate Above Ground Level; C-Cemented; SL-Slot Length; A-Aperture; GS-Grain Size; Q-Quantity; PL-Placement of Gravel Pack; PC-Pressure Cemented; S-Sump; CE-Centralisers

Hole	Pipe	Component	Type	From (m)	To (m)	Outside Diameter (mm)	Inside Diameter (mm)	Interval	Details
1		Hole	Hole	0.00	6.00	100			Auger - Solid Flight
1		Annulus	Waterworn/Rounded	0.00	0.20	100	50		Graded, PL:Pour
1		Annulus	Bentonite/Grout	0.20	3.10	100	50		PL:Pour
1		Annulus	Waterworn/Rounded	3.10	6.00	100	50		Graded, PL:Pour
1	1	Casing	Steel Stainless 3	0.00	3.00	50	44		Cemented, Screwed
1	1	Opening	Screen - Wedge Wire	3.00	6.00	50		0	Stainless Steel 316, Screwed, A: 0.50mm

Water Bearing Zones

From (m)	To (m)	Thickness (m)	WBZ Type	S.W.L. (m)	D.D.L. (m)	Yield (L/s)	Hole Depth (m)	Duration (hr)	Salinity (mg/L)
2.10	6.00	3.90	Unknown	2.10	4.96	40.00		00:10:00	

Drillers Log

From (m)	To (m)	Thickness (m)	Drillers Description	Geological Material	Comments
0.00	0.20	0.20	Fill; Concrete	Fill	
0.20	0.65	0.45	Fill; Silty Sandy Clay, low plasticity, dark brown, fine to medium grained sand, with igneous gravel	Fill	
0.65	2.50	1.85	Sandstone; fine to coarse grained, orange & yellow	Sandstone	
2.50	4.00	1.50	Sandstone; as above, but light grey, brown & orange	Sandstone	
4.00	6.00	2.00	Sandstone; as above, but orange & grey	Sandstone	

Remarks

27/08/2010: Form A Remarks:
Nat Carling, 5-Oct-2012; Coordinates based on location map provided with the Form-A.
29/11/2012: Nat Carling, 29-Nov-2012; Attached correct licence, as directed.

*** End of GW202406 ***

Warning To Clients: This raw data has been supplied to the WaterNSW by drillers, licensees and other sources. WaterNSW does not verify the accuracy of this data. The data is presented for use by you at your own risk. You should consider verifying this data before relying on it. Professional hydrogeological advice should be sought in interpreting and using this data.

Site GW202406 Values at Time of Drilling

Measure	Data Type	Hole	Pipe	Date	Value
Groundwater depth below surface level (Metres)	Manual	1	1	27/08/2010 @ 12:00	2.100
Meter Discharge (Kilolitres/Day)	Manual	1	1	27/08/2010 @ 00:00	40.000

Site GW114973 Values at Time of Drilling

Measure	Data Type	Hole	Pipe	Date	Value
Groundwater depth below surface level (Metres)	Manual	1	1	08/06/2011 @ 12:00	2.770
Inst. Salinity (Total Dissolved Salts) (Milligrams/Litre)	Manual	1	1	08/06/2011 @ 00:00	340

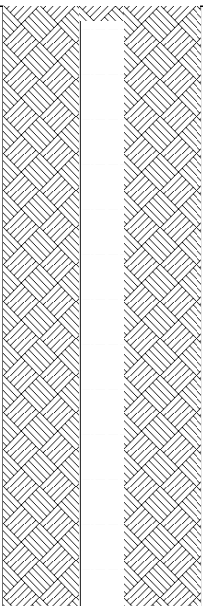
Appendix G – Borehole Logs

MONITORING WELL LOG

BH ID: BH1M

Location	300 Burns Bay Road, Lane Cove, NSW	Started	09 September 2024		
Client	Lane Cove Development No. 1 Pty Ltd	Completed	09 September 2024		
Job No.	E26484.G03	Logged By	KP	Date	09 September 2024
Sheets	1 of 2	Review By		Date	

Drilling Contractor	Geosense Drilling and Engineering	Surface RL	≈22.25 m (AHD)	Northing	6256177.0000 (MGA 2020 Zone 56)
Plant	Comacchio Geo 205	Inclination	90°	Easting	328958.0000 (MGA 2020 Zone 56)

WATER		SAMPLES & FIELD TESTS		DEPTH (m)	GRAPHIC LOG	RL (m AHD)	MATERIAL DESCRIPTION	MOISTURE CONDITION	BACKFILL DETAILS	STANDPIPE DETAILS		
GWNE	BH1M_0.50-0.95 SPT 0.50-0.95 4,4,2 N=6	80%	BH1M_1.50-1.88 SPT 1.50-1.70 1,3/50 mm HB N=R	0.00		22.25	ASPHALT: 100mm thick	-	Steel Cover at Surface		Well Stickup =-0.10m (RL 22.15m)	
				0.10		22.15	FILL: Gravelly SAND: medium to coarse grained, grey, gravels are medium to coarse, angular to sub-angular	M	Cuttings 0.00m - 4.00m			
0%		0.40		21.85	FILL: Silty SAND: fine to medium grained, yellow brown, trace of fine to medium, sub-angular to angular and brick		Bentonite 4.00m - 4.40m					0.10m - 5.0m PVC casing (50mm Ø)
		0.80		21.45	From 0.80m, yellow brown-grey trace of clay							
				1		20.55	SANDSTONE: fine to medium grained, grey-white / brown-red					
				1.70		20.45	NO CORE: 300mm thick					
				2		20.15	SANDSTONE: fine to medium grained, grey-white / brown-red, laminated					
				2.10								
				3								
				3.10		19.15	From 3.10m, laminated					
				4								
				4.18		18.07	From 4.18m, pale grey, medium to thickly bedded					
				5								
				6								
				7								
				8								
				9								
				9.20		13.05	From 9.20m, interbedded with shale, dark grey					
				9.65		12.60	From 9.65m, medium bedded					
				10								

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

MONITORING WELL LOG

BH ID: BH1M

Location	300 Burns Bay Road, Lane Cove, NSW	Started	09 September 2024	
Client	Lane Cove Development No. 1 Pty Ltd	Completed	09 September 2024	
Job No.	E26484.G03	Logged By	KP	Date 09 September 2024
Sheets	2 of 2	Review By	Date	

Drilling Contractor	Geosense Drilling and Engineering	Surface RL	≈22.25 m (AHD)	Northing	6256177.0000 (MGA 2020 Zone 56)
Plant	Comacchio Geo 205	Inclination	90°	Easting	328958.0000 (MGA 2020 Zone 56)

WATER	SAMPLES & FIELD TESTS	DEPTH (m)	GRAPHIC LOG	RL (m AHD)	MATERIAL DESCRIPTION	MOISTURE CONDITION	BACKFILL DETAILS	STANDPIPE DETAILS
0%				12.05	From 9.65m, medium bedded			
					Terminated at 10.20m. Target Depth Reached.			
		11						
		12						
		13						
		14						
		15						
		16						
		17						
		18						
		19						
		20						

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

MONITORING WELL LOG

BH ID: BH2M

Location	300 Burns Bay Road, Lane Cove, NSW	Started	11 September 2024		
Client	Lane Cove Development No. 1 Pty Ltd	Completed	11 September 2024		
Job No.	E26484.G03	Logged By	KP	Date	11 September 2024
Sheets	1 of 2	Review By		Date	

Drilling Contractor	Geosense Drilling andnEngineering	Surface RL	≈22.60 m (AHD)	Northing	6256200.0000 (MGA 2020 Zone 56)
Plant	Comacchio Geo 205	Inclination	90°	Easting	328946.0000 (MGA 2020 Zone 56)

WATER	SAMPLES & FIELD TESTS	DEPTH (m)	GRAPHIC LOG	RL (m AHD)	MATERIAL DESCRIPTION	MOISTURE CONDITION	BACKFILL DETAILS	STANDPIPE DETAILS
▽	BH2M_0.50-0.95 SPT 0.50-0.95 10,8,11 N=19	0.00		22.60	ASPHALT: 100mm thick	-	Steel Cover at Surface	Well Stickup ≈-0.10m (RL 22.50m)
		0.10		22.50	FILL: Gravelly SAND: fine to medium grained, dark grey, gravels are fine to medium, angular to sub-angular	M	Cuttings 0.00m - 1.00m	
		0.30		22.30	FILL: Silty SAND: fine to medium grained, dark brown / grey, with medium to coarse, sub-angular to sub-rounded gravels and sandstone cobbles			
		0.80		21.80	From 0.80m, medium to coarse grained, brown / pale grey-dark grey, trace of sandstone fragments	W		
		1.00		21.60	SANDSTONE: fine to medium grained, grey-white, distinctly weathered, low strength	-	Bentonite 1.00m - 1.50m	0.10m - 2.0m PVC casing (50mm Ø)
90%		1.20		21.40	SANDSTONE: fine to medium grained, pale grey, thinly to medium bedded			
0%		2						
		2.30		20.30	From 2.30m, purple red			
		2.45		20.15	NO CORE: 260mm thick			
90%		2.71		19.89	SANDSTONE: fine to medium grained, grey / orange brown, medium bedded			
		3						
		3.45		19.15	From 3.45m, pale grey		Sand 1.50m - 5.00m	2.0m - 5.0m PVC screen (50mm Ø)
		4						
		4.20		18.40	From 4.20m, very thickly bedded			
		5						
		6						
		7						
50%		7.20		15.40	From 7.20m, medium to thickly bedded		Bentonite 5.00m - 5.50m	
		8						
		9						
		10					Sand 5.50m - 10.08m	

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

MONITORING WELL LOG

BH ID: BH2M

Location	300 Burns Bay Road, Lane Cove, NSW	Started	11 September 2024		
Client	Lane Cove Development No. 1 Pty Ltd	Completed	11 September 2024		
Job No.	E26484.G03	Logged By	KP	Date	11 September 2024
Sheets	2 of 2	Review By		Date	

Drilling Contractor	Geosense Drilling andnEngineering	Surface RL	≈22.60 m (AHD)	Northing	6256200.0000 (MGA 2020 Zone 56)
Plant	Comacchio Geo 205	Inclination	90°	Easting	328946.0000 (MGA 2020 Zone 56)

WATER	SAMPLES & FIELD TESTS	DEPTH (m)	GRAPHIC LOG	RL (m AHD)	MATERIAL DESCRIPTION	MOISTURE CONDITION	BACKFILL DETAILS	STANDPIPE DETAILS
				12.52	From 7.20m, medium to thickly bedded Terminated at 10.08m. Target Depth Reached.			
		11						
		12						
		13						
		14						
		15						
		16						
		17						
		18						
		19						
		20						

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

MONITORING WELL LOG

BH ID: BH3M

Location	300 Burns Bay Road, Lane Cove, NSW	Started	09 September 2024		
Client	Lane Cove Development No. 1 Pty Ltd	Completed	09 September 2024		
Job No.	E26484.G03	Logged By	KP	Date	09 September 2024
Sheets	1 of 2	Review By		Date	

Drilling Contractor	Geosense Drilling and Engineering	Surface RL	≈22.30 m (AHD)	Northing	6256195.0000 (MGA 2020 Zone 56)
Plant	Comacchio Geo 205	Inclination	90°	Easting	329007.0000 (MGA 2020 Zone 56)

WATER	SAMPLES & FIELD TESTS	DEPTH (m)	GRAPHIC LOG	RL (m AHD)	MATERIAL DESCRIPTION	MOISTURE CONDITION	BACKFILL DETAILS	STANDPIPE DETAILS
GWNE	BH3M_0.50-0.60 SPT 0.50-0.60 7/100 mm HB N=R	0.00		22.30	ASPHALT: 100mm thick	-	Steel Cover at Surface	Well Stickup = -0.10m (RL 22.20m)
		0.10		22.20	FILL: Gravelly SAND: fine to medium grained, dark grey / pale grey, gravels are fine to medium, angular to sub-angular, trace of clay	M		
60%		0.50		21.80	SANDSTONE: fine to medium grained, grey-white, distinctly weathered, low strength	-	Cuttings 0.00m - 3.80m	0.10m - 5.0m PVC casing (50mm Ø)
		0.60		21.70	SANDSTONE: fine to medium grained, pale grey / brown, very thinly to thinly bedded	-		
		1.38		20.92	NO CORE: 180mm thick	-		
		1.56		20.74	SANDSTONE: fine to medium grained, brown / grey, very thinly bedded	-		
70%		1.81		20.49	From 1.81m, thinly to medium bedded	-	Bentonite 3.80m - 4.30m	5.0m - 8.0m PVC screen (50mm Ø)
		2.77		19.53	From 2.77m, medium to thickly bedded	-		
		7.89		14.41	From 7.89m, interbedded with shale, dark grey	-		
		8.68		13.62	From 8.68m, grey / grey-white	-		
80%		8.00					Sand 4.30m - 8.00m	
		9.50						
		10.00					Bentonite 8.00m - 9.50m	

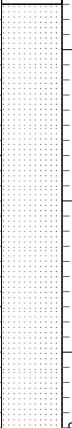
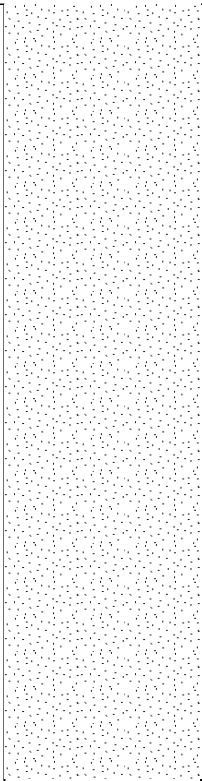
This log should be read in conjunction with EI Australia's accompanying explanatory notes.

MONITORING WELL LOG

BH ID: BH3M

Location	300 Burns Bay Road, Lane Cove, NSW	Started	09 September 2024		
Client	Lane Cove Development No. 1 Pty Ltd	Completed	09 September 2024		
Job No.	E26484.G03	Logged By	KP	Date	09 September 2024
Sheets	2 of 2	Review By		Date	

Drilling Contractor	Geosense Drilling and Engineering	Surface RL	≈22.30 m (AHD)	Northing	6256195.0000 (MGA 2020 Zone 56)
Plant	Comacchio Geo 205	Inclination	90°	Easting	329007.0000 (MGA 2020 Zone 56)

WATER	SAMPLES & FIELD TESTS	DEPTH (m)	GRAPHIC LOG	RL (m AHD)	MATERIAL DESCRIPTION	MOISTURE CONDITION	BACKFILL DETAILS	STANDPIPE DETAILS
80%		11		9.50	From 8.68m, grey / grey-white		Sand 9.50m - 15.12m	
		12			From 12.80m, thinly to medium bedded			
		12.80		7.18	Terminated at 15.12m. Target Depth Reached.			
		13						
		14						
		15						
		16						
		17						
		18						
		19						
		20						

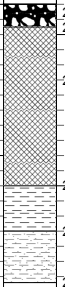
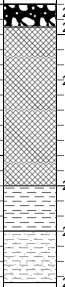
This log should be read in conjunction with EI Australia's accompanying explanatory notes.

BOREHOLE LOG

BH ID: BH4

Location	300 Burns Bay Road, Lane Cove, NSW	Started	10 September 2024		
Client	Lane Cove Development No. 1 Pty Ltd	Completed	10 September 2024		
Job No.	E26484.G03	Logged By	KP	Date	10 September 2024
Sheets	1 of 3	Review By		Date	

Drilling Contractor	Geosense Drilling and Engineering	Surface RL	≈22.20 m (AHD)	Northing	6256173.0000 (MGA 2020 Zone 56)
Plant	Comacchio Geo 205	Inclination	90°	Easting	329011.0000 (MGA 2020 Zone 56)

METHOD	GROUND WATER LEVELS	SAMPLES & FIELD TESTS	SAMPLE RECOVERY	DEPTH (m)	GRAPHIC LOG	RL (m AHD)	MATERIAL DESCRIPTION	MOISTURE CONDITION	CONSISTENCY / REL. DENSITY	MATERIAL ORIGIN & OBSERVATIONS
AD/T	GWNE	BH5_0.50-0.95 SPT 0.50-0.95 5,3,2 N=5		0.00		22.20	ASPHALT: 150mm thick	-	-	ASPHALT
				0.15		22.05	FILL: Gravelly SAND: fine to medium grained, dark brown, gravels are fine to medium, angular to sub-angular	M	-	FILL
				0.50		21.70	FILL: Silty SAND: fine to medium grained, brown, trace of fine to medium, angular to sub-angular			FILL
				1.20		21.00	Silty CLAY: low plasticity, brown	M < PL	-	RESIDUAL SOIL
		BH5_1.50-1.80 SPT 1.50-1.70 0,4/50 mm HB N=R		1.50		20.70	From 1.50m, low plasticity, grey / orange brown, grading into extremely weathered sandstone			
				1.84		20.36	Log continued on next page.			
				2						
				3						
				4						
				5						
				6						
				7						
				8						
				9						
				10						

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

BOREHOLE CORE LOG

BH ID: BH4

Location	300 Burns Bay Road, Lane Cove, NSW	Started	10 September 2024		
Client	Lane Cove Development No. 1 Pty Ltd	Completed	10 September 2024		
Job No.	E26484.G03	Logged By	KP	Date	10 September 2024
Sheets	2 of 3	Review By		Date	

Drilling Contractor	Geosense Drilling and Engineering	Surface RL	≈22.20 m (AHD)	Northing	6256173.0000 (MGA 2020 Zone 56)
Plant	Comacchio Geo 205	Inclination	90°	Easting	329011.0000 (MGA 2020 Zone 56)

METHOD	Flush Return	TCR %	RQD %	DEPTH (m)	GRAPHIC LOG	RL (m AHD)	MATERIAL DESCRIPTION	WEATHERING	ESTIMATED STRENGTH Is(50) ▼ - Axial ▽ - Diametral	DISCONTINUITIES & ADDITIONAL DATA	FRACTURE SPACING
				0			Log continued from previous page.		VL 0-1 L 0-3 M 1 H 3 VH 10 EH		30 100 300 1000 3000
				1							
		100	94	2			SANDSTONE: fine to medium grained, grey / dark brown, thickly bedded				
				3				SW			
				4						3.84: JT 25° PR RO CN 3.88-3.95: XWS 3.88: JT 25° PR RO CN	
				4.48		17.72	SANDSTONE: pale grey, thickly bedded			4.50: JT 15° PR RO CN	
		98	91	5				FR			
				6							
				6.51		15.69	NO CORE: 60mm thick			6.48-6.51: XWS	
				6.57		15.63	SANDSTONE: fine to medium grained, pale grey, interbedded with shale, dark shale, thinly to medium bedded			6.57-6.61: XWS	
				7							
				8				FR			
		100	93	8.68		13.52	From 8.68m, grey-brown, medium bedded			8.71-8.74: XWS	
				9							
				9.45		12.75	From 9.45m, grey, interbedded with shale, dark grey			9.49: JT 5° CU RO CN	
				10							

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

BOREHOLE CORE LOG

BH ID: BH4

Location	300 Burns Bay Road, Lane Cove, NSW				Started	10 September 2024					
Client	Lane Cove Development No. 1 Pty Ltd				Completed	10 September 2024					
Job No.	E26484.G03				Logged By	KP	Date	10 September 2024			
Sheets	3 of 3				Review By		Date				
Drilling Contractor	Geosense Drilling and Engineering				Surface RL	≈22.20 m (AHD)		Northing	6256173.0000 (MGA 2020 Zone 56)		
Plant	Comacchio Geo 205				Inclination	90°		Easting	329011.0000 (MGA 2020 Zone 56)		
METHOD	Flush Return	TCR %	RQD %	DEPTH (m)	GRAPHIC LOG	RL (mAHD)	MATERIAL DESCRIPTION	WEATHERING	ESTIMATED STRENGTH Is(50) ▼ - Axial ▽ - Diametral	DISCONTINUITIES & ADDITIONAL DATA	FRACTURE SPACING
	80%					11.88	From 9.45m, grey, interbedded with shale, dark grey				
							Terminated at 10.32m. Target Depth Reached.			10.20-10.22: XWS 10.22: JT 15° PR RO CN 10.31-10.32: XWS	
				11							
				12							
				13							
				14							
				15							
				16							
				17							
				18							
				19							
				20							

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

MONITORING WELL LOG

BH ID: BH5M

Location	300 Burns Bay Road, Lane Cove, NSW			Started	10 September 2024	
Client	Lane Cove Development No. 1 Pty Ltd			Completed	10 September 2024	
Job No.	E26484.G03			Logged By	KP	Date 10 September 2024
Sheets	1 of 2			Review By		Date
Drilling Contractor	Geosense drilling and engineering		Surface RL	≈22.15 m (AHD)	Northing	6256169.0000 (MGA 2020 Zone 56)
Plant	Comacchio Geo 205		Inclination	90°	Easting	329038.0000 (MGA 2020 Zone 56)

WATER	SAMPLES & FIELD TESTS	DEPTH (m)	GRAPHIC LOG	RL (m AHD)	MATERIAL DESCRIPTION	MOISTURE CONDITION	BACKFILL DETAILS	STANDPIPE DETAILS
		0.00		22.15	ASPHALT: 100mm thick	-	Steel Cover at Surface	
		0.10		22.05	FILL: Gravelly SAND: fine to medium grained, dark grey, gravels are fine to coarse, angular to sub-angular			Well Stickup ≈-0.10m (RL 22.05m)
	BH5M_0.60-1.05 SPT 0.60-1.05 4,2,3 N=5	0.60		21.55	FILL: Clayey SAND: medium to coarse grained, dark grey / grey-white, trace of clay and weathered sandstone and with fine to medium, angular to sub-angular gravel	M	Cuttings 0.00m - 3.00m	
▽	BH5M_1.50-1.95 SPT 1.50-1.95 3,0,0 N=0	1						
		2				W		
		2.30		19.85	SANDSTONE: medium to coarse grained, grey-white / yellow brown, extremely weathered sandstone, very low to low strength	-		
		2.50		19.65	SANDSTONE: fine to medium grained, grey / brown, medium to thickly bedded			0.10m - 5.0m PVC casing (50mm Ø)
		3						
70%		4					Bentonite 3.00m - 4.50m	
		5						
		5.60		16.55	From 5.60m, thinly to medium bedded			
		6						
		6.53		15.62	NO CORE: 120mm thick			
		6.65		15.50	SANDSTONE: fine to medium grained, grey / brown / purple red, medium to thickly bedded			5.0m - 8.0m PVC screen (50mm Ø)
80%		7						
		8					Sand 4.50m - 10.13m	
		9						
		10						

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

MONITORING WELL LOG

BH ID: BH5M

Location

300 Burns Bay Road, Lane Cove, NSW

Client

Lane Cove Development No. 1 Pty Ltd

Job No.

E26484.G03

Sheets

2 of 2

Started

10 September 2024

Completed

10 September 2024

Logged By

KP

Date

10 September 2024

Review By

Date

Drilling Contractor

Geosense drilling and engineering

Surface RL

≈22.15 m (AHD)

Northing

6256169.0000 (MGA 2020 Zone 56)

Plant

Comacchio Geo 205

Inclination

90°

Easting

329038.0000 (MGA 2020 Zone 56)

WATER	SAMPLES & FIELD TESTS	DEPTH (m)	GRAPHIC LOG	RL (m AHD)	MATERIAL DESCRIPTION	MOISTURE CONDITION	BACKFILL DETAILS	STANDPIPE DETAILS
80 %				42.02	SANDSTONE: fine to medium grained, grey / brown / purple red, medium to thickly bedded Terminated at 10.13m. Target Depth Reached.			
		11						
		12						
		13						
		14						
		15						
		16						
		17						
		18						
		19						
		20						

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

Appendix H – Chain of Custody and Sample Receipt Forms

Sheet 1 of 3					Sample Matrix				Analysis																Comments							
Site: 300 Burns Bay Rd, Lane Cove			Project No: E26484		SOIL	WATER	0.45 µm field filtered	OTHER	HM ^a /TRH/BTEX/PAHs OC/OP/PCB/Asbestos	HM ^a /TRH/BTEX/PAHs	HM ^a /TRH/BTEX	BTEX	VOCs	Asbestos	Asbestos Quantification (500ml)	Asbestos 10L field screening	Excavated Natural Material (ENM) Suite	ENM Suite - Stockpile discrete (TRH/BTEX/PAHs)	ENM Suite - Stockpile composite (HM ^a /pH / EC / Foreign Materials)	Dewatering Suite	pH / pH peroxide	sPOCAS	Chromium Reducible Sulfur (CrS)	PFAS	pH / CEC (cation exchange)	pH / EC (electrical conductivity)	Sulphate / Chloride	Lead	TCLP HM ^a / PAH	HM^a Arsenic Cadmium Chromium Copper Lead Mercury Nickel Zinc HM^b Arsenic Cadmium Chromium Lead Mercury Nickel		
Laboratory: SGS Australia Unit 16, 33 Maddox Street, ALEXANDRIA NSW 2015 P: 02 8594 0400 F: 02 8594 0499		Sample ID	Laboratory ID	Container Type																											Sampling	
Date	Time																															
BH1M_0.2-0.3		J, ZLB	9/09/2024	am/pm	X				X																						Dewatering Suite pH & EC TDS / TDU Hardness Total Cyanide Metals (Al, As, Cd, Cr, Cu, Pb, Hg, Ni, Zn) TRH (F1, F2, F3, F4) BTEX PAH Total Phenol	
BH1M_0.5-0.6		J, ZLB	9/09/2024	am/pm	X																											
BH1M_1.2-1.3		J, ZLB	9/09/2024	am/pm	X																											
BH1M_1.7-1.8		J, ZLB	9/09/2024	am/pm	X																											
BH2M_0.2-0.3		J, ZLB	11/09/2024	am/pm	X																											
BH2M_0.5-0.6		ZLB	11/09/2024	am/pm	X																											
BH2M_0.6-0.7	2	J, ZLB	11/09/2024	am/pm	X				X																							
BH2M_0.6-0.8		ZLB	11/09/2024	am/pm	X																											
BH2M_0.8-0.9		J, ZLB	11/09/2024	am/pm	X																											
BH2M_0.8-0.95		ZLB	11/09/2024	am/pm	X																											
BH2M_1.1-1.28	3	J, ZLB	11/09/2024	am/pm	X					X																						
BH3M_0.2-0.3	4	J, ZLB	9/09/2024	am/pm	X				X																							

SGS EHS Sydney COC

SE271094



Container Type: J = solvent washed, acid rinsed, Teflon sealed glass jar S = solvent washed, acid rinsed glass bottle P = natural HDPE plastic bottle VC = glass vial, Teflon Septum ZLB = Zip-Lock Bag BB = Bulk Bag		Investigator: I attest that these samples were collected in accordance with standard EI field sampling procedures.		Report with EI Waste Classification Table ☐	
Sampler's Name (EI): Print Andrew Schmidt		Received by (SGS): Print		Sampler's Comments: cc: Linda.Sweeney Please fwd QT1 to envirolab with ice	
Signature <i>A. Schmidt</i>		Signature <i>L. Sweeney</i>			
Date 12/09/2024		Date 16/09/24 @ 1:10			
IMPORTANT: Please e-mail laboratory results to: lab@eiaustralia.com.au					



Contamination | Remediation | Geotechnical

Suite 6.01, 55 Miller Street,
PYRMONT NSW 2009
Ph: 9516 0722
lab@eiaustralia.com.au

COC June 2021 FORM v.5 - SGS

Yin, Emily (Alexandria)

From: Geisiane Torres - EIAustralia <geisiane.torres@eiaustralia.com.au>
Sent: Tuesday, 15 October 2024 12:06 PM
To: AU.Environmental.Sydney, AU (Sydney); AU.SampleReceipt.Sydney, AU (Sydney)
Cc: Andrew Schmidt - EIAustralia; Linda Sweeney - EIAustralia
Subject: [EXTERNAL] RE: Report Job SE271094, your reference E26484-300 Burns Bay Rd, Lane Cove, order number E26484

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

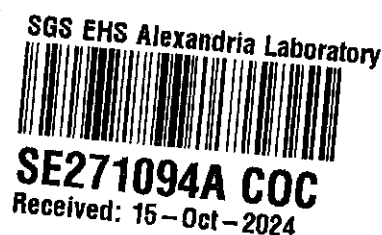
Hi SGS team,

Can you please test sample BH1M_1.2-1.3 for heavy metals on 24hrs TAT?

Thank you.

Best regards,

Geisiane Torres
Environmental Engineer
T (02) 9516 0722 M 0478 965 237
E geisiane.torres@eiaustralia.com.au
Suite 6.01, 55 Miller Street
Pyrmont, NSW 2009
www.eiaustralia.com.au



Environmental | Geotechnical | Structural | Civil | Hazardous Materials

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 Please consider the environment before printing this email.

From: AU.Environmental.Sydney@SGS.com [mailto:AU.Environmental.Sydney@SGS.com]
Sent: Monday, 23 September 2024 6:51 PM
To: Andrew Schmidt - EIAustralia; Laboratory Results - EIAustralia; Linda Sweeney - EIAustralia
Subject: Report Job SE271094, your reference E26484-300 Burns Bay Rd, Lane Cove, order number E26484

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



SAMPLE RECEIPT ADVICE

SE271094A

CLIENT DETAILS

Contact **Andrew Schmidt**
Client **EI AUSTRALIA**
Address **SUITE 6.01
55 MILLER STREET
PYRMONT NSW 2009**

Telephone **61 2 95160722**
Facsimile **(Not specified)**
Email **andrew.schmidt@eiaustralia.com.au**

Project **E26484-300 Burns Bay Rd, Lane Cove**
Order Number **E26484**
Samples **14**

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 **Tue 15/10/2024**
Report Due **Wed 16/10/2024**
SGS Reference **SE271094A**

SUBMISSION DETAILS

This is to confirm that 14 samples were received on Tuesday 15/10/2024. Results are expected to be ready by COB Wednesday 16/10/2024. Please quote SGS reference SE271094A when making enquiries. Refer below for details relating to sample integrity upon receipt.

Sample counts by matrix	1 Soil	Type of documentation received	Email
Date documentation received	15/10/2024@12:06pm	Samples received in good order	Yes
Samples received without headspace	Yes	Sample temperature upon receipt	7.3°C
Sample container provider	SGS	Turnaround time requested	Next Day
Samples received in correct containers	Yes	Sufficient sample for analysis	Yes
Sample cooling method	Ice Bricks	Samples clearly labelled	Yes
Complete documentation received	Yes		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

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



SAMPLE RECEIPT ADVICE

SE271094A

CLIENT DETAILS

Client EI AUSTRALIA

Project E26484-300 Burns Bay Rd, Lane Cove

SUMMARY OF ANALYSIS

No.	Sample ID	Mercury in Soil	Moisture Content	Total Recoverable Elements in Soil/Waste
014	BH1M_1.2-1.3	1	1	7

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



SAMPLE RECEIPT ADVICE

SE271094

CLIENT DETAILS

Contact **Andrew Schmidt**
Client **EI AUSTRALIA**
Address **SUITE 6.01
55 MILLER STREET
PYRMONT NSW 2009**

Telephone **61 2 95160722**
Facsimile **(Not specified)**
Email **andrew.schmidt@eiaustralia.com.au**

Project **E26484-300 Burns Bay Rd, Lane Cove**
Order Number **E26484**
Samples **13**

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 **Mon 16/9/2024**
Report Due **Mon 23/9/2024**
SGS Reference **SE271094**

SUBMISSION DETAILS

This is to confirm that 13 samples were received on Monday 16/9/2024. Results are expected to be ready by COB Monday 23/9/2024. Please quote SGS reference SE271094 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Sample counts by matrix	11 Soil, 1 Water, 1 Material	Type of documentation received	COC
Date documentation received	16/9/2024	Samples received in good order	Yes
Samples received without headspace	Yes	Sample temperature upon receipt	7.3°C
Sample container provider	SGS	Turnaround time requested	Standard
Samples received in correct containers	Yes	Sufficient sample for analysis	Yes
Sample cooling method	Ice Bricks	Samples clearly labelled	Yes
Complete documentation received	Yes		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

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

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



SAMPLE RECEIPT ADVICE

SE271094

CLIENT DETAILS

Client **EI AUSTRALIA**

Project **E26484-300 Burns Bay Rd, Lane Cove**

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	Total Recoverable Elements in Soil/Waste	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
001	BH1M_0.2-0.3	30	14	26	11	7	10	11	7
002	BH2M_0.6-0.7	30	14	26	11	7	10	11	7
003	BH2M_1.1-1.28	-	-	26	-	7	10	11	7
004	BH3M_0.2-0.3	30	14	26	11	7	10	11	7
005	BH4_0.3-0.4	30	14	26	11	7	10	11	7
006	BH4_1.6-1.7	-	-	26	-	7	10	11	7
007	BH5M_0.7-0.8	30	14	26	11	7	10	11	7
008	BH5M-2.4-2.5	-	-	26	-	7	10	11	7
010	QD1	-	-	-	-	7	10	11	7
012	QTB1	-	-	-	-	-	-	11	-
013	QTS1	-	-	-	-	-	-	11	-

CONTINUED OVERLEAF

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

Appendix I – Laboratory Analytical Reports

CLIENT DETAILS

Contact Andrew Schmidt
Client EI AUSTRALIA
Address SUITE 6.01
55 MILLER STREET
PYRMONT NSW 2009

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Project **E26484-300 Burns Bay Rd, Lane Cove**
Order Number **E26484**
Samples 13

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SGS Reference **SE271094 R0**
Date Received 16/9/2024
Date Reported 23/9/2024

COMMENTS

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

No respirable fibres detected in all soil samples using trace analysis technique.

Sample #7: A portion of the sample supplied has been sub-sampled for asbestos analysis in soil according to SGS In-house procedures. We therefore cannot guarantee that the sub-sample is representative of the entire sample supplied. SGS Industries and Environment recommends supplying approximately 50-100g of sample in a separate container.

Sample#2,4,5 :A portion of the sample supplied has been sub-sampled for asbestos analysis in soil according to SGS In-house procedures due to large volume. We therefore cannot guarantee that the sub-sample is representative of the entire sample supplied. SGS Industries and Environment recommends supplying approximately 50-100g of sample in a separate container.

Asbestos analysed by Approved Identifier Ravee Sivasubramaniam

SIGNATORIES

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VOC's in Soil [AN433] Tested: 18/9/2024

PARAMETER	UOM	LOR	BH1M_0.2-0.3	BH2M_0.6-0.7	BH2M_1.1-1.28	BH3M_0.2-0.3	BH4_0.3-0.4
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			9/9/2024 SE271094.001	11/9/2024 SE271094.002	11/9/2024 SE271094.003	9/9/2024 SE271094.004	10/9/2024 SE271094.005
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	BH4_1.6-1.7	BH5M_0.7-0.8	BH5M-2.4-2.5	QD1	QTB1
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			10/9/2024 SE271094.006	10/9/2024 SE271094.007	10/9/2024 SE271094.008	9/9/2024 SE271094.010	9/9/2024 SE271094.012
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	QTS1
			SOIL
			-
			9/9/2024 SE271094.013
Benzene	mg/kg	0.1	[95%]
Toluene	mg/kg	0.1	[99%]
Ethylbenzene	mg/kg	0.1	[100%]
m/p-xylene	mg/kg	0.2	[99%]
o-xylene	mg/kg	0.1	[101%]
Total Xylenes*	mg/kg	0.3	-
Total BTEX*	mg/kg	0.6	-
Naphthalene (VOC)*	mg/kg	0.1	-

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 18/9/2024

PARAMETER	UOM	LOR	BH1M_0.2-0.3	BH2M_0.6-0.7	BH2M_1.1-1.28	BH3M_0.2-0.3	BH4_0.3-0.4
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			9/9/2024 SE271094.001	11/9/2024 SE271094.002	11/9/2024 SE271094.003	9/9/2024 SE271094.004	10/9/2024 SE271094.005
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	BH4_1.6-1.7	BH5M_0.7-0.8	BH5M-2.4-2.5	QD1
			SOIL	SOIL	SOIL	SOIL
			-	-	-	-
			10/9/2024 SE271094.006	10/9/2024 SE271094.007	10/9/2024 SE271094.008	9/9/2024 SE271094.010
TRH C6-C9	mg/kg	20	<20	<20	<20	<20
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C10	mg/kg	25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 18/9/2024

PARAMETER	UOM	LOR	BH1M_0.2-0.3	BH2M_0.6-0.7	BH2M_1.1-1.28	BH3M_0.2-0.3	BH4_0.3-0.4
			SOIL	SOIL	SOIL	SOIL	SOIL
			9/9/2024 SE271094.001	11/9/2024 SE271094.002	11/9/2024 SE271094.003	9/9/2024 SE271094.004	10/9/2024 SE271094.005
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	46	<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	BH4_1.6-1.7	BH5M_0.7-0.8	BH5M-2.4-2.5	QD1
			SOIL	SOIL	SOIL	SOIL
			10/9/2024 SE271094.006	10/9/2024 SE271094.007	10/9/2024 SE271094.008	9/9/2024 SE271094.010
TRH C10-C14	mg/kg	20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	150
TRH C29-C36	mg/kg	45	<45	<45	<45	140
TRH C37-C40	mg/kg	100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	270
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	300
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	270

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 18/9/2024

PARAMETER	UOM	LOR	BH1M_0.2-0.3	BH2M_0.6-0.7	BH2M_1.1-1.28	BH3M_0.2-0.3	BH4_0.3-0.4
			SOIL	SOIL	SOIL	SOIL	SOIL
			9/9/2024 SE271094.001	11/9/2024 SE271094.002	11/9/2024 SE271094.003	9/9/2024 SE271094.004	10/9/2024 SE271094.005
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	0.2	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	0.3	<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	1.0	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	1.0	<0.8	<0.8	<0.8

PARAMETER	UOM	LOR	BH4_1.6-1.7	BH5M_0.7-0.8	BH5M-2.4-2.5
			SOIL	SOIL	SOIL
			10/9/2024 SE271094.006	10/9/2024 SE271094.007	10/9/2024 SE271094.008
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	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
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8

OC Pesticides in Soil [AN420] Tested: 18/9/2024

PARAMETER	UOM	LOR	BH1M_0.2-0.3	BH2M_0.6-0.7	BH3M_0.2-0.3	BH4_0.3-0.4	BH5M_0.7-0.8
			SOIL	SOIL	SOIL	SOIL	SOIL
			9/9/2024 SE271094.001	11/9/2024 SE271094.002	9/9/2024 SE271094.004	10/9/2024 SE271094.005	10/9/2024 SE271094.007
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane (gamma BHC)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE*	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD*	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT*	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1
Total OC VIC EPA	mg/kg	1	<1	<1	<1	<1	<1

OP Pesticides in Soil [AN420] Tested: 18/9/2024

			BH1M_0.2-0.3	BH2M_0.6-0.7	BH3M_0.2-0.3	BH4_0.3-0.4	BH5M_0.7-0.8
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			9/9/2024	11/9/2024	9/9/2024	10/9/2024	10/9/2024
PARAMETER	UOM	LOR	SE271094.001	SE271094.002	SE271094.004	SE271094.005	SE271094.007
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7



ANALYTICAL RESULTS

SE271094 R0

PCBs in Soil [AN420] Tested: 18/9/2024

			BH1M_0.2-0.3	BH2M_0.6-0.7	BH3M_0.2-0.3	BH4_0.3-0.4	BH5M_0.7-0.8
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			9/9/2024	11/9/2024	9/9/2024	10/9/2024	10/9/2024
PARAMETER	UOM	LOR	SE271094.001	SE271094.002	SE271094.004	SE271094.005	SE271094.007
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 18/9/2024

PARAMETER	UOM	LOR	BH1M_0.2-0.3	BH2M_0.6-0.7	BH2M_1.1-1.28	BH3M_0.2-0.3	BH4_0.3-0.4
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			9/9/2024 SE271094.001	11/9/2024 SE271094.002	11/9/2024 SE271094.003	9/9/2024 SE271094.004	10/9/2024 SE271094.005
Arsenic, As	mg/kg	1	1	2	<1	4	4
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	11	24	1.0	19	21
Copper, Cu	mg/kg	0.5	59	7.0	1.3	8.2	100
Lead, Pb	mg/kg	1	3	9	3	13	130
Nickel, Ni	mg/kg	0.5	87	6.7	<0.5	16	9.9
Zinc, Zn	mg/kg	2	51	14	<2.0	43	280

PARAMETER	UOM	LOR	BH4_1.6-1.7	BH5M_0.7-0.8	BH5M-2.4-2.5	QD1
			SOIL	SOIL	SOIL	SOIL
			-	-	-	-
			10/9/2024 SE271094.006	10/9/2024 SE271094.007	10/9/2024 SE271094.008	9/9/2024 SE271094.010
Arsenic, As	mg/kg	1	2	2	2	5
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	5.6	59	8.9	59
Copper, Cu	mg/kg	0.5	1.8	17	1.7	120
Lead, Pb	mg/kg	1	11	36	3	70
Nickel, Ni	mg/kg	0.5	<0.5	9.0	<0.5	14
Zinc, Zn	mg/kg	2	5.2	78	<2.0	120



ANALYTICAL RESULTS

SE271094 R0

Mercury in Soil [AN312] Tested: 18/9/2024

			BH1M_0.2-0.3	BH2M_0.6-0.7	BH2M_1.1-1.28	BH3M_0.2-0.3	BH4_0.3-0.4
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			9/9/2024	11/9/2024	11/9/2024	9/9/2024	10/9/2024
PARAMETER	UOM	LOR	SE271094.001	SE271094.002	SE271094.003	SE271094.004	SE271094.005
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

			BH4_1.6-1.7	BH5M_0.7-0.8	BH5M-2.4-2.5	QD1
			SOIL	SOIL	SOIL	SOIL
			-	-	-	-
			10/9/2024	10/9/2024	10/9/2024	9/9/2024
PARAMETER	UOM	LOR	SE271094.006	SE271094.007	SE271094.008	SE271094.010
Mercury	mg/kg	0.05	<0.05	0.09	<0.05	<0.05



ANALYTICAL RESULTS

SE271094 R0

Moisture Content [AN002] Tested: 19/9/2024

			BH1M_0.2-0.3	BH2M_0.6-0.7	BH2M_1.1-1.28	BH3M_0.2-0.3	BH4_0.3-0.4
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			9/9/2024	11/9/2024	11/9/2024	9/9/2024	10/9/2024
PARAMETER	UOM	LOR	SE271094.001	SE271094.002	SE271094.003	SE271094.004	SE271094.005
% Moisture	%w/w	1	8.1	10.4	7.3	6.5	13.1

			BH4_1.6-1.7	BH5M_0.7-0.8	BH5M-2.4-2.5	QD1	QTB1
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			10/9/2024	10/9/2024	10/9/2024	9/9/2024	9/9/2024
PARAMETER	UOM	LOR	SE271094.006	SE271094.007	SE271094.008	SE271094.010	SE271094.012
% Moisture	%w/w	1	14.7	11.8	10.6	8.2	<1.0



ANALYTICAL RESULTS

SE271094 R0

Fibre Identification in soil [AS4964/AN602] Tested: 18/9/2024

			BH1M_0.2-0.3	BH2M_0.6-0.7	BH3M_0.2-0.3	BH4_0.3-0.4	BH5M_0.7-0.8
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			9/9/2024	11/9/2024	9/9/2024	10/9/2024	10/9/2024
			SE271094.001	SE271094.002	SE271094.004	SE271094.005	SE271094.007
PARAMETER	UOM	LOR					
Date Analysed*	No unit	-	20/09/2024 00:00	20/09/2024 00:00	20/09/2024 00:00	20/09/2024 00:00	20/09/2024 00:00
Asbestos Detected	No unit	-	No	No	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01



ANALYTICAL RESULTS

SE271094 R0

Fibre ID in bulk materials [AN602/AS4964] Tested: 23/9/2024

			FCS1
			MATERIAL
			-
			9/9/2024
			SE271094.009
PARAMETER	UOM	LOR	
Asbestos Detected	No unit	-	Yes
Date Analysed*	No unit	-	23/09/2024 00:00



ANALYTICAL RESULTS

SE271094 R0

VOCs in Water [AN433] Tested: 18/9/2024

			QRB1
			WATER
			-
			9/9/2024
PARAMETER	UOM	LOR	SE271094.011
Benzene	µg/L	0.5	<0.5
Toluene	µg/L	0.5	<0.5
Ethylbenzene	µg/L	0.5	<0.5
m/p-xylene	µg/L	1	<1
o-xylene	µg/L	0.5	<0.5
Total Xylenes	µg/L	1.5	<1.5
Total BTEX	µg/L	3	<3
Naphthalene (VOC)*	µg/L	0.5	<0.5



ANALYTICAL RESULTS

SE271094 R0

Volatile Petroleum Hydrocarbons in Water [AN433] Tested: 18/9/2024

			QRB1
			WATER
			-
			9/9/2024
PARAMETER	UOM	LOR	SE271094.011
TRH C6-C9	µg/L	40	<40
Benzene (F0)	µg/L	0.5	<0.5
TRH C6-C10	µg/L	50	<50
TRH C6-C10 minus BTEX (F1)	µg/L	50	<50



ANALYTICAL RESULTS

SE271094 R0

TRH (Total Recoverable Hydrocarbons) in Water [AN403] Tested: 17/9/2024

			QRB1
			WATER
			-
			9/9/2024
PARAMETER	UOM	LOR	SE271094.011
TRH C10-C14	µg/L	50	<50
TRH C15-C28	µg/L	200	<200
TRH C29-C36	µg/L	200	<200
TRH C37-C40	µg/L	200	<200
TRH >C10-C16	µg/L	60	<60
TRH >C10-C16 - Naphthalene (F2)	µg/L	60	<60
TRH >C16-C34 (F3)	µg/L	500	<500
TRH >C34-C40 (F4)	µg/L	500	<500
TRH C10-C40	µg/L	320	<320



ANALYTICAL RESULTS

SE271094 R0

Trace Metals (Dissolved) in Water by ICPMS [AN318] Tested: 20/9/2024

			QRB1
			WATER
			-
			9/9/2024
PARAMETER	UOM	LOR	SE271094.011
Arsenic	µg/L	1	<1
Cadmium	µg/L	0.1	<0.1
Chromium	µg/L	1	<1
Copper	µg/L	1	<1
Lead	µg/L	1	<1
Nickel	µg/L	1	<1
Zinc	µg/L	5	<5



ANALYTICAL RESULTS

SE271094 R0

Mercury (dissolved) in Water [AN311(Perth)/AN312] Tested: 17/9/2024

			QRB1
			WATER
			-
			9/9/2024
PARAMETER	UOM	LOR	SE271094.011
Mercury	mg/L	0.0001	<0.0001

METHOD

METHODOLOGY SUMMARY

AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN020	Unpreserved water sample is filtered through a 0.45µm membrane filter and acidified with nitric acid similar to APHA3030B.
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by AAS or ICP as per USEPA Method 200.8.
AN311(Perth)/AN312	Mercury by Cold Vapour AAS in Waters: Mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500.
AN312	Mercury by Cold Vapour AAS in Soils: After digestion with nitric acid, hydrogen peroxide and hydrochloric acid, mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500
AN318	Determination of elements at trace level in waters by ICP-MS technique,, referenced to USEPA 6020B and USEPA 200.8 (5.4).
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). F2 is reported directly and also corrected by subtracting Naphthalene (from VOC method AN433) where available.
AN403	Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Recoverable Hydrocarbons - Silica (TRH-Si) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents .
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D). Total PAH calculated from individual analyte detections at or above the limit of reporting .
AN420	SVOC Compounds: Semi-Volatile Organic Compounds (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC`s are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.
AN602/AS4964	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602/AS4964	Fibres/material that cannot be unequivocally identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602/AS4964	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples, Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection/reporting limit (RL) of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."

AN602/AS4964

The sample can be reported "no asbestos found at the reporting limit (RL) of 0.1 g/kg" (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if-

- (a) no trace asbestos fibres have been detected (i.e. no 'respirable' fibres);
- (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg; and
- (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
**	Indicative data, theoretical holding time exceeded.	NVL	Not validated.	LOR	Limit of Reporting.
		IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
***	Indicates that both * and ** apply.	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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Project **E26484-300 Burns Bay Rd, Lane Cove**
 Order Number **E26484**
 Samples **6**

LABORATORY DETAILS

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SGS Reference **SE271094 R0**
 Date Received **16 Sep 2024**
 Date Reported **23 Sep 2024**

COMMENTS

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

No respirable fibres detected in all soil samples using trace analysis technique.

Sample #7: A portion of the sample supplied has been sub-sampled for asbestos analysis in soil according to SGS In-house procedures. We therefore cannot guarantee that the sub-sample is representative of the entire sample supplied. SGS Industries and Environment recommends supplying approximately 50-100g of sample in a separate container.

Sample#2,4,5 :A portion of the sample supplied has been sub-sampled for asbestos analysis in soil according to SGS In-house procedures due to large volume. We therefore cannot guarantee that the sub-sample is representative of the entire sample supplied. SGS Industries and Environment recommends supplying approximately 50-100g of sample in a separate container.

Asbestos analysed by Approved Identifier Ravee Sivasubramaniam

SIGNATORIES



Ravee SIVASUBRAMANIAM
 Hygiene Team Leader

RESULTS

Fibre Identification in soil

Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Date Analysed	Fibre Identification	Est.%w/w*
SE271094.001	BH1M_0.2-0.3	Soil	135g Clay, Sand, Rocks	09 Sep 2024	20 Sep 2024	No Asbestos Found at RL of 0.1g/kg	<0.01
SE271094.002	BH2M_0.6-0.7	Soil	130g Clay, Sand, Rocks	11 Sep 2024	20 Sep 2024	No Asbestos Found at RL of 0.1g/kg	<0.01
SE271094.004	BH3M_0.2-0.3	Soil	154g Clay, Sand, Rocks	09 Sep 2024	20 Sep 2024	No Asbestos Found at RL of 0.1g/kg	<0.01
SE271094.005	BH4_0.3-0.4	Soil	156g Clay, Sand, Rocks	10 Sep 2024	20 Sep 2024	No Asbestos Found at RL of 0.1g/kg	<0.01
SE271094.007	BH5M_0.7-0.8	Soil	105g Clay, Sand, Rocks	10 Sep 2024	20 Sep 2024	No Asbestos Found at RL of 0.1g/kg	<0.01



ANALYTICAL REPORT

SE271094 R0

RESULTS

Fibre ID in bulk materials						Method	S4964
Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Date Analysed	Fibre Identification	Est.%w/w*
SE271094.009	FCS1	Other	80x60x5mm Cement Sheet Fragment	09 Sep 2024	23 Sep 2024	Chrysotile Asbestos Detected	

METHOD

METHODOLOGY SUMMARY

AN602/AS4964	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic 'clues', which provide a reasonable degree of certainty, dispersion staining is a mandatory 'clue' for positive identification. If sufficient 'clues' are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602/AS4964	Fibres/material that cannot be unequivocally identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602/AS4964	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples, Section 8.4, Trace Analysis Criteria, Note 4 states: "Depending upon sample condition and fibre type, the detection/reporting limit (RL) of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602/AS4964	The sample can be reported "no asbestos found at the reporting limit (RL) of 0.1 g/kg" (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no 'respirable' fibres); (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg; and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.

FOOTNOTES

Amosite	-	Brown Asbestos	NA	-	Not Analysed
Chrysotile	-	White Asbestos	LNR	-	Listed, Not Required
Crocidolite	-	Blue Asbestos	*	-	NATA accreditation does not cover the performance of this service.
Amphiboles	-	Amosite and/or Crocidolite	**	-	Indicative data, theoretical holding time exceeded.
			***	-	Indicates that both * and ** apply.

(In reference to soil samples only) This report does not comply with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment and Remediation and Management of Asbestos Contaminated sites in Western Australia - May 2009.

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.

Where reported: 'Asbestos Detected': Asbestos detected by polarised light microscopy, including dispersion staining.

Where reported: 'No Asbestos Found': No Asbestos Found by polarised light microscopy, including dispersion staining.

Where reported: 'UMF Detected': Mineral fibres of unknown type detected by polarised light microscopy, including dispersion staining. Confirmation by another independent analytical technique may be necessary.

Even after disintegration it can be very difficult, or impossible, to detect the presence of asbestos in some asbestos-containing bulk materials using polarised light microscopy. This is due to the low grade or small length or diameter of asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials.

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

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Project **E26484-300 Burns Bay Rd, Lane Cove**
Order Number **E26484**
Samples 14

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SGS Reference **SE271094A R0**
Date Received 15/10/2024
Date Reported 16/10/2024

COMMENTS

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

SIGNATORIES



Bennet LO
Senior Chemist



Kamrul AHSAN
Senior Chemist



Shane MCDERMOTT
Laboratory Manager



Ying Ying ZHANG
Laboratory Technician



ANALYTICAL RESULTS

SE271094A R0

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 15/10/2024

			BH1M_1.2-1.3
			SOIL
			-
			9/9/2024
PARAMETER	UOM	LOR	SE271094A.014
Arsenic, As	mg/kg	1	7
Cadmium, Cd	mg/kg	0.3	<0.3
Chromium, Cr	mg/kg	0.5	56
Copper, Cu	mg/kg	0.5	110
Lead, Pb	mg/kg	1	55
Nickel, Ni	mg/kg	0.5	18
Zinc, Zn	mg/kg	2	95



ANALYTICAL RESULTS

SE271094A R0

Mercury in Soil [AN312] Tested: 15/10/2024

			BH1M_1.2-1.3
			SOIL
			-
			9/9/2024
			SE271094A.014
PARAMETER	UOM	LOR	
Mercury	mg/kg	0.05	<0.05



ANALYTICAL RESULTS

SE271094A R0

Moisture Content [AN002] Tested: 15/10/2024

			BH1M_1.2-1.3
			SOIL
			-
			9/9/2024
			SE271094A.014
PARAMETER	UOM	LOR	
% Moisture	%w/w	1	10.2

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

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.
		IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
***	Indicates that both * and ** apply.	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:

- 1 Bq is equivalent to 27 pCi
- 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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CERTIFICATE OF ANALYSIS 361962

Client Details

Client	El Australia
Attention	Andrew Schmidt
Address	Suite 6.01, 55 Miller Street, Pyrmont, NSW, 2009

Sample Details

Your Reference	<u>E26484, 300 Burns Bay Rd, Lane Cove</u>
Number of Samples	1 Soil
Date samples received	17/09/2024
Date completed instructions received	01/10/2024

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.

Samples were analysed as received from the client. Results relate specifically to the samples as received.

Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Report Details

Date results requested by	04/10/2024
Date of Issue	03/10/2024
NATA Accreditation Number 2901. This document shall not be reproduced except in full.	
Accredited for compliance with ISO/IEC 17025 - Testing. Tests not covered by NATA are denoted with *	

Results Approved By

Tabitha Roberts, Senior Chemist

Authorised By

Nancy Zhang, Laboratory Manager

Acid Extractable metals in soil		
Our Reference		361962-1
Your Reference	UNITS	QT1
Date Sampled		09/09/2024
Type of sample		Soil
Date prepared	-	02/10/2024
Date analysed	-	02/10/2024
Arsenic	mg/kg	6
Cadmium	mg/kg	<0.4
Chromium	mg/kg	69
Copper	mg/kg	130
Lead	mg/kg	63
Mercury	mg/kg	<0.1
Nickel	mg/kg	12
Zinc	mg/kg	110

Moisture		
Our Reference	UNITS	361962-1
Your Reference		QT1
Date Sampled		09/09/2024
Type of sample		Soil
Date prepared	-	02/10/2024
Date analysed	-	03/10/2024
Moisture	%	11

Method ID	Methodology Summary
Inorg-008	Moisture content determined by heating at 105+/-5 °C for a minimum of 12 hours.
Metals-020	Determination of various metals by ICP-AES.
Metals-021	Determination of Mercury by Cold Vapour AAS.

Client Reference: E26484, 300 Burns Bay Rd, Lane Cove

QUALITY CONTROL: Acid Extractable metals in soil					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-16	[NT]
Date prepared	-			02/10/2024	[NT]	[NT]	[NT]	[NT]	02/10/2024	[NT]
Date analysed	-			02/10/2024	[NT]	[NT]	[NT]	[NT]	02/10/2024	[NT]
Arsenic	mg/kg	4	Metals-020	<4	[NT]	[NT]	[NT]	[NT]	106	[NT]
Cadmium	mg/kg	0.4	Metals-020	<0.4	[NT]	[NT]	[NT]	[NT]	93	[NT]
Chromium	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	96	[NT]
Copper	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	103	[NT]
Lead	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	98	[NT]
Mercury	mg/kg	0.1	Metals-021	<0.1	[NT]	[NT]	[NT]	[NT]	97	[NT]
Nickel	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	97	[NT]
Zinc	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	93	[NT]

Result Definitions

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

Quality Control Definitions

Blank	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
Duplicate	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
Matrix Spike	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample)	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
Surrogate Spike	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.
Australian Drinking Water Guidelines recommend that Thermotolerant Coliform, Faecal Enterococci, & E.Coli levels are less than 1cfu/100mL. The recommended maximums are taken from "Australian Drinking Water Guidelines", published by NHMRC & ARMC 2011.	
The recommended maximums for analytes in urine are taken from "2018 TLVs and BEIs", as published by ACGIH (where available). Limit provided for Nickel is a precautionary guideline as per Position Paper prepared by AIOH Exposure Standards Committee, 2016.	
Guideline limits for Rinse Water Quality reported as per analytical requirements and specifications of AS 4187, Amdt 2 2019, Table 7.2	

Laboratory Acceptance Criteria

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

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

Spikes for Physical and Aggregate Tests are not applicable.

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

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

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

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

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

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

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

Measurement Uncertainty estimates are available for most tests upon request.

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

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

Appendix J – Laboratory QA/QC Policies and DQOs



STATEMENT OF QA/QC PERFORMANCE

SE271094 R0

CLIENT DETAILS

Contact Andrew Schmidt
Client EI AUSTRALIA
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PYRMONT NSW 2009

Telephone 61 2 95160722
Facsimile (Not specified)
Email andrew.schmidt@eiaustralia.com.au

Project **E26484-300 Burns Bay Rd, Lane Cove**
Order Number **E26484**
Samples 13

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

SGS Reference **SE271094 R0**
Date Received 16 Sep 2024
Date Reported 23 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:

Extraction Date	TRH (Total Recoverable Hydrocarbons) in Water	1 item
Duplicate	TRH (Total Recoverable Hydrocarbons) in Water	6 items
Matrix Spike	TRH (Total Recoverable Hydrocarbons) in Soil	1 item

SAMPLE SUMMARY

Sample counts by matrix	11 Soil, 1 Water, 1 M	Type of documentation received	COC
Date documentation received	16/9/2024	Samples received in good order	Yes
Samples received without headspace	Yes	Sample temperature upon receipt	7.3°C
Sample container provider	SGS	Turnaround time requested	Standard
Samples received in correct containers	Yes	Sufficient sample for analysis	Yes
Sample cooling method	Ice Bricks	Samples clearly labelled	Yes
Complete documentation received	Yes		

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

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

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

Fibre ID in bulk materials

Method: ME-(AU)-[ENV]AN602/AS4964

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
FCS1	SE271094.009	LB324552	09 Sep 2024	16 Sep 2024	09 Sep 2025	23 Sep 2024	09 Sep 2025	23 Sep 2024

Fibre Identification in soil

Method: ME-(AU)-[ENV]AS4964/AN602

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH1M_0.2-0.3	SE271094.001	LB324127	09 Sep 2024	16 Sep 2024	09 Sep 2025	18 Sep 2024	09 Sep 2025	23 Sep 2024
BH2M_0.6-0.7	SE271094.002	LB324127	11 Sep 2024	16 Sep 2024	11 Sep 2025	18 Sep 2024	11 Sep 2025	23 Sep 2024
BH3M_0.2-0.3	SE271094.004	LB324127	09 Sep 2024	16 Sep 2024	09 Sep 2025	18 Sep 2024	09 Sep 2025	23 Sep 2024
BH4_0.3-0.4	SE271094.005	LB324127	10 Sep 2024	16 Sep 2024	10 Sep 2025	18 Sep 2024	10 Sep 2025	23 Sep 2024
BH5M_0.7-0.8	SE271094.007	LB324127	10 Sep 2024	16 Sep 2024	10 Sep 2025	18 Sep 2024	10 Sep 2025	23 Sep 2024

Mercury (dissolved) in Water

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

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
QRB1	SE271094.011	LB323943	09 Sep 2024	16 Sep 2024	07 Oct 2024	17 Sep 2024	07 Oct 2024	18 Sep 2024

Mercury in Soil

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

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH1M_0.2-0.3	SE271094.001	LB324148	09 Sep 2024	16 Sep 2024	07 Oct 2024	18 Sep 2024	07 Oct 2024	20 Sep 2024
BH2M_0.6-0.7	SE271094.002	LB324148	11 Sep 2024	16 Sep 2024	09 Oct 2024	18 Sep 2024	09 Oct 2024	20 Sep 2024
BH2M_1.1-1.28	SE271094.003	LB324148	11 Sep 2024	16 Sep 2024	09 Oct 2024	18 Sep 2024	09 Oct 2024	20 Sep 2024
BH3M_0.2-0.3	SE271094.004	LB324148	09 Sep 2024	16 Sep 2024	07 Oct 2024	18 Sep 2024	07 Oct 2024	20 Sep 2024
BH4_0.3-0.4	SE271094.005	LB324148	10 Sep 2024	16 Sep 2024	08 Oct 2024	18 Sep 2024	08 Oct 2024	20 Sep 2024
BH4_1.6-1.7	SE271094.006	LB324148	10 Sep 2024	16 Sep 2024	08 Oct 2024	18 Sep 2024	08 Oct 2024	20 Sep 2024
BH5M_0.7-0.8	SE271094.007	LB324148	10 Sep 2024	16 Sep 2024	08 Oct 2024	18 Sep 2024	08 Oct 2024	20 Sep 2024
BH5M-2.4-2.5	SE271094.008	LB324148	10 Sep 2024	16 Sep 2024	08 Oct 2024	18 Sep 2024	08 Oct 2024	20 Sep 2024
QD1	SE271094.010	LB324148	09 Sep 2024	16 Sep 2024	07 Oct 2024	18 Sep 2024	07 Oct 2024	20 Sep 2024

Moisture Content

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

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH1M_0.2-0.3	SE271094.001	LB324298	09 Sep 2024	16 Sep 2024	23 Sep 2024	19 Sep 2024	24 Sep 2024	20 Sep 2024
BH2M_0.6-0.7	SE271094.002	LB324298	11 Sep 2024	16 Sep 2024	25 Sep 2024	19 Sep 2024	24 Sep 2024	20 Sep 2024
BH2M_1.1-1.28	SE271094.003	LB324298	11 Sep 2024	16 Sep 2024	25 Sep 2024	19 Sep 2024	24 Sep 2024	20 Sep 2024
BH3M_0.2-0.3	SE271094.004	LB324298	09 Sep 2024	16 Sep 2024	23 Sep 2024	19 Sep 2024	24 Sep 2024	20 Sep 2024
BH4_0.3-0.4	SE271094.005	LB324298	10 Sep 2024	16 Sep 2024	24 Sep 2024	19 Sep 2024	24 Sep 2024	20 Sep 2024
BH4_1.6-1.7	SE271094.006	LB324298	10 Sep 2024	16 Sep 2024	24 Sep 2024	19 Sep 2024	24 Sep 2024	20 Sep 2024
BH5M_0.7-0.8	SE271094.007	LB324298	10 Sep 2024	16 Sep 2024	24 Sep 2024	19 Sep 2024	24 Sep 2024	20 Sep 2024
BH5M-2.4-2.5	SE271094.008	LB324298	10 Sep 2024	16 Sep 2024	24 Sep 2024	19 Sep 2024	24 Sep 2024	20 Sep 2024
QD1	SE271094.010	LB324298	09 Sep 2024	16 Sep 2024	23 Sep 2024	19 Sep 2024	24 Sep 2024	20 Sep 2024
QT81	SE271094.012	LB324298	09 Sep 2024	16 Sep 2024	23 Sep 2024	19 Sep 2024	24 Sep 2024	20 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
BH1M_0.2-0.3	SE271094.001	LB324096	09 Sep 2024	16 Sep 2024	23 Sep 2024	18 Sep 2024	28 Oct 2024	20 Sep 2024
BH2M_0.6-0.7	SE271094.002	LB324096	11 Sep 2024	16 Sep 2024	25 Sep 2024	18 Sep 2024	28 Oct 2024	20 Sep 2024
BH2M_1.1-1.28	SE271094.003	LB324096	11 Sep 2024	16 Sep 2024	25 Sep 2024	18 Sep 2024	28 Oct 2024	20 Sep 2024
BH3M_0.2-0.3	SE271094.004	LB324096	09 Sep 2024	16 Sep 2024	23 Sep 2024	18 Sep 2024	28 Oct 2024	20 Sep 2024
BH4_0.3-0.4	SE271094.005	LB324096	10 Sep 2024	16 Sep 2024	24 Sep 2024	18 Sep 2024	28 Oct 2024	20 Sep 2024
BH4_1.6-1.7	SE271094.006	LB324096	10 Sep 2024	16 Sep 2024	24 Sep 2024	18 Sep 2024	28 Oct 2024	20 Sep 2024
BH5M_0.7-0.8	SE271094.007	LB324096	10 Sep 2024	16 Sep 2024	24 Sep 2024	18 Sep 2024	28 Oct 2024	20 Sep 2024
BH5M-2.4-2.5	SE271094.008	LB324096	10 Sep 2024	16 Sep 2024	24 Sep 2024	18 Sep 2024	28 Oct 2024	20 Sep 2024
QD1	SE271094.010	LB324096	09 Sep 2024	16 Sep 2024	23 Sep 2024	18 Sep 2024	28 Oct 2024	20 Sep 2024

OP Pesticides in Soil

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

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH1M_0.2-0.3	SE271094.001	LB324096	09 Sep 2024	16 Sep 2024	23 Sep 2024	18 Sep 2024	28 Oct 2024	23 Sep 2024
BH2M_0.6-0.7	SE271094.002	LB324096	11 Sep 2024	16 Sep 2024	25 Sep 2024	18 Sep 2024	28 Oct 2024	23 Sep 2024
BH2M_1.1-1.28	SE271094.003	LB324096	11 Sep 2024	16 Sep 2024	25 Sep 2024	18 Sep 2024	28 Oct 2024	23 Sep 2024
BH3M_0.2-0.3	SE271094.004	LB324096	09 Sep 2024	16 Sep 2024	23 Sep 2024	18 Sep 2024	28 Oct 2024	23 Sep 2024
BH4_0.3-0.4	SE271094.005	LB324096	10 Sep 2024	16 Sep 2024	24 Sep 2024	18 Sep 2024	28 Oct 2024	23 Sep 2024
BH4_1.6-1.7	SE271094.006	LB324096	10 Sep 2024	16 Sep 2024	24 Sep 2024	18 Sep 2024	28 Oct 2024	23 Sep 2024
BH5M_0.7-0.8	SE271094.007	LB324096	10 Sep 2024	16 Sep 2024	24 Sep 2024	18 Sep 2024	28 Oct 2024	23 Sep 2024
BH5M-2.4-2.5	SE271094.008	LB324096	10 Sep 2024	16 Sep 2024	24 Sep 2024	18 Sep 2024	28 Oct 2024	23 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

OP Pesticides in Soil (continued)

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

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
QD1	SE271094.010	LB324096	09 Sep 2024	16 Sep 2024	23 Sep 2024	18 Sep 2024	28 Oct 2024	23 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
BH1M_0.2-0.3	SE271094.001	LB324096	09 Sep 2024	16 Sep 2024	23 Sep 2024	18 Sep 2024	28 Oct 2024	23 Sep 2024
BH2M_0.6-0.7	SE271094.002	LB324096	11 Sep 2024	16 Sep 2024	25 Sep 2024	18 Sep 2024	28 Oct 2024	23 Sep 2024
BH2M_1.1-1.28	SE271094.003	LB324096	11 Sep 2024	16 Sep 2024	25 Sep 2024	18 Sep 2024	28 Oct 2024	23 Sep 2024
BH3M_0.2-0.3	SE271094.004	LB324096	09 Sep 2024	16 Sep 2024	23 Sep 2024	18 Sep 2024	28 Oct 2024	23 Sep 2024
BH4_0.3-0.4	SE271094.005	LB324096	10 Sep 2024	16 Sep 2024	24 Sep 2024	18 Sep 2024	28 Oct 2024	23 Sep 2024
BH4_1.6-1.7	SE271094.006	LB324096	10 Sep 2024	16 Sep 2024	24 Sep 2024	18 Sep 2024	28 Oct 2024	23 Sep 2024
BH5M_0.7-0.8	SE271094.007	LB324096	10 Sep 2024	16 Sep 2024	24 Sep 2024	18 Sep 2024	28 Oct 2024	23 Sep 2024
BH5M-2.4-2.5	SE271094.008	LB324096	10 Sep 2024	16 Sep 2024	24 Sep 2024	18 Sep 2024	28 Oct 2024	23 Sep 2024
QD1	SE271094.010	LB324096	09 Sep 2024	16 Sep 2024	23 Sep 2024	18 Sep 2024	28 Oct 2024	23 Sep 2024

PCBs in Soil

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

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH1M_0.2-0.3	SE271094.001	LB324096	09 Sep 2024	16 Sep 2024	23 Sep 2024	18 Sep 2024	28 Oct 2024	20 Sep 2024
BH2M_0.6-0.7	SE271094.002	LB324096	11 Sep 2024	16 Sep 2024	25 Sep 2024	18 Sep 2024	28 Oct 2024	20 Sep 2024
BH2M_1.1-1.28	SE271094.003	LB324096	11 Sep 2024	16 Sep 2024	25 Sep 2024	18 Sep 2024	28 Oct 2024	20 Sep 2024
BH3M_0.2-0.3	SE271094.004	LB324096	09 Sep 2024	16 Sep 2024	23 Sep 2024	18 Sep 2024	28 Oct 2024	20 Sep 2024
BH4_0.3-0.4	SE271094.005	LB324096	10 Sep 2024	16 Sep 2024	24 Sep 2024	18 Sep 2024	28 Oct 2024	20 Sep 2024
BH4_1.6-1.7	SE271094.006	LB324096	10 Sep 2024	16 Sep 2024	24 Sep 2024	18 Sep 2024	28 Oct 2024	20 Sep 2024
BH5M_0.7-0.8	SE271094.007	LB324096	10 Sep 2024	16 Sep 2024	24 Sep 2024	18 Sep 2024	28 Oct 2024	20 Sep 2024
BH5M-2.4-2.5	SE271094.008	LB324096	10 Sep 2024	16 Sep 2024	24 Sep 2024	18 Sep 2024	28 Oct 2024	20 Sep 2024
QD1	SE271094.010	LB324096	09 Sep 2024	16 Sep 2024	23 Sep 2024	18 Sep 2024	28 Oct 2024	20 Sep 2024

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

Method: ME-(AU)-[ENV]AN40/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH1M_0.2-0.3	SE271094.001	LB324097	09 Sep 2024	16 Sep 2024	08 Mar 2025	18 Sep 2024	08 Mar 2025	20 Sep 2024
BH2M_0.6-0.7	SE271094.002	LB324097	11 Sep 2024	16 Sep 2024	10 Mar 2025	18 Sep 2024	10 Mar 2025	20 Sep 2024
BH2M_1.1-1.28	SE271094.003	LB324097	11 Sep 2024	16 Sep 2024	10 Mar 2025	18 Sep 2024	10 Mar 2025	20 Sep 2024
BH3M_0.2-0.3	SE271094.004	LB324097	09 Sep 2024	16 Sep 2024	08 Mar 2025	18 Sep 2024	08 Mar 2025	20 Sep 2024
BH4_0.3-0.4	SE271094.005	LB324097	10 Sep 2024	16 Sep 2024	09 Mar 2025	18 Sep 2024	09 Mar 2025	20 Sep 2024
BH4_1.6-1.7	SE271094.006	LB324097	10 Sep 2024	16 Sep 2024	09 Mar 2025	18 Sep 2024	09 Mar 2025	20 Sep 2024
BH5M_0.7-0.8	SE271094.007	LB324097	10 Sep 2024	16 Sep 2024	09 Mar 2025	18 Sep 2024	09 Mar 2025	20 Sep 2024
BH5M-2.4-2.5	SE271094.008	LB324097	10 Sep 2024	16 Sep 2024	09 Mar 2025	18 Sep 2024	09 Mar 2025	20 Sep 2024
QD1	SE271094.010	LB324097	09 Sep 2024	16 Sep 2024	08 Mar 2025	18 Sep 2024	08 Mar 2025	20 Sep 2024

Trace Metals (Dissolved) in Water by ICPMS

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

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
QRB1	SE271094.011	LB324456	09 Sep 2024	16 Sep 2024	08 Mar 2025	20 Sep 2024	08 Mar 2025	23 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
BH1M_0.2-0.3	SE271094.001	LB324096	09 Sep 2024	16 Sep 2024	23 Sep 2024	18 Sep 2024	28 Oct 2024	23 Sep 2024
BH2M_0.6-0.7	SE271094.002	LB324096	11 Sep 2024	16 Sep 2024	25 Sep 2024	18 Sep 2024	28 Oct 2024	23 Sep 2024
BH2M_1.1-1.28	SE271094.003	LB324096	11 Sep 2024	16 Sep 2024	25 Sep 2024	18 Sep 2024	28 Oct 2024	23 Sep 2024
BH3M_0.2-0.3	SE271094.004	LB324096	09 Sep 2024	16 Sep 2024	23 Sep 2024	18 Sep 2024	28 Oct 2024	23 Sep 2024
BH4_0.3-0.4	SE271094.005	LB324096	10 Sep 2024	16 Sep 2024	24 Sep 2024	18 Sep 2024	28 Oct 2024	23 Sep 2024
BH4_1.6-1.7	SE271094.006	LB324096	10 Sep 2024	16 Sep 2024	24 Sep 2024	18 Sep 2024	28 Oct 2024	23 Sep 2024
BH5M_0.7-0.8	SE271094.007	LB324096	10 Sep 2024	16 Sep 2024	24 Sep 2024	18 Sep 2024	28 Oct 2024	23 Sep 2024
BH5M-2.4-2.5	SE271094.008	LB324096	10 Sep 2024	16 Sep 2024	24 Sep 2024	18 Sep 2024	28 Oct 2024	23 Sep 2024
QD1	SE271094.010	LB324096	09 Sep 2024	16 Sep 2024	23 Sep 2024	18 Sep 2024	28 Oct 2024	23 Sep 2024

TRH (Total Recoverable Hydrocarbons) in Water

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

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
QRB1	SE271094.011	LB323913	09 Sep 2024	16 Sep 2024	16 Sep 2024	17 Sep 2024†	27 Oct 2024	23 Sep 2024

VOC's in Soil

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

Sample Name	Sample No.	QC Ref
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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

VOC's in Soil (continued)

Method: ME-(AU)-ENVJAN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH1M_0.2-0.3	SE271094.001	LB324150	09 Sep 2024	16 Sep 2024	23 Sep 2024	18 Sep 2024	23 Sep 2024	23 Sep 2024
BH2M_0.6-0.7	SE271094.002	LB324150	11 Sep 2024	16 Sep 2024	25 Sep 2024	18 Sep 2024	25 Sep 2024	23 Sep 2024
BH2M_1.1-1.28	SE271094.003	LB324150	11 Sep 2024	16 Sep 2024	25 Sep 2024	18 Sep 2024	25 Sep 2024	23 Sep 2024
BH3M_0.2-0.3	SE271094.004	LB324150	09 Sep 2024	16 Sep 2024	23 Sep 2024	18 Sep 2024	23 Sep 2024	23 Sep 2024
BH4_0.3-0.4	SE271094.005	LB324150	10 Sep 2024	16 Sep 2024	24 Sep 2024	18 Sep 2024	24 Sep 2024	23 Sep 2024
BH4_1.6-1.7	SE271094.006	LB324150	10 Sep 2024	16 Sep 2024	24 Sep 2024	18 Sep 2024	24 Sep 2024	23 Sep 2024
BH5M_0.7-0.8	SE271094.007	LB324150	10 Sep 2024	16 Sep 2024	24 Sep 2024	18 Sep 2024	24 Sep 2024	23 Sep 2024
BH5M-2.4-2.5	SE271094.008	LB324150	10 Sep 2024	16 Sep 2024	24 Sep 2024	18 Sep 2024	24 Sep 2024	23 Sep 2024
QD1	SE271094.010	LB324150	09 Sep 2024	16 Sep 2024	23 Sep 2024	18 Sep 2024	23 Sep 2024	23 Sep 2024
QTB1	SE271094.012	LB324150	09 Sep 2024	16 Sep 2024	23 Sep 2024	18 Sep 2024	23 Sep 2024	23 Sep 2024
QTS1	SE271094.013	LB324150	09 Sep 2024	16 Sep 2024	23 Sep 2024	18 Sep 2024	23 Sep 2024	23 Sep 2024

VOCs in Water

Method: ME-(AU)-ENVJAN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
QRB1	SE271094.011	LB324065	09 Sep 2024	16 Sep 2024	23 Sep 2024	18 Sep 2024	23 Sep 2024	19 Sep 2024

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-ENVJAN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH1M_0.2-0.3	SE271094.001	LB324150	09 Sep 2024	16 Sep 2024	23 Sep 2024	18 Sep 2024	23 Sep 2024	23 Sep 2024
BH2M_0.6-0.7	SE271094.002	LB324150	11 Sep 2024	16 Sep 2024	25 Sep 2024	18 Sep 2024	25 Sep 2024	23 Sep 2024
BH2M_1.1-1.28	SE271094.003	LB324150	11 Sep 2024	16 Sep 2024	25 Sep 2024	18 Sep 2024	25 Sep 2024	23 Sep 2024
BH3M_0.2-0.3	SE271094.004	LB324150	09 Sep 2024	16 Sep 2024	23 Sep 2024	18 Sep 2024	23 Sep 2024	23 Sep 2024
BH4_0.3-0.4	SE271094.005	LB324150	10 Sep 2024	16 Sep 2024	24 Sep 2024	18 Sep 2024	24 Sep 2024	23 Sep 2024
BH4_1.6-1.7	SE271094.006	LB324150	10 Sep 2024	16 Sep 2024	24 Sep 2024	18 Sep 2024	24 Sep 2024	23 Sep 2024
BH5M_0.7-0.8	SE271094.007	LB324150	10 Sep 2024	16 Sep 2024	24 Sep 2024	18 Sep 2024	24 Sep 2024	23 Sep 2024
BH5M-2.4-2.5	SE271094.008	LB324150	10 Sep 2024	16 Sep 2024	24 Sep 2024	18 Sep 2024	24 Sep 2024	23 Sep 2024
QD1	SE271094.010	LB324150	09 Sep 2024	16 Sep 2024	23 Sep 2024	18 Sep 2024	23 Sep 2024	23 Sep 2024
QTB1	SE271094.012	LB324150	09 Sep 2024	16 Sep 2024	23 Sep 2024	18 Sep 2024	23 Sep 2024	23 Sep 2024
QTS1	SE271094.013	LB324150	09 Sep 2024	16 Sep 2024	23 Sep 2024	18 Sep 2024	23 Sep 2024	23 Sep 2024

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-ENVJAN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
QRB1	SE271094.011	LB324065	09 Sep 2024	16 Sep 2024	23 Sep 2024	18 Sep 2024	23 Sep 2024	19 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 identifier 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)	BH1M_0.2-0.3	SE271094.001	%	60 - 130%	107
	BH2M_0.6-0.7	SE271094.002	%	60 - 130%	106
	BH3M_0.2-0.3	SE271094.004	%	60 - 130%	107
	BH4_0.3-0.4	SE271094.005	%	60 - 130%	107
	BH5M_0.7-0.8	SE271094.007	%	60 - 130%	106

OP Pesticides in Soil

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

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	BH1M_0.2-0.3	SE271094.001	%	60 - 130%	93
	BH2M_0.6-0.7	SE271094.002	%	60 - 130%	91
	BH3M_0.2-0.3	SE271094.004	%	60 - 130%	93
	BH4_0.3-0.4	SE271094.005	%	60 - 130%	100
	BH5M_0.7-0.8	SE271094.007	%	60 - 130%	96
d14-p-terphenyl (Surrogate)	BH1M_0.2-0.3	SE271094.001	%	60 - 130%	107
	BH2M_0.6-0.7	SE271094.002	%	60 - 130%	103
	BH3M_0.2-0.3	SE271094.004	%	60 - 130%	106
	BH4_0.3-0.4	SE271094.005	%	60 - 130%	103
	BH5M_0.7-0.8	SE271094.007	%	60 - 130%	103

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

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

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	BH1M_0.2-0.3	SE271094.001	%	70 - 130%	93
	BH2M_0.6-0.7	SE271094.002	%	70 - 130%	91
	BH2M_1.1-1.28	SE271094.003	%	70 - 130%	102
	BH3M_0.2-0.3	SE271094.004	%	70 - 130%	93
	BH4_0.3-0.4	SE271094.005	%	70 - 130%	100
	BH4_1.6-1.7	SE271094.006	%	70 - 130%	99
	BH5M_0.7-0.8	SE271094.007	%	70 - 130%	96
	BH5M-2.4-2.5	SE271094.008	%	70 - 130%	97
d14-p-terphenyl (Surrogate)	BH1M_0.2-0.3	SE271094.001	%	70 - 130%	107
	BH2M_0.6-0.7	SE271094.002	%	70 - 130%	103
	BH2M_1.1-1.28	SE271094.003	%	70 - 130%	110
	BH3M_0.2-0.3	SE271094.004	%	70 - 130%	106
	BH4_0.3-0.4	SE271094.005	%	70 - 130%	103
	BH4_1.6-1.7	SE271094.006	%	70 - 130%	108
	BH5M_0.7-0.8	SE271094.007	%	70 - 130%	103
	BH5M-2.4-2.5	SE271094.008	%	70 - 130%	108
d5-nitrobenzene (Surrogate)	BH1M_0.2-0.3	SE271094.001	%	70 - 130%	85
	BH2M_0.6-0.7	SE271094.002	%	70 - 130%	76
	BH2M_1.1-1.28	SE271094.003	%	70 - 130%	90
	BH3M_0.2-0.3	SE271094.004	%	70 - 130%	82
	BH4_0.3-0.4	SE271094.005	%	70 - 130%	104
	BH4_1.6-1.7	SE271094.006	%	70 - 130%	108
	BH5M_0.7-0.8	SE271094.007	%	70 - 130%	102
	BH5M-2.4-2.5	SE271094.008	%	70 - 130%	102

PCBs in Soil

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

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
TCMX (Surrogate)	BH1M_0.2-0.3	SE271094.001	%	60 - 130%	105
	BH2M_0.6-0.7	SE271094.002	%	60 - 130%	104
	BH3M_0.2-0.3	SE271094.004	%	60 - 130%	105
	BH4_0.3-0.4	SE271094.005	%	60 - 130%	105
	BH5M_0.7-0.8	SE271094.007	%	60 - 130%	104

VOC's in Soil

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

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	BH1M_0.2-0.3	SE271094.001	%	60 - 130%	94
	BH2M_0.6-0.7	SE271094.002	%	60 - 130%	89
	BH2M_1.1-1.28	SE271094.003	%	60 - 130%	88
	BH3M_0.2-0.3	SE271094.004	%	60 - 130%	91
	BH4_0.3-0.4	SE271094.005	%	60 - 130%	95
	BH4_1.6-1.7	SE271094.006	%	60 - 130%	91
	BH5M_0.7-0.8	SE271094.007	%	60 - 130%	106

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 identifier 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 %
Bromofluorobenzene (Surrogate)	BH5M-2.4-2.5	SE271094.008	%	60 - 130%	85
	QD1	SE271094.010	%	60 - 130%	92
	QTB1	SE271094.012	%	60 - 130%	94
	QTS1	SE271094.013	%	60 - 130%	93
d4-1,2-dichloroethane (Surrogate)	BH1M_0.2-0.3	SE271094.001	%	60 - 130%	98
	BH2M_0.6-0.7	SE271094.002	%	60 - 130%	89
	BH2M_1.1-1.28	SE271094.003	%	60 - 130%	89
	BH3M_0.2-0.3	SE271094.004	%	60 - 130%	93
	BH4_0.3-0.4	SE271094.005	%	60 - 130%	97
	BH4_1.6-1.7	SE271094.006	%	60 - 130%	96
	BH5M_0.7-0.8	SE271094.007	%	60 - 130%	103
	BH5M-2.4-2.5	SE271094.008	%	60 - 130%	86
	QD1	SE271094.010	%	60 - 130%	90
	QTB1	SE271094.012	%	60 - 130%	95
	QTS1	SE271094.013	%	60 - 130%	98
d8-toluene (Surrogate)	BH1M_0.2-0.3	SE271094.001	%	60 - 130%	95
	BH2M_0.6-0.7	SE271094.002	%	60 - 130%	89
	BH2M_1.1-1.28	SE271094.003	%	60 - 130%	89
	BH3M_0.2-0.3	SE271094.004	%	60 - 130%	92
	BH4_0.3-0.4	SE271094.005	%	60 - 130%	94
	BH4_1.6-1.7	SE271094.006	%	60 - 130%	94
	BH5M_0.7-0.8	SE271094.007	%	60 - 130%	104
	BH5M-2.4-2.5	SE271094.008	%	60 - 130%	85
	QD1	SE271094.010	%	60 - 130%	89
	QTB1	SE271094.012	%	60 - 130%	96
	QTS1	SE271094.013	%	60 - 130%	98

VOCs in Water

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

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	QRB1	SE271094.011	%	40 - 130%	77
d4-1,2-dichloroethane (Surrogate)	QRB1	SE271094.011	%	40 - 130%	93
d8-toluene (Surrogate)	QRB1	SE271094.011	%	40 - 130%	95

Volatile Petroleum Hydrocarbons in Soil

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

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	BH1M_0.2-0.3	SE271094.001	%	60 - 130%	94
	BH2M_0.6-0.7	SE271094.002	%	60 - 130%	89
	BH2M_1.1-1.28	SE271094.003	%	60 - 130%	88
	BH3M_0.2-0.3	SE271094.004	%	60 - 130%	91
	BH4_0.3-0.4	SE271094.005	%	60 - 130%	95
	BH4_1.6-1.7	SE271094.006	%	60 - 130%	91
	BH5M_0.7-0.8	SE271094.007	%	60 - 130%	106
	BH5M-2.4-2.5	SE271094.008	%	60 - 130%	85
	QD1	SE271094.010	%	60 - 130%	92
d4-1,2-dichloroethane (Surrogate)	BH1M_0.2-0.3	SE271094.001	%	60 - 130%	98
	BH2M_0.6-0.7	SE271094.002	%	60 - 130%	89
	BH2M_1.1-1.28	SE271094.003	%	60 - 130%	89
	BH3M_0.2-0.3	SE271094.004	%	60 - 130%	93
	BH4_0.3-0.4	SE271094.005	%	60 - 130%	97
	BH4_1.6-1.7	SE271094.006	%	60 - 130%	96
	BH5M_0.7-0.8	SE271094.007	%	60 - 130%	103
	BH5M-2.4-2.5	SE271094.008	%	60 - 130%	86
	QD1	SE271094.010	%	60 - 130%	90
d8-toluene (Surrogate)	BH1M_0.2-0.3	SE271094.001	%	60 - 130%	95
	BH2M_0.6-0.7	SE271094.002	%	60 - 130%	89
	BH2M_1.1-1.28	SE271094.003	%	60 - 130%	89
	BH3M_0.2-0.3	SE271094.004	%	60 - 130%	92
	BH4_0.3-0.4	SE271094.005	%	60 - 130%	94
	BH4_1.6-1.7	SE271094.006	%	60 - 130%	94
	BH5M_0.7-0.8	SE271094.007	%	60 - 130%	104
	BH5M-2.4-2.5	SE271094.008	%	60 - 130%	85
	QD1	SE271094.010	%	60 - 130%	89

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

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

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

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	QRB1	SE271094.011	%	40 - 130%	77
d4-1,2-dichloroethane (Surrogate)	QRB1	SE271094.011	%	60 - 130%	93
d8-toluene (Surrogate)	QRB1	SE271094.011	%	40 - 130%	95

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

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

Mercury (dissolved) in Water

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

Sample Number	Parameter	Units	LOR	Result
LB323943.001	Mercury	mg/L	0.0001	<0.0001

Mercury in Soil

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

Sample Number	Parameter	Units	LOR	Result
LB324148.001	Mercury	mg/kg	0.05	<0.05

OC Pesticides in Soil

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

Sample Number	Parameter	Units	LOR	Result
LB324096.001	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)	%	-	101

OP Pesticides in Soil

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

Sample Number	Parameter	Units	LOR	Result
LB324096.001	Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Bromophos Ethyl	mg/kg	0.2	<0.2
	Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
	Diazinon (Dimpylate)	mg/kg	0.5	<0.5
	Dichlorvos	mg/kg	0.5	<0.5
	Dimethoate	mg/kg	0.5	<0.5
	Ethion	mg/kg	0.2	<0.2
	Fenitrothion	mg/kg	0.2	<0.2
	Malathion	mg/kg	0.2	<0.2
	Methidathion	mg/kg	0.5	<0.5
	Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
	2-fluorobiphenyl (Surrogate)	%	-	87
	d14-p-terphenyl (Surrogate)	%	-	90
Surrogates				

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

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

Sample Number	Parameter	Units	LOR	Result
LB324096.001	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

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
LB324096.001	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)	%	-	91
	2-fluorobiphenyl (Surrogate)	%	-	87
	d14-p-terphenyl (Surrogate)	%	-	90

PCBs in Soil

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

Sample Number	Parameter	Units	LOR	Result
LB324096.001	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)	%	-	102

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

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

Sample Number	Parameter	Units	LOR	Result
LB324097.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0

Trace Metals (Dissolved) in Water by ICPMS

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

Sample Number	Parameter	Units	LOR	Result
LB324456.001	Arsenic	µg/L	1	<1
	Cadmium	µg/L	0.1	<0.1
	Chromium	µg/L	1	<1
	Copper	µg/L	1	<1
	Lead	µg/L	1	<1
	Nickel	µg/L	1	<1
	Zinc	µg/L	5	<5

TRH (Total Recoverable Hydrocarbons) in Soil

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

Sample Number	Parameter	Units	LOR	Result
LB324096.001	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

TRH (Total Recoverable Hydrocarbons) in Water

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

Sample Number	Parameter	Units	LOR	Result
LB323913.001	TRH C10-C14	µg/L	50	<50
	TRH C15-C28	µg/L	200	<200
	TRH C29-C36	µg/L	200	<200
	TRH C37-C40	µg/L	200	<200

VOC's in Soil

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

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

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

VOC's in Soil (continued)

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

Sample Number		Parameter	Units	LOR	Result
LB324150.001	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)	%	-	98
		d8-toluene (Surrogate)	%	-	102
		Bromofluorobenzene (Surrogate)	%	-	76
	Totals	Total BTEX*	mg/kg	0.6	<0.6

VOCs in Water

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

Sample Number		Parameter	Units	LOR	Result
LB324065.001	Monocyclic Aromatic Hydrocarbons	Benzene	µg/L	0.5	<0.5
		Toluene	µg/L	0.5	<0.5
		Ethylbenzene	µg/L	0.5	<0.5
		m/p-xylene	µg/L	1	<1
		o-xylene	µg/L	0.5	<0.5
	Polycyclic VOCs	Naphthalene (VOC)*	µg/L	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	94
		d8-toluene (Surrogate)	%	-	110
		Bromofluorobenzene (Surrogate)	%	-	77

Volatile Petroleum Hydrocarbons in Soil

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

Sample Number		Parameter	Units	LOR	Result
LB324150.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	98

Volatile Petroleum Hydrocarbons in Water

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

Sample Number		Parameter	Units	LOR	Result
LB324065.001		TRH C6-C9	µg/L	40	<40
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	94
		d8-toluene (Surrogate)	%	-	110
		Bromofluorobenzene (Surrogate)	%	-	77

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: $RPD = | \text{OriginalResult} - \text{ReplicateResult} | \times 100 / \text{Mean}$

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: $MAD = 100 \times \text{SDL} / \text{Mean} + \text{LR}$

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

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

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

Mercury (dissolved) in Water

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

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE271102.001	LB323943.022	Mercury	µg/L	0.0001	<0.0001	<0.0001	200	0

Mercury in Soil

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

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE271063.010	LB324148.014	Mercury	mg/kg	0.05	0.06	<0.05	152	22

Moisture Content

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

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE271063.010	LB324298.011	% Moisture	%w/w	1	5.8	6.0	47	3
SE271094.008	LB324298.022	% Moisture	%w/w	1	10.6	10.9	39	3
SE271094.012	LB324298.025	% Moisture	%w/w	1	<1.0	<1.0	200	0

OC Pesticides in Soil

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

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE271063.010	LB324096.014	Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
		Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
		Lindane (gamma BHC)	mg/kg	0.1	<0.1	<0.1	200	0
		Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
		Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
		Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
		Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
		Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
		Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
		Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
		Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
		o,p'-DDE*	mg/kg	0.1	<0.1	<0.1	200	0
		p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
		Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
		Endrin	mg/kg	0.2	<0.2	<0.2	200	0
		Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
		o,p'-DDD*	mg/kg	0.1	<0.1	<0.1	200	0
		p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
		Endrin aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
		Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
		o,p'-DDT*	mg/kg	0.1	<0.1	<0.1	200	0
		p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
		Endrin ketone	mg/kg	0.1	<0.1	<0.1	200	0
		Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
		Mirex	mg/kg	0.1	<0.1	<0.1	200	0
		trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0		
Total OC VIC EPA	mg/kg	1	<1	<1	200	0		
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.16	0.16	30	1
SE271094.007	LB324096.027	Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
		Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
		Lindane (gamma BHC)	mg/kg	0.1	<0.1	<0.1	200	0
		Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
		Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
		Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
		Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
		Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
		Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
		Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
		Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
		o,p'-DDE*	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: $RPD = | \text{OriginalResult} - \text{ReplicateResult} | \times 100 / \text{Mean}$

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: $MAD = 100 \times \text{SDL} / \text{Mean} + \text{LR}$

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

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

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

OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]JAN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE271094.007	LB324096.027	p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
		Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
		Endrin	mg/kg	0.2	<0.2	<0.2	200	0
		Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
		o,p'-DDD*	mg/kg	0.1	<0.1	<0.1	200	0
		p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
		Endrin aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
		Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
		o,p'-DDT*	mg/kg	0.1	<0.1	<0.1	200	0
		p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
		Endrin ketone	mg/kg	0.1	<0.1	<0.1	200	0
		Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
		Mirex	mg/kg	0.1	<0.1	<0.1	200	0
		trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
		Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
	Total OC VIC EPA	mg/kg	1	<1	<1	200	0	
Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.16	0.16	30	1	

OP Pesticides in Soil

Method: ME-(AU)-[ENV]JAN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE271063.010	LB324096.014	Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
		Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
		Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
		Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
		Ethion	mg/kg	0.2	<0.2	<0.2	200	0
		Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
		Malathion	mg/kg	0.2	<0.2	<0.2	200	0
		Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
		Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	4
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	1
SE271094.007	LB324096.027	Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
		Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
		Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
		Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
		Ethion	mg/kg	0.2	<0.2	<0.2	200	0
		Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
		Malathion	mg/kg	0.2	<0.2	<0.2	200	0
		Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
		Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	1
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	0

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]JAN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE271063.010	LB324096.014	Naphthalene	mg/kg	0.1	<0.1	<0.1	163	0
		2-methylnaphthalene	mg/kg	0.1	0.3	0.3	65	1
		1-methylnaphthalene	mg/kg	0.1	0.2	0.2	73	3
		Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
		Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
		Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
		Phenanthrene	mg/kg	0.1	0.2	0.2	79	2
		Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: $RPD = | \text{OriginalResult} - \text{ReplicateResult} | \times 100 / \text{Mean}$

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: $MAD = 100 \times \text{SDL} / \text{Mean} + \text{LR}$

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

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

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

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-ENVJAN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE271063.010	LB324096.014	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	44	2
		Surrogates						
		d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	30	4
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	4
SE271094.007	LB324096.027	d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	1
		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	195	0
		Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Fluoranthene	mg/kg	0.1	<0.1	<0.1	140	0
		Pyrene	mg/kg	0.1	0.1	<0.1	137	2
		Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Chrysene	mg/kg	0.1	<0.1	<0.1	177	0
		Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	189	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	177	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	186	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	2
		Surrogates						
		d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	30	2
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	2
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	0

PCBs in Soil

Method: ME-(AU)-ENVJAN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE271063.010	LB324096.014	Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
		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						
SE271094.007	LB324096.028	TCMX (Surrogate)	mg/kg	-	0	0	30	1
		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

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: $RPD = | \text{OriginalResult} - \text{ReplicateResult} | \times 100 / \text{Mean}$

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: $MAD = 100 \times \text{SDL} / \text{Mean} + \text{LR}$

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

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

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

PCBs in Soil (continued)

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

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE271094.007	LB324096.028	Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
		Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates	mg/kg	-	0	0	30	1

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 %
SE271063.010	LB324097.014	Arsenic, As	mg/kg	1	7	7	44	12
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	9.7	10	35	5
		Copper, Cu	mg/kg	0.5	31	32	32	4
		Nickel, Ni	mg/kg	0.5	22	24	32	8
		Lead, Pb	mg/kg	1	20	19	35	4
		Zinc, Zn	mg/kg	2	79	82	32	4

Trace Metals (Dissolved) in Water by ICPMS

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

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE271008A.013	LB324456.024	Arsenic	µg/L	1	1.187	1.071	104	10
		Cadmium	µg/L	0.1	0.011	0.013	200	0
		Copper	µg/L	1	4.36	4.732	37	8
		Lead	µg/L	1	0.006	0.01	200	0
		Nickel	µg/L	1	12.7	13.785	23	8
		Zinc	µg/L	5	15.245	16.798	46	10
SE271174.002	LB324456.015	Arsenic	µg/L	1	0.092	0.094	200	0
		Cadmium	µg/L	0.1	0.05	0.043	200	0
		Chromium	µg/L	1	0.378	0.349	200	0
		Copper	µg/L	1	0.89	0.897	127	0
		Lead	µg/L	1	0.035	0.034	200	0
		Nickel	µg/L	1	1.706	1.699	74	0
		Zinc	µg/L	5	34.781	34.109	30	2

TRH (Total Recoverable Hydrocarbons) in Soil

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

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE271063.010	LB324096.014	TRH C10-C14	mg/kg	20	<20	<20	200	0
		TRH C15-C28	mg/kg	45	<45	<45	149	0
		TRH C29-C36	mg/kg	45	<45	<45	153	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	mg/kg	25	<25	<25	200	0
		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	173	0
		TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE271094.007	LB324096.027	TRH C10-C14	mg/kg	20	<20	<20	200	0
		TRH C15-C28	mg/kg	45	<45	<45	143	0
		TRH C29-C36	mg/kg	45	<45	<45	165	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	mg/kg	25	<25	<25	200	0
		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	167	0
		TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0

TRH (Total Recoverable Hydrocarbons) in Water

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

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE271022.001	LB323913.028	TRH C10-C14	µg/L	50	960	340	38	95 @
		TRH C15-C28	µg/L	200	21000	5200	32	120 @
		TRH C29-C36	µg/L	200	210	<200	200	4
		TRH C37-C40	µg/L	200	<200	<200	200	0
		TRH C10-C40	µg/L	320	22000	5500	32	119 @
		TRH F Bands	µg/L	60	3000	770	33	118 @
		TRH >C10-C16	µg/L	60	3000	770	33	118 @
		TRH >C10-C16 - Naphthalene (F2)	µg/L	60	3000	770	33	118 @
		TRH >C16-C34 (F3)	µg/L	500	19000	4800	34	119 @

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: $RPD = | \text{OriginalResult} - \text{ReplicateResult} | \times 100 / \text{Mean}$

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: $MAD = 100 \times \text{SDL} / \text{Mean} + \text{LR}$

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

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

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

TRH (Total Recoverable Hydrocarbons) in Water (continued)

Method: ME-(AU)-[ENV]JAN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE271022.001	LB323913.028	TRH F Bands	TRH >C34-C40 (F4)	µg/L	500	<500	<500	200	0
SE271102.001	LB323913.029		TRH C10-C14	µg/L	50	0	0	200	0
			TRH C15-C28	µg/L	200	0	0	200	0
			TRH C29-C36	µg/L	200	0	0	200	0
			TRH C37-C40	µg/L	200	0	0	200	0
			TRH C10-C40	µg/L	320	0	0	200	0
		TRH F Bands	TRH >C10-C16	µg/L	60	0	0	200	0
			TRH >C10-C16 - Naphthalene (F2)	µg/L	60	-0.03144362480.0005879536		200	0
			TRH >C16-C34 (F3)	µg/L	500	0	0	200	0
			TRH >C34-C40 (F4)	µg/L	500	0	0	200	0

VOC's in Soil

Method: ME-(AU)-[ENV]JAN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE271063.010	LB324150.015	Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
		Polycyclic	Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.9	11.3	50	4
			d8-toluene (Surrogate)	mg/kg	-	11.9	12.8	50	7
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.9	9.1	50	3
		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
SE271094.007	LB324150.027	Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
		Polycyclic	Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.3	8.5	50	19
			d8-toluene (Surrogate)	mg/kg	-	10.4	8.3	50	23
			Bromofluorobenzene (Surrogate)	mg/kg	-	10.6	9.0	50	17
		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
SE271094.010	LB324150.036	Monocyclic	Benzene	mg/kg	0.1	<0.1	0.0014508268	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	0.0037236490	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	0.0013185042	200	0
			m/p-xylene	mg/kg	0.2	<0.2	0.0057087267	200	0
			o-xylene	mg/kg	0.1	<0.1	0.0036313523	200	0
		Polycyclic	Naphthalene (VOC)*	mg/kg	0.1	<0.1	0.0293816160	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.0	8.8777965290	50	1
			d8-toluene (Surrogate)	mg/kg	-	8.9	8.8995010675	50	0
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.2	9.0321937535	50	2
		Totals	Total BTEX*	mg/kg	0.6	<0.6	0	200	0
			Total Xylenes*	mg/kg	0.3	<0.3	0.0093400790	200	0

VOCs in Water

Method: ME-(AU)-[ENV]JAN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE271013.001	LB324065.020	Monocyclic	Benzene	µg/L	0.5	<0.5	<0.5	200	0
		Aromatic	Toluene	µg/L	0.5	<0.5	<0.5	200	0
			Ethylbenzene	µg/L	0.5	<0.5	<0.5	200	0
			m/p-xylene	µg/L	1	<1	<1	200	0
			o-xylene	µg/L	0.5	<0.5	<0.5	200	0
		Polycyclic	Naphthalene (VOC)*	µg/L	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	10.5	8.0	30	27
			d8-toluene (Surrogate)	µg/L	-	9.1	8.5	30	7
			Bromofluorobenzene (Surrogate)	µg/L	-	7.7	7.9	30	3
		Totals	Total BTEX	µg/L	3	<3	<3	200	0

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]JAN433

Original	Duplicate	Parameter	Units	LOR
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Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: $RPD = | \text{OriginalResult} - \text{ReplicateResult} | \times 100 / \text{Mean}$

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: $MAD = 100 \times \text{SDL} / \text{Mean} + \text{LR}$

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

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

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

Volatile Petroleum Hydrocarbons in Soil (continued)

Method: ME-(AU)-ENVJAN433

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE271063.010	LB324150.015	TRH C6-C10	mg/kg	25	<25	<25	200	0
		TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates						
		d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.9	11.3	50	4
		d8-toluene (Surrogate)	mg/kg	-	11.9	12.8	50	7
		Bromofluorobenzene (Surrogate)	mg/kg	-	8.9	9.1	50	3
		VPH F Bands						
		Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
SE271094.007	LB324150.027	TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
		TRH C6-C10	mg/kg	25	<25	<25	200	0
		TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates						
		d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.3	8.5	50	19
		d8-toluene (Surrogate)	mg/kg	-	10.4	8.3	50	23
		Bromofluorobenzene (Surrogate)	mg/kg	-	10.6	9.0	50	17
		VPH F Bands						
SE271094.010	LB324150.036	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
		TRH C6-C10	mg/kg	25	<25	1.3497259054	200	0
		TRH C6-C9	mg/kg	20	<20	1.1408338480	200	0
		Surrogates						
		d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.0	8.8777965290	50	1
		d8-toluene (Surrogate)	mg/kg	-	8.9	8.8995010675	50	0
		Bromofluorobenzene (Surrogate)	mg/kg	-	9.2	9.0321937535	50	2
		VPH F Bands						
		Benzene (F0)	mg/kg	0.1	<0.1	0.0014508268	200	0
		TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	1.3497259054	200	0

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-ENVJAN433

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE271013.001	LB324065.020	TRH C6-C10	µg/L	50	<50	<50	200	0
		TRH C6-C9	µg/L	40	<40	<40	200	0
		Surrogates						
		d4-1,2-dichloroethane (Surrogate)	µg/L	-	10.5	8.0	30	27
		d8-toluene (Surrogate)	µg/L	-	9.1	8.5	30	7
		Bromofluorobenzene (Surrogate)	µg/L	-	7.7	7.9	30	3
		VPH F Bands						
		Benzene (F0)	µg/L	0.5	<0.5	<0.5	200	0
SE271148.001	LB324065.021	TRH C6-C10 minus BTEX (F1)	µg/L	50	<50	<50	200	0
		TRH C6-C10	µg/L	50	<50	<50	200	0
		TRH C6-C9	µg/L	40	<40	<40	200	0
		Surrogates						
		d4-1,2-dichloroethane (Surrogate)	µg/L	-	9.2	8.2	30	11
		d8-toluene (Surrogate)	µg/L	-	9.4	8.7	30	8
		Bromofluorobenzene (Surrogate)	µg/L	-	8.0	8.1	30	2
		VPH F Bands						
		Benzene (F0)	µg/L	0.5	<0.5	<0.5	200	0
		TRH C6-C10 minus BTEX (F1)	µg/L	50	<50	<50	200	0

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

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

Mercury in Soil

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

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB324148.002	Mercury	mg/kg	0.05	0.21	0.2	80 - 120	103

OC Pesticides in Soil

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

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB324096.002	Delta BHC	mg/kg	0.1	0.2	0.2	60 - 140	87
	Heptachlor	mg/kg	0.1	0.2	0.2	60 - 140	86
	Aldrin	mg/kg	0.1	0.2	0.2	60 - 140	88
	Dieldrin	mg/kg	0.2	<0.2	0.2	60 - 140	84
	Endrin	mg/kg	0.2	<0.2	0.2	60 - 140	96
	p,p'-DDT	mg/kg	0.1	0.2	0.2	60 - 140	82
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.14	0.15	40 - 130

OP Pesticides in Soil

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

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB324096.002	Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	2.2	2	60 - 140	112
	Diazinon (Dimpylate)	mg/kg	0.5	2.2	2	60 - 140	112
	Dichlorvos	mg/kg	0.5	2.0	2	60 - 140	99
	Ethion	mg/kg	0.2	2.4	2	60 - 140	118
Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	99
	d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	108

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

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

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB324096.002	Naphthalene	mg/kg	0.1	4.2	4	60 - 140	106
	Acenaphthylene	mg/kg	0.1	4.6	4	60 - 140	114
	Acenaphthene	mg/kg	0.1	4.2	4	60 - 140	105
	Phenanthrene	mg/kg	0.1	4.5	4	60 - 140	112
	Anthracene	mg/kg	0.1	5.0	4	60 - 140	124
	Fluoranthene	mg/kg	0.1	4.3	4	60 - 140	106
	Pyrene	mg/kg	0.1	4.9	4	60 - 140	122
	Benzo(a)pyrene	mg/kg	0.1	4.8	4	60 - 140	121
Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	104
	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	99
	d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	108

PCBs in Soil

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

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB324096.002	Arochlor 1260	mg/kg	0.2	0.4	0.4	60 - 140	100

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 %
LB324097.002	Arsenic, As	mg/kg	1	340	318.22	80 - 120	106
	Cadmium, Cd	mg/kg	0.3	5.3	4.81	70 - 130	111
	Chromium, Cr	mg/kg	0.5	44	38.31	80 - 120	114
	Copper, Cu	mg/kg	0.5	300	290	80 - 120	104
	Nickel, Ni	mg/kg	0.5	190	187	80 - 120	102
	Lead, Pb	mg/kg	1	93	89.9	80 - 120	104
	Zinc, Zn	mg/kg	2	290	273	80 - 120	105

Trace Metals (Dissolved) in Water by ICPMS

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

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB324456.002	Arsenic	µg/L	1	21	20	80 - 120	104
	Cadmium	µg/L	0.1	20	20	80 - 120	102
	Chromium	µg/L	1	20	20	80 - 120	101
	Copper	µg/L	1	20	20	80 - 120	101
	Lead	µg/L	1	19	20	80 - 120	95
	Nickel	µg/L	1	19	20	80 - 120	96
	Zinc	µg/L	5	21	20	80 - 120	104

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 %
LB324096.002	TRH C10-C14	mg/kg	20	40	40	60 - 140	99
	TRH C15-C28	mg/kg	45	<45	40	60 - 140	93
	TRH C29-C36	mg/kg	45	<45	40	60 - 140	83
	TRH F Bands						
	TRH >C10-C16	mg/kg	25	40	40	60 - 140	99
	TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	89
	TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	82

TRH (Total Recoverable Hydrocarbons) in Water

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

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB323913.002	TRH C10-C14	µg/L	50	1500	1200	60 - 140	123
	TRH C15-C28	µg/L	200	1600	1200	60 - 140	133
	TRH C29-C36	µg/L	200	1500	1200	60 - 140	123
	TRH F Bands						
	TRH >C10-C16	µg/L	60	1500	1200	60 - 140	123
	TRH >C16-C34 (F3)	µg/L	500	1600	1200	60 - 140	136
	TRH >C34-C40 (F4)	µg/L	500	720	600	60 - 140	120

VOC's in Soil

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

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB324150.002	Monocyclic						
	Benzene	mg/kg	0.1	4.3	5	60 - 140	86
	Aromatic						
	Toluene	mg/kg	0.1	5.1	5	60 - 140	103
	Ethylbenzene	mg/kg	0.1	4.7	5	60 - 140	93
	m/p-xylene	mg/kg	0.2	9.1	10	60 - 140	91
	o-xylene	mg/kg	0.1	4.7	5	60 - 140	94

VOCs in Water

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

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB324065.002	Monocyclic						
	Benzene	µg/L	0.5	55	45.45	60 - 140	122
	Aromatic						
	Toluene	µg/L	0.5	63	45.45	60 - 140	140
	Ethylbenzene	µg/L	0.5	55	45.45	60 - 140	122
	m/p-xylene	µg/L	1	110	90.9	60 - 140	120
	o-xylene	µg/L	0.5	54	45.45	60 - 140	119
	Surrogates						
	d4-1,2-dichloroethane (Surrogate)	µg/L	-	10.3	10	60 - 140	103
	d8-toluene (Surrogate)	µg/L	-	9.4	10	70 - 130	94
	Bromofluorobenzene (Surrogate)	µg/L	-	11.0	10	70 - 130	110

Volatile Petroleum Hydrocarbons in Soil

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

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB324150.002	TRH C6-C10	mg/kg	25	67	92.5	60 - 140	73
	TRH C6-C9	mg/kg	20	57	80	60 - 140	71
	VPH F Bands						
	TRH C6-C10 minus BTEX (F1)	mg/kg	25	39	62.5	60 - 140	63

Volatile Petroleum Hydrocarbons in Water

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

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB324065.002	TRH C6-C10	µg/L	50	1100	946.63	60 - 140	116
	TRH C6-C9	µg/L	40	950	818.71	60 - 140	116
	Surrogates						
	d4-1,2-dichloroethane (Surrogate)	µg/L	-	10.3	10	60 - 140	103
	d8-toluene (Surrogate)	µg/L	-	9.4	10	70 - 130	94
	Bromofluorobenzene (Surrogate)	µg/L	-	11.0	10	70 - 130	110
	VPH F Bands						
	TRH C6-C10 minus BTEX (F1)	µg/L	50	760	639.67	60 - 140	118

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

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

Mercury (dissolved) in Water

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

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE271048.001	LB323943.004	Mercury	mg/L	0.0001	0.0022	0.076	0.008	105

Mercury in Soil

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

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE271063.001	LB324148.004	Mercury	mg/kg	0.05	0.25	<0.05	0.2	108

OC Pesticides in Soil

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

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE271063.001	LB324096.004	Alpha BHC	mg/kg	0.1	<0.1	<0.1	-	-
		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	-	-
		Beta BHC	mg/kg	0.1	<0.1	<0.1	-	-
		Lindane (gamma BHC)	mg/kg	0.1	<0.1	<0.1	-	-
		Delta BHC	mg/kg	0.1	0.2	<0.1	0.2	103
		Heptachlor	mg/kg	0.1	0.2	<0.1	0.2	103
		Aldrin	mg/kg	0.1	0.2	<0.1	0.2	105
		Isodrin	mg/kg	0.1	<0.1	<0.1	-	-
		Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	-	-
		Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	-	-
		Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	-	-
		Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	-	-
		o,p'-DDE*	mg/kg	0.1	<0.1	<0.1	-	-
		p,p'-DDE	mg/kg	0.1	<0.1	<0.1	-	-
		Dieldrin	mg/kg	0.2	<0.2	<0.2	0.2	100
		Endrin	mg/kg	0.2	0.2	<0.2	0.2	115
		Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	-	-
		o,p'-DDD*	mg/kg	0.1	<0.1	<0.1	-	-
		p,p'-DDD	mg/kg	0.1	<0.1	<0.1	-	-
		Endrin aldehyde	mg/kg	0.1	<0.1	<0.1	-	-
		Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	-	-
		o,p'-DDT*	mg/kg	0.1	<0.1	<0.1	-	-
		p,p'-DDT	mg/kg	0.1	0.2	<0.1	0.2	102
		Endrin ketone	mg/kg	0.1	<0.1	<0.1	-	-
		Methoxychlor	mg/kg	0.1	<0.1	<0.1	-	-
		Mirex	mg/kg	0.1	<0.1	<0.1	-	-
		trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	-	-
		Total CLP OC Pesticides	mg/kg	1	1	<1	-	-
		Total OC VIC EPA	mg/kg	1	1	<1	-	-
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.16	0.15	-	108

OP Pesticides in Soil

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

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE271063.001	LB324096.004	Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	-	-
		Bromophos Ethyl	mg/kg	0.2	2.1	<0.2	-	-
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	2.2	<0.2	2	111
		Diazinon (Dimpylate)	mg/kg	0.5	2.2	<0.5	2	111
		Dichlorvos	mg/kg	0.5	2.0	<0.5	2	98
		Dimethoate	mg/kg	0.5	2.0	<0.5	-	-
		Ethion	mg/kg	0.2	2.4	<0.2	2	117
		Fenitrothion	mg/kg	0.2	2.2	<0.2	-	-
		Malathion	mg/kg	0.2	2.0	<0.2	-	-
		Methidathion	mg/kg	0.5	1.9	<0.5	-	-
		Parathion-ethyl (Parathion)	mg/kg	0.2	1.8	<0.2	-	-
		Total OP Pesticides*	mg/kg	1.7	21	<1.7	-	-
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	-	105
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	-	109

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

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

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

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

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

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

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE271063.001	LB324096.004	Naphthalene	mg/kg	0.1	4.3	0.2	4	101
		2-methylnaphthalene	mg/kg	0.1	0.6	0.6	-	-
		1-methylnaphthalene	mg/kg	0.1	0.5	0.4	-	-
		Acenaphthylene	mg/kg	0.1	4.5	<0.1	4	112
		Acenaphthene	mg/kg	0.1	4.2	<0.1	4	104
		Fluorene	mg/kg	0.1	<0.1	<0.1	-	-
		Phenanthrene	mg/kg	0.1	4.8	0.4	4	110
		Anthracene	mg/kg	0.1	4.9	<0.1	4	122
		Fluoranthene	mg/kg	0.1	4.2	<0.1	4	105
		Pyrene	mg/kg	0.1	4.7	<0.1	4	117
		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	37	1.6	-	-
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	-	101
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	-	105
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	-	109

PCBs in Soil

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

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE271063.001	LB324096.004	Arochlor 1016	mg/kg	0.2	<0.2	<0.2	-	-
		Arochlor 1221	mg/kg	0.2	<0.2	<0.2	-	-
		Arochlor 1232	mg/kg	0.2	<0.2	<0.2	-	-
		Arochlor 1242	mg/kg	0.2	<0.2	<0.2	-	-
		Arochlor 1248	mg/kg	0.2	<0.2	<0.2	-	-
		Arochlor 1254	mg/kg	0.2	<0.2	<0.2	-	-
		Arochlor 1260	mg/kg	0.2	0.5	<0.2	0.4	127
		Arochlor 1262	mg/kg	0.2	<0.2	<0.2	-	-
		Arochlor 1268	mg/kg	0.2	<0.2	<0.2	-	-
		Total PCBs (Arochlors)	mg/kg	1	<1	<1	-	-
	Surrogates	TCMX (Surrogate)	mg/kg	-	0	0	-	110

Total Recoverable Elements in Soil/Waste Solids/Materials by ICP-OES

Method: ME-(AU)-[ENV]AN400/AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE271063.001	LB324097.004	Arsenic, As	mg/kg	1	54	7	50	93
		Cadmium, Cd	mg/kg	0.3	41	<0.3	50	81
		Chromium, Cr	mg/kg	0.5	57	13	50	89
		Copper, Cu	mg/kg	0.5	79	34	50	91
		Nickel, Ni	mg/kg	0.5	67	21	50	91
		Lead, Pb	mg/kg	1	61	19	50	85
		Zinc, Zn	mg/kg	2	130	84	50	91

Trace Metals (Dissolved) in Water by ICP-MS

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

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE271362.001	LB324456.005	Arsenic	µg/L	1	27	0.657	20	130
		Cadmium	µg/L	0.1	19	0.054	20	96
		Chromium	µg/L	1	19	0.111	20	95
		Copper	µg/L	1	17	0.752	20	82
		Lead	µg/L	1	19	0.002	20	93
		Nickel	µg/L	1	26	10.014	20	81
		Zinc	µg/L	5	39	19.472	20	96

TRH (Total Recoverable Hydrocarbons) in Soil

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

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

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

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

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

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE271063.001	LB324096.004	TRH C10-C14	mg/kg	20	54	<20	40	100
		TRH C15-C28	mg/kg	45	99	66	40	82
		TRH C29-C36	mg/kg	45	84	58	40	65
		TRH C37-C40	mg/kg	100	<100	<100	-	-
		TRH C10-C36 Total	mg/kg	110	240	120	-	-
		TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	-	-
		TRH F	mg/kg	25	57	<25	40	100
		TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	57	<25	-	-
		TRH >C16-C34 (F3)	mg/kg	90	130	110	40	60 @
		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%
SE271063.001	LB324150.004	Monocyclic	Benzene	mg/kg	0.1	4.4	<0.1	5	87
			Aromatic	Toluene	mg/kg	0.1	5.1	<0.1	5
			Ethylbenzene	mg/kg	0.1	4.7	<0.1	5	94
			m/p-xylene	mg/kg	0.2	9.2	<0.2	10	90
			o-xylene	mg/kg	0.1	4.8	<0.1	5	94
		Polycyclic	Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.4	10.5	-	84
			d8-toluene (Surrogate)	mg/kg	-	9.5	10.8	-	95
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.8	9.3	-	98
		Totals	Total BTEX*	mg/kg	0.6	28	<0.6	-	-
			Total Xylenes*	mg/kg	0.3	14	<0.3	-	-

VOCs in Water

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

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE271174.004	LB324065.022	Monocyclic	Benzene	µg/L	0.5	0	45.45	102
		Aromatic	Toluene	µg/L	0.5	0.03533581338	45.45	98
			Ethylbenzene	µg/L	0.5	0.00557551515	45.45	99
			m/p-xylene	µg/L	1	0.02143614860	90.9	99
			o-xylene	µg/L	0.5	0.01071807430	45.45	98
		Polycyclic	Naphthalene (VOC)*	µg/L	0.5	0.02872675031	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	9.72462693326	-	105
			d8-toluene (Surrogate)	µg/L	-	9.29133100405	-	89
			Bromofluorobenzene (Surrogate)	µg/L	-	7.77076664805	-	106
		Totals	Total BTEX	µg/L	3	0	-	-

Volatile Petroleum Hydrocarbons in Soil

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

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%	
SE271063.001	LB324150.005	TRH C6-C10	mg/kg	25	71	<25	92.5	74	
		TRH C6-C9	mg/kg	20	64	<20	80	77	
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.4	10.5	-	84
			d8-toluene (Surrogate)	mg/kg	-	9.5	10.8	-	95
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.8	9.3	-	98
		VPH F	Benzene (F0)	mg/kg	0.1	4.4	<0.1	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	42	<25	62.5	64

Volatile Petroleum Hydrocarbons in Water

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

QC Sample	Sample Number	Parameter	Units	LOR	Original	Spike	Recovery%	
SE271174.004	LB324065.022	TRH C6-C10	µg/L	50	0	946.63	95	
		TRH C6-C9	µg/L	40	0	818.71	97	
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	9.72462693326	-	105
			d8-toluene (Surrogate)	µg/L	-	9.29133100405	-	89
			Bromofluorobenzene (Surrogate)	µg/L	-	7.77076664805	-	106
		VPH F	Benzene (F0)	µg/L	0.5	0	-	-
		Bands	TRH C6-C10 minus RTEX (F1)	µg/L	50	0	639.67	98



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

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: $MAD = 100 \times SDL / Mean + LR$

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

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the

QC Sample	Sample Number	Parameter	Units	LOR
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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.

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STATEMENT OF QA/QC PERFORMANCE

SE271094A R0

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Order Number **E26484**
Samples 14

LABORATORY DETAILS

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SGS Reference **SE271094A R0**
Date Received 15 Oct 2024
Date Reported 16 Oct 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:

Extraction Date	Mercury in Soil	1 item
	Moisture Content	1 item
Analysis Date	Mercury in Soil	1 item

SAMPLE SUMMARY

Sample counts by matrix	1 Soil	Type of documentation received	Email
Date documentation received	15/10/2024@12:06p	Samples received in good order	Yes
Samples received without headspace	Yes	Sample temperature upon receipt	7.3°C
Sample container provider	SGS	Turnaround time requested	Next Day
Samples received in correct containers	Yes	Sufficient sample for analysis	Yes
Sample cooling method	Ice Bricks	Samples clearly labelled	Yes
Complete documentation received	Yes		

SGS 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
BH1M_1.2-1.3	SE271094A.014	LB326802	09 Sep 2024	15 Oct 2024	07 Oct 2024	15 Oct 2024†	07 Oct 2024	16 Oct 2024†

Moisture Content

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

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH1M_1.2-1.3	SE271094A.014	LB326798	09 Sep 2024	15 Oct 2024	23 Sep 2024	15 Oct 2024†	20 Oct 2024	16 Oct 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
BH1M_1.2-1.3	SE271094A.014	LB326801	09 Sep 2024	15 Oct 2024	08 Mar 2025	15 Oct 2024	08 Mar 2025	16 Oct 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 identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No surrogates were required for this job.

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
LB326802.001	Mercury	mg/kg	0.05	<0.05

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

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

Sample Number	Parameter	Units	LOR	Result
LB326801.001	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

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: $RPD = | \text{OriginalResult} - \text{ReplicateResult} | \times 100 / \text{Mean}$

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: $MAD = 100 \times \text{SDL} / \text{Mean} + \text{LR}$

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

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

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

Mercury in Soil

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

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE272540.001	LB326802.017	Mercury	mg/kg	0.05	0.02357169460	0.0293670118	200	0
SE272542.008	LB326802.014	Mercury	mg/kg	0.05	0.02231012500	0.0210810014	200	0

Moisture Content

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

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE272540.001	LB326798.016	% Moisture	%w/w	1	8.29610721127	2.970195272	43	13
SE272542.009	LB326798.013	% Moisture	%w/w	1	13.33938294011	0.465116275	38	19

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 %
SE272540.001	LB326801.017	Arsenic, As	mg/kg	1	1.30360283410	0.8674838114	122	26
		Cadmium, Cd	mg/kg	0.3	0.02072787080	0.0075977459	200	0
		Chromium, Cr	mg/kg	0.5	4.45468980944	0.0598778688	42	9
		Copper, Cu	mg/kg	0.5	8.79582693518	8.540555327	36	1
		Nickel, Ni	mg/kg	0.5	7.37777020535	7.903762295	38	24
		Lead, Pb	mg/kg	1	10.03499312738	6.238885245	41	15
SE272542.008	LB326801.014	Zinc, Zn	mg/kg	2	14.77942252282	0.0580696721	45	20
		Arsenic, As	mg/kg	1	3.51837663802	5.286963025	63	33
		Cadmium, Cd	mg/kg	0.3	0.07168960070	0.0454426890	200	0
		Chromium, Cr	mg/kg	0.5	7.48364948837	5.486933613	37	1
		Copper, Cu	mg/kg	0.5	5.97304718745	5.5610490756	39	7
		Nickel, Ni	mg/kg	0.5	1.84996411212	0.0491812605	56	10
		Lead, Pb	mg/kg	1	26.27051452945	2.306803612	34	4
		Zinc, Zn	mg/kg	2	13.87310460803	2.782492436	35	27

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 %
LB326802.002	Mercury	mg/kg	0.05	0.21	0.2	80 - 120	103

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 %
LB326801.002	Arsenic, As	mg/kg	1	380	318.22	80 - 120	118
	Cadmium, Cd	mg/kg	0.3	5.6	4.81	70 - 130	116
	Chromium, Cr	mg/kg	0.5	41	38.31	80 - 120	108
	Copper, Cu	mg/kg	0.5	340	290	80 - 120	116
	Nickel, Ni	mg/kg	0.5	210	187	80 - 120	113
	Lead, Pb	mg/kg	1	93	89.9	80 - 120	103
	Zinc, Zn	mg/kg	2	320	273	80 - 120	116

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

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

Mercury in Soil

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

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE271094A.014	LB326802.004	Mercury	mg/kg	0.05	0.24	<0.05	0.2	105

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

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

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE271094A.014	LB326801.004	Arsenic, As	mg/kg	1	65	7	50	116
		Cadmium, Cd	mg/kg	0.3	53	<0.3	50	106
		Chromium, Cr	mg/kg	0.5	100	56	50	95
		Copper, Cu	mg/kg	0.5	160	110	50	92
		Nickel, Ni	mg/kg	0.5	66	18	50	94
		Lead, Pb	mg/kg	1	120	55	50	125
		Zinc, Zn	mg/kg	2	150	95	50	111

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: $RPD = | \text{OriginalResult} - \text{ReplicateResult} | \times 100 / \text{Mean}$

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: $MAD = 100 \times \text{SDL} / \text{Mean} + \text{LR}$

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

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the

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.

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Appendix K – QA/QC Assessment

K.1 Project QA/QC Protocols

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

Table K-1 QA/QC Protocols

Task	Description	Comments / Compliance with SOP or DQI
Field QA/QC		
General	Work undertaken following standard field procedures which are based on industry accepted standard practice.	Yes. Soil samples were collected directly from the auger flights. Samples were placed in suitable, laboratory-supplied containers, which were filled to minimise headspace and sealed using Teflon-coated lids.
	All fieldwork supervised by a suitably qualified and experienced scientist or engineer.	Yes
Soil screening with PID	The PID serviced and calibrated as per the manufacturer requirements. PID calibrated at the beginning of fieldwork.	Yes
Equipment decontamination	Sampling equipment decontaminated after the collection of each soil sample by washing with PFAS free detergent (<i>Alconox</i>) and potable water, followed by a final distilled water rinse.	Yes Field rinsate sample (QRB1) results recorded analyte concentrations below the corresponding LOR.
Transport	Samples were stored in a chilled (with ice bricks) cooler box and transported to the laboratories. To ensure the integrity of the samples from collection to receipt by the analytical laboratory, samples were sent by courier to the laboratories under 'chain of custody' describing sample preservation and transport duration.	Yes
Trip blanks	Trip blank samples were prepared and analysed by the primary laboratory for BTEX. Analytical results for trip blank samples should be below the laboratory PQLs, indicating that ideal sample transport and handling conditions were achieved.	Yes. All analytes in the soil (QTB1) trip blank was below laboratory quantitation limits.
Trip spikes	Trip spike samples were prepared and analysed by the primary laboratory for BTEX. Acceptance criteria of spike recoveries were between 70-130%, indicating that satisfactory sample transport and handling conditions were achieved.	Yes. Recoveries for soil QTS1 ranged from 95-100%.

Task	Description	Comments / Compliance with SOP or DQI
Duplicates	Field duplicates were collected / analysed as follows: - intra-laboratory (blind) duplicates at a rate of 1 in 20 primary samples (as per NEPM); and - inter-laboratory (split) duplicates at a rate of 1 in 20 primary samples (as per NEPM). DQI was 30% RPD, as stated by AS4482.1-2005. RPDs that exceed this threshold were considered acceptable where: - Results were less than 10 times the limits of reporting (LOR); - Results were less than 20 times the LOR and the RPD is less than 50%; and/or - Heterogeneous materials or volatile compounds are encountered. Non-compliance was documented in the report.	Yes. Field QC samples are summarised in Table K-2 and calculated RPD values are displayed in Table 4. RPDs were within the acceptable range limit..
Laboratory QA/QC		
Laboratory analysis	The laboratories selected were NATA accredited for the analytes selected and performed their own internal QA/QC programs.	Yes SGS - primary laboratory. Envirolab - secondary laboratory. Refer to Appendices N and O.
	Appropriate detection limits used for the analyses to be undertaken.	Practical Quantitation Limits for all analysed parameters were presented in laboratory analytical reports. Refer to Appendices N and O.
Holding times	Holding times are the maximum permissible elapsed time in days from the collection of the sample to its extraction and/or analysis. All extraction and analyses should be completed within standard guidelines.	The laboratory holding times were within acceptable ranges with exception of extraction date of TRH at sample QRB1 and extraction and analysis at sample BH1M_1.2-1.3 mercury outside holding time. Laboratory DQO documents are attached in Appendix M.
Method Blanks	A method blank contains the reagents used to prepare the sample for final analysis. The purpose of this procedure is to identify contamination in the reagent materials and assess potential bias in the sample analysis due to contaminated reagents. The QC criterion aims to find no detectable contamination in the reagents. Each analysis procedure should be subject to a method blank analysis. The results of each should indicate that contaminants were not detected.	Yes. Assessment of method blanks has been undertaken by the laboratory. All data quality objectives were met.

Task	Description	Comments / Compliance with SOP or DQI
Laboratory duplicates	Laboratory duplicates are samples that are split in the laboratory and subsequently analysed a number of times in the same batch. These sub-samples are selected by the laboratory to assess the accuracy and precision of the analytical method. The selected laboratories should undertake QA/QC procedures such as calibration standards, laboratory control samples, surrogates, reference materials, sample duplicates and matrix spikes. Intra-laboratory duplicates should be performed at a frequency of 1 per 10 samples.	The majority Assessment of Laboratory duplicates has been undertaken by the laboratory, with exception SE271022.001 at sample LB323913.028: TRH C10-C14: 95%, TRH C15-C28: 120%, TRH C10-C40: 119%, TRH >C10-C16 (F2):118% TRH >C16-C34 (F3): 119% RPD failed acceptance criteria due to sample heterogeneity. Laboratory DQO documents are attached in Appendix M .
Laboratory control standards	A laboratory control standard is a standard reference material used in preparing primary standards. The concentration should be equivalent to a mid-range standard to confirm the primary calibration. Laboratory control samples should be performed on a frequency of 1 per 20 samples or at least one per analytical run.	The Laboratory Control Samples for the analysis batches were within acceptable ranges. All data quality objectives were met.
Matrix Spike	These are field samples to which a predetermined stock solution of known concentration has been added. The samples are then analysed for recovery of the known addition. Recoveries should be within the stated laboratory control limits of 70 to 130% and duplicates should have RPDs of less than 50%.	The majority Assessment of matrix spikes has been undertaken by the laboratory, with exception SE271063.001 at sample LB324096.004: TRH >C16-C34 (F3): 60% Recovery failed acceptance criteria due to sample heterogeneity. Laboratory DQO documents are attached in Appendix M .
Surrogate	Surrogate spikes provide a means of checking, for every analysis that no gross errors have occurred at any stage of the procedure leading to significant analyte loss. Recoveries should be within the stated laboratory control limits.	Assessment of surrogate has been undertaken by the laboratory. All data quality objectives were met.
Conclusion	The QA/QC indicators should either all comply with the required standards or showed no variations that would have no significant effect on the quality of the data.	Yes. Further assessment of the investigation QA/QC is presented in the following sections.

K.2 Calculation of Relative Percentage Difference (RPD)

The RPD values were calculated using the following equation:

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

Where:

C_O = Concentration obtained for the primary sample; and

C_R = Concentration obtained for the blind replicate or split duplicate sample.

K.3 Field QA/QC

K.3.1 Field QC Samples

The field quality control samples collected during the investigation works are identified in **Table K-2**. Analytical results for the field QC samples are tabulated in **Table 2**.

Table K-2 Field QC Sampling Program

Activity	Matrix	Primary Sample	Intra-Lab Duplicate	Inter-Lab Duplicate	Number Duplicates
Soil	Soil	BH1M_1.2-1.3	QD1	QT1	2

K.3.2 Field Data Quality Indicators

A discussion of the field data quality indicators is presented in **Table K-3** below.

Table K-3 Field Data Quality Indicators

QA Component	Data Quality Indicator(s)	Conformance
Accuracy – A quantitative measure of the closeness of reported data to the “true” value	Standard operation procedures appropriate and complied with	Yes
	Calibration of instruments (PID) against known standards	-
	Results for inter-laboratory (split field) duplicates acceptable	Yes
Precision – A quantitative measure of the variability (or reproducibility) of data	Standard operation procedures appropriate and complied with	Yes
	Results for intra-laboratory (blind field) duplicates acceptable	Yes
Completeness – A measure of the amount of useable data from a data collection activity	Each critical location sampled	Yes
	Samples collected at targeted locations and depth	Yes
	SAQP appropriate and complied with	Yes
	Experienced sampler	Yes
	Field documentation correct	Yes
Comparability – The confidence (expressed qualitatively) that data may be considered to be equivalent for each sampling and analytical event	Same sampling method used on each occasion/location	Yes
	Experienced sampler	Yes
	Same type of samples collected (filtered, size, fractions)	Yes
Representativeness – The confidence (expressed qualitatively) that data are	Appropriate media sampled according to SAQP	Yes
	Each media identified in SAQP sampled	Yes

QA Component	Data Quality Indicator(s)	Conformance
representative of each medium present onsite	Appropriate sample collection methodologies, handling, storage and preservation techniques used	Yes
	Consistency between field observations and laboratory results.	Yes

K.3.3 Conclusion for the Field QA/QC

All field work, including equipment decontamination and sample preservation and transport, was conducted in accordance with the SAQP and SOPs, which were devised with reference to industry-approved guidelines. Appropriate QC measures were integrated into each sampling event and the DQI were met, or if not, the variability was suitably justified.

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

K.4 Laboratory QA/QC Data

K.4.1 Laboratory Accreditation and DQIs

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

A discussion of the laboratory DQIs is presented in **Table K-4** below.

Table K-4 Laboratory Data Quality Indicators

QA/QC Measure	Data Quality Indicator(s)	Conformance
Accuracy – A quantitative measure of the closeness of reported data to the “true” value	Analysis of method blanks	Yes
	Analysis of matrix spikes	Yes
	Analysis of duplicates	Yes
	Analysis of surrogate spikes	Yes
	Analysis of laboratory control samples	Yes
Precision – A quantitative measure of the variability (or reproducibility) of data	Analysis of laboratory duplicates	Yes
Completeness – A measure of the amount of useable data from a data collection activity	All critical samples analysed according to SAQP and proposal	Yes
	All analytes analysed according to SAQP in proposal	Yes
	Appropriate methods and PQLs	Yes
	Sample documentation complete	Yes
	Sample holding times complied with	Yes

QA/QC Measure	Data Quality Indicator(s)	Conformance
Comparability – The confidence (expressed qualitatively) that data may be considered to be equivalent for each sampling and analytical event	Same sample analytical methods used (including clean-up)	Yes
	Same Sample PQLs	Yes
	Same laboratories (NATA-accredited)	Yes
	Same units	Yes
Representativeness – The confidence (expressed qualitatively) that data are representative of each medium present onsite	All key samples analysed according to SAQP in the proposal.	Yes
	Analysis of laboratory-prepared volatile trip spikes and trip blanks	Yes

K.4.2 Conclusions for the Laboratory QA/QC

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

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

K.5 Summary Of Project QA/QC

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