

DETAILED SITE (CONTAMINATION) ASSESSMENT

**PART LOT 1 & PART LOT 2, DP 1318566, 1309 WINE COUNTRY
DRIVE, ROTHBURY, NSW**

Prepared for AUSGRID

Prepared by RCA Australia

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15 April 2026

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Geotechnical Engineering
Engineering Geology
Environmental Engineering
Hydrogeology
Construction Materials Testing
Environmental Monitoring
Noise & Vibration
Occupational Hygiene

**DETAILED SITE (CONTAMINATION) ASSESSMENT
PROPOSED BATTERY ENERGY STORAGE SYSTEM
PART LOT 1 & PART LOT 2, DP 1318566, 1309 WINE COUNTRY DRIVE, ROTHBURY, NSW**

EXECUTIVE SUMMARY

This report presents the findings of a detailed site (contamination) assessment undertaken for land which sits partially within both Lot 1 and Lot 2, DP 1318566, located at 1309 Wine Country Drive, Rothbury NSW 2320 (the 'site'). This assessment was undertaken as part of the investigative process for the construction of a proposed Battery Energy Storage System (BESS) at the site (the 'Project'). The works have been undertaken at the request of Ausgrid as part of their evaluation of the site's suitability and were undertaken in conjunction with a separate geotechnical assessment.

Historical aerial imagery indicated the site remained undeveloped rural land until the 1970s, with horticultural activity, presumed to be vineyards, observed in Lot 2 by 1975. A residential dwelling with associated ancillary structures and access roads was established in Lot 1 by 1984 and later demolished between 2004 and 2007, presumably as part of the process of the construction of the Rothbury Zone Substation in Lot 1. The site has remained unchanged since. Potential contamination sources include historical agricultural activities and possible hazardous building materials from the former dwelling.

The objective of this assessment was to characterise the contamination status of the site to determine its suitability for the proposed Project, and to identify whether further assessment, remediation, or management was required. A further objective was to provide a preliminary understanding of whether there would be constraints to the removal of deeper soil from the site.

The scope of the assessment included a desktop review of the site's historical land use, a site inspection, intrusive investigation involving the collection and analysis of soil samples for contaminants of concern, comparison of results against relevant criteria, characterisation of contamination at the site and preparation of this report.

A total of fifty-nine (59) soil samples were collected from eighteen (18) locations to characterise the potential of contamination at the site and to provide an indicative material classification of deep soil likely to be excavated as part of the Project. No visual or olfactory evidence of contamination was observed during the site inspection and intrusive works, and all analytical results were below the relevant human health and ecological criteria for commercial / industrial land use (Ref [5] and [6]).

RCA considers that the site is suitable for the proposed use without the need for further assessment of soil, remediation or long-term management.

Groundwater sampling was not considered necessary for the purpose of the assessment however will be required if extraction of groundwater will occur to facilitate Project construction or operation.

All material removed from the site must be managed in accordance with the NSW EPA guidelines, including sampling, transport and disposal. Based on current analytical results, excavated soil is expected to be classified as:

- Excavated Natural Material (ENM) under the NSW EPA Resource Recovery Order (Ref [12]) which will facilitate off-site re-use of the material.
- General solid waste (Ref [13]) if material is being removed to a licensed waste facility.

RCA recommends differential stockpiling based on depth as well as any other indications of contamination prior to sampling in accordance with the ENM Order as the shallow materials do have higher concentrations of hydrocarbons than the deeper materials. Differential stockpiling is not considered warranted for material being classified for removal to a licensed waste facility.

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SUMMARY OF RESULTS

1 INTRODUCTION

This report presents the findings of a detailed site (contamination) assessment undertaken for land known as Part Lot 1 and Part Lot 2, DP 1318566 within Rothbury NSW 2320 (herein referred to as 'the site'). The Rothbury Zone Substation is situated within the remainder of Lot 1.

The site is proposed to be developed as a battery energy storage system (BESS) within a potential area of approximately 2.4 ha (referred to as the Project). The locality and layout of the site is shown in **Drawing 1, Appendix A**.

The report has been prepared at the request of Ausgrid to evaluate the suitability of the site for the Project with regards to its contamination status. A geotechnical assessment was undertaken concurrently and is reported separately.

1.1 SCOPE

The scope of work for this assessment comprised:

- Review of site history information.
- Intrusive assessment and collection of soil samples.
- Analysis of soil samples for contaminants of concern and comparison to criteria considered relevant for the proposed land use and for off-site re-use.
- Preparation of this report.

1.2 PURPOSE AND OBJECTIVE

The purpose of this assessment is to inform Ausgrid regarding potential contamination constraints.

The objective of this assessment is to characterise the potential for, and location of, contamination at the site to be able to assess whether it is suitable for the Project or otherwise provide recommendations for further assessment, remediation and / or management. A further objective was to provide an indicative classification for deep soil anticipated to potentially require removal from site following the completion of the development.

1.3 REGULATORY COMPLIANCE

Preparation of this report was undertaken with reference to (but not limited to) the following regulatory guidance documents and standards:

- *Contaminated Land Guidelines: Sampling Design* (Ref [1]). This document was used as a reference with regards to the number of samples required for characterisation of the site's soil contamination status.
- *Guidelines for Consultants Reporting on Contaminated Sites*, (Ref [2]). This document was used as a reference for the derivation of the scope of work and what information was to be included in this report.
- *Guidelines for the NSW Site Auditor Scheme* (3rd Ed, (Ref [3])). This document was used as a reference for the derivation of the scope of work and what information was to be included in this report.
- *State Environmental Planning Policy (Resilience and Hazards) 2021*, (Ref [4]). This report has been provided to satisfy the requirements of the R&H SEPP which require an assessment that the site is suitable or can be made suitable for the proposed use.

- *National Environment Protection (Assessment of Site Contamination) Measure*, (Ref [5]). These guidelines were utilised as guideline criteria for the assessment of the contamination status of soil at the site and quality assurance.
- *Technical Report 10, Health screening levels for petroleum in soil and groundwater* (Ref [6]). These guidelines were utilised as criteria for the assessment of the contamination status of soil at the site.
- *Guide to the investigation and sampling of sites with potentially contaminated soil, Part 1: Non-volatile and semi-volatile compounds*, (Ref [7]). These guidelines were utilised as a guide for the methodology for the collection of soil samples and quality assurance.

2 SITE IDENTIFICATION AND DESCRIPTION

The site and Project Area are located in the western portion of Lot 1 and the eastern portion of Lot 2 of DP 1318566 and is identified as 1309 Wine Country Drive, Rothbury, NSW 2320. Additional site details are shown in **Table 1**.

Table 1 Site Details

Current zoning (Ref [8])		RU2 – Rural landscape (Lots 1 & 2 as per dashed line)
Proposed use	Proposed development of a BESS with access driveway from Old North Road.	
Size of site	~2.4 ha. The area of Lot 1 & 2 is approximately 11.8 ha.	
Land use to the: North	Cleared rural land (Rural Landscape (RU2)).	
South	Old North Road immediately to south, across which is <i>Quambatook House</i> (understood to be currently vacant). Further south are rural lands (Primary Production Small Lots (RU4)) including a vineyard to the southeast.	
East	The Rothbury Zone Substation is immediately to the east of the Project Area and Wine Country Drive with further rural residential lots beyond the roadway (Rural Landscape (RU2)).	
West	Remainder of Lot 2, Black Creek with a vineyard present on the land beyond the creek and further lands with dense trees (Primary Production Small Lots (RU4)).	
Nearest sensitive receptor (human health)	Residential dwellings are located approximately 200 m to the south and east of the site and Project Area.	
Nearest sensitive receptor (environmental)	Black Creek, at its closest, is approximately 200 m southwest of the site and Project Area. The Creek is also present approximately 250 m to the west.	

2.1 GEOLOGY AND HYDROGEOLOGY

RCA reviewed published geological and hydrogeological maps and summarised the findings in **Table 2**.

Table 2 *Geology and Hydrogeology*

Soil type¹	The site is situated within the Branxton soil landscape. This comprises brown sandy loam / yellow orange loamy sand overlaying brown to light brown clay with prominent yellow and grey mottles. The geological profile is described as being within the Permian period Farley Formation – poorly sorted, light and dark grey, micaceous sandy siltstone, silty sandstone, mudstone and shale. The site is mapped as being immediately north of Permian era Farley Formation – Sandstone.
Acid sulfate soil	The Greta Acid Sulfate risk map indicates that there is no known occurrence of acid sulfate soil materials on the site.
Number of monitoring wells on site	There are no registered or known groundwater wells on site.
Groundwater use	There is no known groundwater use on site. There is one (1) registered groundwater well within 500 m of the site, refer Appendix B, noting that there is potential for the presence of unregistered groundwater wells which have not been identified in the search. GW050646 is situated approximately 500 m to the east of the site and is registered for stock use.
Depth to groundwater	The depth to groundwater at the site is unknown. The closest groundwater well (GW050646) lists the standing water level as 19 m below the ground surface.
Estimated groundwater flow direction	Groundwater flow direction is unknown, however is assumed to flow towards the Black Creek, likely in an overall southerly direction with potentially either a westerly or easterly component.
Background water quality	The regional groundwater quality is unknown.

3 SITE HISTORY AND BACKGROUND INFORMATION

3.1 SITE NOTIFICATIONS

The Section 10.7 Planning Certificate as specified under the Environmental Planning and Assessment Regulation 2021 (Schedule 2) includes information associated with any restrictions for the use of the land.

Information relevant to this obtained from the Section 10.7 planning certificate and relevant to the site is contained in **Table 3**, noting that the Certificate applies to the previous Lot / DP reference prior to the subdivision into the current Lot boundaries. RCA has presumed all aspects apply to the site / Project Area.

¹ <https://www.environment.nsw.gov.au/eSpade2Webapp/>

Table 3 *Planning Advice Contained in the Section 10.7 Planning Certificate*

Part 2 relevant Information	• The Cessnock Local Environmental Plan 2011 applies to the site. • The site is zoned RU2 Rural Landscape under the Cessnock Local Environmental Plan 2011. • There are no minimum land dimensions for the erection of a dwelling house that apply to this site. • The land is not land that includes or comprises biodiversity conservation under the Biodiversity Conservation Act 2016. • The land is not a conservation area under the Cessnock Local Environmental Plan 2011. • An item of environmental heritage identified in Cessnock Local Environmental Plan 2011 is not situated on the land. • There is not an affected building notice, as defined by the Building Product (Safety) Act 2017, in force in respect to the land. • There is not an outstanding building product rectification order, as defined by the Building Products (Safety) Act 2017, in force in respect to the land. • The land or part of the land is subject to an Act, planning instrument or Council resolution relating to road widening or alignment, which includes provisions for acquisition by a State authority, as referenced in section 3.15 of the Roads Act 1993. • The land or part of the land is within the flood planning area and subject to flood related development controls. • The land or part of the land is between the flood planning area and the probable maximum flood and subject to flood related development controls. • All the land is bushfire prone land as defined in the Environmental Planning & Assessment Act 1979. • The site is not notified in the Loose-fill Asbestos Insulation Register. • The land is not declared to be within a mine subsidence district. • Council is not aware that there is an approved property vegetation plan on the land. • Council is not aware that the lands are subject to a biodiversity stewardship agreement. • The land is not biodiversity certified land under Part 8 of the Biodiversity Conservation Act 2016. • Council has not been notified of an Order issued under the trees (Disputes between Neighbours) Act 2006. • The land is not subject to annual charges under the Local Government Act 1993, section 496B, for coastal protection services. • The State Environmental Planning Policy (Precincts—Western Parkland City) 2021 does not apply to land within the Cessnock local government area. • Any water or sewerage services provided to the lands are not under the Water Industry Competition Act 2006.
Part 5 relevant Information	• Council do not indicate that the land is subject to noise exposure. • There are no matters as prescribed by Section 59 (2) of the <i>Contaminated Land Management Act 1997</i> required to be disclosed.

The reviewed planning certificate is included in **Appendix C**.

RCA undertook a search of the Heritage NSW register² and Department of Climate Change, Energy the Environment and Water heritage register³ for Rothbury and identified one (1) heritage item listed under the Local Environmental Plan (LEP) within the vicinity of the site, as shown in **Figure 1** below, relating to an *Old North Road Remnant* (LEP#1177) situated approximately 180 m to the southeast of the site, across Wine Country Drive. The item is of historical significance as it is a remnant of an early road route associated with European occupation and development of this part of the Hunter Valley.

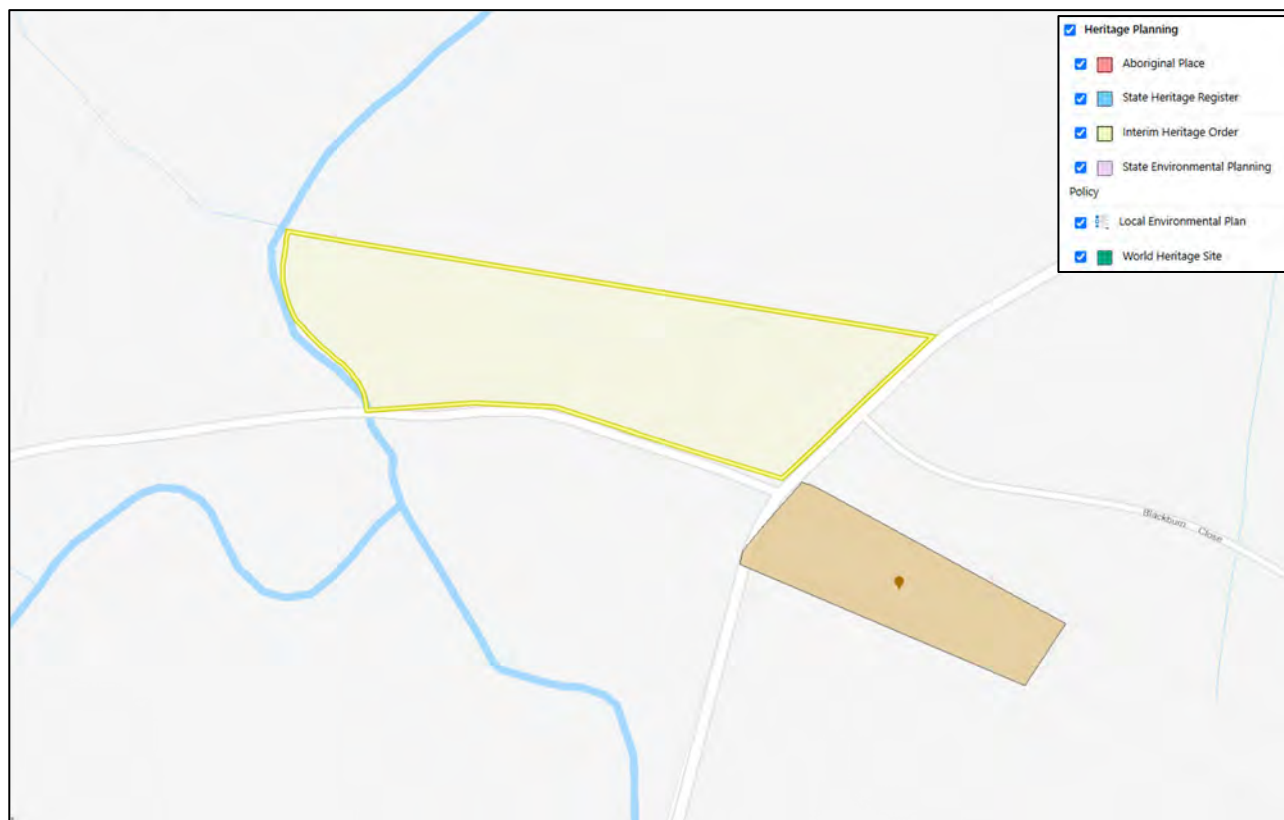


Figure 1 Results from the heritage NSW register (*brown* shaded area indicates the LEP heritage item and the *yellow* outline is the extent of Lot 1 & 2, DP 1318566)

3.2 HISTORICAL MAPS AND PHOTOGRAPHS

RCA undertook a search of the Historical Land Records Viewer⁴ for the former Lot reference prior to the recent subdivision (Lot 4, DP598847) and the Parish of Rothbury and identified five (5) records associated with the site, as shown in **Figure 2** below. The maps from 1887 to 1967 show no apparent indication of land use during this period, suggesting that the site remained undeveloped.

² <https://www.environment.nsw.gov.au/topics/heritage/search-heritage-databases/state-heritage-inventory>

³ <https://www.dcceew.gov.au/parks-heritage/heritage/publications/australian-heritage-database>

⁴ <http://hlrv.nswlrs.com.au/pixel.htm>

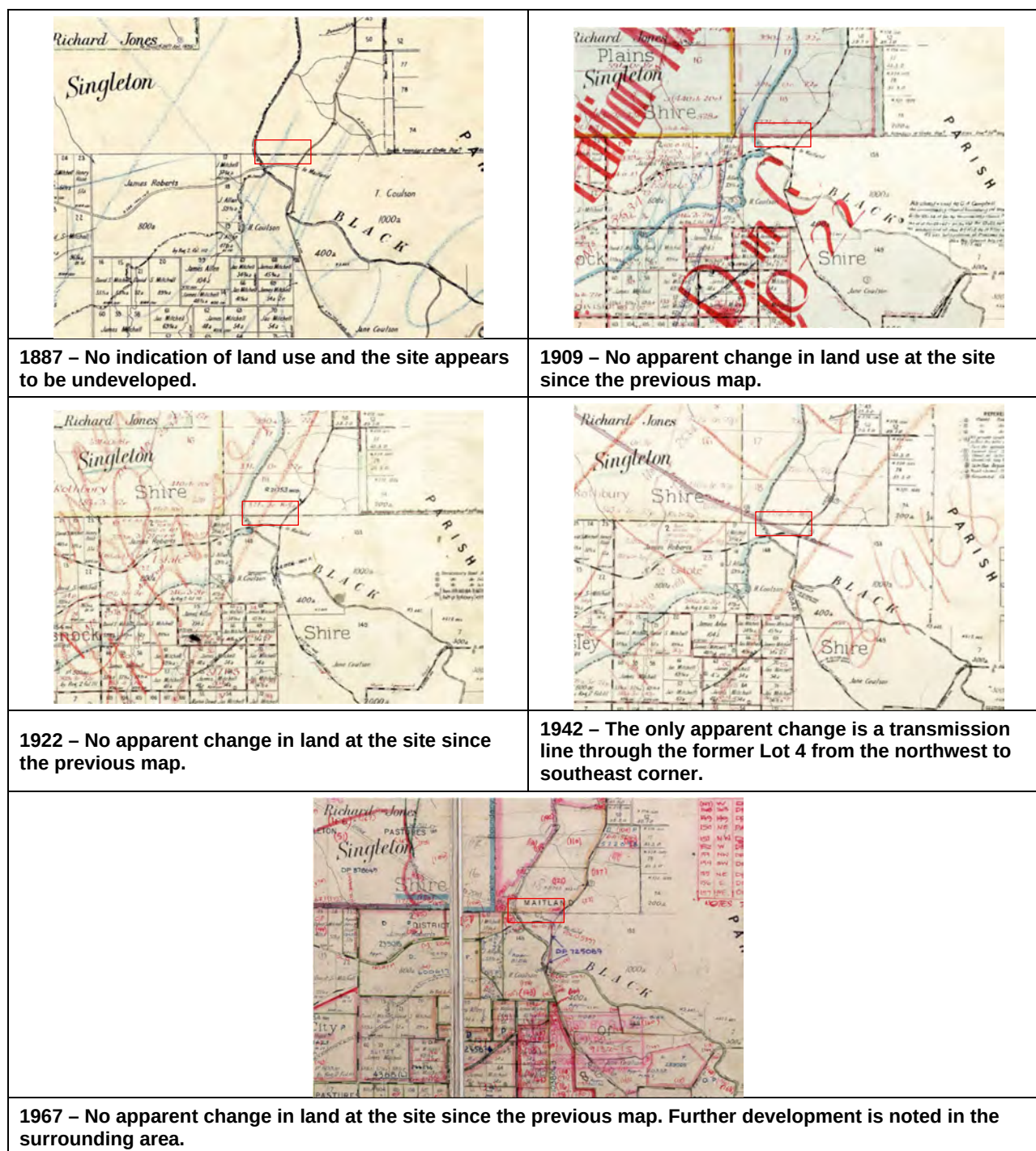


Figure 2 Extracts of the land district maps for Rothbury, the area of the site is outlined in red.

RCA undertook a search through the collections of the Newcastle Library⁵ and identified twenty-six (26) records for Rothbury; however, none were found to be relevant to the site.

RCA undertook a search through the State Library of NSW⁶ collection for photographs relevant to the site and identified ten (10) records for Rothbury; however, none were found to be relevant to the site.

⁵ <http://www.newcastle.nsw.gov.au/Library/Heritage-History/Search-the-Collection/Hunter-PhotoBank>

⁶ <http://archival.sl.nsw.gov.au/home>

Table 4 summarises the findings of RCA's review of historical photographs regarding the site and the surrounding environment.

Table 4 *Aerial Photograph Review*

Year	Lots 1 & 2	Beyond Lots 1 & 2
1961 (Black and white, good resolution)	The Lots appear to be undeveloped cleared rural land with no apparent land use or infrastructure. A small dam can be seen in the western portion of Lot 1 in close proximity to sparse vegetation.	The surrounding area primarily consists of a mix of cleared rural land and commercial agricultural land use (presumed vineyard). Dwellings are located to the north and west of the Lots, while agricultural fields border its northern boundary. The break in vegetation to the northwest of the Lots is considered likely to be associated with the transmission line as shown in 1942 map in Figure 2 .
1975 (Black and white, good resolution)	The Lots remain largely unchanged, with the exception of some increase in trees and the apparent agricultural use (presumed vineyard) in the western portion of Lot 2 taking up approximately half of the total area.	The surrounding area remains largely unchanged with further agricultural development occurring to the north of the Lots and the construction of houses to the northwest of the Lot.
1984 (Black and white, moderate resolution)	A residential dwelling along with associated buildings and access roads have been constructed in the eastern portion of Lot 1, while the remainder of the Lots appear to be unchanged since the previous image other than the removal of trees in the area of the site and the growth of trees in the western portion of Lot 2. It is uncertain whether the vineyard is in use.	The surrounding area appears largely unchanged; the vineyard at the northern border of the Lots appears to be no longer in use and there is a house in the property to the south of the Lots across Old North Road.
1991 (Colour, good resolution)	The Lots remain largely unchanged, with the exception of a dam that has been constructed in the northeastern corner of Lot 1 and the apparent decrease in trees. The vineyard in the western portion of Lot 2 does not appear to be in use.	The surrounding area appears largely unchanged. An additional, larger, dwelling and swimming pool have been constructed in the neighbouring Lot to the south of the site across Old North Road and there have been some buildings constructed to the northwest.
1998 (Colour, moderate resolution)	The Lots remain largely unchanged. A new structure has been built just north of the existing dwellings in the eastern portion of Lot 1 along the northern boundary and there has been a decrease in trees in the western portion of Lot 2. A third dam has been constructed within the area of the site near the northern boundary.	The surrounding area appears largely unchanged with further rural residential development expanding to the southeast of the site. A vineyard appears to have been constructed directly to the west of Lot 2 across Black Creek and some land to the north of the Lot appears to be actively cultivated.

Year	Lots 1 & 2	Beyond Lots 1 & 2
November 2004 (Colour, moderate resolution)	The Lots remain largely unchanged since the previous image.	Further development has occurred to the north and east of Lot 1 with additional dams and houses present. Commercial agriculture continues to grow around the area including the land on the northern border of the Lots which appears to be a vineyard.
February 2007 (Colour, good resolution)	The Rothbury Zone Substation is in the process of being built in Lot 1. One of the dams appears to have been filled as part of this process however the other two (2) remain. The previous structures have been demolished.	The surrounding area remains largely unchanged.
February 2010 (Colour, moderate resolution)	The Rothbury Zone Substation has been completed. The remainder of the Lots is unchanged other than a lesser number of trees in the eastern portion of Lot 1 and the growth of trees (presumed as part of landscaping) around the substation and the southern boundary of the Lots.	The surrounding area remains largely unchanged. Blackburn Close has been constructed to the east across Wine Country Drive. There has been some house construction along the Close and there is disturbance in the area of the existing carpark to the south of the Lots across Old North Road.
November 2015 (Colour, moderate resolution)	The Lots remain largely unchanged other than the growth of trees around the substation.	Further residential development has occurred in the area directly to the east of the Lots and the carpark construction to the south appears to have been completed.
2020 (Colour, good resolution)	The Lots remain largely unchanged; there are large areas of vegetation discoloration visible within Lot 2, presumed to be related to water inundation in the absence of any other indications of burning in the area.	The surrounding area has remained mostly unchanged, aside from an increase in residential development.
2024 (Colour, good resolution)	The Lots remain largely unchanged other than the condition of the vegetation.	Residential and commercial development continues to increase in the surrounding area.

Reviewed documentation is included in **Appendix C**, noting that RCA reviewed larger images than are presented.

There are two (2) years of imagery available in Google *StreetView* in which the site is visible from Old North Road as presented below:

- February 2008: The image quality is moderate showing the Lots are cleared rural land with electrical poles and cables leading towards the Rothbury Zone Substation that can be seen in the distance.
- August 2019: The image quality is good showing the Lots are largely unchanged since the previous image.

These images are included in **Appendix C**. It is noted that there are alternative viewpoints through the access gate from Old North Road however none of the site itself is visible; similarly, while there are eight (8) years of imagery from 2008 onwards from Wine Country Drive, only parts of the substation area of the Lot 1 are visible.

3.3 CONTAMINATED LAND PUBLIC RECORD

RCA undertook a search of the NSW EPA public lands register⁷ and did not find any record of Environment Protection licences, applications, notices, audits or pollution studies and reduction programmes applicable to the site or within Rothbury.

A search of the wider area showed five (5) records associated with one (1) licence in the North Rothbury:

- Leaway PTY. Limited C/- Robert Whitton Administrators, Ayrfield Colliery No. 3, Wine Country Drive North Rothbury, NSW, 2235, was licenced for waste facilities (landfilling) before the licence was revoked in 2007. This facility is situated approximately 3.8 km north northeast of the site. The licence required monitoring of discharges to air, water and applications to land. Due to the licence being revoked and the distance to the site, it is not considered to represent an ongoing potential source of contamination at the site.

RCA undertook a search of sites notified⁸ to the NSW EPA as potentially requiring regulation (as updated 19 March and 8 July 2025, and 10 February 2026) and confirmed that the site is not notified, nor is there any lands within Rothbury or North Rothbury.

RCA undertook a search of the:

- NSW EPA gasworks database⁹.
- NSW Department of Primary Industries register¹⁰.
- NSW Office of Fair-Trading asbestos insulation register¹¹.
- Department of Defence register for unexploded ordnance (UXO)¹².
- Department of Industry mapping of naturally occurring asbestos¹³.
- PFAS¹⁴ registers from the NSW EPA¹⁵, Department of Defence¹⁶, Airservices Australia¹⁷ and the Rural Fire Service¹⁸.

No records of relevance were identified. RCA further considered Appendix C of the PFAS National Environmental Management Plan 3.0¹⁹ and identified no historical or current activities associated with point source of PFAS contamination.

⁷ <https://www.epa.nsw.gov.au/Licensing-and-Regulation/Public-registers>

⁸ <https://www.epa.nsw.gov.au/Your-environment/Contaminated-land/notified-and-regulated-contaminated-land/list-of-notified-sites>

⁹ <https://www.epa.nsw.gov.au/Your-environment/Contaminated-land/other-contamination-issues/former-gasworks-sites>

¹⁰ www.dpi.nsw.gov.au/animals-and-livestock/beef-cattle/health-and-disease/parasitic-and-protozoal-diseases/ticks/cattle-dip-site-locator

¹¹ www.fairtrading.nsw.gov.au/loose-fill-asbestos-insulation-register

¹² <https://uxo-map.defence.gov.au/>

¹³ trade.maps.arcgis.com/apps/PublicInformation/index.html?appid=87434b6ec7dd4aba8cb664d8e646fb06 (reviewed when available in 2025)

¹⁴ per and poly fluoroalkyl substances

¹⁵ <https://www.epa.nsw.gov.au/Your-environment/Chemicals/PFAS-in-NSW/nsw-government-pfas-investigation-program>

¹⁶ <https://www.defence.gov.au/about/locations-property/pfas/pfas-management-sites>

¹⁷ <https://engage.airservicesaustralia.com/national-pfas-program> now

<https://www.airservicesaustralia.com/community/environment/pfas/>

¹⁸ <https://www.rfs.nsw.gov.au/news-and-media/pfas-environmental-investigation>

¹⁹ <https://www.dcceew.gov.au/sites/default/files/documents/pfas-nemp-3.pdf>

3.4 PREVIOUS INVESTIGATIONS

Three (3) previous investigations have been undertaken at the Lots; two (2) for the Rothbury Zone Substation and one (1) for the proposed Project.

3.4.1 STATEMENT OF ENVIRONMENTAL EFFECTS (REF [9])

A Statement of Environmental Effects (Ref [9]) was prepared for the construction of the Rothbury Zone Substation (132 kV / 11 kV) to the east within Lot 2.

The assessment stated it aimed to provide Cessnock City Council with the necessary information to evaluate the development's environmental impact. The project included designing, constructing, and commissioning a substation, as well as demolishing a residential house. The report states that there were three (3) dams located on the site, including one within the substation footprint however, there is no mention of any dam being filled within the substation footprint. The report identified potential environmental and social impacts and concluded that the development would not have any significant adverse effects on the Lot or surrounding area.

There was no specific information relating to contamination or hazardous materials within the house and associated structures.

3.4.2 ENVIRONMENTAL SITE ASSESSMENT (REF [10])

Parsons Brinckerhoff (PB) was commissioned by Enerserve to conduct Phase 1 and 2 Environmental Site Assessments (Ref [10]) for the area of Lot 1 proposed for the construction of the Rothbury Zone Substation.

The investigation outlined the (then) Lot's history, land use and geological conditions, followed by a walkover and soil sampling. Soil samples were tested for pH, metals, total petroleum hydrocarbons (TPH²⁰), benzene, toluene, ethylbenzene, xylene (BTEX), organochlorine pesticides (OCP), polychlorinated biphenyls (PCB), polycyclic aromatic hydrocarbons (PAH) and total phenols.

The previous land use at the (then) Lot, based on the historical title search, indicated that the land was privately owned by various proprietors with unspecified land use from 1894 until at least October 2005. Based on the information provided, PB considered that the site had been most likely used for grazing. Key findings identified potential contamination from fill materials near former structures, runoff from past site activities, and possible asbestos in old buildings. Fill material was encountered in one (1) of the boreholes (HA03) located in the former carpark area that was comprised of crushed aggregate. Soil testing from ten (10) boreholes confirmed that all contaminant levels were below (the then current) regulatory limits for commercial/industrial use. There is no information regarding the presence of absence within the report other than relates to the former dwelling and associated structures.

Minor TPH contamination was identified within fill material in the former shed area; however, concentrations were below the regulatory limits applicable at the time. Based on these findings, the site was deemed suitable for redevelopment for commercial / industrial use, and it was concluded (Ref [10]) that the contamination was within acceptable limits. The fill material could therefore remain on-site or be classified as Solid Waste for disposal at a licensed waste facility.

²⁰ Laboratory analysis of hydrocarbons is now (since 2013) being reported as total recoverable hydrocarbons (TRH) rather than TPH. There is no change in the methodology, rather the change in name was recognition that this testing method includes all forms of hydrocarbons, not just petroleum hydrocarbons and therefore can be considered a conservative measure against the chosen TPH criteria. Further laboratory analysis using a silica gel clean up (TRH_{sg}) is considered to enable a better identification of the extent of petroleum based contamination.

3.4.3 ABORIGINAL DUE DILIGENCE ASSESSMENT (REF [11])

Apex Archaeology conducted an Aboriginal due diligence assessment (Ref [11]) for the proposed BESS at the site.

A site visit on 4 April, 2024 found no previously recorded or newly identified archaeological sites, though ground surface visibility was low (15%), and moderate ground disturbance was observed due to past viticulture, substation construction, and transmission line easements. Moderate potential for subsurface archaeological deposits to be present in the western portion near Black Creek was identified (Ref [11]).

It was recommended that the western portion of Lot 2 (RB-PAD-01) be avoided to prevent potential disturbance of subsurface archaeological deposits; this constraint was taken into account as part of RCA's assessments with the area inferred onto **Drawing 1, Appendix A**. No further environmental concerns were identified in the report (Ref [11]).

3.5 INTEGRITY ASSESSMENT

Information obtained from the Section 10.7 planning certificate is presumed to be accurate, however is limited to information that has been obtained and documented by Council.

Information obtained relating to previous assessments of the site is presumed to be accurate and representative however only one of the assessments was in relation to potential contamination and there were no intrusive works undertaken in the Project area.

Information obtained from aerial photography is limited in that it only provides a snapshot of the site in time. RCA considers that adequate coverage was achieved for this investigation with aerials available for each decade from the 1960s onwards.

Information regarding groundwater use is subject to third parties and may not be up to date. However, for the purpose of this report, it is considered that the information provided by Water NSW is adequate and representative. There is no information regarding the contamination status of groundwater.

Information obtained from publicly accessible registers and websites are presumed to be accurate however is subject to third parties and may not be up to date.

Overall, RCA considers that the site history review is adequate to provide a general understanding of the site's past nature of land use.

4 PRELIMINARY CONCEPTUAL SITE MODEL

RCA has determined, based on the reviewed historical information, that the site has been used primarily for rural agricultural purposes since the late 1800s. As seen in the abovementioned aerial photography, the site remained largely undeveloped until the 1970s, when rows of vegetation (presumed vineyards and associated shade trees) were established in the western portion of Lot 2. In the early 1980s, a residential dwelling along with associated infrastructure was constructed in the eastern portion of the Lot 1. Demolition of the dwelling and construction of the Rothbury Zone Substation commenced in early 2007. Since the completion of the substation, the Lots have remained largely unchanged. The surrounding area has similarly been used for rural agricultural purposes, including cropping to the north, west, and south, with rural residential lands located directly to the east of the site.

Based on RCA's understanding of the site, the potential contamination, exposure pathways, and receptors are considered as follows:

- Former use of the site (agricultural):
 - This may have resulted in surface, and potentially subsurface, contamination from the application of chemicals for pest and weed control. Contaminants of concern are considered to be metals, pesticides and herbicides. Surface water bodies may have been impacted by contaminated runoff.
 - Additional hydrocarbon contamination may have resulted from the use of machinery in the area of cropping and in any areas of parking / maintenance works.
 - On-site risks are primarily associated with inhalation of dust, ingestion of and dermal contact with dust and soil. Volatile contaminants are not expected however if present would present a further risk of inhalation.
 - Off-site impacts are considered to be related to surface water only. Groundwater contamination is not considered likely to have been caused by any activities at the site however cannot be discounted, and groundwater may be contaminated by activities on other sites.
- Potential use of hazardous containing building materials at the Lots:
 - It is unknown if the former dwelling contained asbestos building materials or lead-based paint; however, if these were used this may have resulted in surface soil contamination in the immediate area of the structures. Subsurface contamination may also be present if excess building materials were inappropriately disposed of at site at the time of construction or during demolition.
 - The structures were situated >70 m away from the site's eastern extent such that it is not considered likely that there would have been any impact at the site unless demolition waste was moved to the site. Risks are primarily associated with inhalation of dust, ingestion of and dermal contact with dust and soil.

The current and future receptors at the site relate to construction / maintenance workers and visitors of the Project. Potential off-site sources of contamination include both the historic and current use of pesticides and herbicides within the surrounding vineyards.

5 SAMPLING AND ANALYTICAL QUALITY PLAN

No formal sampling and analytical quality plan (SAQP) was developed for the Project, however **Table 5** provides detail and rationale regarding the scope of works undertaken.

Table 5 *Data Quality Objectives of the Site Investigation*

Data Quality Objective	Description		
Step 1- State the Problem	The site is proposed for development adjacent to the Rothbury Zone Substation and as such an assessment has been undertaken in order to assess the site's suitability for the Project. Specific characterisation of material anticipated to be excavated during the installation of an earth grid to assess the materials' likely classification for off-site disposal / use.		
Step 2- Identify the Goal and Decisions	The goal of the assessment was to adequately characterise the site with regards to its suitability for the proposed use or otherwise identify that further assessment would be required. The specific decisions to be made to address the goal of the assessment are as follows: • Is there potential for contamination of the site from previous land use and / or adjoining uses? • Is there contamination present in the soils of the area of proposed construction? • Are any contaminant concentrations at levels which would pose a constraint to the proposed development and / or require management during construction? • Is the site suitable for the intended use? • Is the material anticipated to be generated during the excavation of an earth grid suitable for off-site disposal?		
Step 3- Identify the Inputs to the decisions	The specific types of information needed to resolve the decision statements in Step 2 are noted as follows: • Site history information. • Sampling results. • Guidelines for assessing risk to human health and the environment from contaminated soil. • Best practice in alignment with R&H SEPP (Ref [4]) prescribes assessment on the basis of the most sensitive allowable site use. RCA considers the human health criteria as defined (Ref [5] and [6]) for commercial / industrial land use is appropriate. RCA considers the ecological criteria as defined (Ref [5]) for commercial / industrial land to be the most appropriate soil criteria for the site. Full details of the relevant guidelines are included in Appendix D.		
Step 4- Define the Boundaries of the investigation	The horizontal extent of the assessment has been defined by the site boundary, as fenced to the north and as presumed by nearby features and shown in Drawing 1, Appendix A. The vertical extent was based on consideration of the conceptual site model and was to be defined by the depth of the earth grid installation (four (4) metres below ground surface (mbgs)). No groundwater assessment was proposed as part of this assessment. Practical constraints that could have interfered with sampling comprised underground services and ground conditions. No specific temporal constraints were identified. No specific financial constrains were identified, noting that any variations to costs identified to client were to be confirmed with client prior to additional cost being incurred.		
Step 5- Develop the Decision Rules	Accuracy	Internal – surrogates, laboratory control samples (LCS), matrix spikes, method blanks. No external consideration of accuracy was proposed.	Surrogate, LCS, spike recovery data to be 70-130%. Blanks results to be <practical quantification limit (PQL).

Data Quality Objective	Description		
Step 5- ctd	Precision	Internal – laboratory duplicates External – intralaboratory duplicates.	Relative percentage difference (RPD) of duplicates to be: • 50% at concentration levels greater than ten (10) times PQL. • 75% at concentrations between five (5) to ten (10) times PQL. • 100% at concentration levels between two (2) and five (5) times PQL. Where concentration levels are less than two (2) times the PQL, the Absolute Difference (AD) shall be calculated. Data will be considered acceptable if the AD <2.5 times the PQL.
	Completeness	The percentage of completed data points, taking in account consideration of other DQI.	95%
	Representativeness	Whether there has been sufficient sampling by appropriate methodology with relevant analysis to determine that the assessment is representative of the site conditions.	
	Comparability	• All samples collected during this sampling programme will be obtained by adequately trained RCA personnel using consistent sampling methodologies throughout the project. • All samples must be received by the laboratory cool and appropriately preserved for the requested analysis with sufficient time within the specified holding time. • All laboratory analyses will be conducted by NATA accredited methodologies that comply with the international standard methods. • Comparable analytes such as TRH C₆-C₁₀ and BTEXN, PAH and TRH >C₁₀-C₄₀, and metals should show some concurrence between analytical results and to identified field observations.	
Step 6- Acceptable Limits on Decision Rules	The following provides the basis of the data's useability assessment which is not in accordance with the DQI: • The result's closeness to the guideline concentrations. • Specific contaminant of concern (carcinogen, bioaccumulation potential, available exposure pathways). • The area of sample location(s) in question including the potential lateral and vertical extent of questionable information. • Whether the uncertainty can be effectively managed by site management controls.		

The scope of work, **Section 6**, is considered to comprise Step 7 of the DQO.

6 FIELDWORK

Specific observations made by RCA personnel who attended the site on 29 and 30 May 2025 are listed in **Table 6**: the location of photographs taken during the site inspection are shown on **Drawing 1, Appendix A** and the photographs are included as **Appendix E**.

Table 6 *General Site Conditions and Observations*

Site condition	The Lots comprise the Rothbury Zone Substation, cleared rural grasslands and two (2) dams located along the northern boundary. Two (2) internal asphalt roads are located off Wine Country Drive to the east and Old North Road to the south of the site. The area surrounding the substation is vegetated with shrubs and trees. Overhead high voltage transmission cables run parallel to the southern boundary. RCA did not inspect Lot 2 beyond the western extent of the Project area.
Topography	The site is generally flat without any formal surface water drainage system apparent. Standing surface water was observed during the fieldwork and RCA has inferred that surface water tends to pool within the site and Project area, with overland flow occurring westward towards Black Creek during significant rainfall events.
Condition of building and roads	The substation and associated roads appear to be in good condition.
Visual signs of contamination	There were no visual indications of contamination.
Signs of erosion	No visual signs of erosion were identified.
Presence of drums or waste	No evidence of drums and / or waste were identified.
Identification of potential asbestos containing materials (ACM)	No indications of materials suspected to be asbestos were identified at the site.
Visible signs of plant stress	No indications of plant stress were identified.
Odours	No odours were noticeable on site.
Evidence of current or former petroleum facilities	No indications of former petroleum facilities were identified.
Chemicals Storage	No indications of chemical storage were identified on site
Evidence of waste burial: (anecdotal or otherwise)	No indications of buried waste material were identified at the site nor was there any overt undulations considered indicative of waste burial.

An environmental engineer experienced in the handling of potentially contaminated soil undertook the fieldwork on 29 and 30 May 2025 with the assistance of a subcontracted excavator and drill rig, in conjunction with geotechnical personnel. The scope of work included:

- A site inspection.
- The collection of forty-seven (47) soil samples from twelve (12) locations on the site for the purpose of assessing the presence of contamination:
 - This is not in accordance with the minimum thirty-three (33) sampling locations as recommended by NSW EPA guidelines (Ref [1]) for a site of 2.4 ha and has been reduced based on the presumed absence of contamination. All sampling locations are presented on **Drawing 1, Appendix A**.
 - The sampling locations were cleared of services prior to the commencement of fieldwork.
 - Soil samples were collected from encountered materials at the near surface (0.05-0.1 mbgs), and at approximately 0.5, 1.0, 2.0 mbgs. Samples were collected from test pits TP114 to TP123 and a large diameter auger from BH112, BH113, BH115 and BH117 using an eight (8) tonne excavator.
 - Soil samples from the near surface to approximately 2.0 mbgs were assessed with the photoionisation detector (PID) for the presence of volatile compounds.
 - Soil samples were collected directly from the excavator bucket and large diameter auger with gloved hands.
 - Samples for chemical analysis were transferred to laboratory provided jars and stored on ice in an insulated container for transport to the laboratory.
- Additional sampling was undertaken from six (6) locations to provide preliminary material classification of soils at approximately 3.0 and 4.0 mbgs specifically in the area of the proposed earth grid. These soil samples were collected using a standard penetration test (SPT) tube with a Massenza Mi2 drill rig.
- Re-instatement of all test pit and bore hole locations by replacing the extracted soil back into the excavated areas.
- Logging of test pits / boreholes including description of samples for texture, colour, odour, moisture content. Logs are attached in **Appendix F**.
- Analysis of all twelve (12) near surface (0.05-0.1 mbgs) soil samples for pH, electrical conductivity, total recoverable hydrocarbons (TRH), benzene, toluene, ethylbenzene, xylene, naphthalene (BTEXN), polycyclic aromatic hydrocarbons (PAH), metals (arsenic, cadmium, chromium, copper, nickel, lead, zinc, mercury), pesticides and herbicides.
- Analysis of twelve (12) deeper soil samples (0.5-2.0 mbgs) for pH, electrical conductivity and metals.
- Analysis of all twelve (12) 3.0 mbgs and 4.0 mbgs samples for pH, electrical conductivity, TRH, BTEXN, PAH and metals.

The site was found to comprise a heterogeneous mix of natural materials (sand, silt and clay) across the majority of sampling locations with the exception of TP114 where localised fill was encountered (clayey sandy gravel); refer to test pit logs in **Appendix F**. No visual or olfactory indications of contamination, nor any asbestos materials were identified during the intrusive works; the PID readings were 0 ppm in all samples.

Proposed borehole locations BH105 and BH110 were unable to be accessed or drilled due to poor ground conditions and the presence of surface water.

Groundwater was encountered at two (2) locations during this assessment:

- BH104 at approximately 2.5 mbgs.
- TP123 at approximately 1.7 mbgs.

Groundwater was also encountered in the geotechnical sampling location BH101.

7 QUALITY ASSURANCE / QUALITY CONTROL

RCA have assessed the data in accordance with the DQI as presented in **Section 5** in **Appendix G** as follows:

- Accuracy
 - The accuracy of the data has been assessed by internal means (surrogates, LCS, matrix spikes and method blanks) as being acceptable. Results were within the acceptance criteria with the exception of three (3) LCS for benzene and acenaphthene; however, these are not considered to present significant uncertainty in the results.
 - The accuracy of the data was not assessed by external means.
- Precision
 - The precision of the data has been assessed by internal means (duplicates) as being acceptable.
 - The precision of the data has been assessed by external means (intralaboratory duplicates) as being acceptable.
- Completeness
 - Data that was sought during the investigation was able to be retrieved with the exception of two (2) proposed borehole locations that were unable to be accessed due to poor ground conditions and the presence of surface water. The absence of these samples is not considered to present significant uncertainty in the characterisation of the site based on the site history and due to the absence of field indications of contamination in nearby boreholes within similar geological strata.
 - Chain of custody were completed for all samples.
- Representativeness
 - This assessment has considered soil contaminant concentrations on-site. The method of sampling presented a potential for loss of volatiles however in absence of olfactory or visual indications of this type of contamination it is not considered that the potential was significant and the methodology permitted inspection of the soil strata. As such the soil data is considered representative of the concentrations at the site.
- Comparability
 - Works were undertaken by personnel experienced in the sampling of potentially contaminated soil.
 - All samples were appropriately preserved for the requested analysis and all soil samples were kept on ice or in the refrigerator between sampling and analysis.

- All laboratory analyses have been conducted by NATA accredited methodologies that comply with the international standard methods.

As such it is considered that the comparability of the data is appropriate.

It is therefore considered that the data obtained from this testing is accurate and reliable in as far as it can be ascertained and is acceptable for the purpose of site assessment.

8 RESULTS

All soil results are compared to the relevant criteria in **Appendix H**. In summary:

- BTEXN concentrations were not detected in any of the samples and all concentrations are below the relevant criteria (Ref [5] and [6]).
- TRH concentrations were not detected in any of the samples and all concentrations are below the relevant criteria (Ref [5] and [6]).
- PAH concentrations were not detected or were detected at low concentrations below the relevant criteria (Ref [5]).
- Metals concentrations were either not detected or detected below the relevant guidelines (Ref [5]).
- Pesticide (OCP and OPP) concentrations were not detected in any of the samples and all concentrations are below the relevant criteria (Ref [5]).
- Herbicide concentrations were not detected in any of the samples and all concentrations are below the relevant criteria (Ref [5]).
- Soil pH ranged from 5.7 to 8.3.
- Electrical conductivity ranged from 8 to 160 $\mu\text{S} / \text{cm}$.

All hydrocarbons, metals and electrical conductivity results of the samples collected for the purpose of ENM classification are below the criteria (Ref [12]) specified for individual samples and the average of the data set; the pH of these samples are within the allowable ranges.

9 SITE CONTAMINATION CHARACTERISATION

The desktop assessment indicates that the site was historically undeveloped, cleared rural land with no apparent land use or infrastructure up to at least the 1970s. Aerial imagery from 1975 shows evidence of horticultural activity, presumed to be vineyards, within part of Lot 2. A residential dwelling with associated ancillary structures and access roads had been established in part of Lot 1 by 1984. The dwelling and associated structures were demolished between 2004 and 2007, presumably as part of the process of the construction of the Rothbury Zone Substation in Lot 1. Horticulture (cropping / vineyard) was also undertaken in the adjacent Lot to the north of the site and in the surrounding area. The Lots have remained unchanged since that time. Potential sources of contamination at the site are considered to be due to historical agricultural activities and the possible presence of hazardous building materials associated with the former residential dwelling.

Fifty-nine (59) soil samples were collected from eighteen (18) locations to characterise the potential of contamination at the site and to provide an indicative assessment of the deep material likely to be excavated as part of the installation of the earth grid. This number is below the minimum thirty-three (33) sampling locations recommended by the NSW EPA guidelines (Ref [1]) for a site of 2.4 ha however is considered appropriate based on the findings of the desktop component of the assessment.

No visual or olfactory indications of contamination were identified at the site during the inspection and intrusive works. Contaminant concentrations for all soil samples were below both the human health and ecological criteria for commercial / industrial land use (Ref [5] and [6]).

RCA therefore considered that the site is suitable for the proposed use without any further assessment of soil, remediation or long-term management.

Groundwater was identified in two (2) locations during this assessment and at one of the designated geotechnical sampling locations BH101. Groundwater encountered in BH104 may be associated with perched groundwater in the historic dam backfilled as part of the Rothbury Zone Substation construction process however this is not considered as likely in BH101 and is not the case for TP123. RCA considers that groundwater is present in the order of 2 mbgs and will likely impact on excavations at that depth; the rate of flow will be higher in areas of higher sand content and lower in areas of higher clay / silt content. Groundwater is not anticipated to be contaminated from activities with the Lots based on the findings of this assessment however there may be off-site impacts which have not been identified. As such, RCA considers that groundwater will require assessment prior to any extraction (such as via dewatering) to ensure that there are no management requirements and / or limitations to its disposal.

Based on current analytical results of deep soils in the area of the earth grid, natural soils from below 3 mbgs at the site are expected to be able to be classified as ENM in accordance with the Order (Ref [12]) however there has been no analysis of foreign materials or asbestos such as is required for formal classification. Similarly, the results of samples of shallower materials throughout the site also indicate concentrations which meet the specifications of the ENM Order however the hydrocarbons are higher than that detected in the deeper samples such that, if off-site re-use in accordance with the Order is intended, RCA recommends consideration of differential stockpiling based on depth and any additional indications of contamination to optimise the potential for ENM classification. Full sampling and analysis in accordance with the Order will be required prior to removal from the site.

It is noted that all current sample results meet the threshold of general solid waste (Ref [13]) such that differential stockpiling is unlikely to be required if material is being removed to a licensed waste facility however any additional sampling results would need to be taken into account to provide a formal classification.

All material removed from site must be tracked to demonstrate that it has been suitably managed, transported and placed in accordance with the requirements of the NSW waste legislation.

Documents to be maintained comprise:

- Load sheets – truck registration being loaded, time loaded, approximate quantity, description of material being loaded, details of person doing the recording.
- Receival sheets – truck registration received, time received, approximate quantity, description of material being received, details of person doing the recording.
 - Dockets from a licensed waste facility will be required if this is the final placement of the material.

- Truck dockets as maintained by the driver transporting the loads.

These records should be kept in readiness for provision to a regulatory authority upon request.

10 CONCLUSIONS

This report has presented the findings of a detailed site (contamination) assessment undertaken for the proposed BESS and associated infrastructure at 1309 Wine Country Drive Rothbury NSW 2320. A geotechnical investigation was undertaken concurrently and is reported separately.

The assessment involved a desktop review of the site's historical land use, a site inspection, and the collection of soil samples to evaluate the potential for contamination at the site and to provide an indicative assessment of material classification of deep soils likely to be excavated as part of the installation of an earth grid. Potential sources of contamination were identified as historical agricultural activities conducted on or near the site, and the possible presence of hazardous building materials associated with the former residential dwellings.

No visual or olfactory evidence of contamination was observed during the site inspection and intrusive works, and all soil sample results were below the relevant human health and ecological criteria for commercial / industrial land use (Ref [5] and [6]). Based on these findings, RCA considers the site suitable for the proposed use without the need for further assessment of soil, remediation or long-term management.

Groundwater was encountered in the order of 2 mbgs at three (3) locations and is considered likely to be encountered during excavations to that depth such that it may be a constraint to the works and require extraction during construction. RCA therefore recommends an assessment of the likely volume of extraction and the quality of the groundwater be undertaken as part of the design of the BESS to facilitate appropriate consideration of methodology, management and disposal options.

All material that will be removed from site must be sampled, classified, transported and tracked in accordance with the NSW EPA framework prior to removal. Based on the current analytical results, the material is expected to be classified as general solid waste (Ref [13]) and may be disposed of at an appropriately licensed waste disposal or recycling facility. Additionally, the results suggest that excavated soil will be able to be classified as ENM in accordance with the Order (Ref [12]) for re-use at a site with regulatory permission to receive ENM or as general solid waste (Ref [13]) for removal to a licensed waste facility, however full testing in accordance with either the Order or the relevant guidelines (Ref [1] and [13]) will be required prior to removal of material from the site. RCA recommends differential stockpiling based on depth and any additional indications of contamination, if ENM classification is being sought due to the differential concentrations of hydrocarbons.

Yours faithfully

RCA AUSTRALIA



Stephen Hendriksen
Environmental Engineer
BEng (Env)



Fiona Brooker
Manager of Environmental Services
BEng (Env)

LIMITATIONS

This report has been prepared for Ausgrid in accordance with an agreement with RCA Australia (RCA) dated 24 March 2025. The services performed by RCA have been conducted in a manner consistent with that generally exercised by members of its profession and consulting practice.

This report has been prepared for the sole use of Ausgrid. The report may not contain sufficient information for purposes of other uses or for parties other than Ausgrid. This report shall only be presented in full and may not be used to support objectives other than those stated in the report without written permission from RCA Australia.

The information in this report is considered accurate at the date of issue with regard to the current conditions of the site. Conditions can vary across any site that cannot be explicitly defined by investigation.

Environmental conditions including contaminant concentrations can change in a limited period of time. This should be considered if the report is used following a significant period of time after the date of issue.

REFERENCES

- [1] NSW EPA, *Contaminated Land Guidelines: Sampling Design Part 1 – Application*, August 2022.
- [2] NSW EPA, *Guidelines for Consultants Reporting on Contaminated Sites*, April 2020.
- [3] NSW EPA, *Guidelines for the NSW Site Auditor Scheme (3rd Edition)*, October 2017.
- [4] State Environmental Planning Policy (Resilience and Hazards) 2021, current version 4 August 2023.
- [5] NEPC, *National Environment Protection (Assessment of Site Contamination) Measure*, 1999 as amended 2013.
- [6] CRC Care, *Technical Report 10, Health screening levels for petroleum in soil and groundwater*, September 2011.
- [7] Standards Australia, *Guide to the investigation and sampling of sites with potentially contaminated soil, Part 1: Non-volatile and semi-volatile compounds*, AS 4482.1-2005.
- [8] NSW Planning Portal -Spatial Viewer:
<https://www.planningportal.nsw.gov.au/spatialviewerhistoric/#/find-a-property/1309WineCountryDriveRothbury2320>
- [9] Energy Australia, *Statement of Environmental Effects, 132kV/11kV Zone Substation At Rothbury*, 16 May 2005
- [10] Parsons Brinckerhoff, *Environmental Site Assessment: corner of Wine Country Drive & Old North Road, Rothbury, NSW*, October 2005
- [11] Apex Archaeology, *Aboriginal Due Diligence Assessment, 1309 Wine Country Drive, Rothbury, NSW – Proposed Battery Energy Storage System (BESS)*, April 2024.
- [12] Resource Recovery Order under Part 9, Clause 93 of the Protection of the Environment Operations (Waste) Regulation 2014, *The excavated natural material order 2014*.
- [13] NSW EPA, *Waste Classification Guidelines, Part 1; Classifying Waste*, November 2014.

GLOSSARY

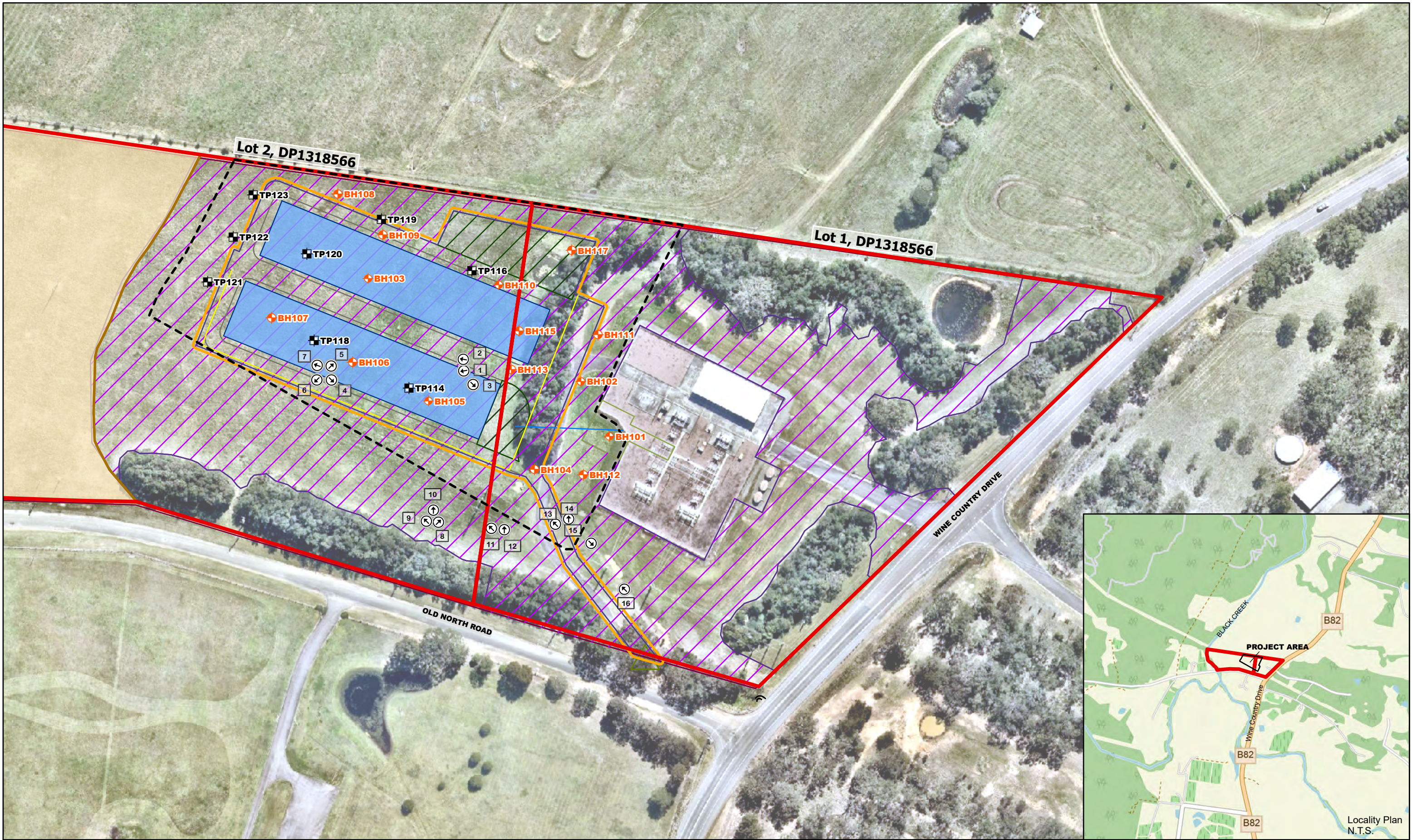
95%UCL _{ave}	A statistical calculation – 95% Upper Confidence Limit of the arithmetic mean of the data set.
ASC NEPM	National Environment Protection (Assessment of Site Contamination) Measure.
BESS	Battery Energy Storage System
EIL	Ecological investigation level. Relates to soil concentrations which may pose a risk to ecological health.
ESL	Ecological screening level. Relates to vapour risk from petroleum hydrocarbons which may pose a risk to ecological health.
HIL	Health investigation level. Relates to soil concentrations which may pose a risk to human health in soil.
HSL	Health screening level. Relates to the vapour risk from petroleum hydrocarbons which may pose a risk to human health in soil. Also relates to exposure to asbestos fibres.
In-Situ	In place, without excavation.
Intralaboratory	A sample split into two and sent blind to the sample laboratory for comparative analysis.
ISL	Investigation screening levels for soil. Comprised of HIL / EIL and HSL / ESL
kg	kilogram, 1000 gram.
LEP	Local environment plan. A planning tool for the Local Government.
µg	microgram, 1/1000 milligram.
mg	milligram, 1/1000 gram.
NEPC	National Environment Protection Council.
NSW EPA	NSW Environment Protection Authority – made a separate entity in 2011 to regulate the contaminated land industry.
PID	Photoionisation detector. Measures volatile gases in air or emanating from soil or water.
PPE	Personal Protective Equipment.
PQL	Practical Quantitation Limit.
QA	Quality Assurance.
QC	Quality Control.
RPD	Relative Percentage Difference.

Chemical Compounds

BTEX	Benzene, toluene, ethylbenzene, xylene. Monocyclic (single ring) aromatic hydrocarbon compounds which are highly soluble in water, volatile and hazardous to health. Widely used in industrial and commercial applications. Present in emissions from motor vehicles and aircrafts, cigarette smoke, processing of petroleum products and during the production of numerous goods.
Naphthalene	Simplest polycyclic (double ring) aromatic hydrocarbon. Analysis is included with BTEX and as part of the PAH suite and the results are used in comparison to different criteria
OCP	Organochlorin pesticides. Persistent, bio-accumulative pesticides used in many commercial products to protect crops, livestock, buildings and households from the damaging effects of insects.
OPP	Organophosphorous pesticides. Persistent pesticides, some of which are accumulative, used in many commercial products to protect crops, livestock, buildings and households from the damaging effects of insects.
PAH	Polycyclic aromatic hydrocarbons. Multi-ring compounds, persistent and carcinogenic found in fuels, oils and creosote. These are also common combustion products.
TRH / TPH	Total recoverable / petroleum hydrocarbons. Mixture of (typically) straight chain chemicals mainly comprising hydrocarbon and carbons found in compounds sourced from crude oil. Fractions are based on behaviour in soil / water and contain many individual chemicals.

Appendix A

Drawing



LEGEND

- Lot boundaries
- Site boundary at time of fieldwork
- Approximate borehole location
- Approximate test pit location
- Approximate photograph location and direction
- Not to be disturbed due to Indigenous heritage (RB-PAD-01)
- Operational footprint
- Containerised battery units
- Laydown area

Notes:

- Aerial image taken from Nearmap, 6 October 2024 (used in accordance with commercial licence)
- Proposed development outline adapted from supplied Rothbury BESS Layout indicative plan (undated PDF) supplied by Ausgrid on 21/01/2026

0 12.5 25 50 75 100 metres

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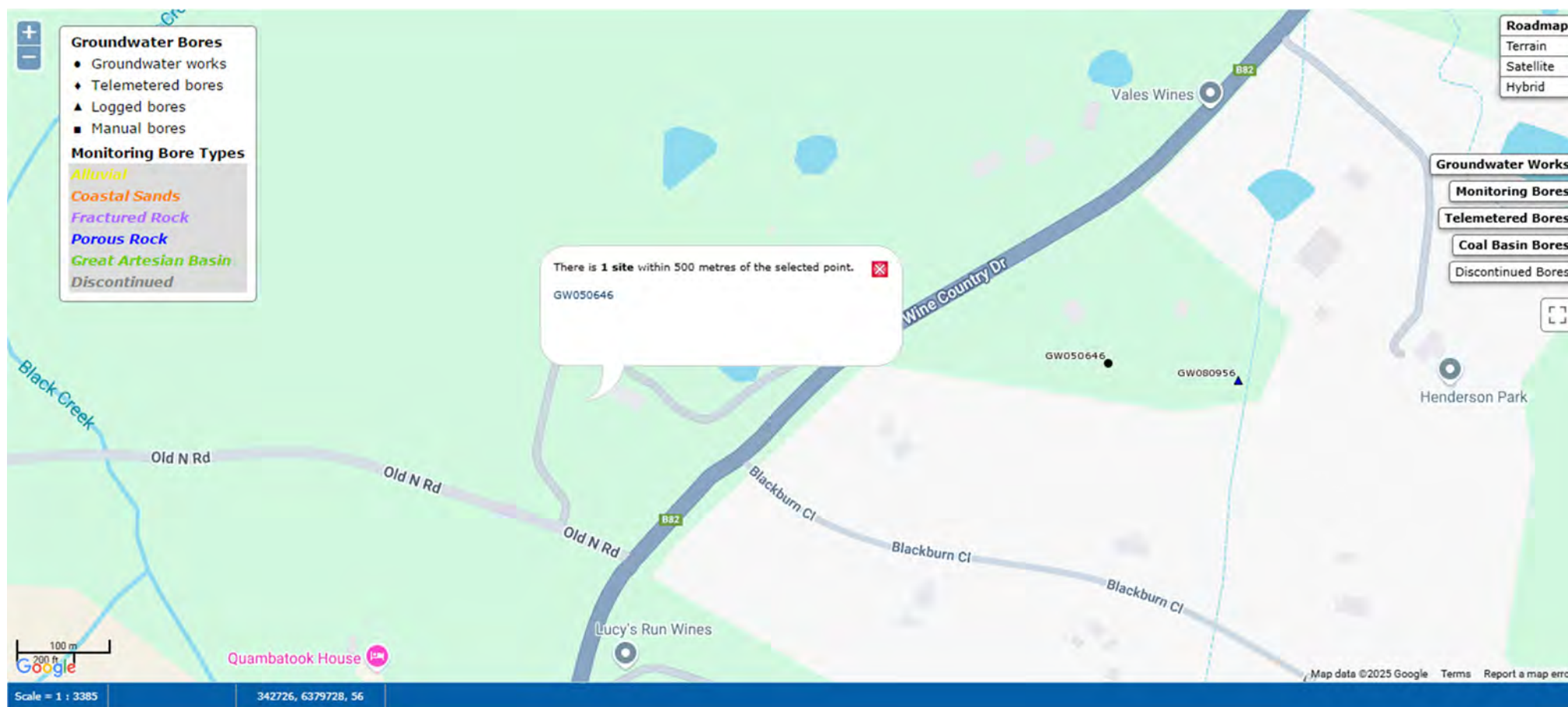
N

**SITE LAYOUT, LOCALITY AND TEST LOCATION PLAN
DETAILED SITE
(CONTAMINATION) ASSESSMENT
PART 1309 WINE COUNTRY DRIVE, ROTHBURY**

CLIENT	Ausgrid	RCA Ref	17524-201/1
DRAWN BY	SH	SCALE	1:1,500 (A3)
APPROVED BY	FB	DATE	15/04/2026
		DRAWING No	1
		REV	1
		OFFICE	NEWCASTLE

Appendix B

Registered Groundwater Well Information



WaterNSW Work Summary

GW050646

Licence: 20BL114956

Licence Status: ACTIVE

Authorised Purpose(s): STOCK
Intended Purpose(s): STOCK

Work Type: Bore open thru rock
Work Status: Abandoned
Construct.Method: Rotary Air
Owner Type: Private

Commenced Date:
Completion Date: 01/08/1980

Final Depth: 38.00 m
Drilled Depth: 38.00 m

Contractor Name: (None)
Driller:
Assistant Driller:

Property: N/A NSW
GWMA:
GW Zone:

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

Site Details

Site Chosen By:

County: NORTHUMBERLAND
Form A: NORTHUMBERLAND
Licensed: NORTHUMB
Parish: ROTHB
ROTHBURY
Cadastre: 1
Whole Lot

Region: 20 - Hunter
River Basin: 210 - HUNTER RIVER
Area/District:

CMA Map: 9132-1S
Grid Zone:

Scale:

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

Northing: 6379449.000
Easting: 343735.000

Latitude: 32°42'42.0"S
Longitude: 151°19'57.8"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	1	Casing	P.V.C.	0.00	9.00	155			Driven into Hole

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)
32.00	33.00	1.00	Fractured	19.00		0.38			

Drillers Log

From (m)	To (m)	Thickness (m)	Drillers Description	Geological Material	Comments
0.00	1.00	1.00	Soil	Soil	
1.00	4.00	3.00	Clay	Clay	
4.00	38.00	34.00	Shale Water Supply	Shale	

*** End of GW050646 ***

Appendix C

Desktop Assessment Information



PLANNING CERTIFICATE

ISSUED UNDER SECTION 10.7 (2) & (5)
ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979
and associated
ENVIRONMENTAL PLANNING & ASSESSMENT REGULATION 2021

Radha Rockwood
24-28 Campbell Street
Haymarket 2000

Applicants Reference
Rothbury Ausgrid

CERTIFICATE DETAILS

Certificate Number: 1053
Date of Certificate: 24/04/2025

PROPERTY DETAILS

Address: 1309 Wine Country Drive ROTHBURY NSW 2320
Title: LOT: 4 DP: 598847
Parcel No: 19606

BACKGROUND INFORMATION

This certificate provides information on how the relevant parcel of land may be developed, including the planning restrictions that apply to development of the land, as at the date the certificate is issued. The certificate contains information Council is aware of through its records and environmental plans, along with data supplied by the State Government. The details contained in this certificate are limited to that required by Section 10.7 of the *Environmental Planning and Assessment Act, 1979*.

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PLANNING CERTIFICATE

ISSUED UNDER SECTION 10.7 (2) & (5)
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1. Names of relevant planning instruments and development control plans

- (1) The name of each environmental planning instrument and development control plan that applies to the carrying out of development on the land:

State Environmental Planning Policies

State Environmental Planning Policy No 65 _ Design Quality of Residential Apartment Development

State Environmental Planning Policy (Sustainable Buildings) 2022_ relevant to zones _ RU4, RU5, RE1, RE2, E1, E2, E3, E4, MU1, C4, SP1, SP2 & SP3

Chapter 2 _ Standards for residential development _ BASIX

Chapter 3_ Standards for Non-residential development

Chapter 4_ Miscellaneous

State Environmental Planning Policy (Resilience and Hazards) 2021

Chapter 3 _ Hazardous and offensive development

Chapter 4 _ Remediation of land

State Environmental Planning Policy (Exempt and Complying Development Codes) 2008

State Environmental Planning Policy (Transport and Infrastructure) 2021

Chapter 2 _ Infrastructure

Chapter 3 _ Educational establishments and child care facilities

State Environmental Planning Policy (Resources and Energy) 2021

Chapter 2 _ Mining, petroleum production and extractive industries

State Environmental Planning Policy (Primary Production) 2021

Chapter 2 _ Primary production and rural development

State Environmental Planning Policy (Planning Systems) 2021

Chapter 2 _ State and regional development

Chapter 4 _ Concurrences and consents

State Environmental Planning Policy (Biodiversity and Conservation) 2021

Chapter 4 _ Koala habitat protection 2021

State Environmental Planning Policy (Housing) 2021

State Environmental Planning Policy (Precincts _ Regional) 2021

Chapter 2 _ State significant precincts

The chapters listed above are those that are applicable to the whole LGA. Please note that other chapters of the state environmental planning policies may apply to particular parcels of land in the LGA.

Local Environmental Plans

[Cessnock Local Environmental Plan 2011](#)

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Development Control Plans

[Cessnock Development Control Plan 2010](#)

Note: Detailed information on the local environmental plans and State Environmental Planning Policies that are listed in this certificate are available at NSW Legislation – in force website.

- (2) The name of each proposed environmental planning instruments and draft development control plan, which is or has been subject to community consultation or public exhibition under the Environmental Planning and Assessment Act 1979, that will apply to the carrying out of development on the land and:
- (3) Council has been notified that the following Draft State Environmental Planning Policy was placed on public exhibition and may affect land use planning and development in Cessnock:

Draft State Environmental Planning Policies

DRAFT SEPP _ New Sustainable Buildings Incorporating BASIX (in force from 1 October 2023)

DRAFT SEPP _ BASIX Higher Standards – Exhibition 17 November 2021 to 28 February 2022

DRAFT SEPP _ Infrastructure and Education (Amendments) – Exhibition 15 December 2021 to 11 February 2022

DRAFT SEPP _ Infrastructure (amendments)

Amendment _ Changes to Landscape Rehydration Infrastructure Planning Rules – Exhibition 20 December 2021 to 28 February 2022

DRAFT SEPP _ Infrastructure Planning Rules – Exhibition 20 December 2021 to 28 February 2022

DRAFT SEPP _ Housing EIE Amendments _ Exhibition 22 November 2022 to 19 December 2022

DRAFT SEPP _ The Design and Place _ Exhibition 10 December 2021 to 27 February 2022

Draft Planning Proposal for Local Environmental Plan

DRAFT Planning Proposal _ 18-2020-3-1 – Comprehensive LEP Review _ Recreation Zones _ Public exhibition _ 16-06-2022 _ 20-07-2022

DRAFT Planning Proposal _ 18-2020-3-1_ Proposal to implement the changes to the Special Purposes(SP)zones _ Public Exhibition _ 02-02-2023 _ 02-03-2023.

DRAFT Planning Proposal _ 18-2022-2-1_ Proposal to implement the changes to the Comprehensive Rural Zones review. Public Exhibition _ 14-09-2022 _ 2-10-2022

DRAFT Planning Proposal _ Comprehensive LEP Review _ Environment Zones _ Land Use Table _ 18-2023-5-1 _ Public exhibition _ 31-08-2022 _ 26-10-2022 _ PP2021-7357

Draft Planning Proposal _ Cessnock City Council Various Administrative Amendments 2021 _ Public exhibition 30-11-2022 - 18-01-2022

DRAFT Planning Proposal _ Environmental Lands _ 18 2021 6 1 _ Public exhibition _ 31-08-2022 _ 26-10-2022

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DRAFT Planning Proposal _ Comprehensive LEP Review _ Amending Rural Zone Land Uses, Local Objectives and Mapping Anomalies _ 18-2022-2-1 _ Public exhibition _ 14-9-2022 _ 26-10-2022

Draft Development Control Plan

Draft DCP _ Parking and Access Subdivision Chapter _ Public Exhibition _ 26/04/2024 _ 24/05/2024

Draft DCP _ E20 Regrowth Kurri Kurri _ Adopted by Council _ Public Exhibition _ 01/05/2024 _ 29/05/2024

DRAFT DCP Chapter _ Access and Parking Review _ 57 2023 2 1 _ Public Exhibition _ 26/4/2024 _ 24/5/2024

DRAFT DCP Chapter _ D1 Subdivision Guidelines _ Public Exhibition _ 26/4/2024 _ 24/5/2024

Draft Waste Management DCP, Waste Management Guidelines & DCP Dictionary Amendments _ 57 2023 11 1 _ 5/11/2024 _ 3/12/2024

Draft DCP _ Administrative and Legislative Context (replacing Part A Introduction) and E1 Centres (replacing E16 Commercial Precinct and E19 Branxton Town Centre relating to developments in E1 Local Centre, E2 Commercial Centre and MU1 Mixed Use zones) _ 57/2020/2/1 _ Public Exhibition _ 13/09/2023 _ 12/10/2023

57 2025 2 1 _ Draft Cessnock Development Control (DCP) Plan Chapter _ Vineyards District _ Public Exhibition 28 March 2025 - 9 May 2025

57 2025 8 1 _ Draft Cessnock Development Control (DCP) Plan Chapter _ Tourist and Visitors Accommodation on Rural and Conservation Lands _ Public Exhibition _ 28 March 2025 to 9 May 2025

57 2025 9 1 _ Draft Cessnock Development Control Plan (DCP) Chapter _ Signage and Outdoor Advertising _ Public Exhibition 28 March 2025 _ 9 May 2025

(4) In this section –

proposed environmental planning instrument means a draft environmental planning instrument and includes a planning proposal for a local environmental plan.

Draft Cessnock Local Environmental Plan 2011 _ Amendment No.34 _ Notification Date 10 June 2022 _ 18 2019 1 1 _ Reclassification and Rezoning of Various Council Land

Draft Cessnock Local Environmental Plan 2011 _ Amendment No. 35 _ 18 2020 2 1 _ Notification Date 21 October 2022 _ Administrative amendments.

Draft Cessnock Local Environmental Plan 2011 _ Amendment No. 36 _ 18 2020 3 1 _ Notification Date 2 June 2023 _ Recreation Lands (ORIGINALLY ALLOCATED TO HYDRO - Refer to Map Only Amendment No 4)

Draft Cessnock Local Environmental Plan 2011 _ Amendment No. 37 _ 18 2021 3 1 _ Notification Date 17 February 2023 _ Wills Hill Road - Heritage Listing.



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Draft Cessnock Local Environmental Plan 2011 _ Amendment No. 38 _ 18 2021 6 1 _
Notification Date 16 June 2023 _ Environemtnal Zones (text only) amendments.

Draft Cessnock Local Environmental Plan 2011 _ Amendment No. 39 _ 18 2022 3 1 _
Notification Date 15 December 2023 _ Lovedale Integrated Tourist Development.

Draft Cessnock Local Environmental Plan 2011 _ Amendment No. 40 _ 18 2022 2 1 _
Notification Date 13 October 2023 _ Rural Zones.

Draft Cessnock Local Environmental Plan 2011 _ Amendment No. 41 _ 18 2020 5 1 _
Notification Date 4 August 2023 _ 0 Blackhill Road, Black Hill - Additional Permitted Use for a Dwelling.

Draft Cessnock Local Environmental Plan 2011 _ Amendment No. 42 _ 18 2022 4 1 _
Notification Date 24 May 2023 _ Section 3.22 Heritage Amendments.

Draft Cessnock Local Environmental Plan 2011 _ Amendment No. 43 _ 18 2023 8 1 _
Notification Date 4 August 2023 _ Removal of Clause 7.11B from 49B Aberdare Road Aberdare.

Draft Cessnock Local Environmental Plan 2011 _ Map Amendment No. 1 _ 18 2017 6 1 _
Notification Date 6 August 2021 _ 17 Branxton Street, Greta.

Draft Cessnock Local Environmental Plan 2011 _ Map Amendment No. 2 _ 18 2020 1 1 _ 39
Pinchen Street and 8 Kerlew Street, Nulkaba

Draft Cessnock Local Environmental Plan 2011 _ Map Amendment No. 3 _ 18 2021 7 1 _
Notification Date 9 September 2022 _ Cessnock Commercial Precinct.

Draft Cessnock Local Environmental Plan 2011 _ Map Amendment No. 4 _ 18 2015 2 1 _
Notification Date 16 December 2022 _ Hydro Kurri Kurri.

Draft Cessnock Local Environmental Plan 2011 _ Map Amendment No. 5 _ 18 2020 4 1 _
Notification Date 30 June 2023 _ 259 & 261 Averys Lane Buchanan (LSZ, LZN & URA)
(originally allocated to Black Hill - Refer to Amendmnet No. 41).

Draft Cessnock Local Environmental Plan 2011 _ Map Amendment No. 6 _ RN20 956 _
Notification Date 26 April 2023 _ Employment Zones Reforms.

Draft Cessnock Local Environmental Plan 2011 _ Map Amendment No. 7 _ 18 2022 9 1 _
Notification Date 9 June 2023 _ Employment Zones Reforms S.3.22 Amendment (Originally
allocated to Hydro Part A - refer to MOA No.8).

Draft Cessnock Local Environmental Plan 2011 _ Map Amendment No. 8 _ 18 2015 2 1 _
Notification Date 16 June 2023 _ Hydro Kurri Kurri (Part A - land above PMF excluded from
Amendment No 4).

Draft Cessnock Local Environmental Plan 2011 _ Map Amendment No. 9 _ 18 2020 3 1 _
Notification Date 25 August 2023 _ Special Purposes (Various).

Draft Cessnock Local Environmental Plan 2011 _ Map Amendment No. 10 _ 18 2015 2 1 _
Notification Date 24 May 2024 _ Hydro Kurri Kurri (Part B - land above PMF excluded from
Amendment No. 4 and 8).



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Draft Cessnock Local Environmental Plan 2011 _ Map Amendment No. 11 _ 18 2024 5 1 _
Notification Date 16 August 2024 _ Split Zoning 3.22 Zone Boundary Adjustment.

Draft Cessnock Local Environmental Plan 2011 _ Map Amendment No. 12 _ 18 2022 9 1 _
Notification Date 20 September 2024 _ Conversion of LEP PDF maps to Digital Mapping.

Draft Cessnock Local Environmental Plan 2011 _ Map Amendment No. 13 _ PP-2024-2402 _
Notification Date 6 December 2024 _ applies to land on and surrounding Kurri Kurri Aquatic
Centre _ Lot 1 DP1153680 and Lot 1 DP1166822. Zoning change from C2 Environmental
Conservation to RE1 Public Recreation.

Draft Cessnock Local Environmental Plan 2011 _ Amendment No. 44 _ PP-2023-1184 _
Notification Date 13 December 2024 _ Lot 5, DP239505, 406 Wilderness Road, Lovedale -
additional permitted use of "depot" as permitted with development consent, if the depot is used
for the purposes of a balloon tourism business.

2. Zoning and land use under relevant planning instruments

The following matters for each environmental planning instrument or draft environmental planning
instrument that includes the land in a zone, however described –

- (a) the identity of the zone, whether by reference to –
 - (i) a name, such as "Residential Zone" or "Heritage Area", or
 - (ii) a number, such as "Zone No 2 (a)",

RU2 Rural Landscape under the Cessnock Local Environmental Plan 2011

- (b) the purposes for which development in the zone –
 - (i) may be carried out without development consent, and
 - (ii) may not be carried out except with development consent, and
 - (iii) is prohibited,

RU2 Rural Landscape

1 Permitted without consent

Extensive agriculture; Home occupations; Horticulture

2 Permitted with consent

Agriculture; Airports; Animal boarding or training establishments; Aquaculture; Building
identification signs; Business identification signs; Campinggrounds; Cemeteries; Community
facilities; Crematoria; Dual occupancies; Dwelling houses; Eco-tourist facilities; Educational
establishments; Electricity generating works; Emergency services facilities; Environmental
facilities; Environmental protection works; Extractive industries; Farm buildings; Flood mitigation
works; Forestry; Helipads; Home-based child care; Home businesses; Home industries;
Information and education facilities; Open cut mining; Plant nurseries; Recreation areas;
Recreation facilities (major); Recreation facilities (outdoor); Research stations; Roads; Roadside
stalls; Rural industries; School-based child care; Secondary dwellings; Sewerage systems;

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Tourist and visitor accommodation; Waste or resource management facilities; Water supply systems.

3 Prohibited

Backpackers' accommodation; Hotel or motel accommodation; Serviced apartments; Any other development not specified in item 1 or 2

- (c) whether additional permitted uses apply to the land,
No
- (d) whether development standards applying to the land fix minimum land dimensions for the erection of a dwelling house on the land and, if so, the fixed minimum land dimensions,
No
- (e) whether the land is in an area of outstanding biodiversity value under the *Biodiversity Conservation Act 2016*:
The land is not land that includes or comprises biodiversity conservation under the Biodiversity Conservation Act 2016.
- (f) whether the land is in a conservation area, however described,
The land is not a conservation area under the Cessnock Local Environmental Plan 2011.
- (g) whether an item of environmental heritage, however described, is located on the land.
An item of environmental heritage identified in Cessnock Local Environmental Plan 2011 is not situated on the land.

3. Contributions plans

- (1) The name of each contributions plan under the Act, Division 7.1 applying to the land, including draft contributions plans.

Cessnock Section 7.12 Levy Contributions Plan 2017.

Cessnock City Wide Local Infrastructure Contributions Plan 2020.

Housing and Productivity Contributions

58 2023 1 1_ Draft Amendment No 2 to Cessnock City Wide S7.11 Infrastructure Contributions Plan and Cessnock City Wide S7.12 Infrastructure Contributions Plan _ Public Exhibition 28 March 2025 _ 9 May 2025

- (2) If the land is in a region within the meaning of the Act, Division 7.1, Subdivision 4-
 - a. The name of the region, and
 - b. The name of the Ministerial planning order in which the reason is identified.
- (3) If the land is in a special contribution area to which a continued 7.23 determination applies, the name of the area.
- (4) In this section-



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Continued 7.23 determination means a 7.23 determination that-

- a. Has been continued in force by the Act, Schedule 4, Part 1, and
- b. Has not been repealed as provided by that part.

Note- The Act, Schedule 4, Part 1 contains other definitions that affect the interpretation of this section.

No

4. Complying development

- (1) If the land is land on which complying development may be carried out under each of the complying development codes under State Environmental Planning Policy (*Exempt and Complying Development Codes*) 2008, because of that Policy, clause 1.17A(1)(c)–(e), (2), (3) or (4), 1.18(1)(c3) or 1.19.
- (2) If complying development may not be carried out on the land because of 1 of those clauses, the reasons why it may not be carried out under the clause.
- (3) If the council does not have sufficient information to ascertain the extent to which complying development may or may not be carried out on the land, a statement that—
 - a. a restriction applies to the land, but it may not apply to all of the land, and
 - b. the council does not have sufficient information to ascertain the extent to which complying development may or may not be carried out on the land.
- (4) If the complying development codes are varied, under that Policy, clause 1.12, in relation to the land.

Housing Code	Complying Development may not be carried out under the Housing Code as the subject land falls within a Local Environmental Plan zone that does not meet the requirements of the code.
Rural housing code	Complying Development under the Rural Housing Code may not be carried out on the land as the land is reserved for a public purpose by an environmental planning instrument.
Low Rise Housing Diversity Code	Complying Development may not be carried out under the Low Rise Housing Diversity Code as the subject land falls within a Local Environmental Plan zone that does not meet the requirements of the code.
Greenfield Housing Code	Complying Development may not be carried out under the Greenfield Housing Code as the subject land falls within a Local Environmental Plan zone that does not meet the requirements of the code.
Housing Alterations Code	Complying Development may be carried out on the land under the Housing Alterations Code, subject to the development complying with the relevant standards contained within the State Environmental Planning Policy (Exempt and Complying

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	Development Codes) 2008.
General Development Code (Transitional development under former General Housing Code and related provisions)	Complying Development may be carried out on the land under the General Development Code, subject to the development complying with the relevant standards contained within the State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.
Industrial and Business Alterations Code	Complying Development may be carried out on the land under the Industrial and Business Alterations Code, subject to the development complying with the relevant standards contained within the State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.
Industrial and Business Buildings Code	Complying Development may not be carried out under the Industrial and Business Buildings Code as the subject land falls within a Local Environmental Plan zone that does not meet the requirements of the code.
Container Recycling Facilities Code	Complying Development may not be carried out under the Container Recycling Facilities Code as the subject land falls within a Local Environmental Plan zone that does not meet the requirements of the code.
Subdivisions Code	Complying Development may be carried out on the land under the Subdivision Code, subject to the development complying with the relevant standards contained within the State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.
Demolition Code	Complying Development may be carried out on the land under the Demolition Code, subject to the development complying with the relevant standards contained within the State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.
Fire Safety Code	Complying Development may be carried out on the land under the Fire Safety Code, subject to the development complying with the relevant standards contained within the State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.
Agritourism and Farm Stay Accommodation Code	Complying Development may be carried out on the land under the Agritourism and Farm Stay Accommodation Code, subject to the development complying with the relevant standards contained within the State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.

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5. Exempt Development

- (1) If the land is land on which exempt development may be carried out under each of the exempt development codes under *State Environmental Policy (Exempt and Complying Development Codes) 2008*, because of that Policy, clause 1.16(1) (b1) -(d) or I .16A.
- (2) If exempt development may not be carried out on the land because of 1 of those clauses, the reasons why it may not be carried out under the clause.

Biodiversity Conservation Act 2016 and Fisheries Management Act 1994	Exempt Development may not be carried out on land that is a declared area of outstanding biodiversity value under the Biodiversity Conservation Act 2016 or declared critical habitat under Part 7A of the Fisheries Management Act 1994
Wilderness Act 1987	Exempt Development may not be carried out on land that is, or is part of, a wilderness area (within the meaning of Wilderness Act 1987)
Heritage Act 1977	Exempt Development may not be carried out on land that is, or on which there is, an item that is listed on the State Heritage Register under the Heritage Act 1977, or that is subject to an interim heritage order under that Act
Schedule 4 _ Land included from the General Exempt Development Code	Exempt Development may be carried out on land that is described or otherwise identified on a map specified in Schedule 4.
Land within 18 kilometres of Siding Spring Observatory	Exempt Development may not be carried out on Land within 18 kilometres of Siding Spring Observatory
Schedule 11 _ Conditions applying to complying development certificates under the Agritourism and Farm Stay Accommodation Code	Exempt Development may be carried out on land that is not described or otherwise identified on the Agritourism and Farm Stay Accommodation Exempt and Complying Development map.

- (3) If the council does not have sufficient information to ascertain the extent to which exempt development may or may not be carried out on the land, a statement that-
- (a) a restriction applies to the land, but it may not apply to all of the land, and
 - (b) the council does not have sufficient information to ascertain the extent to which exempt development may or may not be carried out on the land.
- (4) If the exempt development codes are varied, under that Policy, clause 1.12, in relation to the land.

There are no variations to the exempt development codes within the State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 that apply in the Cessnock local government area.

6. Affected building notices and building product rectification orders

- (1) Whether the Council is aware that –

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- (a) an affected building notice is in force in relation to the land, or
- (b) a building product rectification order is in force in relation to the land that has not been fully complied with, or
- (c) a notice of intention to make a building product rectification order given in relation to the land is outstanding.

(2) In this section –

affected building notice has the same meaning as in the *Building Products (Safety) Act 2017*, Part 4.

building Product Rectification Order has the same meaning as in the *Building Products (Safety) Act 2017*.

There is not an affected building notice, as defined by the Building Product (Safety) Act 2017, in force in respect to the land.

There is not an outstanding building product rectification order, as defined by the Building Products (Safety) Act 2017, in force in respect to the land.

A notice of intent to make a building product rectification order, as defined by the Building Products(Safety) Act 2017, has not been served in respect to the land.

7. Land reserved for acquisition

Whether an environmental planning instrument or proposed environmental planning instrument referred to in section 1 makes provision in relation to the acquisition of the land by an authority of the State, as referred to in the Act, section 3.15.

Yes

8. Road widening and road realignment

Whether the land is affected by road widening or road realignment under –

- (a) the *Roads Act 1993*, Part 3, Division 2, or
- (b) an environmental planning instrument, or
- (c) a resolution of the council.

The land is affected by a road widening or road realignment proposal under:

- (a) Division 2 of Part 3 of the *Roads Act 1993*, or
- (b) any environmental planning instrument, or
- (c) any resolution of the council.

9. Flood related development controls

- (1) If the land or part of the land is within the flood planning area and subject to flood related development controls.

Yes



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- (2) If the land or part of the land is between the flood planning area and the probable maximum flood and subject to flood related development controls.

Yes

- (3) In this section –

flood planning area has the same meaning as in the Flood Risk Management Manual.

Flood Risk Management Manual means the Flood Risk Management Manual, ISBN 978-1-923076-17-4, published by the NSW Government in June 2023.

probable maximum flood has the same meaning as in the Flood Risk Management Manual.

Details relating to flood risk and flood planning levels are provided on a flood certificate and flood data application form. See Cessnock City Council's website [Flood Certificate and Flood Data Application Form](#)

Note: Flood Studies

- Cessnock Citywide Flood Study
- Branxton Flood Level Review WMA Water Final Report
- Floodplain Risk Management Study and Plan Report Cessnock City (Black Creek)
- Hunter River Branxton to Green Rocks Flood Study Final Report
- Wallis and Swamp Creek Flood Study Final Report Volume 1
- Wallis and Swamp Creek Flood Study Final Report Volume 2
- Wollombi Floodplain Risk Management Study & Plan
- Greta Flood Study
- Swamp/Fishery Creek Floodplain Risk Management Study - Final Report

10. Council and other public authority policies on hazard risk restrictions

- (1) Whether any of the land is affected by an adopted policy that restricts the development of the land because of the likelihood of:

Landslip

No

Bushfire

No

Tidal Inundation

No

Subsidence

No

Acid Sulphate Soils

No

Contamination



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Cessnock City Council _ Contaminated Land Policy _ Land Use Planning

Note: Council has adopted a policy for managing contaminated land. This may restrict development of identified contaminated or potentially contaminated land and is implemented when zoning, development or land use changes are proposed. Consideration of Council's adopted policy and section C5 of the Cessnock Development Control Plan along with the provisions of State Environmental Planning Policy (Resilience and Hazards) 2021 is required when changes or development is proposed.

Aircraft Noise

No

Salinity

No

Coastal Hazards

No

Sea Level Rise

No

Any Other Risk (other than flooding)

Cessnock City Council _ Climate Change Policy _ Land Use Planning

In this section – ***adopted policy*** means a policy adopted –

- (a) by the council, or
- (b) by another public authority, if the public authority has notified the council that the policy will be included in a planning certificate issued by the council.

11. Bush fire prone land

- (1) If any of the land is bush fire prone land, designated by the Commissioner of the NSW Rural Fire Service under the Act, section 10.3, a statement that all or some of the land is bush fire prone land.
- (2) If none of the land is bush fire prone land, a statement to that effect.

All of the land is bushfire prone land as defined in the Environmental Planning & Assessment Act 1979.

12. Loose-fill asbestos insulation

If the land includes residential premises, within the meaning of the *Home Building Act 1989* (Part 8, Division 1A), that are listed on the Register kept under that Division, a statement to that effect.



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No

13. Mine subsidence

Whether the land is declared to be a mine subsidence district, within the meaning of the *Coal Mine Subsidence Compensation Act 2017*.

No

14. Paper subdivision information

(1) The name of a development plan adopted by a relevant authority that –

(a) applies to the land, or

(b) is proposed to be subject to a ballot.

There is no development plan adopted by a relevant authority that applies to the land of that is proposed to be subject to a consent ballot.

(2) The date of a subdivision order that applies to the land.

There is no subdivision order that applies to the land

(3) Words and expressions used in this section have the same meaning as in this Regulation, Part 10 and the Act, Schedule 7.

15. Property vegetation plans

If the land is land in relation to which a property vegetation plan is approved and in force under the *Native Vegetation Act 2003*, Part 4, a statement to that effect, but only if the council has been notified of the existence of the plan by the person or body that approved the plan under that Act.

The land is not land to which a property vegetation plan approved under Part 4 of the *Native Vegetation Act 2003* (and that continues in force) applies, only insofar as the Council has been notified of the existence of the plan by the person or body that approved the plan under the Act.

16. Biodiversity stewardship sites

If the land is a biodiversity stewardship site under a biodiversity stewardship agreement under the *Biodiversity Conservation Act 2016*, Part 5, a statement to that effect, but only if the council has been notified of the existence of the agreement by the Biodiversity Conservation Trust.

Note—Biodiversity stewardship agreements include biobanking agreements under the *Threatened Species Conservation Act 1995*, Part 7A that are taken to be biodiversity stewardship agreements under the *Biodiversity Conservation Act 2016*, Part 5. .

The land is not a biodiversity stewardship site under a biodiversity stewardship agreement under Part 5 of the *Biodiversity Conservation Act 2016*, but only insofar as the Council has been notified of the existence of the agreement by the Biodiversity Conservation Trust.

17. Biodiversity certified land

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If the land is biodiversity certified land under the *Biodiversity Conservation Act 2016*, Part 8, a statement to that effect.

Note— Biodiversity certified land includes land certified under the *Threatened Species Conservation Act 1995*, Part 7AA that is taken to be certified under the *Biodiversity Conservation Act 2016*, Part 8.

The land is not biodiversity certified land under Part 8 of the *Biodiversity Conservation Act 2016*.

18. Orders under Trees (Disputes Between Neighbours) Act 2006

Whether an order has been made under the *Trees (Disputes Between Neighbours) Act 2006* to carry out work in relation to a tree on the land, but only if the council has been notified of the order.

No

19. Annual charges under Local Government Act 1993 for coastal protection services that relate to existing coastal protection works

(1) If the *Coastal Management Act 2016* applies to the council, whether the owner, or a previous owner, of the land has given written consent to the land being subject to annual charges under the *Local Government Act 1993*, section 496B, for coastal protection services that relate to existing coastal protection works.

(2) In this section –

existing coastal protection works has the same meaning as in the *Local Government Act 1993*, section 553B.

Note – Existing coastal protection works are works to reduce the impact of coastal hazards on land, such as seawalls, revetments, groynes and beach nourishment, that existed before 1 January 2011.

No, the land is not subject to annual charges under the *Local Government Act 1993*, section 496B, for coastal protection services.

20. Western Sydney Aerotropolis

Whether under *State Environmental Planning Policy (Precincts—Western Parkland City) 2021*, Chapter 4 the land is—

- (a) in an ANEF or ANEC contour of 20 or greater, as referred to in that Chapter, section 4.17, or
- (b) shown on the Lighting Intensity and Wind Shear Map, or
- (c) shown on the Obstacle Limitation Surface Map, or
- (d) in the “public safety area” on the Public Safety Area Map, or
- (e) in the “3 kilometre wildlife buffer zone” or the “13 kilometre wildlife buffer zone” on the Wildlife Buffer Zone Map.

The *State Environmental Planning Policy (Precincts—Western Parkland City) 2021* does not apply to land within the Cessnock local government area.

21. Development consent conditions for seniors housing

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and associated
ENVIRONMENTAL PLANNING & ASSESSMENT REGULATION 2021

If *State Environmental Planning Policy (Housing) 2021, Chapter 3, Part 5* applies to the land, any conditions of a development consent granted after 11 October 2007 in relation to the land that are of the kind set out in that Policy, section 88(2).

No

22. Site compatibility certificates and development consent conditions for affordable rental housing

- (1) Whether there is a current site compatibility certificate under *State Environmental Planning Policy (Housing) 2021*, or a former site compatibility certificate, of which the council is aware, in relation to proposed development on the land and, if there is a certificate –

- (a) the period for which the certificate is current, and
- (b) that a copy may be obtained from the Department.

There is not a valid current or former site compatibility verification certificate for affordable rental housing on the land.

- (2) If *State Environmental Planning Policy (Housing) 2021, Chapter 2, Part 2, Division 1 or 5* applies to the land, any conditions of a development consent in relation to the land that are of a kind referred to in that Policy, clause 21(1) or 40(1).

No, Council is not aware of a condition of a development consent in relation to the land that are of a kind referred to in *State Environmental Planning Policy (Affordable Rental Housing) 2009, Clause 17(1) or 38(1)*.

Note: Any conditions of a development consent in relation to land that are of a kind referred to in *State Environmental Planning Policy (Affordable Rental Housing) 2009, clause 17(1) or 38(1)*.

In this section, former site compatibility certificate means a site compatibility certificate issued under *State Environmental Planning Policy (Affordable Rental Housing) 2009*.

- (3) Any conditions of a development consent in relation to land that are of a kind referred to in *State Environmental Planning Policy (Affordable Housing) 2009, clause 17(1) or 38(1)*.

No

- (4) In this section –

former site compatibility certificate means a site compatibility certificate issued under *State Environmental Planning Policy (Affordable Rental Housing) 2009*.

23. Water or sewerage services

If water or sewerage services are, or are to be, provided to the land under the [Water Industry Competition Act 2006](#), a statement to that effect.

Note: A public water utility may not be the provider of some or all of the services to the land. If a water or sewerage service is provided to the land by a licensee under the [Water Industry Competition Act 2006](#), a contract for the service will be deemed to have been entered into between the licensee and the owner of the land. A register relating to approvals and licences necessary for the provision of water or sewerage services under the [Water Industry Competition Act 2006](#) is



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maintained by the Independent Pricing and Regulatory Tribunal and provides information about the areas serviced, or to be serviced, under that Act. Purchasers should check the register to understand who will service the property. Outstanding charges for water or sewerage services provided under the [Water Industry Competition Act 2006](#) become the responsibility of the purchaser.

No

For further information, please contact Council's Assistant Strategic Planner on 02 4993 4100.

A handwritten signature in black ink, appearing to read "Peter Chrystal", is written over a faint, circular official stamp.

Peter Chrystal
Director Planning and Environment



PLANNING CERTIFICATE

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ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979
and associated
ENVIRONMENTAL PLANNING & ASSESSMENT REGULATION 2021

Radha Rockwood
24-28 Campbell Street
Haymarket 2000

Applicants Reference
Rothbury Ausgrid

CERTIFICATE DETAILS

Certificate Number: 1053
Date of Certificate: 24/04/2025

PROPERTY DETAILS

Address: 1309 Wine Country Drive ROTHBURY NSW 2320
Title: LOT: 4 DP: 598847
Parcel No.: 19606

BACKGROUND INFORMATION

This certificate provides information on how the relevant parcel of land may be developed, including the planning restrictions that apply to development of the land, as at the date the certificate is issued. The certificate contains information Council is aware of through its records and environmental plans, along with data supplied by the State Government. The details contained in this certificate are limited to that required by Section 10.7 of the *Environmental Planning and Assessment Act, 1979*.

t 02 4993 4100 f 02 4993 2500
p: PO Box 152 Cessnock NSW 2325
e: council@cessnock.nsw.gov.au w: www.cessnock.nsw.gov.au
ABN 60 919 148 928



PLANNING CERTIFICATE

ISSUED UNDER SECTION 10.7 (2) & (5)
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and associated
ENVIRONMENTAL PLANNING & ASSESSMENT REGULATION 2021

Additional information pursuant to Section 10.7(5) of the *Environmental Planning & Assessment Act 1979*

(5) A council may, in a planning certificate, include advice on such other relevant matters affecting the land of which it may be aware.

Council's records do not indicate that the land the subject of this Certificate is subject to Noise Exposure.

Part 7 Additional Local Provisions

7.13 Dual Occupancies on land in Zone RU2.

- (1) This objective of this clause is to preserve the rural character of the area.
- (2) Development consent must not be granted to development for the purpose of dual occupancies on land in Zone RU1 Rural Landscape unless the consent authority is satisfied that_
 - (a) the dwellings are designed and sited to give the appearance of being a single development, and
 - (b) the dwellings will use shared facilities such as a common driveway, fire breaks and essential services, and
 - (c) any ancillary buildings and structures will be situated within close proximity to the dwellings, and,
 - (d) the dwellings are designed and sited to avoid significant adverse environmental impacts, and
 - (e) the dwellings are designed and sited to avoid significant adverse impacts on the agricultural potential and capability of the land.

Part 7 Additional Local Provisions

7.14 Essential Services.

- (1) This clause applies to land in Zone RU1 Rural Landscape.
- (2) Development consent must not be granted to development on land to which this clause applies unless the consent authority is satisfied that any of the following services that are essential for the development are available or that adequate arrangements have been made to make them available when required-_
 - (a) the supply of water;
 - (b) the supply of electricity,
 - (c) the disposal and management of sewage,
 - (d) stormwater drainage or on-site conservation;
 - (e) suitable vehicle access.



PLANNING CERTIFICATE

ISSUED UNDER SECTION 10.7 (2) & (5)
ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979
and associated
ENVIRONMENTAL PLANNING & ASSESSMENT REGULATION 2021

Part 7 Additional Local Provisions

7.15 Groundwater vulnerability.

(1) The objectives of this clause are as follows—

(a) to maintain the hydrological functions of key groundwater systems,
(b) to protect vulnerable groundwater resources from depletion and contamination as a result of development,

(2) This clause applies to land in Zone RU2 Rural Landscape.

(3) in deciding whether to grant development consent for development on land to which this clause applies, the consent authority must consider the following-

(a) the likelihood of groundwater contamination from the development (including from any on-site storage or disposal of solid or liquid waste and chemicals),

(b) any adverse impacts the development may have on groundwater dependant ecosystems,

(c) the cumulative impact the development may have on groundwater (including impacts on nearby groundwater extraction for a potable water supply),

(d) any appropriate measures proposed to avoid, minimise or mitigate the impacts of the development,

(4) development consent must not be granted to development on land to which this clause applies unless the consent authority is satisfied that_

(a) the development is designed, sited and will be managed to avoid any significant adverse environmental impact, or

(b) if that impact cannot be reasonably avoided-the development is designed, sited and will be managed to minimise the impact, or

(c) if that impact cannot be minimised-the development will be managed to mitigate that impact.

Matters are prescribed by section 59 (2) of the Contaminated Land Management Act 1997 as additional matters to be specified in a planning certificate:

(a) The land or part of the land is not significantly contaminated land within the meaning of the Contaminated Land Management Act 1997 at the date this certificate is issued.

(b) The land is not subject to a management order within the meaning of the Contaminated Land Management Act 1997 at the date this certificate is issued.

(c) The land is not the subject of an approved voluntary management proposal within the meaning of the Contaminated Land Management Act 1997 at the date this certificate is issued.

(d) The land is not the subject of an ongoing maintenance order within the meaning of the Contaminated Land Management Act 1997 at the date this certificate is issued.



PLANNING CERTIFICATE

ISSUED UNDER SECTION 10.7 (2) & (5)

ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979

and associated

ENVIRONMENTAL PLANNING & ASSESSMENT REGULATION 2021

- (e) The land is not the subject of a site audit statement within the meaning of the Contaminated Land Management Act 1997 (if a copy of such a statement has been provided at any time) to the local authority issuing the certificate.



PLANNING CERTIFICATE

ISSUED UNDER SECTION 10.7 (2) & (5)
ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979
and associated
ENVIRONMENTAL PLANNING & ASSESSMENT REGULATION 2021

For further information, please contact Council's Assistant Strategic Planner on 02 4993 4100.

A handwritten signature in black ink, appearing to read "Peter Chrystal", is positioned above the printed name.

Peter Chrystal
Director Planning and Environment



Lot 2 DP1318566

Lot 1 DP1318566

1961



Lot 2 DP1318566

Lot 1 DP1318566

1975

N



Lot 2 DP1318566

Lot 1 DP1318566

1984



Lot 2 DP1318566

Lot 1 DP1318566

1991



Lot 2 DP1318566

Lot 1 DP1318566

1998



Lot 2 DP1318566

Lot 1 DP1318566

November 2004



Lot 2 DP1318566

Lot 1 DP1318566

February 2007



Lot 2 DP1318566

Lot 1 DP1318566

February 2010



Lot 2 DP1318566

Lot 1 DP1318566

November 2015



Lot 2 DP1318566

Lot 1 DP1318566

May 2020



Lot 2 DP1318566

Lot 1 DP1318566

March 2024



February 2008



August 2019

Appendix D

Screening Levels and Guidelines

NATIONAL ENVIRONMENT PROTECTION (ASSESSMENT OF SITE CONTAMINATION) MEASURE 1999 AS AMENDED 2013

The investigation and screening levels (ISL) utilised for the assessment of the soil on site were sourced from the National Environment Protection Measure for the Assessment of Site Contamination (ASC NEPM, Ref [5]). These ISL are not derived as acceptance criteria for contamination at a site, but as levels above which specific consideration of risk, based on the site use and potential exposure, is required. If a risk is determined as present, then remediation and / or management must be undertaken.

Assessment ISL are based on:

- Human Health.

Intentionally conservative health investigation levels (HIL) have been derived for four (4) generic land use settings.

- HIL 'A' - Residential with garden / accessible soil (home grown produce <10% fruit and vegetable intake (no poultry). This category includes children's day care centres, preschools and primary schools.
- HIL 'B' - Residential with minimal opportunities for soil access includes dwellings with fully and permanently paved yard space such as high rise buildings and flats.
- HIL 'C' - Public open space such as parks, playgrounds, playing fields (e.g. ovals) secondary schools and footpaths. It does not include undeveloped public open space (such as urban bushland and reserves).
- HIL 'D' – Commercial / industrial such as shops, offices, factories and industrial sites.

RCA have adopted the HIL 'D' scenario as the most applicable for the site / proposed development. The exposure scenario for the derivation of the relevant land use setting is set out in the table below; the scenario applies to adults only.

Summary of Exposure Pathways	Units	Parameters
Body Weight	kg	70
Exposure Duration	years	30
Exposure Frequency	days/year	240
Soil / dust ingestion rate*	mg/day	25
Soil / dust to skin adherence factor	mg/cm ² /day	0.5
Skin surface area	cm ²	20,000
Fraction of skin exposed	%	31.5
Dermal absorption factor	%	Chemical specific values applied
Time spent indoors on site each day	hours	8
Time spent outdoors on site each day	hours	1
Home-grown fraction of vegetables consumed	%	0
Vegetable and fruit consumption rate	g/day	-
Averaging time for carcinogens ('lifetime')	years	70
Dust lung retention factor	%	37.5

* Soil ingestion rates for the HIL D scenario are based on the default soil / dust ingestion rates, corrected for an 8 hr/day daily exposure duration (50% of total waking hours)

Health screening levels (HSL) have been determined for risks associated from vapour intrusion from petroleum²¹ compound contamination for the same land use settings. These HSL are additionally based on the fraction of compound, the soil texture and the depth of the encountered soil.

Direct hydrocarbon contact criteria are not provided in the ASC NEPM (Ref [5]), however these are provided in CRC Care Technical Report 10 (Ref [6]) which is the source document for the HSL.

- Ecological Health

These levels are considered to apply to soil within two (2) metres of the surface, the root zone and habitation zone of many species.

Ecological investigation levels (EIL) have been determined for arsenic, copper, chromium III, DDT, naphthalene, nickel, lead and zinc in soil based on species sensitivity model and for three (3) generic land use settings:

- Areas of ecological significance (AES) – for areas where the primary intention is for the conservation and protection of the natural environment. Protection level of 99%.
- Urban residential areas and public open space (URPOS) – broadly equivalent to the HIL A, HIL B and HIL C land use settings. Protection level of 80%.
- Commercial and industrial land uses (C&I) – considered to be broadly equivalent to HIL D land use setting. Protection level of 60%.

RCA have adopted the C&I scenario as the most applicable for the site / proposed development. Note if other scenario is considered appropriate for the current use of the site / change in development.

Methodology for the derivation of EIL for other contaminants is available in the ASC NEPM (Ref [5]) and requires additional soil character data; this has not been undertaken as part of this assessment.

Ecological screening levels (ESL) have been determined for petroleum compound contamination. Due to limitations in the data only moderate reliability ESL have been determined for fractions $<C_{16}$, applied generically in fine and coarse grained soils. ESL for petroleum fractions $> C_{16}$, BTEXN and naphthalene are considered low reliability.

- Aesthetics

Aesthetic considerations operate separately to the HIL / HSL and EIL / ESL assessment. Issues to be considered include:

- Highly malodorous soils or extracted groundwater (e.g., strong residual petroleum hydrocarbon odours, hydrogen sulphide in soil or extracted groundwater, organosulfur compounds).
- Hydrocarbon sheen on surface water.

²¹ Laboratory analysis of hydrocarbons is being reported as total recoverable hydrocarbons (TRH). This testing method includes all forms of hydrocarbons, not just petroleum hydrocarbons and therefore can be considered a conservative measure against the chosen TPH criteria. Further laboratory analysis using a silica gel clean up (TRH_{sg}) is considered to enable a better identification of the extent of petroleum based contamination.

- Discoloured chemical deposits or soil staining with chemical waste other than of a very minor nature.
- Large monolithic deposits of otherwise low-risk material, e.g., gypsum as powder or plasterboard, cement kiln dust.
- Presence of putrescible refuse including material that may generate hazardous levels of methane such as a deep-fill profile of green waste or large quantities of timber waste.
- Soils containing residue from animal burial (e.g., former abattoir sites).

Site assessment requires consideration of the quantity, type and distribution of foreign material or odours in relation to the specific land use and its sensitivity. For example, higher expectations for soil quality would apply to residential properties with gardens compared with industrial settings.

Tier 1 assessment comprises the comparison of the soil data with the HIL / HSL and EIL / ESL. In the event that some concentrations are in excess of the relevant criteria, the summary statistics of the data set may be utilised for assessment purpose. Consideration of a range of statistics is recommended; at a minimum the 95%UCL_{ave} should be compared to the relevant criteria as long as:

- No single value exceeds 250% of the relevant criterion.
- The standard deviation of the results for each analyte is less than 50% of the relevant criterion.

In addition to appropriate consideration and application of the HSL and ESL, there are a number of policy considerations which reflect the nature and properties of petroleum hydrocarbons:

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

The ASC NEPM (Ref [5]) has therefore provided management limits, the application of which will require consideration of site-specific factors such as the depth of building basements and services and depth to groundwater, to determine the maximum depth to which the limits should apply. The management limits may have less relevance at operating industrial sites (including mine sites) which have no or limited sensitive receptors in the area of potential impact. When the management limits are exceeded, further site-specific assessment and management may enable any identified risk to be addressed.

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

The following figure has been taken from the ASC NEPM (Ref [5]) to illustrate the assessment methodology in regards to petroleum contamination.

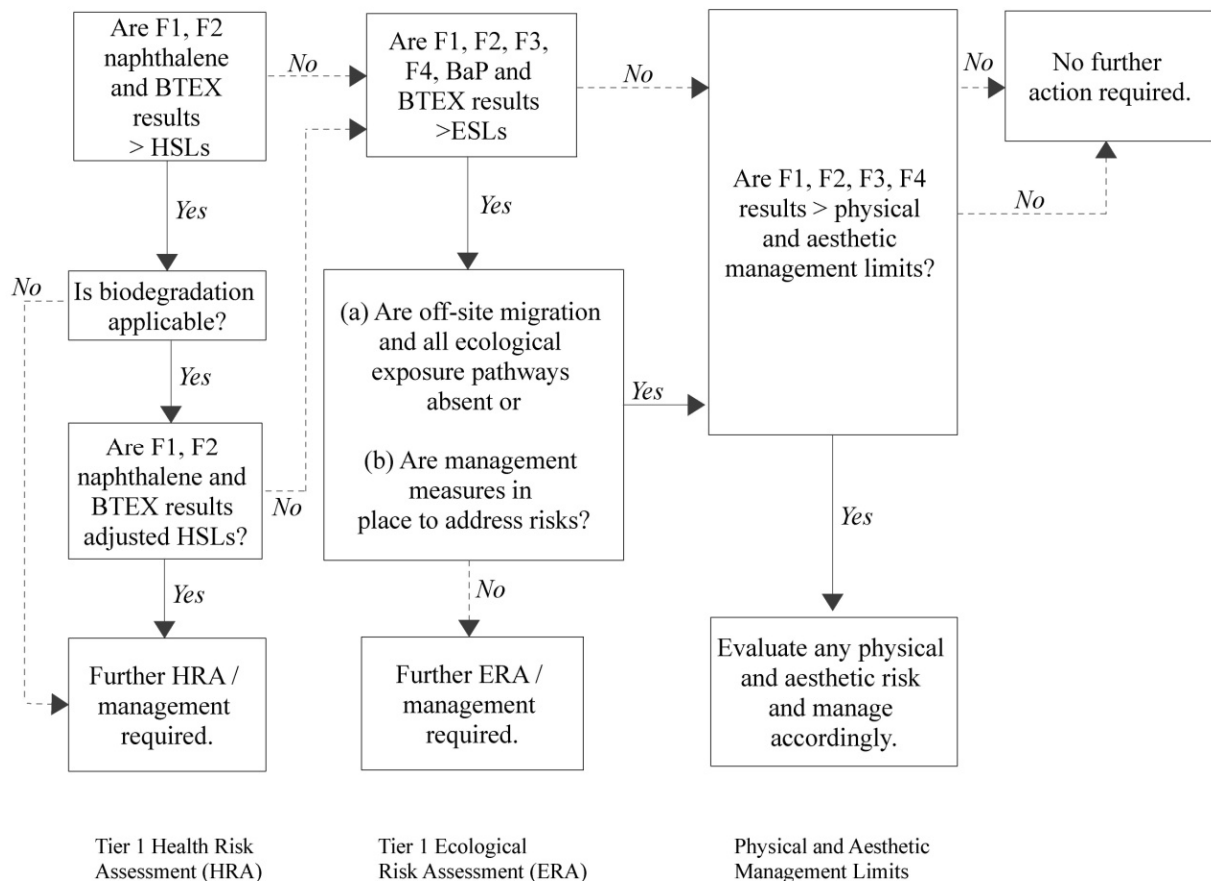


Figure 3 Flowchart for the Tier 1 human and ecological risk assessment of petroleum hydrocarbon contamination – application of HSL and ESL and consideration of management limits

NSW EPA 2014, WASTE CLASSIFICATION GUIDELINES

The waste classification guidelines (Ref [13]) are designed to ensure waste streams are managed appropriately and in accordance with the Protection of the Environment Operations Act 1997 (the POEO Act) and its associated regulations. The guidelines classify waste into groups which pose similar risks to the environment and human health; and facilitate their management and appropriate disposal.

Six (6) waste classes are used:

- Special waste:
 - Clinical or related waste, asbestos waste, waste tyres.
- Liquid waste:
 - As defined by angle of repose, temperature at which it is free flowing and physical composition.
- Hazardous waste.
- Restricted solid waste.
- General solid waste (putrescible).

- General solid waste (non-putrescible).

Classification begins with determination of whether the waste is 'special waste'. If not determination of whether material is classified as liquid waste is then required. Material which is not liquid waste, or is special waste due to asbestos content, must be compared to pre-classification definitions. Without pre-classification, the potential for hazardous characteristics (such as explosives, gases, flammable materials, oxidising, toxic and corrosive substances) must be established. If material cannot be classified as hazardous, assessment by chemical analysis must be undertaken. Without assessment, material must be managed as if hazardous waste.

Chemical classification is two tiered. The first set of criteria is based on total contaminant concentrations, whereas the second set of criteria is based on a leachable (TCLP) concentration and a total contaminant concentration. The total concentrations criteria are generally higher in conjunction with TCLP testing than if it was not undertaken.

Appendix E

Site Photographs



1 Looking southwest towards Old North Road.



2 Looking west towards Black Creek.



3 Looking southeast towards Wine Country Drive.



4 Looking east towards Wine Country Drive.



5 Looking northeast towards the northern boundary.



6 Looking southwest towards Old North Road.



7 Looking west towards Black Creek.



8 Looking northeast towards the Rothbury Zone Substation.



9 Looking northwest towards Black Creek.



10 Looking north towards the northern boundary.



11 Looking west towards Black Creek.



12 Looking north towards the northern boundary.



13 Looking west towards Black Creek.



14 Drainage on the south side of the Rothbury Zone Substation.



15 Looking southeast up the drainage easement towards the southern boundary.



16 Looking northwest down the drainage easement towards Black Creek.

Appendix F

Borehole / Test Pit Logs

RCA notes that logs for BH101, BH102 and BH103 are not included in this report as they were exclusively undertaken for geotechnical purposes. Additionally, boreholes BH105 and BH110 were not undertaken due to wet weather conditions and as such no logs are available.

PROJECT No: 17524

CLIENT: Ausgrid

PROJECT: Preliminary Site (Contamination) Assessment

LOCATION: Part Lot 4 DP598847, 1309 Wine Country Drive Rothbury

DATE: 30/05/2025

SURFACE RL:

COORDS:

EXCAVATION METHOD: Massenza MI2

Borehole Information				Field Material Information					
WATER	FIELD TEST	SAMPLE	DEPTH (m)	GRAPHIC LOG	DESCRIPTION (SOIL NAME; plasticity/grain size, colour, particle shape, secondary components, minor constituents) (ROCK NAME; grain size, colour, minor constituents)	PID (ppm)	MOISTURE/ WEATHERING	CONSISTENCY/ RELATIVE DENSITY/ STRENGTH	STRUCTURE/AESTHETICS AND ADDITIONAL OBSERVATIONS
30/05/25			0.10		TOPSOIL, Sandy SILT, low plasticity, grey-brown		W		TOPSOIL
					Sandy SILT, low plasticity, grey-brown		VL - L	Grass roots to 0.1m	
			0.5						
			1.0						
			1.5	Becoming grey and orange	M		MD		
			2.0		D				
			2.30						
			2.5	SAND, fine to medium grained, orange-brown with silt	W				
			3.0						
			3.10						
			3.90m						
			4.00m						
			3.00m BH104A						
			3.90m BH104B						
			4.00m						
			4.45						
			4.5						
				BOREHOLE BH104 TERMINATED AT 4.45 m Target depth					

LOGGED: RC	CHECKED: MA	DATE: 21/07/2025
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PROJECT No: 17524

CLIENT: Ausgrid

PROJECT: Preliminary Site (Contamination) Assessment

LOCATION: Part Lot 4 DP598847, 1309 Wine Country Drive Rothbury

DATE: 29/05/2025

SURFACE RL:

COORDS:

EXCAVATION METHOD: Massenza MI2

Borehole Information				Field Material Information						
WATER	FIELD TEST	SAMPLE	DEPTH (m)	GRAPHIC LOG	DESCRIPTION (SOIL NAME; plasticity/grain size, colour, particle shape, secondary components, minor constituents) (ROCK NAME; grain size, colour, minor constituents)	PID (ppm)	MOISTURE/ WEATHERING	CONSISTENCY/ RELATIVE DENSITY/ STRENGTH	STRUCTURE/AESTHETICS AND ADDITIONAL OBSERVATIONS	
Not Observed					TOPSOIL, Sandy SILT, low plasticity, grey-brown		W		TOPSOIL	
			0.20		Clayey SAND, grey-brown, fine grained		M - W	L	ALLUVIUM	
			0.5							
			0.80		Sandy CLAY, medium plasticity, grey		M	St		
			1.0							
			1.5							
			2.0						VSt - H	
			2.5		Trace of gravel from 2.4m					
			3.0							
			3.10m							
										
						</				

PROJECT No: 17524

CLIENT: Ausgrid

PROJECT: Preliminary Site (Contamination) Assessment

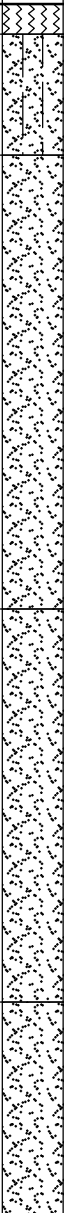
LOCATION: Part Lot 4 DP598847, 1309 Wine Country Drive Rothbury

DATE: 29/05/2025

SURFACE RL:

COORDS:

EXCAVATION METHOD: Massenza MI2

Borehole Information				Field Material Information					
WATER	FIELD TEST	SAMPLE	DEPTH (m)	GRAPHIC LOG	DESCRIPTION (SOIL NAME; plasticity/grain size, colour, particle shape, secondary components, minor constituents) (ROCK NAME; grain size, colour, minor constituents)	PID (ppm)	MOISTURE/ WEATHERING	CONSISTENCY/ RELATIVE DENSITY/ STRENGTH	STRUCTURE/AESTHETICS AND ADDITIONAL OBSERVATIONS
Not Observed			0.10		TOPSOIL, Silty SAND, grey-brown		M	L	TOPSOIL
					Silty SAND, fine grained, grey-brown				Grass roots to 0.1m
			0.50		SAND with Silt brown, fine to medium grained sand		M - W		ALLUVIUM
			2.00		SAND with Silt, yellow brown, fine to medium grained sand		M		
			3.00				MD - D		
			3.30		SAND with Silt, yellow brown, fine to medium grained sand, grey				
			3.50		Gradually changing to clayey sand with trace fine gravels				
			3.90						
			4.00						
			4.5						
LOGGED: TS					CHECKED: MA			DATE: 21/07/2025	

ENVIRONMENTAL BOREHOLE LOG

BH108

SHEET 1 OF 1

PROJECT No: 17524

CLIENT: Ausgrid

PROJECT: Preliminary Site (Contamination) Assessment

LOCATION: Part Lot 4 DP598847, 1309 Wine Country Drive Rothbury

DATE: 29/05/2025

SURFACE RL:

COORDS:

EXCAVATION METHOD: Massenza MI2

Borehole Information				Field Material Information					
WATER	FIELD TEST	SAMPLE	DEPTH (m)	GRAPHIC LOG	DESCRIPTION (SOIL NAME; plasticity/grain size, colour, particle shape, secondary components, minor constituents) (ROCK NAME; grain size, colour, minor constituents)	PID (ppm)	MOISTURE/ WEATHERING	CONSISTENCY/ RELATIVE DENSITY/ STRENGTH	STRUCTURE/AESTHETICS AND ADDITIONAL OBSERVATIONS
Not Observed					TOPSOIL, Silty SAND, fine to medium grained, grey-brown		W		TOPSOIL
			0.20		VL - L			ALLUVIUM	
			0.5		SAND, brown fine to medium grained				
			1.0						
			1.5						
			2.00		SAND with Silt, brown, fine to medium grained sand		M	L	
			2.5						
			3.00m BH108A 3.10m						
			3.20		Gravelly SAND with Clay/Silt, orange brown			MD-D	Variably cemented from 3.2m
			3.5						
3.70m BH108B 3.80m									
			3.80		BOREHOLE BH108 TERMINATED AT 3.80 m TC bit refusal				
			4.0						
			4.5						
LOGGED: TS					CHECKED: MA			DATE: 21/07/2025	

PROJECT No: 17524

CLIENT: Ausgrid

PROJECT: Preliminary Site (Contamination) Assessment

LOCATION: Part Lot 4 DP598847, 1309 Wine Country Drive Rothbury

DATE: 30/05/2025

SURFACE RL:

COORDS:

EXCAVATION METHOD: Massenza MI2

Borehole Information				Field Material Information					
WATER	FIELD TEST	SAMPLE	DEPTH (m)	GRAPHIC LOG	DESCRIPTION (SOIL NAME; plasticity/grain size, colour, particle shape, secondary components, minor constituents) (ROCK NAME; grain size, colour, minor constituents)	PID (ppm)	MOISTURE/ WEATHERING	CONSISTENCY/ RELATIVE DENSITY/ STRENGTH	STRUCTURE/AESTHETICS AND ADDITIONAL OBSERVATIONS
Not Observed			0.20		TOPSOIL, Silty SAND, fine grained, brown		M - W		TOPSOIL Grass roots to 0.2m
			0.5		Silty SAND, fine grained, brown			L	ALLUVIUM
			1.0		Becoming pale brown				
			1.5						
			2.0						
			2.5					MD	
			3.0						
			3.10		Silty Sandy GRAVEL, fine to coarse, sub-rounded to sub-angular brown, grey and orange				
			3.50		Clayey Sandy GRAVEL fine to coarse, sub-rounded to sub-angular, brown and orange				
			3.80		Silty SAND fine to coarse grained, brown, trace clay				
		3.00m BH109A 3.10m							
		3.90m BH109B 4.00m							
			4.00		BOREHOLE BH109 TERMINATED AT 4.00 m Target depth				
			4.5						
LOGGED: RC					CHECKED: MA			DATE: 21/07/2025	

ENVIRONMENTAL BOREHOLE LOG

BH111

SHEET 1 OF 1

PROJECT No: 17524

CLIENT: Ausgrid

PROJECT: Preliminary Site (Contamination) Assessment

LOCATION: Part Lot 4 DP598847, 1309 Wine Country Drive Rothbury

DATE: 29/05/2025

SURFACE RL:

COORDS:

EXCAVATION METHOD: Massenza MI2

Borehole Information				Field Material Information								
WATER	FIELD TEST	SAMPLE	DEPTH (m)	GRAPHIC LOG	DESCRIPTION (SOIL NAME; plasticity/grain size, colour, particle shape, secondary components, minor constituents) (ROCK NAME; grain size, colour, minor constituents)	PID (ppm)	MOISTURE/ WEATHERING	CONSISTENCY/ RELATIVE DENSITY/ STRENGTH	STRUCTURE/AESTHETICS AND ADDITIONAL OBSERVATIONS			
Not Observed			0.5		FILL, Sandy Gravelly CLAY, grey-brown		M		FILL			
			0.70		FILL, Silty Sandy CLAY, brown-yellow							
			1.0		Sandy SILT, low plasticity, dark grey-brown			St	TOPSOIL / ALLUVIUM			
			1.10		Sandy CLAY, medium plasticity, yellow brown mottled grey				ALLUVIUM			
			1.50									
			2.0		Clayey SAND, fine to medium sand, yellow-orange			MD				
			2.5									
			3.0									
			3.00m BH111A 3.10m	3.30			Clayey SAND, fine to medium sand, yellow-orange					
			3.5									
3.90m BH111B 4.00m	4.00	BOREHOLE BH111 TERMINATED AT 4.00 m Target depth										
			4.5									
LOGGED: TS					CHECKED: MA			DATE: 21/07/2025				

PROJECT No: 17524

CLIENT: Ausgrid

PROJECT: Preliminary Site (Contamination) Assessment

LOCATION: Part Lot 4 DP598847, 1309 Wine Country Drive Rothbury

DATE: 29/05/2025

SURFACE RL:

COORDS:

EXCAVATION METHOD: 8 tonne Excavator, 450mm Auger

Borehole Information				Field Material Information					
WATER	FIELD TEST	SAMPLE	DEPTH (m)	GRAPHIC LOG	DESCRIPTION (SOIL NAME; plasticity/grain size, colour, particle shape, secondary components, minor constituents) (ROCK NAME; grain size, colour, minor constituents)	PID (ppm)	MOISTURE/ WEATHERING	CONSISTENCY/ RELATIVE DENSITY/ STRENGTH	STRUCTURE/AESTHETICS AND ADDITIONAL OBSERVATIONS
Not Observed		BH112A 0.10m	0.10		TOPSOIL, Sandy SILT, low plasticity, grey-brown	0	M - W	S	TOPSOIL Grass roots to 0.1m
		0.50m GAS BH112B 0.60m	0.5		Sandy SILT, low plasticity, brown	0			ALLUVIUM
		1.00m BH112C 1.10m	1.0		Silty SAND, fine grained, grey mottled orange	0	M	MD	Slight hydrogen sulfide odour observed in upper 0.8m
		1.90m BH112D 2.00m	2.00		Becoming orange mottled grey, trace clay and weakly cemented soil nodules	0			
					BOREHOLE BH112 TERMINATED AT 2.00 m Target depth				
			2.5						
			3.0						
			3.5						
			4.0						
			4.5						
LOGGED: RC				CHECKED: MA				DATE: 21/07/2025	

ENVIRONMENTAL BOREHOLE LOG

BH113

SHEET 1 OF 1

PROJECT No: 17524

CLIENT: Ausgrid

PROJECT: Preliminary Site (Contamination) Assessment

LOCATION: Part Lot 4 DP598847, 1309 Wine Country Drive Rothbury

DATE: 29/05/2025

SURFACE RL:

COORDS:

EXCAVATION METHOD: 8 tonne Excavator, 500mm bucket

Borehole Information				Field Material Information					
WATER	FIELD TEST	SAMPLE	DEPTH (m)	GRAPHIC LOG	DESCRIPTION (SOIL NAME; plasticity/grain size, colour, particle shape, secondary components, minor constituents) (ROCK NAME; grain size, colour, minor constituents)	PID (ppm)	MOISTURE/ WEATHERING	CONSISTENCY/ RELATIVE DENSITY/ STRENGTH	STRUCTURE/AESTHETICS AND ADDITIONAL OBSERVATIONS
seepage		BH113A 0.10m	0.10		TOPSOIL, Silty SAND, fine grained, brown	0	M - W	L	TOPSOIL
			Silty SAND, fine grained, brown				Grass roots to 0.1m		
		0.50m BH113B 0.60m	0.5		Becoming pale brown at 0.3m	0			ALLUVIUM
		1.00m BH113C 1.10m	1.0		Becoming pale grey mottled orange, trace clay at 0.8m	0	W		Borehole sides caving below 0.3m
		1.90m BH113D 2.00m	2.00			0		MD	Borehole collapsed to 0.7m on completion
			2.00		BOREHOLE BH113 TERMINATED AT 2.00 m Target depth				
			2.5						
			3.0						
			3.5						
			4.0						
			4.5						
LOGGED: RC					CHECKED: MA			DATE: 21/07/2025	

ENVIRONMENTAL BOREHOLE LOG

BH115

SHEET 1 OF 1

PROJECT No: 17524

CLIENT: Ausgrid

PROJECT: Preliminary Site (Contamination) Assessment

LOCATION: Part Lot 4 DP598847, 1309 Wine Country Drive Rothbury

DATE: 29/05/2025

SURFACE RL:

COORDS:

EXCAVATION METHOD: 8 tonne Excavator, 500mm bucket

Borehole Information					Field Material Information			
WATER	FIELD TEST	SAMPLE	DEPTH (m)	GRAPHIC LOG	DESCRIPTION (SOIL NAME; plasticity/grain size, colour, particle shape, secondary components, minor constituents) (ROCK NAME; grain size, colour, minor constituents)	PID (ppm)	MOISTURE/ WEATHERING	CONSISTENCY/ RELATIVE DENSITY/ STRENGTH
		BH115A 0.10m	0.15		TOPSOIL, Sandy SILT, low plasticity, dark grey	0	M - W	TOPSOIL Grass roots to 0.1m
		0.50m GA4 BH115B 0.60m	0.5		Silty SAND, fine grained, pale brown	0	W	L ALLUVIUM
		1.00m BH115C 1.10m	1.0		Becoming pale grey mottled orange-brown, trace clay at 0.9m	0	MD	Borehole sides caving over upper 0.9m depth
		1.90m BH115D 2.00m	2.00			0	D	
			2.00		BOREHOLE BH115 TERMINATED AT 2.00 m Target depth			
			2.5					
			3.0					
			3.5					
			4.0					
			4.5					
LOGGED: RC					CHECKED: MA		DATE: 21/07/2025	

ENVIRONMENTAL BOREHOLE LOG

BH117

SHEET 1 OF 1

PROJECT No: 17524

CLIENT: Ausgrid

PROJECT: Preliminary Site (Contamination) Assessment

LOCATION: Part Lot 4 DP598847, 1309 Wine Country Drive Rothbury

DATE: 29/05/2025

SURFACE RL:

COORDS:

EXCAVATION METHOD: 8 tonne Excavator, 500mm bucket

Borehole Information				Field Material Information						
WATER	FIELD TEST	SAMPLE	DEPTH (m)	GRAPHIC LOG	DESCRIPTION (SOIL NAME; plasticity/grain size, colour, particle shape, secondary components, minor constituents) (ROCK NAME; grain size, colour, minor constituents)	PID (ppm)	MOISTURE/ WEATHERING	CONSISTENCY/ RELATIVE DENSITY/ STRENGTH	STRUCTURE/AESTHETICS AND ADDITIONAL OBSERVATIONS	
seepage →		BH117A 0.10m	0.10		TOPSOIL, Sandy SILT, low plasticity, grey, fine grained sand	0	M	L	TOPSOIL	
			Sandy SILT, low plasticity, grey, fine grained sand		Grass roots to 0.1m					
			Silty SAND, fine grained, pale brown		ALLUVIUM					
			0.50m BH117B 0.60m		0.5		0			Borehole sides unstable below 0.3m
			1.00m BH117C 1.10m		1.0		0	M - W	MD	Silty SAND alluvial soil profile has high silt content (close to Sandy SILT behaviour)
					1.90m BH117D 2.00m	2.00		0	W	D
			2.5		BOREHOLE BH117 TERMINATED AT 2.00 m Target depth				Slight hydrogen sulfide odour at 2.0m	
			3.0							
			3.5							
			4.0							
			4.5							
LOGGED: RC					CHECKED: MA			DATE: 21/07/2025		

PROJECT No: 17524

CLIENT: Ausgrid

PROJECT: Preliminary Site (Contamination) Assessment

LOCATION: Part Lot 4 DP598847, 1309 Wine Country Drive Rothbury

DATE: 29/05/2025

SURFACE RL:

COORDS:

EXCAVATION METHOD: 8 tonne Excavator, 500mm bucket

Test Pit Information				Field Material Information					
WATER	FIELD TEST	SAMPLE	DEPTH (m)	GRAPHIC LOG	DESCRIPTION (SOIL NAME; plasticity/grain size, colour, particle shape, secondary components, minor constituents) (ROCK NAME; grain size, colour, minor constituents)	PID (ppm)	MOISTURE/ WEATHERING	CONSISTENCY/ RELATIVE DENSITY/ STRENGTH	STRUCTURE/AESTHETICS AND ADDITIONAL OBSERVATIONS
Not Observed		TP114A 0.10m	0.15		FILL, Clayey Sandy GRAVEL, fine to medium, dark brown, sub-angular	-0	W		FILL
					Clayey SAND, fine grained, pale brown		M	VL	Some white nodules of soil/powder observed in fill material (possibly lime). Standing water on surface ALLUVIUM
		0.50m TP114B 0.60m	0.5		Sandy CLAY, low plasticity, grey mottled orange-brown	-0		F	
								St	
		1.00m TP114C 1.10m				1.0	-0		
			1.30		TEST PIT TP114 TERMINATED AT 1.30 m Due to surface water inflow				DCP hammer bouncing at 1.6m on inferred cemented alluvial soil material
			1.5						
			2.0						
			2.5						
			3.0						
			3.5						
			4.0						
			4.5						
LOGGED: RC					CHECKED: MA			DATE: 21/07/2025	

PROJECT No: 17524

CLIENT: Ausgrid

PROJECT: Preliminary Site (Contamination) Assessment

LOCATION: Part Lot 4 DP598847, 1309 Wine Country Drive Rothbury

DATE: 29/05/2025

SURFACE RL:

COORDS:

EXCAVATION METHOD: 8 tonne Excavator, 500mm bucket

Test Pit Information				Field Material Information						
WATER	FIELD TEST	SAMPLE	DEPTH (m)	GRAPHIC LOG	DESCRIPTION (SOIL NAME; plasticity/grain size, colour, particle shape, secondary components, minor constituents) (ROCK NAME; grain size, colour, minor constituents)	PID (ppm)	MOISTURE/ WEATHERING	CONSISTENCY/ RELATIVE DENSITY/ STRENGTH	STRUCTURE/AESTHETICS AND ADDITIONAL OBSERVATIONS	
seepage		TP116A 0.10m	0.20		TOPSOIL, Silty SAND, fine grained, brown	-0	M - W		TOPSOIL Standing water on surface	
					Silty SAND, fine grained, pale brown			L	ALLUVIUM	
		0.50m TP116B 0.60m	0.5			-0				
			0.80							
		1.00m TP116C 1.10m	1.0		Sandy CLAY, low plasticity, pale grey mottled orange with bands of clayey sand	-0	M	F		
			1.5							
			1.90m TP116D 2.00m	2.00			-0		St - VSt	Weakly cemented soil at 1.2m depth prevented further U50 sample tube penetration
LOGGED: RC					CHECKED: MA			DATE: 21/07/2025		

PROJECT No: 17524

CLIENT: Ausgrid

PROJECT: Preliminary Site (Contamination) Assessment

LOCATION: Part Lot 4 DP598847, 1309 Wine Country Drive Rothbury

DATE: 29/05/2025

SURFACE RL:

COORDS:

EXCAVATION METHOD: 8 tonne Excavator, 500mm bucket

Test Pit Information					Field Material Information			
WATER	FIELD TEST	SAMPLE	DEPTH (m)	GRAPHIC LOG	DESCRIPTION (SOIL NAME; plasticity/grain size, colour, particle shape, secondary components, minor constituents) (ROCK NAME; grain size, colour, minor constituents)	PID (ppm)	MOISTURE/ WEATHERING	CONSISTENCY/ RELATIVE DENSITY/ STRENGTH
		TP118A 0.10m	0.10		TOPSOIL, Silty SAND, fine grained, pale brown	0	M	
		TP118B 0.50m 0.60m	0.5		Silty SAND, fine grained, pale brown	0		L
		TP118C 1.00m 1.10m	1.0			0		
			1.30		Sandy Silty CLAY, low plasticity, pale grey with orange mottles with bands of clayey sand			F
		TP118D 1.90m 2.00m	2.00			0		St
			2.5		TEST PIT TP118 TERMINATED AT 2.00 m Target depth			
			3.0					
			3.5					
			4.0					
			4.5					
LOGGED: SH					CHECKED: MA		DATE: 21/07/2025	

PROJECT No: 17524

CLIENT: Ausgrid

PROJECT: Preliminary Site (Contamination) Assessment

LOCATION: Part Lot 4 DP598847, 1309 Wine Country Drive Rothbury

DATE: 29/05/2025

SURFACE RL:

COORDS:

EXCAVATION METHOD: 8 tonne Excavator, 500mm bucket

Test Pit Information				Field Material Information					
WATER	FIELD TEST	SAMPLE	DEPTH (m)	GRAPHIC LOG	DESCRIPTION (SOIL NAME; plasticity/grain size, colour, particle shape, secondary components, minor constituents) (ROCK NAME; grain size, colour, minor constituents)	PID (ppm)	MOISTURE/ WEATHERING	CONSISTENCY/ RELATIVE DENSITY/ STRENGTH	STRUCTURE/AESTHETICS AND ADDITIONAL OBSERVATIONS
Not Observed		TP119A 0.10m	0.20		TOPSOIL, Silty Clayey SAND. fine grained, dark brown	0	M		TOPSOIL Grass roots to 0.1m
		Silty Clayey SAND, fine grained, brown			VL - L			ALLUVIUM	
		0.50m TP119B 0.60m	0.50		Becoming light brown at 0.5m Silty SAND, fine grained, light brown	0	M / W		Test pit sides caving in upper 1m of soil profile
		1.00m TP119C 1.10m			MD				
		1.90m TP119D 2.00m	1.00		Sandy Silty CLAY, medium plasticity, grey with orange mottles, fine grained sand	0	M	St - VSt	
								H	
			1.5						
			2.00			0			
					TEST PIT TP119 TERMINATED AT 2.00 m Target depth				
			2.5						
			3.0						
			3.5						
			4.0						
			4.5						
LOGGED: SH					CHECKED: MA			DATE: 21/07/2025	

PROJECT No: 17524

CLIENT: Ausgrid

PROJECT: Preliminary Site (Contamination) Assessment

LOCATION: Part Lot 4 DP598847, 1309 Wine Country Drive Rothbury

DATE: 29/05/2025

SURFACE RL:

COORDS:

EXCAVATION METHOD: 8 tonne Excavator, 500mm bucket

Test Pit Information				Field Material Information					
WATER	FIELD TEST	SAMPLE	DEPTH (m)	GRAPHIC LOG	DESCRIPTION (SOIL NAME; plasticity/grain size, colour, particle shape, secondary components, minor constituents) (ROCK NAME; grain size, colour, minor constituents)	PID (ppm)	MOISTURE/ WEATHERING	CONSISTENCY/ RELATIVE DENSITY/ STRENGTH	STRUCTURE/AESTHETICS AND ADDITIONAL OBSERVATIONS
Not Observed		TP120A 0.10m			TOPSOIL, Silty SAND, fine grained, brown	-0	M		TOPSOIL Grass roots to 0.1-0.2m
			0.20		Silty SAND, fine grained, brown				ALLUVIUM
		0.50m TP120B 0.60m	0.5		Becoming pale brown at 0.4m	-0			Test pit sides caving in sand profile to 1.3m depth
		1.00m TP120C 1.10m	1.0			-0			
			1.30		Sandy Silty CLAY, low plasticity, grey with orange mottles				
		1.90m TP120D 2.00m	2.00			-0			Weakly cemented soil at 1.9m
			2.5		TEST PIT TP120 TERMINATED AT 2.00 m Target depth				
			3.0						
			3.5						
			4.0						
			4.5						
LOGGED: RC					CHECKED: MA			DATE: 21/07/2025	

ENVIRONMENTAL TEST PIT LOG

TP121

SHEET 1 OF 1

PROJECT No: 17524

CLIENT: Ausgrid

PROJECT: Preliminary Site (Contamination) Assessment

LOCATION: Part Lot 4 DP598847, 1309 Wine Country Drive Rothbury

DATE: 29/05/2025

SURFACE RL:

COORDS:

EXCAVATION METHOD: 8 tonne Excavator, 500mm bucket

Test Pit Information				Field Material Information							
WATER	FIELD TEST	SAMPLE	DEPTH (m)	GRAPHIC LOG	DESCRIPTION (SOIL NAME; plasticity/grain size, colour, particle shape, secondary components, minor constituents) (ROCK NAME; grain size, colour, minor constituents)	PID (ppm)	MOISTURE/ WEATHERING	CONSISTENCY/ RELATIVE DENSITY/ STRENGTH	STRUCTURE/AESTHETICS AND ADDITIONAL OBSERVATIONS		
seepage ▲		QA1 TP121A 0.10m	0.10		TOPSOIL, Silty SAND, fine grained brown	0	M	L	TOPSOIL Grass roots to 0.1m		
			Silty SAND, fine grained, brown						ALLUVIUM		
		0.50m TP121B 0.60m	0.5			0					
		1.00m TP121C 1.10m	1.0			0	M - W		Test pit unstable/collapsing following excavation deeper than 1m		
					1.90m TP121D 2.00m	2.00			0	W	MD
			2.00		TEST PIT TP121 TERMINATED AT 2.00 m Target depth						
			2.5								
			3.0								
			3.5								
			4.0								
			4.5								
LOGGED: RC					CHECKED: MA			DATE: 21/07/2025			

PROJECT No: 17524

CLIENT: Ausgrid

PROJECT: Preliminary Site (Contamination) Assessment

LOCATION: Part Lot 4 DP598847, 1309 Wine Country Drive Rothbury

DATE: 29/05/2025

SURFACE RL:

COORDS:

EXCAVATION METHOD: 8 tonne Excavator, 500mm bucket

Test Pit Information				Field Material Information					
WATER	FIELD TEST	SAMPLE	DEPTH (m)	GRAPHIC LOG	DESCRIPTION (SOIL NAME; plasticity/grain size, colour, particle shape, secondary components, minor constituents) (ROCK NAME; grain size, colour, minor constituents)	PID (ppm)	MOISTURE/ WEATHERING	CONSISTENCY/ RELATIVE DENSITY/ STRENGTH	STRUCTURE/AESTHETICS AND ADDITIONAL OBSERVATIONS
Not Observed		TP122A 0.10m	0.10		TOPSOIL, Silty SAND, fine grained dark brown	0	M		TOPSOIL
							L	Grass roots to 0.1m	
		0.50m TP122B 0.60m	0.5		Silty SAND, fine grained, pale brown	0		ALLUVIUM	
							VL - L		
		1.00m TP122C 1.10m	1.0		Becoming pale brown	0	M - W	Test pit unstable/collapsing following excavation deeper than 1m	
			1.5				MD		
		1.90m TP122D 2.00m	2.00			0			
			2.5		TEST PIT TP122 TERMINATED AT 2.00 m Target depth				
			3.0						
			3.5						
			4.0						
			4.5						
LOGGED: RC					CHECKED: MA			DATE: 21/07/2025	

PROJECT No: 17524

CLIENT: Ausgrid

PROJECT: Preliminary Site (Contamination) Assessment

LOCATION: Part Lot 4 DP598847, 1309 Wine Country Drive Rothbury

DATE: 29/05/2025

SURFACE RL:

COORDS:

EXCAVATION METHOD: 8 tonne Excavator, 500mm bucket

Test Pit Information				Field Material Information					
WATER	FIELD TEST	SAMPLE	DEPTH (m)	GRAPHIC LOG	DESCRIPTION (SOIL NAME; plasticity/grain size, colour, particle shape, secondary components, minor constituents) (ROCK NAME; grain size, colour, minor constituents)	PID (ppm)	MOISTURE/ WEATHERING	CONSISTENCY/ RELATIVE DENSITY/ STRENGTH	STRUCTURE/AESTHETICS AND ADDITIONAL OBSERVATIONS
		TP123A 0.10m	0.10		TOPSOIL, Silty SAND, fine grained, brown	0	M		TOPSOIL
					Silty SAND, fine grained, brown			L	Grass roots to 0.1m
		0.50m GAZ TP123B 0.60m	0.5		Becoming pale brown at 0.3m	0			ALLUVIUM
		1.00m TP123C 1.10m	1.0		Becoming orange brown at 0.8m	0	M - W	MD	Test pit unstable/collapsing following excavation deeper than 1m
		1.90m TP123D 2.00m	2.00			0	W		Test pit sides caving in immediately following excavation below 1.7m
			2.00		TEST PIT TP123 TERMINATED AT 2.00 m Target depth				
			2.5						
			3.0						
			3.5						
			4.0						
			4.5						
LOGGED: RC					CHECKED: MA			DATE: 21/07/2025	

Appendix G

Quality Assurance Review and
Laboratory Report Sheets

A total of two (2) soil duplicate samples were submitted blind to the laboratory for analysis with the batch of samples, comprising two (2) intralaboratory duplicates. This represents a percentage of 6% overall however comprises 9% of the samples collected for contamination assessment purpose, which is less than the frequency recommended by the Australian Standard AS4482.1 (Ref [7]) and RCA protocol. No duplicates were collected of the material classification samples as the ENM Order does not prescribe any.

RCA omitted the field and trip blank due to the low potential for cross-contamination from the field conditions and transport process, the trip spikes due to the low potential for volatile loss during the transport process and the equipment wash due to the low potential from the sampling equipment.

Results, as shown further in this **Appendix**, indicate a total of zero (0) soil analyses which report RPD in excess of the acceptance criteria.

EnviroLab was chosen as the primary laboratory. The laboratory used for analysis is NATA accredited and are experienced in the analytical requirements for potentially contaminated soil.

EnviroLab undertook internal quality assurance testing. Results are contained within the laboratory report sheets, included in this **Appendix**. **Table 7** presents a summary of their review.

Table 7 Internal Quality Assurance Review

	Number Samples (including QA)	Laboratory Duplicates	Spikes	Laboratory Control Samples	Laboratory Blanks
Requirement		10%	5%	One every batch	One every batch
Soil					
TRH(C6-C10) / BTEXN	26	4	2	2	1
TRH(C10-C40)	26	4	2	2	1
PAH	26	4	2	2	1
Metals (As, Cd, Cr, Cu, Pb, Hg, Ni, Zn)	37	4	2	2	1
OCP	13	3	2	2	1
OPP	13	3	2	2	1
Herbicides	13	2	1	1	1
pH	37	4	2	2	0
Electrical Conductivity	37	4	2	2	1

Examination of the above table reveals that EnviroLab have undertaken laboratory quality assurance testing in accordance with the ASC NEPM (Ref [5]).

With regards to the results:

- Recoveries of Surrogates were within acceptance criteria of 70-130%.
- Holding times were within laboratory specified time frames.
- No laboratory blank result was detected above the PQL.

- Relative percentage differences for duplicates were within acceptance criteria as defined for intralaboratory duplicates further in this **Appendix**.
- Recoveries of laboratory control samples were within the acceptance criteria of 70-130% with the exception of:
 - LCS-6 and LCS-8 for benzene with a recovery of 133% and 132% respectively. These are considered minor and conservative non-compliance, and therefore the uncertainty is not considered significant.
 - LCS-6 and LCS-7 for acenaphthene with a recovery of 66%. These are considered minor non-compliance and therefore the uncertainty is not considered significant.
- Recoveries of spikes were within acceptance criteria of 70-130% with the exception of:
 - Acenaphthene in BH113A and TP122A had a recovery of 64%. These are considered minor non-compliance and therefore the uncertainty is not considered significant.

Quality Assurance Type	PQL	Intralaboratory Duplicate		RPD %	Intralaboratory Duplicate		RPD %
Sample Identification		TP121A	QA1		BH115B	QA4	
Sample Depth (m)		0.1			0.5		
Date		29/05/2025			29/05/2025		
Sample Profile		TOPSOIL, Silty SAND, fine grained, brown		Silty SAND, fine grained, pale brown			
Sample Purpose		Characterisation		Characterisation			
Sample collected by		RCA - SH		RCA - SH			
General Soil Chemistry							
pH (pH units)		6.3	6.2	1.6	7.0	6.8	2.9
Electrical Conductivity (µS/cm)	1	25	28	11.3	15	16	6.5
Benzene, Toluene, Ethylbenzene, Xylene (BTEX)							
Benzene	0.2	0.1	0.1	0.0	--	--	--
Toluene	0.5	0.25	0.25	0.0	--	--	--
Ethylbenzene	1	0.5	0.5	0.0	--	--	--
meta- and para-Xylene	2	1	1	0.0	--	--	--
ortho-Xylene	1	0.5	0.5	0.0	--	--	--
Polycyclic Aromatic Hydrocarbons (PAH)							
Naphthalene	1	0.5	0.5	0.0	--	--	--
Total Recoverable Hydrocarbons							
TRH C ₆ -C ₁₀	25	12.5	12.5	0.0	--	--	--
TRH >C ₁₀ -C ₁₆	50	25	25	0.0	--	--	--
TRH >C ₁₆ -C ₃₄	100	50	50	0.0	--	--	--
TRH >C ₃₄ -C ₄₀	100	50	50	0.0	--	--	--
Polycyclic Aromatic Hydrocarbons (PAH)							
Naphthalene	0.1	0.05	0.05	0.0	--	--	--
Acenaphthylene	0.1	0.05	0.05	0.0	--	--	--
Acenaphthene	0.1	0.05	0.05	0.0	--	--	--
Fluorene	0.1	0.05	0.05	0.0	--	--	--
Phenanthrene	0.1	0.05	0.05	0.0	--	--	--
Anthracene	0.1	0.05	0.05	0.0	--	--	--
Fluoranthene	0.1	0.05	0.05	0.0	--	--	--
Pyrene	0.1	0.05	0.05	0.0	--	--	--
Benz(a)anthracene	0.1	0.05	0.05	0.0	--	--	--
Chrysene	0.1	0.05	0.05	0.0	--	--	--
Benzo(b)&(j)&(k)fluoranthene	0.2	0.1	0.1	0.0	--	--	--
Benzo(a) pyrene	0.05	0.025	0.025	0.0	--	--	--
Indeno(1,2,3-c,d)pyrene	0.1	0.05	0.05	0.0	--	--	--
Dibenz(a,h)anthracene	0.1	0.05	0.05	0.0	--	--	--
Benzo(g,h,i)perylene	0.1	0.05	0.05	0.0	--	--	--
Metals							
Arsenic	4	2	2	0.0	2	2	0.0
Cadmium	0.4	0.2	0.2	0.0	0.2	0.2	0.0
Chromium	1	4	5	22.2	7	8	13.3
Copper	1	4	5	22.2	0.5	0.5	0.0
Mercury	0.1	0.05	0.05	0.0	0.05	0.05	0.0
Lead	1	9	9	0.0	2	3	40.0
Nickel	1	5	7	33.3	2	2	0.0
Zinc	1	22	28	24.0	1	1	0.0
Organochlorine Pesticides (OCP)							
alpha-BHC	0.1	0.05	0.05	0.0	--	--	--
HCB	0.1	0.05	0.05	0.0	--	--	--
b-BHC	0.1	0.05	0.05	0.0	--	--	--
g-BHC (Lindane)	0.1	0.05	0.05	0.0	--	--	--
d-BHC	0.1	0.05	0.05	0.0	--	--	--

Quality Assurance Type	PQL	Intralaboratory Duplicate			RPD %	Intralaboratory Duplicate		RPD %
Sample Identification		TP121A	QA1	BH115B		QA4		
Sample Depth (m)		0.1				0.5		
Date		29/05/2025				29/05/2025		
Heptachlor	0.1	<u>0.05</u>	<u>0.05</u>	0.0	--	--	--	
Aldrin	0.1	<u>0.05</u>	<u>0.05</u>	0.0	--	--	--	
Heptachlor epoxide	0.1	<u>0.05</u>	<u>0.05</u>	0.0	--	--	--	
trans-Chlordane	0.1	<u>0.05</u>	<u>0.05</u>	0.0	--	--	--	
alpha-Endosulfan	0.1	<u>0.05</u>	<u>0.05</u>	0.0	--	--	--	
cis-Chlordane	0.1	<u>0.05</u>	<u>0.05</u>	0.0	--	--	--	
Dieldrin	0.1	<u>0.05</u>	<u>0.05</u>	0.0	--	--	--	
DDE	0.1	<u>0.05</u>	<u>0.05</u>	0.0	--	--	--	
Endrin	0.1	<u>0.05</u>	<u>0.05</u>	0.0	--	--	--	
beta-Endosulfan	0.1	<u>0.05</u>	<u>0.05</u>	0.0	--	--	--	
DDD	0.1	<u>0.05</u>	<u>0.05</u>	0.0	--	--	--	
Endrin Aldehyde	0.1	<u>0.05</u>	<u>0.05</u>	0.0	--	--	--	
Endosulfan sulfate	0.1	<u>0.05</u>	<u>0.05</u>	0.0	--	--	--	
DDT	0.1	<u>0.05</u>	<u>0.05</u>	0.0	--	--	--	
Methoxychlor	0.1	<u>0.05</u>	<u>0.05</u>	0.0	--	--	--	
Mirex	0.1	<u>0.05</u>	<u>0.05</u>	0.0	--	--	--	
Organophosphorous Pesticides (OPP)								
Chlorpyrifos	0.1	<u>0.05</u>	<u>0.05</u>	0.0	--	--	--	
Herbicides								
MCPP	0.5	<u>0.25</u>	<u>0.25</u>	0.0	--	--	--	
MCPA	0.5	<u>0.25</u>	<u>0.25</u>	0.0	--	--	--	
2,4-D	0.5	<u>0.25</u>	<u>0.25</u>	0.0	--	--	--	
Dicamba	0.5	<u>0.25</u>	<u>0.25</u>	0.0	--	--	--	
Dichlorprop	0.5	<u>0.25</u>	<u>0.25</u>	0.0	--	--	--	
2,4,5-T	0.5	<u>0.25</u>	<u>0.25</u>	0.0	--	--	--	
MCPB	0.5	<u>0.25</u>	<u>0.25</u>	0.0	--	--	--	
Picloram	0.5	<u>0.25</u>	<u>0.25</u>	0.0	--	--	--	

All units in mg/kg

PQL = Practical Quantitation Limit.

Results underlined were not detected and are reported as half the detection limit for statistical purpose.

BOLD identifies where RPD results

>50 where sample results are >10 x PQL

>75 where sample results are > 5 to ≤10 x PQL

>100 where sample results are >2 to ≤5 x PQL

AD>2.5 * PQL where sample results are ≤2 x PQL

Where results are within two of the above ranges the most conservative criteria have been used to assess duplicate performance

CERTIFICATE OF ANALYSIS 382238

Client Details

Client	RCA Australia
Attention	Fiona Brooker
Address	PO Box 175, Carrington, NSW, 2294

Sample Details

Your Reference	<u>17524-101</u>
Number of Samples	37 Soil
Date samples received	03/06/2025
Date completed instructions received	03/06/2025

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	10/06/2025
Date of Issue	10/06/2025
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

Diego Bigolin, Inorganics Supervisor
 Dragana Tomas, Senior Chemist
 Josh Williams, Senior R&D Chemist
 Tabitha Roberts, Senior Chemist
 Timothy Toll, Senior Chemist

Authorised By

Nancy Zhang, Laboratory Manager

vTRH(C6-C10)/BTEXN in Soil

Our Reference		382238-1	382238-3	382238-5	382238-7	382238-9
Your Reference	UNITS	BH112A	BH113A	TP114A	BH115A	TP116A
Date Sampled		29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	04/06/2025	04/06/2025	04/06/2025	04/06/2025	04/06/2025
Date analysed	-	10/06/2025	10/06/2025	10/06/2025	10/06/2025	10/06/2025
TRH C ₆ - C ₉	mg/kg	<25	<25	<25	<25	<25
TRH C ₆ - C ₁₀	mg/kg	<25	<25	<25	<25	<25
vTRH C ₆ - C ₁₀ less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
Naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<1	<1	<1	<1	<1
Surrogate aaa-Trifluorotoluene	%	96	86	91	91	85

vTRH(C6-C10)/BTEXN in Soil

Our Reference		382238-12	382238-14	382238-16	382238-19	382238-20
Your Reference	UNITS	BH117A	TP118A	TP119A	TP120A	TP121A
Date Sampled		29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	04/06/2025	04/06/2025	04/06/2025	04/06/2025	04/06/2025
Date analysed	-	10/06/2025	10/06/2025	10/06/2025	10/06/2025	10/06/2025
TRH C ₆ - C ₉	mg/kg	<25	<25	<25	<25	<25
TRH C ₆ - C ₁₀	mg/kg	<25	<25	<25	<25	<25
vTRH C ₆ - C ₁₀ less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
Naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<1	<1	<1	<1	<1
Surrogate aaa-Trifluorotoluene	%	92	95	95	97	93

vTRH(C6-C10)/BTEXN in Soil

Our Reference		382238-22	382238-23	382238-24	382238-25	382238-26
Your Reference	UNITS	QA1	TP122A	TP123A	TP123C	BH104A
Date Sampled		29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	04/06/2025	04/06/2025	04/06/2025	04/06/2025	04/06/2025
Date analysed	-	10/06/2025	10/06/2025	10/06/2025	10/06/2025	10/06/2025
TRH C ₆ - C ₉	mg/kg	<25	<25	<25	<25	<25
TRH C ₆ - C ₁₀	mg/kg	<25	<25	<25	<25	<25
vTRH C ₆ - C ₁₀ less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
Naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<1	<1	<1	<1	<1
Surrogate aaa-Trifluorotoluene	%	102	94	96	82	97

vTRH(C6-C10)/BTEXN in Soil

Our Reference		382238-27	382238-28	382238-29	382238-30	382238-31
Your Reference	UNITS	BH104B	BH106A	BH106B	BH107A	BH107B
Date Sampled		29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	04/06/2025	04/06/2025	04/06/2025	04/06/2025	04/06/2025
Date analysed	-	10/06/2025	10/06/2025	10/06/2025	10/06/2025	10/06/2025
TRH C ₆ - C ₉	mg/kg	<25	<25	<25	<25	<25
TRH C ₆ - C ₁₀	mg/kg	<25	<25	<25	<25	<25
vTRH C ₆ - C ₁₀ less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
Naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<1	<1	<1	<1	<1
Surrogate aaa-Trifluorotoluene	%	90	101	91	79	101

vTRH(C6-C10)/BTEXN in Soil

Our Reference		382238-32	382238-33	382238-34	382238-35	382238-36
Your Reference	UNITS	BH108A	BH108B	BH109A	BH109B	BH111A
Date Sampled		29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	04/06/2025	04/06/2025	04/06/2025	04/06/2025	04/06/2025
Date analysed	-	10/06/2025	10/06/2025	10/06/2025	10/06/2025	10/06/2025
TRH C ₆ - C ₉	mg/kg	<25	<25	<25	<25	<25
TRH C ₆ - C ₁₀	mg/kg	<25	<25	<25	<25	<25
vTRH C ₆ - C ₁₀ less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
Naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<1	<1	<1	<1	<1
Surrogate aaa-Trifluorotoluene	%	90	101	86	101	100

vTRH(C6-C10)/BTEXN in Soil

Our Reference		382238-37
Your Reference	UNITS	BH111B
Date Sampled		29/05/2025
Type of sample		Soil
Date extracted	-	04/06/2025
Date analysed	-	10/06/2025
TRH C ₆ - C ₉	mg/kg	<25
TRH C ₆ - C ₁₀	mg/kg	<25
vTRH C ₆ - C ₁₀ less BTEX (F1)	mg/kg	<25
Benzene	mg/kg	<0.2
Toluene	mg/kg	<0.5
Ethylbenzene	mg/kg	<1
m+p-xylene	mg/kg	<2
o-Xylene	mg/kg	<1
Naphthalene	mg/kg	<1
Total +ve Xylenes	mg/kg	<1
Surrogate aaa-Trifluorotoluene	%	99

svTRH (C10-C40) in Soil						
Our Reference		382238-1	382238-3	382238-5	382238-7	382238-9
Your Reference	UNITS	BH112A	BH113A	TP114A	BH115A	TP116A
Date Sampled		29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	04/06/2025	04/06/2025	04/06/2025	04/06/2025	04/06/2025
Date analysed	-	05/06/2025	05/06/2025	05/06/2025	05/06/2025	05/06/2025
TRH C ₁₀ - C ₁₄	mg/kg	<50	<50	<50	<50	<50
TRH C ₁₅ - C ₂₈	mg/kg	<100	<100	<100	<100	<100
TRH C ₂₉ - C ₃₆	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (C10-C36)	mg/kg	<50	<50	<50	<50	<50
TRH >C ₁₀ -C ₁₆	mg/kg	<50	<50	<50	<50	<50
TRH >C ₁₀ -C ₁₆ less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C ₁₆ -C ₃₄	mg/kg	<100	<100	<100	<100	<100
TRH >C ₃₄ -C ₄₀	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	91	91	88	90	88

svTRH (C10-C40) in Soil						
Our Reference		382238-12	382238-14	382238-16	382238-19	382238-20
Your Reference	UNITS	BH117A	TP118A	TP119A	TP120A	TP121A
Date Sampled		29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	04/06/2025	04/06/2025	04/06/2025	04/06/2025	04/06/2025
Date analysed	-	05/06/2025	05/06/2025	05/06/2025	05/06/2025	05/06/2025
TRH C ₁₀ - C ₁₄	mg/kg	<50	<50	<50	<50	<50
TRH C ₁₅ - C ₂₈	mg/kg	<100	<100	<100	<100	<100
TRH C ₂₉ - C ₃₆	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (C10-C36)	mg/kg	<50	<50	<50	<50	<50
TRH >C ₁₀ -C ₁₆	mg/kg	<50	<50	<50	<50	<50
TRH >C ₁₀ -C ₁₆ less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C ₁₆ -C ₃₄	mg/kg	<100	<100	<100	<100	<100
TRH >C ₃₄ -C ₄₀	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	91	87	90	88	89

svTRH (C10-C40) in Soil

Our Reference		382238-22	382238-23	382238-24	382238-25	382238-26
Your Reference	UNITS	QA1	TP122A	TP123A	TP123C	BH104A
Date Sampled		29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	04/06/2025	04/06/2025	04/06/2025	04/06/2025	04/06/2025
Date analysed	-	05/06/2025	05/06/2025	05/06/2025	05/06/2025	05/06/2025
TRH C ₁₀ - C ₁₄	mg/kg	<50	<50	<50	<50	<50
TRH C ₁₅ - C ₂₈	mg/kg	<100	<100	<100	<100	<100
TRH C ₂₉ - C ₃₆	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (C10-C36)	mg/kg	<50	<50	<50	<50	<50
TRH >C ₁₀ -C ₁₆	mg/kg	<50	<50	<50	<50	<50
TRH >C ₁₀ -C ₁₆ less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C ₁₆ -C ₃₄	mg/kg	<100	<100	<100	<100	<100
TRH >C ₃₄ -C ₄₀	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	94	97	92	93	91

svTRH (C10-C40) in Soil

Our Reference		382238-27	382238-28	382238-29	382238-30	382238-31
Your Reference	UNITS	BH104B	BH106A	BH106B	BH107A	BH107B
Date Sampled		29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	04/06/2025	04/06/2025	04/06/2025	04/06/2025	04/06/2025
Date analysed	-	05/06/2025	05/06/2025	05/06/2025	05/06/2025	05/06/2025
TRH C ₁₀ - C ₁₄	mg/kg	<50	<50	<50	<50	<50
TRH C ₁₅ - C ₂₈	mg/kg	<100	<100	<100	<100	<100
TRH C ₂₉ - C ₃₆	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (C10-C36)	mg/kg	<50	<50	<50	<50	<50
TRH >C ₁₀ -C ₁₆	mg/kg	<50	<50	<50	<50	<50
TRH >C ₁₀ -C ₁₆ less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C ₁₆ -C ₃₄	mg/kg	<100	<100	<100	<100	<100
TRH >C ₃₄ -C ₄₀	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	95	94	93	97	94

svTRH (C10-C40) in Soil

Our Reference		382238-32	382238-33	382238-34	382238-35	382238-36
Your Reference	UNITS	BH108A	BH108B	BH109A	BH109B	BH111A
Date Sampled		29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	04/06/2025	04/06/2025	04/06/2025	04/06/2025	04/06/2025
Date analysed	-	05/06/2025	05/06/2025	05/06/2025	05/06/2025	05/06/2025
TRH C ₁₀ - C ₁₄	mg/kg	<50	<50	<50	<50	<50
TRH C ₁₅ - C ₂₈	mg/kg	<100	<100	<100	<100	<100
TRH C ₂₉ - C ₃₆	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (C10-C36)	mg/kg	<50	<50	<50	<50	<50
TRH >C ₁₀ -C ₁₆	mg/kg	<50	<50	<50	<50	<50
TRH >C ₁₀ -C ₁₆ less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C ₁₆ -C ₃₄	mg/kg	<100	<100	<100	<100	<100
TRH >C ₃₄ -C ₄₀	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	93	90	101	88	91

svTRH (C10-C40) in Soil

Our Reference		382238-37
Your Reference	UNITS	BH111B
Date Sampled		29/05/2025
Type of sample		Soil
Date extracted	-	04/06/2025
Date analysed	-	05/06/2025
TRH C ₁₀ - C ₁₄	mg/kg	<50
TRH C ₁₅ - C ₂₈	mg/kg	<100
TRH C ₂₉ - C ₃₆	mg/kg	<100
Total +ve TRH (C10-C36)	mg/kg	<50
TRH >C ₁₀ -C ₁₆	mg/kg	<50
TRH >C ₁₀ -C ₁₆ less Naphthalene (F2)	mg/kg	<50
TRH >C ₁₆ -C ₃₄	mg/kg	<100
TRH >C ₃₄ -C ₄₀	mg/kg	<100
Total +ve TRH (>C10-C40)	mg/kg	<50
Surrogate o-Terphenyl	%	92

PAHs in Soil						
Our Reference		382238-1	382238-3	382238-5	382238-7	382238-9
Your Reference	UNITS	BH112A	BH113A	TP114A	BH115A	TP116A
Date Sampled		29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	04/06/2025	04/06/2025	04/06/2025	04/06/2025	04/06/2025
Date analysed	-	05/06/2025	05/06/2025	05/06/2025	05/06/2025	05/06/2025
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	0.2	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1	0.3	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	0.3	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	0.1	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	0.9	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	0.2	<0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	<0.05	2.1	<0.05	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate <i>p</i> -Terphenyl-d14	%	102	98	108	106	104

PAHs in Soil						
Our Reference		382238-12	382238-14	382238-16	382238-19	382238-20
Your Reference	UNITS	BH117A	TP118A	TP119A	TP120A	TP121A
Date Sampled		29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	04/06/2025	04/06/2025	04/06/2025	04/06/2025	04/06/2025
Date analysed	-	05/06/2025	05/06/2025	05/06/2025	05/06/2025	05/06/2025
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate <i>p</i> -Terphenyl-d14	%	102	100	105	102	103

PAHs in Soil						
Our Reference		382238-22	382238-23	382238-24	382238-25	382238-26
Your Reference	UNITS	QA1	TP122A	TP123A	TP123C	BH104A
Date Sampled		29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	04/06/2025	04/06/2025	04/06/2025	04/06/2025	04/06/2025
Date analysed	-	05/06/2025	05/06/2025	05/06/2025	05/06/2025	05/06/2025
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	0.2	0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	0.2	0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	0.07	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	0.5	0.3	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	0.1	0.92	0.51	<0.05	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate <i>p</i> -Terphenyl-d14	%	103	99	101	99	101

PAHs in Soil						
Our Reference		382238-27	382238-28	382238-29	382238-30	382238-31
Your Reference	UNITS	BH104B	BH106A	BH106B	BH107A	BH107B
Date Sampled		29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	04/06/2025	04/06/2025	04/06/2025	04/06/2025	04/06/2025
Date analysed	-	05/06/2025	05/06/2025	05/06/2025	05/06/2025	05/06/2025
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate <i>p</i> -Terphenyl-d14	%	103	103	103	105	102

PAHs in Soil						
Our Reference		382238-32	382238-33	382238-34	382238-35	382238-36
Your Reference	UNITS	BH108A	BH108B	BH109A	BH109B	BH111A
Date Sampled		29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	04/06/2025	04/06/2025	04/06/2025	04/06/2025	04/06/2025
Date analysed	-	05/06/2025	05/06/2025	05/06/2025	05/06/2025	05/06/2025
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate <i>p</i> -Terphenyl-d14	%	108	101	102	97	102

PAHs in Soil		
Our Reference		382238-37
Your Reference	UNITS	BH111B
Date Sampled		29/05/2025
Type of sample		Soil
Date extracted	-	04/06/2025
Date analysed	-	05/06/2025
Naphthalene	mg/kg	<0.1
Acenaphthylene	mg/kg	<0.1
Acenaphthene	mg/kg	<0.1
Fluorene	mg/kg	<0.1
Phenanthrene	mg/kg	<0.1
Anthracene	mg/kg	<0.1
Fluoranthene	mg/kg	<0.1
Pyrene	mg/kg	<0.1
Benzo(a)anthracene	mg/kg	<0.1
Chrysene	mg/kg	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2
Benzo(a)pyrene	mg/kg	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1
Total +ve PAH's	mg/kg	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5
Surrogate <i>p</i> -Terphenyl-d14	%	98

Acid Extractable metals in soil

Our Reference		382238-1	382238-2	382238-3	382238-4	382238-5
Your Reference	UNITS	BH112A	BH112C	BH113A	BH113C	TP114A
Date Sampled		29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	04/06/2025	04/06/2025	04/06/2025	04/06/2025	04/06/2025
Date analysed	-	04/06/2025	04/06/2025	04/06/2025	04/06/2025	04/06/2025
Arsenic	mg/kg	<4	<4	<4	<4	<4
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	5	18	5	5	8
Copper	mg/kg	1	<1	3	1	9
Lead	mg/kg	4	7	3	3	54
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	1	3	2	2	14
Zinc	mg/kg	3	3	4	2	21

Acid Extractable metals in soil

Our Reference		382238-6	382238-7	382238-8	382238-9	382238-10
Your Reference	UNITS	TP114B	BH115A	BH115B	TP116A	TP116C
Date Sampled		29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	04/06/2025	04/06/2025	04/06/2025	04/06/2025	04/06/2025
Date analysed	-	04/06/2025	04/06/2025	04/06/2025	04/06/2025	04/06/2025
Arsenic	mg/kg	<4	<4	<4	<4	<4
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	4	6	7	7	6
Copper	mg/kg	<1	1	<1	1	1
Lead	mg/kg	2	3	2	3	5
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	1	2	2	2	1
Zinc	mg/kg	<1	2	1	2	2

Acid Extractable metals in soil

Our Reference		382238-11	382238-12	382238-13	382238-14	382238-15
Your Reference	UNITS	QA4	BH117A	BH117B	TP118A	TP118D
Date Sampled		29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	04/06/2025	04/06/2025	04/06/2025	04/06/2025	04/06/2025
Date analysed	-	04/06/2025	04/06/2025	04/06/2025	04/06/2025	04/06/2025
Arsenic	mg/kg	<4	<4	<4	<4	<4
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	8	11	7	3	4
Copper	mg/kg	<1	4	<1	2	2
Lead	mg/kg	3	4	2	4	4
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	2	3	2	1	2
Zinc	mg/kg	1	3	1	6	4

Acid Extractable metals in soil

Our Reference		382238-16	382238-17	382238-18	382238-19	382238-20
Your Reference	UNITS	TP119A	TP119B	TP119C	TP120A	TP121A
Date Sampled		29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	04/06/2025	04/06/2025	04/06/2025	04/06/2025	04/06/2025
Date analysed	-	04/06/2025	04/06/2025	04/06/2025	04/06/2025	04/06/2025
Arsenic	mg/kg	<4	<4	<4	<4	<4
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	5	4	12	3	4
Copper	mg/kg	7	<1	2	2	4
Lead	mg/kg	8	3	11	4	9
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	2	2	6	1	5
Zinc	mg/kg	8	2	7	6	22

Acid Extractable metals in soil

Our Reference		382238-21	382238-22	382238-23	382238-24	382238-25
Your Reference	UNITS	TP121B	QA1	TP122A	TP123A	TP123C
Date Sampled		29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	04/06/2025	04/06/2025	04/06/2025	04/06/2025	04/06/2025
Date analysed	-	04/06/2025	04/06/2025	04/06/2025	04/06/2025	04/06/2025
Arsenic	mg/kg	<4	<4	<4	<4	<4
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	3	5	9	7	4
Copper	mg/kg	2	5	8	8	1
Lead	mg/kg	3	9	7	7	3
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	4	7	16	17	2
Zinc	mg/kg	4	28	24	26	3

Acid Extractable metals in soil

Our Reference		382238-26	382238-27	382238-28	382238-29	382238-30
Your Reference	UNITS	BH104A	BH104B	BH106A	BH106B	BH107A
Date Sampled		29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	04/06/2025	04/06/2025	04/06/2025	04/06/2025	04/06/2025
Date analysed	-	04/06/2025	04/06/2025	04/06/2025	04/06/2025	04/06/2025
Arsenic	mg/kg	<4	<4	<4	5	<4
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	3	10	6	7	3
Copper	mg/kg	2	2	4	3	1
Lead	mg/kg	3	6	5	7	3
Mercury	mg/kg	<0.1	0.2	<0.1	<0.1	<0.1
Nickel	mg/kg	<1	2	3	5	1
Zinc	mg/kg	3	8	4	15	4

Acid Extractable metals in soil

Our Reference		382238-31	382238-32	382238-33	382238-34	382238-35
Your Reference	UNITS	BH107B	BH108A	BH108B	BH109A	BH109B
Date Sampled		29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	04/06/2025	04/06/2025	04/06/2025	04/06/2025	04/06/2025
Date analysed	-	04/06/2025	04/06/2025	04/06/2025	04/06/2025	04/06/2025
Arsenic	mg/kg	5	<4	12	<4	10
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	5	4	6	8	12
Copper	mg/kg	3	2	3	2	3
Lead	mg/kg	7	4	9	5	11
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	4	2	7	3	6
Zinc	mg/kg	15	6	23	10	20

Acid Extractable metals in soil

Our Reference		382238-36	382238-37
Your Reference	UNITS	BH111A	BH111B
Date Sampled		29/05/2025	29/05/2025
Type of sample		Soil	Soil
Date prepared	-	04/06/2025	04/06/2025
Date analysed	-	04/06/2025	04/06/2025
Arsenic	mg/kg	8	5
Cadmium	mg/kg	<0.4	<0.4
Chromium	mg/kg	9	7
Copper	mg/kg	2	3
Lead	mg/kg	18	6
Mercury	mg/kg	<0.1	<0.1
Nickel	mg/kg	4	3
Zinc	mg/kg	11	8

Misc Inorg - Soil

Our Reference		382238-1	382238-2	382238-3	382238-4	382238-5
Your Reference	UNITS	BH112A	BH112C	BH113A	BH113C	TP114A
Date Sampled		29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	6/06/2025	6/06/2025	6/06/2025	6/06/2025	6/06/2025
Date analysed	-	6/06/2025	6/06/2025	6/06/2025	6/06/2025	6/06/2025
pH 1:5 soil:water	pH Units	5.7	7.0	5.9	6.5	7.2
Electrical Conductivity 1:5 soil:water	µS/cm	28	50	20	11	110

Misc Inorg - Soil

Our Reference		382238-6	382238-7	382238-8	382238-9	382238-10
Your Reference	UNITS	TP114B	BH115A	BH115B	TP116A	TP116C
Date Sampled		29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	6/06/2025	6/06/2025	6/06/2025	6/06/2025	6/06/2025
Date analysed	-	6/06/2025	6/06/2025	6/06/2025	6/06/2025	6/06/2025
pH 1:5 soil:water	pH Units	8.7	6.5	7.0	6.9	6.2
Electrical Conductivity 1:5 soil:water	µS/cm	40	21	15	32	63

Misc Inorg - Soil

Our Reference		382238-11	382238-12	382238-13	382238-14	382238-15
Your Reference	UNITS	QA4	BH117A	BH117B	TP118A	TP118D
Date Sampled		29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	6/06/2025	6/06/2025	6/06/2025	6/06/2025	6/06/2025
Date analysed	-	6/06/2025	6/06/2025	6/06/2025	6/06/2025	6/06/2025
pH 1:5 soil:water	pH Units	6.8	6.5	6.4	5.9	8.2
Electrical Conductivity 1:5 soil:water	µS/cm	16	69	160	24	52

Misc Inorg - Soil

Our Reference		382238-16	382238-17	382238-18	382238-19	382238-20
Your Reference	UNITS	TP119A	TP119B	TP119C	TP120A	TP121A
Date Sampled		29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	6/06/2025	6/06/2025	6/06/2025	6/06/2025	6/06/2025
Date analysed	-	6/06/2025	6/06/2025	6/06/2025	6/06/2025	6/06/2025
pH 1:5 soil:water	pH Units	5.9	6.6	7.4	6.1	6.3
Electrical Conductivity 1:5 soil:water	µS/cm	33	11	59	28	25

Misc Inorg - Soil

Our Reference		382238-21	382238-22	382238-23	382238-24	382238-25
Your Reference	UNITS	TP121B	QA1	TP122A	TP123A	TP123C
Date Sampled		29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	6/06/2025	6/06/2025	6/06/2025	6/06/2025	6/06/2025
Date analysed	-	6/06/2025	6/06/2025	6/06/2025	6/06/2025	6/06/2025
pH 1:5 soil:water	pH Units	6.2	6.2	6.3	5.8	6.3
Electrical Conductivity 1:5 soil:water	µS/cm	13	28	27	17	8

Misc Inorg - Soil

Our Reference		382238-26	382238-27	382238-28	382238-29	382238-30
Your Reference	UNITS	BH104A	BH104B	BH106A	BH106B	BH107A
Date Sampled		29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	6/06/2025	6/06/2025	6/06/2025	6/06/2025	6/06/2025
Date analysed	-	6/06/2025	6/06/2025	6/06/2025	6/06/2025	6/06/2025
pH 1:5 soil:water	pH Units	7.2	7.3	7.0	6.5	6.8
Electrical Conductivity 1:5 soil:water	µS/cm	16	49	24	28	10

Misc Inorg - Soil

Our Reference		382238-31	382238-32	382238-33	382238-34	382238-35
Your Reference	UNITS	BH107B	BH108A	BH108B	BH109A	BH109B
Date Sampled		29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	6/06/2025	6/06/2025	6/06/2025	6/06/2025	6/06/2025
Date analysed	-	6/06/2025	6/06/2025	6/06/2025	6/06/2025	6/06/2025
pH 1:5 soil:water	pH Units	6.5	6.8	6.4	6.4	6.2
Electrical Conductivity 1:5 soil:water	µS/cm	17	11	39	18	15

Misc Inorg - Soil

Our Reference		382238-36	382238-37
Your Reference	UNITS	BH111A	BH111B
Date Sampled		29/05/2025	29/05/2025
Type of sample		Soil	Soil
Date prepared	-	6/06/2025	6/06/2025
Date analysed	-	6/06/2025	6/06/2025
pH 1:5 soil:water	pH Units	8.3	6.8
Electrical Conductivity 1:5 soil:water	µS/cm	140	56

Organochlorine Pesticides in soil

Our Reference		382238-1	382238-3	382238-5	382238-7	382238-9
Your Reference	UNITS	BH112A	BH113A	TP114A	BH115A	TP116A
Date Sampled		29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	04/06/2025	04/06/2025	04/06/2025	04/06/2025	04/06/2025
Date analysed	-	05/06/2025	05/06/2025	05/06/2025	05/06/2025	05/06/2025
alpha-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
HCB	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve DDT+DDD+DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total Positive Aldrin+Dieldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate 4-Chloro-3-NBTF	%	111	106	101	101	111

Organochlorine Pesticides in soil						
Our Reference	UNITS	382238-12	382238-14	382238-16	382238-19	382238-20
Your Reference		BH117A	TP118A	TP119A	TP120A	TP121A
Date Sampled		29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	04/06/2025	04/06/2025	04/06/2025	04/06/2025	04/06/2025
Date analysed	-	05/06/2025	05/06/2025	05/06/2025	05/06/2025	05/06/2025
alpha-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
HCB	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve DDT+DDD+DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total Positive Aldrin+Dieldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate 4-Chloro-3-NBTF	%	106	106	105	106	97

Organochlorine Pesticides in soil				
Our Reference		382238-22	382238-23	382238-24
Your Reference	UNITS	QA1	TP122A	TP123A
Date Sampled		29/05/2025	29/05/2025	29/05/2025
Type of sample		Soil	Soil	Soil
Date extracted	-	04/06/2025	04/06/2025	04/06/2025
Date analysed	-	05/06/2025	05/06/2025	05/06/2025
alpha-BHC	mg/kg	<0.1	<0.1	<0.1
HCB	mg/kg	<0.1	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1
Aldrin	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
Endosulfan I	mg/kg	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1	<0.1
Endosulfan Sulphate	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
Total +ve DDT+DDD+DDE	mg/kg	<0.1	<0.1	<0.1
Total Positive Aldrin+Dieldrin	mg/kg	<0.1	<0.1	<0.1
Surrogate 4-Chloro-3-NBTF	%	107	102	103

Organophosphorus Pesticides in Soil						
Our Reference	UNITS	382238-1	382238-3	382238-5	382238-7	382238-9
Your Reference		BH112A	BH113A	TP114A	BH115A	TP116A
Date Sampled		29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	04/06/2025	04/06/2025	04/06/2025	04/06/2025	04/06/2025
Date analysed	-	05/06/2025	05/06/2025	05/06/2025	05/06/2025	05/06/2025
Dichlorvos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Mevinphos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phorate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Diazinon	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Disulfoton	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyrifos-methyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Parathion-Methyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Malathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyrifos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fenthion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Parathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Methidathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fenamiphos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phosalone	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Azinphos-methyl (Guthion)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Coumaphos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate 4-Chloro-3-NBTF	%	111	106	101	101	111

Organophosphorus Pesticides in Soil						
Our Reference	UNITS	382238-12	382238-14	382238-16	382238-19	382238-20
Your Reference		BH117A	TP118A	TP119A	TP120A	TP121A
Date Sampled		29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	04/06/2025	04/06/2025	04/06/2025	04/06/2025	04/06/2025
Date analysed	-	05/06/2025	05/06/2025	05/06/2025	05/06/2025	05/06/2025
Dichlorvos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Mevinphos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phorate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Diazinon	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Disulfoton	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyrifos-methyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Parathion-Methyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Malathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyrifos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fenthion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Parathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Methidathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fenamiphos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phosalone	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Azinphos-methyl (Guthion)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Coumaphos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate 4-Chloro-3-NBTF	%	106	106	105	106	97

Organophosphorus Pesticides in Soil				
Our Reference		382238-22	382238-23	382238-24
Your Reference	UNITS	QA1	TP122A	TP123A
Date Sampled		29/05/2025	29/05/2025	29/05/2025
Type of sample		Soil	Soil	Soil
Date extracted	-	04/06/2025	04/06/2025	04/06/2025
Date analysed	-	05/06/2025	05/06/2025	05/06/2025
Dichlorvos	mg/kg	<0.1	<0.1	<0.1
Mevinphos	mg/kg	<0.1	<0.1	<0.1
Phorate	mg/kg	<0.1	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1	<0.1
Diazinon	mg/kg	<0.1	<0.1	<0.1
Disulfoton	mg/kg	<0.1	<0.1	<0.1
Chlorpyrifos-methyl	mg/kg	<0.1	<0.1	<0.1
Parathion-Methyl	mg/kg	<0.1	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1	<0.1
Malathion	mg/kg	<0.1	<0.1	<0.1
Chlorpyrifos	mg/kg	<0.1	<0.1	<0.1
Fenthion	mg/kg	<0.1	<0.1	<0.1
Parathion	mg/kg	<0.1	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1	<0.1
Methidathion	mg/kg	<0.1	<0.1	<0.1
Fenamiphos	mg/kg	<0.1	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1	<0.1
Phosalone	mg/kg	<0.1	<0.1	<0.1
Azinphos-methyl (Guthion)	mg/kg	<0.1	<0.1	<0.1
Coumaphos	mg/kg	<0.1	<0.1	<0.1
Surrogate 4-Chloro-3-NBTF	%	107	102	103

Moisture						
Our Reference	UNITS	382238-1	382238-2	382238-3	382238-4	382238-5
Your Reference		BH112A	BH112C	BH113A	BH113C	TP114A
Date Sampled		29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	04/06/2025	04/06/2025	04/06/2025	04/06/2025	04/06/2025
Date analysed	-	05/06/2025	05/06/2025	05/06/2025	05/06/2025	05/06/2025
Moisture	%	14	14	18	22	21

Moisture						
Our Reference	UNITS	382238-6	382238-7	382238-8	382238-9	382238-10
Your Reference		TP114B	BH115A	BH115B	TP116A	TP116C
Date Sampled		29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	04/06/2025	04/06/2025	04/06/2025	04/06/2025	04/06/2025
Date analysed	-	05/06/2025	05/06/2025	05/06/2025	05/06/2025	05/06/2025
Moisture	%	15	15	20	13	16

Moisture						
Our Reference	UNITS	382238-11	382238-12	382238-13	382238-14	382238-15
Your Reference		QA4	BH117A	BH117B	TP118A	TP118D
Date Sampled		29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	04/06/2025	04/06/2025	04/06/2025	04/06/2025	04/06/2025
Date analysed	-	05/06/2025	05/06/2025	05/06/2025	05/06/2025	05/06/2025
Moisture	%	15	17	16	9.1	15

Moisture						
Our Reference	UNITS	382238-16	382238-17	382238-18	382238-19	382238-20
Your Reference		TP119A	TP119B	TP119C	TP120A	TP121A
Date Sampled		29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	04/06/2025	04/06/2025	04/06/2025	04/06/2025	04/06/2025
Date analysed	-	05/06/2025	05/06/2025	05/06/2025	05/06/2025	05/06/2025
Moisture	%	20	19	15	11	11

Moisture						
Our Reference	UNITS	382238-21	382238-22	382238-23	382238-24	382238-25
Your Reference		TP121B	QA1	TP122A	TP123A	TP123C
Date Sampled		29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	04/06/2025	04/06/2025	04/06/2025	04/06/2025	04/06/2025
Date analysed	-	05/06/2025	05/06/2025	05/06/2025	05/06/2025	05/06/2025
Moisture	%	11	12	11	14	20

Moisture						
Our Reference	UNITS	382238-26	382238-27	382238-28	382238-29	382238-30
Your Reference		BH104A	BH104B	BH106A	BH106B	BH107A
Date Sampled		29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	04/06/2025	04/06/2025	04/06/2025	04/06/2025	04/06/2025
Date analysed	-	05/06/2025	05/06/2025	05/06/2025	05/06/2025	05/06/2025
Moisture	%	17	17	19	16	19

Moisture						
Our Reference	UNITS	382238-31	382238-32	382238-33	382238-34	382238-35
Your Reference		BH107B	BH108A	BH108B	BH109A	BH109B
Date Sampled		29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	04/06/2025	04/06/2025	04/06/2025	04/06/2025	04/06/2025
Date analysed	-	05/06/2025	05/06/2025	05/06/2025	05/06/2025	05/06/2025
Moisture	%	16	15	16	12	16

Moisture			
Our Reference	UNITS	382238-36	382238-37
Your Reference		BH111A	BH111B
Date Sampled		29/05/2025	29/05/2025
Type of sample		Soil	Soil
Date prepared	-	04/06/2025	04/06/2025
Date analysed	-	05/06/2025	05/06/2025
Moisture	%	13	18

Phenoxy Acid Herbicides in Soil						
Our Reference	UNITS	382238-1	382238-3	382238-5	382238-7	382238-9
Your Reference		BH112A	BH113A	TP114A	BH115A	TP116A
Date Sampled		29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	05/06/2025	05/06/2025	05/06/2025	05/06/2025	05/06/2025
Date analysed	-	05/06/2025	05/06/2025	05/06/2025	05/06/2025	05/06/2025
Clopyralid	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
3,5-Dichlorobenzoic acid	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
o-chlorophenoxy acetic acid	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
4-CPA	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Dicamba	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
MCPP	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
MCPA	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Dichlorprop	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-D	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoxynil	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Triclopyr	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,5-TP	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,5-T	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
MCPB	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Dinoseb	mg/kg	<1	<1	<1	<1	<1
2,4-DB	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ioxynil	mg/kg	<1	<1	<1	<1	<1
Picloram	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Acifluorfen	mg/kg	<2	<2	<2	<2	<2
2,4,6-T	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-D	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Bentazon	mg/kg	<1	<1	<1	<1	<1
Chloramben	mg/kg	<1	<1	<1	<1	<1
Fluroxypyr	mg/kg	<1	<1	<1	<1	<1
Surrogate 2,4- DCPA	%	110	100	100	100	120

Phenoxy Acid Herbicides in Soil						
Our Reference		382238-12	382238-14	382238-16	382238-19	382238-20
Your Reference	UNITS	BH117A	TP118A	TP119A	TP120A	TP121A
Date Sampled		29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	05/06/2025	05/06/2025	05/06/2025	05/06/2025	05/06/2025
Date analysed	-	05/06/2025	05/06/2025	05/06/2025	05/06/2025	05/06/2025
Clopyralid	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
3,5-Dichlorobenzoic acid	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
o-chlorophenoxy acetic acid	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
4-CPA	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Dicamba	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
MCPPP	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
MCPA	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Dichlorprop	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-D	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoxynil	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Triclopyr	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,5-TP	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,5-T	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
MCPB	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Dinoseb	mg/kg	<1	<1	<1	<1	<1
2,4-DB	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ioxynil	mg/kg	<1	<1	<1	<1	<1
Picloram	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Acifluorfen	mg/kg	<2	<2	<2	<2	<2
2,4,6-T	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-D	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Bentazon	mg/kg	<1	<1	<1	<1	<1
Chloramben	mg/kg	<1	<1	<1	<1	<1
Fluroxypyr	mg/kg	<1	<1	<1	<1	<1
Surrogate 2,4- DCPA	%	110	110	100	110	110

Phenoxy Acid Herbicides in Soil				
Our Reference		382238-22	382238-23	382238-24
Your Reference	UNITS	QA1	TP122A	TP123A
Date Sampled		29/05/2025	29/05/2025	29/05/2025
Type of sample		Soil	Soil	Soil
Date extracted	-	05/06/2025	05/06/2025	05/06/2025
Date analysed	-	05/06/2025	05/06/2025	05/06/2025
Clopyralid	mg/kg	<0.5	<0.5	<0.5
3,5-Dichlorobenzoic acid	mg/kg	<0.5	<0.5	<0.5
o-chlorophenoxy acetic acid	mg/kg	<0.5	<0.5	<0.5
4-CPA	mg/kg	<0.5	<0.5	<0.5
Dicamba	mg/kg	<0.5	<0.5	<0.5
MCPP	mg/kg	<0.5	<0.5	<0.5
MCPA	mg/kg	<0.5	<0.5	<0.5
Dichlorprop	mg/kg	<0.5	<0.5	<0.5
2,4-D	mg/kg	<0.5	<0.5	<0.5
Bromoxynil	mg/kg	<0.5	<0.5	<0.5
Triclopyr	mg/kg	<0.5	<0.5	<0.5
2,4,5-TP	mg/kg	<0.5	<0.5	<0.5
2,4,5-T	mg/kg	<0.5	<0.5	<0.5
MCPB	mg/kg	<0.5	<0.5	<0.5
Dinoseb	mg/kg	<1	<1	<1
2,4-DB	mg/kg	<0.5	<0.5	<0.5
Ioxynil	mg/kg	<1	<1	<1
Picloram	mg/kg	<0.5	<0.5	<0.5
Acifluorfen	mg/kg	<2	<2	<2
2,4,6-T	mg/kg	<0.5	<0.5	<0.5
2,6-D	mg/kg	<0.5	<0.5	<0.5
Bentazon	mg/kg	<1	<1	<1
Chloramben	mg/kg	<1	<1	<1
Fluroxypyr	mg/kg	<1	<1	<1
Surrogate 2,4- DCPA	%	120	110	100

Method ID	Methodology Summary
Inorg-001	pH - Measured using pH meter and electrode. Please note that the results for water analyses are indicative only, as analysis outside of the APHA storage times.
Inorg-002	Conductivity and Salinity - measured using a conductivity cell.
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. Total Phosphate determined stoichiometrically from Phosphorus (assumed to be present as Phosphate). Where salts (oxides, chlorides etc.) are calculated from the element concentration stoichiometrically there is no guarantee that the salt form is completely soluble in the acids used in the preparation.
Metals-021	Determination of Mercury by Cold Vapour AAS.
Org-020	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis.
Org-020	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis. Note, the Total +ve TRH PQL is reflective of the lowest individual PQL and is therefore "Total +ve TRH" is simply a sum of the positive individual TRH fractions (>C10-C40).
Org-022/025	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS/GC-MSMS.
Org-022/025	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-MS/GC-MSMS. Note, the Total +ve reported DDD+DDE+DDT PQL is reflective of the lowest individual PQL and is therefore simply a sum of the positive individually report DDD+DDE+DDT.

Method ID	Methodology Summary
Org-022/025	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS and/or GC-MS/MS. Benzo(a)pyrene TEQ as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater - 2013. For soil results:- 1. 'EQ PQL' values are assuming all contributing PAHs reported as <PQL are actually at the PQL. This is the most conservative approach and can give false positive TEQs given that PAHs that contribute to the TEQ calculation may not be present. 2. 'EQ zero' values are assuming all contributing PAHs reported as <PQL are zero. This is the least conservative approach and is more susceptible to false negative TEQs when PAHs that contribute to the TEQ calculation are present but below PQL. 3. 'EQ half PQL' values are assuming all contributing PAHs reported as <PQL are half the stipulated PQL. Hence a mid-point between the most and least conservative approaches above. Note, the Total +ve PAHs PQL is reflective of the lowest individual PQL and is therefore "Total +ve PAHs" is simply a sum of the positive individual PAHs.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater. Note, the Total +ve Xylene PQL is reflective of the lowest individual PQL and is therefore "Total +ve Xylenes" is simply a sum of the positive individual Xylenes.
Org-029	Phenoxyacid Herbicides - Soil/Solids samples are extracted with methanol. Waters are solvent amended followed by direct injection and/or put through SPE. Analysis is undertaken with LC-MSMS.

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-6	382238-3
Date extracted	-			04/06/2025	1	04/06/2025	04/06/2025		04/06/2025	04/06/2025
Date analysed	-			10/06/2025	1	10/06/2025	10/06/2025		10/06/2025	10/06/2025
TRH C ₆ - C ₉	mg/kg	25	Org-023	<25	1	<25	<25	0	127	103
TRH C ₆ - C ₁₀	mg/kg	25	Org-023	<25	1	<25	<25	0	127	103
Benzene	mg/kg	0.2	Org-023	<0.2	1	<0.2	<0.2	0	133	109
Toluene	mg/kg	0.5	Org-023	<0.5	1	<0.5	<0.5	0	127	103
Ethylbenzene	mg/kg	1	Org-023	<1	1	<1	<1	0	126	102
m+p-xylene	mg/kg	2	Org-023	<2	1	<2	<2	0	124	100
o-Xylene	mg/kg	1	Org-023	<1	1	<1	<1	0	127	102
Naphthalene	mg/kg	1	Org-023	<1	1	<1	<1	0	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-023	102	1	96	82	16	114	92

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-8	382238-23
Date extracted	-			[NT]	12	04/06/2025	04/06/2025		04/06/2025	04/06/2025
Date analysed	-			[NT]	12	10/06/2025	10/06/2025		10/06/2025	10/06/2025
TRH C ₆ - C ₉	mg/kg	25	Org-023	[NT]	12	<25	<25	0	126	111
TRH C ₆ - C ₁₀	mg/kg	25	Org-023	[NT]	12	<25	<25	0	126	111
Benzene	mg/kg	0.2	Org-023	[NT]	12	<0.2	<0.2	0	132	117
Toluene	mg/kg	0.5	Org-023	[NT]	12	<0.5	<0.5	0	125	111
Ethylbenzene	mg/kg	1	Org-023	[NT]	12	<1	<1	0	127	111
m+p-xylene	mg/kg	2	Org-023	[NT]	12	<2	<2	0	124	109
o-Xylene	mg/kg	1	Org-023	[NT]	12	<1	<1	0	128	111
Naphthalene	mg/kg	1	Org-023	[NT]	12	<1	<1	0	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-023	[NT]	12	92	85	8	112	103

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	22	04/06/2025	04/06/2025		[NT]	[NT]
Date analysed	-			[NT]	22	10/06/2025	10/06/2025		[NT]	[NT]
TRH C ₆ - C ₉	mg/kg	25	Org-023	[NT]	22	<25	<25	0	[NT]	[NT]
TRH C ₆ - C ₁₀	mg/kg	25	Org-023	[NT]	22	<25	<25	0	[NT]	[NT]
Benzene	mg/kg	0.2	Org-023	[NT]	22	<0.2	<0.2	0	[NT]	[NT]
Toluene	mg/kg	0.5	Org-023	[NT]	22	<0.5	<0.5	0	[NT]	[NT]
Ethylbenzene	mg/kg	1	Org-023	[NT]	22	<1	<1	0	[NT]	[NT]
m+p-xylene	mg/kg	2	Org-023	[NT]	22	<2	<2	0	[NT]	[NT]
o-Xylene	mg/kg	1	Org-023	[NT]	22	<1	<1	0	[NT]	[NT]
Naphthalene	mg/kg	1	Org-023	[NT]	22	<1	<1	0	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-023	[NT]	22	102	104	2	[NT]	[NT]

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	32	04/06/2025	04/06/2025		[NT]	[NT]
Date analysed	-			[NT]	32	10/06/2025	10/06/2025		[NT]	[NT]
TRH C ₆ - C ₉	mg/kg	25	Org-023	[NT]	32	<25	<25	0	[NT]	[NT]
TRH C ₆ - C ₁₀	mg/kg	25	Org-023	[NT]	32	<25	<25	0	[NT]	[NT]
Benzene	mg/kg	0.2	Org-023	[NT]	32	<0.2	<0.2	0	[NT]	[NT]
Toluene	mg/kg	0.5	Org-023	[NT]	32	<0.5	<0.5	0	[NT]	[NT]
Ethylbenzene	mg/kg	1	Org-023	[NT]	32	<1	<1	0	[NT]	[NT]
m+p-xylene	mg/kg	2	Org-023	[NT]	32	<2	<2	0	[NT]	[NT]
o-Xylene	mg/kg	1	Org-023	[NT]	32	<1	<1	0	[NT]	[NT]
Naphthalene	mg/kg	1	Org-023	[NT]	32	<1	<1	0	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-023	[NT]	32	90	89	1	[NT]	[NT]

QUALITY CONTROL: svTRH (C10-C40) in Soil					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-6	382238-3
Date extracted	-			04/06/2025	1	04/06/2025	04/06/2025		04/06/2025	04/06/2025
Date analysed	-			05/06/2025	1	05/06/2025	05/06/2025		05/06/2025	05/06/2025
TRH C ₁₀ - C ₁₄	mg/kg	50	Org-020	<50	1	<50	<50	0	97	83
TRH C ₁₅ - C ₂₈	mg/kg	100	Org-020	<100	1	<100	<100	0	81	76
TRH C ₂₉ - C ₃₆	mg/kg	100	Org-020	<100	1	<100	<100	0	89	83
TRH >C ₁₀ -C ₁₆	mg/kg	50	Org-020	<50	1	<50	<50	0	97	83
TRH >C ₁₆ -C ₃₄	mg/kg	100	Org-020	<100	1	<100	<100	0	81	76
TRH >C ₃₄ -C ₄₀	mg/kg	100	Org-020	<100	1	<100	<100	0	89	83
Surrogate o-Terphenyl	%		Org-020	101	1	91	91	0	78	78

QUALITY CONTROL: svTRH (C10-C40) in Soil					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-7	382238-23
Date extracted	-			[NT]	12	04/06/2025	04/06/2025		04/06/2025	04/06/2025
Date analysed	-			[NT]	12	05/06/2025	05/06/2025		05/06/2025	05/06/2025
TRH C ₁₀ - C ₁₄	mg/kg	50	Org-020	[NT]	12	<50	<50	0	107	90
TRH C ₁₅ - C ₂₈	mg/kg	100	Org-020	[NT]	12	<100	<100	0	98	89
TRH C ₂₉ - C ₃₆	mg/kg	100	Org-020	[NT]	12	<100	<100	0	100	93
TRH >C ₁₀ -C ₁₆	mg/kg	50	Org-020	[NT]	12	<50	<50	0	107	90
TRH >C ₁₆ -C ₃₄	mg/kg	100	Org-020	[NT]	12	<100	<100	0	98	89
TRH >C ₃₄ -C ₄₀	mg/kg	100	Org-020	[NT]	12	<100	<100	0	100	93
Surrogate o-Terphenyl	%		Org-020	[NT]	12	91	90	1	84	82

QUALITY CONTROL: svTRH (C10-C40) in Soil					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	22	04/06/2025	04/06/2025		[NT]	[NT]
Date analysed	-			[NT]	22	05/06/2025	05/06/2025		[NT]	[NT]
TRH C ₁₀ - C ₁₄	mg/kg	50	Org-020	[NT]	22	<50	<50	0	[NT]	[NT]
TRH C ₁₅ - C ₂₈	mg/kg	100	Org-020	[NT]	22	<100	<100	0	[NT]	[NT]
TRH C ₂₉ - C ₃₆	mg/kg	100	Org-020	[NT]	22	<100	<100	0	[NT]	[NT]
TRH >C ₁₀ -C ₁₆	mg/kg	50	Org-020	[NT]	22	<50	<50	0	[NT]	[NT]
TRH >C ₁₆ -C ₃₄	mg/kg	100	Org-020	[NT]	22	<100	<100	0	[NT]	[NT]
TRH >C ₃₄ -C ₄₀	mg/kg	100	Org-020	[NT]	22	<100	<100	0	[NT]	[NT]
Surrogate o-Terphenyl	%		Org-020	[NT]	22	94	88	7	[NT]	[NT]

QUALITY CONTROL: svTRH (C10-C40) in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	32	04/06/2025	04/06/2025		[NT]	[NT]
Date analysed	-			[NT]	32	05/06/2025	05/06/2025		[NT]	[NT]
TRH C ₁₀ - C ₁₄	mg/kg	50	Org-020	[NT]	32	<50	<50	0	[NT]	[NT]
TRH C ₁₅ - C ₂₈	mg/kg	100	Org-020	[NT]	32	<100	<100	0	[NT]	[NT]
TRH C ₂₉ - C ₃₆	mg/kg	100	Org-020	[NT]	32	<100	<100	0	[NT]	[NT]
TRH >C ₁₀ -C ₁₆	mg/kg	50	Org-020	[NT]	32	<50	<50	0	[NT]	[NT]
TRH >C ₁₆ -C ₃₄	mg/kg	100	Org-020	[NT]	32	<100	<100	0	[NT]	[NT]
TRH >C ₃₄ -C ₄₀	mg/kg	100	Org-020	[NT]	32	<100	<100	0	[NT]	[NT]
Surrogate o-Terphenyl	%		Org-020	[NT]	32	93	93	0	[NT]	[NT]

QUALITY CONTROL: PAHs in Soil					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-6	382238-3
Date extracted	-			04/06/2025	1	04/06/2025	04/06/2025		04/06/2025	04/06/2025
Date analysed	-			05/06/2025	1	05/06/2025	05/06/2025		05/06/2025	05/06/2025
Naphthalene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	96	90
Acenaphthylene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	66	64
Fluorene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	80	78
Phenanthrene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	86	92
Anthracene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	80	88
Pyrene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	84	92
Benzo(a)anthracene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	74	72
Benzo(b,j,k)fluoranthene	mg/kg	0.2	Org-022/025	<0.2	1	<0.2	<0.2	0	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-022/025	<0.05	1	<0.05	<0.05	0	76	72
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-022/025	101	1	102	102	0	86	100

QUALITY CONTROL: PAHs in Soil					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-7	382238-23
Date extracted	-			[NT]	12	04/06/2025	04/06/2025		04/06/2025	04/06/2025
Date analysed	-			[NT]	12	05/06/2025	05/06/2025		05/06/2025	05/06/2025
Naphthalene	mg/kg	0.1	Org-022/025	[NT]	12	<0.1	<0.1	0	94	90
Acenaphthylene	mg/kg	0.1	Org-022/025	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-022/025	[NT]	12	<0.1	<0.1	0	66	64
Fluorene	mg/kg	0.1	Org-022/025	[NT]	12	<0.1	<0.1	0	78	76
Phenanthrene	mg/kg	0.1	Org-022/025	[NT]	12	<0.1	<0.1	0	84	94
Anthracene	mg/kg	0.1	Org-022/025	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-022/025	[NT]	12	<0.1	<0.1	0	78	92
Pyrene	mg/kg	0.1	Org-022/025	[NT]	12	<0.1	<0.1	0	82	97
Benzo(a)anthracene	mg/kg	0.1	Org-022/025	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-022/025	[NT]	12	<0.1	<0.1	0	74	64
Benzo(b,j,k)fluoranthene	mg/kg	0.2	Org-022/025	[NT]	12	<0.2	<0.2	0	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-022/025	[NT]	12	<0.05	<0.05	0	74	72
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-022/025	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-022/025	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-022/025	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-022/025	[NT]	12	102	104	2	85	92

QUALITY CONTROL: PAHs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	22	04/06/2025	04/06/2025		[NT]	[NT]
Date analysed	-			[NT]	22	05/06/2025	05/06/2025		[NT]	[NT]
Naphthalene	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Acenaphthylene	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Fluorene	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Phenanthrene	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Anthracene	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Pyrene	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Benzo(a)anthracene	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-022/025	[NT]	22	<0.2	<0.2	0	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-022/025	[NT]	22	<0.05	<0.05	0	[NT]	[NT]
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-022/025	[NT]	22	0.1	0.1	0	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-022/025	[NT]	22	103	102	1	[NT]	[NT]

QUALITY CONTROL: PAHs in Soil						Duplicate		Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	32	04/06/2025	04/06/2025		[NT]	[NT]
Date analysed	-			[NT]	32	05/06/2025	05/06/2025		[NT]	[NT]
Naphthalene	mg/kg	0.1	Org-022/025	[NT]	32	<0.1	<0.1	0	[NT]	[NT]
Acenaphthylene	mg/kg	0.1	Org-022/025	[NT]	32	<0.1	<0.1	0	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-022/025	[NT]	32	<0.1	<0.1	0	[NT]	[NT]
Fluorene	mg/kg	0.1	Org-022/025	[NT]	32	<0.1	<0.1	0	[NT]	[NT]
Phenanthrene	mg/kg	0.1	Org-022/025	[NT]	32	<0.1	<0.1	0	[NT]	[NT]
Anthracene	mg/kg	0.1	Org-022/025	[NT]	32	<0.1	<0.1	0	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-022/025	[NT]	32	<0.1	<0.1	0	[NT]	[NT]
Pyrene	mg/kg	0.1	Org-022/025	[NT]	32	<0.1	<0.1	0	[NT]	[NT]
Benzo(a)anthracene	mg/kg	0.1	Org-022/025	[NT]	32	<0.1	<0.1	0	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-022/025	[NT]	32	<0.1	<0.1	0	[NT]	[NT]
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-022/025	[NT]	32	<0.2	<0.2	0	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-022/025	[NT]	32	<0.05	<0.05	0	[NT]	[NT]
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-022/025	[NT]	32	<0.1	<0.1	0	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-022/025	[NT]	32	<0.1	<0.1	0	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-022/025	[NT]	32	<0.1	<0.1	0	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-022/025	[NT]	32	108	105	3	[NT]	[NT]

QUALITY CONTROL: Acid Extractable metals in soil					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-6	382238-3
Date prepared	-			04/06/2025	1	04/06/2025	04/06/2025		04/06/2025	04/06/2025
Date analysed	-			04/06/2025	1	04/06/2025	04/06/2025		04/06/2025	04/06/2025
Arsenic	mg/kg	4	Metals-020	<4	1	<4	<4	0	113	105
Cadmium	mg/kg	0.4	Metals-020	<0.4	1	<0.4	<0.4	0	100	98
Chromium	mg/kg	1	Metals-020	<1	1	5	6	18	103	100
Copper	mg/kg	1	Metals-020	<1	1	1	1	0	106	105
Lead	mg/kg	1	Metals-020	<1	1	4	4	0	105	105
Mercury	mg/kg	0.1	Metals-021	<0.1	1	<0.1	<0.1	0	128	126
Nickel	mg/kg	1	Metals-020	<1	1	1	2	67	103	101
Zinc	mg/kg	1	Metals-020	<1	1	3	3	0	102	99

QUALITY CONTROL: Acid Extractable metals in soil					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-7	382238-23
Date prepared	-			[NT]	12	04/06/2025	04/06/2025		04/06/2025	04/06/2025
Date analysed	-			[NT]	12	04/06/2025	04/06/2025		04/06/2025	04/06/2025
Arsenic	mg/kg	4	Metals-020	[NT]	12	<4	<4	0	111	106
Cadmium	mg/kg	0.4	Metals-020	[NT]	12	<0.4	<0.4	0	99	96
Chromium	mg/kg	1	Metals-020	[NT]	12	11	8	32	102	100
Copper	mg/kg	1	Metals-020	[NT]	12	4	4	0	105	106
Lead	mg/kg	1	Metals-020	[NT]	12	4	4	0	104	104
Mercury	mg/kg	0.1	Metals-021	[NT]	12	<0.1	<0.1	0	101	126
Nickel	mg/kg	1	Metals-020	[NT]	12	3	2	40	102	97
Zinc	mg/kg	1	Metals-020	[NT]	12	3	2	40	103	96

QUALITY CONTROL: Acid Extractable metals in soil					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date prepared	-			[NT]	22	04/06/2025	04/06/2025		[NT]	[NT]
Date analysed	-			[NT]	22	04/06/2025	04/06/2025		[NT]	[NT]
Arsenic	mg/kg	4	Metals-020	[NT]	22	<4	<4	0	[NT]	[NT]
Cadmium	mg/kg	0.4	Metals-020	[NT]	22	<0.4	<0.4	0	[NT]	[NT]
Chromium	mg/kg	1	Metals-020	[NT]	22	5	4	22	[NT]	[NT]
Copper	mg/kg	1	Metals-020	[NT]	22	5	4	22	[NT]	[NT]
Lead	mg/kg	1	Metals-020	[NT]	22	9	10	11	[NT]	[NT]
Mercury	mg/kg	0.1	Metals-021	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Nickel	mg/kg	1	Metals-020	[NT]	22	7	6	15	[NT]	[NT]
Zinc	mg/kg	1	Metals-020	[NT]	22	28	25	11	[NT]	[NT]

QUALITY CONTROL: Acid Extractable metals in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date prepared	-			[NT]	32	04/06/2025	04/06/2025		[NT]	[NT]
Date analysed	-			[NT]	32	04/06/2025	04/06/2025		[NT]	[NT]
Arsenic	mg/kg	4	Metals-020	[NT]	32	<4	<4	0	[NT]	[NT]
Cadmium	mg/kg	0.4	Metals-020	[NT]	32	<0.4	<0.4	0	[NT]	[NT]
Chromium	mg/kg	1	Metals-020	[NT]	32	4	5	22	[NT]	[NT]
Copper	mg/kg	1	Metals-020	[NT]	32	2	2	0	[NT]	[NT]
Lead	mg/kg	1	Metals-020	[NT]	32	4	4	0	[NT]	[NT]
Mercury	mg/kg	0.1	Metals-021	[NT]	32	<0.1	<0.1	0	[NT]	[NT]
Nickel	mg/kg	1	Metals-020	[NT]	32	2	2	0	[NT]	[NT]
Zinc	mg/kg	1	Metals-020	[NT]	32	6	6	0	[NT]	[NT]

QUALITY CONTROL: Misc Inorg - Soil					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-6	[NT]
Date prepared	-			06/06/2025	1	6/06/2025	6/06/2025		06/06/2025	[NT]
Date analysed	-			06/06/2025	1	6/06/2025	6/06/2025		06/06/2025	[NT]
pH 1:5 soil:water	pH Units		Inorg-001	[NT]	1	5.7	5.7	0	98	[NT]
Electrical Conductivity 1:5 soil:water	µS/cm	1	Inorg-002	<1	1	28	34	19	100	[NT]

QUALITY CONTROL: Misc Inorg - Soil					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-7	[NT]
Date prepared	-			[NT]	11	6/06/2025	6/06/2025		06/06/2025	[NT]
Date analysed	-			[NT]	11	6/06/2025	6/06/2025		06/06/2025	[NT]
pH 1:5 soil:water	pH Units		Inorg-001	[NT]	11	6.8	6.9	1	98	[NT]
Electrical Conductivity 1:5 soil:water	µS/cm	1	Inorg-002	[NT]	11	16	16	0	101	[NT]

QUALITY CONTROL: Misc Inorg - Soil					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date prepared	-			[NT]	21	6/06/2025	6/06/2025		[NT]	[NT]
Date analysed	-			[NT]	21	6/06/2025	6/06/2025		[NT]	[NT]
pH 1:5 soil:water	pH Units		Inorg-001	[NT]	21	6.2	6.2	0	[NT]	[NT]
Electrical Conductivity 1:5 soil:water	µS/cm	1	Inorg-002	[NT]	21	13	12	8	[NT]	[NT]

QUALITY CONTROL: Misc Inorg - Soil					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date prepared	-			[NT]	31	6/06/2025	6/06/2025		[NT]	[NT]
Date analysed	-			[NT]	31	6/06/2025	6/06/2025		[NT]	[NT]
pH 1:5 soil:water	pH Units		Inorg-001	[NT]	31	6.5	6.5	0	[NT]	[NT]
Electrical Conductivity 1:5 soil:water	µS/cm	1	Inorg-002	[NT]	31	17	17	0	[NT]	[NT]

QUALITY CONTROL: Organochlorine Pesticides in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-6	382238-3
Date extracted	-			04/06/2025	1	04/06/2025	04/06/2025		04/06/2025	04/06/2025
Date analysed	-			05/06/2025	1	05/06/2025	05/06/2025		05/06/2025	05/06/2025
alpha-BHC	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	84	80
HCB	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
beta-BHC	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	80	78
gamma-BHC	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Heptachlor	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	84	92
delta-BHC	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aldrin	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	88	98
Heptachlor Epoxide	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	90	104
gamma-Chlordane	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
alpha-chlordane	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Endosulfan I	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
pp-DDE	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	78	88
Dieldrin	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	88	106
Endrin	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	84	86
Endosulfan II	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
pp-DDD	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	78	88
Endrin Aldehyde	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
pp-DDT	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Endosulfan Sulphate	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	80	88
Methoxychlor	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Mirex	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Surrogate 4-Chloro-3-NBTF	%		Org-022/025	104	1	111	107	4	93	99

QUALITY CONTROL: Organochlorine Pesticides in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-7	382238-23
Date extracted	-			[NT]	12	04/06/2025	04/06/2025		04/06/2025	04/06/2025
Date analysed	-			[NT]	12	05/06/2025	05/06/2025		05/06/2025	05/06/2025
alpha-BHC	mg/kg	0.1	Org-022/025	[NT]	12	<0.1	<0.1	0	80	76
HCB	mg/kg	0.1	Org-022/025	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
beta-BHC	mg/kg	0.1	Org-022/025	[NT]	12	<0.1	<0.1	0	82	76
gamma-BHC	mg/kg	0.1	Org-022/025	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Heptachlor	mg/kg	0.1	Org-022/025	[NT]	12	<0.1	<0.1	0	82	88
delta-BHC	mg/kg	0.1	Org-022/025	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Aldrin	mg/kg	0.1	Org-022/025	[NT]	12	<0.1	<0.1	0	86	96
Heptachlor Epoxide	mg/kg	0.1	Org-022/025	[NT]	12	<0.1	<0.1	0	88	88
gamma-Chlordane	mg/kg	0.1	Org-022/025	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
alpha-chlordane	mg/kg	0.1	Org-022/025	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Endosulfan I	mg/kg	0.1	Org-022/025	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
pp-DDE	mg/kg	0.1	Org-022/025	[NT]	12	<0.1	<0.1	0	78	84
Dieldrin	mg/kg	0.1	Org-022/025	[NT]	12	<0.1	<0.1	0	90	88
Endrin	mg/kg	0.1	Org-022/025	[NT]	12	<0.1	<0.1	0	84	88
Endosulfan II	mg/kg	0.1	Org-022/025	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
pp-DDD	mg/kg	0.1	Org-022/025	[NT]	12	<0.1	<0.1	0	80	88
Endrin Aldehyde	mg/kg	0.1	Org-022/025	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
pp-DDT	mg/kg	0.1	Org-022/025	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Endosulfan Sulphate	mg/kg	0.1	Org-022/025	[NT]	12	<0.1	<0.1	0	78	86
Methoxychlor	mg/kg	0.1	Org-022/025	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Mirex	mg/kg	0.1	Org-022/025	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Surrogate 4-Chloro-3-NBTF	%		Org-022/025	[NT]	12	106	100	6	91	85

QUALITY CONTROL: Organochlorine Pesticides in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	22	04/06/2025	04/06/2025		[NT]	[NT]
Date analysed	-			[NT]	22	05/06/2025	05/06/2025		[NT]	[NT]
alpha-BHC	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
HCB	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
beta-BHC	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
gamma-BHC	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Heptachlor	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
delta-BHC	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Aldrin	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Heptachlor Epoxide	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
gamma-Chlordane	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
alpha-chlordane	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Endosulfan I	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
pp-DDE	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Dieldrin	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Endrin	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Endosulfan II	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
pp-DDD	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Endrin Aldehyde	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
pp-DDT	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Endosulfan Sulphate	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Methoxychlor	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Mirex	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Surrogate 4-Chloro-3-NBTF	%		Org-022/025	[NT]	22	107	98	9	[NT]	[NT]

QUALITY CONTROL: Organophosphorus Pesticides in Soil						Duplicate		Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-6	382238-3
Date extracted	-			04/06/2025	1	04/06/2025	04/06/2025		04/06/2025	04/06/2025
Date analysed	-			05/06/2025	1	05/06/2025	05/06/2025		05/06/2025	05/06/2025
Dichlorvos	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	100	94
Mevinphos	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Phorate	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Dimethoate	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Diazinon	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Disulfoton	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Chlorpyrifos-methyl	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Parathion-Methyl	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Ronnel	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	86	94
Fenitrothion	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	82	88
Malathion	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	92	98
Chlorpyrifos	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	84	92
Fenthion	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Parathion	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	74	72
Bromophos-ethyl	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Methidathion	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Fenamiphos	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Ethion	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	72	74
Phosalone	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Azinphos-methyl (Guthion)	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Coumaphos	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Surrogate 4-Chloro-3-NBTF	%		Org-022/025	104	1	111	107	4	93	99

QUALITY CONTROL: Organophosphorus Pesticides in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-7	382238-23
Date extracted	-			[NT]	12	04/06/2025	04/06/2025		04/06/2025	04/06/2025
Date analysed	-			[NT]	12	05/06/2025	05/06/2025		05/06/2025	05/06/2025
Dichlorvos	mg/kg	0.1	Org-022/025	[NT]	12	<0.1	<0.1	0	100	90
Mevinphos	mg/kg	0.1	Org-022/025	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Phorate	mg/kg	0.1	Org-022/025	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Dimethoate	mg/kg	0.1	Org-022/025	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Diazinon	mg/kg	0.1	Org-022/025	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Disulfoton	mg/kg	0.1	Org-022/025	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Chlorpyrifos-methyl	mg/kg	0.1	Org-022/025	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Parathion-Methyl	mg/kg	0.1	Org-022/025	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Ronnel	mg/kg	0.1	Org-022/025	[NT]	12	<0.1	<0.1	0	84	90
Fenitrothion	mg/kg	0.1	Org-022/025	[NT]	12	<0.1	<0.1	0	80	80
Malathion	mg/kg	0.1	Org-022/025	[NT]	12	<0.1	<0.1	0	86	92
Chlorpyriphos	mg/kg	0.1	Org-022/025	[NT]	12	<0.1	<0.1	0	84	90
Fenthion	mg/kg	0.1	Org-022/025	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Parathion	mg/kg	0.1	Org-022/025	[NT]	12	<0.1	<0.1	0	70	72
Bromophos-ethyl	mg/kg	0.1	Org-022/025	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Methidathion	mg/kg	0.1	Org-022/025	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Fenamiphos	mg/kg	0.1	Org-022/025	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Ethion	mg/kg	0.1	Org-022/025	[NT]	12	<0.1	<0.1	0	72	78
Phosalone	mg/kg	0.1	Org-022/025	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Azinphos-methyl (Guthion)	mg/kg	0.1	Org-022/025	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Coumaphos	mg/kg	0.1	Org-022/025	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Surrogate 4-Chloro-3-NBTF	%		Org-022/025	[NT]	12	106	100	6	91	85

QUALITY CONTROL: Organophosphorus Pesticides in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	22	04/06/2025	04/06/2025		[NT]	[NT]
Date analysed	-			[NT]	22	05/06/2025	05/06/2025		[NT]	[NT]
Dichlorvos	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Mevinphos	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Phorate	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Dimethoate	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Diazinon	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Disulfoton	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Chlorpyrifos-methyl	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Parathion-Methyl	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Ronnel	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Fenitrothion	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Malathion	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Chlorpyriphos	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Fenthion	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Parathion	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Bromophos-ethyl	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Methidathion	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Fenamiphos	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Ethion	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Phosalone	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Azinphos-methyl (Guthion)	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Coumaphos	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Surrogate 4-Chloro-3-NBTF	%		Org-022/025	[NT]	22	107	98	9	[NT]	[NT]

QUALITY CONTROL: Phenoxy Acid Herbicides in Soil					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-6	382238-3
Date extracted	-			05/06/2025	1	05/06/2025	05/06/2025		05/06/2025	05/06/2025
Date analysed	-			05/06/2025	1	05/06/2025	05/06/2025		05/06/2025	05/06/2025
Clopyralid	mg/kg	0.5	Org-029	<0.5	1	<0.5	<0.5	0	110	88
3,5-Dichlorobenzoic acid	mg/kg	0.5	Org-029	<0.5	1	<0.5	<0.5	0	104	97
o-chlorophenoxy acetic acid	mg/kg	0.5	Org-029	<0.5	1	<0.5	<0.5	0	128	99
4-CPA	mg/kg	0.5	Org-029	<0.5	1	<0.5	<0.5	0	121	102
Dicamba	mg/kg	0.5	Org-029	<0.5	1	<0.5	<0.5	0	96	83
MCPP	mg/kg	0.5	Org-029	<0.5	1	<0.5	<0.5	0	117	98
MCPA	mg/kg	0.5	Org-029	<0.5	1	<0.5	<0.5	0	103	90
Dichlorprop	mg/kg	0.5	Org-029	<0.5	1	<0.5	<0.5	0	94	83
2,4-D	mg/kg	0.5	Org-029	<0.5	1	<0.5	<0.5	0	115	101
Bromoxynil	mg/kg	0.5	Org-029	<0.5	1	<0.5	<0.5	0	110	84
Triclopyr	mg/kg	0.5	Org-029	<0.5	1	<0.5	<0.5	0	89	91
2,4,5-TP	mg/kg	0.5	Org-029	<0.5	1	<0.5	<0.5	0	108	93
2,4,5-T	mg/kg	0.5	Org-029	<0.5	1	<0.5	<0.5	0	99	118
MCPB	mg/kg	0.5	Org-029	<0.5	1	<0.5	<0.5	0	129	117
Dinoseb	mg/kg	1	Org-029	<1	1	<1	<1	0	116	112
2,4-DB	mg/kg	0.5	Org-029	<0.5	1	<0.5	<0.5	0	115	117
Ioxynil	mg/kg	1	Org-029	<1	1	<1	<1	0	96	86
Picloram	mg/kg	0.5	Org-029	<0.5	1	<0.5	<0.5	0	81	79
Acifluorfen	mg/kg	2	Org-029	<2	1	<2	<2	0	82	75
2,4,6-T	mg/kg	0.5	Org-029	<0.5	1	<0.5	<0.5	0	95	79
2,6-D	mg/kg	0.5	Org-029	<0.5	1	<0.5	<0.5	0	92	84
Bentazon	mg/kg	1	Org-029	<1	1	<1	<1	0	93	79
Chloramben	mg/kg	1	Org-029	<1	1	<1	<1	0	110	93
Fluroxypyr	mg/kg	1	Org-029	<1	1	<1	<1	0	109	93
Surrogate 2,4- DCPA	%		Org-029	120	1	110	120	9	111	101

QUALITY CONTROL: Phenoxy Acid Herbicides in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	12	05/06/2025	05/06/2025		[NT]	[NT]
Date analysed	-			[NT]	12	05/06/2025	05/06/2025		[NT]	[NT]
Clopyralid	mg/kg	0.5	Org-029	[NT]	12	<0.5	<0.5	0	[NT]	[NT]
3,5-Dichlorobenzoic acid	mg/kg	0.5	Org-029	[NT]	12	<0.5	<0.5	0	[NT]	[NT]
o-chlorophenoxy acetic acid	mg/kg	0.5	Org-029	[NT]	12	<0.5	<0.5	0	[NT]	[NT]
4-CPA	mg/kg	0.5	Org-029	[NT]	12	<0.5	<0.5	0	[NT]	[NT]
Dicamba	mg/kg	0.5	Org-029	[NT]	12	<0.5	<0.5	0	[NT]	[NT]
MCPP	mg/kg	0.5	Org-029	[NT]	12	<0.5	<0.5	0	[NT]	[NT]
MCPA	mg/kg	0.5	Org-029	[NT]	12	<0.5	<0.5	0	[NT]	[NT]
Dichlorprop	mg/kg	0.5	Org-029	[NT]	12	<0.5	<0.5	0	[NT]	[NT]
2,4-D	mg/kg	0.5	Org-029	[NT]	12	<0.5	<0.5	0	[NT]	[NT]
Bromoxynil	mg/kg	0.5	Org-029	[NT]	12	<0.5	<0.5	0	[NT]	[NT]
Triclopyr	mg/kg	0.5	Org-029	[NT]	12	<0.5	<0.5	0	[NT]	[NT]
2,4,5-TP	mg/kg	0.5	Org-029	[NT]	12	<0.5	<0.5	0	[NT]	[NT]
2,4,5-T	mg/kg	0.5	Org-029	[NT]	12	<0.5	<0.5	0	[NT]	[NT]
MCPB	mg/kg	0.5	Org-029	[NT]	12	<0.5	<0.5	0	[NT]	[NT]
Dinoseb	mg/kg	1	Org-029	[NT]	12	<1	<1	0	[NT]	[NT]
2,4-DB	mg/kg	0.5	Org-029	[NT]	12	<0.5	<0.5	0	[NT]	[NT]
Ioxynil	mg/kg	1	Org-029	[NT]	12	<1	<1	0	[NT]	[NT]
Picloram	mg/kg	0.5	Org-029	[NT]	12	<0.5	<0.5	0	[NT]	[NT]
Acifluorfen	mg/kg	2	Org-029	[NT]	12	<2	<2	0	[NT]	[NT]
2,4,6-T	mg/kg	0.5	Org-029	[NT]	12	<0.5	<0.5	0	[NT]	[NT]
2,6-D	mg/kg	0.5	Org-029	[NT]	12	<0.5	<0.5	0	[NT]	[NT]
Bentazon	mg/kg	1	Org-029	[NT]	12	<1	<1	0	[NT]	[NT]
Chloramben	mg/kg	1	Org-029	[NT]	12	<1	<1	0	[NT]	[NT]
Fluroxypyr	mg/kg	1	Org-029	[NT]	12	<1	<1	0	[NT]	[NT]
Surrogate 2,4- DCPA	%		Org-029	[NT]	12	110	99	11	[NT]	[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.

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.

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.

Air volumes are typically provided by customers (often as flow rate(s) and sampling time(s) and/or simply volumes) sampled or exposure times (determines 'volume' passive badges are exposed to)). Hence in such circumstances the volume measurement is inevitably not covered by Envirolab's NATA accreditation. An exception may occur where Envirolab Newcastle does the sampling where accreditation exists for certain types of sampling and hence volume determination(s). Note air volumes are often used to determine concentrations for dust and/or analyses on filters, sorbents and in impingers. For canister sampling, the air volume is covered by Envirolab's NATA accreditation.

Urine Analysis - The BEI values listed are taken from the 2022 edition of "TLVs and BEIs Threshold Limits" by ACGIH.

CHAIN OF CUSTODY - Client



ENVIROLAB GROUP

Company:	RCA Australia		RCA Reference Number (i.e. report title)		ENVIROLAB GROUP Sydney Lab - Envirolab Services 12 Ashley St, Chatswood, NSW 2067 02 9910 6200 sydney@envirolab.com.au
Contact person:	Fiona Brooker		17524-101		
Project Mgr:	Stephen Hendriksen		PO No. (if applicable):	Not applicable	
Sampler:	Stephen Hendriksen / Robert Cater		Envirolab Quote No. :	BM8	
Address:	92 Hill St Carrington, NSW 2294		Date results required:	Standard	
Phone:	02 4902 9200	Mob:	--		
Email results to:	administrator@rca.com.au + enviro@rca.com.au		Lab comments:		Note: Inform lab in advance if urgent turnaround is required - surcharge applies
Email invoice to:					

Sample information					Tests Required												Comments
Envirolab Sample ID	Client Sample ID	Date sampled	Type of sample	# Containers	ENM without Foreign Materials	OCOP	Phenoxyacid Herbicides	8 Metals	pH	EC							Provide as much information about the sample as you can
1	BH112A	29/05/2025	Soil	1 UP jar	X	X	X										
2	BH112C	29/05/2025	Soil	1 UP jar				X	X	X							
3	BH113A	29/05/2025	Soil	1 UP jar	X	X	X										
4	BH113C	29/05/2025	Soil	1 UP jar				X	X	X							
5	TP114A	29/05/2025	Soil	1 UP jar	X	X	X										
6	TP114B	29/05/2025	Soil	1 UP jar				X	X	X							
7	BH115A	29/05/2025	Soil	1 UP jar	X	X	X										
8	BH115B	29/05/2025	Soil	1 UP jar				X	X	X							
9	TP116A	29/05/2025	Soil	1 UP jar	X	X	X										
10	TP116C	29/05/2025	Soil	1 UP jar				X	X	X							
11	QA4	29/05/2025	Soil	1 UP jar				X	X	X							
Total				11	5	5	5	6	6	6							

Relinquished by (company):	RCA Australia	Received by (company):	Envirolab	Lab use only:			
Print Name: Ogmira		Print Name: S. Joseph		Job Number	382238	Cooling:	Ice / Ice Pack / None
Date & Time: 2/6/25		Date & Time: 2/6/25 15:31		Temperature	14°C	Security Seal:	Intact / Broken / Not Used
Signature: [Signature]		Signature: [Signature]		TAT Req:	SAME DAY / 1 / 2 / 3 / 4 / STD		


Envirolab Services
 12 Ashley St
 Chatswood NSW 2067
 Ph: (02) 9910 6200
 Job No: 382238
 Date Received: 31/5/25
 Time Received: 10:42
 Received By: SY
 Temp: Cool/Ambient
 Cooling: Ice/Icepack
 Security: Intact/Broken/None

CHAIN OF CUSTODY - Client



ENVIROLAB GROUP

Company:	RCA Australia		RCA Reference Number (i.e. report title)	
Contact person:	Fiona Brooker		17524-101	
Project Mgr:	Stephen Hendriksen		PO No. (if applicable):	Not applicable
Sampler:	Stephen Hendriksen / Robert Cater		Envirolab Quote No. :	BM8
Address:	92 Hill St Carrington, NSW 2294		Date results required:	Standard
Phone:	02 4902 9200	Mob:	--	
Email results to:	administrator@rca.com.au + enviro@rca.com.au		Note: Inform lab in advance if urgent turnaround is required - surcharge applies	
Email invoice to:			Lab comments:	

ENVIROLAB GROUP

Sydney Lab - Envirolab Services
12 Ashley St, Chatswood, NSW 2067
02 9910 6200 sydney@envirolab.com.au

Sample Information				# Containers	Tests Required										Comments
Envirolab Sample ID	Client Sample ID	Date sampled	Type of sample		ENM without Foreign Materials	OCOP	Phenoxyacid Herbicides	8 Metals	pH	EC					
11 12 -	BH117A	29/05/2025	Soil	1 UP jar	X	X	X								
12 13 -	BH117B	29/05/2025	Soil	1 UP jar				X	X	X					
13 14 -	TP118A	29/05/2025	Soil	1 UP jar	X	X	X								#382238
14 15 -	TP118D	29/05/2025	Soil	1 UP jar				X	X	X					57
ST 15 16 -	TP119A	29/05/2025	Soil	1 UP jar	X	X	X								316125
16 17 -	TP119B	29/05/2025	Soil	1 UP jar				X	X	X					
17 18 -	TP119C	29/05/2025	Soil	1 UP jar				X	X	X					
18 19 -	TP120A	29/05/2025	Soil	1 UP jar	X	X	X								
19 20 -	TP121A	29/05/2025	Soil	1 UP jar	X	X	X								
20 21 -	TP121B	29/05/2025	Soil	1 UP jar				X	X	X					
21 22 -	QA1	29/05/2025	Soil	1 UP jar	X	X	X								
Total				11	6	6	6	5	5	5					

Relinquished by (company):	RCA Australia	Received by (company):	Envirolab	Lab use only:	
Print Name: Damien		Print Name: S. Joseph		Job Number	382238
Date & Time: 2/6/25		Date & Time: 2/6/25 15:31		Cooling:	Ice / Ice Pack / None
Signature: [Signature]		Signature: [Signature]		Temperature	14°C
				Security Seal:	Intact / Broken / Not Used
				TAT Req:	SAME DAY / 1 / 2 / 3 / 4 / STD

CHAIN OF CUSTODY - Client



ENVIROLAB GROUP

Company:	RCA Australia		RCA Reference Number (i.e. report title)	
Contact person:	Fiona Brooker		17524-101	
Project Mgr:	Stephen Hendriksen		PO No. (if applicable):	Not applicable
Sampler:	Stephen Hendriksen / Robert Cater		Envirolab Quote No. :	BMB
Address:	92 Hill St Carrington, NSW 2294		Date results required:	Standard
Phone:	02 4902 9200	Mob:	--	
Email results to:	administrator@rca.com.au + enviro@rca.com.au		Note: Inform lab in advance if urgent turnaround is required - surcharge applies	
Email invoice to:				
Lab comments:				

ENVIROLAB GROUP

Sydney Lab - Envirolab Services
12 Ashley St, Chatswood, NSW 2067
02 9910 6200 sydney@envirolab.com.au

Sample Information				# Containers	Tests Required										Comments
Envirolab Sample ID	Client Sample ID	Date sampled	Type of sample		ENM without Foreign Materials	OCOP	Phenoxyacid Herbicides	8 Metals	pH	EC					
22 23	TP122A	29/05/2025	Soil	1 UP jar	X	X	X								
23 24	TP123A	29/05/2025	Soil	1 UP jar	X	X	X								
24 25	TP123C	29/05/2025	Soil	1 UP jar	X			X	X	X					#382238
25 26	BH104A	30/05/2025	Soil	1 UP jar	X										57
26 27	BH104B	30/05/2025	Soil	1 UP jar	X										216125
27 28	BH106A	29/05/2025	Soil	1 UP jar	X										
28 29	BH106B	29/05/2025	Soil	1 UP jar	X										
29 30	BH107A	29/05/2025	Soil	1 UP jar	X										
30 31	BH107B	29/05/2025	Soil	1 UP jar	X										
31 32	BH108A	29/05/2025	Soil	1 UP jar	X										
32 33	BH108B	29/05/2025	Soil	1 UP jar	X										
Total				11	11	2	2	1	1	1					

Relinquished by (company):	RCA Australia	Received by (company):	Envirolab	Lab use only:			
Print Name:	DG Mich	Print Name:	S. Joseph	Job Number	382238	Cooling:	Ice / Ice Pack / None
Date & Time:	2/6/25	Date & Time:	2/6/25 15:31	Temperature	14°C	Security Seal:	Intact / Broken / Not Used
Signature:	[Signature]	Signature:	[Signature]	TAT Req:	SAME DAY / 1 / 2 / 3 / 4 / STD		

CHAIN OF CUSTODY - Client



ENVIROLAB GROUP

Company:	RCA Australia	RCA Reference Number (i.e. report title)		ENVIROLAB GROUP Sydney Lab - Envirolab Services 12 Ashley St, Chatswood, NSW 2067 02 9910 6200 sydney@envirolab.com.au
Contact person:	Fiona Brooker	17524-101		
Project Mgr:	Stephen Hendriksen	PO No. (if applicable):	Not applicable	
Sampler:	Stephen Hendriksen / Robert Cater	Envirolab Quote No. :	BM8	
Address:	92 Hill St Carrington, NSW 2294	Date results required:	Standard	
Phone:	02 4902 9200	Mob:	--	
Email results to:	administrator@rca.com.au + enviro@rca.com.au		Lab comments:	
Email invoice to:				

Sample Information				# Containers	Tests Required												Comments
Envirolab Sample ID	Client Sample ID	Date sampled	Type of sample		ENM without Foreign Materials	OCOP	Phenoxycid Herbicides	8 Metals	pH	EC							Provide as much information about the sample as you can
33 34	BH109A	30/05/2025	Soil	1 UP jar	X												
34 35	BH109B	30/05/2025	Soil	1 UP jar	X												
35 36	BH111A	29/05/2025	Soil	1 UP jar	X												
36 37	BH111B	29/05/2025	Soil	1 UP jar	X												#382238
																	ST
																	31/5/25
Total				4	4	0	0	0	0	0							

Relinquished by (company):	RCA Australia	Received by (company):	Envirolab	Lab use only:			
Print Name: Damien		Print Name: S. Joseph	Job Number: 38 2238	Cooling:	Ice / Ice Pack / None		
Date & Time: 2/6/25		Date & Time: 2/6/25 15:31	Temperature: 14°C	Security Seal:	Intact / Broken / Not Used		
Signature: Di Blasi		Signature: S	TAT Req:	SAME DAY / 1 / 2 / 3 / 4 / STD			

SAMPLE RECEIPT ADVICE

Client Details

Client	RCA Australia
Attention	Fiona Brooker

Sample Login Details

Your reference	17524-101
Envirolab Reference	382238
Date Sample Received	03/06/2025
Date Instructions Received	03/06/2025
Date Results Expected to be Reported	10/06/2025

Sample Condition

Samples received in appropriate condition for analysis	Yes
No. of Samples Provided	37 Soil
Turnaround Time Requested	Standard
Temperature on Receipt (°C)	10
Cooling Method	Ice Pack
Sampling Date Provided	YES

Comments

Nil

Please direct any queries to:

Aileen Hie

Phone: 02 9910 6200
Fax: 02 9910 6201
Email: ahie@envirolab.com.au

Jacinta Hurst

Phone: 02 9910 6200
Fax: 02 9910 6201
Email: jhurst@envirolab.com.au

Analysis Underway, details on the following page:



Envirolab Services Pty Ltd

ABN 37 112 535 645

12 Ashley St Chatswood NSW 2067

ph 02 9910 6200 fax 02 9910 6201

customerservice@envirolab.com.au

www.envirolab.com.au

Sample ID	VTRH(C6-C10)/BTEXN in Soil	svTRH (C10-C40) in Soil	PAHs in Soil	Acid Extractable metals in soil	Misc Inorg - Soil	Organochlorine Pesticides in soil	Organophosphorus Pesticides in Soil	Phenoxy Acid Herbicides in Soil
BH112A	✓	✓	✓	✓	✓	✓	✓	✓
BH112C				✓	✓			
BH113A	✓	✓	✓	✓	✓	✓	✓	✓
BH113C				✓	✓			
TP114A	✓	✓	✓	✓	✓	✓	✓	✓
TP114B				✓	✓			
BH115A	✓	✓	✓	✓	✓	✓	✓	✓
BH115B				✓	✓			
TP116A	✓	✓	✓	✓	✓	✓	✓	✓
TP116C				✓	✓			
QA4				✓	✓			
BH117A	✓	✓	✓	✓	✓	✓	✓	✓
BH117B				✓	✓			
TP118A	✓	✓	✓	✓	✓	✓	✓	✓
TP118D				✓	✓			
TP119A	✓	✓	✓	✓	✓	✓	✓	✓
TP119B				✓	✓			
TP119C				✓	✓			
TP120A	✓	✓	✓	✓	✓	✓	✓	✓
TP121A	✓	✓	✓	✓	✓	✓	✓	✓
TP121B				✓	✓			
QA1	✓	✓	✓	✓	✓	✓	✓	✓
TP122A	✓	✓	✓	✓	✓	✓	✓	✓
TP123A	✓	✓	✓	✓	✓	✓	✓	✓
TP123C	✓	✓	✓	✓	✓			
BH104A	✓	✓	✓	✓	✓			
BH104B	✓	✓	✓	✓	✓			
BH106A	✓	✓	✓	✓	✓			
BH106B	✓	✓	✓	✓	✓			
BH107A	✓	✓	✓	✓	✓			
BH107B	✓	✓	✓	✓	✓			
BH108A	✓	✓	✓	✓	✓			



Envirolab Services Pty Ltd

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Sample ID	VTRH(C6-C10)/BTEXN in Soil	svTRH (C10-C40) in Soil	PAHs in Soil	Acid Extractable metals in soil	Misc Inorg - Soil	Organochlorine Pesticides in soil	Organophosphorus Pesticides in Soil	Phenoxy Acid Herbicides in Soil
BH108B	✓	✓	✓	✓	✓			
BH109A	✓	✓	✓	✓	✓			
BH109B	✓	✓	✓	✓	✓			
BH111A	✓	✓	✓	✓	✓			
BH111B	✓	✓	✓	✓	✓			

The '✓' indicates the testing you have requested. **THIS IS NOT A REPORT OF THE RESULTS.**

Additional Info

Sample storage - Waters are routinely disposed of approximately 1 month and soils approximately 2 months from receipt.

Requests for longer term sample storage must be received in writing.

Please contact the laboratory immediately if observed settled sediment present in water samples is to be included in the extraction and/or analysis (exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, Total Recoverable metals and PFAS analysis where solids are included by default.

TAT for Micro is dependent on incubation. This varies from 3 to 6 days.

Appendix H

Summary of Results

Sample Identification	Sample Depth (m) ^B	Date	Sample Profile	Dominant Stratum ^C	PID (ppm)	Sample Purpose	Sample Collected by	Benzene, Toluene, Ethylbenzene, Xylene (BTEX)	Benzene	Toluene	Ethylbenzene	meta- and para-Xylene	ortho-Xylene	Total Xylenes	Polycyclic Aromatic Hydrocarbons (PAH)	Naphthalene	Total Recoverable Hydrocarbons (TRH)	TRH C ₆ -C ₁₀	TRH >C ₁₀ -C ₁₆	TRH >C ₁₆ -C ₃₄	TRH >C ₃₄ -C ₄₀	F1	F2			
Guideline ^A						HSL 'D'	SAND 0-<1m		3	NL	NL			230		NL						260	NL			
							SAND 1-<2m		3	NL	NL			NL		NL				370	NL					
						SAND 2-<4m	3		NL	NL			NL	NL					630	NL						
						ESL C&I	Coarse		75	135	165			180								170	1700	3300	215	
						Non-sensitive ML	Coarse														700	1000	3500	10000		
						DC D			430	99000	27000			81000				11000	26000	20000	27000	38000				
PQL								0.2	0.5	1	2	1	3	1	25	50	100	100	25	50						
BH104A	3.0	30/05/2025	SAND, fine to medium grained, orange-brown with silt	SAND	0	Characterisation	RCA - RC		<0.2	<0.5	<1	<2	<1	1.5		<1		<25	<50	<100	<100	<25	<50			
BH104B	4.0	30/05/2025	SAND, fine to medium grained, orange-brown with silt	SAND	0	Characterisation	RCA - RC		<0.2	<0.5	<1	<2	<1	1.5		<1		<25	<50	<100	<100	<25	<50			
BH106A	3.0	29/05/2025	Sandy CLAY, medium plasticity, grey	SAND	0	Characterisation	RCA - TS		<0.2	<0.5	<1	<2	<1	1.5		<1		<25	<50	<100	<100	<25	<50			
BH106B	4.0	29/05/2025	Sandy CLAY, medium plasticity, red-brown with fine gravel and bands of clayey gravel	SAND	0	Characterisation	RCA - TS		<0.2	<0.5	<1	<2	<1	1.5		<1		<25	<50	<100	<100	<25	<50			
BH107A	3.0	29/05/2025	SAND with Silt, yellow brown, fine to medium grained sand	SAND	0	Characterisation	RCA - TS		<0.2	<0.5	<1	<2	<1	1.5		<1		<25	<50	<100	<100	<25	<50			
BH107B	4.0	29/05/2025	SAND with Silt, yellow brown, fine to medium grained sand, grey	SAND	0	Characterisation	RCA - TS		<0.2	<0.5	<1	<2	<1	1.5		<1		<25	<50	<100	<100	<25	<50			
BH108A	3.0	29/05/2025	SAND with Silt, brown, fine to medium grained sand	SAND	0	Characterisation	RCA - TS		<0.2	<0.5	<1	<2	<1	1.5		<1		<25	<50	<100	<100	<25	<50			
BH108B	3.8	29/05/2025	Gravelly SAND with Silt, brown, weakly cemented	SAND	0	Characterisation	RCA - TS		<0.2	<0.5	<1	<2	<1	1.5		<1		<25	<50	<100	<100	<25	<50			
BH109A	3.0	30/05/2025	Silty SAND, fine grained, brown	SAND	0	Characterisation	RCA - RC		<0.2	<0.5	<1	<2	<1	1.5		<1		<25	<50	<100	<100	<25	<50			
BH109B	4.0	30/05/2025	Silty SAND fine to coarse grained, brown, trace clay	SAND	0	Characterisation	RCA - RC		<0.2	<0.5	<1	<2	<1	1.5		<1		<25	<50	<100	<100	<25	<50			
BH111A	3.0	29/05/2025	Sandy CLAY, medium plasticity, yellow brown mottled grey	SAND	0	Characterisation	RCA - TS		<0.2	<0.5	<1	<2	<1	1.5		<1		<25	<50	<100	<100	<25	<50			
BH111B	4.0	29/05/2025	Clayey SAND, fine to medium sand, yellow-orange	SAND	0	Characterisation	RCA - TS		<0.2	<0.5	<1	<2	<1	1.5		<1		<25	<50	<100	<100	<25	<50			
BH112A	0.1	29/05/2025	TOPSOIL, Sandy SILT, low plasticity, grey-brown	SAND	0	Characterisation	RCA - SH		<0.2	<0.5	<1	<2	<1	1.5		<1		<25	<50	<100	<100	<25	<50			
BH112C	1.0	29/05/2025	Silty SAND, fine grained, grey mottled orange	SAND	0	Characterisation	RCA - SH		--	--	--	--	--	--		--		--	--	--	--	--	--			
BH113A	0.1	29/05/2025	TOPSOIL, Silty SAND, fine grained, brown	SAND	0	Characterisation	RCA - SH		<0.2	<0.5	<1	<2	<1	1.5		<1		<25	<50	<100	<100	<25	<50			
BH113C	1.0	29/05/2025	Silty SAND, fine grained, brown	SAND	0	Characterisation	RCA - SH		--	--	--	--	--	--		--		--	--	--	--	--	--			
TP114A	0.1	29/05/2025	FILL, Clayey Sandy GRAVEL, fine to medium, dark brown, sub-angular	SAND	0	Characterisation	RCA - SH		<0.2	<0.5	<1	<2	<1	1.5		<1		<25	<50	<100	<100	<25	<50			
TP114B	0.5	29/05/2025	Sandy CLAY, low plasticity, grey mottled orange-brown	SAND	0	Characterisation	RCA - SH		--	--	--	--	--	--		--		--	--	--	--	--	--			
BH115A	0.1	29/05/2025	TOPSOIL, Sandy SILT, low plasticity, dark grey	SAND	0	Characterisation	RCA - SH		<0.2	<0.5	<1	<2	<1	1.5		<1		<25	<50	<100	<100	<25	<50			
BH115B	0.5	29/05/2025	Silty SAND, fine grained, pale brown	SAND	0	Characterisation	RCA - SH		--	--	--	--	--	--		--		--	--	--	--	--	--			
TP116A	0.1	29/05/2025	TOPSOIL, Silty SAND, fine grained, brown	SAND	0	Characterisation	RCA - SH		<0.2	<0.5	<1	<2	<1	1.5		<1		<25	<50	<100	<100	<25	<50			
TP116C	1.0	29/05/2025	Sandy CLAY, low plasticity, pale grey mottled orange with bands of clayey sand	SAND	0	Characterisation	RCA - SH		--	--	--	--	--	--		--		--	--	--	--	--	--			
BH117A	0.1	29/05/2025	TOPSOIL, Sandy SILT, low plasticity, grey, fine grained sand	SAND	0	Characterisation	RCA - SH		<0.2	<0.5	<1	<2	<1	1.5		<1		<25	<50	<100	<100	<25	<50			
BH117B	0.5	29/05/2025	Sandy SILT, low plasticity, grey, fine grained sand	SAND	0	Characterisation	RCA - SH		--	--	--	--	--	--		--		--	--	--	--	--	--			
TP118A	0.1	29/05/2025	TOPSOIL, Silty SAND, fine grained, pale brown	SAND	0	Characterisation	RCA - SH	<0.2	<0.5	<1	<2	<1	1.5	<1	<25	<50	<100	<100	<25	<50						
TP118D	2.0	29/05/2025	Sandy Silty CLAY, low plasticity, pale grey with orange mottles with bands of clayey sand	SAND	0	Characterisation	RCA - SH	--	--	--	--	--	--	--	--	--	--	--	--	--						
TP119A	0.1	29/05/2025	TOPSOIL, Silty Clayey SAND, fine grained, dark brown	SAND	0	Characterisation	RCA - SH	<0.2	<0.5	<1	<2	<1	1.5	<1	<25	<50	<100	<100	<25	<50						
TP119B	0.5	29/05/2025	Silty Clayey SAND, fine grained, brown	SAND	0	Characterisation	RCA - SH	--	--	--	--	--	--	--	--	--	--	--	--	--						
TP119C	1.0	29/05/2025	Sandy Silty CLAY, medium plasticity, grey with orange mottles, fine grained sand	SAND	0	Characterisation	RCA - SH	--	--	--	--	--	--	--	--	--	--	--	--	--						
TP120A	0.1	29/05/2025	TOPSOIL, Silty SAND, fine grained, brown	SAND	0	Characterisation	RCA - SH	<0.2	<0.5	<1	<2	<1	1.5	<1	<25	<50	<100	<100	<25	<50						
TP121A	0.1	29/05/2025	TOPSOIL, Silty SAND, fine grained, brown	SAND	0	Characterisation	RCA - SH	<0.2	<0.5	<1	<2	<1	1.5	<1	<25	<50	<100	<100	<25	<50						

Sample Identification	Sample Depth (m) ^B	Date	Sample Profile	Dominant Stratum ^C	PID (ppm)	Sample Purpose	Sample Collected by	Benzene, Toluene, Ethylbenzene, Xylene (BTEX)	Benzene	Toluene	Ethylbenzene	meta- and para-Xylene	ortho-Xylene	Total Xylenes	Polycyclic Aromatic Hydrocarbons (PAH)	Naphthalene	Total Recoverable Hydrocarbons (TRH)	TRH C ₆ -C ₁₀	TRH >C ₁₀ -C ₁₆	TRH >C ₁₆ -C ₃₄	TRH >C ₃₄ -C ₄₀	F1	F2
Guideline ^A						HSL 'D'	SAND 0-<1m		3	NL	NL			230		NL						260	NL
							SAND 1-<2m		3	NL	NL			NL		NL						370	NL
							SAND 2-<4m		3	NL	NL			NL		NL						630	NL
						ESL C&I	Coarse		75	135	165			180		370			170	1700	3300	215	
						Non-sensitive ML	Coarse											700	1000	3500	10000		
						DC D			430	99000	27000			81000		11000		26000	20000	27000	38000		
PQL									0.2	0.5	1	2	1	3		1		25	50	100	100	25	50
TP121B	0.5	29/05/2025	Silty SAND, fine grained, brown	SAND	0	Characterisation	RCA - SH		--	--	--	--	--	--		--		--	--	--	--	--	--
TP122A	0.1	29/05/2025	TOPSOIL, Silty SAND, fine grained dark brown	SAND	0	Characterisation	RCA - SH		<0.2	<0.5	<1	<2	<1	1.5		<1		<25	<50	<100	<100	<25	<50
TP123A	0.1	29/05/2025	TOPSOIL, Silty SAND, fine grained, brown	SAND	0	Characterisation	RCA - SH		<0.2	<0.5	<1	<2	<1	1.5		<1		<25	<50	<100	<100	<25	<50
TP123C	1.0	29/05/2025	Silty SAND, fine grained, brown	SAND	0	Characterisation	RCA - SH		<0.2	<0.5	<1	<2	<1	1.5		<1		<25	<50	<100	<100	<25	<50

All results are in units of mg/kg. Blank Cell indicates no criterion available

PQL = Practical Quantitation Limit. Where PQL is for a summation, PQL of all components is summed and may be different from that presented by laboratory

F1 = TRH C₆-C₁₀ minus BTEX. F1 PQL deemed equal TRH C₆-C₁₀.

F2 = TRH >C₁₀-C₁₆ minus naphthalene. F2 PQL deemed = TRH >C₁₀-C₁₆.

^A ASC NEPM 1999 (amended April 2013) Vapour Based Health Screening Levels (HSL) 'D' (Commercial/Industrial)

^A ASC NEPM 1999 (amended April 2013) Ecological Screening Levels (ESL) , C&I (Commercial and Industrial)

^A ASC NEPM 1999 (amended April 2013) Management Limits (ML) , Non-Sensitive Sites (Commercial and Industrial)

^A CRC Care Technical Report 10, September 2011 Direct Contact (DC) Health Screening Levels 'D' (Commercial/Industrial)

^B Start of sample, refer to logs for sample interval

^C Note that this is a generalisation for the purpose of comparing to the HSL criteria. Where two strata equally represented, most conservative criterion used

NL designates 'Not Limiting' indicating that the pore water concentration required to constitute a vapour risk is higher than the solubility capacity for that compound based on a petroleum mixture. Vapour is therefore not a risk for this compound.

Where summation required (Xylene, F1, F2) calculation includes components reported as non detected as 1/2 PQL.

Results for TRH have been compared to TPH guidelines

Presented ESL for naphthalene is an Ecological Investigation Level

ESL are applicable for material at less than 2m depths below finished surface/ground level

For the purpose of the Tier 1 ESL/EIL assessment, all background concentrations are assumed to be zero

ESL for TRH >C₁₆-C₃₄ and >C₃₄-C₄₀ are low reliability

Results shown in **BOLD** are in excess of the vapour based HSL

Results shown in shading are >250% of the vapour based HSL

Results shown in underline are in excess of the ESL

Results shown in *italics* are in excess of the management limit

Results shown in patterned cells are in excess of the direct contact HSL

Sample Identification	PQL	Guideline ^A		BH104A	BH104B	BH106A	BH106B	BH107A	BH107B	BH108A	BH108B	BH109A	BH109B	BH111A	BH111B	BH112A
Sample Depth (m) ^B		HIL 'D'	EIL C&I	3.0	4.0	3.0	4.0	3.0	4.0	3.0	3.8	3.0	4.0	3.0	4.0	0.1
Date				30/05/2025	30/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025	30/05/2025	30/05/2025	29/05/2025	29/05/2025	29/05/2025
Sample Profile				SAND, fine to medium grained, orange-brown with silt	SAND, fine to medium grained, orange-brown with silt	Sandy CLAY, medium plasticity, grey	Sandy CLAY, medium plasticity, red-brown with fine gravel and bands of clayey gravel	SAND with Silt, yellow brown, fine to medium grained sand	SAND with Silt, yellow brown, fine to medium grained sand, grey	SAND with Silt, brown, fine to medium grained sand	Gravelly SAND with Silt, brown, weakly cemented	Silty SAND, fine grained, brown	Silty SAND fine to coarse grained, brown, trace clay	Sandy CLAY, medium plasticity, yellow brown mottled grey	Clayey SAND, fine to medium sand, yellow-orange	TOPSOIL, Sandy SILT, low plasticity, grey-brown
Sample Purpose				Characterisation	Characterisation	Characterisation	Characterisation	Characterisation	Characterisation	Characterisation	Characterisation	Characterisation	Characterisation	Characterisation	Characterisation	Characterisation
Sample collected by				RCA - RC	RCA - RC	RCA - TS	RCA - TS	RCA - TS	RCA - TS	RCA - TS	RCA - TS	RCA - RC	RCA - RC	RCA - TS	RCA - TS	RCA - SH
General Soil Chemistry																
pH (pH units)				7.2	7.3	7	6.5	6.8	6.5	6.8	6.4	6.4	6.2	8.3	6.8	5.7
Electrical Conductivity (µS/cm)	1			16	49	24	28	10	17	11	39	18	15	140	56	28
Polycyclic Aromatic Hydrocarbons (PAH)																
Naphthalene	0.1		370	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benz(a)anthracene	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b)&(j)&(k)fluoranthene	0.2			<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a) pyrene	0.05		1.4	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenz(a,h)anthracene	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAH (B(a)P equivalent)	0.192	40		0.096	0.096	0.096	0.096	0.096	0.096	0.096	0.096	0.096	0.096	0.096	0.096	0.096
Sum of reported PAH	1.55	4000		0.775	0.775	0.775	0.775	0.775	0.775	0.775	0.775	0.775	0.775	0.775	0.775	0.775
Metals																
Arsenic	4	3000	160	<4	<4	<4	5	<4	5	<4	12	<4	10	8	5	<4
Cadmium	0.4	900		<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	1	3600	310	3	10	6	7	3	5	4	6	8	12	9	7	5
Copper	1	240000	400	2	2	4	3	1	3	2	3	2	3	2	3	1
Mercury	0.1	730		<0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lead	1	1500	1800	3	6	5	7	3	7	4	9	5	11	18	6	4
Nickel	1	6000	55	<1	2	3	5	1	4	2	7	3	6	4	3	1
Zinc	1	400000	360	3	8	4	15	4	15	6	23	10	20	11	8	3
Organochlorine Pesticides (OCP)																
HCB	0.1	80		--	--	--	--	--	--	--	--	--	--	--	--	<0.1
Heptachlor	0.1	50		--	--	--	--	--	--	--	--	--	--	--	--	<0.1
Endrin	0.1	100		--	--	--	--	--	--	--	--	--	--	--	--	<0.1
DDT	0.1		640	--	--	--	--	--	--	--	--	--	--	--	--	<0.1
Methoxychlor	0.1	2500		--	--	--	--	--	--	--	--	--	--	--	--	<0.1
Mirex	0.1	100		--	--	--	--	--	--	--	--	--	--	--	--	<0.1
Chlordane (cis + trans)	0.2	530		--	--	--	--	--	--	--	--	--	--	--	--	0.05
DDT+DDD+DDE	0.3	3600		--	--	--	--	--	--	--	--	--	--	--	--	0.15
Aldrin + Dieldrin	0.2	45		--	--	--	--	--	--	--	--	--	--	--	--	0.1
Endosulfan (aplha+beta)	0.2	2000		--	--	--	--	--	--	--	--	--	--	--	--	0.1
Remainder of OCP (7 compounds)	0.7			--	--	--	--	--	--	--	--	--	--	--	--	0.35

Sample Identification	PQL	Guideline ^A		BH112C	BH113A	BH113C	TP114A	TP114B	BH115A	BH115B	TP116A	TP116C	BH117A	BH117B	TP118A	TP118D
Sample Depth (m) ^B		HIL 'D'	EIL C&I	1.0	0.1	1.0	0.1	0.5	0.1	0.5	0.1	1.0	0.1	0.5	0.1	2.0
Date				29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025
Sample Profile				Silty SAND, fine grained, grey mottled orange	TOPSOIL, Silty SAND, fine grained, brown	Silty SAND, fine grained, brown	FILL, Clayey Sandy GRAVEL, fine to medium, dark brown, sub-angular	Sandy CLAY, low plasticity, grey mottled orange-brown	TOPSOIL, Sandy SILT, low plasticity, dark grey	Silty SAND, fine grained, pale brown	TOPSOIL, Silty SAND, fine grained, brown	Sandy CLAY, low plasticity, pale grey mottled orange with bands of clayey sand	TOPSOIL, Sandy SILT, low plasticity, grey, fine grained sand	Sandy SILT, low plasticity, grey, fine grained sand	TOPSOIL, Silty SAND, fine grained, pale brown	Sandy Silty CLAY, low plasticity, pale grey with orange mottles with bands of clayey sand
Sample Purpose				Characterisation	Characterisation	Characterisation	Characterisation	Characterisation	Characterisation	Characterisation	Characterisation	Characterisation	Characterisation	Characterisation	Characterisation	Characterisation
Sample collected by				RCA - SH	RCA - SH	RCA - SH	RCA - SH	RCA - SH	RCA - SH	RCA - SH	RCA - SH	RCA - SH	RCA - SH	RCA - SH	RCA - SH	RCA - SH
General Soil Chemistry																
pH (pH units)				7	5.9	6.5	7.2	8.7	6.5	7	6.9	6.2	6.5	6.4	5.9	8.2
Electrical Conductivity (µS/cm)	1			50	20	11	110	40	21	15	32	63	69	160	24	52
Polycyclic Aromatic Hydrocarbons (PAH)																
Naphthalene	0.1		370	--	<0.1	--	<0.1	--	<0.1	--	<0.1	--	<0.1	--	<0.1	--
Acenaphthylene	0.1			--	<0.1	--	<0.1	--	<0.1	--	<0.1	--	<0.1	--	<0.1	--
Acenaphthene	0.1			--	<0.1	--	<0.1	--	<0.1	--	<0.1	--	<0.1	--	<0.1	--
Fluorene	0.1			--	<0.1	--	<0.1	--	<0.1	--	<0.1	--	<0.1	--	<0.1	--
Phenanthrene	0.1			--	<0.1	--	<0.1	--	<0.1	--	<0.1	--	<0.1	--	<0.1	--
Anthracene	0.1			--	<0.1	--	<0.1	--	<0.1	--	<0.1	--	<0.1	--	<0.1	--
Fluoranthene	0.1			--	<0.1	--	0.2	--	<0.1	--	<0.1	--	<0.1	--	<0.1	--
Pyrene	0.1			--	<0.1	--	0.3	--	<0.1	--	<0.1	--	<0.1	--	<0.1	--
Benz(a)anthracene	0.1			--	<0.1	--	0.1	--	<0.1	--	<0.1	--	<0.1	--	<0.1	--
Chrysene	0.1			--	<0.1	--	0.1	--	<0.1	--	<0.1	--	<0.1	--	<0.1	--
Benzo(b)&(j)&(k)fluoranthene	0.2			--	<0.2	--	0.3	--	<0.2	--	<0.2	--	<0.2	--	<0.2	--
Benzo(a) pyrene	0.05		1.4	--	<0.05	--	0.1	--	<0.05	--	<0.05	--	<0.05	--	<0.05	--
Indeno(1,2,3-c,d)pyrene	0.1			--	<0.1	--	0.9	--	<0.1	--	<0.1	--	<0.1	--	<0.1	--
Dibenz(a,h)anthracene	0.1			--	<0.1	--	<0.1	--	<0.1	--	<0.1	--	<0.1	--	<0.1	--
Carcinogenic PAH (B(a)P equivalent)	0.192	40		--	0.096	--	0.283	--	0.096	--	0.096	--	0.096	--	0.096	--
Sum of reported PAH	1.55	4000		--	0.775	--	2.55	--	0.775	--	0.775	--	0.775	--	0.775	--
Metals																
Arsenic	4	3000	160	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Cadmium	0.4	900		<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	1	3600	310	18	5	5	8	4	6	7	7	6	11	7	3	4
Copper	1	240000	400	<1	3	1	9	<1	1	<1	1	1	4	<1	2	2
Mercury	0.1	730		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lead	1	1500	1800	7	3	3	54	2	3	2	3	5	4	2	4	4
Nickel	1	6000	55	3	2	2	14	1	2	2	2	1	3	2	1	2
Zinc	1	400000	360	3	4	2	21	<1	2	1	2	2	3	1	6	4
Organochlorine Pesticides (OCP)																
HCB	0.1	80		--	<0.1	--	<0.1	--	<0.1	--	<0.1	--	<0.1	--	<0.1	--
Heptachlor	0.1	50		--	<0.1	--	<0.1	--	<0.1	--	<0.1	--	<0.1	--	<0.1	--
Endrin	0.1	100		--	<0.1	--	<0.1	--	<0.1	--	<0.1	--	<0.1	--	<0.1	--
DDT	0.1		640	--	<0.1	--	<0.1	--	<0.1	--	<0.1	--	<0.1	--	<0.1	--
Methoxychlor	0.1	2500		--	<0.1	--	<0.1	--	<0.1	--	<0.1	--	<0.1	--	<0.1	--
Mirex	0.1	100		--	<0.1	--	<0.1	--	<0.1	--	<0.1	--	<0.1	--	<0.1	--
Chlordane (cis + trans)	0.2	530		--	0.05	--	0.05	--	0.05	--	0.05	--	0.05	--	0.05	--
DDT+DDD+DDE	0.3	3600		--	0.15	--	0.15	--	0.15	--	0.15	--	0.15	--	0.15	--
Aldrin + Dieldrin	0.2	45		--	0.1	--	0.1	--	0.1	--	0.1	--	0.1	--	0.1	--
Endosulfan (aplha+beta)	0.2	2000		--	0.1	--	0.1	--	0.1	--	0.1	--	0.1	--	0.1	--
Remainder of OCP (7 compounds)	0.7			--	0.35	--	0.35	--	0.35	--	0.35	--	0.35	--	0.35	--

Sample Identification	PQL	Guideline ^A		TP119A	TP119B	TP119C	TP120A	TP121A	TP121B	TP122A	TP123A	TP123C
Sample Depth (m) ^B		HIL 'D'	EIL C&I	0.1	0.5	1.0	0.1	0.1	0.5	0.1	0.1	1.0
Date				29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025
Sample Profile				TOPSOIL, Silty Clayey SAND. fine grained, dark brown	Silty Clayey SAND, fine grained, brown	Sandy Silty CLAY, medium plasticity, grey with orange mottles, fine grained sand	TOPSOIL, Silty SAND, fine grained, brown	TOPSOIL, Silty SAND, fine grained, brown	Silty SAND, fine grained, brown	TOPSOIL, Silty SAND, fine grained dark brown	TOPSOIL, Silty SAND, fine grained, brown	Silty SAND, fine grained, brown
Sample Purpose				Characterisation	Characterisation	Characterisation	Characterisation	Characterisation	Characterisation	Characterisation	Characterisation	Characterisation
Sample collected by				RCA - SH	RCA - SH	RCA - SH	RCA - SH	RCA - SH	RCA - SH	RCA - SH	RCA - SH	RCA - SH
General Soil Chemistry												
pH (pH units)				5.9	6.6	7.4	6.1	6.3	6.2	6.3	5.8	6.3
Electrical Conductivity (µS/cm)	1			33	11	59	28	25	13	27	17	8
Polycyclic Aromatic Hydrocarbons (PAH)												
Naphthalene	0.1		370	<0.1	--	--	<0.1	<0.1	--	<0.1	<0.1	<0.1
Acenaphthylene	0.1			<0.1	--	--	<0.1	<0.1	--	<0.1	<0.1	<0.1
Acenaphthene	0.1			<0.1	--	--	<0.1	<0.1	--	<0.1	<0.1	<0.1
Fluorene	0.1			<0.1	--	--	<0.1	<0.1	--	<0.1	<0.1	<0.1
Phenanthrene	0.1			<0.1	--	--	<0.1	<0.1	--	<0.1	<0.1	<0.1
Anthracene	0.1			<0.1	--	--	<0.1	<0.1	--	<0.1	<0.1	<0.1
Fluoranthene	0.1			<0.1	--	--	<0.1	<0.1	--	0.2	0.1	<0.1
Pyrene	0.1			<0.1	--	--	<0.1	<0.1	--	0.2	0.1	<0.1
Benz(a)anthracene	0.1			<0.1	--	--	<0.1	<0.1	--	<0.1	<0.1	<0.1
Chrysene	0.1			<0.1	--	--	<0.1	<0.1	--	<0.1	<0.1	<0.1
Benzo(b)&(j)&(k)fluoranthene	0.2			<0.2	--	--	<0.2	<0.2	--	<0.2	<0.2	<0.2
Benzo(a) pyrene	0.05		1.4	<0.05	--	--	<0.05	<0.05	--	0.07	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	0.1			<0.1	--	--	<0.1	<0.1	--	0.5	0.3	<0.1
Dibenz(a,h)anthracene	0.1			<0.1	--	--	<0.1	<0.1	--	<0.1	<0.1	<0.1
Carcinogenic PAH (B(a)P equivalent)	0.192	40		0.096	--	--	0.096	0.096	--	0.186	0.121	0.096
Sum of reported PAH	1.55	4000		0.775	--	--	0.775	0.775	--	1.570	1.125	0.775
Metals												
Arsenic	4	3000	160	<4	<4	<4	<4	<4	<4	<4	<4	<4
Cadmium	0.4	900		<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	1	3600	310	5	4	12	3	4	3	9	7	4
Copper	1	240000	400	7	<1	2	2	4	2	8	8	1
Mercury	0.1	730		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lead	1	1500	1800	8	3	11	4	9	3	7	7	3
Nickel	1	6000	55	2	2	6	1	5	4	16	17	2
Zinc	1	400000	360	8	2	7	6	22	4	24	26	3
Organochlorine Pesticides (OCP)												
HCB	0.1	80		<0.1	--	--	<0.1	<0.1	--	<0.1	<0.1	--
Heptachlor	0.1	50		<0.1	--	--	<0.1	<0.1	--	<0.1	<0.1	--
Endrin	0.1	100		<0.1	--	--	<0.1	<0.1	--	<0.1	<0.1	--
DDT	0.1		640	<0.1	--	--	<0.1	<0.1	--	<0.1	<0.1	--
Methoxychlor	0.1	2500		<0.1	--	--	<0.1	<0.1	--	<0.1	<0.1	--
Mirex	0.1	100		<0.1	--	--	<0.1	<0.1	--	<0.1	<0.1	--
Chlordane (cis + trans)	0.2	530		0.05	--	--	0.05	0.05	--	0.05	0.05	--
DDT+DDD+DDE	0.3	3600		0.15	--	--	0.15	0.15	--	0.15	0.15	--
Aldrin + Dieldrin	0.2	45		0.1	--	--	0.1	0.1	--	0.1	0.1	--
Endosulfan (alpha+beta)	0.2	2000		0.1	--	--	0.1	0.1	--	0.1	0.1	--
Remainder of OCP (7 compounds)	0.7			0.35	--	--	0.35	0.35	--	0.35	0.35	--

Sample Identification	PQL	Guideline ^A		BH104A	BH104B	BH106A	BH106B	BH107A	BH107B	BH108A	BH108B	BH109A	BH109B	BH111A	BH111B	BH112A
Sample Depth (m) ^B		HIL 'D'	EIL C&I	3.0	4.0	3.0	4.0	3.0	4.0	3.0	3.8	3.0	4.0	3.0	4.0	0.1
Date				30/05/2025	30/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025	30/05/2025	30/05/2025	29/05/2025	29/05/2025	29/05/2025
Organophosphorous Pesticides (OPP)																
Chlorpyrifos	0.1	2000		--	--	--	--	--	--	--	--	--	--	--	--	<0.1
Remainder of OPP (20 compounds)	2			--	--	--	--	--	--	--	--	--	--	--	--	1
Herbicides																
MCPP	0.5	5000		--	--	--	--	--	--	--	--	--	--	--	--	<0.5
MCPA	0.5	5000		--	--	--	--	--	--	--	--	--	--	--	--	<0.5
2,4-D	0.5	9000		--	--	--	--	--	--	--	--	--	--	--	--	<0.5
2,4,5-T	0.5	5000		--	--	--	--	--	--	--	--	--	--	--	--	<0.5
MCPB	0.5	5000		--	--	--	--	--	--	--	--	--	--	--	--	<0.5
Picloram	0.5	35000		--	--	--	--	--	--	--	--	--	--	--	--	<0.5
Remainder of Herbicides (13 compounds)	13			--	--	--	--	--	--	--	--	--	--	--	--	7.5

All results are in units of mg/kg, except for pH and electrical conductivity

Blank Cell indicates no criterion available

^A ASC NEPM 1999 (amended April 2013) Health Investigation Levels (HIL)

'D' (Commercial/Industrial).

^A ASC NEPM 1999 (amended April 2013) Ecological Investigation Levels

(EIL) C&I (Commercial and Industrial).

^B Start of sample, refer to logs for sample interval

The Carcinogenic PAH value is calculated by multiplying the concentration of each of the 8 carcinogenic PAH compounds by its B(a)P toxic equivalence factor and summing these products.

HIL for Chromium are for Chromium VI

Results shown in **BOLD** are in excess of the HIL

Results shown in shading are >250% of the HIL

Results shown in underline are in excess of EIL

PQL = Practical Quantitation Limit. Where PQL is for a summation, PQL of all components is summed and may be different from that presented by laboratory

Presented ecological value for benzo(a)pyrene is a low reliability Ecological Screening Level

ESL are applicable for material at less than 2m depths below finished surface/ground level

For the purpose of the Tier 1 ESL/EIL assessment, all background concentrations are assumed to be zero

EIL for Naphthalene are for fresh (<2years) Naphthalene

EIL for Arsenic are for aged (>2years) Arsenic

EIL for Chromium are the added contaminant limit for aged (>2years) Chromium III in soils of 1% clay, the most conservative of the criteria

EIL for Copper are the added contaminant limit for aged (>2years) Copper in soils of pH 6.5

EIL for Lead are the added contaminant limit for aged (>2years) Lead

EIL for Nickel are the added contaminant limit for aged (>2years) Nickel in soils of 5% CEC the most conservative of the criteria

EIL for Zinc are the added contaminant limit for aged (>2years) Zinc in soils of 5% CEC and pH of 6.5, the most conservative of the criteria at pH 6.5

EIL for DDT are for fresh (<2years) DDT

Where summation required (PAH, OCP, OPP, Herbicides) calculation includes components reported as non detected as 1/2 PQL

Sample Identification	PQL	Guideline ^A		BH112C	BH113A	BH113C	TP114A	TP114B	BH115A	BH115B	TP116A	TP116C	BH117A	BH117B	TP118A	TP118D
Sample Depth (m) ^B		HIL 'D'	EIL C&I	1.0	0.1	1.0	0.1	0.5	0.1	0.5	0.1	1.0	0.1	0.5	0.1	2.0
Date				29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025
Organophosphorous Pesticides (OPP)																
Chlorpyrifos	0.1	2000		--	<0.1	--	<0.1	--	<0.1	--	<0.1	--	<0.1	--	<0.1	--
Remainder of OPP (20 compounds)	2			--	1	--	1	--	1	--	1	--	1	--	1	--
Herbicides																
MCPP	0.5	5000		--	<0.5	--	<0.5	--	<0.5	--	<0.5	--	<0.5	--	<0.5	--
MCPA	0.5	5000		--	<0.5	--	<0.5	--	<0.5	--	<0.5	--	<0.5	--	<0.5	--
2,4-D	0.5	9000		--	<0.5	--	<0.5	--	<0.5	--	<0.5	--	<0.5	--	<0.5	--
2,4,5-T	0.5	5000		--	<0.5	--	<0.5	--	<0.5	--	<0.5	--	<0.5	--	<0.5	--
MCPB	0.5	5000		--	<0.5	--	<0.5	--	<0.5	--	<0.5	--	<0.5	--	<0.5	--
Picloram	0.5	35000		--	<0.5	--	<0.5	--	<0.5	--	<0.5	--	<0.5	--	<0.5	--
Remainder of Herbicides (13 compounds)	13			--	7.5	--	7.5	--	7.5	--	7.5	--	7.5	--	7.5	--

All results are in units of mg/kg, except for pH and electrical conductivity

Blank Cell indicates no criterion available

^A ASC NEPM 1999 (amended April 2013) Health Investigation Levels (HIL) 'D' (Commercial/Industrial).

^A ASC NEPM 1999 (amended April 2013) Ecological Investigation Levels (EIL) C&I (Commercial and Industrial).

^B Start of sample, refer to logs for sample interval

The Carcinogenic PAH value is calculated by multiplying the concentration of each of the 8 carcinogenic PAH compounds by its B(a)P toxic equivalence factor and summing these products.

HIL for Chromium are for Chromium VI

Results shown in **BOLD** are in excess of the HIL

Results shown in shading are >250% of the HIL

Results shown in underline are in excess of EIL

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Presented ecological value for benzo(a)pyrene is a low reliability Ecological Screening Level

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EIL for Naphthalene are for fresh (<2years) Naphthalene

EIL for Arsenic are for aged (>2years) Arsenic

EIL for Chromium are the added contaminant limit for aged (>2years) Chromium III in soils of 1% clay, the most conservative of the criteria

EIL for Copper are the added contaminant limit for aged (>2years) Copper in soils of pH 6.5

EIL for Lead are the added contaminant limit for aged (>2years) Lead

EIL for Nickel are the added contaminant limit for aged (>2years) Nickel in soils of 5% CEC the most conservative of the criteria

EIL for Zinc are the added contaminant limit for aged (>2years) Zinc in soils of 5% CEC and pH of 6.5, the most conservative of the criteria at pH 6.5

EIL for DDT are for fresh (<2years) DDT

Where summation required (PAH, OCP, OPP, Herbicides) calculation includes components reported as non detected as 1/2 PQL

Sample Identification	PQL	Guideline ^A		TP119A	TP119B	TP119C	TP120A	TP121A	TP121B	TP122A	TP123A	TP123C
Sample Depth (m) ^B		HIL 'D'	EIL C&I	0.1	0.5	1.0	0.1	0.1	0.5	0.1	0.1	1.0
Date				29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025
Organophosphorous Pesticides (OPP)												
Chlorpyrifos	0.1	2000		<0.1	--	--	<0.1	<0.1	--	<0.1	<0.1	--
Remainder of OPP (20 compounds)	2			1	--	--	1	1	--	1	1	--
Herbicides												
MCPP	0.5	5000		<0.5	--	--	<0.5	<0.5	--	<0.5	<0.5	--
MCPA	0.5	5000		<0.5	--	--	<0.5	<0.5	--	<0.5	<0.5	--
2,4-D	0.5	9000		<0.5	--	--	<0.5	<0.5	--	<0.5	<0.5	--
2,4,5-T	0.5	5000		<0.5	--	--	<0.5	<0.5	--	<0.5	<0.5	--
MCPB	0.5	5000		<0.5	--	--	<0.5	<0.5	--	<0.5	<0.5	--
Picloram	0.5	35000		<0.5	--	--	<0.5	<0.5	--	<0.5	<0.5	--
Remainder of Herbicides (13 compounds)	13			7.5	--	--	7.5	7.5	--	7.5	7.5	--

All results are in units of mg/kg, except for pH and electrical conductivity

Blank Cell indicates no criterion available

^A ASC NEPM 1999 (amended April 2013) Health Investigation Levels (HIL)

'D' (Commercial/Industrial).

^A ASC NEPM 1999 (amended April 2013) Ecological Investigation Levels

(EIL) C&I (Commercial and Industrial).

^B Start of sample, refer to logs for sample interval

The Carcinogenic PAH value is calculated by multiplying the concentration of each of the 8 carcinogenic PAH compounds by its B(a)P toxic equivalence factor and summing these products.

HIL for Chromium are for Chromium VI

Results shown in **BOLD** are in excess of the HIL

Results shown in shading are >250% of the HIL

Results shown in underline are in excess of EIL

PQL = Practical Quantitation Limit. Where PQL is for a summation, PQL of all components is summed and may be different from that presented by laboratory

Presented ecological value for benzo(a)pyrene is a low reliability Ecological Screening Level

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For the purpose of the Tier 1 ESL/EIL assessment, all background concentrations are assumed to be zero

EIL for Naphthalene are for fresh (<2years) Naphthalene

EIL for Arsenic are for aged (>2years) Arsenic

EIL for Chromium are the added contaminant limit for aged (>2years) Chromium III in soils of 1% clay, the most conservative of the criteria

EIL for Copper are the added contaminant limit for aged (>2years) Copper in soils of pH 6.5

EIL for Lead are the added contaminant limit for aged (>2years) Lead

EIL for Nickel are the added contaminant limit for aged (>2years) Nickel in soils of 5% CEC the most conservative of the criteria

EIL for Zinc are the added contaminant limit for aged (>2years) Zinc in soils of 5% CEC and pH of 6.5, the most conservative of the criteria at pH 6.5

EIL for DDT are for fresh (<2years) DDT

Where summation required (PAH, OCP, OPP, Herbicides) calculation includes components reported as non detected as 1/2 PQL

Sample Identification	PQL	Maximum Average Concentration for Characterisation ^A	Absolute Maximum Concentration for Characterisation ^A	BH104A	BH104B	BH106A	BH106B	BH107A	BH107B	BH108A	BH108B	BH109A	BH109B	BH111A	BH111B	Average Concentration
Sample Depth				3.0	4.0	3.0	4.0	3.0	4.0	3.0	3.8	3.0	4.0	3.0	4.0	
Date				30/05/2025	30/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025	29/05/2025	30/05/2025	30/05/2025	29/05/2025	
Sample Description				SAND, fine to medium grained, orange-brown with silt	SAND, fine to medium grained, orange-brown with silt	Sandy CLAY, medium plasticity, grey	Sandy CLAY, medium plasticity, red-brown with fine gravel and bands of clayey gravel	SAND with Silt, yellow brown, fine to medium grained sand	SAND with Silt, yellow brown, fine to medium grained sand, grey	SAND with Silt, brown, fine to medium grained sand	Gravelly SAND with Silt, brown, weakly cemented	Silty SAND, fine grained, brown	Silty SAND fine to coarse grained, brown, trace clay	Sandy CLAY, medium plasticity, yellow brown mottled grey	Clayey SAND, fine to medium sand, yellow-orange	
Sample Purpose				Characterisation	Characterisation	Characterisation	Characterisation	Characterisation	Characterisation	Characterisation	Characterisation	Characterisation	Characterisation	Characterisation	Characterisation	
Sample collected by				RCA - RC	RCA - RC	RCA - TS	RCA - TS	RCA - TS	RCA - TS	RCA - TS	RCA - TS	RCA - RC	RCA - RC	RCA - TS	RCA - TS	
Benzene, Toluene, Ethylbenzene, Xylene (BTEX)																
Benzene	0.2	NA	0.5	<u>0.1</u>	<u>0.1</u>	<u>0.1</u>	<u>0.1</u>	<u>0.1</u>	<u>0.1</u>	<u>0.1</u>	<u>0.1</u>	<u>0.1</u>	<u>0.1</u>	<u>0.1</u>	<u>0.1</u>	NA
Toluene	0.5	NA	65	<u>0.25</u>	<u>0.25</u>	<u>0.25</u>	<u>0.25</u>	<u>0.25</u>	<u>0.25</u>	<u>0.25</u>	<u>0.25</u>	<u>0.25</u>	<u>0.25</u>	<u>0.25</u>	<u>0.25</u>	NA
Ethylbenzene	1	NA	25	<u>0.5</u>	<u>0.5</u>	<u>0.5</u>	<u>0.5</u>	<u>0.5</u>	<u>0.5</u>	<u>0.5</u>	<u>0.5</u>	<u>0.5</u>	<u>0.5</u>	<u>0.5</u>	<u>0.5</u>	NA
meta- and para-Xylene	2			<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	NA
ortho-Xylene	1			<u>0.5</u>	<u>0.5</u>	<u>0.5</u>	<u>0.5</u>	<u>0.5</u>	<u>0.5</u>	<u>0.5</u>	<u>0.5</u>	<u>0.5</u>	<u>0.5</u>	<u>0.5</u>	<u>0.5</u>	NA
Total Xylenes	3	NA	15	<u>1.5</u>	<u>1.5</u>	<u>1.5</u>	<u>1.5</u>	<u>1.5</u>	<u>1.5</u>	<u>1.5</u>	<u>1.5</u>	<u>1.5</u>	<u>1.5</u>	<u>1.5</u>	<u>1.5</u>	NA
Total Recoverable Hydrocarbons (TRH)																
TRH C10-C14	50			<u>25</u>	<u>25</u>	<u>25</u>	<u>25</u>	<u>25</u>	<u>25</u>	<u>25</u>	<u>25</u>	<u>25</u>	<u>25</u>	<u>25</u>	<u>25</u>	<u>25.00</u>
TRH C15-C28	100			<u>50</u>	<u>50</u>	<u>50</u>	<u>50</u>	<u>50</u>	<u>50</u>	<u>50</u>	<u>50</u>	<u>50</u>	<u>50</u>	<u>50</u>	<u>50</u>	<u>50.00</u>
TRH C29-C36	100			<u>50</u>	<u>50</u>	<u>50</u>	<u>50</u>	<u>50</u>	<u>50</u>	<u>50</u>	<u>50</u>	<u>50</u>	<u>50</u>	<u>50</u>	<u>50</u>	<u>50.00</u>
TRH C10-C36	250	250	500	<u>125</u>	<u>125</u>	<u>125</u>	<u>125</u>	<u>125</u>	<u>125</u>	<u>125</u>	<u>125</u>	<u>125</u>	<u>125</u>	<u>125</u>	<u>125</u>	<u>125.00</u>
Polycyclic Aromatic Hydrocarbons (PAH)																
Naphthalene	0.1			<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>
Acenaphthylene	0.1			<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>
Acenaphthene	0.1			<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>
Fluorene	0.1			<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>
Phenanthrene	0.1			<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>
Anthracene	0.1			<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>
Fluoranthene	0.1			<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	0.05
Pyrene	0.1			<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	0.05
Benz(a)anthracene	0.1			<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>
Chrysene	0.1			<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>
Benzo(b)&(j)&(k)fluoranthene	0.2			<u>0.1</u>	<u>0.1</u>	<u>0.1</u>	<u>0.1</u>	<u>0.1</u>	<u>0.1</u>	<u>0.1</u>	<u>0.1</u>	<u>0.1</u>	<u>0.1</u>	<u>0.1</u>	<u>0.1</u>	0.10
Benzo(a) pyrene	0.05	0.5	1	<u>0.025</u>	<u>0.025</u>	<u>0.025</u>	<u>0.025</u>	<u>0.025</u>	<u>0.025</u>	<u>0.025</u>	<u>0.025</u>	<u>0.025</u>	<u>0.025</u>	<u>0.025</u>	<u>0.025</u>	0.025
Indeno(1,2,3-c,d)pyrene	0.1			<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	0.05
Dibenz(a,h)anthracene	0.1			<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>
Benzo(g,h,i)perylene	0.1			<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>
Sum of reported PAH	1.55	20	40	<u>0.775</u>	<u>0.775</u>	<u>0.775</u>	<u>0.775</u>	<u>0.775</u>	<u>0.775</u>	<u>0.775</u>	<u>0.775</u>	<u>0.775</u>	<u>0.775</u>	<u>0.775</u>	<u>0.775</u>	<u>0.775</u>
Metals																
Arsenic	4	20	40	<u>2</u>	<u>2</u>	<u>2</u>	5	<u>2</u>	5	<u>2</u>	12	<u>2</u>	10	8	5	4.75
Cadmium	0.4	0.5	1	<u>0.2</u>	<u>0.2</u>	<u>0.2</u>	<u>0.2</u>	<u>0.2</u>	<u>0.2</u>	<u>0.2</u>	<u>0.2</u>	<u>0.2</u>	<u>0.2</u>	<u>0.2</u>	<u>0.2</u>	<u>0.2</u>
Chromium (total)	1	75	150	3	10	6	7	3	5	4	6	8	12	9	7	6.67
Copper	1	100	200	2	2	4	3	1	3	2	3	2	3	2	3	2.50
Mercury	0.1	0.5	1	<u>0.05</u>	0.2	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	0.06
Lead	1	50	100	3	6	5	7	3	7	4	9	5	11	18	6	7.00
Nickel	1	30	60	<u>0.5</u>	2	3	5	1	4	2	7	3	6	4	3	3.38
Zinc	1	150	300	3	8	4	15	4	15	6	23	10	20	11	8	10.58
Physical Parameters																
Electrical Conductivity		1.5 dS/m	3 dS/m	0.016	0.049	0.024	0.028	0.010	0.017	0.011	0.039	0.018	0.015	0.140	0.056	0.04
pH**		5 to 9	4.5 to 10	7.2	7.3	7	6.5	6.8	6.5	6.8	6.4	6.4	6.2	8.3	6.8	6.85

All results are in units of mg/kg 'dry weight' unless otherwise specified

Blank Cell indicates no criterion available

PQL = Practical Quantitation Limit. Where PQL is for a summation, PQL of all components is summed and may be different from that presented by laboratory

^A POEO (Waste) Regulation 2014 - General Exemption Under Part 9, Clause 93, The Excavated Natural Material Order 2014, Table 4

All analytes from discrete samples as per 4.4 of the Order

**The ranges given for pH are for the minimum and maximum acceptable pH values in the ENM Order

Results shown in **BOLD** are in excess of the Absolute Maximum Concentration for Characterisation

Results shown in **shading** are in excess of the Maximum Average Concentration for Characterisation

Where summation or average required, calculation includes components reported as non detected as 1/2 PQL.Underlined summations and averages are those not detected