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# Preliminary Site Investigation: 210 Borella Road, East Albury, New South Wales

Prepared for: Civil Test Pty Ltd

4 February 2025

JE10388-R01

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# Executive Summary

Jones Environmental Consulting Pty Ltd (JEC) was commissioned by Civil Test Pty Ltd to undertake a Preliminary Site Investigation (PSI) at Albury Base Hospital, 201 Borella Road, East Albury, NSW (Lot 14 DP1175382). The investigation was initiated to assess potential site contamination associated with past and present land uses and to determine whether further environmental assessment is required.

The primary objectives of the PSI were to:

- Identify potential sources of contamination through a desktop review, historical site assessment, and site walkover.
- Assess potential risks to human health and the environment.
- Determine if further detailed site investigations are warranted.

The PSI was conducted in accordance with the NSW EPA (2020) Consultants Reporting on Contaminated Land: Contaminated Land Guidelines and the National Environment Protection (Assessment of Site Contamination) Measure (ASC NEPM, 2013). The scope included:

- Desktop review of historical aerial photographs, land title records, geological and hydrogeological maps, NSW EPA records, and other publicly available data.
- Site walkover to visually assess potential contamination sources and environmental conditions.
- Review of previous environmental reports relevant to the site.
- Identification of Areas of Environmental Concern (AECs) based on site history and observations.

The site was historically used for livestock sales yards, an abattoir, and a piggery, all of which may have introduced hydrocarbons, pesticides, heavy metals, and organic waste residues into the soil.

A former underground storage tank (UST) for Iodine-131 was identified and removed; however, due to its short half-life, residual contamination is unlikely.

Above-ground diesel storage tanks were observed on the eastern side of the site.

No visible evidence of large quantities of waste, soil staining, odours, or stressed vegetation was noted during the site walkover.

Historical land uses and site observations indicate the potential presence of asbestos, heavy metals, hydrocarbons, and pesticides in the soil.

The PSI has identified several potential contamination sources, primarily from historical livestock operations, fuel storage, and possible asbestos-containing materials.

If materials suspected of being contaminated, based on visual or olfactory evidence, are encountered during site development, seeking advice from a qualified and experienced environmental consultant without delay is strongly advised.

The site is suitable in its current state for the intended development, in accordance with SEPP (Resilience and Hazards) 2021 and the Contaminated Land Planning Guidelines. No further remediation or assessment is required unless unexpected contamination is encountered during construction.

# Distribution

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# Table of Contents

**Executive Summary** ..... **i**

**Distribution** ..... **ii**

**1.Introduction** ..... **1**

1.1. Background ..... 1

**2.Assessment approach** ..... **1**

2.1. Preliminary Site Investigation (PSI) ..... 1

**3.Site setting** ..... **2**

3.1. Site Information ..... 2

3.2. Site Setting and Proposed Development ..... 2

**4.Site history** ..... **3**

4.1. Sources of Information ..... 3

4.2. Geology ..... 3

4.3. Hydrology and Hydrogeology ..... 3

4.4. Acid Sulfate Soils and Salinity ..... 4

4.5. Previous Environmental Reports ..... 4

4.6. Contaminated Land & Waste Management Facilities ..... 5

4.6.1 Potential for Contamination Impacting the Site ..... 6

4.7. Aerial Photography ..... 7

4.8. Historical Map Review ..... 8

4.9. Titles Search ..... 9

4.10. Interview with Hospital Staff ..... 10

4.11. Summary of Site History ..... 10

**5.Preliminary Conceptual Site Model** ..... **13**

**6.Adopted criteria** ..... **15**

6.1Soil Investigation Criteria ..... 15

6.1.1 Health Investigation and Screening Levels ..... 15

6.1.2 Ecological Investigation Levels ..... 17

**7.Data Quality Objectives** ..... **18**

**8.Sampling Analysis and Quality Plan** ..... **20**

8.1. Analytical Suite ..... 20

**9.Assessment Methodology** ..... **21**

9.1.1 Encountered Geology ..... 22

**10.Quality Assurance/Quality Control (QA/QC)** ..... **22**

**11.Field Observations and Analytical Results** ..... **22**

11.1. Field Observations ..... 22

11.2. Field Screening ..... 22
**12.Results of Preliminary Site Investigation ..... 23**
12.1. Suitability for on-site re-use of soil ..... 23
12.2. Preliminary Categorisation ..... 24
12.2.1 NSW Waste Classification ..... 24
12.2.2 Excavated Natural Material ..... 24
12.2.3 Virgin Excavated Natural Material ..... 24
**13.Discussion ..... 24**
**14.Conclusions and Recommendations ..... 25**
14.1. Conclusions ..... 25
14.2. Recommendations ..... 25
**15.Limitations ..... 26**

## Appendices

Appendix A - Figures
Appendix B - Tables
Appendix C - Site history review information
Appendix D - Bore Logs
Appendix E - Calibration Certificates
Appendix F - Laboratory Reports
Appendix G - Data Validation

## Tables

Table 3-1**:** Site Identification

Table 4-1: Summary of groundwater database search

Table 4-2: Observations from aerial photographs covering the site.

Table 4-3: Historic titles search summary

Table 4-4: Areas of Environmental Concern (AEC)

Table 5-1: Preliminary Conceptual Site Model

Table 6-1: Summary of HILs in Soil

Table 6-2: Summary of HSLs in Soil

Table 6-3: Summary of EILs in Soil

Table 6-4: Summary of ESLs in Soil

Table 8-1: Sampling Location Rationale

Table 8-2: Summary of Analysis

Table 9-1: Soil Sampling Methodology

# 1. Introduction

## 1.1. Background

Civil Test Pty Ltd (Civil Test) commissioned Jones Environmental Consulting Pty Ltd (JEC) to conduct a preliminary site investigation (PSI) at the Albury Base Hospital site located at 201 Borella Road, East Albury, New South Wales also known as Lot 14 DP1175382 (the site). JEC understands that these works were required to investigate the potential for contamination to exist at the site from past and present activities and provide recommendations for further detailed investigation, if appropriate.

From information provided by Civil Test it is understood that the existing hospital site has been earmarked for an upgrade to facilities and a preliminary site investigation is required to be completed consistent with the NSW EPA (2020) Consultants reporting on contaminated land: Contaminated Land Guidelines and State Environmental Planning Policy (Resilience and Hazards) 2021.

The site location is shown in Figure 1 (Appendix A).

# 2. Assessment approach

The below scope of works has been completed in general accordance NEPC (2013) National Environment Protection (Assessment of Site Contamination) Amendment Measure (No. 1) 1999 as amended in 2013 (ASC NEPM).

## 2.1. Preliminary Site Investigation (PSI)

The desktop study undertaken for the site included the review of the following (where readily available):

- Selected historical aerial photographs.
- EPA Priority Sites Register (PSR) for the site and surrounds.
- Previous environmental audit reports for nearby sites.
- Available land title records.
- Groundwater database search.
- Publicly available records comprising topographic, geological and hydrogeological maps.

As part of the PSI, a site walkover was carried out, making observations on the following:

- Site processes and activities.
- Evidence of current or former underground and aboveground storage tanks.
- Evidence of staining and spills.
- Presence of wastes and fill material.
- Odours that may be indicative of site contamination.
- Chemical storage or use.
- Observation of existing buildings or structures regarding the potential for particularly asbestos containing materials or lead paint to have contributed to site contamination.
- Signs of vegetation stress.
- Preparation of a photographic record of observations made during the site walkover.

# 3. Site setting

## 3.1. Site Information

The site is located in East Albury, New South Wales. The site consists of one lot totalling approximately 8.4 hectares in area as shown on Figure 1.

A site walkover was undertaken on 3 November 2023 by a JEC Environmental Scientist. The main features observed during the site walkover and information obtained during discussions are summarised below.

Details of the site setting are provided in Table 3.1 below.

Table 3-1: Site Identification

| | |
|---|---|
| Location: | Lot 14 DP 1175382, East Albury, New South Wales |
| Area: | Site Total: 8.4 ha |
| Current Zoning: | SP2 - Infrastructure Zone |
| Current Site Use: | Hospital |
| Proposed Site Use: | Hospital |
| Current Adjoining Site Uses: | North – Borella Road, beyond Commercial<br>East – East Street, beyond Residential<br>South – Bushland<br>West – Keene Street, beyond residential & Medical accommodation & Patient Care |

## 3.2. Site Setting and Proposed Development

The proposed new buildings, integral to the planned upgrade of clinical services, will encompass a multistorey structure situated on the southwestern section of the site. This building's footprint will overlay the current allied health, breast screening building, pre-admission unit, OP, and pharmacy, covering approximately 570m$^2$. Additionally, a multistorey car park is also proposed for construction along the southern section of the site's car park. A new access road is also proposed to be constructed, entering the western side of the site, and running along the southern side of the new building. The proposed development overlay is shown in Figure 2 (Appendix A).

The site, located west of Albury's East Street and south of Borella Road, lies at the base of Eastern Hill. Surface levels range from RL 176 m to RL 184 m AHD. Notable features include a low-height rock cutting within the site and rising terrain towards the hill's crest at about RL 230 m AHD. Existing amenities comprise an asphalted carpark, access road, two 8-metre diameter tanks, landscaped areas, and the aforementioned rock cutting, shaped by previous earthworks.

The walkover included inspecting the site for areas of potential environmental concern. The below observations were noted:

- There was no obvious evidence of a sheep dip.
- Two above ground storage tanks containing diesel were observed on the eastern side of the site.
- No observation of large quantities of wastes and fill material.
- No soil staining or odours were noted during the site walkover.
- No evidence of stressed vegetation was noted.
- No asbestos containing material or building waste was observed on site.

# 4. Site history

## 4.1. Sources of Information

A desktop review for the proposed development area was undertaken to assist in identifying potential sources of contamination in the vicinity of the site. The investigation included a review of the following:

- Review of current and historical records (including but not limited to a review of council records, site photographs, site plans, and Statutory Audits conducted in the vicinity of the site).
- Review of historical aerial photographs, where available.
- Review of publicly available records, including but not limited to groundwater database records (for registered groundwater bores), topographic, geological and hydrogeological maps.
- Review of available licences and notices (i.e. water discharge licences, dangerous goods, trade waste etc.).
- Groundwater database search.
- Review of online EPA information on: EPA Audit Reports; EPA Site Registers; EPA Licences.
- Assessment of regional geology and hydrogeology, contaminated land records and environmental protection licence information in the public registers held by the NSW Environmental Protection Authority (EPA), where available.
- A review of services registered through the Before You Dig Australia (BYDA) portal.

## 4.2. Geology

According to the Geological Survey of Victoria's 1:50,000 scale Albury Map, the geological composition beneath the Albury Base Hospital area consists primarily of Quaternary-age unconsolidated colluvial deposits, such as hill wash and scree. These deposits overlie the Quaternary Shepparton Formation, which is characterised by clays, sands, and gravels. Eastern Hill is formed from the Ordovician Omeo Metamorphic Complex, composed of layered schist types including biotite schist, spotted schist, and quartz-rich psammitic schist. It is inferred that these older metamorphic rocks underlie the more recent geological units.

## 4.3. Hydrology and Hydrogeology

An unnamed waterway is present 575m northeast of the site. This waterway ultimately discharges to the Murray River, located 1 km east from the site. The likely regional groundwater flow direction is expected to be to the northeast /east. Groundwater is expected to be between 5 to 10 metres below ground surface (bgs) underlying the site.

Information sourced from the NSW Department of Primary Industries – Office of Water was obtained on registered bores within a 500 m radius of the site of which two were identified. The details are summarised in Table 4.1 below.

It should be noted that while a groundwater well was installed to a maximum depth of 15 mbgs during the preliminary site investigation works groundwater was not encountered.

Table 4-1: Summary of groundwater database search

| Bore ID | Distance from site | Depth to Groundwater (m) | Use |
|---|---|---|---|
| GW064889 | ~370 m northeast | 5.9 | Recreational |
| GW503269 | ~625 m southeast | 3.3 | Stock/Domestic/Recreational |

## 4.4. Acid Sulfate Soils and Salinity

A review of available mapping, including the Lotsearch Report (LS048622) and NSW Government acid sulfate soil risk mapping, indicates that the site at 201 Borella Road, East Albury is not within an area identified as having a high probability of Acid Sulfate Soils (ASS). The site's geology consists primarily of Quaternary-age unconsolidated colluvial deposits overlying the Shepparton Formation, with no significant presence of marine-derived sediments, which are typically associated with ASS risk.

Salinity risk mapping and regional hydrogeological data suggest that the site is not within a designated salinity hazard area. However, given the presence of clay-rich Shepparton Formation soils and the potential for perched groundwater conditions, some degree of soil salinity may be present in localised areas. Site investigations did not identify any visible indicators of salinity, such as surface crusting or vegetation stress.

While no immediate risks have been identified, if excavation or construction works reveal unexpected acid sulfate soils or saline conditions, further assessment may be warranted. In such cases, appropriate soil and water management measures should be implemented in accordance with NSW Acid Sulfate Soil Management Guidelines and Salinity Management Strategies.

## 4.5. Previous Environmental Reports

Two documents were provided to JEC that had been completed for the site. Each of the reports has been summarised below.

**Douglas Partners, Project: 78863.00, dated June 2013**

The environmental investigation report presents the findings of a geotechnical and limited environmental investigation for proposed developments at the Albury Base Hospital in East Albury, NSW. The investigation included drilling boreholes and excavating test pits, collecting samples, conducting site history investigation, and undertaking geotechnical and environmental testing. The investigation area for the Albury Wodonga Regional Cancer Centre (AWRCC) building is in the northern section of the site. The site history review identified previous land uses, including a livestock saleyard. Off-site contamination sources were reviewed and determined to pose no risk to the subject land. The investigation involved solid flight auger drilling and wash boring. In situ testing and laboratory testing were conducted on samples collected during the investigation. The laboratory test results indicated that the tested soils contained chemical concentrations within health-based criteria for commercial/industrial land use and would be classified as general solid waste in NSW and Category C waste in Victoria. The report concludes that there are no significant contamination issues that would impact the proposed developments at the Albury Base Hospital site.

In addition to reviewing the findings of the Douglas Partners (2013) report, data from boreholes BH1 and BH2, located in the northeastern section of the site, has been incorporated into this PSI. These boreholes confirm that soil conditions in this area meet the adopted criteria for commercial/industrial land use. No significant contamination issues were identified in this section of the site.

**Douglas Partners, Project: 206725.01, dated April 2022**

The environmental investigation conducted at Albury Base Hospital Mental Health Building concluded that no obvious signs of contamination were observed during fieldwork.

Ten representative soil samples were analysed for various contaminants including metals, hydrocarbons, pesticides, polychlorinated biphenyls (PCBs), and asbestos.

To assess soil suitability for the proposed hospital land-use, results were compared to established ecological, human health investigation levels. Waste soil was classified according to regulatory guidelines for off-site disposal in New South Wales and Victoria.

Laboratory chemical analytical results indicated that all analysed samples contained chemical concentrations below ecological and human health investigation and screening levels, suggesting suitability for on-site use. However, two fill samples and two natural soil samples exhibited arsenic concentrations consistent with Category D contaminated soil in Victoria.

Recommendations included the possibility of reducing the Victorian categorisation through further sampling and analysis.

The report concluded that the site was suitable for on-site use for the proposed commercial land-use. However, if removal was necessary, soils would be classified as general solid waste in NSW and Category D contaminated soil in Victoria due to reported arsenic concentrations.

## 4.6. Contaminated Land & Waste Management Facilities

A search of NSW EPA records provided the below details:

- There is one site on the current NSW EPA Contaminated Land list within a 1km radius of the site.
    - 616-624 Young Street, Albury, NSW – Service Station (formerly regulated under the CLM Act).
- Six former notices of contaminated land notice within a 1km buffer of the site.
    - 616-624 Young Street, Albury, NSW – Service Station.
- No records of a former gasworks within a 1km buffer.
- One Clean-Up Notice issued to a service station located at 624 Young Street, Albury, NSW within 1km of the site.
- Four National Liquid Fuel Facilities within 1 km of the site including:
    - BP East Albury – located 690m northeast of the site.
    - Mobil Albury – located 748m northeast of the site.
    - TASCO Albury North Street – located 748m northeast of the site.
    - Mobil Young Street – located 988 m west of the site.
- No sites being investigated by the EPA for per-and polyfluoroalkyl substances (PFAS) contamination within a 1 km radius of the site.
- Two licensed activities under the Protection of the Environmental Operations Act 1997 within the 1km buffer of the site including:
    - Australian Rail Track Corporation Limited: Railway systems activities - 758m northwest of the site.
    - Albury City Council: Albury Water Filtration Plant - 977m east of the site.
- Two delicensed activities still regulated by the EPA within a 1km buffer of the site including:

    - Greater Southern Area Health Service: Hazardous, Industrial or Group A Waste Generation or Storage – located on-site.
    - RTA NSW: Hazardous, Industrial or Group a Waste Generation or Storage – 811m north of the site.
- Four sites which formerly carried out activities under the Protection of the Environmental Operations Act 1997 within 1km of the site including:
    - Luhrmann Environmental Management Pty Ltd: application of herbicides located 457m northeast of the site.
    - Robert Orchard: application of herbicides located 457m northeast of the site.
    - Sydney Weed & Pest Management Pty Ltd: application of herbicides located 457m northeast of the site.
    - Acciona Infrastructure Projects Australia Pty Ltd: road construction located 457m northeast of the site.
- Historical Business Directories Premise Records of potentially contaminating activities including:
    - Abattoirs (1970): Located on site.
    - Building & Building contractors (1961, 1970): Located on site.
    - Poultry Farms (1970): Located on site.
    - Carrier & Cartage Contractors (1961, 1970): Located on site.
    - Motor Garage & Engineers (1961, 1970): Located 45m northeast from site.
    - Brick and Brick Wall Cleaners (1991): Located 88m east of the site.
    - Pest Control (1991): Located 88m east of the site.
    - Insulating Material (1991): Located 88m east of the site.
    - Insulation Contractors (1991): Located 88m east of the site.
    - Gravel, Sand & Soil Supplies (1970): Located 133m northwest of the site.

### 4.6.1 Potential for Contamination Impacting the Site

Several historical and current activities have been identified both on-site and off-site that have the potential to contribute to contamination at the subject site.

**On-Site Facilities**

The presence of historical abattoirs, poultry farms, and cartage contractors on-site may have introduced contaminants such as heavy metals, hydrocarbons, pesticides, and organic waste residues into the soil. Given the nature of these activities, there is a reasonable likelihood that some level of contamination may still be present, particularly in areas where waste disposal, animal processing, or vehicle operations occurred.

**Off-Site Facilities**

While several off-site facilities have been identified within a 1 km radius, their potential to impact the site is considered low to moderate for the following reasons:

- Service Stations & Liquid Fuel Facilities: The nearest service station with a known contamination history (616-624 Young Street) is approximately 1 km away, and other fuel facilities are located between 690 m and 988 m from the site. Given the likely regional groundwater flow direction (northeast/east) and the

distance from the site, it is unlikely that petroleum hydrocarbons or fuel-related contaminants have migrated to the subject site. However, if groundwater monitoring is conducted in future investigations, this assumption should be verified.

- EPA-Regulated and Former Licensed Activities: The hazardous waste storage at Greater Southern Area Health Service (on-site) may have led to localized contamination, particularly with chemical and medical waste residues. Other regulated activities, such as the railway operations (758m northwest) and Albury Water Filtration Plant (977m east), are not expected to have directly impacted the subject site due to their distance and operational nature.
- Historical Industrial and Commercial Activities: Some nearby businesses, such as motor garages, pest control companies, insulation contractors, and gravel/sand suppliers, have a potential risk of contamination due to the use of solvents, hydrocarbons, pesticides, or heavy metals. However, these are over 45m from the site, and no direct migration pathways (such as surface water runoff or shallow groundwater connectivity) have been identified that would indicate a significant contamination risk to the site.

While on-site activities such as the abattoir, poultry farming, and hazardous waste storage present a potential contamination risk, the identified off-site facilities are unlikely to have significantly impacted the subject site due to their distance and nature of operations. However, if any future excavations or redevelopment works are planned, additional investigation and soil sampling should be considered to confirm the absence of off-site contamination influences.

## 4.7. Aerial Photography

Thirteen aerial photographs were obtained dating from between 1948 - 2023. Aerial photographs are presented in Appendix C and observations relevant to the site and surroundings are provided in Table 4.2.

Table 4-2: Observations from aerial photographs covering the site.

| Date | Observations | |
|---|---|---|
| 1948 | Site | The photographs resolution is not clear; however, the site appears to generally clear of tree cover. Small paddocks are shown across the northwestern portion of the site. There appears to be heavily worn tracks across the site. |
| | Surrounds | The photographs resolution is not clear; however, the surrounding land is generally cleared of tree vegetation, with most of the surrounding land appearing to be utilised for agricultural uses. |
| 1961 | Site | A building structure has been constructed in the southeastern section of the site, likely associated with historical land uses such as the abattoir or Municipal Sales Yards. Tree vegetation across the site has increased. A series of rectangular features are visible in the northern half of the site, which could potentially be holding pens for livestock associated with the abattoir and/or Municipal Sales Yards. Their uniform layout suggests structured use, possibly for animal containment, processing, or transport staging. |
| | Surrounds | The surrounding land appears to have begun to be developed. North, west and east of the site appear to have low density residential housing. |
| 1969 | Site | No significant change on site is observed. |
| | Surrounds | A small structure is now shown east of the site. Offsite residential dwellings can be seen surrounding the site. |
| 1975 | Site | The site remains relatively unchanged. |
| | Surrounds | Further commercial and residential development surrounding the site. |

| Date | Observations | |
|---|---|---|
| 1982 | Site | The site paddock fencing appears to have been removed. The site structures located on the southeastern section of the site are no longer visible on site. |
| | Surrounds | Further commercial and residential development surrounding the site. |
| 1990 | Site | No significant change on site is observed. |
| | Surrounds | Earthworks appear to have occurred to the southeast of the site. |
| 1996 | Site | A large building structure (the main existing hospital), with several carparks surrounding the structure are now shown on site. |
| | Surrounds | Further residential development is shown to the southeast of the site. |
| 2003 | Site | No significant change on site is observed. |
| | Surrounds | Further residential development is shown to the southeast of the site. |
| 2009 | Site | No significant change on site is observed. |
| | Surrounds | A building structure is now shown immediately southeast of the site. Further residential development is shown to the southeast of the site. |
| 2014 | Site | Significant earthworks are shown in the northern section of the site. |
| | Surrounds | A building structure is shown to the immediate southwest of the site. |
| 2018 | Site | A large building structure has been constructed in the northeastern portion of the site with a new carpark constructed to the east, west and north of the new structure. |
| | Surrounds | A small building structure located to the northeast of the site appears to have been demolished. |
| 2020 | Site | No significant change on site is observed. |
| | Surrounds | No significant change off site is observed. |
| 2023 | Site | A small addition to the existing site structure is shown on the southeastern section of the site structure. |
| | Surrounds | Offsite a new carpark has been constructed to the northeast of the site with the former commercial structure no longer visible. |

## 4.8. Historical Map Review

Below is a summary of the historical maps (1951 and 1984) and the 2015 topographic map for 201 Borella Road, Albury, NSW, based on the Lotsearch report:

1951 Historical Map

- The site appears to be undeveloped or used for agricultural purposes.
- Surrounding the site, there is minimal infrastructure, with development concentrated around the main road network.
- There is no evidence of significant industrial or commercial activity on the site itself.
- The landscape appears largely rural with open land use.

1984 Historical Map

- By this time, the site shows some development, likely associated with previously identified uses such as abattoirs, poultry farms, and cartage contractors.
- The surrounding area has undergone some urbanisation, with more road networks and built infrastructure appearing nearby.

- Industrial and commercial activities increase in proximity to the site, particularly along Borella Road and nearby streets.

2015 Topographic Map

- The Albury Base Hospital is present on the site, indicating major redevelopment.
- The site is now urbanised, with surrounding land occupied by commercial and residential buildings.
- Infrastructure is highly developed, with road networks, services, and amenities evident.
- No large-scale industrial or agricultural land use remains on or near the site.

The site has transitioned from rural/agricultural use (1951) to some development (1984) and then to full urbanisation with the hospital (2015).

Historical land uses, particularly from the 1970s (abattoirs, poultry farms, and industrial activity), suggest that contaminants such as hydrocarbons, heavy metals, and organic waste residues may still be present.

The surrounding development has increased significantly, reducing the likelihood of off-site agricultural contamination but potentially introducing urban pollution sources.

## 4.9. Titles Search

A Certificate of Title search for the site was conducted by Advance Legal Searches Pty Ltd on Lot 14 DP1175382. Relevant site ownership information is presented below in Table 4.3.

Table 4-3: Historic titles search summary

| Name | Year |
|---|---|
| **Lot 14 DP1175382** | |
| Health Administration Corporation | 2013 to date |
| Lease to Secretary to the Department of Health & Human Services | 2015 to date |
| Various sub-leases shown on Folio Identifier 14/1175382 | 2013 to date |
| **Lot 2 DP 1076041** | |
| Health Administration Corporation | 2005 |
| University of New South Wales | 2005 |
| **Lot 1153 DP 820832** | |
| University of New South Wales | 1992 |
| **Portion 108 Parish Albury** | |
| Crown Land | 1992 |
| Appropriated and Vested to Health Administration Corporation via Government Gazette | 1991 to 1992 |
| Resumed by Albury Council for Water Supply Purposes via Government Gazette | 1981 to 1991 |

| Name | Year |
|---|---|
| Dedicated for Municipal Cattle Sales Yard via Government Gazette | 1887 to 1979 |

## 4.10. Interview with Hospital Staff

JEC undertook discussions with Hospital Staff as well as former staff member of the former Saleyards (1950s). Details have been summarised below.

- The site was utilised as a livestock sales yard dating back to at least the 1960s.
- Initially, the hospital building was intended to face north-south. However, a subsequent decision was made to change its orientation to east-west. This adjustment necessitated extensive backfilling and compaction work to accommodate the new orientation of the building.
- Prior excavation activities undertaken in the vicinity of the site during the 1990s uncovered evidence suggesting that a former quarry to the southeast of the site had been utilised for the disposal of animal carcasses, potentially originating from the earlier livestock sales yards.
- To the west of the site where the current East Albury residential estate stands, there was formerly a piggery.
- A former underground storage tank was located to the east of the Mental Health Unit. It was understood to contain diluted Iodine-131. It has been removed and backfilled with stabilised sand. Radioiodine therapy is a nuclear medicine treatment. Medical practitioners use it to treat an overactive thyroid, a condition called hyperthyroidism. They also may use it to treat thyroid cancer.

  Following discussions with the EPA Radiation Senior Officer, it was clarified that iodine-131 (I-131) is highly unlikely to be present in the soil at the site following the removal of the underground storage tank. I-131 has a half-life of eight days, meaning its radioactivity decreases by half every eight days. After approximately 64 days, any residual I-131 would have decayed to undetectable levels.

  The officer confirmed that the purpose of the dilution tanks was to reduce concentrations of I-131, and even if there had been leakage into the surrounding soil, the concentration would have been minimal and would have rapidly decayed.

  This information reinforces the conclusion that the likelihood of any remaining I-131 in the soil is negligible, negating the need for further investigation of I-131 contamination.

## 4.11. Summary of Site History

The site at 201 Borella Road, East Albury, currently occupied by the Albury Base Hospital, has undergone significant changes over time, transitioning from rural and agricultural land use to an urbanised medical facility. Key historical developments identified through aerial photography, historical maps, and interviews with hospital staff are summarised below:

**Pre-1950s: Agricultural and Pastoral Land Use**

- The site was largely undeveloped and primarily used for agriculture.
- Historical maps and aerial photographs indicate open paddocks, tree clearing, and minimal built infrastructure.

**1950s–1980s: Livestock Saleyards and Associated Uses**

- The site was used as a livestock saleyard from at least the 1960s.
- A piggery was located west of the site (now the East Albury residential estate).
- A quarry to the southeast was reportedly used for animal carcass disposal, likely from the saleyards.
- Rectangular features in the northern half of the site (observed in 1961 aerial photography) suggest holding pens for livestock, likely associated with the abattoir or Municipal Sales Yards.
- 1984 historical maps show fencing and infrastructure, indicating structured use.

**1990s: Transition Towards Hospital Development**

- By 1996, aerial photographs show the presence of the main hospital building and carparks.
- Excavations confirmed former quarry use for animal disposal.
- The EPA confirmed Iodine-131 decay, eliminating radiation contamination concerns.

- 2000s–2010s: Hospital Expansion and Urbanisation
- Additional buildings and carparks were developed.
- By 2014, earthworks in the northern section indicated further redevelopment.
- A multistorey car park and hospital extensions were added.

**2020s: Current Status**

- The Albury Base Hospital remains the primary land use.
- A UST containing diluted Iodine-131 was removed and backfilled.
- 2023 imagery shows a small new addition to the hospital's southeastern section.
- The surrounding area is now fully urbanised, with residential, commercial, and medical infrastructure replacing previous agricultural and industrial land uses.

Table 4-4: Areas of Environmental Concern (AEC)

| AEC | Potentially Contaminating Activities | Area of Concern | Contaminants of potential concern |
|---|---|---|---|
| 1 | Livestock Sales Yard (Late 1880s to 1970s) | Entire Site | Heavy metals, organochlorine pesticides (OCP) and organophosphorus (OPP), Total recoverable hydrocarbons (TRH), benzene, toluene, ethylbenzene, xylene (BTEX), polycyclic aromatic hydrocarbons (PAHs), nutrients, salt |
| 2 | Abattoir (Late 1930s to 1970s) | Southeastern section of site | Heavy metals, (OCP), (OPP), (TRH), (BTEX), (PAHs), nutrients, salt. |
| 3 | Levelling of the Site (1980s)<br><br>Potential weather hazardous building material present from former site structure. | Entire Site | Asbestos, lead, and zinc. |
| 4 | Hospital Construction (1994) | Entire site | Asbestos, Heavy metals, Total recoverable hydrocarbons (TRH), benzene, toluene, ethylbenzene, xylene (BTEX), polycyclic aromatic hydrocarbons (PAHs) |

| AEC | Potentially Contaminating Activities | Area of Concern | Contaminants of potential concern |
|---|---|---|---|
| | Potential fill imported to site/buried waste | | |
| 5 | Former Quarry (Southeast of the Site) possibly used for disposal of animal remains | Groundwater and soil underlying the site | Ammonia, nutrients, heavy metals, hydrocarbons. |
| 6 | Piggery (West of the Site) | Groundwater and soil underlying the site | Ammonia, nutrients, heavy metals. |
| 7 | Above-Ground Diesel Storage Tanks (AST) | Soils underlying and surrounding the AST | TRH, BTEX, PAHs |
| 8 | Bunded Pool Chemical Storage | Soils underlying and adjacent to storage area. | Chlorine, hydrochloric acid, heavy metals |
| 9 | Former Underground Storage Tank (UST) for Iodine-131 | Soils surrounding the UST | Iodine-131 |

While historical activities suggest some contamination risks, previous investigations confirm the site remains suitable for continued hospital use. Any future excavation should consider potential contamination hotspots identified in past assessments.

# 5. Preliminary Conceptual Site Model

Based on the information reviewed as part of the site history review a preliminary conceptual site model (PCSM) has been developed. A PCSM is a representation of site related information regarding contamination sources, receptors and exposure pathways between those sources and receptors.

Based on the past uses, it is considered that there is potential for contamination to be present at the site. The areas of environmental concern identified at the site that pose a risk of soil contamination include the livestock sales yard (late 1880s to 1970s), the abattoir (late 1930s to 1970s), levelling of the site (1980s), hospital construction (1994), former quarry southeast of the site (possibly used for disposal of animal remains), piggery west of the site, above-ground diesel storage tanks, bunded pool chemical storage, and former underground storage tank for Iodine-131 (See Figure 3).

If elevated concentrations of contaminants are present in these areas, then they could present a potential health risk to future site users (through dermal contact, ingestion, or inhalation of contaminated soils and/or vapours), or to ecological receptors, if not adequately removed as part of the site redevelopment works. A summary is provided in Table 5.1 below.

Table 5-1: Preliminary Conceptual Site Model

| AEC | Potentially contaminating activities | Area of concern | Likelihood of potential contamination | Contaminants of potential concern | Key potential receptors/exposure pathways |
|---|---|---|---|---|---|
| 1 | Livestock Sales Yard (Late 1880s to 1970s) | Entire Site | High | Heavy metals, organochlorine pesticides (OCP) and organophosphorus (OPP), Total recoverable hydrocarbons (TRH), benzene, toluene, ethylbenzene, xylene (BTEX), polycyclic aromatic hydrocarbons (PAHs), nutrients, salt | Future patients/staff/visitors \| construction and maintenance workers and terrestrial ecosystems from inhalation of dust, ingestion of soil, and dermal contact with contaminated areas. |
| 2 | Abattoir (Late 1930s to 1970s) | Southeastern section of site | High | Heavy metals, OCP, OPP, TRH, BTEX, PAHs, nutrients, salt. | Future patients/staff/visitors \| construction and maintenance workers and terrestrial ecosystems from inhalation of dust, ingestion of soil, and dermal contact with contaminated areas. |
| 3 | Levelling of the Site (1980s)<br>Potential weather hazardous building material present from former site structure. | Entire Site | Moderate | Asbestos, lead, and zinc. | Future patients/staff/visitors \| construction and maintenance workers and terrestrial ecosystems from inhalation of asbestos fibres, ingestion of soil, and dermal contact with contaminated areas. |
| 4 | Hospital Construction (1994)<br>Potential fill imported to site/buried waste | Entire site | Moderate | Asbestos, heavy metals, TRH, BTEX, PAHs | Future patients/staff/visitors \| construction and maintenance workers and terrestrial ecosystems from inhalation of dust, ingestion of soil, and dermal contact with contaminated areas. |
| 5 | Former Quarry (Southeast of the Site) possibly used for disposal of animal remains | Groundwater and soil underlying the site | Low | Ammonia, nutrients, heavy metals, hydrocarbons. | Future patients/staff/visitors \| construction and maintenance workers and terrestrial ecosystems from ingestion of contaminated groundwater, and dermal contact with contaminated soil. |
| 6 | Piggery (West of the Site) | Groundwater and soil underlying the site | Low | Ammonia, nutrients, heavy metals. | Future patients/staff/visitors \| construction and maintenance workers and terrestrial ecosystems from ingestion of contaminated groundwater, and dermal contact with contaminated soil. |

| AEC | Potentially contaminating activities | Area of concern | Likelihood of potential contamination | Contaminants of potential concern | Key potential receptors/exposure pathways |
|---|---|---|---|---|---|
| 7 | Above-Ground Diesel Storage Tanks (AST) | Soils underlying and surrounding the AST | Moderate | TRH, BTEX, PAHs | Future patients/staff/visitors \| construction and maintenance workers and terrestrial ecosystems from inhalation of volatile compounds, ingestion of contaminated soil, and dermal contact with contaminated areas. |
| 8 | Bunded Pool Chemical Storage | Soils underlying and adjacent to storage area. | Moderate | Chlorine, hydrochloric acid, heavy metals | Future patients/staff/visitors \| construction and maintenance workers and terrestrial ecosystems from inhalation of volatile compounds, ingestion of contaminated soil, and dermal contact with contaminated areas. |
| 9 | Former Underground Storage Tank (UST) for Iodine-131 | Soils surrounding the UST | Low | Iodine-131 | Future patients/staff/visitors \| construction and maintenance workers and terrestrial ecosystems from ingestion of contaminated soil and dermal contact with contaminated areas. |

# 6. Adopted criteria

## 6.1 Soil Investigation Criteria

The soil investigation levels (SILs) presented in the following reference are the primary criteria used in NSW when setting acceptance criteria for chemical contaminants in soil:

- Schedule B(1) 'Guideline on the Investigation Levels for Soil and Groundwater' of the National Environment Protection (Assessment of Site Contamination) Measure 1999, (ASC NEPM) as amended in 2013 (NEPC, 2013).

### 6.1.1 Health Investigation and Screening Levels

For assessing contamination levels in soil in urban settings, the ASC NEPM presents health-based investigation levels (HILs) and health screening levels (HSLs) for different land uses (e.g., industrial/commercial, residential, recreational etc). The current zoning of the site is Infrastructure Zone (SP2). Based on information provided it is understood that the site is proposed to be used for hospital uses. On this basis the most relevant SILs have been adopted for use in this assessment for chemical concentration screening purposes, namely those relevant for commercial/industrial use.

The HILs and HSLs are summarised in Table 6.1 and Table 6.2 respectively.

Table 6-1: Summary of HILs in Soil

| Analyte | ^HILs for Commercial/Industrial Land Use (mg/kg) HIL D |
|---|---|
| Arsenic | 3,000 |
| Beryllium | 500 |
| Boron | 300,000 |
| Cadmium | 900 |
| Cobalt | 4,000 |
| Copper | 240,000 |
| Lead | 1,500 |
| Manganese | 60,000 |
| Mercury | 730 |
| Nickel | 6,000 |
| Selenium | 10,000 |
| Zinc | 400,000 |
| Hexachlorobenzene | 80 |
| Aldrin + Dieldrin | 45 |
| Chlordane | 530 |
| DDT+DDE+DDD | 3,600 |

| Analyte | ^HILs for Commercial/Industrial Land Use (mg/kg) HIL D |
|---|---|
| Endosulfan | 2,000 |
| Endrin | 100 |
| Heptachlor | 50 |
| Methoxychlor | 2,500 |
| Chlorpyrifos | 2,000 |

Table 6-2: Summary of HSLs in Soil

| Analyte | CRC HSL-D for Commercial/Industrial Land Use (mg/kg) HIL D | Soil HSL D for Vapour Intrusion (Clay)<br>0 m to <1m\|1m to <2m\|2m to <4m\| 4m+ |
|---|---|---|
| Toluene | 99,000 | NL\|NL\|NL\|NL |
| Ethylbenzene | 27,000 | NL\|NL\|NL\|NL |
| Xylene | 81,000 | NL\|NL\|NL\|NL |
| Naphthalene | 11,000 | NL\|NL\|NL\|NL |
| Benzene | 430 | 4\|6\|9\|20 |
| TRH ($C_6$-$C_{10}$) F1 | | 310\|480\|NL\|NL |
| TRH ($C_{10}$-$C_{16}$) F2 | | NL \| NL \| NL \|NL |
| TRH ($C_6$-$C_{10}$) | 26,000 | |
| TRH ($C_{10}$-$C_{16}$) | 20,000 | |
| TRH ($C_{16}$-$C_{34}$) | 27,000 | |
| TRH ($C_{34}$-$C_{40}$) | 38,000 | |

### 6.1.2 Ecological Investigation Levels

The protection of Ecosystems is assessed with reference to the Ecological Investigation Levels (EILs) for metals and Ecological Screening Levels (ESLs) for petroleum hydrocarbons provided in Schedule B1 of the *National Environmental Protection (Assessment of Site Contamination) Measure 1999, as amended in 2013* (NEPM, 2013). In the first instance, analytical data would be compared to NEPM (2013) EILs and ESLs.

These guidelines provide a range of site uses including areas of ecological significance, urban residential/public open space and commercial/industrial.

The EILs and ESLs are summarised in Table 6.3 and Table 6.4 respectively.

Table 6-3: Summary of EILs in Soil

| Analyte | ^EILs for Commercial/Industrial Use (mg/kg) |
|---|---|
| Arsenic | 160 |
| Chromium | 310 |
| Copper | 280 |
| Lead | 1800 |
| Nickel | 290 |
| DDT | 640 |
| Zinc | 620 |
| Naphthalene | 370 |

^EILs based on a pH of 8.5, CEC of 10 meq/100g, clay soils.

Table 6-4: Summary of ESLs in Soil

| Analyte | ^ESLs for Commercial/Industrial Use (mg/kg) |
|---|---|
| Benzene | 95 |
| Toluene | 135 |
| Ethylbenzene | 185 |
| Xylene Total | 95 |
| TRH ($C_6$-$C_{10}$) F1 minus BTEX | 215 |
| TRH ($C_{10}$-$C_{16}$) | 170 |
| TRH ($C_{10}$-$C_{16}$) F2 minus naphthalene | 170 |
| TRH ($C_{16}$-$C_{34}$) | 2,500 |
| TRH ($C_{34}$-$C_{40}$) | 6,600 |
| Benzo(a)pyrene | 1.4 |

^ESLs based on a fine soil texture.

# 7. Data Quality Objectives

The data quality objectives (DQO) for this project have been developed on the seven-step process outlined in NEPM 2013.

The seven-step DQO process adopted for this assessment is provided below:

Step 1: State the Problem
The primary objective is to determine, from a contamination point of view, if the land is suitable to be developed for use as a hospital of which commercial/industrial land use has been selected as the most appropriate in accordance with the requirements of State Environmental Planning Policy (Resilience and Hazards) 2021.

The main problems are:

- Is contamination associated with the past use a risk to human health and/or the environment in a commercial/industrial setting?
- Is the site considered suitable for commercial land use due to possible historical contaminating activities on site?

Step 2: Identify the Decision

- Do chemical concentrations in soil samples comply with the stated the adopted criteria?

Step 3: Identify Inputs to the Decision

The primary inputs to assessing the above include:

- Systematic soil sampling and representative analysis of identified chemicals of potential concern (COPC) at the site.
- Determination of the general concentrations of COPC across the site.
- Interpretation of the analytical data.
- Identifying current and future potential receptors and the likelihood of exposure to unacceptable levels of contamination both on and off the site.

Step 4: Define the Study Boundaries
The lateral study boundaries for soil are defined by the boundaries of the site as shown in Figure 3.

The vertical study boundaries are defined by the depth of soil bores drill on the site.

Step 5: Develop a Decision Rule
The decision rule for soil for each chemical/layer to assess the suitability of the site will be as follows:

- QA/QC assessment indicates that the data is usable;
- Where contaminant concentrations for each sample are below the adopted investigation levels, then no further assessment is required with respect to that chemical/media/area; and
- Where contaminant concentrations are reported to exceed the adopted investigation levels, then additional investigation or site-specific risk assessment may be required, followed by remediation of the site to the extent practicable where the risk has been shown to be unacceptable. If the impact cannot be removed, further human health risk assessment and/ or management controls will be identified to address the residual impact.

Step 6: Specify Limits on Decision Errors

There are two types of decision errors:

- Sampling errors, which occur when the samples collected are not representative of the conditions within the investigation area; and
- Measurement errors, which occur during sample collection, handling, preparation, analysis and data reduction.

The null hypothesis for this study is:

1) Contaminant concentrations within the soil beneath the site are less than the adopted investigation levels.

These errors may lead the decision maker to make the following errors:

- Deciding that the soil is not contaminated and, therefore, the site is suitable for commercial use when the reverse is true; and
- Deciding that the soil is contaminated and, therefore, the site is not suitable for commercial use when the reverse is true; and
- An assessment was made as to the likelihood of a decision error being made based on the results of a QA/QC assessment and the closeness of the data to assessment criteria. Additionally, statistical methods could be utilised, where applicable, such as 95% Upper Confidence Limit (UCL) calculations,

The investigation levels for assessment are nominated in Section 6 of this report.

Step 7: Optimise the Design for Obtaining Data

Based on the previous Steps 1 to 6 of the DQO process, the optimal design for obtaining the required data is presented in the following sections.

# 8. Sampling Analysis and Quality Plan

A total of twelve soil bores were drilled at the site targeting identified areas of concern as summarised in Table 8.1 below.

Table 8-1: Sampling Location Rationale

| Sample Location | Rationale |
|---|---|
| SB1, SB4, SB5-SB7, SB9-SB12 | Former saleyards, levelling of site and hospital construction |
| SB2, SB3 and SB8 | Former abattoir |
| SB5 | Pool chemical storage |

The diesel ASTs, iodine i-131 UST and identified potential off-site sources were not targeted as part of this investigation.

## 8.1. Analytical Suite

Samples were analysed for the following analytical suite, based on the identified contaminants of concern.

Twenty-five soil samples were selected to provide an assessment of soil / filling conditions at the site. The samples were selected to provide an even spread of analysis across the site.

Laboratory analyses were carried out by NATA accredited laboratories as follows:

- Primary laboratory: ALS at Springvale, VIC
- Secondary laboratory: Eurofins at Oakleigh, VIC.

A selection of primary soil samples was submitted for laboratory analysis for a suite of contaminants of potential concern as summarised in Table 8.2.

Table 8-2: Summary of Analysis

| Analyte | Number of Soil Samples Analysed |
|---|---|
| Metals | 25 soil samples |
| Organochlorine Pesticides | 25 soil samples |
| Organophosphorus Pesticides | 25 soil samples |
| TRH | 25 soil samples |
| BTEXN | 25 soil samples |
| PAH | 25 soil samples |
| PCBs | 25 soil samples |
| Asbestos | 12 soil samples |

# 9. Assessment Methodology

The details of the assessment methodology are summarised in Table 9.1 below.

Table 9-1: Soil Sampling Methodology

| Activity | Details |
|---|---|
| Date of Fieldwork | Fieldwork was undertaken on the 12-15 December 2023 and 18-19 December 2023. |
| Test Locations | Sampling locations are shown in Figure 3.<br>Soil Bores: SB1 – SB12 |
| Soil Sampling | A ute mounted drilling rig was used to collect samples from each of the sampling locations from the surface, 0.5 m bgs, 1.0 m bgs and every following metre to a maximum of 10 m.<br>Soil samples were collected and sealed into 250 mL glass soil sampling jars provided by the laboratory. A clean pair of disposable nitrile gloves was used for each sample. All sample containers were uniquely labelled, placed in eskies with ice packs and dispatched for analysis to ALS under standard chain of custody documentation procedures.<br>Between each sampling location, the hand-auger was decontaminated using Decon90 and rinsate water in a triple rinse procedure to remove any residual material left behind from the previous sample location and to minimise cross contamination. |
| Soil Logging | Soil logging was carried out in general accordance with JECs relevant Standard Operating Procedure (SOP) and the United Soil Classification System (USCS) by a suitably qualified and experienced environmental scientist.<br>Soil sample descriptions and borehole logs are presented in Appendix D. |
| Soil Screening | A portion of each soil sample was placed inside a sealed plastic bag for soil screening in the field for Volatile Organic Compounds (VOCs) using a Photo-ionisation Detector (PID).<br>The PID was calibrated at the start of each day to 100 ppm isobutylene calibration gas. The calibration certificate is included in Appendix E.<br>The PID readings, together with other field observations, were used to assess which samples should be analysed for volatile contaminants. |
| QA/QC Samples | To measure the accuracy and precision of the data generated by the field and laboratory procedures carried out in this assessment, JEC collected and analysed the following QA/QC samples:<br>Soil Sampling Program<br>• One intra-laboratory and one inter-laboratory replicate soil sample were submitted to the primary and secondary laboratory respectively for analysis for metals.<br>• Six field blank sample were submitted to the primary laboratory for the analysis of metals to assess whether any contamination may have been introduced to the samples due to cross contamination of field equipment.<br>• Two trip blank sample were submitted to the primary laboratory for analysis for a TRH C6-C10 and BTEXN to access whether contamination may have been introduced to samples during transportation to the laboratory. |

### 9.1.1 Encountered Geology

During the soil investigation, the subsurface lithology was found to consist of:

- Fill: This layer consists of pavement material (including asphalt over medium sub-angular sandy gravel), with a depth ranging from 0.4 to 1.8 metres. It is primarily found in the carpark areas.
- Alluvial: Consisting of medium to coarse grained sandy clays/silty clays. Generally encountered in the northern section of the site.
- Residual/Extremely Weathered Schist: This layer consists of sandy silt or fine silty sand with varying plasticity, overlaying the weathered schist rock.
- Weathered Schist - Omeo Metamorphic Complex: This layer represents the underlying bedrock encountered at depths ranging from 1 to 10 metres. It consists of fine to medium-grained schist.

For detailed information on the soil profiles, please refer to Appendix D, which contains the soil logs.

# 10. Quality Assurance/Quality Control (QA/QC)

Work on this project was completed in accordance with standard JEC QA/QC procedures, NSW EPA Sampling design guidelines and NEPM Schedule B(2) “Assessment of Site Contamination”. A detailed discussion of the data validation is included in Appendix G.

JEC has completed a review of the quality assurance steps and quality control results, including holding times, laboratory accreditation, sample preservation methods and a review of field and laboratory quality control sample results.

Based on the field and laboratory QC results, it is considered that the field and laboratory programs have provided acceptable QA/QC results and that the results of the sampling and analysis program are sufficiently reliable.

# 11. Field Observations and Analytical Results

The following provides a summary of the results of the fieldwork and laboratory analysis of soil samples collected from the site.

## 11.1. Field Observations

A fill layer consistent layer of fill was encountered in each soil bore on site ranging between 0.4 m bgs – 1.8 m.

## 11.2. Field Screening

All soil samples collected during the fieldwork were screened in the field using a PID for the presence of VOCs. PID results all soils samples are presented in Appendix D.

All PID readings for soil samples collected from hand auger locations drilled were recorded at <0.1 ppm indicating low concentrations of volatile hydrocarbons in the samples. There was no observed staining of soils or noted hydrocarbon odours encountered during the soil investigation on site.

# 12. Results of Preliminary Site Investigation

The results of soil samples have been compiled and compared against relevant regulatory guidelines to assess their suitability for disposal offsite, potential resource recovery, and compliance with proposed future site use. All tables are included in Appendix B.

Table 1A provides a comparison of the soil sample results against the Nation Environmental Protection Measure (NEPM) Guidelines, considering the intended future use of the site.

In Table 1B, the soil sample results are evaluated against the criteria outlined in the NSW Waste Classification Guidelines: Part 1 (2014) to determine their classification for offsite disposal.

Additionally, Table 1C presents a comparison against the Resource Recovery Order: Excavated Natural Material Order (2014) to assess the potential for resource recovery from the excavated material.

Data from the Douglas Partners (2013) investigation has been incorporated into this assessment. Specifically, boreholes BH1 and BH2, located in the northeastern section of the site, have been reviewed and included in the analysis. The results of this data can be found in Table 1A and Table 1B, Appendix B.

For further details and reference, all certified laboratory reports and chain of custody documentation are available in Appendix F.

## 12.1. Suitability for on-site re-use of soil

As part of this preliminary investigation the soil samples have been compared against soil quality guidelines from National Environmental Protection (Assessment of Site Contamination) Measure (NEPM) (2013) Schedule B1 'Guideline on Investigation Levels for Soil and Groundwater'. Guidelines have been adopted commercial/industrial land uses to cover the proposed use of the site. The adopted criteria are presented in Section 6.1 and Table 1A, Appendix B.

Concentrations of analytes in all samples were below the adopted human health and ecological criteria relating to commercial / industrial land use, with the exception of arsenic in natural sample SB4/1.0 (204 mg/kg) which exceeded the adopted ecological screening level.

In this case, locally slightly elevated arsenic concentrations above the screening criteria is not likely to represent a risk to ecological receptors at the site, particularly in the context of a heavily developed urban site.

It is considered that the condition of soils underlying the site do not represent a risk to construction/maintenance workers or future users of the site.

Borehole data from the Douglas Partners (2013) investigation was reviewed as part of this assessment. Concentrations of analytes within boreholes BH1 and BH2, located in the northeastern section of the site, were all below the adopted human health and ecological criteria for commercial/industrial land use. The results for BH1 and BH2 are included in Table 1A, Appendix B.

Additionally, no evidence of construction rubble or potential asbestos-containing material (ACM) or any other aesthetic issues relating to contamination were observed during the site walkover; nor were any notes of rubble or other foreign materials included in the soil bores.

## 12.2. Preliminary Categorisation

### 12.2.1 NSW Waste Classification

Two soil samples, SB4_1.0-1.2 and SB5_1.0-1.2, recorded arsenic concentrations of 204 mg/kg and 150 mg/kg, respectively, exceeding the NSW General Solid Waste Upper Limit of 100 mg/kg. Both exceedances were located within natural materials.

No other analytes or samples exceeded the upper concentration limit for Fill Material.

Following NSW EPA guidelines, the 95% upper confidence limit (UCL) for arsenic was recalculated using ProUCL, focusing only on the natural material samples and excluding results from fill samples. The 95% KM Bootstrap t UCL value was determined to be 90.36 mg/kg, which is below the NSW General Solid Waste Upper Limit of 100 mg/kg. Based on this updated statistical analysis, the natural material is classified as General Solid Waste rather than Restricted Solid Waste, reducing the perceived environmental risk.

The results of the statistical analysis and comparison to NSW upper limits are detailed in Table 1B in Appendix B. Statistical outputs from ProUCL are also included in Appendix B for reference.

Consideration should be given to categorising surplus soil materials based on excavation locations, depths, soil types, and volumes, ensuring proper classification of any larger volumes of material during future works.

### 12.2.2 Excavated Natural Material

Several soil samples exceeded the NSW Excavated Natural Material (ENM) criterion for arsenic. While one sample exceeded the maximum average pH value and another the zinc maximum average concentration.

All other analytes were below the ENM criteria.

### 12.2.3 Virgin Excavated Natural Material

Given the historical uses of the site, which includes potentially contaminating activities, site soils would not meet the criteria for classification as Virgin Excavated Natural Material (VENM).

# 13. Discussion

Based on the Preliminary Site Investigation (PSI) conducted at 201 Borella Road, East Albury, NSW, the historical land use of the site has included agricultural and industrial activities. The potential for significant contamination arising from these historical activities is considered to range from low to high.

These areas of concern, along with their respective periods of operation or occurrence, are summarized as follows:

- Livestock Sales Yard (Late 1880s to 1970s).
- Abattoir (Late 1930s to 1970s).
- Levelling of the Site (1980s).
- Potential weather hazardous building material present from former site structures.
- Hospital Construction (1994).
- Potential fill imported to site/buried waste.
- Former Quarry (Southeast of the Site) possibly used for disposal of animal remains.
- Piggery (West of the Site).

- Above-Ground Diesel Storage Tanks (AST).
- Bunded Pool Chemical Storage.
- Former Underground Storage Tank (UST) for Iodine-131.

These activities introduced potential contaminants, including organochlorine pesticides (OCP), organophosphate pesticides (OPP), heavy metals, Total Recoverable Hydrocarbons (TRH), Benzene, Toluene, Ethylbenzene, Xylene (BTEX), Polycyclic Aromatic Hydrocarbons (PAHs), Volatile Organic Compounds (VOCs), and asbestos.

The investigation revealed a consistent fill layer across the site, ranging from 0.4 m to 1.8 m below ground surface (bgs). No buried waste was observed in the soil bores.

Most analytes tested were below the adopted human health and ecological screening levels for commercial/industrial land use. However, arsenic concentrations were identified in two natural soil samples, SB4_1.0-1.2 (204 mg/kg) and SB5_1.0-1.2 (150 mg/kg), which both exceed the NSW General Solid Waste upper limit (100 mg/kg), with the former sample concentration also exceeding the adopted ecological screening level.

Calculation of the 95% upper confidence limit (UCL) using ProUCL, focusing exclusively on natural material samples, resulted in a value of 90.36 mg/kg. This ProUCL calculation reduced the classification of the natural materials from Restricted Solid Waste to General Solid Waste. While the Toxicity Characteristic Leaching Procedure (TCLP) analysis also confirmed low leachability of arsenic.

Despite this reclassification, site soils did not meet the Excavated Natural Material (ENM) or Virgin Excavated Natural Material (VENM) criteria due to the presence of arsenic concentrations in some soil samples and the historical land uses.

Based on the site soil results, the soil conditions are not considered to pose an unacceptable risk to identified receptors related to its proposed use.

# 14. Conclusions and Recommendations

## 14.1. Conclusions

The Preliminary Site Investigation (PSI) has determined that the site at 201 Borella Road, East Albury, NSW is suitable in its current state for the proposed hospital redevelopment, in accordance with SEPP (Resilience and Hazards) 2021 and the Contaminated Land Planning Guidelines.

The investigation identified no significant contamination concerns that would necessitate further assessment or remediation, except where unexpected contamination is encountered during construction. Key findings include:

- Acid Sulfate Soils (ASS): A review of NSW Acid Sulfate Soil Risk Mapping and the Lotsearch Report (LS048622) confirms that the site is not within a designated ASS risk area. The geological setting, dominated by Quaternary colluvial deposits and Shepparton Formation soils, does not suggest conditions conducive to acid sulfate soil formation.
- Salinity: Regional salinity risk mapping indicates the site is not within a high salinity hazard area. However, clay-rich Shepparton Formation soils may contribute to minor localised salinity. No visible surface indicators, such as salt crusting or stressed vegetation, were observed during the site inspection.

- Historical Land Use: The site has undergone extensive redevelopment from agricultural and industrial use (including livestock sales yards and an abattoir) to a hospital facility. Borehole investigations, including historical data from Douglas Partners (2013), confirm that soil conditions within the identified areas of development meet adopted commercial/industrial land-use criteria.
- Soil Suitability: Soil sampling results were below the adopted health and ecological criteria for commercial/industrial land use under NEPM (2013), with the exception of arsenic exceedances in two natural soil samples. These exceedances surpassed the ecological screening level for suitability of on-site use but are not considered to pose a risk given the site's intended use. Separately, a 95% UCL statistical analysis was conducted to assess off-site disposal classification, confirming that natural site soils fall within the General Solid Waste category under NSW Waste Classification Guidelines.

Groundwater was not encountered during the investigation. Given the nature of site activities and soil conditions, impacts to groundwater are not considered a risk to site receptors.

## 14.2. Recommendations

If excavation or construction works uncover unexpected acid sulfate soils or saline conditions, further assessment should be undertaken, and appropriate management strategies should be implemented in accordance with NSW Acid Sulfate Soil Management Guidelines and Salinity Management Strategies.

If suspected contaminated materials (e.g., odours, staining, debris) are encountered during development, consultation with an environmental consultant is advised before proceeding with works.

This report should be read in conjunction with the *Important Information About your JEC Environmental Report*, as attached.

# 15. Limitations

The findings contained within this report are the result of discrete/specific sampling methodologies used in accordance with normal practices and standards, with some variations as indicated in the report. To the best of our knowledge, they represent a reasonable interpretation of the general condition of the site within the sampled areas. Under no circumstances, however, can it be considered that these findings represent the actual state of the site at all points.

In conducting this review and preparing the report, current guidelines for assessment and management of contaminated land were generally followed. This work has been conducted in good faith in accordance with JEC's understanding of the client's brief and general accepted practice for environmental consulting.

# LIMITATIONS

This report has been prepared by Jones Environmental Consulting Pty Ltd (JEC) for you, as JECs client, in accordance with our agreed purpose, scope, schedule and budget.

The report has been prepared using accepted procedures and practices of the consulting profession at the time it was prepared, and the opinions, recommendations and conclusions set out in the report are made in accordance with generally accepted principles and practices of that profession.

The report is based on information gained from environmental conditions (including assessment of some or all of soil, groundwater, vapour and surface water) and supplemented by reported data of the local area and professional experience. Assessment has been scoped with consideration to industry standards, regulations, guidelines and your specific requirements, including budget and timing. The characterisation of site conditions is an interpretation of information collected during assessment, in accordance with industry practice.

This interpretation is not a complete description of all material on or in the vicinity of the site, due to the inherent variation in spatial and temporal patterns of contaminant presence and impact in the natural environment. JEC may have also relied on data and other information provided by you and other qualified individuals in preparing this report. JEC has not verified the accuracy or completeness of such data or information except as otherwise stated in the report. For these reasons the report must be regarded as interpretative, in accordance with industry standards and practice, rather than being a definitive record.

1 Your report has been written for a specific purpose

Your report has been developed for a specific purpose as agreed by us and applies only to the site or area investigated. Unless otherwise stated in the report, this report cannot be applied to an adjacent site or area, nor can it be used when the nature of the specific purpose changes from that which we agreed.

For each purpose, a tailored approach to the assessment of potential soil and groundwater contamination is required. In most cases, a key objective is to identify, and if possible quantify, risks that both recognised and potential contamination posed in the context of the agreed purpose. Such risks may be financial (for example, clean up costs or constraints on site use) and/or physical (for example, potential health risks to users of the site or the general public).

2 Limitations

The work was conducted, and the report has been prepared, in response to an agreed purpose and scope, within time and budgetary constraints, and in reliance on certain data and information made available to JEC.

The analyses, evaluations, opinions and conclusions presented in this report are based on that purpose and scope, requirements, data or information, and they could change if such requirements or data are inaccurate or incomplete.

This report is valid as of the date of preparation. The condition of the site (including subsurface conditions) and extent or nature of contamination or other environmental hazards can change over time, as a result of either natural processes or human influence. JEC should be kept appraised of any such events and should be consulted for further investigations if any changes are noted, particularly during construction activities where excavations often reveal subsurface conditions.

In addition, advancements in professional practice regarding contaminated land and changes in applicable statues and/or guidelines may affect the validity of this report. Consequently, the currency of conclusions and recommendations in this report should be verified if you propose to use this report more than 6 months after its date of issue.
The report does not include the evaluation or assessment of potential geotechnical engineering constraints of the site.

## 3 Interpretation

Environmental site assessments identify actual conditions only at those points where samples are taken and on the date collected. Data derived from indirect field measurements, and sometimes other reports on the site, are interpreted by geologists, engineers or scientists to provide an opinion about overall site conditions, their likely impact with respect to the report purpose and recommended actions.

Variations in soil and groundwater conditions may occur between test or sample locations and actual conditions may differ from those inferred to exist. No environmental assessment program, no matter how comprehensive, can reveal all subsurface details and anomalies. Similarly, no professional, no matter how well qualified, can reveal what is hidden by earth, rock or changed through time.

The actual interface between different materials may be far more gradual or abrupt than assumed based on the facts obtained. Nothing can be done to change the actual site conditions which exist, but steps can be taken to reduce the impact of unexpected conditions.

For this reason, parties involved with land acquisition, management and/or redevelopment should retain the services of a suitably qualified and experienced environmental consultant through the development and use of the site to identify variances, conduct additional tests if required, and recommend solutions to unexpected conditions or other unrecognised features encountered on site. JEC would be pleased to assist with any investigation or advice in such circumstances.

## 4 Recommendations

This report assumes, in accordance with industry practice, that the site conditions recognised through discrete sampling are representative of actual conditions throughout the investigation area. Recommendations are based on the resulting interpretation. Should further data be obtained that differs from the data on which the report recommendations are based (such as through excavation or other additional assessment), then the recommendations would need to be reviewed and may need to be revised.

## 5 Report for benefit of client

Unless otherwise agreed between us, the report has been prepared for your benefit and no other party. Other parties should not rely upon the report or the accuracy or completeness of any recommendation and should make their own enquiries and obtain independent advice in relation to such matters.

JEC assumes no responsibility and will not be liable to any other person or organisation for, or in relation to, any matter dealt with or conclusions expressed in the report, or for any loss or damage suffered by any other person or organisation arising from matters dealt with or conclusions expressed in the report.

To avoid misuse of the information presented in your report, we recommend that JEC be consulted before the report is provided to another party who may not be familiar with the background and the purpose of the report. In particular, an environmental disclosure report for a property vendor may not be suitable for satisfying the needs of that property's purchaser. This report should not be applied for any purpose other than that stated in the report.

## 6 Interpretation

Costly problems can occur when other professionals develop their plans based on misinterpretations of a report. To help avoid misinterpretations, a suitably qualified and experienced environmental consultant should be retained to explain the implications of the report to other professionals referring to the report and then review plans and specifications produced to see how other professionals have incorporated the report findings.

Given JEC prepared the report and has familiarity with the site, JEC is well placed to provide such assistance. If another party is engaged to interpret the recommendations of the report, there is a risk that the contents of the report may be misinterpreted and JEC disowns any responsibility for such misinterpretation.

## 7 Data

The report as a whole presents the findings of the site assessment and the report should not be copied in part or altered in any way. Logs, figures, laboratory data, drawings, etc. are customarily included in our reports and are developed by scientists or engineers based on their interpretation of field logs, field testing and laboratory evaluation of samples. This information should not under any circumstances be redrawn for inclusion in other documents or separated from the report in any way. This report should be reproduced in full. No responsibility is accepted for use of any part of this report in any other context or for any other purpose or by third parties.

## 8 Responsibility

Environmental reporting relies on interpretation of factual information using professional judgement and opinion and has a level of uncertainty attached to it, which is much less exact than other design disciplines. This has often resulted in claims being lodged against consultants, which are unfounded. As noted earlier, the recommendations and findings set out in this report should only be regarded as interpretive and should not be taken as accurate and complete information about all environmental media at all depths and locations across the site.

# Appendix A - Figures




| | |
|---|---|
| drawn | RJ |
| approved | PJ |
| date | 16/12/24 |
| scale | NTS |
| original size | A4 |

jones environmental consulting

| | |
|---|---|
| client: | Civil Test Pty Ltd |
| project: | Preliminary Site Investigation<br>201 Borella Road, East Albury, NSW, 2640 |
| title: | Site Locality |
| project no: JE10388 | figure no: FIGURE 1 |




| | |
|---|---|
| drawn | RJ |
| approved | PJ |
| date | 02/02/25 |
| scale | NTS |
| original size | A4 |

jones environmental consulting

| | |
|---|---|
| client: | Civil Test Pty Ltd |
| project: | Preliminary Site Investigation<br>201 Borella Road, East Albury, NSW, 2640 |
| title: | Albury Base Hospital Proposed Development Overlay |
| project no: | JE10388 |
| figure no: | FIGURE 2 |




| | |
|---|---|
| drawn | RJ |
| approved | PJ |
| date | 16/12/24 |
| scale | NTS |
| original size | A4 |

jones environmental consulting

| | |
|---|---|
| client: | Civil Test Pty Ltd |
| project: | Preliminary Site Investigation<br>201 Borella Road, East Albury, NSW, 2640 |
| title: | Potential Areas of Concern |
| project no: | JE10388 |
| figure no: | FIGURE 3 |




| | |
|---|---|
| drawn | RJ |
| approved | PJ |
| date | 02/02/25 |
| scale | NTS |
| original size | A4 |

jones environmental consulting

| | |
|---|---|
| client: | Civil Test Pty Ltd |
| project: | Preliminary Site Investigation<br>201 Borella Road, East Albury, NSW, 2640 |
| title: | Soil Sampling Locations |
| project no: JE10388 | figure no: FIGURE 4 |

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# Appendix B - Tables

Table 1
Laboratory Analytical Results - Soil
JE10388

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Field ID | SB1_0.0-0.2 | SB1_1.0-1.2 | SB2_0.5-0.7 | SB2_2.0-2.2 | SB3_0.0-0.2 | SB3_2.0-2.2 | SB4_0.0-0.2 |
| | | | | | | | Date | 18 Dec 2023 | 18 Dec 2023 | 13 Dec 2023 | 13 Dec 2023 | 14 Dec 2023 | 14 Dec 2023 | 12 Dec 2023 |
| | Unit | EQL | CRC Care HSL-D Commercial / Industrial | NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Clay | NEPM 2013 Table 1B(5) Generic EIL - Comm/Ind | NEPM 2013 Table 1B(6) ESLs for Comm/Ind, Fine Soil | NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil | | | | | | | |
| **Asbestos** | | | | | | | | | | | | | | |
| Asbestos fibres | g/kg | 0.1 | | | | | | ND | | ND | | ND | | |
| **NA** | | | | | | | | | | | | | | |
| Clay in soils <2um | % | 1 | | | | | | | | | | | | 4 |
| Magnesium/Potassium Ratio | - | 0.2 | | | | | | | 28.2 | | 23.5 | | | 6.2 |
| weight of sample | g | 0.01 | | | | | | 181 | | 151 | | 112 | | |
| **Particle Size** | | | | | | | | | | | | | | |
| DENSITY | g/cm3 | 0.01 | | | | | | | | | | | | 2.68 |
| **BTEX** | | | | | | | | | | | | | | |
| Naphthalene (BTEX) | mg/kg | 1 | 11,000 | | 370 | | | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Benzene | mg/kg | 0.2 | 430 | 4 \| 6 \| 9 \| 20 | | 95 | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| Toluene | mg/kg | 0.5 | 99,000 | | | 135 | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Ethylbenzene | mg/kg | 0.5 | 27,000 | | | 185 | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Xylene (m & p) | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Xylene (o) | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Xylene Total | mg/kg | 0.5 | 81,000 | | | 95 | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Total BTEX | mg/kg | 0.2 | | | | | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| **Phenols** | | | | | | | | | | | | | | |
| 3&4-Methylphenol (m&p-cresol) | mg/kg | 1 | | | | | | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| 2,4,5-Trichlorophenol | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 2,4,6-Trichlorophenol | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 2,4-Dichlorophenol | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 2,4-Dimethylphenol | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 2,6-Dichlorophenol | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 2-Chlorophenol | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 2-Methylphenol | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 2-Nitrophenol | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 4-chloro-3-methylphenol | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Pentachlorophenol | mg/kg | 2 | | | | | 660 | <2 | <2 | <2 | <2 | <2 | <2 | <2 |
| Phenol | mg/kg | 0.5 | | | | | 240,000 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| **TPH** | | | | | | | | | | | | | | |
| C6-C9 | mg/kg | 20 | | | | | | | | | | | | |
| C10-C14 | mg/kg | 20 | | | | | | | | | | | | |
| C15-C28 | mg/kg | 50 | | | | | | | | | | | | |
| C29-C36 | mg/kg | 50 | | | | | | | | | | | | |
| **TRH** | | | | | | | | | | | | | | |
| C6-C10 | mg/kg | 10 | 26,000 | | | | | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| C6-C10 (F1 minus BTEX) | mg/kg | 10 | | 310 \| 480 | | 215 | | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| C10-C16 | mg/kg | 50 | 20,000 | | | 170 | | <50 | <50 | <50 | <50 | <50 | <50 | <50 |
| C10-C16 (F2 minus Naphthalene) | mg/kg | 50 | | | | 170 | | <50 | <50 | <50 | <50 | <50 | <50 | <50 |
| C16-C34 | mg/kg | 100 | 27,000 | | | 2,500 | | <100 | <100 | <100 | <100 | <100 | <100 | <100 |
| C34-C40 | mg/kg | 100 | 38,000 | | | 6,600 | | <100 | <100 | <100 | <100 | <100 | <100 | <100 |
| C10-C40 (Sum of total) | mg/kg | 50 | | | | | | <50 | <50 | <50 | <50 | <50 | <50 | <50 |
| **Halogenated Benzenes** | | | | | | | | | | | | | | |
| Hexachlorobenzene | mg/kg | 0.05 | | | | | 80 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Inorganics** | | | | | | | | | | | | | | |
| Exchangeable Calcium Percent | % | 0.2 | | | | | | | 24.4 | | 23.6 | | | 75.2 |
| Exchangeable Magnesium Percent | % | 0.2 | | | | | | | 62.9 | | 52.0 | | | 21.4 |
| Exchangeable Potassium Percent | % | 0.2 | | | | | | | 2.2 | | 2.2 | | | 3.4 |
| Exchangeable Sodium Percent | % | 0.2 | | | | | | | 10.4 | | 22.2 | | | <0.2 |
| Exchangeable Calcium | meq/100g | 0.1 | | | | | | | 3.6 | | 4.0 | | | 6.1 |
| Exchangeable Magnesium | meq/100g | 0.1 | | | | | | | 9.3 | | 8.8 | | | 1.7 |
| Exchangeable Potassium | meq/100g | 0.1 | | | | | | | 0.3 | | 0.4 | | | 0.3 |
| Exchangeable Sodium | meq/100g | 0.1 | | | | | | | 1.5 | | 3.7 | | | <0.2 |
| CEC | meq/100g | 0.1 | | | | | | | 14.8 | | 16.8 | | | 8.1 |
| Cyanide Total | mg/kg | 1 | | | | | | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Electrical Conductivity (Lab) | µS/cm | 1 | | | | | | | 94 | | 136 | | | 92 |
| Calcium/Magnesium Ratio | - | 0.2 | | | | | | | 0.4 | | 0.4 | | | 3.5 |
| Fluoride | mg/kg | 40 | | | | | | 440 | 280 | 210 | 260 | 530 | 280 | 360 |
| pH (Lab) | - | 0.1 | | | | | | | 8.3 | | 8.6 | | | 9.7 |
| TOC | % | 0.5 | | | | | | | <0.5 | | <0.5 | | | <0.5 |
| **Metals** | | | | | | | | | | | | | | |
| Arsenic | mg/kg | 2 | | | 160 | | 3,000 | 82 | 8 | <5 | <5 | 86 | <5 | 6 |
| | mg/l | 0 | | | | | | | | | | | | |
| Barium | mg/kg | 10 | | | | | | 50 | 200 | 80 | 70 | 30 | 90 | 30 |
| Beryllium | mg/kg | 1 | | | | | 500 | 1 | 2 | 1 | 1 | 1 | <1 | <1 |
| Boron | mg/kg | 50 | | | | | 300,000 | <50 | <50 | <50 | <50 | <50 | <50 | <50 |
| Cadmium | mg/kg | 0.4 | | | | | 900 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Chromium | mg/kg | 2 | | | 310 | | | 17 | 30 | 25 | 25 | 20 | 25 | 16 |
| Cobalt | mg/kg | 2 | | | | | 4,000 | 8 | 19 | 4 | 11 | 8 | 6 | 7 |
| Copper | mg/kg | 5 | | | 280 | | 240,000 | 26 | 17 | 12 | 14 | 23 | 15 | 9 |
| Iron | % | 0.005 | | | | | | | 3.16 | | 2.13 | | | 1.46 |
| Lead | mg/kg | 5 | | | 1800 | | 1,500 | 12 | 40 | 14 | 15 | 15 | 11 | 6 |
| Manganese | mg/kg | 5 | | | | | 60,000 | 180 | 820 | 117 | 154 | 184 | 168 | 178 |
| Mercury | mg/kg | 0.1 | | | | | 730 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| Molybdenum | mg/kg | 5 | | | | | | | | | | | | |

Table 1
Laboratory Analytical Results - Soil
JE10388

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Field ID | SB1_0.0-0.2 | SB1_1.0-1.2 | SB2_0.5-0.7 | SB2_2.0-2.2 | SB3_0.0-0.2 | SB3_2.0-2.2 | SB4_0.0-0.2 |
| | | | | | | | Date | 18 Dec 2023 | 18 Dec 2023 | 13 Dec 2023 | 13 Dec 2023 | 14 Dec 2023 | 14 Dec 2023 | 12 Dec 2023 |
| | Unit | EQL | CRC Care HSL-D Commercial / Industrial | NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Clay | NEPM 2013 Table 1B(5) Generic EIL - Comm/Ind | NEPM 2013 Table 1B(6) ESLs for Comm/Ind, Fine Soil | NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil | | | | | | | |
| Nickel | mg/kg | 2 | | | 290 | | 6,000 | 13 | 14 | 12 | 12 | 16 | 11 | 20 |
| Selenium | mg/kg | 2 | | | | | 10,000 | <5 | <5 | <5 | <5 | <5 | <5 | <5 |
| Silver | mg/kg | 2 | | | | | | | | | | | | |
| Tin | mg/kg | 10 | | | | | | | | | | | | |
| Vanadium | mg/kg | 5 | | | | | | 22 | 51 | 31 | 34 | 19 | 28 | 21 |
| Zinc | mg/kg | 5 | | | 620 | | 400,000 | 36 | 27 | 25 | 24 | 40 | 25 | 29 |
| **Organochlorine Pesticides** | | | | | | | | | | | | | | |
| 4,4-DDE | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| a-BHC | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Aldrin | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Aldrin + Dieldrin | mg/kg | 0.05 | | | | | 45 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| b-BHC | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Chlordane | mg/kg | 0.05 | | | | | 530 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Chlordane (cis) | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Chlordane (trans) | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| d-BHC | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| DDD | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| DDT | mg/kg | 0.2 | | | 640 | | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| DDT+DDE+DDD | mg/kg | 0.05 | | | | | 3,600 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Dieldrin | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Endosulfan | mg/kg | 0.05 | | | | | 2,000 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Endosulfan I | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Endosulfan II | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Endosulfan sulphate | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Endrin | mg/kg | 0.05 | | | | | 100 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Endrin aldehyde | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Endrin ketone | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| g-BHC (Lindane) | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Heptachlor | mg/kg | 0.05 | | | | | 50 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Heptachlor epoxide | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Methoxychlor | mg/kg | 0.2 | | | | | 2,500 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| **Organophosphorous Pesticides** | | | | | | | | | | | | | | |
| Azinophos methyl | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Bromophos-ethyl | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Carbophenothion | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Chlorfenvinphos | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Chlorpyrifos | mg/kg | 0.05 | | | | | 2,000 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Chlorpyrifos-methyl | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Diazinon | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Dichlorvos | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Dimethoate | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Ethion | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Fenthion | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Malathion | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Methyl parathion | mg/kg | 0.2 | | | | | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| Monocrotophos | mg/kg | 0.2 | | | | | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| Prothiofos | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **PAH** | | | | | | | | | | | | | | |
| Acenaphthene | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Acenaphthylene | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Anthracene | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Benz(a)anthracene | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Benzo(a) pyrene | mg/kg | 0.5 | | | | 1.4 | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Benzo(b+j)fluoranthene | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Benzo(g,h,i)perylene | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Benzo(k)fluoranthene | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Chrysene | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Dibenz(a,h)anthracene | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Fluoranthene | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Fluorene | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Indeno(1,2,3-c,d)pyrene | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Naphthalene | mg/kg | 0.5 | 11,000 | | 370 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Phenanthrene | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Pyrene | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| PAHs (Sum of total) | mg/kg | 0.5 | | | | | 4,000 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| **PCBs** | | | | | | | | | | | | | | |
| PCBs (Sum of total) | mg/kg | 0.1 | | | | | 7 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| **Pesticides** | | | | | | | | | | | | | | |
| Demeton-S-methyl | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Fenamiphos | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Parathion | mg/kg | 0.2 | | | | | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| Pirimphos-ethyl | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |

Table 1
Laboratory Analytical Results - Soil
JE10388

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Field ID | SB4_1.0-1.2 | SB5_0.0-0.2 | SB5_1.0-1.2 | SB6_0.0-0.2 | SB6_1.0-1.2 | SB6_1.5 | SB7_0.5-0.7 | SB7_2.0-2.2 |
| | | | | | | | Date | 12 Dec 2023 | 14 Dec 2023 | 14 Dec 2023 | 19 Dec 2023 | 19 Dec 2023 | 19 Dec 2023 | 19 Dec 2023 | 19 Dec 2023 |
| | Unit | EQL | CRC Care HSL-D Commercial / Industrial | NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Clay | NEPM 2013 Table 1B(5) Generic EIL - Comm/Ind | NEPM 2013 Table 1B(6) ESLs for Comm/Ind, Fine Soil | NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil | | | | | | | | |
| **Asbestos** | | | | | | | | | | | | | | | |
| Asbestos fibres | **g/kg** | 0.1 | | | | | | | | | ND | ND | ND | ND | ND |
| **NA** | | | | | | | | | | | | | | | |
| Clay in soils <2um | **%** | 1 | | | | | | 13 | 5 | | | | | | |
| Magnesium/Potassium Ratio | **-** | 0.2 | | | | | | | 2.8 | 34.7 | | | | | |
| weight of sample | **g** | 0.01 | | | | | | | | | 291 | 42.5 | 43.7 | 167 | 45.0 |
| **Particle Size** | | | | | | | | | | | | | | | |
| DENSITY | **g/cm3** | 0.01 | | | | | | 2.75 | 2.35 | | | | | | |
| **BTEX** | | | | | | | | | | | | | | | |
| Naphthalene (BTEX) | **mg/kg** | 1 | 11,000 | | 370 | | | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Benzene | **mg/kg** | 0.2 | 430 | 4 \| 6 \| 9 \| 20 | | 95 | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| Toluene | **mg/kg** | 0.5 | 99,000 | | | 135 | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Ethylbenzene | **mg/kg** | 0.5 | 27,000 | | | 185 | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Xylene (m & p) | **mg/kg** | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Xylene (o) | **mg/kg** | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Xylene Total | **mg/kg** | 0.5 | 81,000 | | | 95 | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Total BTEX | **mg/kg** | 0.2 | | | | | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| **Phenols** | | | | | | | | | | | | | | | |
| 3&4-Methylphenol (m&p-cresol) | **mg/kg** | 1 | | | | | | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| 2,4,5-Trichlorophenol | **mg/kg** | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 2,4,6-Trichlorophenol | **mg/kg** | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 2,4-Dichlorophenol | **mg/kg** | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 2,4-Dimethylphenol | **mg/kg** | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 2,6-Dichlorophenol | **mg/kg** | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 2-Chlorophenol | **mg/kg** | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 2-Methylphenol | **mg/kg** | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 2-Nitrophenol | **mg/kg** | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 4-chloro-3-methylphenol | **mg/kg** | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Pentachlorophenol | **mg/kg** | 2 | | | | | 660 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 |
| Phenol | **mg/kg** | 0.5 | | | | | 240,000 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| **TPH** | | | | | | | | | | | | | | | |
| C6-C9 | **mg/kg** | 20 | | | | | | | | | | | | | |
| C10-C14 | **mg/kg** | 20 | | | | | | | | | | | | | |
| C15-C28 | **mg/kg** | 50 | | | | | | | | | | | | | |
| C29-C36 | **mg/kg** | 50 | | | | | | | | | | | | | |
| **TRH** | | | | | | | | | | | | | | | |
| C6-C10 | **mg/kg** | 10 | 26,000 | | | | | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| C6-C10 (F1 minus BTEX) | **mg/kg** | 10 | | 310 \| 480 | | 215 | | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| C10-C16 | **mg/kg** | 50 | 20,000 | | | 170 | | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 |
| C10-C16 (F2 minus Naphthalene) | **mg/kg** | 50 | | | | 170 | | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 |
| C16-C34 | **mg/kg** | 100 | 27,000 | | | 2,500 | | <100 | 370 | <100 | <100 | <100 | <100 | <100 | <100 |
| C34-C40 | **mg/kg** | 100 | 38,000 | | | 6,600 | | <100 | 620 | <100 | <100 | <100 | <100 | <100 | <100 |
| C10-C40 (Sum of total) | **mg/kg** | 50 | | | | | | <50 | 990 | <50 | <50 | <50 | <50 | <50 | <50 |
| **Halogenated Benzenes** | | | | | | | | | | | | | | | |
| Hexachlorobenzene | **mg/kg** | 0.05 | | | | | 80 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Inorganics** | | | | | | | | | | | | | | | |
| Exchangeable Calcium Percent | **%** | 0.2 | | | | | | 21.5 | 48.6 | 12.2 | | | | | |
| Exchangeable Magnesium Percent | **%** | 0.2 | | | | | | 60.3 | 32.6 | 68.7 | | | | | |
| Exchangeable Potassium Percent | **%** | 0.2 | | | | | | <0.2 | 11.6 | 2.0 | | | | | |
| Exchangeable Sodium Percent | **%** | 0.2 | | | | | | 18.2 | 7.3 | 17.1 | | | | | |
| Exchangeable Calcium | **meq/100g** | 0.1 | | | | | | 1.2 | 1.8 | 2.0 | | | | | |
| Exchangeable Magnesium | **meq/100g** | 0.1 | | | | | | 3.4 | 1.2 | 11.5 | | | | | |
| Exchangeable Potassium | **meq/100g** | 0.1 | | | | | | <0.2 | 0.4 | 0.3 | | | | | |
| Exchangeable Sodium | **meq/100g** | 0.1 | | | | | | 1.0 | 0.3 | 2.9 | | | | | |
| CEC | **meq/100g** | 0.1 | | | | | | 5.7 | 3.7 | 16.8 | | | | | |
| Cyanide Total | **mg/kg** | 1 | | | | | | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Electrical Conductivity (Lab) | **µS/cm** | 1 | | | | | | 55 | 115 | 159 | | | | | |
| Calcium/Magnesium Ratio | - | 0.2 | | | | | | 0.4 | 1.5 | <0.2 | | | | | |
| Fluoride | **mg/kg** | 40 | | | | | | 180 | 390 | 300 | 280 | 330 | 380 | 310 | 380 |
| pH (Lab) | - | 0.1 | | | | | | 9.0 | 8.6 | 8.2 | | | | | |
| TOC | **%** | 0.5 | | | | | | <0.5 | 1.8 | <0.5 | | | | | |
| **Metals** | | | | | | | | | | | | | | | |
| Arsenic | **mg/kg** | 2 | | | 160 | | 3,000 | 204 | 44 | 150 | 50 | 23 | 36 | 19 | 31 |
| | **mg/l** | 0 | | | | | | 0.1 | | | | | | | |
| Barium | **mg/kg** | 10 | | | | | | 60 | 40 | 90 | 50 | 50 | 50 | 60 | 70 |
| Beryllium | **mg/kg** | 1 | | | | | 500 | 3 | <1 | 2 | <1 | 1 | 2 | 2 | 2 |
| Boron | **mg/kg** | 50 | | | | | 300,000 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 |
| Cadmium | **mg/kg** | 0.4 | | | | | 900 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Chromium | **mg/kg** | 2 | | | 310 | | | 38 | 16 | 27 | 16 | 28 | 37 | 28 | 28 |
| Cobalt | **mg/kg** | 2 | | | | | 4,000 | 14 | 12 | 9 | 6 | 11 | 21 | 11 | 11 |
| Copper | **mg/kg** | 5 | | | 280 | | 240,000 | 20 | 15 | 19 | 15 | 14 | 18 | 15 | 16 |
| Iron | **%** | 0.005 | | | | | | 3.17 | 2.14 | 3.04 | | | | | |
| Lead | **mg/kg** | 5 | | | 1800 | | 1,500 | 13 | 10 | 48 | 9 | 21 | 34 | 38 | 30 |
| Manganese | **mg/kg** | 5 | | | | | 60,000 | 238 | 177 | 99 | 206 | 118 | 173 | 330 | 188 |
| Mercury | **mg/kg** | 0.1 | | | | | 730 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| Molybdenum | **mg/kg** | 5 | | | | | | | | | | | | | |

Table 1
Laboratory Analytical Results - Soil
JE10388

| | | | | | | | Field ID | SB4_1.0-1.2 | SB5_0.0-0.2 | SB5_1.0-1.2 | SB6_0.0-0.2 | SB6_1.0-1.2 | SB6_1.5 | SB7_0.5-0.7 | SB7_2.0-2.2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Date | 12 Dec 2023 | 14 Dec 2023 | 14 Dec 2023 | 19 Dec 2023 | 19 Dec 2023 | 19 Dec 2023 | 19 Dec 2023 | 19 Dec 2023 |
| | Unit | EQL | CRC Care HSL-D Commercial / Industrial | NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Clay | NEPM 2013 Table 1B(5) Generic EIL - Comm/Ind | NEPM 2013 Table 1B(6) ESLs for Comm/Ind, Fine Soil | NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil | | | | | | | | |
| Nickel | mg/kg | 2 | | | 290 | | 6,000 | 17 | 12 | 13 | 10 | 13 | 18 | 14 | 14 |
| Selenium | mg/kg | 2 | | | | | 10,000 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 |
| Silver | mg/kg | 2 | | | | | | | | | | | | | |
| Tin | mg/kg | 10 | | | | | | | | | | | | | |
| Vanadium | mg/kg | 5 | | | | | | 36 | 30 | 42 | 31 | 39 | 48 | 42 | 42 |
| Zinc | mg/kg | 5 | | | 620 | | 400,000 | 180 | 39 | 55 | 35 | 36 | 54 | 28 | 44 |
| **Organochlorine Pesticides** | | | | | | | | | | | | | | | |
| 4,4-DDE | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| a-BHC | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Aldrin | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Aldrin + Dieldrin | mg/kg | 0.05 | | | | | 45 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| b-BHC | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Chlordane | mg/kg | 0.05 | | | | | 530 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Chlordane (cis) | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Chlordane (trans) | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| d-BHC | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| DDD | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| DDT | mg/kg | 0.2 | | | 640 | | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| DDT+DDE+DDD | mg/kg | 0.05 | | | | | 3,600 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Dieldrin | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Endosulfan | mg/kg | 0.05 | | | | | 2,000 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Endosulfan I | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Endosulfan II | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Endosulfan sulphate | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Endrin | mg/kg | 0.05 | | | | | 100 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Endrin aldehyde | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Endrin ketone | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| g-BHC (Lindane) | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Heptachlor | mg/kg | 0.05 | | | | | 50 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Heptachlor epoxide | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Methoxychlor | mg/kg | 0.2 | | | | | 2,500 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| **Organophosphorous Pesticides** | | | | | | | | | | | | | | | |
| Azinophos methyl | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Bromophos-ethyl | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Carbophenothion | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Chlorfenvinphos | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Chlorpyrifos | mg/kg | 0.05 | | | | | 2,000 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Chlorpyrifos-methyl | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Diazinon | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Dichlorvos | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Dimethoate | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Ethion | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Fenthion | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Malathion | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Methyl parathion | mg/kg | 0.2 | | | | | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| Monocrotophos | mg/kg | 0.2 | | | | | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| Prothiofos | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **PAH** | | | | | | | | | | | | | | | |
| Acenaphthene | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Acenaphthylene | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Anthracene | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Benz(a)anthracene | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Benzo(a) pyrene | mg/kg | 0.5 | | | | 1.4 | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Benzo(b+j)fluoranthene | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Benzo(g,h,i)perylene | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Benzo(k)fluoranthene | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Chrysene | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Dibenz(a,h)anthracene | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Fluoranthene | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Fluorene | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Indeno(1,2,3-c,d)pyrene | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Naphthalene | mg/kg | 0.5 | 11,000 | | 370 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Phenanthrene | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Pyrene | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| PAHs (Sum of total) | mg/kg | 0.5 | | | | | 4,000 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| **PCBs** | | | | | | | | | | | | | | | |
| PCBs (Sum of total) | mg/kg | 0.1 | | | | | 7 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| **Pesticides** | | | | | | | | | | | | | | | |
| Demeton-S-methyl | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Fenamiphos | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Parathion | mg/kg | 0.2 | | | | | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| Pirimphos-ethyl | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |

Table 1
Laboratory Analytical Results - Soil
JE10388

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Field ID | SB8_0.0-0.2 | SB8_1.0-1.2 | SB8_4.0-4.2 | SB9_0.5-0.7 | SB10_0.0-0.2 | SB10_1.0-1.2 | SB11_0.5-0.7 |
| | | | | | | | Date | 15 Dec 2023 | 15 Dec 2023 | 15 Dec 2023 | 14 Dec 2023 | 19 Dec 2023 | 19 Dec 2023 | 18 Dec 2023 |
| | Unit | EQL | CRC Care HSL-D Commercial / Industrial | NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Clay | NEPM 2013 Table 1B(5) Generic EIL - Comm/Ind | NEPM 2013 Table 1B(6) ESLs for Comm/Ind, Fine Soil | NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil | | | | | | | |
| **Asbestos** | | | | | | | | | | | | | | |
| Asbestos fibres | g/kg | 0.1 | | | | | | | | | | ND | ND | |
| **NA** | | | | | | | | | | | | | | |
| Clay in soils <2um | % | 1 | | | | | | 32 | | | 7 | | | 33 |
| Magnesium/Potassium Ratio | - | 0.2 | | | | | | 14.5 | | 26.1 | | | | |
| weight of sample | g | 0.01 | | | | | | | | | | 199 | 192 | |
| **Particle Size** | | | | | | | | | | | | | | |
| DENSITY | g/cm3 | 0.01 | | | | | | 2.73 | | | 2.63 | | | 2.93 |
| **BTEX** | | | | | | | | | | | | | | |
| Naphthalene (BTEX) | mg/kg | 1 | 11,000 | | 370 | | | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Benzene | mg/kg | 0.2 | 430 | 4 \| 6 \| 9 \| 20 | | 95 | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| Toluene | mg/kg | 0.5 | 99,000 | | | 135 | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Ethylbenzene | mg/kg | 0.5 | 27,000 | | | 185 | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Xylene (m & p) | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Xylene (o) | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Xylene Total | mg/kg | 0.5 | 81,000 | | | 95 | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Total BTEX | mg/kg | 0.2 | | | | | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| **Phenols** | | | | | | | | | | | | | | |
| 3&4-Methylphenol (m&p-cresol) | mg/kg | 1 | | | | | | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| 2,4,5-Trichlorophenol | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 2,4,6-Trichlorophenol | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 2,4-Dichlorophenol | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 2,4-Dimethylphenol | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 2,6-Dichlorophenol | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 2-Chlorophenol | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 2-Methylphenol | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 2-Nitrophenol | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 4-chloro-3-methylphenol | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Pentachlorophenol | mg/kg | 2 | | | | | 660 | <2 | <2 | <2 | <2 | <2 | <2 | <2 |
| Phenol | mg/kg | 0.5 | | | | | 240,000 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| **TPH** | | | | | | | | | | | | | | |
| C6-C9 | mg/kg | 20 | | | | | | | | | | | | |
| C10-C14 | mg/kg | 20 | | | | | | | | | | | | |
| C15-C28 | mg/kg | 50 | | | | | | | | | | | | |
| C29-C36 | mg/kg | 50 | | | | | | | | | | | | |
| **TRH** | | | | | | | | | | | | | | |
| C6-C10 | mg/kg | 10 | 26,000 | | | | | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| C6-C10 (F1 minus BTEX) | mg/kg | 10 | | 310 \| 480 | | 215 | | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| C10-C16 | mg/kg | 50 | 20,000 | | | 170 | | <50 | <50 | <50 | <50 | <50 | <50 | <50 |
| C10-C16 (F2 minus Naphthalene) | mg/kg | 50 | | | | 170 | | <50 | <50 | <50 | <50 | <50 | <50 | <50 |
| C16-C34 | mg/kg | 100 | 27,000 | | | 2,500 | | <100 | <100 | <100 | <100 | <100 | <100 | <100 |
| C34-C40 | mg/kg | 100 | 38,000 | | | 6,600 | | <100 | <100 | <100 | <100 | <100 | <100 | <100 |
| C10-C40 (Sum of total) | mg/kg | 50 | | | | | | <50 | <50 | <50 | <50 | <50 | <50 | <50 |
| **Halogenated Benzenes** | | | | | | | | | | | | | | |
| Hexachlorobenzene | mg/kg | 0.05 | | | | | 80 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Inorganics** | | | | | | | | | | | | | | |
| Exchangeable Calcium Percent | % | 0.2 | | | | | | 38.3 | 18.7 | 22.0 | 46.5 | | | |
| Exchangeable Magnesium Percent | % | 0.2 | | | | | | 50.2 | 55.2 | 48.6 | 45.3 | | | |
| Exchangeable Potassium Percent | % | 0.2 | | | | | | 3.5 | 2.0 | 1.9 | 3.3 | | | |
| Exchangeable Sodium Percent | % | 0.2 | | | | | | 8.0 | 24.1 | 27.5 | 4.9 | | | |
| Exchangeable Calcium | meq/100g | 0.1 | | | | | | 4.2 | 1.7 | 3.0 | 2.3 | | | 2.6 |
| Exchangeable Magnesium | meq/100g | 0.1 | | | | | | 5.5 | 5.1 | 6.7 | 2.3 | | | 9.4 |
| Exchangeable Potassium | meq/100g | 0.1 | | | | | | 0.4 | <0.2 | 0.2 | <0.2 | | | 1.1 |
| Exchangeable Sodium | meq/100g | 0.1 | | | | | | 0.9 | 2.2 | 3.8 | 0.2 | | | 0.4 |
| CEC | meq/100g | 0.1 | | | | | | 10.9 | 9.3 | 13.8 | 5.0 | | | 13.5 |
| Cyanide Total | mg/kg | 1 | | | | | | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Electrical Conductivity (Lab) | µS/cm | 1 | | | | | | 47 | 64 | 207 | 33 | | | 66 |
| Calcium/Magnesium Ratio | - | 0.2 | | | | | | 0.8 | 0.3 | 0.4 | 1.0 | | | |
| Fluoride | mg/kg | 40 | | | | | | 240 | 240 | 260 | 130 | 380 | 270 | 250 |
| pH (Lab) | - | 0.1 | | | | | | 8.0 | 8.7 | 8.5 | 8.4 | | | 6.9 |
| TOC | % | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | | | <0.5 |
| **Metals** | | | | | | | | | | | | | | |
| Arsenic | mg/kg | 2 | | | 160 | | 3,000 | 11 | 22 | 40 | 40 | 66 | 8 | 9 |
| | mg/l | 0 | | | | | | | | | | | | |
| Barium | mg/kg | 10 | | | | | | 60 | 60 | 70 | 30 | 90 | 50 | 150 |
| Beryllium | mg/kg | 1 | | | | | 500 | 2 | 2 | 2 | <1 | 1 | <1 | 1 |
| Boron | mg/kg | 50 | | | | | 300,000 | <50 | <50 | <50 | <50 | <50 | <50 | <50 |
| Cadmium | mg/kg | 0.4 | | | | | 900 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Chromium | mg/kg | 2 | | | 310 | | | 28 | 24 | 30 | 6 | 9 | 23 | 33 |
| Cobalt | mg/kg | 2 | | | | | 4,000 | 8 | 10 | 27 | 5 | 5 | 4 | 11 |
| Copper | mg/kg | 5 | | | 280 | | 240,000 | 17 | 19 | 15 | 18 | 6 | 15 | 23 |
| Iron | % | 0.005 | | | | | | 2.44 | 2.99 | 3.00 | 0.907 | | | 2.92 |
| Lead | mg/kg | 5 | | | 1800 | | 1,500 | 18 | 29 | 35 | 19 | 11 | 12 | 20 |
| Manganese | mg/kg | 5 | | | | | 60,000 | 110 | 265 | 470 | 61 | 216 | 277 | 620 |
| Mercury | mg/kg | 0.1 | | | | | 730 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| Molybdenum | mg/kg | 5 | | | | | | | | | | | | |

Table 1
Laboratory Analytical Results - Soil
JE10388

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Field ID | SB8_0.0-0.2 | SB8_1.0-1.2 | SB8_4.0-4.2 | SB9_0.5-0.7 | SB10_0.0-0.2 | SB10_1.0-1.2 | SB11_0.5-0.7 |
| | | | | | | | Date | 15 Dec 2023 | 15 Dec 2023 | 15 Dec 2023 | 14 Dec 2023 | 19 Dec 2023 | 19 Dec 2023 | 18 Dec 2023 |
| | Unit | EQL | CRC Care HSL-D Commercial / Industrial | NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Clay | NEPM 2013 Table 1B(5) Generic EIL - Comm/Ind | NEPM 2013 Table 1B(6) ESLs for Comm/Ind, Fine Soil | NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil | | | | | | | |
| Nickel | mg/kg | 2 | | | 290 | | 6,000 | 14 | 13 | 15 | 4 | 5 | 8 | 15 |
| Selenium | mg/kg | 2 | | | | | 10,000 | <5 | <5 | <5 | <5 | <5 | <5 | <5 |
| Silver | mg/kg | 2 | | | | | | | | | | | | |
| Tin | mg/kg | 10 | | | | | | | | | | | | |
| Vanadium | mg/kg | 5 | | | | | | 36 | 42 | 37 | 9 | 28 | 32 | 45 |
| Zinc | mg/kg | 5 | | | 620 | | 400,000 | 29 | 25 | 44 | 26 | 45 | 22 | 32 |
| **Organochlorine Pesticides** | | | | | | | | | | | | | | |
| 4,4-DDE | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| a-BHC | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Aldrin | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Aldrin + Dieldrin | mg/kg | 0.05 | | | | | 45 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| b-BHC | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Chlordane | mg/kg | 0.05 | | | | | 530 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Chlordane (cis) | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Chlordane (trans) | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| d-BHC | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| DDD | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| DDT | mg/kg | 0.2 | | | 640 | | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| DDT+DDE+DDD | mg/kg | 0.05 | | | | | 3,600 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Dieldrin | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Endosulfan | mg/kg | 0.05 | | | | | 2,000 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Endosulfan I | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Endosulfan II | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Endosulfan sulphate | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Endrin | mg/kg | 0.05 | | | | | 100 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Endrin aldehyde | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Endrin ketone | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| g-BHC (Lindane) | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Heptachlor | mg/kg | 0.05 | | | | | 50 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Heptachlor epoxide | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Methoxychlor | mg/kg | 0.2 | | | | | 2,500 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| **Organophosphorous Pesticides** | | | | | | | | | | | | | | |
| Azinophos methyl | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Bromophos-ethyl | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Carbophenothion | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Chlorfenvinphos | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Chlorpyrifos | mg/kg | 0.05 | | | | | 2,000 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Chlorpyrifos-methyl | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Diazinon | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Dichlorvos | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Dimethoate | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Ethion | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Fenthion | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Malathion | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Methyl parathion | mg/kg | 0.2 | | | | | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| Monocrotophos | mg/kg | 0.2 | | | | | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| Prothiofos | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **PAH** | | | | | | | | | | | | | | |
| Acenaphthene | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Acenaphthylene | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Anthracene | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Benz(a)anthracene | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Benzo(a) pyrene | mg/kg | 0.5 | | | | 1.4 | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Benzo(b+j)fluoranthene | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Benzo(g,h,i)perylene | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Benzo(k)fluoranthene | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Chrysene | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Dibenz(a,h)anthracene | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Fluoranthene | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Fluorene | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Indeno(1,2,3-c,d)pyrene | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Naphthalene | mg/kg | 0.5 | 11,000 | | 370 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Phenanthrene | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Pyrene | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| PAHs (Sum of total) | mg/kg | 0.5 | | | | | 4,000 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| **PCBs** | | | | | | | | | | | | | | |
| PCBs (Sum of total) | mg/kg | 0.1 | | | | | 7 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| **Pesticides** | | | | | | | | | | | | | | |
| Demeton-S-methyl | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Fenamiphos | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Parathion | mg/kg | 0.2 | | | | | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| Pirimphos-ethyl | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |

Table 1
Laboratory Analytical Results - Soil
JE10388

| | | | | | | | Field ID | SB11_2.0-2.2 | SB12_0.0-0.2 | SB12_1.5 | BH1-1 | BH1-3 | BH2-2 | BH2-3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Date | 18 Dec 2023 | 19 Dec 2023 | 19 Dec 2023 | 06 Aug 2012 | 06 Aug 2012 | 06 Aug 2012 | 06 Aug 2012 |
| | Unit | EQL | CRC Care HSL-D Commercial / Industrial | NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Clay | NEPM 2013 Table 1B(5) Generic EIL - Comm/Ind | NEPM 2013 Table 1B(6) ESLs for Comm/Ind, Fine Soil | NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil | | | | | | | |
| **Asbestos** | | | | | | | | | | | | | | |
| Asbestos fibres | g/kg | 0.1 | | | | | | | ND | ND | | | | |
| **NA** | | | | | | | | | | | | | | |
| Clay in soils <2um | % | 1 | | | | | | 28 | | | | | | |
| Magnesium/Potassium Ratio | - | 0.2 | | | | | | 16.7 | | | | | | |
| weight of sample | g | 0.01 | | | | | | | 187 | 177 | | | | |
| **Particle Size** | | | | | | | | | | | | | | |
| DENSITY | g/cm3 | 0.01 | | | | | | 3.03 | | | | | | |
| **BTEX** | | | | | | | | | | | | | | |
| Naphthalene (BTEX) | mg/kg | 1 | 11,000 | | 370 | | | <1 | <1 | <1 | | | <0.5 | |
| Benzene | mg/kg | 0.2 | 430 | 4 \| 6 \| 9 \| 20 | | 95 | | <0.2 | <0.2 | <0.2 | | | <0.5 | |
| Toluene | mg/kg | 0.5 | 99,000 | | | 135 | | <0.5 | <0.5 | <0.5 | | | <0.5 | |
| Ethylbenzene | mg/kg | 0.5 | 27,000 | | | 185 | | <0.5 | <0.5 | <0.5 | | | <0.5 | |
| Xylene (m & p) | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | | | <1 | |
| Xylene (o) | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | | | <0.5 | |
| Xylene Total | mg/kg | 0.5 | 81,000 | | | 95 | | <0.5 | <0.5 | <0.5 | | | <1 | |
| Total BTEX | mg/kg | 0.2 | | | | | | <0.2 | <0.2 | <0.2 | | | <1 | |
| **Phenols** | | | | | | | | | | | | | | |
| 3&4-Methylphenol (m&p-cresol) | mg/kg | 1 | | | | | | <1 | <1 | <1 | | | | |
| 2,4,5-Trichlorophenol | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | | | | |
| 2,4,6-Trichlorophenol | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | | | | |
| 2,4-Dichlorophenol | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | | | | |
| 2,4-Dimethylphenol | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | | | | |
| 2,6-Dichlorophenol | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | | | | |
| 2-Chlorophenol | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | | | | |
| 2-Methylphenol | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | | | | |
| 2-Nitrophenol | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | | | | |
| 4-chloro-3-methylphenol | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | | | | |
| Pentachlorophenol | mg/kg | 2 | | | | | 660 | <2 | <2 | <2 | | | | |
| Phenol | mg/kg | 0.5 | | | | | 240,000 | <0.5 | <0.5 | <0.5 | | | <0.5 | |
| **TPH** | | | | | | | | | | | | | | |
| C6-C9 | mg/kg | 20 | | | | | | | | | <20 | | <20 | <20 |
| C10-C14 | mg/kg | 20 | | | | | | | | | <20 | | <20 | <20 |
| C15-C28 | mg/kg | 50 | | | | | | | | | <50 | | <50 | <50 |
| C29-C36 | mg/kg | 50 | | | | | | | | | <50 | | <50 | <50 |
| **TRH** | | | | | | | | | | | | | | |
| C6-C10 | mg/kg | 10 | 26,000 | | | | | <10 | <10 | <10 | | | | |
| C6-C10 (F1 minus BTEX) | mg/kg | 10 | | 310 \| 480 | | 215 | | <10 | <10 | <10 | | | | |
| C10-C16 | mg/kg | 50 | 20,000 | | | 170 | | <50 | <50 | <50 | | | | |
| C10-C16 (F2 minus Naphthalene) | mg/kg | 50 | | | | 170 | | <50 | <50 | <50 | | | | |
| C16-C34 | mg/kg | 100 | 27,000 | | | 2,500 | | <100 | <100 | <100 | | | | |
| C34-C40 | mg/kg | 100 | 38,000 | | | 6,600 | | <100 | <100 | <100 | | | | |
| C10-C40 (Sum of total) | mg/kg | 50 | | | | | | <50 | <50 | <50 | | | | |
| **Halogenated Benzenes** | | | | | | | | | | | | | | |
| Hexachlorobenzene | mg/kg | 0.05 | | | | | 80 | <0.05 | <0.05 | <0.05 | | | | |
| **Inorganics** | | | | | | | | | | | | | | |
| Exchangeable Calcium Percent | % | 0.2 | | | | | | 22.8 | | | | | | |
| Exchangeable Magnesium Percent | % | 0.2 | | | | | | 54.4 | | | | | | |
| Exchangeable Potassium Percent | % | 0.2 | | | | | | 3.2 | | | | | | |
| Exchangeable Sodium Percent | % | 0.2 | | | | | | 19.5 | | | | | | |
| Exchangeable Calcium | meq/100g | 0.1 | | | | | | 3.4 | | | | | | |
| Exchangeable Magnesium | meq/100g | 0.1 | | | | | | 8.1 | | | | | | |
| Exchangeable Potassium | meq/100g | 0.1 | | | | | | 0.5 | | | | | | |
| Exchangeable Sodium | meq/100g | 0.1 | | | | | | 2.9 | | | | | | |
| CEC | meq/100g | 0.1 | | | | | | 14.9 | | | | | | |
| Cyanide Total | mg/kg | 1 | | | | | | <1 | <1 | <1 | | | | |
| Electrical Conductivity (Lab) | µS/cm | 1 | | | | | | 145 | | | | | | |
| Calcium/Magnesium Ratio | - | 0.2 | | | | | | 0.4 | | | | | | |
| Fluoride | mg/kg | 40 | | | | | | 170 | 240 | 210 | | | | |
| pH (Lab) | - | 0.1 | | | | | | 8.8 | | | | | | |
| TOC | % | 0.5 | | | | | | <0.5 | | | | | | |
| **Metals** | | | | | | | | | | | | | | |
| Arsenic | mg/kg | 2 | | | 160 | | 3,000 | 8 | 10 | 11 | 7 | 12 | <5 | <5 |
| | mg/l | 0 | | | | | | | | | | | | |
| Barium | mg/kg | 10 | | | | | | 160 | 70 | 70 | | | | |
| Beryllium | mg/kg | 1 | | | | | 500 | 1 | <1 | <1 | | | | |
| Boron | mg/kg | 50 | | | | | 300,000 | <50 | <50 | <50 | | | | |
| Cadmium | mg/kg | 0.4 | | | | | 900 | <1 | <1 | <1 | <0.2 | <0.2 | <0.2 | <0.2 |
| Chromium | mg/kg | 2 | | | 310 | | | 33 | 16 | 19 | 17 | 26 | | 6 |
| Cobalt | mg/kg | 2 | | | | | 4,000 | 14 | 8 | 9 | | | | |
| Copper | mg/kg | 5 | | | 280 | | 240,000 | 17 | 11 | 12 | 10 | 13 | 6 | <5 |
| Iron | % | 0.005 | | | | | | 2.96 | | | | | | |
| Lead | mg/kg | 5 | | | 1800 | | 1,500 | 22 | 16 | 17 | 15 | 24 | 7 | <5 |
| Manganese | mg/kg | 5 | | | | | 60,000 | 597 | 332 | 443 | | | | |
| Mercury | mg/kg | 0.1 | | | | | 730 | <0.1 | <0.1 | <0.1 | 0.12 | 0.07 | <0.05 | <0.05 |
| Molybdenum | mg/kg | 5 | | | | | | | | | | | | |

Table 1
Laboratory Analytical Results - Soil
JE10388

| | | | | | | | Field ID | SB11_2.0-2.2 | SB12_0.0-0.2 | SB12_1.5 | BH1-1 | BH1-3 | BH2-2 | BH2-3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Date | 18 Dec 2023 | 19 Dec 2023 | 19 Dec 2023 | 06 Aug 2012 | 06 Aug 2012 | 06 Aug 2012 | 06 Aug 2012 |
| | Unit | EQL | CRC Care HSL-D Commercial / Industrial | NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Clay | NEPM 2013 Table 1B(5) Generic EIL - Comm/Ind | NEPM 2013 Table 1B(6) ESLs for Comm/Ind, Fine Soil | NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil | | | | | | | |
| Nickel | mg/kg | 2 | | | 290 | | 6,000 | 11 | 9 | 9 | 9 | 10 | <5 | <5 |
| Selenium | mg/kg | 2 | | | | | 10,000 | <5 | <5 | <5 | | | | |
| Silver | mg/kg | 2 | | | | | | | | | | | | |
| Tin | mg/kg | 10 | | | | | | | | | | <5 | <5 | |
| Vanadium | mg/kg | 5 | | | | | | 54 | 25 | 27 | | | | |
| Zinc | mg/kg | 5 | | | 620 | | 400,000 | 21 | 30 | 24 | 36 | 29 | 20 | 14 |
| **Organochlorine Pesticides** | | | | | | | | | | | | | | |
| 4,4-DDE | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | | | | |
| a-BHC | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | | | | |
| Aldrin | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | | | | |
| Aldrin + Dieldrin | mg/kg | 0.05 | | | | | 45 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| b-BHC | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | | | | |
| Chlordane | mg/kg | 0.05 | | | | | 530 | <0.05 | <0.05 | <0.05 | | | | |
| Chlordane (cis) | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | | | | |
| Chlordane (trans) | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | | | | |
| d-BHC | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | | | | |
| DDD | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | | | | |
| DDT | mg/kg | 0.2 | | | 640 | | | <0.2 | <0.2 | <0.2 | | | | |
| DDT+DDE+DDD | mg/kg | 0.05 | | | | | 3,600 | <0.05 | <0.05 | <0.05 | | | | |
| Dieldrin | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | | | | |
| Endosulfan | mg/kg | 0.05 | | | | | 2,000 | <0.05 | <0.05 | <0.05 | | | | |
| Endosulfan I | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | | | | |
| Endosulfan II | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | | | | |
| Endosulfan sulphate | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | | | | |
| Endrin | mg/kg | 0.05 | | | | | 100 | <0.05 | <0.05 | <0.05 | | | | |
| Endrin aldehyde | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | | | | |
| Endrin ketone | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | | | | |
| g-BHC (Lindane) | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | | | | |
| Heptachlor | mg/kg | 0.05 | | | | | 50 | <0.05 | <0.05 | <0.05 | | | | |
| Heptachlor epoxide | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | | | | |
| Methoxychlor | mg/kg | 0.2 | | | | | 2,500 | <0.2 | <0.2 | <0.2 | | | | |
| **Organophosphorous Pesticides** | | | | | | | | | | | | | | |
| Azinophos methyl | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | | | | |
| Bromophos-ethyl | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | | | | |
| Carbophenothion | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | | | | |
| Chlorfenvinphos | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | | | | |
| Chlorpyrifos | mg/kg | 0.05 | | | | | 2,000 | <0.05 | <0.05 | <0.05 | | | | |
| Chlorpyrifos-methyl | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | | | | |
| Diazinon | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | | | | |
| Dichlorvos | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | | | | |
| Dimethoate | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | | | | |
| Ethion | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | | | | |
| Fenthion | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | | | | |
| Malathion | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | | | | |
| Methyl parathion | mg/kg | 0.2 | | | | | | <0.2 | <0.2 | <0.2 | | | | |
| Monocrotophos | mg/kg | 0.2 | | | | | | <0.2 | <0.2 | <0.2 | | | | |
| Prothiofos | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | | | | |
| **PAH** | | | | | | | | | | | | | | |
| Acenaphthene | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | | | | |
| Acenaphthylene | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | | | | |
| Anthracene | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | | | | |
| Benz(a)anthracene | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | | | | |
| Benzo(a) pyrene | mg/kg | 0.5 | | | | 1.4 | | <0.5 | <0.5 | <0.5 | 0.1 | | <0.1 | <0.1 |
| Benzo(b+j)fluoranthene | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | | | | |
| Benzo(g,h,i)perylene | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | | | | |
| Benzo(k)fluoranthene | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | | | | |
| Chrysene | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | | | | |
| Dibenz(a,h)anthracene | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | | | | |
| Fluoranthene | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | | | | |
| Fluorene | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | | | | |
| Indeno(1,2,3-c,d)pyrene | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | | | | |
| Naphthalene | mg/kg | 0.5 | 11,000 | | 370 | | | <0.5 | <0.5 | <0.5 | | | | |
| Phenanthrene | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | | | | |
| Pyrene | mg/kg | 0.5 | | | | | | <0.5 | <0.5 | <0.5 | | | | |
| PAHs (Sum of total) | mg/kg | 0.5 | | | | | 4,000 | <0.5 | <0.5 | <0.5 | 0.9 | | <0.1 | <0.1 |
| **PCBs** | | | | | | | | | | | | | | |
| PCBs (Sum of total) | mg/kg | 0.1 | | | | | 7 | <0.1 | <0.1 | <0.1 | | | <0. | |
| **Pesticides** | | | | | | | | | | | | | | |
| Demeton-S-methyl | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | | | | |
| Fenamiphos | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | | | | |
| Parathion | mg/kg | 0.2 | | | | | | <0.2 | <0.2 | <0.2 | | | | |
| Pirimphos-ethyl | mg/kg | 0.05 | | | | | | <0.05 | <0.05 | <0.05 | | | | |

Table 2A
Laboratory Analytical Results - NSW Waste Classification
IE10388

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Field ID | SB1_0.0-0.2 | SB2_0.5-0.7 | SB3_0.0-0.2 | SB4_0.0-0.2 | SB5_0.0-0.2 | SB6_0.0-0.2 | SB8_0.0-0.2 | SB8_1.0-1.2 | SB10_0.0-0.2 | SB10_1.0-1.2 | SB11_0.5-0.7 | SB12_0.0-0.2 | SB12_1.5 | BH1-1 | BH2-2 |
| | | | | Date | 18 Dec 2023 | 13 Dec 2023 | 14 Dec 2023 | 12 Dec 2023 | 14 Dec 2023 | 19 Dec 2023 | 15 Dec 2023 | 15 Dec 2023 | 19 Dec 2023 | 19 Dec 2023 | 18 Dec 2023 | 19 Dec 2023 | 19 Dec 2023 | 06 Aug 2012 | 06 Aug 2012 |
| | | | | | FILL | FILL | FILL | FILL | FILL | FILL | FILL | FILL | FILL | FILL | FILL | FILL | FILL | FILL | FILL |
| | Unit | EQL | NSW 2014 General Solid Waste CT1 (No Leaching) | NSW 2014 Restricted Solid Waste CT2 (No Leaching) | | | | | | | | | | | | | | | |
| **Asbestos** | | | | | | | | | | | | | | | | | | | |
| Asbestos fibres | g/kg | 0.1 | | | ND | ND | ND | | | ND | | | ND | ND | | ND | ND | | |
| **BTEX** | | | | | | | | | | | | | | | | | | | |
| Naphthalene (BTEX) | mg/kg | 1 | | | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | |
| Benzene | mg/kg | 0.2 | 10 | 40 | <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 | | <0.5 |
| Toluene | mg/kg | 0.5 | 288 | 1,152 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | | <0.5 |
| Ethylbenzene | mg/kg | 0.5 | 600 | 2,400 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | | <0.5 |
| Xylene (m & p) | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | | |
| Xylene (o) | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | | |
| Xylene Total | mg/kg | 0.5 | 1,000 | 4,000 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | | <1 |
| Total BTEX | mg/kg | 0.2 | | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | | <1 |
| **Phenols** | | | | | | | | | | | | | | | | | | | |
| 3&4-Methylphenol (m&p-cresol) | mg/kg | 1 | | | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | |
| 2,4,5-Trichlorophenol | mg/kg | 0.5 | 8,000 | 32,000 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | | |
| 2,4,6-Trichlorophenol | mg/kg | 0.5 | 40 | 160 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | | |
| 2,4-Dichlorophenol | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | | |
| 2,4-Dimethylphenol | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | | |
| 2,6-Dichlorophenol | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | | |
| 2-Chlorophenol | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | | |
| 2-Methylphenol | mg/kg | 0.5 | 4,000 | 16,000 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | | |
| 2-Nitrophenol | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | | |
| 4-chloro-3-methylphenol | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | | |
| Pentachlorophenol | mg/kg | 2 | | | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | | |
| Phenol | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | | <0.5 |
| **Inorganics** | | | | | | | | | | | | | | | | | | | |
| Cyanide Total | mg/kg | 1 | 320 | 1,280 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | <5 |
| Fluoride | mg/kg | 40 | 3,000 | 12,000 | 440 | 210 | 530 | 360 | 390 | 280 | 240 | 240 | 380 | 270 | 250 | 240 | 210 | | 200 |
| **Metals** | | | | | | | | | | | | | | | | | | | |
| Arsenic | mg/kg | 2 | 100 | 400 | 82 | <5 | 86 | 6 | 44 | 50 | 11 | 22 | 66 | 8 | 9 | 10 | 11 | 7 | <5 |
| Barium | mg/kg | 10 | | | 50 | 80 | 30 | 30 | 40 | 50 | 60 | 60 | 90 | 50 | 150 | 70 | 70 | | |
| Beryllium | mg/kg | 1 | 20 | 80 | 1 | 1 | 1 | <1 | <1 | <1 | 2 | 2 | 1 | <1 | 1 | <1 | <1 | | |
| Boron | mg/kg | 50 | | | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | | |
| Cadmium | mg/kg | 0.4 | 20 | 80 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.2 | <0.2 |
| Chromium (III+VI) | mg/kg | 2 | | | 17 | 25 | 20 | 16 | 16 | 16 | 28 | 24 | 9 | 23 | 33 | 16 | 19 | 17 | |
| Cobalt | mg/kg | 2 | | | 8 | 4 | 8 | 7 | 12 | 6 | 8 | 10 | 5 | 4 | 11 | 8 | 9 | | |
| Copper | mg/kg | 5 | | | 26 | 12 | 23 | 9 | 15 | 15 | 17 | 19 | 6 | 15 | 23 | 11 | 12 | 10 | 13 |
| Iron | % | 0.005 | | | | | | 1.46 | 2.14 | | 2.44 | 2.99 | | | 2.92 | | | | |
| Lead | mg/kg | 5 | 100 | 400 | 12 | 14 | 15 | 6 | 10 | 9 | 18 | 29 | 11 | 12 | 20 | 16 | 17 | 15 | 7 |
| Manganese | mg/kg | 5 | | | 180 | 117 | 184 | 178 | 177 | 206 | 110 | 265 | 216 | 277 | 620 | 332 | 443 | | |
| Mercury | mg/kg | 0.1 | 4 | 16 | <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 | 0.12 | <0.05 |
| Nickel | mg/kg | 2 | 40 | 160 | 13 | 12 | 16 | 20 | 12 | 10 | 14 | 13 | 5 | 8 | 15 | 9 | 9 | 9 | <5 |
| Selenium | mg/kg | 2 | 20 | 80 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | | 4 |
| Vanadium | mg/kg | 5 | | | 22 | 31 | 19 | 21 | 30 | 31 | 36 | 42 | 28 | 32 | 45 | 25 | 27 | | |
| Zinc | mg/kg | 5 | | | 36 | 25 | 40 | 29 | 39 | 35 | 29 | 25 | 45 | 22 | 32 | 30 | 24 | 36 | 20 |

Table 2A
Laboratory Analytical Results - NSW Waste Classification
JE10388

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Field ID | SB1_0.0-0.2 | SB2_0.5-0.7 | SB3_0.0-0.2 | SB4_0.0-0.2 | SB5_0.0-0.2 | SB6_0.0-0.2 | SB8_0.0-0.2 | SB8_1.0-1.2 | SB10_0.0-0.2 | SB10_1.0-1.2 | SB11_0.5-0.7 | SB12_0.0-0.2 | SB12_1.5 | BH1-1 | BH2-2 |
| | | | | Date | 18 Dec 2023 | 13 Dec 2023 | 14 Dec 2023 | 12 Dec 2023 | 14 Dec 2023 | 19 Dec 2023 | 15 Dec 2023 | 15 Dec 2023 | 19 Dec 2023 | 19 Dec 2023 | 18 Dec 2023 | 19 Dec 2023 | 19 Dec 2023 | 06 Aug 2012 | 06 Aug 2012 |
| | | | | | FILL | FILL | FILL | FILL | FILL | FILL | FILL | FILL | FILL | FILL | FILL | FILL | FILL | FILL | FILL |
| | Unit | EQL | NSW 2014 General Solid Waste CT1 (No Leaching) | NSW 2014 Restricted Solid Waste CT2 (No Leaching) | | | | | | | | | | | | | | | |
| **Organochlorine Pesticides** | | | | | | | | | | | | | | | | | | | |
| 4,4-DDE | mg/kg | 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 | <0.05 | | <0.05 |
| a-BHC | mg/kg | 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 | <0.05 | | <0.05 |
| Aldrin | mg/kg | 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 | <0.05 | | <0.05 |
| Aldrin + Dieldrin | mg/kg | 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 | <0.05 | | <0.05 |
| b-BHC | mg/kg | 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 | <0.05 | | <0.05 |
| Chlordane | mg/kg | 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 | <0.05 | | <0.05 |
| Chlordane (cis) | mg/kg | 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 | <0.05 | | <0.05 |
| Chlordane (trans) | mg/kg | 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 | <0.05 | | <0.05 |
| d-BHC | mg/kg | 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 | <0.05 | | <0.05 |
| DDD | mg/kg | 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 | <0.05 | | <0.05 |
| DDT | mg/kg | 0.2 | | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | | <0.2 |
| DDT+DDE+DDD | mg/kg | 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 | <0.05 | | <0.05 |
| Dieldrin | mg/kg | 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 | <0.05 | | <0.05 |
| Endosulfan | mg/kg | 0.05 | 60 | 240 | <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 | | <0.05 |
| Endosulfan I | mg/kg | 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 | <0.05 | | <0.05 |
| Endosulfan II | mg/kg | 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 | <0.05 | | <0.05 |
| Endosulfan sulphate | mg/kg | 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 | <0.05 | | <0.05 |
| Endrin | mg/kg | 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 | <0.05 | | <0.05 |
| Endrin aldehyde | mg/kg | 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 | <0.05 | | <0.05 |
| Endrin ketone | mg/kg | 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 | <0.05 | | <0.05 |
| g-BHC (Lindane) | mg/kg | 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 | <0.05 | | <0.05 |
| Heptachlor | mg/kg | 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 | <0.05 | | <0.05 |
| Heptachlor epoxide | mg/kg | 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 | <0.05 | | <0.05 |
| Methoxychlor | mg/kg | 0.2 | | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | | <0.2 |
| **Organophosphorous Pesticides** | | | | | | | | | | | | | | | | | | | |
| Azinophos methyl | mg/kg | 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 | <0.05 | | <0.05 |
| Bromophos-ethyl | mg/kg | 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 | <0.05 | | <0.05 |
| Carbophenothion | mg/kg | 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 | <0.05 | | <0.05 |
| Chlorfenvinphos | mg/kg | 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 | <0.05 | | <0.05 |
| Chlorpyrifos | mg/kg | 0.05 | 4 | 16 | <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 | | <0.05 |
| Chlorpyrifos-methyl | mg/kg | 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 | <0.05 | | <0.05 |
| Diazinon | mg/kg | 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 | <0.05 | | <0.05 |
| Dichlorvos | mg/kg | 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 | <0.05 | | <0.05 |
| Dimethoate | mg/kg | 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 | <0.05 | | <0.05 |
| Ethion | mg/kg | 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 | <0.05 | | <0.05 |
| Fenthion | mg/kg | 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 | <0.05 | | <0.05 |
| Malathion | mg/kg | 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 | <0.05 | | <0.05 |
| Methyl parathion | mg/kg | 0.2 | | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | | <0.2 |
| Monocrotophos | mg/kg | 0.2 | | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | | <0.2 |
| Prothiofos | mg/kg | 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 | <0.05 | | <0.05 |
| **PAH** | | | | | | | | | | | | | | | | | | | |
| Acenaphthene | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | | <0.5 |
| Acenaphthylene | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | | <0.5 |
| Anthracene | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | | <0.5 |
| Benz(a)anthracene | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | | <0.5 |
| Benzo(a) pyrene | mg/kg | 0.5 | 0.8 | 3.2 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 0.1 | <0.5 |
| Benzo(b+j)fluoranthene | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | | <0.5 |
| Benzo(g,h,i)perylene | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | | <0.5 |
| Benzo(k)fluoranthene | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | | <0.5 |
| Chrysene | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | | <0.5 |
| Dibenz(a,h)anthracene | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | | <0.5 |
| Fluoranthene | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | | <0.5 |
| Fluorene | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | | <0.5 |
| Indeno(1,2,3-c,d)pyrene | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | | <0.5 |
| Naphthalene | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | | <0.5 |
| Phenanthrene | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | | <0.5 |
| Pyrene | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | | <0.5 |
| PAHs (Sum of total) | mg/kg | 0.5 | 200 | 800 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 0.9 | <0.1 |
| **PCBs** | | | | | | | | | | | | | | | | | | | |
| PCBs (Sum of total) | mg/kg | 0.1 | 50 | 50 | <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 |
| **Pesticides** | | | | | | | | | | | | | | | | | | | |
| Demeton-S-methyl | mg/kg | 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 | <0.05 | | <0.05 |
| Fenamiphos | mg/kg | 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 | <0.05 | | <0.05 |
| Parathion | mg/kg | 0.2 | | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | | <0.2 |
| Pirimphos-ethyl | mg/kg | 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 | <0.05 | | <0.05 |
| **TPH** | | | | | | | | | | | | | | | | | | | |
| C6-C9 | mg/kg | 10 | 650 | 2,600 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <20 | <20 |
| C10-C14 | mg/kg | 50 | | | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <20 | <20 |
| C15-C28 | mg/kg | 100 | | | <100 | <100 | <100 | <100 | 140 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <50 | <50 |
| C29-C36 | mg/kg | 100 | | | <100 | <100 | <100 | <100 | 420 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <50 | <50 |
| C10-C36 (Sum of total) | mg/kg | 50 | 10,000 | 40,000 | <50 | <50 | <50 | <50 | 560 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 |

Table 2B
Laboratory Analytical Results - NSW Waste Classification
JE10388

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Field ID | SB1_1.0-1.2 | SB2_2.0-2.2 | SB3_2.0-2.2 | SB4_1.0-1.2 | SB5_1.0-1.2 | SB6_1.0-1.2 | SB6_1.5 | SB7_0.5-0.7 | SB7_2.0-2.2 | SB8_4.0-4.2 | SB9_0.5-0.7 | SB11_2.0-2.2 | BH1-3 | BH2-3 |
| | | | | Date | 18 Dec 2023 | 13 Dec 2023 | 14 Dec 2023 | 12 Dec 2023 | 14 Dec 2023 | 19 Dec 2023 | 19 Dec 2023 | 19 Dec 2023 | 19 Dec 2023 | 15 Dec 2023 | 14 Dec 2023 | 18 Dec 2023 | 06 Aug 2012 | 06 Aug 2012 |
| | | | | | NATURAL | NATURAL | NATURAL | NATURAL | NATURAL | NATURAL | NATURAL | NATURAL | NATURAL | NATURAL | NATURAL | NATURAL | NATURAL | NATURAL |
| | Unit | EQL | NSW 2014 General Solid Waste CT1 (No Leaching) | NSW 2014 Restricted Solid Waste CT2 (No Leaching) | | | | | | | | | | | | | | |
| **Asbestos** | | | | | | | | | | | | | | | | | | |
| Asbestos fibres | g/kg | 0.1 | | | | | | | | ND | ND | ND | ND | | | | | |
| **BTEX** | | | | | | | | | | | | | | | | | | |
| Naphthalene (BTEX) | mg/kg | 1 | | | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | |
| Benzene | mg/kg | 0.2 | 10 | 40 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | | |
| Toluene | mg/kg | 0.5 | 288 | 1,152 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | | |
| Ethylbenzene | mg/kg | 0.5 | 600 | 2,400 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | | |
| Xylene (m & p) | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | | |
| Xylene (o) | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | | |
| Xylene Total | mg/kg | 0.5 | 1,000 | 4,000 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | | |
| Total BTEX | mg/kg | 0.2 | | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | | |
| **Phenols** | | | | | | | | | | | | | | | | | | |
| 3&4-Methylphenol (m&p-cresol) | mg/kg | 1 | | | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | |
| 2,4,5-Trichlorophenol | mg/kg | 0.5 | 8,000 | 32,000 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | | |
| 2,4,6-Trichlorophenol | mg/kg | 0.5 | 40 | 160 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | | |
| 2,4-Dichlorophenol | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | | |
| 2,4-Dimethylphenol | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | | |
| 2,6-Dichlorophenol | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | | |
| 2-Chlorophenol | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | | |
| 2-Methylphenol | mg/kg | 0.5 | 4,000 | 16,000 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | | |
| 2-Nitrophenol | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | | |
| 4-chloro-3-methylphenol | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | | |
| Pentachlorophenol | mg/kg | 2 | | | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | | |
| Phenol | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | | |
| **Inorganics** | | | | | | | | | | | | | | | | | | |
| Cyanide Total | mg/kg | 1 | 320 | 1,280 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | |
| Fluoride | mg/kg | 40 | 3,000 | 12,000 | 280 | 260 | 280 | 180 | 300 | 330 | 380 | 310 | 380 | 260 | 130 | 170 | | |
| **Metals** | | | | | | | | | | | | | | | | | | |
| Arsenic | mg/kg | 2 | 100 | 400 | 8 | <5 | <5 | 204 | 150 | 23 | 36 | 19 | 31 | 40 | 40 | 8 | 12 | <5 |
| Barium | mg/kg | 10 | | | 200 | 70 | 90 | 60 | 90 | 50 | 50 | 60 | 70 | 70 | 30 | 160 | | |
| Beryllium | mg/kg | 1 | 20 | 80 | 2 | 1 | <1 | 3 | 2 | 1 | 2 | 2 | 2 | 2 | <1 | 1 | | |
| Boron | mg/kg | 50 | | | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | | |
| Cadmium | mg/kg | 0.4 | 20 | 80 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.2 | <0.2 |
| Chromium (III+VI) | mg/kg | 2 | | | 30 | 25 | 25 | 38 | 27 | 28 | 37 | 28 | 28 | 30 | 6 | 33 | 17 | 26 |
| Cobalt | mg/kg | 2 | | | 19 | 11 | 6 | 14 | 9 | 11 | 21 | 11 | 11 | 27 | 5 | 14 | | |
| Copper | mg/kg | 5 | | | 17 | 14 | 15 | 20 | 19 | 14 | 18 | 15 | 16 | 15 | 18 | 17 | 13 | <5 |
| Iron | % | 0.005 | | | 3.16 | 2.13 | | 3.17 | 3.04 | | | | | 3.00 | 0.907 | 2.96 | | |
| Lead | mg/kg | 5 | 100 | 400 | 40 | 15 | 11 | 13 | 48 | 21 | 34 | 38 | 30 | 35 | 19 | 22 | 24 | <5 |
| Manganese | mg/kg | 5 | | | 820 | 154 | 168 | 238 | 99 | 118 | 173 | 330 | 188 | 470 | 61 | 597 | | |
| Mercury | mg/kg | 0.1 | 4 | 16 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | 0.07 | <0.05 |
| Nickel | mg/kg | 2 | 40 | 160 | 14 | 12 | 11 | 17 | 13 | 13 | 18 | 14 | 14 | 15 | 4 | 11 | 10 | <5 |
| Selenium | mg/kg | 2 | 20 | 80 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | 6 | |
| Vanadium | mg/kg | 5 | | | 51 | 34 | 28 | 36 | 42 | 39 | 48 | 42 | 42 | 37 | 9 | 54 | | |
| Zinc | mg/kg | 5 | | | 27 | 24 | 25 | 180 | 55 | 36 | 54 | 28 | 44 | 44 | 26 | 21 | 29 | 14 |

Table 2B
Laboratory Analytical Results - NSW Waste Classification
JE10388

| | | | | | Field ID | SB1_1.0-1.2 | SB2_2.0-2.2 | SB3_2.0-2.2 | SB4_1.0-1.2 | SB5_1.0-1.2 | SB6_1.0-1.2 | SB6_1.5 | SB7_0.5-0.7 | SB7_2.0-2.2 | SB8_4.0-4.2 | SB9_0.5-0.7 | SB11_2.0-2.2 | BH1-3 | BH2-3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Date | 18 Dec 2023 | 13 Dec 2023 | 14 Dec 2023 | 12 Dec 2023 | 14 Dec 2023 | 19 Dec 2023 | 19 Dec 2023 | 19 Dec 2023 | 19 Dec 2023 | 15 Dec 2023 | 14 Dec 2023 | 18 Dec 2023 | 06 Aug 2012 | 06 Aug 2012 |
| | | | | | | NATURAL | NATURAL | NATURAL | NATURAL | NATURAL | NATURAL | NATURAL | NATURAL | NATURAL | NATURAL | NATURAL | NATURAL | NATURAL | NATURAL |
| | Unit | EQL | NSW 2014 General Solid Waste CT1 (No Leaching) | NSW 2014 Restricted Solid Waste CT2 (No Leaching) | | | | | | | | | | | | | | | |
| **Organochlorine Pesticides** | | | | | | | | | | | | | | | | | | | |
| 4,4-DDE | mg/kg | 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 | | |
| a-BHC | mg/kg | 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 | | |
| Aldrin | mg/kg | 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 | | |
| Aldrin + Dieldrin | mg/kg | 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 | | |
| b-BHC | mg/kg | 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 | | |
| Chlordane | mg/kg | 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 | | |
| Chlordane (cis) | mg/kg | 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 | | |
| Chlordane (trans) | mg/kg | 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 | | |
| d-BHC | mg/kg | 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 | | |
| DDD | mg/kg | 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 | | |
| DDT | mg/kg | 0.2 | | | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | | |
| DDT+DDE+DDD | mg/kg | 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 | | |
| Dieldrin | mg/kg | 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 | | |
| Endosulfan | mg/kg | 0.05 | 60 | 240 | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | | |
| Endosulfan I | mg/kg | 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 | | |
| Endosulfan II | mg/kg | 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 | | |
| Endosulfan sulphate | mg/kg | 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 | | |
| Endrin | mg/kg | 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 | | |
| Endrin aldehyde | mg/kg | 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 | | |
| Endrin ketone | mg/kg | 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 | | |
| g-BHC (Lindane) | mg/kg | 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 | | |
| Heptachlor | mg/kg | 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 | | |
| Heptachlor epoxide | mg/kg | 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 | | |
| Methoxychlor | mg/kg | 0.2 | | | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | | |
| **Organophosphorous Pesticides** | | | | | | | | | | | | | | | | | | | |
| Azinophos methyl | mg/kg | 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 | | |
| Bromophos-ethyl | mg/kg | 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 | | |
| Carbophenothion | mg/kg | 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 | | |
| Chlorfenvinphos | mg/kg | 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 | | |
| Chlorpyrifos | mg/kg | 0.05 | 4 | 16 | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | | |
| Chlorpyrifos-methyl | mg/kg | 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 | | |
| Diazinon | mg/kg | 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 | | |
| Dichlorvos | mg/kg | 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 | | |
| Dimethoate | mg/kg | 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 | | |
| Ethion | mg/kg | 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 | | |
| Fenthion | mg/kg | 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 | | |
| Malathion | mg/kg | 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 | | |
| Methyl parathion | mg/kg | 0.2 | | | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | | |
| Monocrotophos | mg/kg | 0.2 | | | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | | |
| Prothiofos | mg/kg | 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 | | |
| **PAH** | | | | | | | | | | | | | | | | | | | |
| Acenaphthene | mg/kg | 0.5 | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | | |
| Acenaphthylene | mg/kg | 0.5 | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | | |
| Anthracene | mg/kg | 0.5 | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | | |
| Benz(a)anthracene | mg/kg | 0.5 | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | | |
| Benzo(a) pyrene | mg/kg | 0.5 | 0.8 | 3.2 | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | | <0.1 |
| Benzo(b+j)fluoranthene | mg/kg | 0.5 | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | | |
| Benzo(g,h,i)perylene | mg/kg | 0.5 | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | | |
| Benzo(k)fluoranthene | mg/kg | 0.5 | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | | |
| Chrysene | mg/kg | 0.5 | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | | |
| Dibenz(a,h)anthracene | mg/kg | 0.5 | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | | |
| Fluoranthene | mg/kg | 0.5 | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | | |
| Fluorene | mg/kg | 0.5 | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | | |
| Indeno(1,2,3-c,d)pyrene | mg/kg | 0.5 | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | | |
| Naphthalene | mg/kg | 0.5 | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | | |
| Phenanthrene | mg/kg | 0.5 | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | | |
| Pyrene | mg/kg | 0.5 | | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | | |
| PAHs (Sum of total) | mg/kg | 0.5 | 200 | 800 | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | | <0.1 |
| **PCBs** | | | | | | | | | | | | | | | | | | | |
| PCBs (Sum of total) | mg/kg | 0.1 | 50 | 50 | | <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 |
| **Pesticides** | | | | | | | | | | | | | | | | | | | |
| Demeton-S-methyl | mg/kg | 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 | | |
| Fenamiphos | mg/kg | 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 | | |
| Parathion | mg/kg | 0.2 | | | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | | |
| Pirimphos-ethyl | mg/kg | 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 | | |
| **TPH** | | | | | | | | | | | | | | | | | | | |
| C6-C9 | mg/kg | 10 | 650 | 2,600 | | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | | <20 |
| C10-C14 | mg/kg | 50 | | | | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | | <20 |
| C15-C28 | mg/kg | 100 | | | | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | | <50 |
| C29-C36 | mg/kg | 100 | | | | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | | <50 |
| C10-C36 (Sum of total) | mg/kg | 50 | 10,000 | 40,000 | | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | | <50 |

Table 3
Laboratory Analytical Results - ENM Waste Classification

JE10388

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Field ID | SB1_0.0-0.2 | SB1_1.0-1.2 | SB2_0.5-0.7 | SB2_2.0-2.2 | SB3_0.0-0.2 | SB3_2.0-2.2 | SB4_0.0-0.2 | SB4_1.0-1.2 | SB5_0.0-0.2 | SB5_1.0-1.2 |
| | | | | Date | 18 Dec 2023 | 18 Dec 2023 | 13 Dec 2023 | 13 Dec 2023 | 14 Dec 2023 | 14 Dec 2023 | 12 Dec 2023 | 12 Dec 2023 | 14 Dec 2023 | 14 Dec 2023 |
| | Unit | EQL | NSW 2014 Excavated Natural Material (Absolute Max) | NSW 2014 Excavated Natural Material (Max Average) | | | | | | | | | | |
| **Asbestos** | | | | | | | | | | | | | | |
| Asbestos fibres | **g/kg** | 0.1 | | | ND | | ND | | ND | | | | | |
| **BTEX** | | | | | | | | | | | | | | |
| Naphthalene (BTEX) | **mg/kg** | 1 | | | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Benzene | **mg/kg** | 0.2 | 0.5 | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| Toluene | **mg/kg** | 0.5 | 65 | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Ethylbenzene | **mg/kg** | 0.5 | 25 | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Xylene (m & p) | **mg/kg** | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Xylene (o) | **mg/kg** | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Xylene Total | **mg/kg** | 0.5 | 15 | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Total BTEX | **mg/kg** | 0.2 | | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| **Phenols** | | | | | | | | | | | | | | |
| 3&4-Methylphenol (m&p-cresol) | **mg/kg** | 1 | | | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| 2,4,5-Trichlorophenol | **mg/kg** | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 2,4,6-Trichlorophenol | **mg/kg** | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 2,4-Dichlorophenol | **mg/kg** | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 2,4-Dimethylphenol | **mg/kg** | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 2,6-Dichlorophenol | **mg/kg** | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 2-Chlorophenol | **mg/kg** | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 2-Methylphenol | **mg/kg** | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 2-Nitrophenol | **mg/kg** | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 4-chloro-3-methylphenol | **mg/kg** | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Pentachlorophenol | **mg/kg** | 2 | | | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 |
| Phenol | **mg/kg** | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| **TRH** | | | | | | | | | | | | | | |
| C6-C10 | **mg/kg** | 10 | | | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| C6-C10 (F1 minus BTEX) | **mg/kg** | 10 | | | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| C10-C16 | **mg/kg** | 50 | | | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 |
| C10-C16 (F2 minus Naphthalene) | **mg/kg** | 50 | | | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 |
| C16-C34 | **mg/kg** | 100 | | | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | 370 | <100 |
| C34-C40 | **mg/kg** | 100 | | | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | 620 | <100 |
| C10-C40 (Sum of total) | **mg/kg** | 50 | | | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | 990 | <50 |
| **Halogenated Benzenes** | | | | | | | | | | | | | | |
| Hexachlorobenzene | **mg/kg** | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Inorganics** | | | | | | | | | | | | | | |
| Cyanide Total | **mg/kg** | 1 | | | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Electrical Conductivity (Lab) | **µS/cm** | 1 | 3,000 | 1,500 | | 94 | | 136 | | | 92 | 55 | 115 | 159 |
| Fluoride | **mg/kg** | 40 | | | 440 | 280 | 210 | 260 | 530 | 280 | 360 | 180 | 390 | 300 |
| pH (Lab) | - | 0.1 | 4.5-10 | 5-9 | | 8.3 | | 8.6 | | | 9.7 | 9.0 | 8.6 | 8.2 |
| **Metals** | | | | | | | | | | | | | | |
| Arsenic | **mg/kg** | 2 | 40 | 20 | 82 | 8 | <5 | <5 | 86 | <5 | 6 | 204 | 44 | 150 |
| Barium | **mg/kg** | 10 | | | 50 | 200 | 80 | 70 | 30 | 90 | 30 | 60 | 40 | 90 |
| Beryllium | **mg/kg** | 1 | | | 1 | 2 | 1 | 1 | 1 | <1 | <1 | 3 | <1 | 2 |
| Boron | **mg/kg** | 50 | | | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 |
| Cadmium | **mg/kg** | 0.4 | 1 | 0.5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Chromium (III+VI) | **mg/kg** | 2 | 150 | 75 | 17 | 30 | 25 | 25 | 20 | 25 | 16 | 38 | 16 | 27 |
| Cobalt | **mg/kg** | 2 | | | 8 | 19 | 4 | 11 | 8 | 6 | 7 | 14 | 12 | 9 |
| Copper | **mg/kg** | 5 | 200 | 100 | 26 | 17 | 12 | 14 | 23 | 15 | 9 | 20 | 15 | 19 |
| Iron | **%** | 0.005 | | | | 3.16 | | 2.13 | | | 1.46 | 3.17 | 2.14 | 3.04 |
| Lead | **mg/kg** | 5 | 100 | 50 | 12 | 40 | 14 | 15 | 15 | 11 | 6 | 13 | 10 | 48 |
| Manganese | **mg/kg** | 5 | | | 180 | 820 | 117 | 154 | 184 | 168 | 178 | 238 | 177 | 99 |
| Mercury | **mg/kg** | 0.1 | 1 | 0.5 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| Molybdenum | **mg/kg** | 5 | | | | | | | | | | | | |
| Nickel | **mg/kg** | 2 | 60 | 30 | 13 | 14 | 12 | 12 | 16 | 11 | 20 | 17 | 12 | 13 |
| Selenium | **mg/kg** | 2 | | | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 |
| Silver | **mg/kg** | 2 | | | | | | | | | | | | |
| Tin | **mg/kg** | 10 | | | | | | | | | | | | |
| Vanadium | **mg/kg** | 5 | | | 22 | 51 | 31 | 34 | 19 | 28 | 21 | 36 | 30 | 42 |
| Zinc | **mg/kg** | 5 | 300 | 150 | 36 | 27 | 25 | 24 | 40 | 25 | 29 | 180 | 39 | 55 |
| **Organochlorine Pesticides** | | | | | | | | | | | | | | |
| 4,4-DDE | **mg/kg** | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| a-BHC | **mg/kg** | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Aldrin | **mg/kg** | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Aldrin + Dieldrin | **mg/kg** | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| b-BHC | **mg/kg** | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Chlordane | **mg/kg** | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Chlordane (cis) | **mg/kg** | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |

Table 3
Laboratory Analytical Results - ENM Waste Classification

JE10388

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Field ID | SB1_0.0-0.2 | SB1_1.0-1.2 | SB2_0.5-0.7 | SB2_2.0-2.2 | SB3_0.0-0.2 | SB3_2.0-2.2 | SB4_0.0-0.2 | SB4_1.0-1.2 | SB5_0.0-0.2 | SB5_1.0-1.2 |
| | | | | Date | 18 Dec 2023 | 18 Dec 2023 | 13 Dec 2023 | 13 Dec 2023 | 14 Dec 2023 | 14 Dec 2023 | 12 Dec 2023 | 12 Dec 2023 | 14 Dec 2023 | 14 Dec 2023 |
| | Unit | EQL | NSW 2014 Excavated Natural Material (Absolute Max) | NSW 2014 Excavated Natural Material (Max Average) | | | | | | | | | | |
| Chlordane (trans) | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| d-BHC | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| DDD | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| DDT | mg/kg | 0.2 | | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| DDT+DDE+DDD | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Dieldrin | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Endosulfan | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Endosulfan I | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Endosulfan II | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Endosulfan sulphate | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Endrin | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Endrin aldehyde | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Endrin ketone | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| g-BHC (Lindane) | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Heptachlor | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Heptachlor epoxide | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Methoxychlor | mg/kg | 0.2 | | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| **Organophosphorous Pesticides** | | | | | | | | | | | | | | |
| Azinophos methyl | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Bromophos-ethyl | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Carbophenothion | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Chlorfenvinphos | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Chlorpyrifos | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Chlorpyrifos-methyl | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Diazinon | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Dichlorvos | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Dimethoate | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Ethion | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Fenthion | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Malathion | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Methyl parathion | mg/kg | 0.2 | | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| Monocrotophos | mg/kg | 0.2 | | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| Prothiofos | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **PAH** | | | | | | | | | | | | | | |
| Acenaphthene | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Acenaphthylene | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Anthracene | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Benz(a)anthracene | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Benzo(a) pyrene | mg/kg | 0.5 | 1 | 0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Benzo(b+j)fluoranthene | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Benzo(g,h,i)perylene | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Benzo(k)fluoranthene | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Chrysene | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Dibenz(a,h)anthracene | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Fluoranthene | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Fluorene | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Indeno(1,2,3-c,d)pyrene | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Naphthalene | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Phenanthrene | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Pyrene | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| PAHs (Sum of total) | mg/kg | 0.5 | 40 | 20 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| **PCBs** | | | | | | | | | | | | | | |
| PCBs (Sum of total) | mg/kg | 0.1 | | | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| **Pesticides** | | | | | | | | | | | | | | |
| Demeton-S-methyl | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Fenamiphos | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Parathion | mg/kg | 0.2 | | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| Pirimphos-ethyl | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **SPOCAS** | | | | | | | | | | | | | | |
| pH (CaCl2) | - | 0.1 | | | | 6.6 | | 7.6 | | | 8.4 | 7.6 | 7.8 | 6.9 |
| **TPH** | | | | | | | | | | | | | | |
| C6-C9 | mg/kg | 10 | | | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| C10-C14 | mg/kg | 50 | | | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 |
| C15-C28 | mg/kg | 100 | | | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | 140 | <100 |
| C29-C36 | mg/kg | 100 | | | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | 420 | <100 |
| C10-C36 (Sum of total) | mg/kg | 50 | 500 | 250 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | 560 | <50 |

Table 3
Laboratory Analytical Results - ENM Waste Classification
JE10388

| | | | | Field ID | SB6_0.0-0.2 | SB6_1.0-1.2 | SB6_1.5 | SB7_0.5-0.7 | SB7_2.0-2.2 | SB8_0.0-0.2 | SB8_1.0-1.2 | SB8_4.0-4.2 | SB9_0.5-0.7 | SB10_0.0-0.2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Date | 19 Dec 2023 | 19 Dec 2023 | 19 Dec 2023 | 19 Dec 2023 | 19 Dec 2023 | 15 Dec 2023 | 15 Dec 2023 | 15 Dec 2023 | 14 Dec 2023 | 19 Dec 2023 |
| | Unit | EQL | NSW 2014 Excavated Natural Material (Absolute Max) | NSW 2014 Excavated Natural Material (Max Average) | | | | | | | | | | |
| **Asbestos** | | | | | | | | | | | | | | |
| Asbestos fibres | **g/kg** | 0.1 | | | ND | ND | ND | ND | ND | | | | | ND |
| **BTEX** | | | | | | | | | | | | | | |
| Naphthalene (BTEX) | **mg/kg** | 1 | | | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Benzene | **mg/kg** | 0.2 | 0.5 | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| Toluene | **mg/kg** | 0.5 | 65 | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Ethylbenzene | **mg/kg** | 0.5 | 25 | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Xylene (m & p) | **mg/kg** | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Xylene (o) | **mg/kg** | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Xylene Total | **mg/kg** | 0.5 | 15 | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Total BTEX | **mg/kg** | 0.2 | | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| **Phenols** | | | | | | | | | | | | | | |
| 3&4-Methylphenol (m&p-cresol) | **mg/kg** | 1 | | | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| 2,4,5-Trichlorophenol | **mg/kg** | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 2,4,6-Trichlorophenol | **mg/kg** | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 2,4-Dichlorophenol | **mg/kg** | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 2,4-Dimethylphenol | **mg/kg** | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 2,6-Dichlorophenol | **mg/kg** | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 2-Chlorophenol | **mg/kg** | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 2-Methylphenol | **mg/kg** | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 2-Nitrophenol | **mg/kg** | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 4-chloro-3-methylphenol | **mg/kg** | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Pentachlorophenol | **mg/kg** | 2 | | | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 |
| Phenol | **mg/kg** | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| **TRH** | | | | | | | | | | | | | | |
| C6-C10 | **mg/kg** | 10 | | | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| C6-C10 (F1 minus BTEX) | **mg/kg** | 10 | | | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| C10-C16 | **mg/kg** | 50 | | | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 |
| C10-C16 (F2 minus Naphthalene) | **mg/kg** | 50 | | | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 |
| C16-C34 | **mg/kg** | 100 | | | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 |
| C34-C40 | **mg/kg** | 100 | | | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 |
| C10-C40 (Sum of total) | **mg/kg** | 50 | | | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 |
| **Halogenated Benzenes** | | | | | | | | | | | | | | |
| Hexachlorobenzene | **mg/kg** | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Inorganics** | | | | | | | | | | | | | | |
| Cyanide Total | **mg/kg** | 1 | | | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Electrical Conductivity (Lab) | **µS/cm** | 1 | 3,000 | 1,500 | | | | | | 47 | 64 | 207 | 33 | |
| Fluoride | **mg/kg** | 40 | | | 280 | 330 | 380 | 310 | 380 | 240 | 240 | 260 | 130 | 380 |
| pH (Lab) | - | 0.1 | 4.5-10 | 5-9 | | | | | | 8.0 | 8.7 | 8.5 | 8.4 | |
| **Metals** | | | | | | | | | | | | | | |
| Arsenic | **mg/kg** | 2 | 40 | 20 | 50 | 23 | 36 | 19 | 31 | 11 | 22 | 40 | 40 | 66 |
| Barium | **mg/kg** | 10 | | | 50 | 50 | 50 | 60 | 70 | 60 | 60 | 70 | 30 | 90 |
| Beryllium | **mg/kg** | 1 | | | <1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | <1 | 1 |
| Boron | **mg/kg** | 50 | | | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 |
| Cadmium | **mg/kg** | 0.4 | 1 | 0.5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Chromium (III+VI) | **mg/kg** | 2 | 150 | 75 | 16 | 28 | 37 | 28 | 28 | 28 | 24 | 30 | 6 | 9 |
| Cobalt | **mg/kg** | 2 | | | 6 | 11 | 21 | 11 | 11 | 8 | 10 | 27 | 5 | 5 |
| Copper | **mg/kg** | 5 | 200 | 100 | 15 | 14 | 18 | 15 | 16 | 17 | 19 | 15 | 18 | 6 |
| Iron | **%** | 0.005 | | | | | | | | 2.44 | 2.99 | 3.00 | 0.907 | |
| Lead | **mg/kg** | 5 | 100 | 50 | 9 | 21 | 34 | 38 | 30 | 18 | 29 | 35 | 19 | 11 |
| Manganese | **mg/kg** | 5 | | | 206 | 118 | 173 | 330 | 188 | 110 | 265 | 470 | 61 | 216 |
| Mercury | **mg/kg** | 0.1 | 1 | 0.5 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| Molybdenum | **mg/kg** | 5 | | | | | | | | | | | | |
| Nickel | **mg/kg** | 2 | 60 | 30 | 10 | 13 | 18 | 14 | 14 | 14 | 13 | 15 | 4 | 5 |
| Selenium | **mg/kg** | 2 | | | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 |
| Silver | **mg/kg** | 2 | | | | | | | | | | | | |
| Tin | **mg/kg** | 10 | | | | | | | | | | | | |
| Vanadium | **mg/kg** | 5 | | | 31 | 39 | 48 | 42 | 42 | 36 | 42 | 37 | 9 | 28 |
| Zinc | **mg/kg** | 5 | 300 | 150 | 35 | 36 | 54 | 28 | 44 | 29 | 25 | 44 | 26 | 45 |
| **Organochlorine Pesticides** | | | | | | | | | | | | | | |
| 4,4-DDE | **mg/kg** | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| a-BHC | **mg/kg** | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Aldrin | **mg/kg** | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Aldrin + Dieldrin | **mg/kg** | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| b-BHC | **mg/kg** | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Chlordane | **mg/kg** | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Chlordane (cis) | **mg/kg** | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |

Table 3
Laboratory Analytical Results - ENM Waste Classification
JE10388

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Field ID | SB6_0.0-0.2 | SB6_1.0-1.2 | SB6_1.5 | SB7_0.5-0.7 | SB7_2.0-2.2 | SB8_0.0-0.2 | SB8_1.0-1.2 | SB8_4.0-4.2 | SB9_0.5-0.7 | SB10_0.0-0.2 |
| | | | | Date | 19 Dec 2023 | 19 Dec 2023 | 19 Dec 2023 | 19 Dec 2023 | 19 Dec 2023 | 15 Dec 2023 | 15 Dec 2023 | 15 Dec 2023 | 14 Dec 2023 | 19 Dec 2023 |
| | Unit | EQL | NSW 2014 Excavated Natural Material (Absolute Max) | NSW 2014 Excavated Natural Material (Max Average) | | | | | | | | | | |
| Chlordane (trans) | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| d-BHC | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| DDD | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| DDT | mg/kg | 0.2 | | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| DDT+DDE+DDD | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Dieldrin | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Endosulfan | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Endosulfan I | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Endosulfan II | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Endosulfan sulphate | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Endrin | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Endrin aldehyde | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Endrin ketone | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| g-BHC (Lindane) | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Heptachlor | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Heptachlor epoxide | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Methoxychlor | mg/kg | 0.2 | | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| **Organophosphorous Pesticides** | | | | | | | | | | | | | | |
| Azinophos methyl | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Bromophos-ethyl | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Carbophenothion | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Chlorfenvinphos | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Chlorpyrifos | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Chlorpyrifos-methyl | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Diazinon | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Dichlorvos | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Dimethoate | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Ethion | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Fenthion | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Malathion | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Methyl parathion | mg/kg | 0.2 | | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| Monocrotophos | mg/kg | 0.2 | | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| Prothiofos | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **PAH** | | | | | | | | | | | | | | |
| Acenaphthene | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Acenaphthylene | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Anthracene | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Benz(a)anthracene | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Benzo(a) pyrene | mg/kg | 0.5 | 1 | 0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Benzo(b+j)fluoranthene | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Benzo(g,h,i)perylene | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Benzo(k)fluoranthene | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Chrysene | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Dibenz(a,h)anthracene | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Fluoranthene | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Fluorene | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Indeno(1,2,3-c,d)pyrene | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Naphthalene | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Phenanthrene | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Pyrene | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| PAHs (Sum of total) | mg/kg | 0.5 | 40 | 20 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| **PCBs** | | | | | | | | | | | | | | |
| PCBs (Sum of total) | mg/kg | 0.1 | | | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| **Pesticides** | | | | | | | | | | | | | | |
| Demeton-S-methyl | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Fenamiphos | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Parathion | mg/kg | 0.2 | | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| Pirimphos-ethyl | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **SPOCAS** | | | | | | | | | | | | | | |
| pH (CaCl2) | - | 0.1 | | | | | | | | 7.1 | 7.2 | 7.7 | 6.9 | |
| **TPH** | | | | | | | | | | | | | | |
| C6-C9 | mg/kg | 10 | | | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| C10-C14 | mg/kg | 50 | | | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 |
| C15-C28 | mg/kg | 100 | | | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 |
| C29-C36 | mg/kg | 100 | | | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 |
| C10-C36 (Sum of total) | mg/kg | 50 | 500 | 250 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 |

Table 3
Laboratory Analytical Results - ENM Waste Classification

| | | | | Field ID | SB10_1.0-1.2 | SB11_0.5-0.7 | SB11_2.0-2.2 | SB12_0.0-0.2 | SB12_1.5 |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Date | 19 Dec 2023 | 18 Dec 2023 | 18 Dec 2023 | 19 Dec 2023 | 19 Dec 2023 |
| | Unit | EQL | NSW 2014 Excavated Natural Material (Absolute Max) | NSW 2014 Excavated Natural Material (Max Average) | | | | | |
| **Asbestos** | | | | | | | | | |
| Asbestos fibres | **g/kg** | 0.1 | | | ND | | | ND | ND |
| **BTEX** | | | | | | | | | |
| Naphthalene (BTEX) | **mg/kg** | 1 | | | <1 | <1 | <1 | <1 | <1 |
| Benzene | **mg/kg** | 0.2 | 0.5 | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| Toluene | **mg/kg** | 0.5 | 65 | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Ethylbenzene | **mg/kg** | 0.5 | 25 | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Xylene (m & p) | **mg/kg** | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Xylene (o) | **mg/kg** | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Xylene Total | **mg/kg** | 0.5 | 15 | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Total BTEX | **mg/kg** | 0.2 | | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| **Phenols** | | | | | | | | | |
| 3&4-Methylphenol (m&p-cresol) | **mg/kg** | 1 | | | <1 | <1 | <1 | <1 | <1 |
| 2,4,5-Trichlorophenol | **mg/kg** | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 2,4,6-Trichlorophenol | **mg/kg** | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 2,4-Dichlorophenol | **mg/kg** | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 2,4-Dimethylphenol | **mg/kg** | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 2,6-Dichlorophenol | **mg/kg** | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 2-Chlorophenol | **mg/kg** | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 2-Methylphenol | **mg/kg** | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 2-Nitrophenol | **mg/kg** | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 4-chloro-3-methylphenol | **mg/kg** | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Pentachlorophenol | **mg/kg** | 2 | | | <2 | <2 | <2 | <2 | <2 |
| Phenol | **mg/kg** | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| **TRH** | | | | | | | | | |
| C6-C10 | **mg/kg** | 10 | | | <10 | <10 | <10 | <10 | <10 |
| C6-C10 (F1 minus BTEX) | **mg/kg** | 10 | | | <10 | <10 | <10 | <10 | <10 |
| C10-C16 | **mg/kg** | 50 | | | <50 | <50 | <50 | <50 | <50 |
| C10-C16 (F2 minus Naphthalene) | **mg/kg** | 50 | | | <50 | <50 | <50 | <50 | <50 |
| C16-C34 | **mg/kg** | 100 | | | <100 | <100 | <100 | <100 | <100 |
| C34-C40 | **mg/kg** | 100 | | | <100 | <100 | <100 | <100 | <100 |
| C10-C40 (Sum of total) | **mg/kg** | 50 | | | <50 | <50 | <50 | <50 | <50 |
| **Halogenated Benzenes** | | | | | | | | | |
| Hexachlorobenzene | **mg/kg** | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Inorganics** | | | | | | | | | |
| Cyanide Total | **mg/kg** | 1 | | | <1 | <1 | <1 | <1 | <1 |
| Electrical Conductivity (Lab) | **µS/cm** | 1 | 3,000 | 1,500 | | 66 | 145 | | |
| Fluoride | **mg/kg** | 40 | | | 270 | 250 | 170 | 240 | 210 |
| pH (Lab) | - | 0.1 | 4.5-10 | 5-9 | | 6.9 | 8.8 | | |
| **Metals** | | | | | | | | | |
| Arsenic | **mg/kg** | 2 | 40 | 20 | 8 | 9 | 8 | 10 | 11 |
| Barium | **mg/kg** | 10 | | | 50 | 150 | 160 | 70 | 70 |
| Beryllium | **mg/kg** | 1 | | | <1 | 1 | 1 | <1 | <1 |
| Boron | **mg/kg** | 50 | | | <50 | <50 | <50 | <50 | <50 |
| Cadmium | **mg/kg** | 0.4 | 1 | 0.5 | <1 | <1 | <1 | <1 | <1 |
| Chromium (III+VI) | **mg/kg** | 2 | 150 | 75 | 23 | 33 | 33 | 16 | 19 |
| Cobalt | **mg/kg** | 2 | | | 4 | 11 | 14 | 8 | 9 |
| Copper | **mg/kg** | 5 | 200 | 100 | 15 | 23 | 17 | 11 | 12 |
| Iron | **%** | 0.005 | | | | 2.92 | 2.96 | | |
| Lead | **mg/kg** | 5 | 100 | 50 | 12 | 20 | 22 | 16 | 17 |
| Manganese | **mg/kg** | 5 | | | 277 | 620 | 597 | 332 | 443 |
| Mercury | **mg/kg** | 0.1 | 1 | 0.5 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| Molybdenum | **mg/kg** | 5 | | | | | | | |
| Nickel | **mg/kg** | 2 | 60 | 30 | 8 | 15 | 11 | 9 | 9 |
| Selenium | **mg/kg** | 2 | | | <5 | <5 | <5 | <5 | <5 |
| Silver | **mg/kg** | 2 | | | | | | | |
| Tin | **mg/kg** | 10 | | | | | | | |
| Vanadium | **mg/kg** | 5 | | | 32 | 45 | 54 | 25 | 27 |
| Zinc | **mg/kg** | 5 | 300 | 150 | 22 | 32 | 21 | 30 | 24 |
| **Organochlorine Pesticides** | | | | | | | | | |
| 4,4-DDE | **mg/kg** | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| a-BHC | **mg/kg** | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Aldrin | **mg/kg** | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Aldrin + Dieldrin | **mg/kg** | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| b-BHC | **mg/kg** | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Chlordane | **mg/kg** | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Chlordane (cis) | **mg/kg** | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |

Table 3
Laboratory Analytical Results - ENM Waste Classification

| | | | | Field ID | SB10_1.0-1.2 | SB11_0.5-0.7 | SB11_2.0-2.2 | SB12_0.0-0.2 | SB12_1.5 |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Date | 19 Dec 2023 | 18 Dec 2023 | 18 Dec 2023 | 19 Dec 2023 | 19 Dec 2023 |
| | Unit | EQL | NSW 2014 Excavated Natural Material (Absolute Max) | NSW 2014 Excavated Natural Material (Max Average) | | | | | |
| Chlordane (trans) | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| d-BHC | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| DDD | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| DDT | mg/kg | 0.2 | | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| DDT+DDE+DDD | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Dieldrin | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Endosulfan | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Endosulfan I | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Endosulfan II | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Endosulfan sulphate | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Endrin | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Endrin aldehyde | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Endrin ketone | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| g-BHC (Lindane) | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Heptachlor | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Heptachlor epoxide | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Methoxychlor | mg/kg | 0.2 | | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| **Organophosphorous Pesticides** | | | | | | | | | |
| Azinophos methyl | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Bromophos-ethyl | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Carbophenothion | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Chlorfenvinphos | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Chlorpyrifos | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Chlorpyrifos-methyl | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Diazinon | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Dichlorvos | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Dimethoate | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Ethion | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Fenthion | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Malathion | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Methyl parathion | mg/kg | 0.2 | | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| Monocrotophos | mg/kg | 0.2 | | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| Prothiofos | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **PAH** | | | | | | | | | |
| Acenaphthene | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Acenaphthylene | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Anthracene | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Benz(a)anthracene | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Benzo(a) pyrene | mg/kg | 0.5 | 1 | 0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Benzo(b+j)fluoranthene | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Benzo(g,h,i)perylene | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Benzo(k)fluoranthene | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Chrysene | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Dibenz(a,h)anthracene | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Fluoranthene | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Fluorene | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Indeno(1,2,3-c,d)pyrene | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Naphthalene | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Phenanthrene | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Pyrene | mg/kg | 0.5 | | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| PAHs (Sum of total) | mg/kg | 0.5 | 40 | 20 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| **PCBs** | | | | | | | | | |
| PCBs (Sum of total) | mg/kg | 0.1 | | | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| **Pesticides** | | | | | | | | | |
| Demeton-S-methyl | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Fenamiphos | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Parathion | mg/kg | 0.2 | | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| Pirimphos-ethyl | mg/kg | 0.05 | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **SPOCAS** | | | | | | | | | |
| pH (CaCl2) | - | 0.1 | | | | 6.8 | 7.6 | | |
| **TPH** | | | | | | | | | |
| C6-C9 | mg/kg | 10 | | | <10 | <10 | <10 | <10 | <10 |
| C10-C14 | mg/kg | 50 | | | <50 | <50 | <50 | <50 | <50 |
| C15-C28 | mg/kg | 100 | | | <100 | <100 | <100 | <100 | <100 |
| C29-C36 | mg/kg | 100 | | | <100 | <100 | <100 | <100 | <100 |
| C10-C36 (Sum of total) | mg/kg | 50 | 500 | 250 | <50 | <50 | <50 | <50 | <50 |

Table 4
Laboratory Analytical Results - Soil Replicates
JE10388

| | | Lab Report Number | EM2322818 | EM2322818 | | EM2322818 | 1056492 | |
|---|---|---|---|---|---|---|---|---|
| | | Field ID | SB12_0.0-0.2 | QC5 | | SB12_0.0-0.2 | QC6 | |
| | | Matrix Type | Soil | Soil | | Soil | Soil | |
| | | Date | 19 Dec 2023 | 19 Dec 2023 | RPD | 19 Dec 2023 | 19 Dec 2023 | RPD |
| | Unit | EQL | | | | | | |
| **Metals** | | | | | | | | |
| Arsenic | mg/kg | 2 | 10 | 9 | 11 | 10 | 10 | 0 |
| Barium | mg/kg | 10 | 70 | 70 | 0 | 70 | | |
| Beryllium | mg/kg | 1 | <1 | <1 | 0 | <1 | | |
| Boron | mg/kg | 50 | <50 | <50 | 0 | <50 | | |
| Cadmium | mg/kg | 0.4 | <1 | <1 | 0 | <1 | <0.4 | 0 |
| Chromium (III+VI) | mg/kg | 2 | 16 | 16 | 0 | 16 | 23 | 36 |
| Cobalt | mg/kg | 2 | 8 | 7 | 13 | 8 | | |
| Copper | mg/kg | 5 | 11 | 11 | 0 | 11 | 14 | 24 |
| Lead | mg/kg | 5 | 16 | 14 | 13 | 16 | 18 | 12 |
| Manganese | mg/kg | 5 | 332 | 307 | 8 | 332 | | |
| Mercury | mg/kg | 0.1 | <0.1 | <0.1 | 0 | <0.1 | <0.1 | 0 |
| Nickel | mg/kg | 2 | 9 | 8 | 12 | 9 | 12 | 29 |
| Selenium | mg/kg | 2 | <5 | <5 | 0 | <5 | <2 | 0 |
| Zinc | mg/kg | 5 | 30 | 28 | 7 | 30 | 40 | 29 |

Table 5
Laboratory Analytical Results - Field Blanks
JE10388

| | | Lab Report Number | EM2322709 | EM2322709 | EM2322709 | EM2322709 | EM2322709 | EM2322709 | EM2322818 | EM2322818 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Field ID | QC1 | QC2 | QC3 | QC4 | QC5 | QC8 | QC9 | QC10 |
| | | Matrix Type | Water | Water | Water | Water | Water | Water | Water | Water |
| | | Date | 12 Dec 2023 | 13 Dec 2023 | 14 Dec 2023 | 15 Dec 2023 | 18 Dec 2023 | 18 Dec 2023 | 19 Dec 2023 | 19 Dec 2023 |
| | | Sample Type | Rinsate | Rinsate | Rinsate | Rinsate | Rinsate | Trip_B | Rinsate | Trip_B |
| | Unit | EQL | | | | | | | | |
| **BTEX** | | | | | | | | | | |
| Naphthalene (BTEX) | **mg/L** | 0.005 | | | | | | <0.005 | | <0.005 |
| Benzene | **µg/L** | 1 | | | | | | <1 | | <1 |
| Toluene | **µg/L** | 2 | | | | | | <2 | | <2 |
| Ethylbenzene | **µg/L** | 2 | | | | | | <2 | | <2 |
| Xylene (m & p) | **µg/L** | 2 | | | | | | <2 | | <2 |
| Xylene (o) | **µg/L** | 2 | | | | | | <2 | | <2 |
| Xylene Total | **µg/L** | 2 | | | | | | <2 | | <2 |
| Total BTEX | **µg/L** | 1 | | | | | | <1 | | <1 |
| **TRH** | | | | | | | | | | |
| C6-C10 | **µg/L** | 20 | | | | | | <20 | | <20 |
| C6-C10 (F1 minus BTEX) | **µg/L** | 20 | | | | | | <20 | | <20 |
| **Metals** | | | | | | | | | | |
| Arsenic (filtered) | **mg/L** | 0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | | <0.001 | |
| Barium (filtered) | **mg/L** | 0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | | | |
| Beryllium (filtered) | **mg/L** | 0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | | | |
| Boron (filtered) | **mg/L** | 0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | | | |
| Cadmium (filtered) | **mg/L** | 0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | | <0.0001 | |
| Chromium (III+VI) (filtered) | **mg/L** | 0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | | <0.001 | |
| Cobalt (filtered) | **mg/L** | 0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | | | |
| Copper (filtered) | **mg/L** | 0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | | <0.001 | |
| Lead (filtered) | **mg/L** | 0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | | <0.001 | |
| Manganese (filtered) | **mg/L** | 0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | | | |
| Mercury (filtered) | **mg/L** | 0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | | <0.0001 | |
| Nickel (filtered) | **mg/L** | 0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | | <0.001 | |
| Selenium (filtered) | **mg/L** | 0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | | | |
| Vanadium (filtered) | **mg/L** | 0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | | | |
| Zinc (filtered) | **mg/L** | 0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | | <0.005 | |
| **TPH** | | | | | | | | | | |
| C6-C9 | **µg/L** | 20 | | | | | | <20 | | <20 |

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# Appendix C - Site history review information

LOTSEARCH
PLANNING PROFESSIONAL

# Planning & Ecological Constraints Report

**Date: 29 Sep 2023 10:51:36**

**Reference: LS048622 PE**

**Address: 201 Borella Road, Albury, NSW 2640**

Disclaimer:
The purpose of this report is to provide an overview of some of the planning and ecological information available, affecting an individual address or geographical area in which the property is located. It is not a substitute for an on-site inspection or review of other available reports and records. It is not intended to be, and should not be taken to be, a rating or assessment of the desirability or market value of the property or its features. Although the data has been produced and processed from sources believed to be reliable, no warranty is made regarding accuracy, completeness, or reliability of any information and is limited to what is publicly available from the relevant authorities.
You should obtain independent advice before you make any decision based on the information within the report. Useful points of contact have been listed at the end of this report.
The detailed terms applicable to use of this report are set out at the end of this report.

# Table of Contents

Dataset Summary Table ..... 3
Site Diagram ..... 6
Section 1 – Environmental Planning Instrument - Primary Planning Layers ..... 7
Section 2 – Heritage ..... 9
Section 3 – Environmental Planning Instrument - Protection Layers ..... 10
Section 4 – Environmental Planning Instrument - Development Control Layers ..... 11
Section 5 – Environmental Planning Instrument - Land Use Layers ..... 12
Section 6 – Environmental Planning Instrument - Strategic Regional Land Use Policy ..... 13
Section 7 – State Environmental Planning Policy - Coastal Management ..... 14
Section 8 – State Environmental Planning Policy - Land Application ..... 15
Section 9 – State Environmental Planning Policy - Additional Layers ..... 16
Section 10 – Ecology ..... 19
Dataset Listing Table ..... 23
Terms & Conditions ..... 26

# Planning & Ecological Data Summary Table

| Datasets | Dataset Buffer (m) | No. Features Onsite | No. Features within 100m | No. Features within Buffer |
|---|---|---|---|---|
| **Section 1: Environmental Planning Instrument - Primary Planning Layers** | | | | |
| Land Zoning | 250 | 1 | 5 | 6 |
| Floor Space Ratio | 0 | 0 | - | - |
| Maximum Height of Building | 0 | 0 | - | - |
| Minimum Lot Size | 0 | 0 | - | - |
| Land Application | 0 | 1 | - | - |
| Land Reservation Acquisition | 0 | 0 | - | - |
| **Section 2: Heritage** | | | | |
| Local Heritage | 250 | 0 | 0 | 0 |
| State Heritage Register - Curtilages | 250 | 0 | 0 | 0 |
| National Heritage List | 250 | 0 | 0 | 0 |
| Commonwealth Heritage List | 250 | 0 | 0 | 0 |
| **Section 3: Environmental Planning Instrument - Protection Layers** | | | | |
| Acid Sulfate Soils | 250 | 0 | - | - |
| Acid Sulfate Soils Sydney Olympic Park | 250 | 0 | 0 | 0 |
| Airport Noise | 0 | 0 | - | - |
| Drinking Water Catchment | 0 | 0 | - | - |
| Environmentally Sensitive Land | 250 | 0 | 0 | 0 |
| Flood | 250 | 0 | 0 | 0 |
| Groundwater Vulnerability | 250 | 0 | 0 | 0 |
| Landslide Risk | 250 | 0 | 0 | 0 |
| Mineral and Extractive Resources | 250 | 0 | 0 | 0 |
| Obstacle Limitation Surface | 0 | 0 | - | - |
| Riparian Lands Watercourses | 250 | 0 | 0 | 0 |
| Salinity | 250 | 0 | 0 | 0 |
| Scenic Protection | 250 | 0 | 0 | 0 |
| Terrestrial Biodiversity | 250 | 0 | 0 | 0 |
| Wetlands | 250 | 0 | 0 | 0 |

| Section 4: Environmental Planning Instrument - Development Control Layers | | | | |
|---|---|---|---|---|
| Dwelling Density | 0 | 0 | - | - |
| Foreshore Building Line | 250 | 0 | 0 | 0 |
| Local Provisions | 0 | 0 | - | - |
| **Section 5: Environmental Planning Instrument - Land Use Layers** | | | | |
| Active Street Frontages | 250 | 0 | 0 | 0 |
| Additional Permitted Uses | 250 | 0 | 0 | 0 |
| Key Sites | 250 | 0 | 0 | 0 |
| Land Reclassification | 250 | 0 | 0 | 0 |
| Urban Release Area | 250 | 0 | 0 | 0 |
| **Section 6: Environmental Planning Instrument - Strategic Regional Land Use Policy** | | | | |
| Additional Rural Village Land | 250 | 0 | 0 | 0 |
| Future Residential Growth Area | 250 | 0 | 0 | 0 |
| Strategic Agricultural Land | 250 | 0 | 0 | 0 |
| **Section 7: State Environmental Planning Policy - Coastal Management** | | | | |
| Coastal Environment Area | 250 | 0 | 0 | 0 |
| Coastal Use Area | 250 | 0 | 0 | 0 |
| Coastal Wetlands | 250 | 0 | 0 | 0 |
| Coastal Wetlands Proximity Area | 250 | 0 | 0 | 0 |
| Littoral Rainforest | 250 | 0 | 0 | 0 |
| Littoral Rainforest Proximity Area | 250 | 0 | 0 | 0 |
| Coastal Land Application | 0 | 0 | - | - |
| **Section 8: State Environmental Planning Policy - Land Application** | | | | |
| Land Application | 0 | 14 | - | - |
| **Section 9: State Environmental Planning Policy - Additional Layers** | | | | |
| Bulk Water Supply Infrastructure | 250 | 0 | 0 | 0 |
| Critical Habitat | 250 | 0 | 0 | 0 |
| Coal Seam Gas Exlusion Zones | 250 | 1 | 3 | 3 |
| Environmental Conservation Area | 250 | 0 | 0 | 0 |
| Geotechnical | 250 | 0 | 0 | 0 |
| Growth Centres | 250 | 0 | 0 | 0 |

| Section 9: State Environmental Planning Policy - Additional Layers | | | | |
|---|---|---|---|---|
| Industrial Release Area | 250 | 0 | 0 | 0 |
| Lease Area | 250 | 0 | 0 | 0 |
| Local Complying Exclusion | 250 | 0 | 0 | 0 |
| Local Exempt Exclusion | 250 | 0 | 0 | 0 |
| Maximum Gross Floor Area | 0 | 0 | - | - |
| Native Vegetation Protection | 250 | 0 | 0 | 0 |
| Precinct Boundaries | 250 | 0 | 0 | 0 |
| Reduced Level | 250 | 0 | 0 | 0 |
| Referral Area | 250 | 0 | 0 | 0 |
| Special Areas | 250 | 0 | 0 | 0 |
| Special Provision | 250 | 0 | 0 | 0 |
| State Significant Development Sites | 250 | 0 | 0 | 0 |
| Strategic Foreshore Sites | 250 | 0 | 0 | 0 |
| Transport Arteial Road Infrastructure | 250 | 0 | 0 | 0 |
| Water Zoning | 250 | 0 | 0 | 0 |
| Wetland Protection Area | 250 | 0 | 0 | 0 |
| **Section 10: Ecology** | | | | |
| Species of National Environmental Significance | 250 | 42 | 48 | 48 |
| NSW BioNet Species Sightings | 10000 | - | - | - |

# Site Diagram

**201 Borella Road, Albury, NSW 2640**




## Legend

- Site Boundary
- Internal Parcel Boundaries

**Total Area:** 85155m²

**Total Perimeter:** 1.29km

Disclaimers:

Measurements are approximate only and may have been simplified or smaller lengths removed for readability.

Parcels that make up a small percentage of the total site area have not been labelled for increased legibility.

Scale: 0 25 50 100 Meters

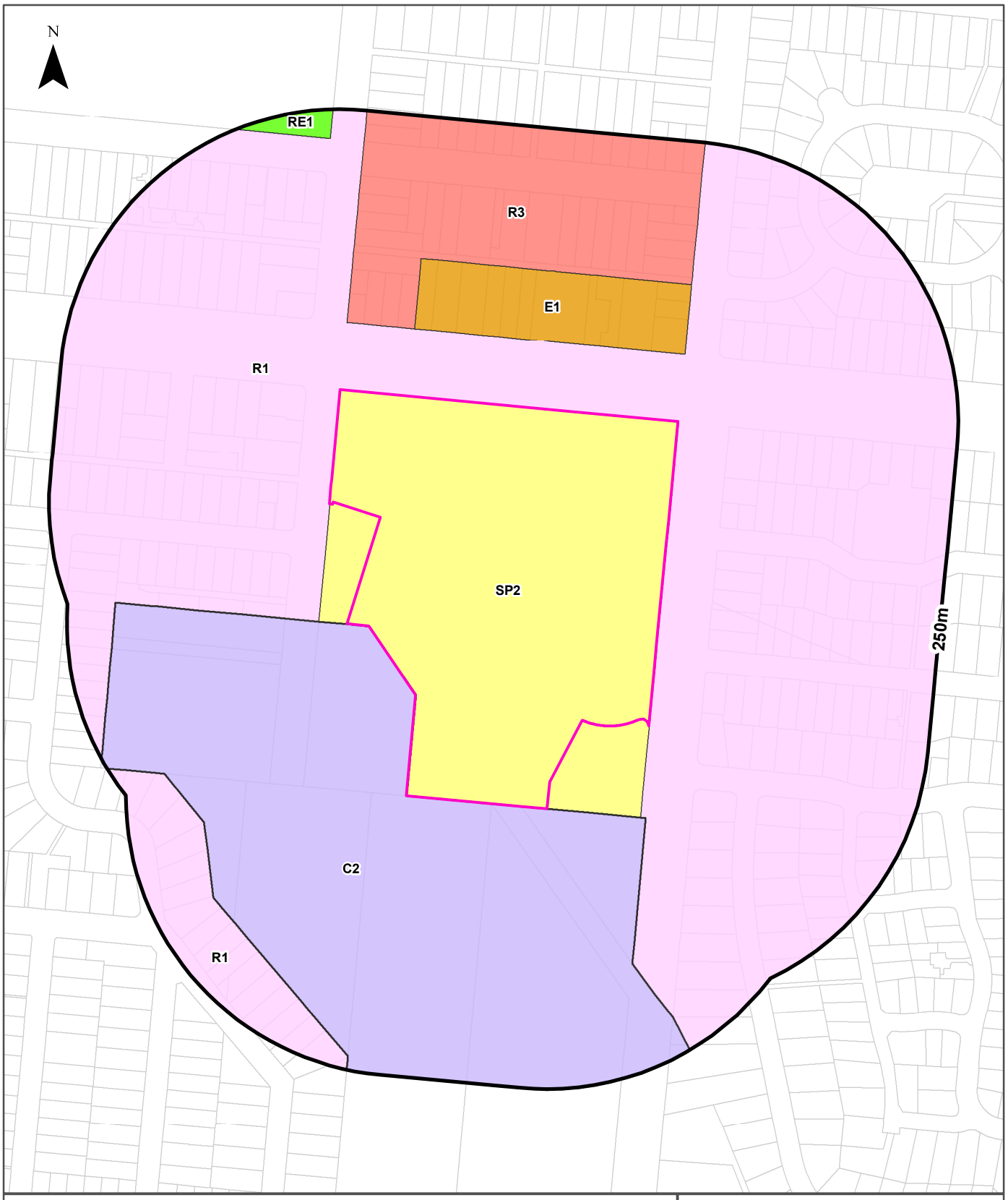
Data Source Aerial Imagery:
© Aerometrex Pty Ltd

Coordinate System:
GDA 1994 MGA Zone 56

Date: 29 September 2023

# Section 1 - Environmental Planning Instrument (EPI) - Land Zoning

**201 Borella Road, Albury, NSW 2640**




**Legend**

- Site Boundary
- Dataset Buffer
- Plan Boundaries

Scale:

0 25 50 100 150 200 250

Meters

Data Sources: Property Boundaries & Topographic Data:
© Department Finance, Services & Innovation 2023
Planning: NSW Crown Copyright - Planning & Environment

Coordinate System:
GDA 1994 MGA Zone 56

Date: 29 September 2023

# Section 1 - EPI Primary Planning Layers

**201 Borella Road, Albury, NSW 2640**

## Land Zoning

What EPI Land Zones exist within the dataset buffer?

| Symbol | Description | Purpose | EPI Name | Published Date | Commenced Date | Currency Date | Amendment | Dist | Dir |
|---|---|---|---|---|---|---|---|---|---|
| SP2 | Infrastructure | Health Services Facility | Albury Local Environmental Plan 2010 | 21/04/2023 | 26/04/2023 | 26/04/2023 | Map Amendment No 1 | 0m | Onsite |
| C2 | Environmental Conservation | | Albury Local Environmental Plan 2010 | 21/04/2023 | 26/04/2023 | 26/04/2023 | Map Amendment No 1 | 0m | South East |
| R1 | General Residential | | Albury Local Environmental Plan 2010 | 21/04/2023 | 26/04/2023 | 26/04/2023 | Map Amendment No 1 | 0m | South |
| E1 | Local Centre | | Albury Local Environmental Plan 2010 | 21/04/2023 | 26/04/2023 | 26/04/2023 | Map Amendment No 1 | 61m | North |
| R3 | Medium Density Residential | | Albury Local Environmental Plan 2010 | 21/04/2023 | 26/04/2023 | 26/04/2023 | Map Amendment No 1 | 61m | North |
| RE1 | Public Recreation | | Albury Local Environmental Plan 2010 | 21/04/2023 | 26/04/2023 | 26/04/2023 | Map Amendment No 1 | 224m | North West |

## Land Application

What are the on-site EPI Land Applications?

| Application Type | EPI Name | Published Date | Commenced Date | Currency Date | Amendment | Percentage of Site Area |
|---|---|---|---|---|---|---|
| Included | Albury Local Environmental Plan 2010 | 28/03/2014 | 28/03/2014 | 28/03/2014 | Amendment No 11 | 100 |

The following datasets have no features within their respective dataset buffer:

- Floor Space Ratio
- Height of Building
- Minimum Lot Size
- Land Reservation Acquisition

Environmental Planning Instrument Data Source: NSW Crown Copyright - Planning & Environment
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# Section 2 - Heritage

**201 Borella Road, Albury, NSW 2640**

The following datasets have no features within their respective dataset buffer:

- EPI Heritage
- State Heritage Register - Curtilages
- National Heritage List
- Commonwealth Heritage List

# Section 3 - EPI Protection Layers

**201 Borella Road, Albury, NSW 2640**

The following datasets have no features within their respective dataset buffer:

- Acid Sulfate Soils
- Acid Sulfate Soils SOP
- Airport Noise
- Drinking Water Catchment
- Environmentally Sensitive Land
- Flood
- Groundwater Vulnerability
- Landslide Risk
- Mineral and Extractive Resources
- Obstacle Limitation Surface
- Riparian Lands Watercourses
- Salinity
- Scenic Protection
- Terrestrial Biodiverstity
- Wetlands

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# Section 4 - EPI Development Control Layers

**201 Borella Road, Albury, NSW 2640**

The following datasets have no features within their respective dataset buffer:

- Dwelling Density
- Foreshore Building Lines
- Local Provisions

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# Section 5 - EPI Land Use Layers

**201 Borella Road, Albury, NSW 2640**

The following datasets have no features within their respective dataset buffer:

- Active Street Frontages
- Additional Permitted Uses
- Key Sites
- Land Reclassification
- Urban Release Area

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# Section 6 - EPI Strategic Regional Land Use Policy

**201 Borella Road, Albury, NSW 2640**

The following datasets have no features within their respective dataset buffer:

- Additional Rural Village Land
- Future Residential Growth Area
- Strategic Agricultural Land

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# Section 7 - SEPP Coastal Management

**201 Borella Road, Albury, NSW 2640**

The following datasets have no features within their respective dataset buffer:

- Coastal Environment Area
- Coastal Use Area
- Coastal Wetlands
- Coastal Wetlands Proximity Area
- Littoral Rainforest
- Littoral Rainforest Proximity Area
- Coastal Land Application

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# Section 8 - SEPP Land Application

**201 Borella Road, Albury, NSW 2640**

## SEPP Land Application

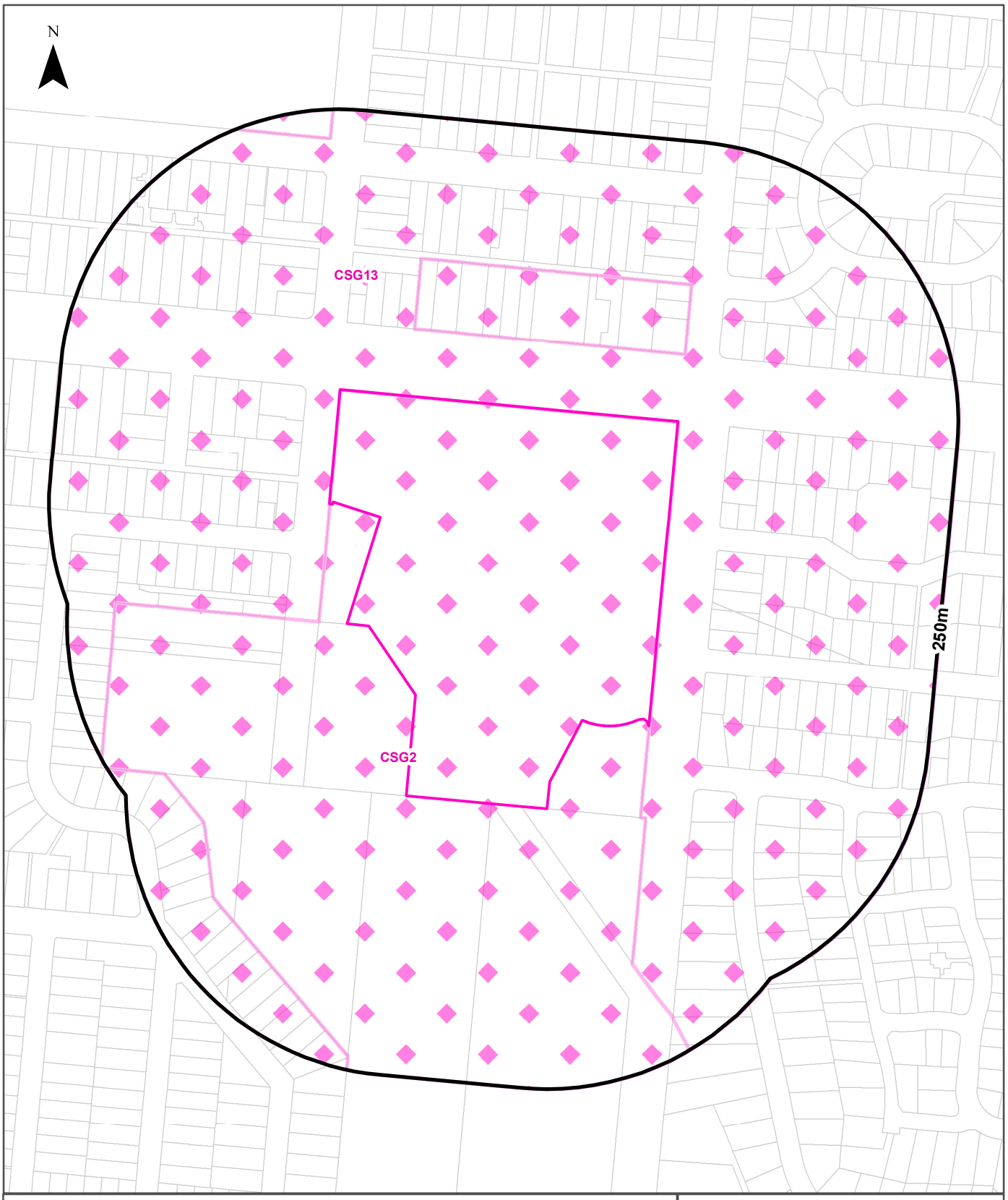
What are the on-site SEPP Land Applications?

| EPI Name | Name | Classification | Published Date | Commenced Date | Currency Date | Amendment | Percentage of Site Area |
|---|---|---|---|---|---|---|---|
| State Environmental Planning Policy (Biodiversity and Conservation) 2021 | | Land Application | 02/12/2021 | 01/03/2022 | 01/03/2022 | | 100 |
| State Environmental Planning Policy (Transport and Infrastructure) 2021 | | Land Application | 02/12/2021 | 01/03/2022 | 01/03/2022 | | 100 |
| State Environmental Planning Policy (Resilience and Hazards) 2021 | | Land Application | 02/12/2021 | 01/03/2022 | 01/03/2022 | | 100 |
| State Environmental Planning Policy (Resources and Energy) 2021 | | Land Application | 02/12/2021 | 01/03/2022 | 01/03/2022 | | 100 |
| State Environmental Planning Policy (Biodiversity and Conservation) 2021 | | Allowable Clearing Area | 21/10/2022 | 21/11/2022 | 21/11/2022 | State Environmental Planning Policy Amendment (Water Catchments) 2022 | 100 |
| State Environmental Planning Policy No 65 - Design Quality of Residential Apartment Development | | Land Application | 26/07/2002 | 26/07/2002 | 17/07/2015 | | 100 |
| State Environmental Planning Policy (Biodiversity and Conservation) 2021 | | Subject Land | 02/12/2021 | 01/03/2022 | 01/03/2022 | | 100 |
| State Environmental Planning Policy (Transport and Infrastructure) 2021 | Subject Land | Subject Land | 02/12/2021 | 01/03/2022 | 01/03/2022 | | 100 |
| State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004 | | Land Application | 25/06/2004 | 25/06/2004 | 22/02/2014 | | 100 |
| State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 | | Land Application | 12/12/2008 | 27/02/2009 | 27/11/2015 | | 100 |
| State Environmental Planning Policy (Housing) 2021 | | Land Application | 26/11/2021 | 26/11/2021 | 26/11/2021 | | 100 |
| State Environmental Planning Policy (Industry and Employment) 2021 | | Land Application | 02/12/2021 | 01/03/2022 | 01/03/2022 | | 100 |
| State Environmental Planning Policy (Planning Systems) 2021 | | Land Application | 02/12/2021 | 01/03/2022 | 01/03/2022 | | 100 |
| State Environmental Planning Policy (Primary Production) 2021 | | Land Application | 02/12/2021 | 01/03/2022 | 01/03/2022 | | 100 |

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# Section 9 - SEPP Addition Layers

**201 Borella Road, Albury, NSW 2640**




**Legend**

- Site Boundary
- Dataset Buffer
- Plan Boundaries
- Coal Seam Gas Exclusion Zones

Scale:

0 25 50 100 150 200 250

Meters

Data Sources: Property Boundaries & Topographic Data: © Department Finance, Services & Innovation 2023
Planning: NSW Crown Copyright - Planning & Environment

Coordinate System: GDA 1994 MGA Zone 56

Date: 29 September 2023

# Section 9 - SEPP Additional Layers

**201 Borella Road, Albury, NSW 2640**

## Coal Seam Gas Exclusion Zones

What SEPP Coal Seam Gas Exclusion Zones exist within the dataset buffer?

| Map Id | Classification | EPI Name | Published Date | Commenced Date | Currency Date | Amendment | Distance | Direction |
|---|---|---|---|---|---|---|---|---|
| CSG2 | Buffer Area | State Environmental Planning Policy (Resources and Energy) 2021 | 02/12/2021 | 01/03/2022 | 01/03/2022 | | 0m | Onsite |
| CSG13 | Land Within a Residential Zone | State Environmental Planning Policy (Resources and Energy) 2021 | 02/12/2021 | 01/03/2022 | 01/03/2022 | | 0m | South |
| CSG2 | Buffer Area | State Environmental Planning Policy (Resources and Energy) 2021 | 02/12/2021 | 01/03/2022 | 01/03/2022 | | 61m | North |

The following datasets have no features within their respective dataset buffer:

- Bulk Water Supply Infrastructure
- Critical Habitat
- Environmental Conservation Area
- Geotechnical
- Growth Centres
- Industrial Release Area
- Lease Area
- Local Complying Exclusions
- Local Excempt Exclusions
- Maximum Gross Floor Area
- Native Vegetation Protection
- Precinct Boundaries
- Reduced Level
- Referral Area
- Special Areas
- Special Provision
- State Significant Development Sites
- Strategic Foreshore Sites
- Transport Arterial Road Infrastructure
- Water Zoning
- Wetland Protection Area

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# Section 10 - Ecology

**201 Borella Road, Albury, NSW 2640**

## Species of National Environmental Significance

What Species of National Environmental Significance as listed in the Environment Protection and Biodiversity Conservation (EPBC) Act 1999 exist within the dataset buffer?

| Id | Scientific | Common | Group | Threatened Status | Migratory Status | Prescence Category | Grid Size | Distance | Direction |
|---|---|---|---|---|---|---|---|---|---|
| 612 | Myiagra cyanoleuca | Satin Flycatcher | birds | | Migratory | Species or species habitat likely to occur | 1km | 0m | Onsite |
| 644 | Motacilla flava | Yellow Wagtail | birds | | Migratory | Species or species habitat may occur | 1km | 0m | Onsite |
| 670 | Merops ornatus | Rainbow Bee-eater | birds | | | Species or species habitat may occur | 1km | 0m | Onsite |
| 678 | Apus pacificus | Fork-tailed Swift | birds | | Migratory | Species or species habitat likely to occur | 1km | 0m | Onsite |
| 705 | Chrysococcyx osculans | Black-eared Cuckoo | birds | | | Species or species habitat likely to occur | 1km | 0m | Onsite |
| 726 | Neophema chrysostoma | Blue-winged Parrot | birds | | | Species or species habitat likely to occur | 1km | 0m | Onsite |
| 858 | Calidris melanotos | Pectoral Sandpiper | birds | | Migratory | Species or species habitat may occur | 1km | 0m | Onsite |
| 863 | Gallinago hardwickii | Latham's Snipe, Japanese Snipe | birds | | Migratory | Species or species habitat likely to occur | 1km | 0m | Onsite |
| 874 | Calidris acuminata | Sharp-tailed Sandpiper | birds | | Migratory | Species or species habitat may occur | 1km | 0m | Onsite |
| 889 | Rostratula benghalensis (sensu lato) | Painted Snipe | birds | | | Species or species habitat likely to occur | 1km | 0m | Onsite |
| 943 | Haliaeetus leucogaster | White-bellied Sea-Eagle | birds | | | Species or species habitat likely to occur | 10km | 0m | Onsite |
| 59309 | Actitis hypoleucos | Common Sandpiper | birds | | Migratory | Species or species habitat may occur | 1km | 0m | Onsite |
| 59542 | Ardea ibis | Cattle Egret | birds | | | Species or species habitat may occur | 1km | 0m | Onsite |
| 906 | Pedionomus torquatus | Plains-wanderer | birds | Critically Endangered | | Species or species habitat may occur | 10km | 0m | Onsite |
| 847 | Numenius madagascariensis | Eastern Curlew, Far Eastern Curlew | birds | Critically Endangered | Migratory | Species or species habitat may occur | 1km | 0m | Onsite |
| 856 | Calidris ferruginea | Curlew Sandpiper | birds | Critically Endangered | Migratory | Species or species habitat may occur | 1km | 0m | Onsite |
| 82338 | Anthochaera phrygia | Regent Honeyeater | birds | Critically Endangered | | Species or species habitat likely to occur | 10km | 0m | Onsite |
| 77037 | Rostratula australis | Australian Painted Snipe | birds | Endangered | | Species or species habitat likely to occur | 1km | 0m | Onsite |
| 768 | Callocephalon fimbriatum | Gang-gang Cockatoo | birds | Endangered | | Species or species habitat may occur | 1km | 0m | Onsite |
| 1001 | Botaurus poiciloptilus | Australasian Bittern | birds | Endangered | | Species or species habitat likely to occur | 1km | 0m | Onsite |
| 929 | Falco hypoleucos | Grey Falcon | birds | Vulnerable | | Species or species habitat likely to occur | 10km | 0m | Onsite |
| 470 | Grantiella picta | Painted Honeyeater | birds | Vulnerable | | Species or species habitat likely to occur | 1km | 0m | Onsite |
| 738 | Polytelis swainsonii | Superb Parrot | birds | Vulnerable | | Species or species habitat likely to occur | 10km | 0m | Onsite |
| 682 | Hirundapus caudacutus | White-throated Needletail | birds | Vulnerable | Migratory | Species or species habitat likely to occur | 1km | 0m | Onsite |
| 84745 | Galaxias rostratus | Flathead Galaxias, Beaked Minnow, Flat-headed Galaxias, Flat-headed Jollytail, Flat-headed Minnow | fishes | Critically Endangered | | Species or species habitat may occur | 1km | 0m | Onsite |

| Id | Scientific | Common | Group | Threatened Status | Migratory Status | Prescence Category | Grid Size | Distance | Direction |
|---|---|---|---|---|---|---|---|---|---|
| 66632 | Macquaria australasica | Macquarie Perch | fishes | Endangered | | Species or species habitat may occur | 1km | 0m | Onsite |
| 7580 | Swainsona recta | Small Purple-pea, Mountain Swainson-pea, Small Purple Pea | flora | Endangered | | Species or species habitat may occur | 1km | 0m | Onsite |
| 55144 | Prasophyllum petilum | Tarengo Leek Orchid | flora | Endangered | | Species or species habitat may occur | 10km | 0m | Onsite |
| 10268 | Prasophyllum validum | Sturdy Leek-orchid, Mount Remarkable Leek-orchid | flora | Vulnerable | | Species or species habitat may occur | 10km | 0m | Onsite |
| 19215 | Amphibromus fluitans | River Swamp Wallaby-grass, Floating Swamp Wallaby-grass | flora | Vulnerable | | Species or species habitat likely to occur | 1km | 0m | Onsite |
| 5505 | Caladenia concolor | Crimson Spider-orchid, Maroon Spider-orchid | flora | Vulnerable | | Species or species habitat likely to occur | 10km | 0m | Onsite |
| 59151 | Crinia sloanei | Sloane's Froglet | frogs | Endangered | | Species or species habitat likely to occur | 1km | 0m | Onsite |
| 1828 | Litoria raniformis | Growling Grass Frog, Southern Bell Frog, Green and Golden Frog, Warty Swamp Frog, Golden Bell Frog | frogs | Vulnerable | | Species or species habitat may occur | 1km | 0m | Onsite |
| 75184 | Dasyurus maculatus maculatus (SE mainland population) | Spot-tailed Quoll, Spotted-tail Quoll, Tiger Quoll (southeastern mainland population) | mammals | Endangered | | Species or species habitat may occur | 1km | 0m | Onsite |
| 85104 | Phascolarctos cinereus (combined populations of Qld, NSW and the ACT) | Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory) | mammals | Endangered | | Species or species habitat likely to occur | 1km | 0m | Onsite |
| 83395 | Nyctophilus corbeni | Corben's Long-eared Bat, South-eastern Long-eared Bat | mammals | Vulnerable | | Species or species habitat may occur | 1km | 0m | Onsite |
| 186 | Pteropus poliocephalus | Grey-headed Flying-fox | mammals | Vulnerable | | Species or species habitat likely to occur | 1km | 0m | Onsite |
| 1649 | Delma impar | Striped Legless Lizard, Striped Snake-lizard | reptiles | Vulnerable | | Species or species habitat may occur | 1km | 0m | Onsite |
| 1665 | Aprasia parapulchella | Pink-tailed Worm-lizard, Pink-tailed Legless Lizard | reptiles | Vulnerable | | Species or species habitat likely to occur | 10km | 0m | Onsite |
| 592 | Rhipidura rufifrons | Rufous Fantail | birds | | Migratory | Species or species habitat likely to occur | 1km | 0m | Onsite |
| 592 | Rhipidura rufifrons | Rufous Fantail | birds | | Migratory | Species or species habitat may occur | 1km | 0m | Onsite |
| 744 | Lathamus discolor | Swift Parrot | birds | Critically Endangered | | Species or species habitat likely to occur | 1km | 0m | Onsite |
| 1001 | Botaurus poiciloptilus | Australasian Bittern | birds | Endangered | | Species or species habitat may occur | 1km | 11m | North |
| 874 | Calidris acuminata | Sharp-tailed Sandpiper | birds | | Migratory | Species or species habitat likely to occur | 1km | 69m | North |
| 59309 | Actitis hypoleucos | Common Sandpiper | birds | | Migratory | Species or species habitat likely to occur | 1km | 69m | North East |
| 84745 | Galaxias rostratus | Flathead Galaxias, Beaked Minnow, Flat-headed Galaxias, Flat-headed Jollytail, Flat-headed Minnow | fishes | Critically Endangered | | Species or species habitat likely to occur | 1km | 69m | West |
| 91711 | Nannoperca australis Murray-Darling Basin lineage | Southern Pygmy Perch (Murray-Darling Basin lineage) | fishes | Vulnerable | | Species or species habitat may occur | 1km | 69m | North East |
| 66633 | Maccullochella peelii | Murray Cod | fishes | Vulnerable | | Species or species habitat likely to occur | 1km | 69m | North |

EPBC Data Source: Commonwealth of Australia (Department of the Environment and Energy)
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# NSW BioNet Atlas

Species on the NSW BioNet Atlas that have a NSW or federal conservation status, a NSW sensitivity status, or are listed under a migratory species agreement, and are within 10km of the site?

| Kingdom | Class | Scientific | Common | NSW Conservation Status | NSW Sensitivity Class | Federal Conservation Status | Migratory Species Agreements |
|---|---|---|---|---|---|---|---|
| Animalia | Amphibia | Crinia sloanei | Sloane's Froglet | Endangered | Not Sensitive | Endangered | |
| Animalia | Amphibia | Heleioporus australiacus | Giant Burrowing Frog | Vulnerable | Not Sensitive | Vulnerable | |
| Animalia | Amphibia | Litoria raniformis | Southern Bell Frog | Endangered | Not Sensitive | Vulnerable | |
| Animalia | Aves | Anseranas semipalmata | Magpie Goose | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Aves | Anthochaera phrygia | Regent Honeyeater | Critically Endangered | Category 2 | Critically Endangered | |
| Animalia | Aves | Apus pacificus | Fork-tailed Swift | Not Listed | Not Sensitive | Not Listed | ROKAMBA;CAMBA;JAMBA |
| Animalia | Aves | Artamus cyanopterus cyanopterus | Dusky Woodswallow | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Aves | Botaurus poiciloptilus | Australasian Bittern | Endangered | Not Sensitive | Endangered | |
| Animalia | Aves | Burhinus grallarius | Bush Stone-curlew | Endangered | Not Sensitive | Not Listed | |
| Animalia | Aves | Calidris acuminata | Sharp-tailed Sandpiper | Not Listed | Not Sensitive | Not Listed | ROKAMBA;CAMBA;JAMBA |
| Animalia | Aves | Callocephalon fimbriatum | Gang-gang Cockatoo | Vulnerable | Category 3 | Endangered | |
| Animalia | Aves | Certhionyx variegatus | Pied Honeyeater | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Aves | Chthonicola sagittata | Speckled Warbler | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Aves | Circus assimilis | Spotted Harrier | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Aves | Climacteris picumnus victoriae | Brown Treecreeper (eastern subspecies) | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Aves | Daphoenositta chrysoptera | Varied Sittella | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Aves | Falco subniger | Black Falcon | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Aves | Gallinago hardwickii | Latham's Snipe | Not Listed | Not Sensitive | Not Listed | ROKAMBA;JAMBA |
| Animalia | Aves | Glossopsitta porphyrocephala | Purple-crowned Lorikeet | Vulnerable | Category 3 | Not Listed | |
| Animalia | Aves | Glossopsitta pusilla | Little Lorikeet | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Aves | Grantiella picta | Painted Honeyeater | Vulnerable | Not Sensitive | Vulnerable | |
| Animalia | Aves | Grus rubicunda | Brolga | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Aves | Haliaeetus leucogaster | White-bellied Sea-Eagle | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Aves | Hieraaetus morphnoides | Little Eagle | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Aves | Hirundapus caudacutus | White-throated Needletail | Not Listed | Not Sensitive | Vulnerable | ROKAMBA;CAMBA;JAMBA |
| Animalia | Aves | Hydroprogne caspia | Caspian Tern | Not Listed | Not Sensitive | Not Listed | JAMBA |
| Animalia | Aves | Lathamus discolor | Swift Parrot | Endangered | Not Sensitive | Critically Endangered | |
| Animalia | Aves | Melanodryas cucullata cucullata | Hooded Robin (south-eastern form) | Vulnerable | Not Sensitive | Not Listed | |

| Kingdom | Class | Scientific | Common | NSW Conservation Status | NSW Sensitivity Class | Federal Conservation Status | Migratory Species Agreements |
|---|---|---|---|---|---|---|---|
| Animalia | Aves | Melithreptus gularis gularis | Black-chinned Honeyeater (eastern subspecies) | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Aves | Neophema chrysostoma | Blue-winged Parrot | Vulnerable | Not Sensitive | Vulnerable | |
| Animalia | Aves | Neophema pulchella | Turquoise Parrot | Vulnerable | Category 3 | Not Listed | |
| Animalia | Aves | Ninox connivens | Barking Owl | Vulnerable | Category 3 | Not Listed | |
| Animalia | Aves | Oxyura australis | Blue-billed Duck | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Aves | Petroica boodang | Scarlet Robin | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Aves | Petroica phoenicea | Flame Robin | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Aves | Polytelis swainsonii | Superb Parrot | Vulnerable | Category 3 | Vulnerable | |
| Animalia | Aves | Pomatostomus temporalis temporalis | Grey-crowned Babbler (eastern subspecies) | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Aves | Stagonopleura guttata | Diamond Firetail | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Aves | Stictonetta naevosa | Freckled Duck | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Aves | Tringa glareola | Wood Sandpiper | Not Listed | Not Sensitive | Not Listed | ROKAMBA;CAMBA;JAMBA |
| Animalia | Aves | Tringa stagnatilis | Marsh Sandpiper | Not Listed | Not Sensitive | Not Listed | ROKAMBA;CAMBA;JAMBA |
| Animalia | Mammalia | Dasyurus maculatus | Spotted-tailed Quoll | Vulnerable | Not Sensitive | Endangered | |
| Animalia | Mammalia | Falsistrellus tasmaniensis | Eastern False Pipistrelle | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Mammalia | Petaurus norfolcensis | Squirrel Glider | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Mammalia | Phascolarctos cinereus | Koala | Endangered | Not Sensitive | Endangered | |
| Animalia | Mammalia | Pteropus poliocephalus | Grey-headed Flying-fox | Vulnerable | Not Sensitive | Vulnerable | |
| Animalia | Mammalia | Saccolaimus flaviventris | Yellow-bellied Sheathtail-bat | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Reptilia | Aprasia parapulchella | Pink-tailed Legless Lizard | Vulnerable | Not Sensitive | Vulnerable | |
| Plantae | Flora | Amphibromus fluitans | Floating Swamp Wallaby-grass | Vulnerable | Not Sensitive | Vulnerable | |
| Plantae | Flora | Caladenia concolor | Crimson Spider Orchid | Endangered | Category 2 | Vulnerable | |
| Plantae | Flora | Caladenia rosella | Rosella Spider Orchid | Presumed Extinct | Category 2 | Endangered | |
| Plantae | Flora | Leucochrysum albicans subsp. tricolor | Hoary Sunray | Endangered | Not Sensitive | Endangered | |
| Plantae | Flora | Pilularia novae-hollandiae | Austral Pillwort | Endangered | Category 3 | Not Listed | |
| Plantae | Flora | Senecio garlandii | Woolly Ragwort | Vulnerable | Not Sensitive | Not Listed | |
| Plantae | Flora | Swainsona sericea | Silky Swainson-pea | Vulnerable | Not Sensitive | Not Listed | |

Data does not include NSW category 1 sensitive species.

NSW BioNet: © State of NSW and Office of Environment and Heritage

# Dataset Listing Table

**201 Borella Road, Albury, NSW 2640**

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

| Datasets | Custodian | Supply Date | Currency Date | Update Frequency |
|---|---|---|---|---|
| **Section 1: Environmental Planning Instrument - Primary Planning Layers** | | | | |
| Land Zoning | NSW Department of Planning, Industry and Environment | 31/08/2023 | 25/08/2023 | Monthly |
| Floor Space Ratio | NSW Department of Planning, Industry and Environment | 31/08/2023 | 25/08/2023 | Monthly |
| Maximum Height of Building | NSW Department of Planning, Industry and Environment | 31/08/2023 | 25/08/2023 | Monthly |
| Minimum Lot Size | NSW Department of Planning, Industry and Environment | 31/08/2023 | 25/08/2023 | Monthly |
| Land Application | NSW Department of Planning, Industry and Environment | 31/08/2023 | 04/08/2023 | Monthly |
| Land Reservation Acquisition | NSW Department of Planning, Industry and Environment | 31/08/2023 | 25/08/2023 | Monthly |
| **Section 2: Heritage** | | | | |
| Local Heritage | NSW Department of Planning, Industry and Environment | 31/08/2023 | 25/08/2023 | Monthly |
| State Heritage Register - Curtilages | NSW Department of Planning, Industry and Environment | 06/09/2023 | 03/03/2023 | Quarterly |
| National Heritage List | Australian Government Department of the Agriculture, Water and the Environment | 03/06/2022 | 13/04/2022 | Annually |
| Commonwealth Heritage List | Australian Government Department of the Agriculture, Water and the Environment | 03/06/2022 | 13/04/2022 | Annually |
| **Section 3: Environmental Planning Instrument - Protection Layers** | | | | |
| Acid Sulfate Soils | NSW Department of Planning, Industry and Environment | 31/08/2023 | 30/06/2023 | Monthly |
| Acid Sulfate Soils Sydney Olympic Park | NSW Department of Planning, Industry and Environment | 31/08/2023 | 30/06/2023 | Monthly |
| Airport Noise | NSW Department of Planning, Industry and Environment | 31/08/2023 | 25/03/2022 | Monthly |
| Drinking Water Catchment | NSW Department of Planning, Industry and Environment | 31/08/2023 | 12/05/2023 | Monthly |
| Environmentally Sensitive Land | NSW Department of Planning, Industry and Environment | 31/08/2023 | 01/02/2023 | Monthly |
| Flood | NSW Department of Planning, Industry and Environment | 31/08/2023 | 16/12/2022 | Monthly |
| Groundwater Vulnerability | NSW Department of Planning, Industry and Environment | 31/08/2023 | 01/02/2023 | Monthly |
| Landslide Risk | NSW Department of Planning, Industry and Environment | 31/08/2023 | 06/12/2019 | Monthly |
| Mineral and Extractive Resources | NSW Department of Planning, Industry and Environment | 31/08/2023 | 28/10/2022 | Monthly |
| Obstacle Limitation Surface | NSW Department of Planning, Industry and Environment | 31/08/2023 | 01/03/2022 | Monthly |
| Riparian Lands Watercourses | NSW Department of Planning, Industry and Environment | 31/08/2023 | 23/06/2023 | Monthly |
| Salinity | NSW Department of Planning, Industry and Environment | 31/08/2023 | 01/02/2023 | Monthly |

| Section 3: Environmental Planning Instrument - Protection Layers | | | | |
|---|---|---|---|---|
| Scenic Protection | NSW Department of Planning, Industry and Environment | 31/08/2023 | 30/06/2023 | Monthly |
| Terrestrial Biodiversity | NSW Department of Planning, Industry and Environment | 31/08/2023 | 19/05/2023 | Monthly |
| Wetlands | NSW Department of Planning, Industry and Environment | 31/08/2023 | 12/05/2023 | Monthly |
| **Section 4: Environmental Planning Instrument - Development Control Layers** | | | | |
| Dwelling Density | NSW Department of Planning, Industry and Environment | 31/08/2023 | 23/06/2023 | Monthly |
| Foreshore Building Line | NSW Department of Planning, Industry and Environment | 31/08/2023 | 19/06/2020 | Monthly |
| Local Provisions | NSW Department of Planning, Industry and Environment | 31/08/2023 | 25/08/2023 | Monthly |
| **Section 5: Environmental Planning Instrument - Land Use Layers** | | | | |
| Active Street Frontages | NSW Department of Planning, Industry and Environment | 31/08/2023 | 25/08/2023 | Monthly |
| Additional Permitted Uses | NSW Department of Planning, Industry and Environment | 31/08/2023 | 18/08/2023 | Monthly |
| Key Sites | NSW Department of Planning, Industry and Environment | 31/08/2023 | 25/08/2023 | Monthly |
| Land Reclassification | NSW Department of Planning, Industry and Environment | 31/08/2023 | 25/08/2023 | Monthly |
| Urban Release Area | NSW Department of Planning, Industry and Environment | 31/08/2023 | 30/06/2023 | Monthly |
| **Section 6: Environmental Planning Instrument - Strategic Regional Land Use Policy** | | | | |
| Additional Rural Village Land | NSW Department of Planning, Industry and Environment | 31/08/2023 | 01/03/2022 | Monthly |
| Future Residential Growth Area | NSW Department of Planning, Industry and Environment | 31/08/2023 | 01/03/2022 | Monthly |
| Strategic Agricultural Land | NSW Department of Planning, Industry and Environment | 31/08/2023 | 01/03/2022 | Monthly |
| **Section 7: State Environmental Planning Policy - Coastal Management** | | | | |
| Coastal Environment Area | NSW Department of Planning, Industry and Environment | 31/08/2023 | 03/10/2022 | Monthly |
| Coastal Use Area | NSW Department of Planning, Industry and Environment | 31/08/2023 | 03/10/2022 | Monthly |
| Coastal Wetlands | NSW Department of Planning, Industry and Environment | 31/08/2023 | 03/10/2022 | Monthly |
| Coastal Wetlands Proximity Area | NSW Department of Planning, Industry and Environment | 31/08/2023 | 03/10/2022 | Monthly |
| Littoral Rainforest | NSW Department of Planning, Industry and Environment | 31/08/2023 | 03/10/2022 | Monthly |
| Littoral Rainforest Proximity Area | NSW Department of Planning, Industry and Environment | 31/08/2023 | 03/10/2022 | Monthly |
| Coastal Land Application | NSW Department of Planning, Industry and Environment | 31/08/2023 | 03/10/2022 | Monthly |
| **Section 8: State Environmental Planning Policy - Land Application** | | | | |
| Land Application | NSW Department of Planning, Industry and Environment | 31/08/2023 | 30/06/2023 | Monthly |
| **Section 9: State Environmental Planning Policy - Additional Layers** | | | | |
| Bulk Water Supply Infrastructure | NSW Department of Planning, Industry and Environment | 31/08/2023 | 01/03/2022 | Monthly |
| Critical Habitat | NSW Department of Planning, Industry and Environment | 09/11/2022 | 28/09/2005 | Monthly |

| Section 9: State Environmental Planning Policy - Additional Layers | | | | |
|---|---|---|---|---|
| Coal Seam Gas Exlusion Zones | NSW Department of Planning, Industry and Environment | 31/08/2023 | 01/03/2022 | Monthly |
| Environmental Conservation Area | NSW Department of Planning, Industry and Environment | 31/08/2023 | 08/07/2022 | Monthly |
| Geotechnical | NSW Department of Planning, Industry and Environment | 31/08/2023 | 01/03/2022 | Monthly |
| Growth Centres | NSW Department of Planning, Industry and Environment | 31/08/2023 | 01/03/2022 | Monthly |
| Industrial Release Area | NSW Department of Planning, Industry and Environment | 31/08/2023 | 01/03/2022 | Monthly |
| Lease Area | NSW Department of Planning, Industry and Environment | 31/08/2023 | 08/07/2022 | Monthly |
| Local Complying Exclusion | NSW Department of Planning, Industry and Environment | 31/08/2023 | 02/07/2021 | Monthly |
| Local Exempt Exclusion | NSW Department of Planning, Industry and Environment | 31/08/2023 | 02/07/2021 | Monthly |
| Maximum Gross Floor Area | NSW Department of Planning, Industry and Environment | 31/08/2023 | 09/06/2023 | Monthly |
| Native Vegetation Protection | NSW Department of Planning, Industry and Environment | 31/08/2023 | 16/12/2022 | Monthly |
| Precinct Boundaries | NSW Department of Planning, Industry and Environment | 31/08/2023 | 01/06/2022 | Monthly |
| Reduced Level | NSW Department of Planning, Industry and Environment | 31/08/2023 | 08/07/2022 | Monthly |
| Referral Area | NSW Department of Planning, Industry and Environment | 31/08/2023 | 08/07/2022 | Monthly |
| Special Areas | NSW Department of Planning, Industry and Environment | 31/08/2023 | 30/06/2023 | Monthly |
| Special Provision | NSW Department of Planning, Industry and Environment | 31/08/2023 | 18/08/2023 | Monthly |
| State Significant Development Sites | NSW Department of Planning, Industry and Environment | 31/08/2023 | 16/12/2022 | Monthly |
| Strategic Foreshore Sites | NSW Department of Planning, Industry and Environment | 31/08/2023 | 01/03/2022 | Monthly |
| Transport Arteial Road Infrastructure | NSW Department of Planning, Industry and Environment | 31/08/2023 | 25/03/2022 | Monthly |
| Water Zoning | NSW Department of Planning, Industry and Environment | 31/08/2023 | 21/11/2022 | Monthly |
| Wetland Protection Area | NSW Department of Planning, Industry and Environment | 09/11/2022 | 28/06/2016 | Monthly |
| **Section 10: Ecology** | | | | |
| Species of National Environmental Significance | Australian Government Department of Agriculture, Water and the Environment | 19/01/2023 | 05/10/2022 | Annually |
| NSW BioNet Species Sightings | NSW Office of Environment & Heritage | 13/09/2023 | 13/09/2023 | Weekly |
| **Other** | | | | |
| Property Boundaries & Roads | NSW Department of Customer Service - Spatial Services | 13/09/2023 | 13/09/2023 | Quarterly |

## Useful Contacts

**Lotsearch Pty Ltd**

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(02) 8287 0680

**NSW Department of Planning and Environment**

www.planning.nsw.gov.au/Contact-Us
information@planning.nsw.gov.au
1300 305 695

**Albury City Council**

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info@alburycity.nsw.gov.au
(02) 6023 8111

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# Planning Certificate Section 10.7(2) & (5)

Certificate Number: 40453
Date Issued: 28/09/2023

**Applicant Details:**

Franco Palazzolo
25/100 Mount Street
NORTH SYDNEY NSW 2060

Applicant Reference: LS048621
Parcel Number: 58185

**Property Details:**

Title Details: LOT: 14 DP: 1175382
Property Address: 201 Borella Road EAST ALBURY NSW 2640

Section 209 and Schedule 2 to the Environmental Planning and Assessment Regulation 2021, issued under the *Environmental Planning and Assessment Act 1979 (Act)*

**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.

**Albury Local Environmental Plan 2010 (Gazetted 13/8/2010)**
The consolidated Albury Local Environmental Plan 2010 is the principal statutory planning instrument to guide planning decisions for the Albury Local Government area.
An electronic version is available at: https://legislation.nsw.gov.au/view/html/inforce/current/epi-2010-0433#statusinformation

**Albury Development Control Plan 2010 (Adopted 13/08/2010)**
The Albury Development Control Plan 2010 contains detailed planning controls that set out the guidelines and considerations against which development proposals can be consistently measured and assessed for determination purposes for the Albury Local Government Area.
An electronic version is available at: https://www.alburycity.nsw.gov.au/property/plan/planning-controls/albury-development-control-plan-2010

**State Environmental Planning Policies**
Full copies of each State Environmental Planning Policy are available online at NSW Legislation website: https://legislation.nsw.gov.au/browse/inforce#/epi/title/s

State Environmental Planning Policy No.65 (Design Quality of Residential Apartment Development) 2002
State Environmental Planning Policy (BASIX) 2004
State Environmental Planning Policy (Exempt and Complying Development) 2008
State Environmental Planning Policy (Housing) 2021
State Environmental Planning Policy (Transport and Infrastructure) 2021
State Environmental Planning Policy (Primary Production) 2021
State Environmental Planning Policy (Biodiversity and Conservation) 2021
State Environmental Planning Policy (Resilience and Hazards) 2021
State Environmental Planning Policy (Industry and Employment) 2021
State Environmental Planning Policy (Resources and Energy) 2021
State Environmental Planning Policy (Planning Systems) 2021
State Environmental Planning Policy (Precincts – Regional) 2021

(2) The name of each proposed environmental planning instrument and draft development control plan, which is or has been subject to community consultation or public exhibition under the Act, that will apply to the carrying out of development on the land.

**Planning Proposal - Albury Conservation Zoned Lands Review**
This Planning Proposal seeks to implement Conservation Zone amendments (proposed additions or removal) informed by an ecological assessment. A map of the proposed changes is available to view at the following webpage haveyoursay.alburycity.nsw.gov.au/conservation-zoned-lands-review
The proposed changes primarily address mapping anomalies where zoning does not line up with property boundaries or does not reflect environmental attributes on the ground. Public exhibition closed on 1 February 2023 and submissions received are now being considered. The outcomes of this process is to be reported to Council in mid to late 2023.

(3) Subsection (2) does not apply in relation to a proposed environmental planning instrument or draft development control plan if:

(a) It has been more than 3 years since the end of the public exhibition period for the proposed instrument or draft plan, or

(b) for a proposed environmental planning instrument – the Planning Secretary has notified the council that the making of the proposed instrument has been deferred indefinitely or has not been approved.

(4) In this section:

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

## 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)”,

**Zone: SP2 - Infrastructure Zone**

(b) the purposes for which development in the zone

(i) may be carried out without development consent

**Refer to Appendix A**

(ii) may not be carried out except with development consent

**All permitted development (construction and/or use) in this zone requires approval (development consent or complying development certificate) unless it is permitted without consent or, if listed as Exempt Development in State Environmental Planning Policy (Exempt & Complying Development Codes) 2008 or where relevant in Clause 3.1 of Albury LEP 2010 (Refer to Appendix A). The demolition of all houses and most buildings or structures on the land require development consent unless it is Exempt Development.**

(iii) is prohibited

**Refer to Appendix A**

(c) whether additional permitted uses apply to the land

**None apply**

(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

**Note: No minimum lot size has been assigned to the subject land.**

(e) whether the land is in an area of outstanding biodiversity value under the *Biodiversity Conservation Act 2016*

**None apply**

(f) whether the land is in a conservation area, however described

**None apply**

(g) whether an item of environmental heritage, however described, is located on the land

**None apply**

## 3. Contributions plans

(1) *The name of each contribution plan under the Act, Division 7.1 applying to the land, including draft contribution plans:*

**Section 94 Development Servicing Plan,** March 2005 as amended. This plan details charges to be levied on development, lodged prior to 30 June 2014.

**Section 64 Development Servicing Plan,** July 2004 as amended. This plan details charges to be levied on development, lodged prior to 30 June 2014.

**Albury Infrastructure Contributions Plan 2014. T**his plan details the Local Infrastructure Contributions, including Section 64 contributions, Section 7.11 (formerly Section 94) contributions or Section 7.12 (formerly Section 94A contributions), to be levied on development and complying development lodged from 1 July 2014, to meet the cost of new and upgraded Local Infrastructure, Water and Wastewater Management Works. The *Albury Infrastructure Contributions Plan 2014* is available to view on Council's website: https://www.alburycity.nsw.gov.au

(2) If the land is in a special contributions area under the Act, Division 7.1, the name of the area:

**None apply**

## 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 Environment Planning Policy (Exempt and Complying Development Codes) 2008*, because of that Policy, clause 1.17A (1) (c) to (e), (2), (3) or (4), 1.18 (1) (c3) and 1.19.

(2) If complying development may not be carried out on the land because of 1 of those clauses, the reason 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.

**Does this apply 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 may not be carried out under the Rural Housing Code as the subject land falls within a Local Environmental Plan zone that does not meet the requirements of the code.

**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 is not within the designated Greenfield Housing Code Area.

**Inland Code**
Complying Development may not be carried out under the Inland 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 Development Codes) 2008, including Clause 4.6A Development standards for bush fire prone land.

**General Development Code**
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.

**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.

**Commercial and Industrial Alterations Code**
Complying Development may be carried out on the land under the Commercial and Industrial Alterations Code, subject to the development complying with the relevant standards contained within the State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.

**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.

**Subdivision 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.

**Commercial and Industrial (New Building and Additions) Code**
Complying Development may not be carried out under the Commercial & Industrial (New Buildings and Additions) Code as the subject land falls within a Local Environmental Plan zone that does not meet the requirements of the code.

**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.

**Note:** Despite any references above advising that Complying Development may be undertaken on the land, certain Complying Development may be precluded from occurring on the land due to requirements contained in the remainder of State Environment Planning Policy (Exempt and Complying Development Codes) 2008. It is necessary to review the State Environment Planning Policy in detail

**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 Planning Policy (Exempt and Complying Development Codes) 2008, because of that Policy, clause 1.16(1)(b1)-(d) or 1.16A.

(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.

(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 extend 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 that land.

**Does this apply to the land?**

There is no land within the Albury local government area identified:

1.16(1)(b1) as a declared area of outstanding biodiversity value under the Biodiversity Conservation Act 2016 https://legislation.nsw.gov.au/view/html/inforce/current/act-2016-063, or

declared critical habitat under Part 7A of the Fisheries Management Act 1994 https://legislation.nsw.gov.au/view/html/inforce/current/act-1994-038, and

1.16(1)(b2) as, or part of, a wilderness area (within the meaning of Wilderness Act 1987 https://legislation.nsw.gov.au/view/html/inforce/current/act-1987-196), and

1.16(1)(d) described or otherwise identified on a map specified in Schedule 4 – Land excluded from the General Exempt Development Code.

1.16A within 18 kilometres of Siding Spring Observatory.

**Note**: Despite any references above advising that Exempt Development may be undertaken on the land, certain Exempt Development may be precluded from occurring on the land due to requirements contained in the remainder of State Environment Planning Policy (Exempt and Complying Development Codes) 2008. It is necessary to review the State Environment Planning Policy in detail to ensure that specific types of exempt development may be undertaken on the land

**6. Affected building notices and building product rectification order**

(1) Whether the council is aware that:

(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.

**Does this apply to the land?**
None that council is aware of

(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 the Building Products (Safety) Act 2017.

**7. Land reserved for acquisition**

(1) 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.

**Does this apply to the land?**
None apply

**8. Road widening and road realignment**

(1) 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.

**Does this apply to the land?**
The land is not in close proximity to the ring road.

The land is not affected by road widening or road re-alignment under Division 2 or Part 3 of the Roads Act 1993 or a resolution by Albury City Council.

**9. Flood related development controls information**

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

(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.

**Does this apply to the land?**
None apply

(3) In this section:

***flood planning area*** has the same meaning as in the Floodplain Development Manual.

***Floodplain Development Manual*** means the *Floodplain Development Manual* (ISBN 0 7347 5476 0) published by the NSW Government in April 2005.

***probable maximum flood*** has the same meaning as in the Floodplain Development Manual.

**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 land slip, bush fire, tidal inundation, subsidence, acid sulfate soils, contamination, aircraft noise, salinity, coastal hazards, sea level rise or another risk, other than flooding.

Contaminated Land Policy:
The council has adopted by resolution a policy on contaminated land which may restrict the development of the land. This policy is implemented when zoning or land use changes are proposed on lands which have previously been used for certain purposes. Consideration of council's adopted policy and the application of provisions under relevant State legislation is warranted.

(2) 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.

**Does this apply to the land?**
Some of the land is bushfire prone

Bushfire Prone Land - Category 1
This land is identified as being within Bushfire Prone Land - Vegetation Category 1 Zone. All development is to be in accordance with the Rural Fire Service Guideline "Planning for Bushfire Protection 2019" - Refer to www.rfs.nsw.gov.au

Bushfire Prone Land - Category 2
This land is identified as being within Bushfire Prone Land - Vegetation Category 2 Zone. All development is to be in accordance with the Rural Fire Service Guideline "Planning for Bushfire Protection 2019". Available at: www.rfs.nsw.gov.au.

Bushfire Area - Vegetation Buffer
This land is identified as being within a Bushfire Prone Land - Vegetation Buffer. All development is to be in accordance with the Rural Fire Service Guideline "Planning for Bushfire Protection 2019". Available at www.rfs.nsw.gov.au

**12. Loose-fill asbestos insulation**

(1) 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.

**Does this apply to the land?**
None apply

**13. Mine subsidence**

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

**Does this apply to the land?**
This land is not proclaimed to be a mine subsidence district within the meaning of the *Coal Mine Subsidence Compensation Act 2017.*

**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.

(2) The date of a 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.

**Does this apply to the land?**
None apply

**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 the Act.

**Does this apply to the land?**
None apply

**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.

**Does this apply to the land?**
None that council is aware of

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 *Biodiversity Conservation Act 2016,* Part 5.

**17. Biodiversity certified land**

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

**Does this apply to the land?**
No, does not apply. The Minister for the Environment has by Biodiversity Certification of Environmental Planning Instruments Order 2017 (dated November 2017) had the effect of amending the original Order Conferring biodiversity certification on the Albury Local Environment Plan 2010 (dated 16 February 2011) by excluding additional areas being land other than zoned Business, Industrial or Residential. The Biodiversity Conservation (Savings and Transitional) Regulation 2017 that enacts the continuation of the biodiversity certification under Part 8 of Schedule 7 of the Threatened Species Conservation Act 1995, immediately before its repeal, specifies that Albury Biodiversity Certification (as amended) does not apply to land identified as Excluded Land (being land other than that zoned Business, Industrial or Residential) and land identified as within the Biodiversity Certified Area in Schedule 1 of the Albury Biodiversity Certification, as extended on 15 February 2021, and remaining in force for a period of up to five years, expiring on 24 February 2026.

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

**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.

**Does this apply to the land?**
None that council is aware of

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

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

**Does this apply to the land?**
None apply

(2) In this section:

**existing coastal protection works** has the same meaning as 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.

**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.

**Does this apply to the land?**
None apply

**21. Development consent conditions for seniors housing**

If *State Environment 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).

**Does this apply to the land?**
None that council is aware of

**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.

(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, section 21(1) or 40(1).

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

**Does this apply to the land?**
None that council is aware of

(4) In this section:

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

**Note: The following matters are prescribed by section 59 (2) of the *Contamination Land Management Act 1997 (CLM Act)* as additional matters to be specified in a planning certificate**

(a) that the land to which the certificate relates is significantly contaminated land within the meaning of that Act-if the land (or part of the land) is significantly contaminated land at the date when the certificate is issued,

**None apply**

(b) that the land to which the certificate relates is subject to a management order within the meaning of that Act-if it is subject to such an order at the date when the certificate is issued,

**None apply**

(c) that the land to which the certificate relates is the subject of an approved voluntary management proposal within the meaning of that Act-if it is the subject of such an approved proposal at the date when the certificate is issued,

**None apply**

(d) that the land to which the certificate relates is subject to an ongoing maintenance order within the meaning of that Act-if it is subject to such an order at the date when the certificate is issued,

**None apply**

(e) that the land to which the certificate relates is the subject of a site audit statement within the meaning of that Act-if a copy of such a statement has been provided at any time to the local authority issuing the certificate.

**None apply**

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# Planning Certificate Section 10.7(2) & (5)

**NOTATIONS:**

**Threatened Species**

None apply

**Other Development Constraints**

State Environmental Planning Policy (Biodiversity and Conservation) 2021 - Chapter 5 'River Murray lands' (formerly Murray Regional Environmental Plan No 2 - Riverine Land) applies to this land.

Additional relevant advice and information as provided by the AlburyCity Council affecting the land in accordance with section 10.7(5) of the *Environmental Planning and Assessment Act 1979*. Such advice and information is limited to that which it is aware.

**Development Consent/Complying Development Certificates within 5 years**
Has any Development Consent or Complying Development Certificate concerning the land been granted within the previous 5 years?

13.2021.30018.1 approved by Private Certifier 08/06/2018 – 201 Borella Road, East Albury - Albury Wodonga Health Nolan House Upgrade

13.2019.29208.1 approved by Private Certifier 30/05/2019 – 201 Borella Road, East Albury - Construction of Tutorial Room

13.2020.29404.1 endorsed by Council 31/01/2020 – 201 Borella Road, East Albury - Solar Panel Installation 175kW - Albury Base Hospital

13.2021.30008.1 approved by Private Certifier 09/11/2020 – 201 Borella Road, East Albury - Alterations and Additions to Existing Isolation Rooms

13.2021.29957.1 approved by Private Certifier 12/05/2021 – 201 Borella Road, East Albury - Installation of a Fire Sprinkler System & Associated Works to Existing Hospital

13.2021.30108.1 approved by Private Certifier 17/09/2021 - 201 Borella Road, East Albury - Alteration to Health Care Building

10.2021.38711.1 approved by JRPP 20/04/2022 – 201 Borella Road, East Albury - Alterations & Additions to Albury Base Hospital – Redevelopment of Emergency Department

# Planning Certificate Section 10.7(2) & (5)

**GENERAL COMMENTS**

See Appendix A for the objectives of the zones affecting the subject land.

Planning Instruments and the *Albury Development Control Plan 2010* impose various restrictions on the use of the land which are not attributable to the zoning or reservation of the land.

*Albury Development Control Plan 2010* complements the provisions *of Albury Local Environmental Plan 2010* and contains the detailed planning provisions relating to development standards and guidelines which will be considered by Council when assessing a development application.

The above information has been taken from the Council's records but Council cannot accept responsibility for any omission or inaccuracy.

The provisions of any covenant, agreement or instrument applying to this land purporting to restrict or prohibit certain development may be inconsistent with the provisions of a *Regional Environmental Plan*, *State Environmental Planning Policy, Albury Local Environmental Plan 2010* or *Albury Development Control Plan 2010*. In these circumstances any such covenant, agreement or instrument may be overwritten under clause 1.9A of the *Albury Local Environmental Plan 2010.*

David Christy

**Service Leader City Development**

**Infrastructure, Planning and Environment**

**APPENDIX 'A' to the PLANNING CERTIFICATE**

## SP2 INFRASTRUCTURE ZONE

### Land Use Table

1. **Objectives of the SP2 Infrastructure Zone**

- To provide for infrastructure and related uses.
- To prevent development that is not compatible with or that may detract from the provision of infrastructure.

2. **Permitted without consent**

Environmental protection works.

3. **Permitted with consent**

The purpose shown on the Land Zoning Map, including any development that is ordinarily incidental or ancillary to development for that purpose; Aquaculture; Roads.

4. **Prohibited**

Any other development not specified in item 2 or 3.

### Development in the SP2 Infrastructure Zone

*State Environmental Planning Policy (Exempt and Complying Development Codes) 2008* (Codes SEPP) and Clause 3.1 of the Albury LEP 2010 allows certain types of development, known as "Exempt Development" to be undertaken generally without development consent on the subject property. Please visit the NSW Planning Portal for more information https://www.planningportal.nsw.gov.au/ .

# LOTSEARCH

## LOTSEARCH ENVIRO PROFESSIONAL

**Date: 29 Sep 2023 10:13:16**

**Reference: LS048621 EP**

**Address: 201 Borella Road, Albury, NSW 2640**

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

# Dataset Listing

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

| Dataset Name | Custodian | Supply Date | Currency Date | Update Frequency | Dataset Buffer (m) | No. Features On-site | No. Features within 100m | No. Features within Buffer |
|---|---|---|---|---|---|---|---|---|
| Cadastre Boundaries | NSW Department of Customer Service - Spatial Services | 14/09/2023 | 14/09/2023 | Quarterly | - | - | - | - |
| Topographic Data | NSW Department of Customer Service - Spatial Services | 22/08/2022 | 22/08/2022 | Annually | - | - | - | - |
| List of NSW contaminated sites notified to EPA | Environment Protection Authority | 11/09/2023 | 08/09/2023 | Monthly | 1000m | 0 | 0 | 1 |
| Contaminated Land Records of Notice | Environment Protection Authority | 28/06/2023 | 28/06/2023 | Monthly | 1000m | 0 | 0 | 1 |
| Former Gasworks | Environment Protection Authority | 10/05/2023 | 14/07/2021 | Quarterly | 1000m | 0 | 0 | 0 |
| Notices under the POEO Act 1997 | Environment Protection Authority | 26/07/2023 | 26/07/2023 | Monthly | 1000m | 0 | 0 | 1 |
| National Waste Management Facilities Database | Geoscience Australia | 26/05/2022 | 07/03/2017 | Annually | 1000m | 0 | 0 | 0 |
| National Liquid Fuel Facilities | Geoscience Australia | 20/09/2023 | 07/09/2020 | Annually | 1000m | 0 | 0 | 4 |
| EPA PFAS Investigation Program | Environment Protection Authority | 22/09/2023 | 23/09/2022 | Monthly | 2000m | 0 | 0 | 0 |
| Defence PFAS Investigation & Management Program - Investigation Sites | Department of Defence | 16/08/2023 | 16/08/2023 | Monthly | 2000m | 0 | 0 | 0 |
| Defence PFAS Investigation & Management Program - Management Sites | Department of Defence | 16/08/2023 | 16/08/2023 | Monthly | 2000m | 0 | 0 | 0 |
| Airservices Australia National PFAS Management Program | Airservices Australia | 18/08/2023 | 18/08/2023 | Monthly | 2000m | 0 | 0 | 0 |
| Defence Controlled Areas | Department of Defence | 08/06/2023 | 08/06/2023 | Quarterly | 2000m | 0 | 0 | 0 |
| Defence 3 Year Regional Contamination Investigation Program | Department of Defence | 16/06/2023 | 02/09/2022 | Quarterly | 2000m | 0 | 0 | 0 |
| National Unexploded Ordnance (UXO) | Department of Defence | 08/06/2023 | 08/06/2023 | Quarterly | 2000m | 0 | 0 | 0 |
| EPA Other Sites with Contamination Issues | Environment Protection Authority | 16/02/2022 | 13/12/2018 | Annually | 1000m | 0 | 0 | 0 |
| Licensed Activities under the POEO Act 1997 | Environment Protection Authority | 20/09/2023 | 20/09/2023 | Monthly | 1000m | 0 | 0 | 2 |
| Delicensed POEO Activities still regulated by the EPA | Environment Protection Authority | 20/09/2023 | 20/09/2023 | Monthly | 1000m | 1 | 1 | 2 |
| Former POEO Licensed Activities now revoked or surrendered | Environment Protection Authority | 20/09/2023 | 20/09/2023 | Monthly | 1000m | 0 | 0 | 4 |
| UBD Business Directories (Premise & Intersection Matches) | Hardie Grant | | | Not required | 150m | 0 | 5 | 6 |
| UBD Business Directories (Road & Area Matches) | Hardie Grant | | | Not required | 150m | - | 11 | 11 |
| UBD Business Directory Dry Cleaners & Motor Garages/Service Stations (Premise & Intersection Matches) | Hardie Grant | | | Not required | 500m | 0 | 1 | 1 |
| UBD Business Directory Dry Cleaners & Motor Garages/Service Stations (Road & Area Matches) | Hardie Grant | | | Not required | 500m | - | 1 | 1 |
| Points of Interest | NSW Department of Customer Service - Spatial Services | 19/10/2022 | 19/10/2022 | Quarterly | 1000m | 5 | 6 | 48 |
| Tanks (Areas) | NSW Department of Customer Service - Spatial Services | 19/10/2022 | 19/10/2022 | Quarterly | 1000m | 0 | 1 | 1 |
| Tanks (Points) | NSW Department of Customer Service - Spatial Services | 19/10/2022 | 19/10/2022 | Quarterly | 1000m | 0 | 2 | 7 |
| Major Easements | NSW Department of Customer Service - Spatial Services | 23/05/2023 | 23/05/2023 | Quarterly | 1000m | 0 | 0 | 2 |
| State Forest | Forestry Corporation of NSW | 16/08/2022 | 14/08/2022 | Annually | 1000m | 0 | 0 | 0 |
| NSW National Parks and Wildlife Service Reserves | NSW Office of Environment & Heritage | 16/02/2023 | 31/12/2022 | Annually | 1000m | 0 | 0 | 0 |
| Hydrogeology Map of Australia | Commonwealth of Australia (Geoscience Australia) | 29/08/2022 | 19/08/2019 | As required | 1000m | 1 | 1 | 1 |

| Dataset Name | Custodian | Supply Date | Currency Date | Update Frequency | Dataset Buffer (m) | No. Features On-site | No. Features within 100m | No. Features within Buffer |
|---|---|---|---|---|---|---|---|---|
| Temporary Water Restriction (Botany Sands Groundwater Source) Order 2018 | NSW Department of Planning, Industry and Environment | 09/05/2023 | 23/02/2018 | Annually | 1000m | 0 | 0 | 0 |
| National Groundwater Information System (NGIS) Boreholes | Bureau of Meteorology; Water NSW | 18/04/2023 | 13/07/2022 | Annually | 2000m | 0 | 0 | 50 |
| NSW Seamless Geology Single Layer: Rock Units | Department of Regional NSW | 17/02/2022 | 01/05/2021 | Annually | 1000m | 2 | 2 | 2 |
| NSW Seamless Geology – Single Layer: Trendlines | Department of Regional NSW | 17/02/2022 | 01/05/2021 | Annually | 1000m | 0 | 0 | 0 |
| NSW Seamless Geology – Single Layer: Geological Boundaries and Faults | Department of Regional NSW | 17/02/2022 | 01/05/2021 | Annually | 1000m | 0 | 0 | 0 |
| Naturally Occurring Asbestos Potential | NSW Dept. of Industry, Resources & Energy | 04/12/2015 | 24/09/2015 | Unknown | 1000m | 0 | 0 | 0 |
| Atlas of Australian Soils | Australian Bureau of Agriculture and Resource Economics and Sciences (ABARES) | 19/05/2017 | 17/02/2011 | As required | 1000m | 1 | 1 | 1 |
| Environmental Planning Instrument Acid Sulfate Soils | NSW Department of Planning, Industry and Environment | 31/08/2023 | 30/06/2023 | Monthly | 500m | 0 | - | - |
| Atlas of Australian Acid Sulfate Soils | CSIRO | 19/01/2017 | 21/02/2013 | As required | 1000m | 1 | 1 | 1 |
| Dryland Salinity - National Assessment | National Land and Water Resources Audit | 18/07/2014 | 12/05/2013 | None planned | 1000m | 1 | 1 | 2 |
| Mining Subsidence Districts | NSW Department of Customer Service - Subsidence Advisory NSW | 15/05/2023 | 15/05/2023 | Quarterly | 1000m | 0 | 0 | 0 |
| Current Mining Titles | NSW Department of Industry | 25/08/2023 | 25/08/2023 | Monthly | 1000m | 0 | 0 | 0 |
| Mining Title Applications | NSW Department of Industry | 25/08/2023 | 25/08/2023 | Monthly | 1000m | 0 | 0 | 0 |
| Historic Mining Titles | NSW Department of Industry | 25/08/2023 | 25/08/2023 | Monthly | 1000m | 3 | 3 | 3 |
| Environmental Planning Instrument SEPP State Significant Precincts | NSW Department of Planning, Industry and Environment | 31/08/2023 | | Monthly | 1000m | 0 | 0 | 0 |
| Environmental Planning Instrument Land Zoning | NSW Department of Planning, Industry and Environment | 31/08/2023 | 25/08/2023 | Monthly | 1000m | 1 | 5 | 28 |
| Commonwealth Heritage List | Australian Government Department of the Agriculture, Water and the Environment | 03/06/2022 | 13/04/2022 | Annually | 1000m | 0 | 0 | 0 |
| National Heritage List | Australian Government Department of the Agriculture, Water and the Environment | 03/06/2022 | 13/04/2022 | Annually | 1000m | 0 | 0 | 1 |
| State Heritage Register - Curtilages | NSW Department of Planning, Industry and Environment | 06/09/2023 | 03/03/2023 | Quarterly | 1000m | 0 | 0 | 1 |
| Environmental Planning Instrument Local Heritage | NSW Department of Planning, Industry and Environment | 31/08/2023 | 25/08/2023 | Monthly | 1000m | 0 | 0 | 24 |
| Bush Fire Prone Land | NSW Rural Fire Service | 28/09/2023 | 15/08/2023 | Monthly | 1000m | 3 | 3 | 4 |
| NSW Native Vegetation Type Map | NSW Department of Planning and Environment | 26/05/2023 | 12/12/2022 | Quarterly | 1000m | 4 | 10 | 43 |
| Ramsar Wetlands of Australia | Australian Government Department of Agriculture, Water and the Environment | 09/05/2023 | 01/11/2022 | Annually | 1000m | 0 | 0 | 0 |
| Groundwater Dependent Ecosystems | Bureau of Meteorology | 28/10/2022 | 26/10/2022 | Annually | 1000m | 1 | 1 | 3 |
| Inflow Dependent Ecosystems Likelihood | Bureau of Meteorology | 28/10/2022 | 26/10/2022 | Annually | 1000m | 2 | 2 | 6 |
| NSW BioNet Species Sightings | NSW Office of Environment & Heritage | 13/09/2023 | 13/09/2023 | Weekly | 10000m | - | - | - |

# Site Diagram

**201 Borella Road, Albury, NSW 2640**




## Legend

- Site Boundary
- Internal Parcel Boundaries

**Total Area:** 85155m²

**Total Perimeter:** 1.29km

Disclaimers:

Measurements are approximate only and may have been simplified or smaller lengths removed for readability.

Parcels that make up a small percentage of the total site area have not been labelled for increased legibility.

Scale:

0 25 50 100
Meters

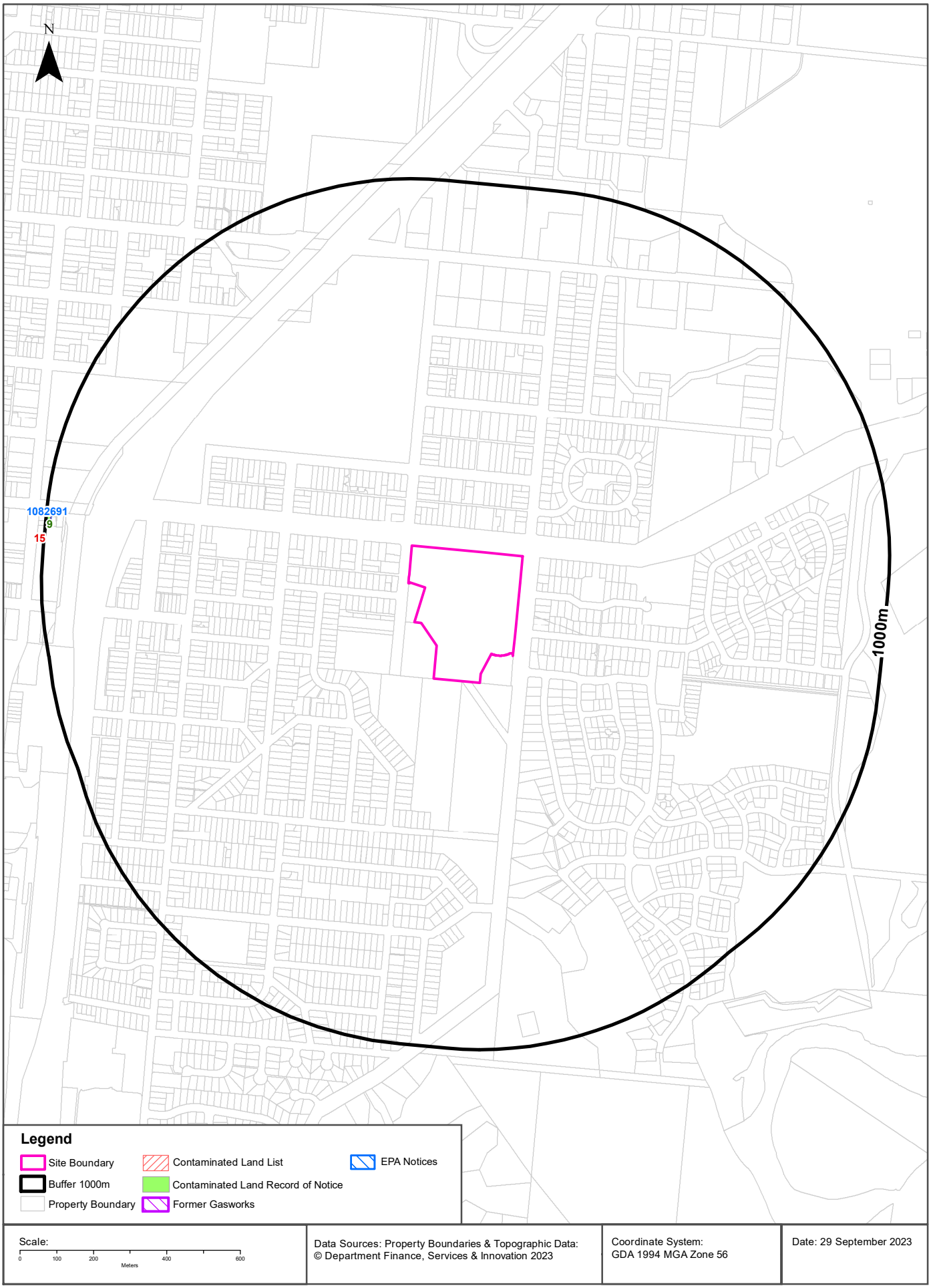
Data Source Aerial Imagery:
© Aerometrex Pty Ltd

Coordinate System:
GDA 1994 MGA Zone 56

Date: 29 September 2023

# Contaminated Land

**201 Borella Road, Albury, NSW 2640**



# Contaminated Land

**201 Borella Road, Albury, NSW 2640**

## List of NSW contaminated sites notified to EPA

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

| Map Id | Site | Address | Suburb | Activity | Management Class | Status | Location Confidence | Dist | Direction |
|---|---|---|---|---|---|---|---|---|---|
| 15 | Xpress Service Station | 616-624 Young STREET | Albury | Service Station | Contamination formerly regulated under the CLM Act | Current EPA List | Premise Match | 988m | West |

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

| EPA site management class | Explanation |
|---|---|
| Contamination being managed via the planning process (EP&A Act) | The EPA has completed an assessment of the contamination and decided that the contamination is significant enough to warrant regulation. The contamination of this site is managed by the consent authority under the Environmental Planning and Assessment Act 1979 (EP&A Act) planning approval process, with EPA involvement as necessary to ensure significant contamination is adequately addressed. The consent authority is typically a local council or the Department of Planning and Environment. |
| Contamination currently regulated under CLM Act | The EPA has completed an assessment of the contamination and decided that the contamination is significant enough to warrant regulation under the Contaminated Land Management Act 1997 (CLM Act). Management of the contamination is regulated by the EPA under the CLM Act. Regulatory notices are available on the EPA's Contaminated Land Public Record of Notices. |
| Contamination currently regulated under POEO Act | The EPA has completed an assessment of the contamination and decided that the contamination is significant enough to warrant regulation. Management of the contamination is regulated under the Protection of the Environment Operations Act 1997 (POEO Act). The EPA's regulatory actions under the POEO Act are available on the POEO public register. |
| Contamination formerly regulated under the CLM Act | The EPA has determined that the contamination is no longer significant enough to warrant regulation under the Contaminated Land Management Act 1997 (CLM Act). The contamination was addressed under the CLM Act. |
| Contamination formerly regulated under the POEO Act | The EPA has determined that the contamination is no longer significant enough to warrant regulation. The contamination was addressed under the Protection of the Environment Operations Act 1997 (POEO Act). |
| Contamination was addressed via the planning process (EP&A Act) | The EPA has determined that the contamination is no longer significant enough to warrant regulation. The contamination was addressed by the appropriate consent authority via the planning process under the Environmental Planning and Assessment Act 1979 (EP&A Act). |
| Ongoing maintenance required to manage residual contamination (CLM Act) | The EPA has determined that ongoing maintenance, under the Contaminated Land Management Act 1997 (CLM Act), is required to manage the residual contamination. Regulatory notices under the CLM Act are available on the EPA's Contaminated Land Public Record of Notices. |
| Regulation being finalised | The EPA has completed an assessment of the contamination and decided that the contamination is significant enough to warrant regulation under the Contaminated Land Management Act 1997. A regulatory approach is being finalised. |
| Regulation under the CLM Act not required | The EPA has completed an assessment of the contamination and decided that regulation under the Contaminated Land Management Act 1997 is not required. |
| Under assessment | The contamination is being assessed by the EPA to determine whether regulation is required. The EPA may require further information to complete the assessment. For example, the completion of management actions regulated under the planning process or Protection of the Environment Operations Act 1997. Alternatively, the EPA may require information via a notice issued under s77 of the Contaminated Land Management Act 1997 or issue a Preliminary Investigation Order. |

NSW EPA Contaminated Land List Data Source: Environment Protection Authority

© State of New South Wales through the Environment Protection Authority

# Contaminated Land

**201 Borella Road, Albury, NSW 2640**

## Contaminated Land: Records of Notice

Record of Notices within the dataset buffer:

| Map Id | Name | Address | Suburb | Notices | Area No | Location Confidence | Distance | Direction |
|---|---|---|---|---|---|---|---|---|
| 9 | Xpress Service Station | 616-624 Young STREET | Albury | 6 former | 3247 | Premise Match | 988m | West |

Contaminated Land Records of Notice Data Source: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority
Terms of use and disclaimer for Contaminated Land: Record of Notices, please visit http://www.epa.nsw.gov.au/clm/clmdisclaimer.htm

## Former Gasworks

Former Gasworks within the dataset buffer:

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

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

# Contaminated Land

**201 Borella Road, Albury, NSW 2640**

## EPA Notices

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

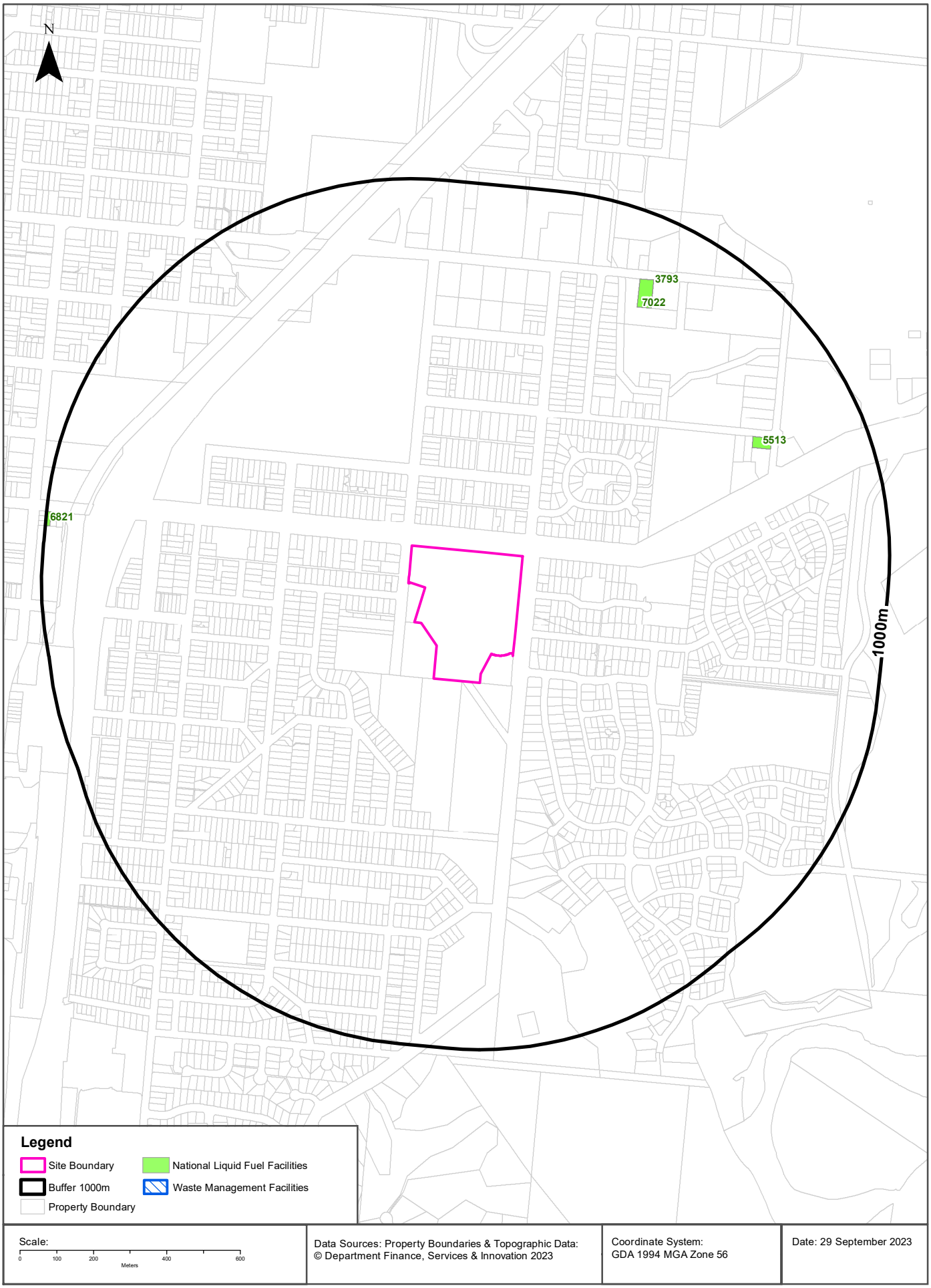
| Number | Type | Name | Address | Status | Issued Date | Act | Offence | Offence Date | Loc Conf | Dist | Dir |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1082691 | s.91 Clean Up Notice | CENTREL PTY LTD | | Issued | 07/03/2008 | | | | Premise Match | 988m | West |

NSW EPA Notice Data Source: Environment Protection Authority

© State of New South Wales through the Environment Protection Authority

# Waste Management & Liquid Fuel Facilities

**201 Borella Road, Albury, NSW 2640**



# Waste Management & Liquid Fuel Facilities

**201 Borella Road, Albury, NSW 2640**

## National Waste Management Site Database

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

| Site Id | Owner | Name | Address | Suburb | Class | Landfill | Reprocess | Transfer | Comments | Loc Conf | Dist | Direction |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| N/A | No records in buffer | | | | | | | | | | | |

Waste Management Facilities Data Source: Geoscience Australia
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

## National Liquid Fuel Facilities

National Liquid Fuel Facilties within the dataset buffer:

| Map Id | Owner | Name | Address | Suburb | Class | Operational Status | Operator | Revision Date | Loc Conf | Dist | Direction |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 5513 | BP | BP EAST ALBURY | 687 DROME STREET | EAST ALBURY | PETROL STATION | OPERATIONAL | | | Premise Match | 690m | North East |
| 3793 | 7-Eleven Pty Ltd | Mobil Albury | 131 North Street | East Albury | Petrol Station | Operational | | 13/07/2012 | Premise Match | 748m | North East |
| 7022 | CALTEX | TASCO ALBURY NORTH ST | 127 NORTH STREET | ALBURY | PETROL STATION | OPERATIONAL | | | Premise Match | 748m | North East |
| 6821 | MOBIL | MOBIL YOUNG STREET | 624 YOUNG STREET | ALBURY | PETROL STATION | OPERATIONAL | | | Premise Match | 988m | West |

National Liquid Fuel Facilities Data Source: Geoscience Australia
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

# PFAS Investigation & Management Programs

**201 Borella Road, Albury, NSW 2640**

## EPA PFAS Investigation Program

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

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

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

## Defence PFAS Investigation Program

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

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

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

## Defence PFAS Management Program

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

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

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

## Airservices Australia National PFAS Management Program

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

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

Airservices Australia National PFAS Management Program Data Custodian: Airservices Australia

# Defence Sites and Unexploded Ordnance

**201 Borella Road, Albury, NSW 2640**

## Defence Controlled Areas (DCA)

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

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

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

## Defence 3 Year Regional Contamination Investigation Program (RCIP)

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

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

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

## National Unexploded Ordnance (UXO)

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

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

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

# EPA Other Sites with Contamination Issues

**201 Borella Road, Albury, NSW 2640**

## EPA Other Sites with Contamination Issues

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

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

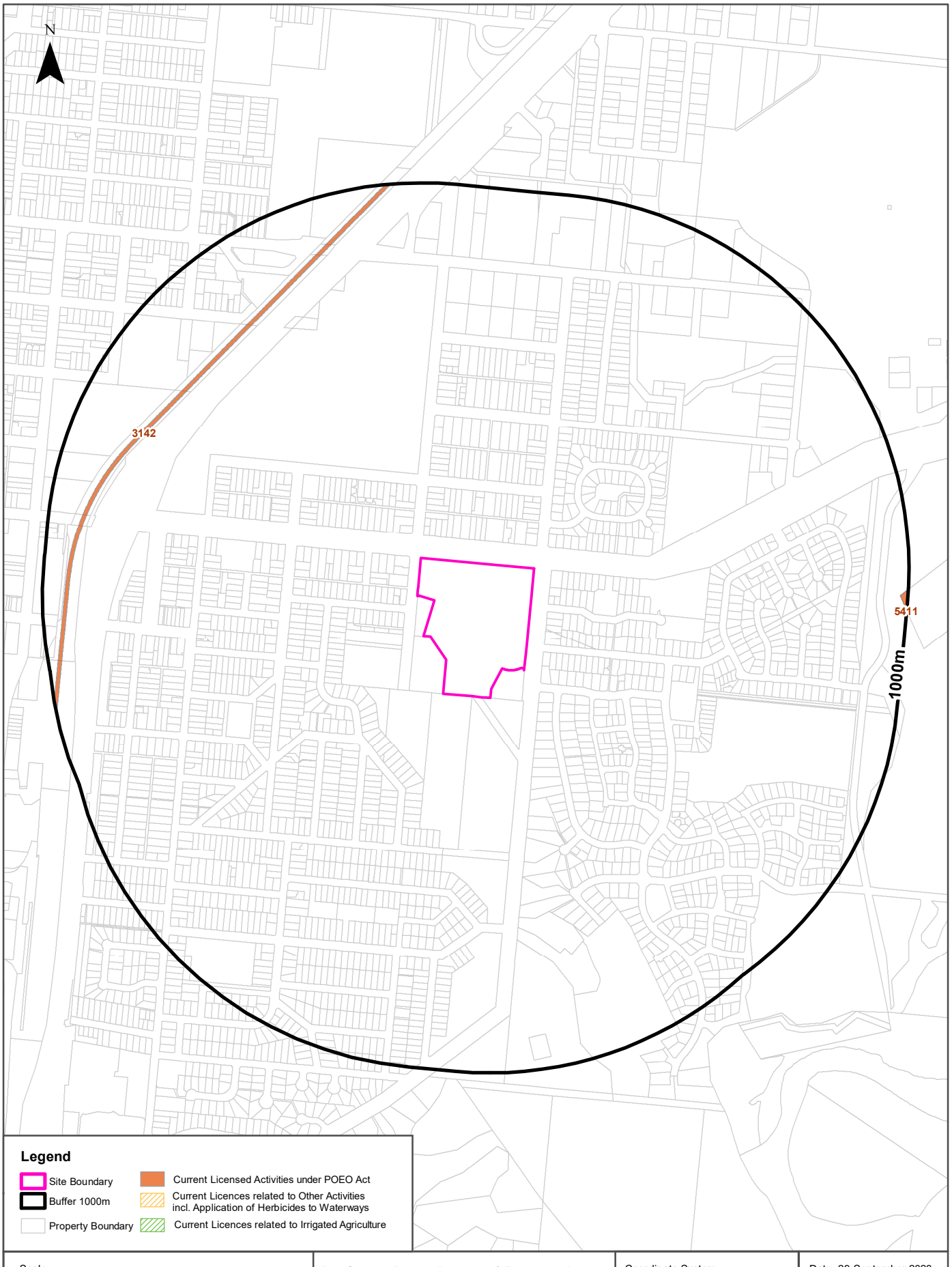
Sites within the dataset buffer:

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

EPA Other Sites with Contamination Issues: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority

# Current EPA Licensed Activities

**201 Borella Road, Albury, NSW 2640**



# EPA Activities

**201 Borella Road, Albury, NSW 2640**

## Licensed Activities under the POEO Act 1997

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

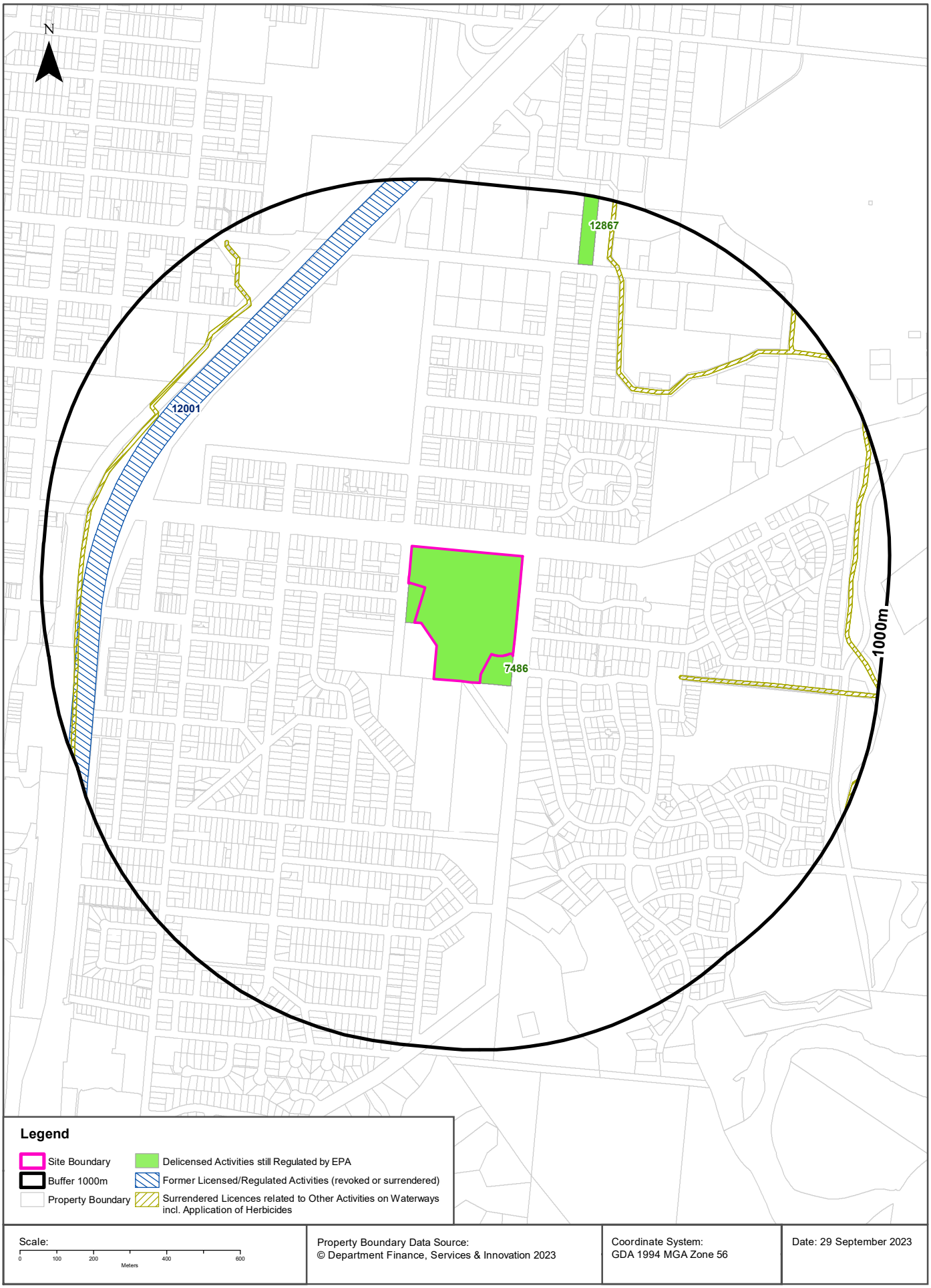
| EPL | Organisation | Name | Address | Suburb | Activity | Loc Conf | Distance | Direction |
|---|---|---|---|---|---|---|---|---|
| 3142 | AUSTRALIAN RAIL TRACK CORPORATION LIMITED | | AUSTRALIAN RAIL TRACK CORPORATION (ARTC) NETWORK, SYDNEY, NSW 2001 | | Railway systems activities | Network of Features | 758m | North West |
| 5411 | ALBURY CITY COUNCIL | ALBURY WATER FILTRATION PLANT | WATER WORKS ROAD | ALBURY | Miscellaneous licensed discharge to waters (at any time) | Premise Match | 977m | East |

POEO Licence Data Source: Environment Protection Authority

© State of New South Wales through the Environment Protection Authority

# Delicensed & Former Licensed EPA Activities

**201 Borella Road, Albury, NSW 2640**



# EPA Activities

**201 Borella Road, Albury, NSW 2640**

## Delicensed Activities still regulated by the EPA

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

| Licence No | Organisation | Name | Address | Suburb | Activity | Loc Conf | Distance | Direction |
|---|---|---|---|---|---|---|---|---|
| 7486 | GREATER SOUTHERN AREA HEALTH SERVICE | ALBURY BASE HOSPITAL | 21 BORELLA ROAD | ALBURY | Hazardous, Industrial or Group A Waste Generation or Storage | Premise Match | 0m | On-site |
| 12867 | ROADS & TRAFFIC AUTHORITY OF NEW SOUTH WALES | RTA NORTH STREET DEPOT | 162 NORTH STREET | ALBURY | Hazardous, Industrial or Group A Waste Generation or Storage | Premise Match | 811m | North |

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

## Former Licensed Activities under the POEO Act 1997, now revoked or surrendered

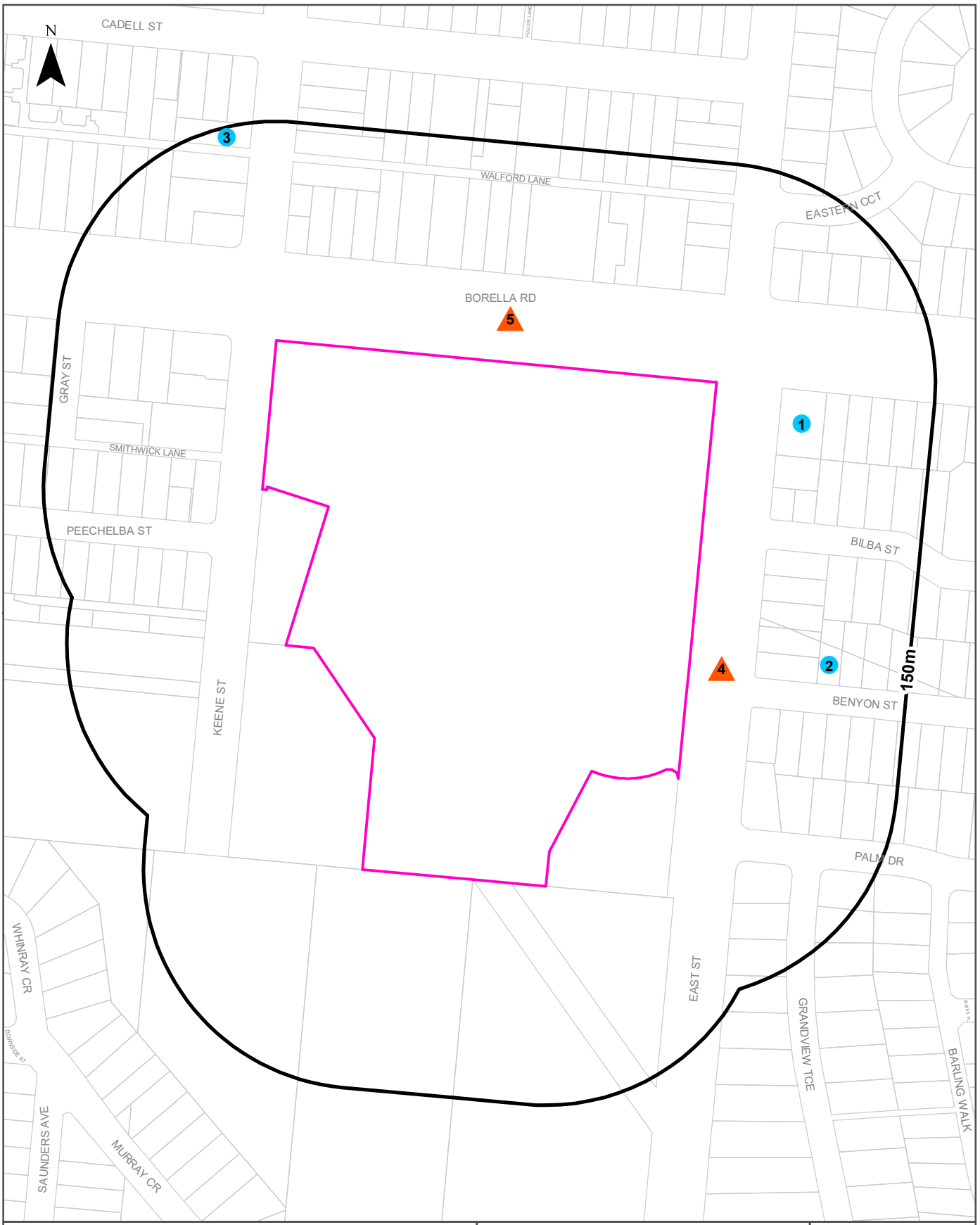
Former Licensed activities under the Protection of the Environment Operations Act 1997, now revoked or surrendered, within the dataset buffer:

| Licence No | Organisation | Location | Status | Issued Date | Activity | Loc Conf | Distance | Direction |
|---|---|---|---|---|---|---|---|---|
| 4653 | LUHRMANN ENVIRONMENT MANAGEMENT PTY LTD | WATERWAYS THROUGHOUT NSW | Surrendered | 06/09/2000 | Other Activities / Non Scheduled Activity - Application of Herbicides | Network of Features | 457m | North East |
| 4838 | Robert Orchard | Various Waterways throughout New South Wales - SYDNEY NSW 2000 | Surrendered | 07/09/2000 | Other Activities / Non Scheduled Activity - Application of Herbicides | Network of Features | 457m | North East |
| 6630 | SYDNEY WEED & PEST MANAGEMENT PTY LTD | WATERWAYS THROUGHOUT NSW - PROSPECT, NSW, 2148 | Surrendered | 09/11/2000 | Other Activities / Non Scheduled Activity - Application of Herbicides | Network of Features | 457m | North East |
| 12001 | ACCIONA INFRASTRUCTURE PROJECTS AUSTRALIA PTY LTD | ALBURY-WODONGA NATIONAL HIGHWAY PROJECT INTERNAL ROUTE, ETTAMOGAH TO MURRAY RIVER, ALBURY, NSW, 2640 | Surrendered | 24/09/2003 | Road construction | Road Match | 684m | North West |

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

# Historical Business Directories

**201 Borella Road, Albury, NSW 2640**




**Legend**

- Site Boundary
- Buffer 150m
- Property Boundary
- Business directory records mapped to a specific premise
- Business directory records mapped to a road intersection
- Business directory records mapped to a road corridor
- Business directory records mapped to a general area

Scale: 0 50 100 150 200 Meters

Coordinate System: GDA 1994 MGA Zone 56

Date: 29 September 2023

Data Sources: Reproduced with permission of UBD and Hardie Grant Media Pty Ltd DD 01/08/2018
Property Boundaries © NSW Department Finance, Services & Innovation 2023

# Historical Business Directories

**201 Borella Road, Albury, NSW 2640**

## Business Directory Records 1950-1991
## Premise or Road Intersection Matches

Universal Business Directory records from years 1991, 1970, 1961 & 1950, mapped to a premise or road intersection within the dataset buffer:

| Map Id | Business Activity | Premise | Ref No. | Year | Location Confidence | Distance to Property Boundary or Road Intersection | Direction |
|---|---|---|---|---|---|---|---|
| 1 | MOTOR GARAGES & ENGINEERS | Schmadicke, W. & H., 614 East St., Albury 2640 | 599475 | 1970 | Premise Match | 45m | North East |
| 2 | Brick & Brick Wall Cleaners. | Albury Border Pest Services, 162 Benyon St., Albury. 2640. | 165497 | 1991 | Premise Match | 88m | East |
| | Pest Control. | Albury Border Pest Services. 162 Benyon St., Albury 2640 | 166630 | 1991 | Premise Match | 88m | East |
| | Insulating Material Mfrs. &/Or Dists. &/Or Suppliers. | Albury Border Pest Services. 162 Benyon St., Albury. 2640. | 167159 | 1991 | Premise Match | 88m | East |
| | Insulation (Insulating) Contractors. | Albury Border Pest Services. 162 Benyon St., Albury. 2640. | 167160 | 1991 | Premise Match | 88m | East |
| 3 | GRAVEL, SAND & SOIL SUPPLIES | Woods, L. J., 647 Keene St., Albury 2640 | 598983 | 1970 | Premise Match | 133m | North West |

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# Business Directory Records 1950-1991
# Road or Area Matches

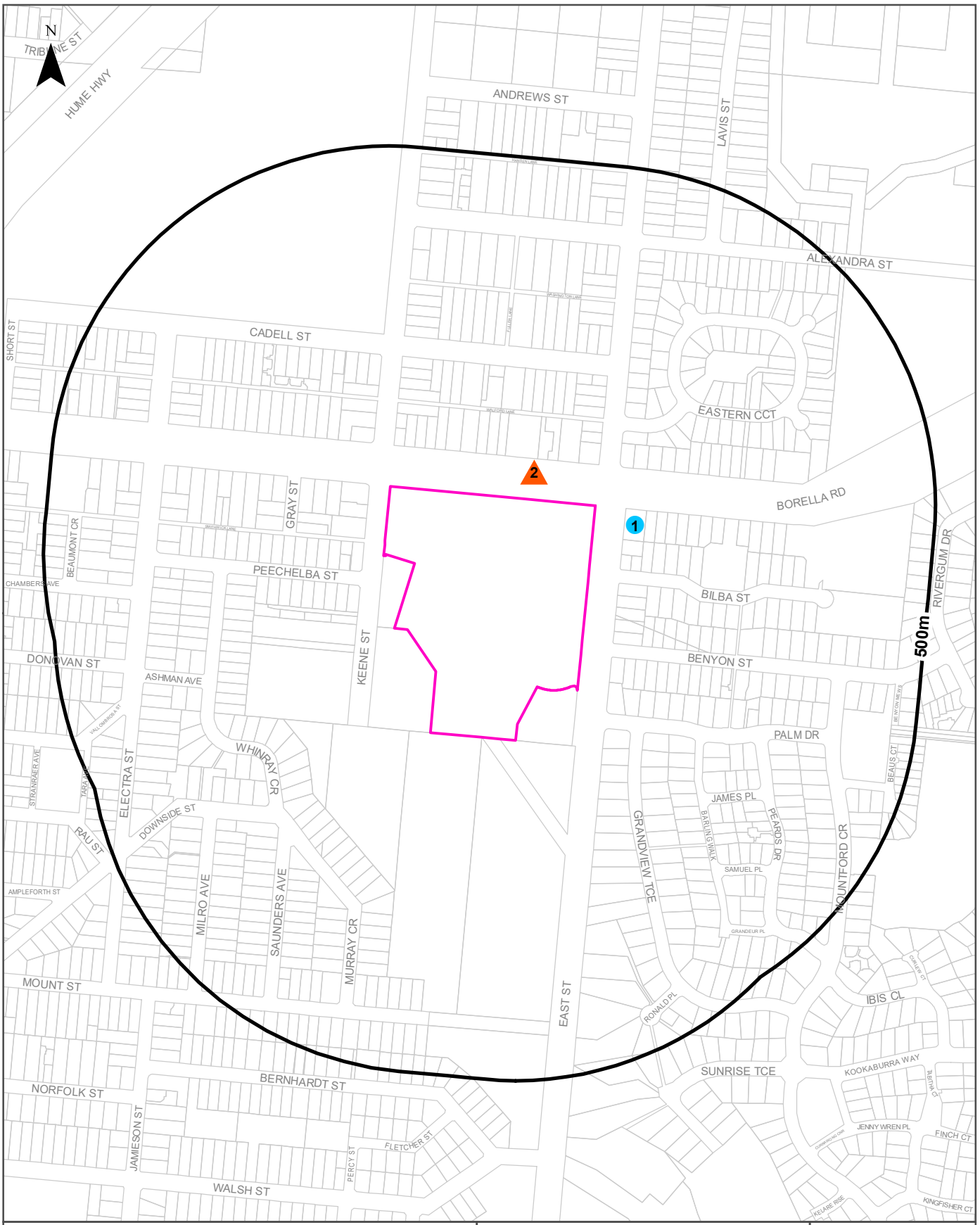
Universal Business Directory records from years 1991, 1970, 1961 & 1950, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published:

| Map Id | Business Activity | Premise | Ref No. | Year | Location Confidence | Distance to Road Corridor or Area |
|---|---|---|---|---|---|---|
| 4 | ABATTOIRS | Albury Municipal Abattoirs, East St., Albury 2640 | 597934 | 1970 | Road Match | 0m |
| | BUILDERS & BUILDING CONTRACTORS | Sproule, I. H., East St., Albury 2640 | 598205 | 1970 | Road Match | 0m |
| 5 | CARRIERS & CARTAGE CONTRACTORS | Danson, J., Borella Rd., Albury 2640 | 598347 | 1970 | Road Match | 0m |
| | POULTRY FARMS | Mardot Poultry, Borella Rd., Albury 2640 | 599737 | 1970 | Road Match | 0m |
| | CARRIERS & CARTAGE CONTRACTORS | McBrien, J. J., Borella Rd., Albury 2640 | 598363 | 1970 | Road Match | 0m |
| | BUILDERS & BUILDING CONTRACTORS | Murray, J., Borella Rd., Albury 2640 | 598193 | 1970 | Road Match | 0m |
| | BUTCHERS | Star Butchery, Borella Rd., Albury 2640 | 598274 | 1970 | Road Match | 0m |
| | CARRIERS & CARTAGE CONTRACTORS | Denson, J., Borella Rd., Albury | 183443 | 1961 | Road Match | 0m |
| | CARRIERS & CARTAGE CONTRACTORS | McBrien, J. J., Borella Rd., Albury | 183453 | 1961 | Road Match | 0m |
| | MOTOR GARAGES & ENGINEERS | Newmarket Motors, Borella St., Newmarket | 184281 | 1961 | Road Match | 0m |
| | BUILDERS & BUILDING CONTRACTORS | Sproule, I. H., Borella Rd., Albury | 183342 | 1961 | Road Match | 0m |

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# Dry Cleaners, Motor Garages & Service Stations

**201 Borella Road, Albury, NSW 2640**




**Legend**

- Site Boundary
- Buffer 500m
- Property Boundary
- Business directory records mapped to a specific premise
- Business directory records mapped to a road intersection
- Business directory records mapped to a road corridor
- Business directory records mapped to a general area

Scale: 0 100 200 300 400 Meters

Coordinate System: GDA 1994 MGA Zone 56

Date: 29 September 2023

Data Sources: Reproduced with permission of UBD and Hardie Grant Media Pty Ltd DD 01/08/2018
Property Boundaries © NSW Department Finance, Services & Innovation 2023

# Historical Business Directories

**201 Borella Road, Albury, NSW 2640**

## Dry Cleaners, Motor Garages & Service Stations Premise or Road Intersection Matches

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

| Map Id | Business Activity | Premise | Ref No. | Year | Location Confidence | Distance to Property Boundary or Road Intersection | Direction |
|---|---|---|---|---|---|---|---|
| 1 | MOTOR GARAGES & ENGINEERS | Schmadicke, W. & H., 614 East St., Albury 2640 | 599475 | 1970 | Premise Match | 45m | North East |

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## Dry Cleaners, Motor Garages & Service Stations Road or Area Matches

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

| Map Id | Business Activity | Premise | Ref No. | Year | Location Confidence | Distance to Road Corridor or Area |
|---|---|---|---|---|---|---|
| 2 | MOTOR GARAGES & ENGINEERS | Newmarket Motors, Borella St., Newmarket | 184281 | 1961 | Road Match | 0m |

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# Aerial Imagery 2023

**201 Borella Road, Albury, NSW 2640**




| Scale: | Data Source Aerial Imagery: | Coordinate System: | Date: 29 September 2023 |
|---|---|---|---|
| 0 40 80 120 160 Meters | © Aerometrex Pty Ltd | GDA 1994 MGA Zone 56 | |

# Aerial Imagery 2020

**201 Borella Road, Albury, NSW 2640**




| Scale: | Data Source Aerial Imagery: | Coordinate System: | Date: 29 September 2023 |
|---|---|---|---|
| 0 40 80 120 160 Meters | © Aerometrex Pty Ltd | GDA 1994 MGA Zone 56 | |

# Aerial Imagery 2018

**201 Borella Road, Albury, NSW 2640**



# Aerial Imagery 2014

**201 Borella Road, Albury, NSW 2640**




| Scale: | Data Source Aerial Imagery: © 2023 Google Inc, used with permission. Google and the Google logo are registered trademarks of Google Inc. | Coordinate System: GDA 1994 MGA Zone 56 | Date: 28 September 2023 |
|---|---|---|---|

0 40 80 120 160
Meters

# Aerial Imagery 2009

**201 Borella Road, Albury, NSW 2640**




Scale:
0 40 80 120 160
Meters

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Coordinate System:
GDA 1994 MGA Zone 56

Date: 28 September 2023

# Aerial Imagery 2003

**201 Borella Road, Albury, NSW 2640**




Scale:
0 40 80 120 160
Meters

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Coordinate System:
GDA 1994 MGA Zone 56

Date: 28 September 2023

# Aerial Imagery 1996

**201 Borella Road, Albury, NSW 2640**




| Scale: | Data Source Aerial Imagery: | Coordinate System: | Date: 28 September 2023 |
|---|---|---|---|
| 0 40 80 120 160 Meters | © NSW Department of Customer Service | GDA 1994 MGA Zone 56 | |

# Aerial Imagery 1990

**201 Borella Road, Albury, NSW 2640**



# Aerial Imagery 1982

**201 Borella Road, Albury, NSW 2640**



# Aerial Imagery 1975

**201 Borella Road, Albury, NSW 2640**




| Scale: | Data Source Aerial Imagery: | Coordinate System: | Date: 28 September 2023 |
|---|---|---|---|
| 0 40 80 120 160 Meters | © NSW Department of Customer Service | GDA 1994 MGA Zone 56 | |

# Aerial Imagery 1969

**201 Borella Road, Albury, NSW 2640**



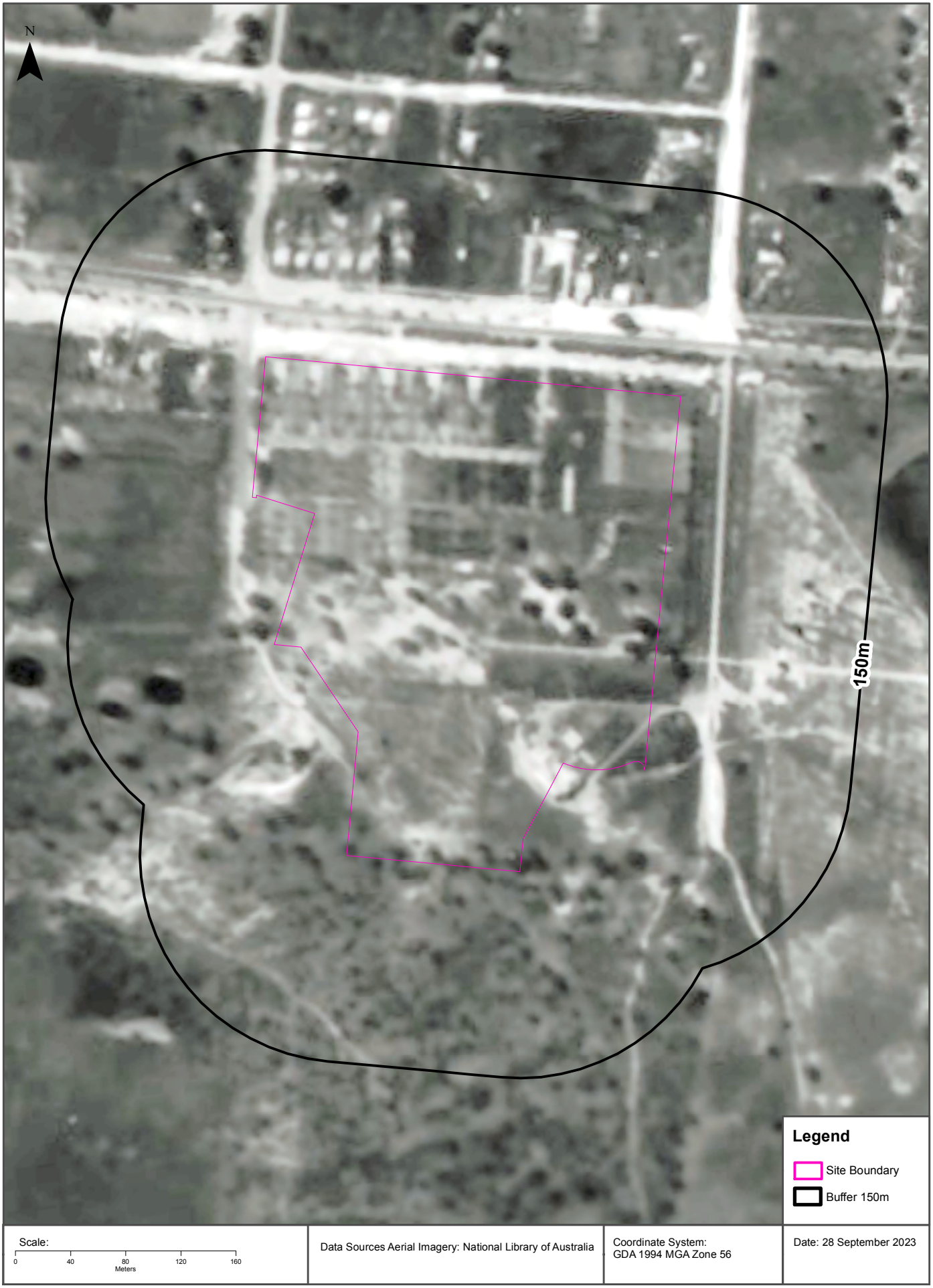
# Aerial Imagery 1961

**201 Borella Road, Albury, NSW 2640**



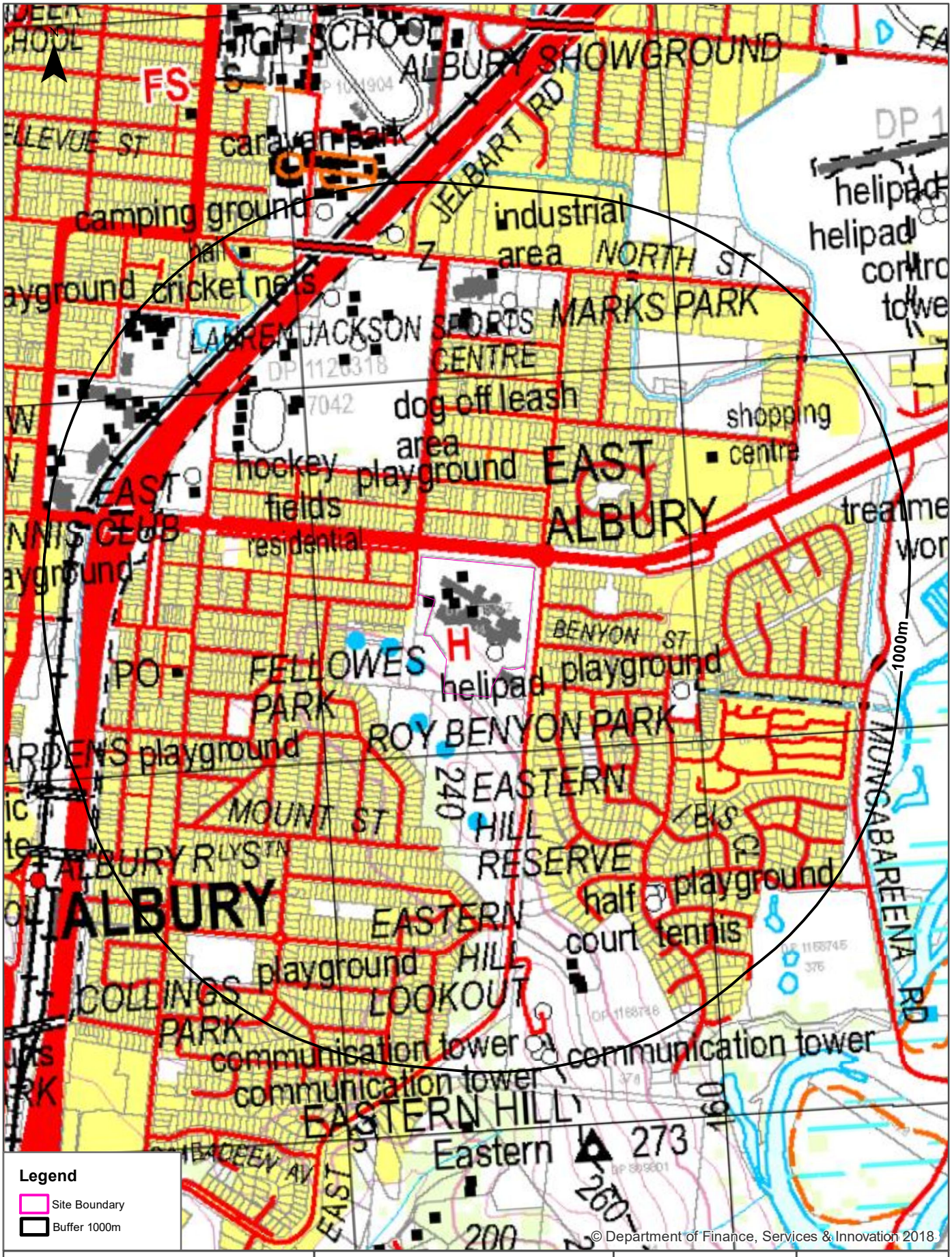
# Aerial Imagery 1948

**201 Borella Road, Albury, NSW 2640**



# Topographic Map 2015

**201 Borella Road, Albury, NSW 2640**




**Legend**

- Site Boundary
- Buffer 1000m

© Department of Finance, Services & Innovation 2018

Scale: 0 160 320 480 640 Meters

Data Sources: Topographic Map Data
© NSW Land and Property Information

Coordinate System:
GDA 1994 MGA Zone 56

Date: 29 September 2023

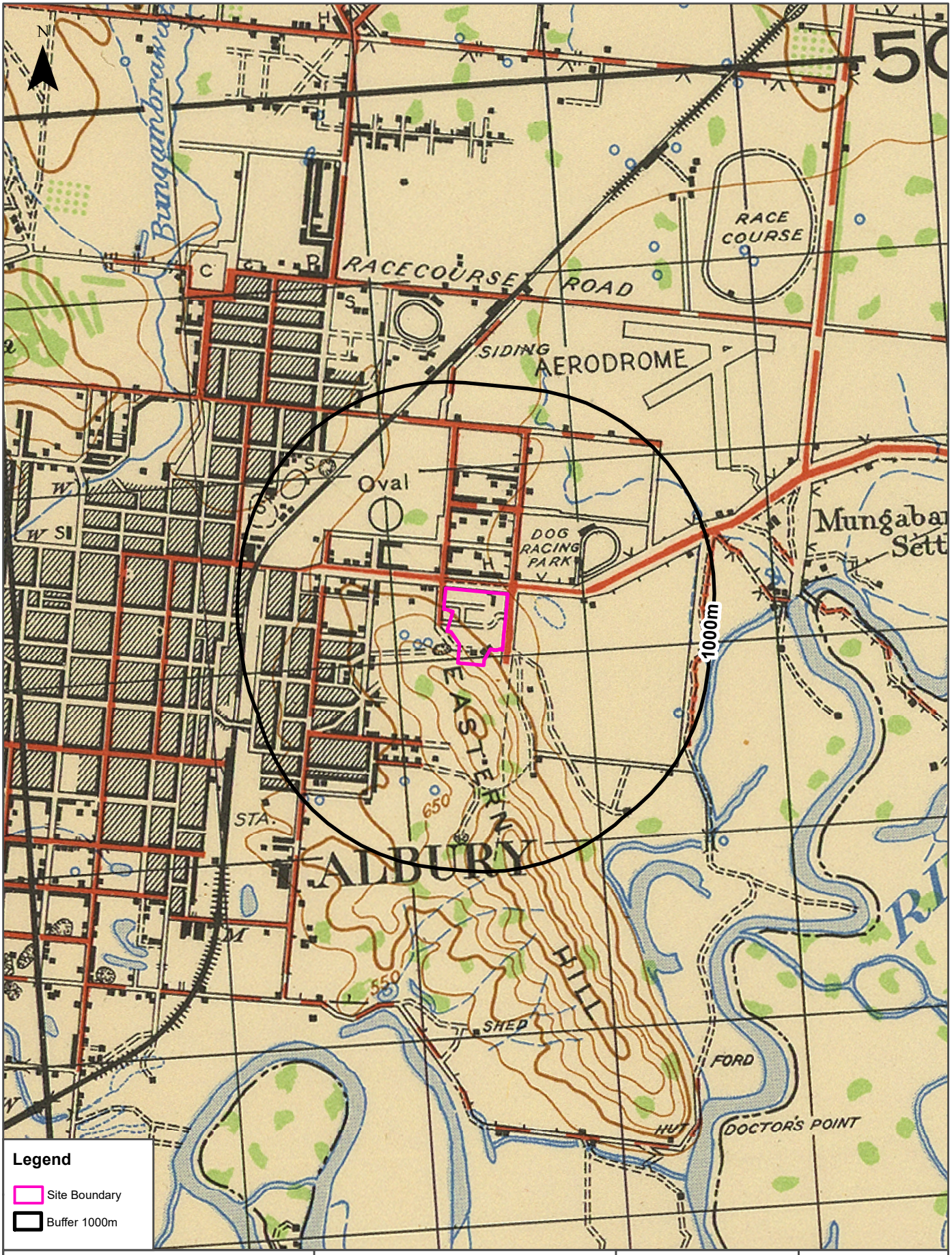
# Historical Map 1984

**201 Borella Road, Albury, NSW 2640**



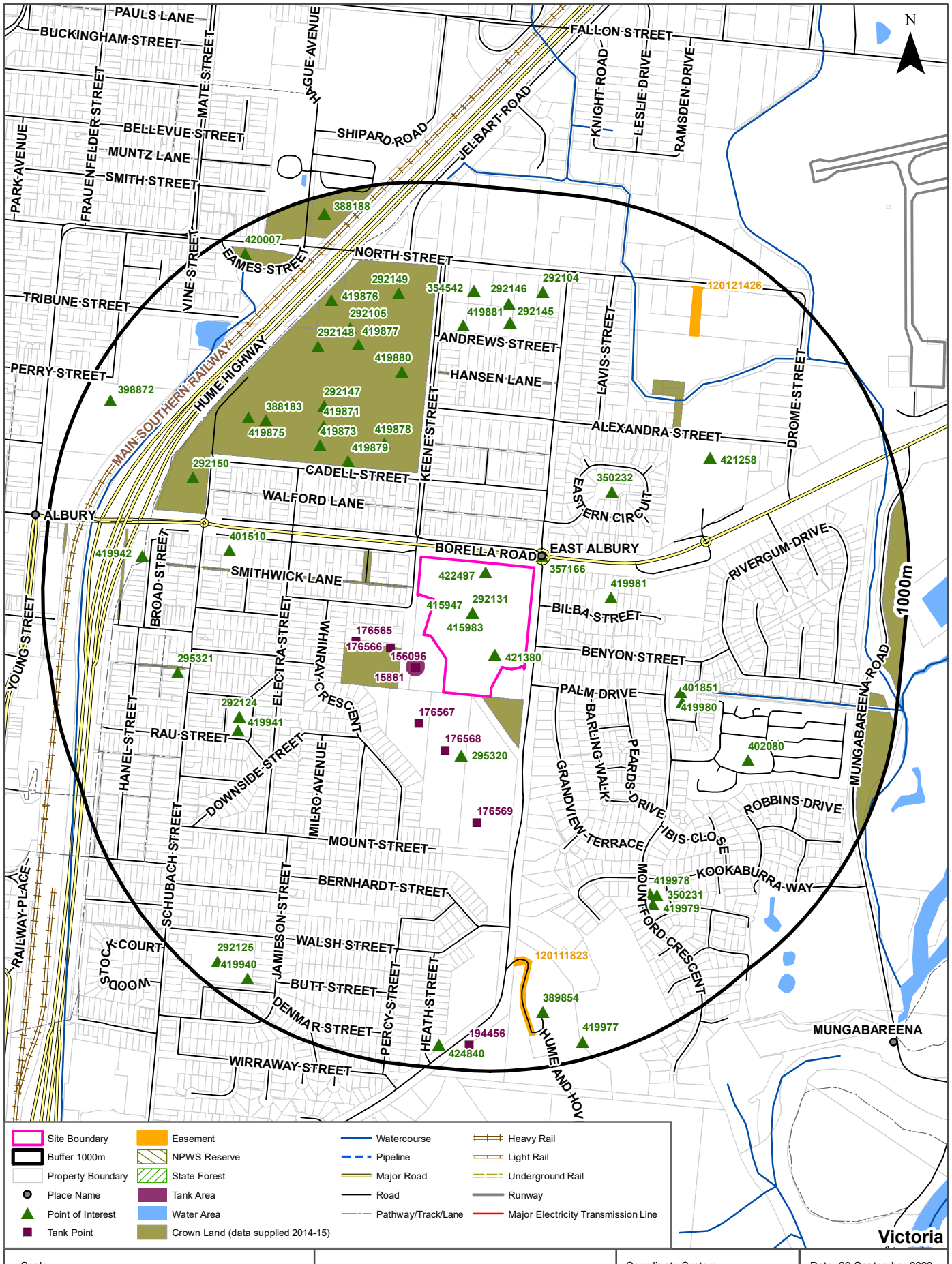
# Historical Map c.1951

**201 Borella Road, Albury, NSW 2640**



# Topographic Features

**201 Borella Road, Albury, NSW 2640**




Scale: 0 100 200 400 600 Meters

Data Sources: Property Boundaries & Topographic Data: © Department Finance, Services & Innovation 2023

Coordinate System: GDA 1994 MGA Zone 56

Date: 29 September 2023

# Topographic Features

**201 Borella Road, Albury, NSW 2640**

## Points of Interest

What Points of Interest exist within the dataset buffer?

| Map Id | Feature Type | Label | Distance | Direction |
|---|---|---|---|---|
| 415947 | Community Medical Centre | NOLAN HOUSE | 0m | On-site |
| 292131 | Community Medical Centre | ALBURY WODONGA HEALTH ALBURY CAMPUS | 0m | On-site |
| 421380 | Helipad | Helipad | 0m | On-site |
| 422497 | General Hospital | THE BORDER CANCER HOSPITAL | 0m | On-site |
| 415983 | General Hospital | ALBURY BASE HOSPITAL | 0m | On-site |
| 357166 | Suburb | EAST ALBURY | 37m | North East |
| 295320 | Park | EASTERN HILL RESERVE | 162m | South |
| 419981 | Park | PLAYGROUND | 212m | East |
| 350232 | Park | EASTERN CIRCUIT PLAYGROUND | 290m | North East |
| 419878 | Park | DOG OFF LEASH AREA | 319m | North West |
| 419879 | Park | PLAYGROUND | 321m | North West |
| 419873 | Sports Field | HOCKEY FIELDS | 402m | North West |
| 419980 | Picnic Area | PLAYGROUND | 423m | East |
| 401851 | Park | ROY BENYON PARK | 430m | East |
| 419871 | Sports Field | HOCKEY ALBURY WODONGA COMPLEX | 436m | North West |
| 292147 | Sports Field | HOCKEY FIELDS | 479m | North West |
| 419880 | Sports Field | IAN BARKER FIELDS | 497m | North |
| 401510 | Nursing Home | BORELLA HOUSE | 510m | West |
| 292124 | Park | FELLOWES PARK | 538m | West |
| 388183 | Sports Field | ALEXANDRA PARK ATHLETICS TRACK | 551m | North West |
| 421258 | Shopping Centre | Shopping Centre | 554m | North East |
| 419941 | Park | PLAYGROUND | 556m | South West |
| 419877 | Sports Court | CRICKET NETS | 591m | North West |
| 419875 | Athletics Track | Athletics Track | 592m | North West |
| 292148 | Sports Field | MURRAYFIELD | 626m | North West |
| 419881 | Community Facility | ALBURY PCYC | 627m | North |
| 292105 | Park | ALEXANDRA PARK | 640m | North West |
| 402080 | Retirement Village | MURRAY GARDENS RETIREMENT VILLAGE | 644m | South East |
| 292150 | Sports Court | EAST ALBURY TENNIS CLUB | 645m | North West |
| 292145 | Sports Court | ST PATRICKS TENNIS CLUB | 646m | North |
| 295321 | Post Office | ALBURY EAST POST OFFICE | 663m | West |

| Map Id | Feature Type | Label | Distance | Direction |
|---|---|---|---|---|
| 419978 | Sports Court | HALF COURT | 677m | South East |
| 350231 | Picnic Area | RED GUM PARK | 691m | South East |
| 292146 | Sports Court | NETBALL COURTS | 697m | North |
| 419979 | Sports Court | TENNIS | 703m | South East |
| 292149 | Sports Field | NORTH ST FIELDS | 707m | North |
| 354542 | Sports Centre | LAUREN JACKSON SPORTS CENTRE | 721m | North |
| 419876 | Sports Court | CRICKET NETS | 727m | North West |
| 292104 | Park | MARKS PARK | 736m | North |
| 419942 | Park | PLAYGROUND | 741m | West |
| 389854 | Lookout | EASTERN HILL LOOKOUT | 853m | South |
| 419940 | Park | PLAYGROUND | 925m | South West |
| 398872 | Combined Primary-Secondary School | THE SCOTS SCHOOL ALBURY | 928m | North West |
| 420007 | Community Facility | 2ND ALBURY SCOUT HALL | 936m | North West |
| 292125 | Sports Field | COLLINGS PARK | 937m | South West |
| 424840 | Park | HEATH STREET PLAYGROUND | 938m | South |
| 388188 | Camping Ground | Camping Ground | 951m | North |
| 419977 | Park | EASTERN HILL RESERVE | 953m | South |

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

**201 Borella Road, Albury, NSW 2640**

## Tanks (Areas)

What are the Tank Areas located within the dataset buffer?
Note. The large majority of tank features provided by LPI are derived from aerial imagery & are therefore primarily above ground tanks.

| Map Id | Tank Type | Status | Name | Feature Currency | Distance | Direction |
|---|---|---|---|---|---|---|
| 15861 | Water | Operational | | 01/05/2020 | 53m | South West |

## Tanks (Points)

What are the Tank Points located within the dataset buffer?
Note. The large majority of tank features provided by LPI are derived from aerial imagery & are therefore primarily above ground tanks.

| Map Id | Tank Type | Status | Name | Feature Currency | Distance | Direction |
|---|---|---|---|---|---|---|
| 156096 | Water | Feature on Previous LPI Tank Point Supply | | 01/11/2011 | 79m | South West |
| 176566 | Water | Operational | | 01/11/2011 | 96m | West |
| 176567 | Water | Operational | | 01/11/2011 | 106m | South West |
| 176568 | Water | Operational | | 01/11/2011 | 154m | South |
| 176565 | Water | Operational | | 01/11/2011 | 181m | West |
| 176569 | Water | Operational | | 01/11/2011 | 338m | South |
| 194456 | Water | Operational | | 01/05/2020 | 932m | South |

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

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

| Map Id | Easement Class | Easement Type | Easement Width | Distance | Direction |
|---|---|---|---|---|---|
| 120111823 | Primary | Undefined | | 701m | South |
| 120121426 | Primary | Undefined | | 747m | North East |

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

**201 Borella Road, Albury, NSW 2640**

## State Forest

What State Forest exist within the dataset buffer?

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

State Forest Data Source: © NSW Department of Finance, Services & Innovation (2018)
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## National Parks and Wildlife Service Reserves

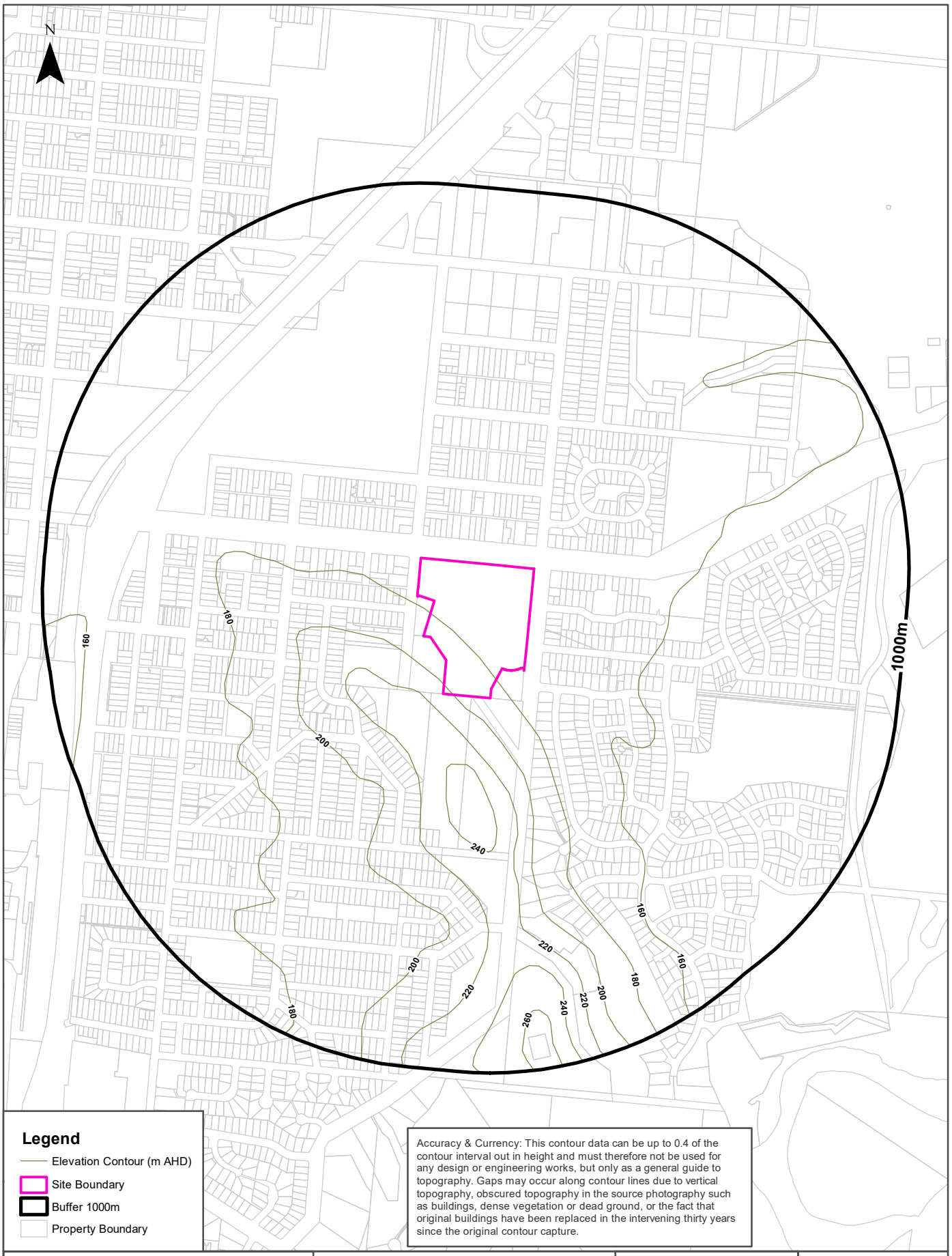
What NPWS Reserves exist within the dataset buffer?

| Reserve Number | Reserve Type | Reserve Name | Gazetted Date | Distance | Direction |
|---|---|---|---|---|---|
| N/A | No records in buffer | | | | |

NPWS Data Source: © NSW Department of Finance, Services & Innovation (2018)
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# Elevation Contours (m AHD)

**201 Borella Road, Albury, NSW 2640**



# Hydrogeology & Groundwater

**201 Borella Road, Albury, NSW 2640**

## Hydrogeology

Description of aquifers within the dataset buffer:

| Description | Distance | Direction |
|---|---|---|
| Porous, extensive highly productive aquifers | 0m | On-site |

Hydrogeology Map of Australia : Commonwealth of Australia (Geoscience Australia)
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## Temporary Water Restriction (Botany Sands Groundwater Source) Order 2018

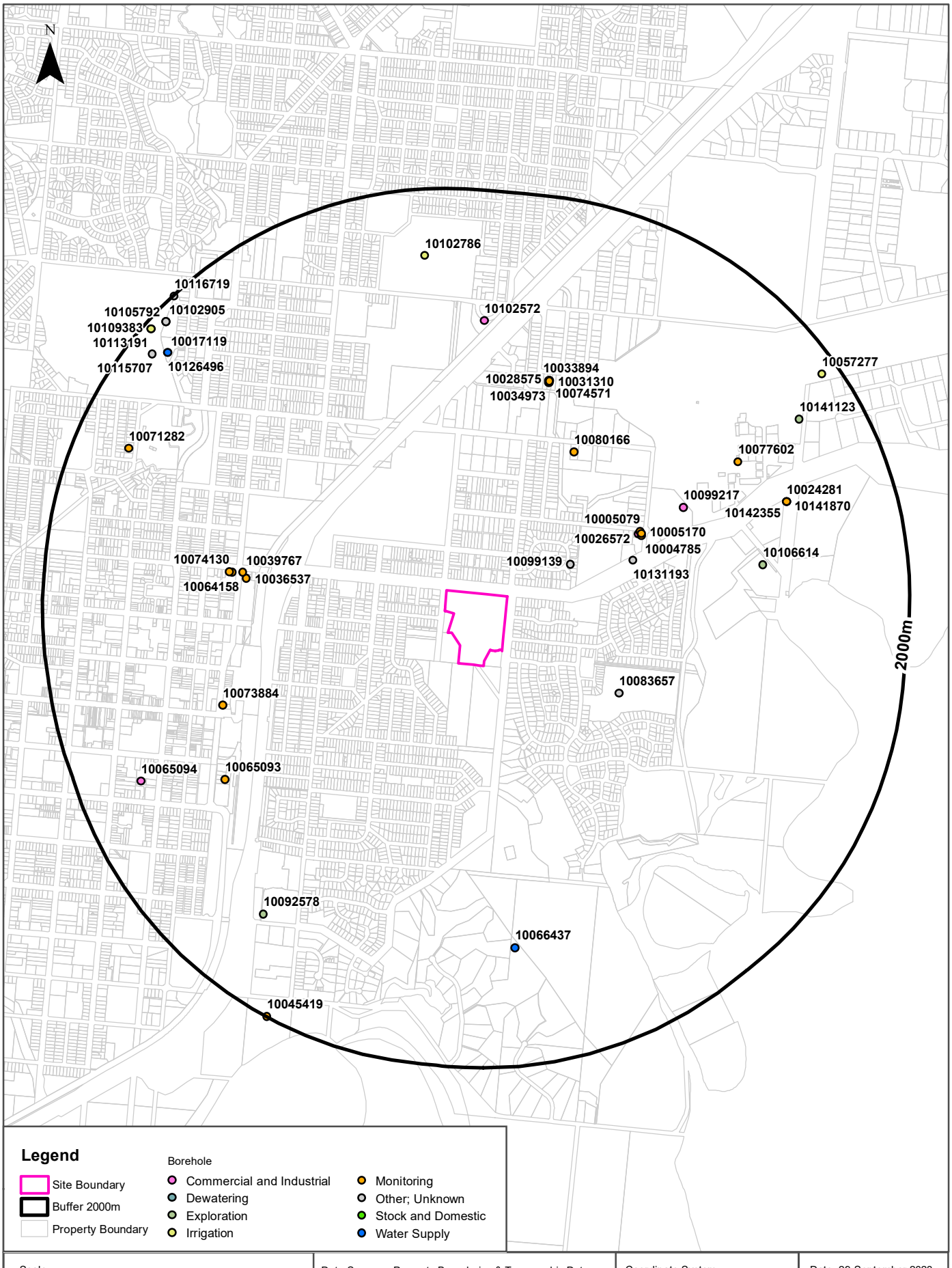
Temporary water restrictions relating to the Botany Sands aquifer within the dataset buffer:

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

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

# Groundwater Boreholes

**201 Borella Road, Albury, NSW 2640**



# Hydrogeology & Groundwater

**201 Borella Road, Albury, NSW 2640**

## Groundwater Boreholes

Boreholes within the dataset buffer:

| NGIS Bore ID | NSW Bore ID | Bore Type | Status | Drill Date | Bore Depth (m) | Reference Elevation | Height Datum | Salinity (mg/L) | Yield (L/s) | SWL (mbgl) | Distance | Direction |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10099139 | GW064889 | Other | Unknown | 19/10/1990 | 30.40 | | AHD | Good | | | 353m | North East |
| 10083657 | GW503269 | Other | Unknown | 21/03/2005 | 9.00 | | AHD | | | 3.30 | 620m | South East |
| 10131193 | GW068988 | Other | Unknown | 19/10/1990 | 30.40 | | AHD | Good | | | 652m | East |
| 10026572 | GW503585 | Commercial and Industrial | Functioning | 06/11/2007 | 38.00 | | AHD | 200 | 0.500 | 4.00 | 722m | North East |
| 10004785 | GW505970 | Monitoring | Functional | 19/04/2017 | 8.00 | | AHD | | | | 732m | North East |
| 10005079 | GW505971 | Monitoring | Functional | 19/04/2017 | 8.00 | | AHD | | | | 735m | North East |
| 10005170 | GW505969 | Monitoring | Functional | 19/04/2017 | 8.00 | | AHD | | | | 736m | North East |
| 10080166 | GW505435 | Monitoring | Functional | 17/02/2005 | 5.00 | | AHD | | | 2.87 | 790m | North East |
| 10099217 | GW065987 | Commercial and Industrial | Unknown | 05/02/1992 | 44.00 | | AHD | 0-500 ppm | | | 981m | North East |
| 10036537 | GW503787 | Monitoring | Unknown | 22/09/2009 | 12.00 | | AHD | | | | 995m | West |
| 10039767 | GW504280 | Monitoring | Functional | 20/02/2006 | 15.00 | | AHD | | | 9.00 | 1015m | West |
| 10064158 | GW505386 | Monitoring | Abandoned | 15/08/2006 | 11.50 | | AHD | | | | 1068m | West |
| 10034973 | GW500837 | Monitoring | Unknown | 10/12/1998 | 16.00 | | AHD | | | 8.00 | 1080m | North |
| 10031310 | GW500838 | Monitoring | Unknown | 16/12/1998 | 16.00 | | AHD | | | 8.00 | 1081m | North |
| 10074130 | GW503354 | Monitoring | Unknown | 12/05/2005 | 10.00 | | AHD | | | | 1083m | West |
| 10028575 | GW500840 | Monitoring | Unknown | 04/12/1997 | 16.00 | | AHD | | | 8.00 | 1086m | North |
| 10038938 | GW500839 | Monitoring | Unknown | 10/12/1998 | 16.00 | | AHD | | | 8.00 | 1086m | North |
| 10074571 | GW500827 | Exploration | Unknown | 09/12/1997 | 13.00 | | AHD | | | 8.00 | 1086m | North |
| 10077083 | GW500828 | Exploration | Unknown | 09/12/1997 | 13.00 | | AHD | | | 8.00 | 1086m | North |
| 10079366 | GW500830 | Monitoring | Unknown | 15/12/1997 | 13.00 | | AHD | | | 8.00 | 1086m | North |
| 10075703 | GW500831 | Monitoring | Unknown | 10/12/1998 | 13.00 | | AHD | | | 8.00 | 1090m | North |
| 10080332 | GW500832 | Monitoring | Unknown | 03/12/1997 | 13.00 | | AHD | | | 8.00 | 1090m | North |
| 10074269 | GW500833 | Monitoring | Unknown | 03/12/1997 | 13.00 | | AHD | | | 8.00 | 1091m | North |
| 10033894 | GW500835 | Monitoring | Unknown | 15/01/1998 | 13.00 | | AHD | | | 8.00 | 1092m | North |
| 10038437 | GW500834 | Monitoring | Unknown | 04/12/1997 | 13.00 | | AHD | | | 8.00 | 1092m | North |
| 10031913 | GW500836 | Monitoring | Unknown | 09/12/1998 | 16.00 | | AHD | | | 8.00 | 1093m | North |
| 10073884 | GW505413 | Monitoring | Functional | 29/05/2011 | 7.50 | | AHD | | | | 1176m | West |
| 10106614 | GW025204 | Exploration | Proposed | 01/08/1968 | 44.80 | | AHD | | | | 1281m | East |
| 10065093 | GW503720 | Monitoring | Functioning | 02/04/2009 | 8.00 | | AHD | | | 5.44 | 1296m | South West |
| 10077602 | GW505421 | Monitoring | Functional | 31/05/2007 | 9.00 | | AHD | | | 7.00 | 1328m | North East |

| NGIS Bore ID | NSW Bore ID | Bore Type | Status | Drill Date | Bore Depth (m) | Reference Elevation | Height Datum | Salinity (mg/L) | Yield (L/s) | SWL (mbgl) | Distance | Direction |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10102572 | GW037928 | Commercial and Industrial | Decommissioned | 01/08/1972 | 41.10 | | AHD | Good | | | 1353m | North |
| 10066437 | GW505415 | Water Supply | Unknown | 01/07/2005 | 100.00 | | AHD | | | | 1412m | South |
| 10024281 | GW025295 | Monitoring | Proposed | 01/05/1969 | 20.10 | 165.50 | AHD | | | | 1466m | East |
| 10141870 | GW025295 | Exploration | Proposed | 01/05/1969 | 20.10 | 165.50 | AHD | | | | 1466m | East |
| 10142355 | GW025295 | Monitoring | Proposed | 01/05/1969 | 20.10 | 165.50 | AHD | | | | 1466m | East |
| 10092578 | GW061362 | Exploration | Proposed | 01/10/1985 | | | AHD | 0-500 ppm | | | 1578m | South West |
| 10102786 | GW024635 | Irrigation | Unknown | 01/10/1965 | 35.10 | | AHD | 1000 | 18.950 | 15.20 | 1667m | North |
| 10065094 | GW503816 | Commercial and Industrial | Functioning | 01/12/2005 | 40.00 | | AHD | Good | 0.600 | | 1684m | South West |
| 10141123 | GW025281 | Exploration | Proposed | 01/05/1969 | | | AHD | 0-500 ppm | | | 1698m | North East |
| 10071282 | GW504437 | Monitoring | Functional | 05/04/2006 | 21.00 | | AHD | | | 3.97 | 1730m | North West |
| 10017119 | GW045981 | Water Supply | Unknown | 01/08/1976 | 30.50 | | AHD | Other | | | 1820m | North West |
| 10126496 | GW038276 | Water Supply | Unknown | 01/07/1974 | 14.60 | | AHD | | | | 1820m | North West |
| 10115707 | GW031503 | Other | Unknown | 01/02/1969 | 31.70 | | AHD | Fresh | | | 1875m | North West |
| 10057277 | GW027897 | Irrigation | Unknown | 01/04/1968 | 13.70 | | AHD | Good | | | 1914m | North East |
| 10102905 | GW036264 | Unknown | Unknown | 01/10/1977 | 38.50 | | AHD | | | | 1931m | North West |
| 10105792 | GW036263 | Unknown | Proposed | 01/10/1977 | 45.00 | | AHD | | | | 1931m | North West |
| 10109383 | GW025590 | Irrigation | Unknown | 01/08/1965 | 31.70 | | AHD | Good | | | 1961m | North West |
| 10113191 | GW031504 | Unknown | Unknown | 01/02/1969 | 38.10 | | AHD | | | | 1961m | North West |
| 10116719 | GW031505 | Unknown | Unknown | 01/02/1969 | 50.30 | | AHD | | | | 1991m | North West |
| 10045419 | GW505179 | Monitoring | Abandoned | 26/08/2007 | 24.00 | | AHD | 250 | 1.500 | 3.50 | 1997m | South West |

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

# Hydrogeology & Groundwater

**201 Borella Road, Albury, NSW 2640**

## Driller's Logs

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

| NGIS Bore ID | Drillers Log | Distance | Direction |
|---|---|---|---|
| 10083657 | 0.00m-0.20m Topsoil<br>0.20m-5.20m Invalid Code<br>5.20m-5.40m Invalid Code<br>5.40m-9.00m Invalid Code<br>9.00m-9.00m Invalid Code | 620m | South East |
| 10131193 | 0.00m-0.30m Topsoil<br>0.30m-2.90m Clay<br>2.90m-4.70m Silt<br>4.70m-9.20m Sand<br>9.20m-11.80m Clay<br>11.80m-15.30m Clay<br>15.30m-17.10m Clay<br>17.10m-28.00m Gravel<br>28.00m-30.40m Sand | 652m | East |
| 10026572 | 0.00m-4.00m Clay<br>4.00m-11.00m Clay<br>11.00m-16.00m Gravel<br>16.00m-32.00m Gravel<br>32.00m-38.00m Sand | 722m | North East |
| 10036537 | 0.00m-12.00m Clay Loam | 995m | West |
| 10039767 | 0.00m-0.15m<br>0.15m-0.40m<br>0.40m-13.90m Silty Clay<br>13.90m-15.00m Sandstone | 1015m | West |
| 10064158 | 0.00m-0.20m Fill<br>0.20m-1.10m Fill<br>1.10m-6.20m Silty Clay<br>6.20m-9.00m Sand<br>9.00m-11.50m Silty Clay | 1068m | West |
| 10034973 | 0.00m-0.50m Gravel<br>0.50m-10.00m Invalid Code<br>10.00m-16.00m Invalid Code | 1080m | North |
| 10031310 | 0.00m-0.20m Invalid Code<br>0.20m-0.50m Gravel<br>0.50m-10.00m Invalid Code<br>10.00m-16.00m Invalid Code | 1081m | North |
| 10074130 | 0.00m-0.70m Invalid Code<br>0.70m-1.90m Clay<br>1.90m-6.30m Clay<br>6.30m-8.50m Invalid Code<br>8.50m-10.00m Invalid Code | 1083m | West |
| 10028575 | 0.00m-0.20m Invalid Code<br>0.20m-0.50m Gravel<br>0.50m-10.00m Invalid Code<br>10.00m-16.00m Invalid Code | 1086m | North |
| 10038938 | 0.00m-0.50m Gravel<br>0.50m-10.50m Invalid Code<br>10.50m-16.00m Invalid Code | 1086m | North |
| 10074571 | 0.00m-0.50m Gravel<br>0.50m-10.00m Invalid Code<br>10.00m-11.00m Gravel<br>11.00m-13.00m Invalid Code | 1086m | North |
| 10077083 | 0.00m-0.50m Gravel<br>0.50m-9.50m Invalid Code<br>9.50m-11.00m Gravel<br>11.00m-13.00m Invalid Code | 1086m | North |
| 10079366 | 0.00m-0.10m Invalid Code<br>0.10m-2.00m Sand<br>2.00m-9.50m Invalid Code<br>9.50m-13.00m Invalid Code | 1086m | North |
| 10075703 | 0.00m-0.50m Gravel<br>0.50m-9.50m Invalid Code<br>9.50m-13.00m Invalid Code | 1090m | North |

| NGIS Bore ID | Drillers Log | Distance | Direction |
|---|---|---|---|
| 10080332 | 0.00m-0.20m Invalid Code<br>0.20m-0.50m Gravel<br>0.50m-10.00m Invalid Code<br>10.00m-13.00m Invalid Code | 1090m | North |
| 10074269 | 0.00m-0.20m Invalid Code<br>0.20m-0.50m Gravel<br>0.50m-10.00m Invalid Code<br>10.00m-13.00m Invalid Code | 1091m | North |
| 10033894 | 0.00m-0.20m Invalid Code<br>0.20m-0.50m Gravel<br>0.50m-9.50m Invalid Code<br>9.50m-13.00m Invalid Code | 1092m | North |
| 10038437 | 0.00m-0.20m Invalid Code<br>0.20m-0.50m Gravel<br>0.50m-10.00m Invalid Code<br>10.00m-13.00m Invalid Code | 1092m | North |
| 10031913 | 0.00m-0.50m Gravel<br>0.50m-10.50m Invalid Code<br>10.50m-16.00m Invalid Code | 1093m | North |
| 10073884 | 0.00m-7.50m Clay | 1176m | West |
| 10106614 | 0.00m-3.66m Clay<br>3.66m-7.32m Clay<br>7.32m-7.62m Clay<br>7.62m-8.23m Sand<br>8.23m-9.45m Gravel<br>9.45m-14.33m Gravel<br>14.33m-15.85m Silt<br>15.85m-16.46m Sand<br>16.46m-22.25m Sand<br>22.25m-28.65m Sand<br>28.65m-30.18m Silt<br>30.18m-36.88m Sand<br>36.88m-39.32m Gravel<br>39.32m-40.54m Sand<br>40.54m-41.76m Sand<br>41.76m-42.98m Sand<br>42.98m-43.59m Sand<br>43.59m-44.20m Clay<br>44.20m-44.81m Clay<br>44.81m-45.72m Clay<br>45.72m-46.94m Clay<br>46.94m-50.90m Clay<br>50.90m-52.43m Clay<br>52.43m-52.58m Rock | 1281m | East |
| 10065093 | 0.00m-0.80m Topsoil<br>0.80m-1.20m Sand Grains (Lithic)<br>1.20m-1.80m Sand Grains (Lithic)<br>1.80m-2.10m Sand Grains (Lithic)<br>2.10m-2.20m Sand Grains (Lithic)<br>2.20m-2.50m Sand Grains (Lithic)<br>2.50m-3.10m Sand Grains (Lithic)<br>3.10m-3.20m Silty Sandstone<br>3.20m-4.50m Clay Loam<br>4.50m-7.10m Clay Loam<br>7.10m-7.80m Sand Grains (Lithic)<br>7.80m-8.00m Sand Grains (Lithic) | 1296m | South West |
| 10077602 | 0.00m-0.20m Ash<br>0.20m-0.50m Fill<br>0.50m-2.40m Silty Clay<br>2.40m-8.00m Sandy Clay<br>8.00m-9.00m Gravel | 1328m | North East |
| 10102572 | 0.00m-0.60m Ash<br>0.60m-2.43m Clay<br>2.43m-9.14m Clay<br>9.14m-13.71m Clay<br>13.71m-17.37m Clay<br>17.37m-23.46m Sand<br>23.46m-27.73m Sand<br>27.73m-41.14m Sand | 1353m | North |
| 10066437 | 0.00m-4.00m Fill<br>4.00m-15.00m Mudstone<br>15.00m-29.00m Shale<br>29.00m-48.00m Granite<br>48.00m-65.00m | 1412m | South |

| NGIS Bore ID | Drillers Log | Distance | Direction |
|---|---|---|---|
| 10024281 | 0.00m-0.30m Topsoil<br>0.30m-1.22m Clay Hard<br>1.22m-3.35m Clay Yellow Mixed<br>3.35m-6.71m Clay Yellow<br>6.71m-7.01m Sand Fine<br>7.01m-12.50m Sand Large Gravel<br>12.50m-21.64m Sand Grey Large Gravel<br>21.64m-21.79m Clay Grey Band Nominal<br>21.79m-27.13m Gravel Silty<br>27.13m-30.18m Sand Grey Clean Gravel Large<br>30.18m-33.22m Gravel Medium Some Very Silty<br>33.22m-33.38m Clay Grey Band Nominal<br>33.38m-39.62m Sand Grey Small Gravel Clean<br>39.62m-48.77m Sand Dirty Gravel<br>39.62m-48.77m Clay Small Bands<br>48.77m-50.60m Clay Dark Brown<br>50.60m-58.52m Clay Grey Sticky Hard<br>58.52m-61.87m Clay Grey<br>61.87m-64.62m Clay<br>64.62m-74.98m Decomposed<br>74.98m-81.38m Granite Red Decomposed | 1466m | East |
| 10141870 | 0.00m-0.30m Topsoil<br>0.30m-1.22m Clay Hard<br>1.22m-3.35m Clay Yellow Mixed<br>3.35m-6.71m Clay Yellow<br>6.71m-7.01m Sand Fine<br>7.01m-12.50m Sand Large Gravel<br>12.50m-21.64m Sand Grey Large Gravel<br>21.64m-21.79m Clay Grey Band Nominal<br>21.79m-27.13m Gravel Silty<br>27.13m-30.18m Sand Grey Clean Gravel Large<br>30.18m-33.22m Gravel Medium Some Very Silty<br>33.22m-33.38m Clay Grey Band Nominal<br>33.38m-39.62m Sand Grey Small Gravel Clean<br>39.62m-48.77m Clay Small Bands<br>39.62m-48.77m Sand Dirty Gravel<br>48.77m-50.60m Clay Dark Brown<br>50.60m-58.52m Clay Grey Sticky Hard<br>58.52m-61.87m Clay Grey<br>61.87m-64.62m Clay<br>64.62m-74.98m Decomposed<br>74.98m-81.38m Granite Red Decomposed | 1466m | East |
| 10142355 | 0.00m-0.30m Topsoil<br>0.30m-1.22m Clay Hard<br>1.22m-3.35m Clay Yellow Mixed<br>3.35m-6.71m Clay Yellow<br>6.71m-7.01m Sand Fine<br>7.01m-12.50m Sand Large Gravel<br>12.50m-21.64m Sand Grey Large Gravel<br>21.64m-21.79m Clay Grey Band Nominal<br>21.79m-27.13m Gravel Silty<br>27.13m-30.18m Sand Grey Clean Gravel Large<br>30.18m-33.22m Gravel Medium Some Very Silty<br>33.22m-33.38m Clay Grey Band Nominal<br>33.38m-39.62m Sand Grey Small Gravel Clean<br>39.62m-48.77m Sand Dirty Gravel<br>39.62m-48.77m Clay Small Bands<br>48.77m-50.60m Clay Dark Brown<br>50.60m-58.52m Clay Grey Sticky Hard<br>58.52m-61.87m Clay Grey<br>61.87m-64.62m Clay<br>64.62m-74.98m Decomposed<br>74.98m-81.38m Granite Red Decomposed | 1466m | East |
| 10092578 | 0.00m-2.50m Clay<br>2.50m-6.50m Sand<br>6.50m-7.00m Gravel<br>7.00m-9.00m Sand<br>9.00m-13.50m Sand<br>13.50m-34.00m Schist<br>34.00m-36.00m Schist | 1578m | South West |
| 10102786 | 0.00m-0.30m Soil<br>0.30m-0.91m Clay<br>0.91m-4.57m Clay<br>4.57m-6.40m Clay<br>6.40m-14.63m Clay<br>14.63m-22.56m Sand<br>22.56m-24.38m Clay<br>24.38m-25.91m Sand<br>25.91m-27.43m Clay<br>27.43m-30.48m Clay<br>30.48m-35.05m Gravel | 1667m | North |

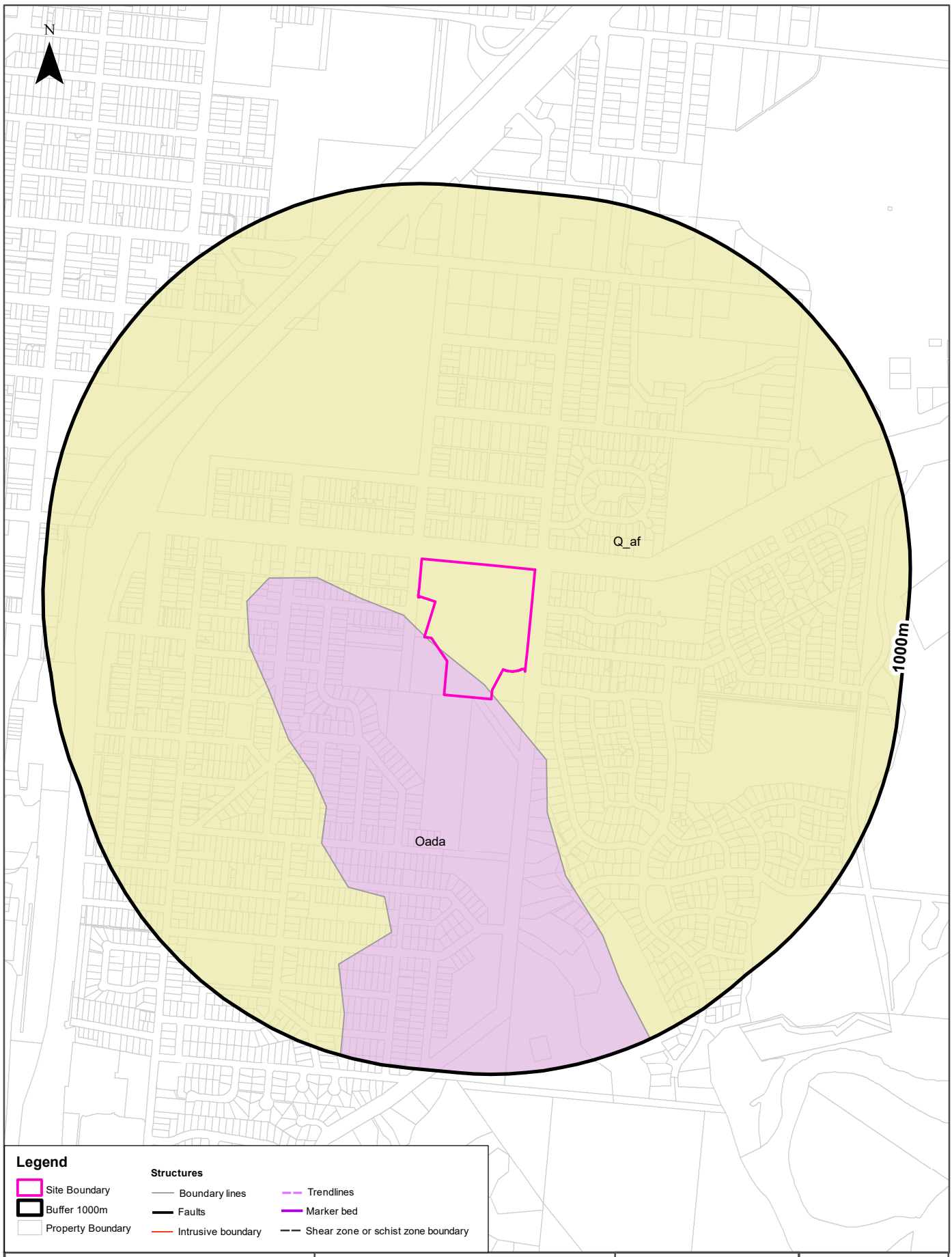
| NGIS Bore ID | Drillers Log | Distance | Direction |
|---|---|---|---|
| 10065094 | 0.00m-8.00m Clay Loam<br>8.00m-33.00m Gravel<br>33.00m-40.00m Sand Grains (Lithic) | 1684m | South West |
| 10141123 | 0.00m-0.61m Topsoil<br>0.61m-3.35m Clay<br>3.35m-10.97m Clay Yellow<br>10.97m-14.94m Sand Gravel<br>14.94m-28.04m Sand Grey Gravel<br>28.04m-36.27m Sand Grey Gravel Very Silty<br>36.27m-36.58m Clay Dark Grey Wood<br>36.58m-52.43m Sand Dark Grey Gravel<br>52.43m-52.73m Clay Grey<br>52.73m-54.25m Peat<br>54.25m-59.74m Clay Waddy<br>59.74m-70.41m Clay Grey Very Sticky<br>70.41m-73.76m Granite Decomposed<br>73.76m-82.60m Granite Green Decomposed | 1698m | North East |
| 10071282 | 0.00m-0.50m Bitumen<br>0.50m-1.75m Fill, gravelly silt, brown fine to medium gravel<br>1.75m-1.90m Silty clay, brown firm to stiff<br>1.90m-4.25m Gravel, fine to medium coarse sand<br>4.25m-14.50m Clay, minor pockets<br>14.50m-16.00m Gravelly sand, coarse grained<br>16.00m-21.00m Sandy gravel, fine to medium | 1730m | North West |
| 10017119 | 0.00m-1.83m Clay Sandy Topsoil<br>1.83m-7.32m Clay Silty<br>7.32m-8.53m Sand Fine-coarse<br>7.32m-8.53m Ironstone Bands<br>8.53m-10.06m Clay Grey Brown Streaks<br>10.06m-10.67m Clay Grey Silty<br>10.67m-12.50m Sand Some Claybound Soakage Fine-coarse<br>12.50m-21.95m Sand Silty Grey Streaks<br>21.95m-23.77m Sand<br>23.77m-25.60m Clay Dark Grey Silty<br>25.60m-30.48m Gravel Large Bands Fine-coarse Water Supply | 1820m | North West |
| 10115707 | 0.00m-0.61m Topsoil<br>0.61m-4.57m Clay Sandy<br>4.57m-6.40m Sand<br>6.40m-7.62m Sand Coarse<br>6.40m-7.62m Clay Seams<br>7.62m-8.23m Sand<br>8.23m-10.36m Clay<br>10.36m-15.24m Drift<br>10.36m-15.24m Clay Seams<br>15.24m-29.26m Clay Black Some Sand<br>29.26m-29.87m Sand Coarse<br>29.87m-31.09m Gravel Water Supply<br>31.09m-31.70m Gravel Sand | 1875m | North West |
| 10057277 | 0.00m-0.91m Loam<br>0.91m-1.52m Ironstone<br>1.52m-7.62m Clay<br>7.62m-8.23m Sand<br>8.23m-12.19m Clay<br>12.19m-13.72m Gravel | 1914m | North East |
| 10105792 | 0.00m-0.30m Topsoil<br>0.30m-2.00m Clay Multicoloured Sandy<br>2.00m-6.00m Clay Sandy<br>6.00m-12.00m Clay Claybound<br>12.00m-12.50m Clay Grey Sandy<br>12.50m-17.00m Gravel Coarse Claybound Dry Sand<br>17.00m-20.00m Clay Grey Gritty<br>20.00m-23.00m Clay Grey Sandy<br>23.00m-27.00m Clay Grey<br>27.00m-28.00m Clay Grey Silty<br>28.00m-42.00m Gravel Large Sand Very Sharp<br>42.00m-45.00m Quartz Coarse Gravel Sand Very Sharp | 1931m | North West |
| 10109383 | 0.00m-3.05m Soil Surface<br>3.05m-4.27m Silt Clay<br>4.27m-6.10m Sand Clayey Fine Dry<br>6.10m-15.24m Sand Clayey Coarse Dry<br>15.24m-15.85m Sand Coarse Gravel<br>15.85m-25.30m Clay Yellow Silty<br>25.30m-25.60m Clay Silty<br>25.60m-31.70m Gravel Coarse Sand Water Supply<br>31.70m-33.22m Gravel<br>31.70m-33.22m Silt Grey | 1961m | North West |
| 10113191 | 0.00m-1.22m Topsoil<br>1.22m-16.76m Clay<br>16.76m-18.59m Drift<br>18.59m-29.87m Clay<br>29.87m-38.10m Clay Black Some Sand<br>29.87m-38.10m Gravel | 1961m | North West |

| NGIS Bore ID | Drillers Log | Distance | Direction |
|---|---|---|---|
| 10116719 | 0.00m-0.61m Topsoil<br>0.61m-7.92m Shale Sandy<br>7.92m-8.53m Gravel<br>8.53m-13.41m Sand Clay<br>13.41m-13.72m Gravel<br>13.72m-16.15m Sand Coarse<br>16.15m-28.04m Clay Grey<br>28.04m-44.50m Gravel<br>44.50m-46.63m Gravel<br>44.50m-46.63m Clay Some Sand<br>46.63m-50.29m Gravel<br>46.63m-50.29m Clay Black Some Sand | 1991m | North West |
| 10045419 | 0.00m-1.00m Topsoil<br>1.00m-5.00m Clay<br>5.00m-15.00m Sand<br>15.00m-24.00m Gravel | 1997m | South West |

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

# Geology

## 201 Borella Road, Albury, NSW 2640



# Geology

**201 Borella Road, Albury, NSW 2640**

## Geological Units

What are the Geological Units within the dataset buffer?

| Unit Code | Unit Name | Description | Unit Stratigraphy | Age | Dominant Lithology | Distance |
|---|---|---|---|---|---|---|
| Q_af | Alluvial floodplain deposits | Silt, very fine- to medium-grained lithic to quartz-rich sand, clay. | /Alluvium//Alluvial floodplain deposits// | Quaternary (base) to Now (top) | Clastic sediment | 0m |
| Oada | Abercrombie Formation | Brown and buff to grey, thin- to thick-bedded, fine- to coarse-grained mica-quartz (±feldspar) sandstone, interbedded with laminated siltstone and mudstone. Sporadic chert-rich units. | Lachlan Supergroup/Adaminaby Group//Abercrombie Formation// | La2b (Lancefieldian) (base) to Da4 (Darriwilian) (top) | Sandstone | 0m |

## Linear Geological Structures

What are the Dyke, Sill, Fracture, Lineament and Vein trendlines within the dataset buffer?

| Map ID | Feature Description | Map Sheet Name | Distance |
|---|---|---|---|
| No Features | | | |

What are the Faults, Shear zones or Schist zones, Intrusive boundaries & Marker beds within the dataset buffer?

| Map ID | Boundary Type | Description | Map Sheet Name | Distance |
|---|---|---|---|---|
| No Features | | | | |

Geological Data Source: Statewide Seamless Geology v2.1, Department of Regional NSW
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# Naturally Occurring Asbestos Potential

**201 Borella Road, Albury, NSW 2640**

## Naturally Occurring Asbestos Potential

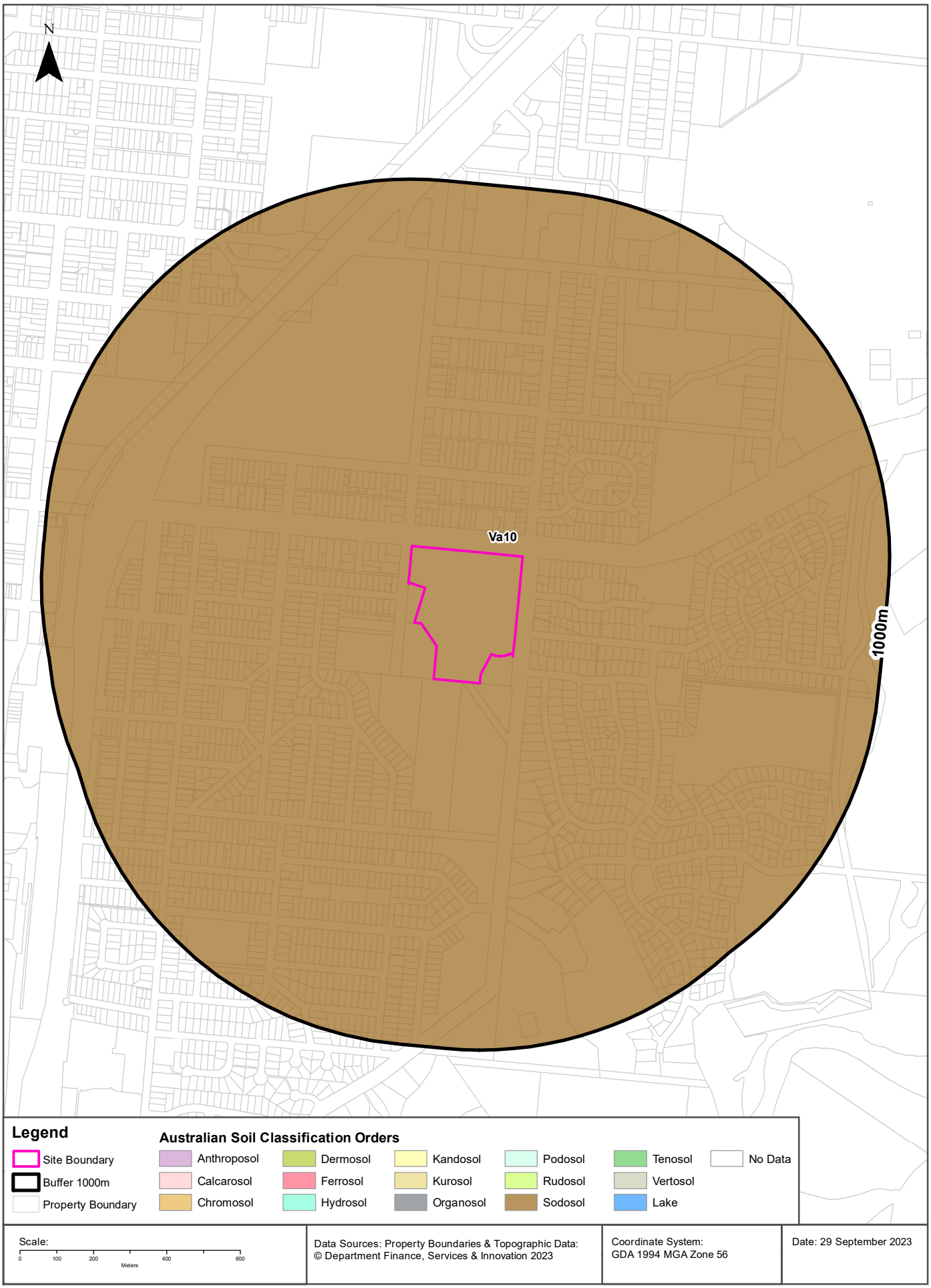
Naturally Occurring Asbestos Potential within the dataset buffer:

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

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

# Atlas of Australian Soils

**201 Borella Road, Albury, NSW 2640**



# Soils

**201 Borella Road, Albury, NSW 2640**

## Atlas of Australian Soils

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

| Map Unit Code | Soil Order | Map Unit Description | Distance | Direction |
|---|---|---|---|---|
| Va10 | Sodosol | River valleys and their adjacent hill slopes: (1) valley plains of hard neutral and alkaline yellow mottled soils (Dy3.42 and Dy3.43) on the colluvial slopes and upper terraces of major streams and also flood-plains of some tributary streams; in association with sandy acidic yellow mottled soils (Dy5.41) on low rises and other soils, including (Gn2.8), on the flatter portions of the middle terraces and flood- plains of the major streams, and with swampy areas close to some of the major stream channels; (2) surrounding hill slopes of hard acidic yellow mottled soils (Dy3.41) and hard acidic red soils (Dr2.21 and Dr2.41). | 0m | On-site |

Atlas of Australian Soils Data Source: CSIRO
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# Acid Sulfate Soils

**201 Borella Road, Albury, NSW 2640**

## Environmental Planning Instrument - Acid Sulfate Soils

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

| Soil Class | Description | EPI Name |
|---|---|---|
| N/A | | |

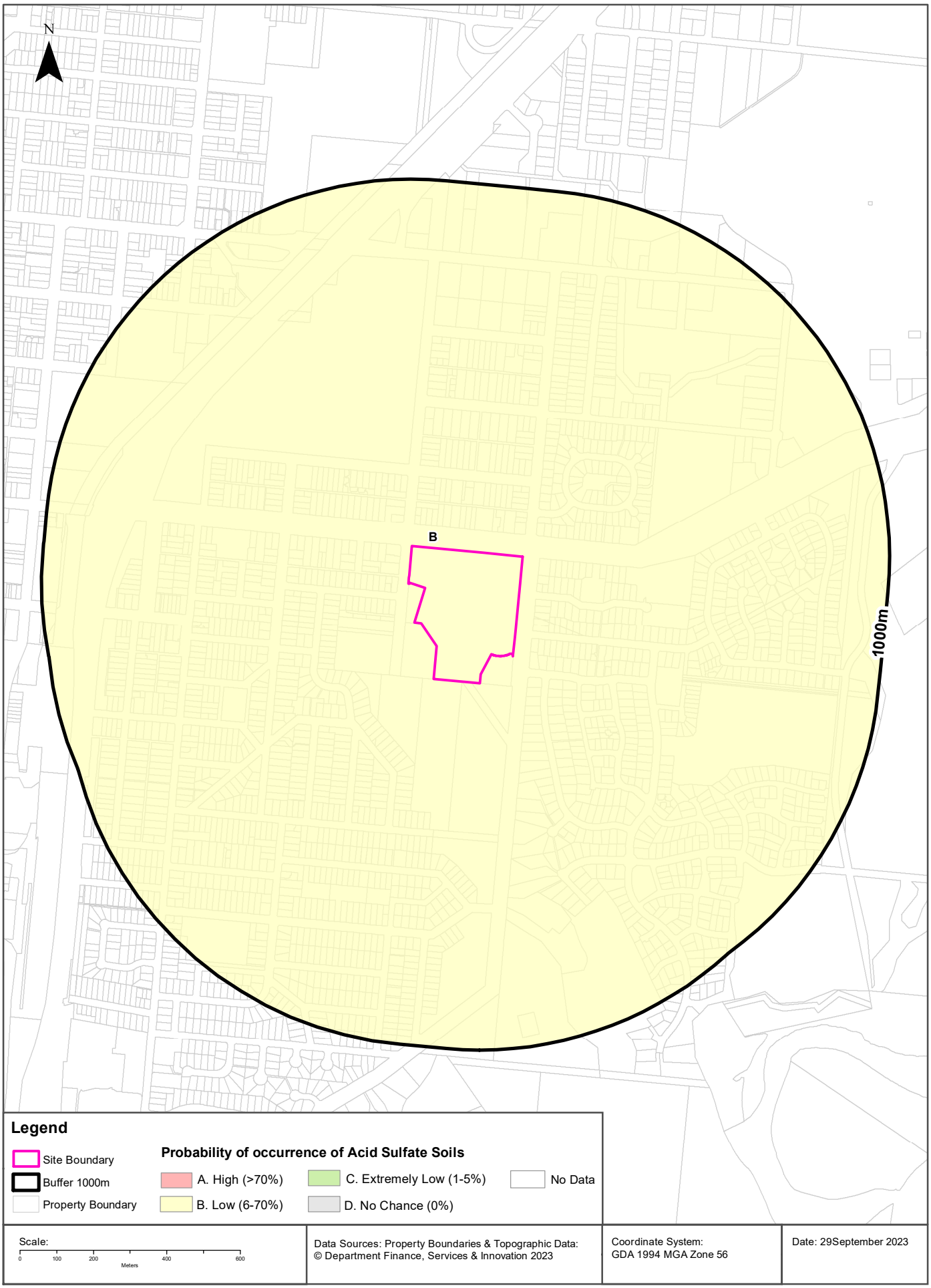
If the on-site Soil Class is 5, what other soil classes exist within 500m?

| Soil Class | Description | EPI Name | Distance | Direction |
|---|---|---|---|---|
| N/A | | | | |

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# Atlas of Australian Acid Sulfate Soils

**201 Borella Road, Albury, NSW 2640**



# Acid Sulfate Soils

**201 Borella Road, Albury, NSW 2640**

## Atlas of Australian Acid Sulfate Soils

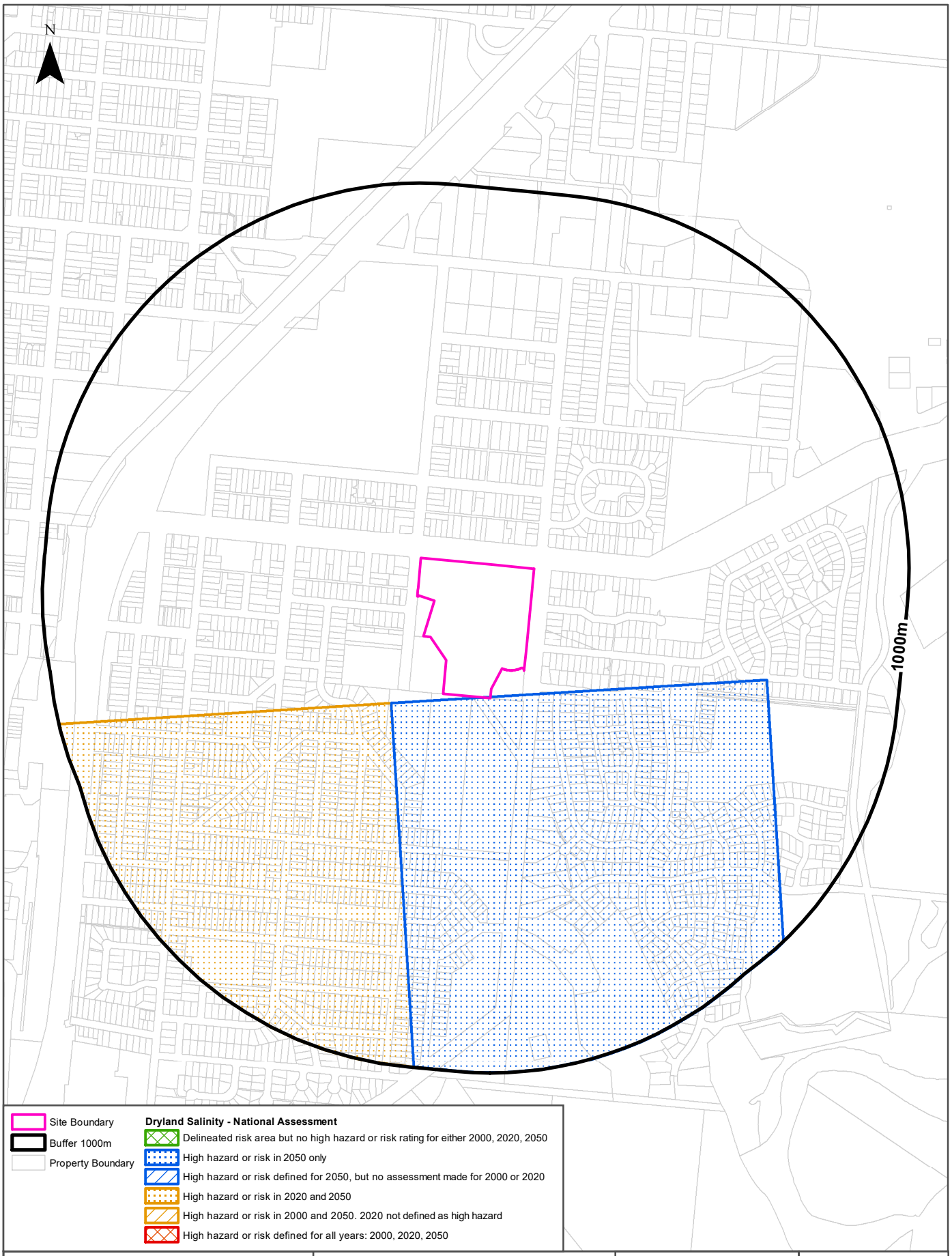
Atlas of Australian Acid Sulfate Soil categories within the dataset buffer:

| Class | Description | Distance | Direction |
|---|---|---|---|
| B | Low Probability of occurrence. 6-70% chance of occurrence. | 0m | On-site |

Atlas of Australian Acid Sulfate Soils Data Source: CSIRO
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# Dryland Salinity

**201 Borella Road, Albury, NSW 2640**




Data Sources: Property Boundaries & Topographic Data: © Department Finance, Services & Innovation 2023

Coordinate System: GDA 1994 MGA Zone 56

Date: 29 September 2023

# Dryland Salinity

**201 Borella Road, Albury, NSW 2640**

## Dryland Salinity - National Assessment

Is there Dryland Salinity - National Assessment data onsite?

**Yes**

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

**Yes**

What Dryland Salinity assessments are given?

| Assessment 2000 | Assessment 2020 | Assessment 2050 | Distance | Direction |
|---|---|---|---|---|
| - | - | High hazard or risk | 0m | On-site |
| - | High hazard or risk | High hazard or risk | 142m | South West |

Dryland Salinity Data Source : National Land and Water Resources Audit
The Commonwealth and all suppliers of source data used to derive the maps of "Australia, Forecast Areas Containing Land of High Hazard or Risk of Dryland Salinity from 2000 to 2050" do not warrant the accuracy or completeness of information in this product. Any person using or relying upon such information does so on the basis that the Commonwealth and data suppliers shall bear no responsibility or liability whatsoever for any errors, faults, defects or omissions in the information. Any persons using this information do so at their own risk.
In many cases where a high risk is indicated, less than 100% of the area will have a high hazard or risk.

# Mining

**201 Borella Road, Albury, NSW 2640**

## Mining Subsidence Districts

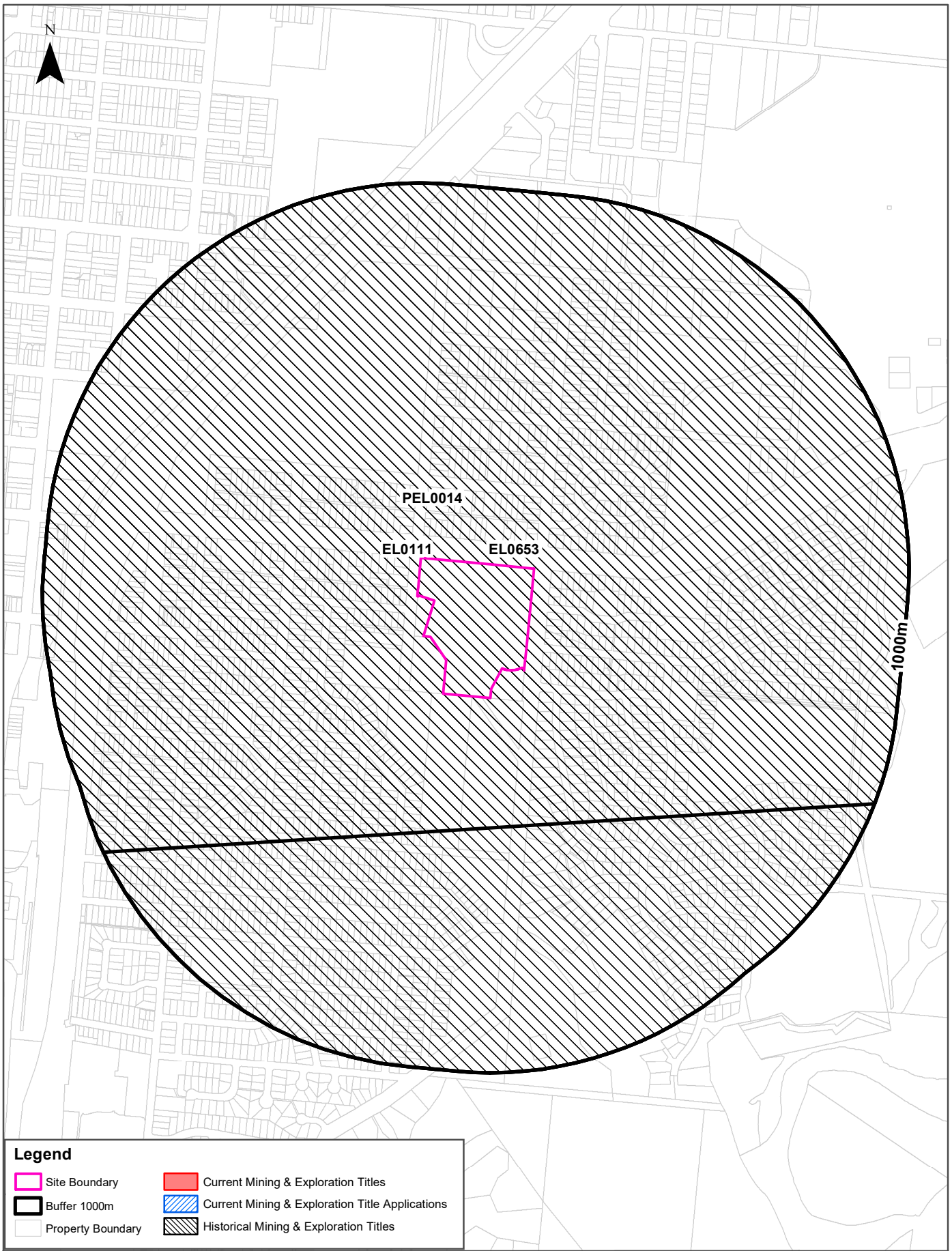
Mining Subsidence Districts within the dataset buffer:

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

Mining Subsidence District Data Source: © Land and Property Information (2016)
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# Mining & Exploration Titles

**201 Borella Road, Albury, NSW 2640**



# Mining

**201 Borella Road, Albury, NSW 2640**

## Current Mining & Exploration Titles

Current Mining & Exploration Titles within the dataset buffer:

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

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

## Current Mining & Exploration Title Applications

Current Mining & Exploration Title Applications within the dataset buffer:

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

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

# Mining

**201 Borella Road, Albury, NSW 2640**

## Historical Mining & Exploration Titles

Historical Mining & Exploration Titles within the dataset buffer:

| Title Ref | Holder | Start Date | End Date | Resource | Minerals | Dist | Dir |
|---|---|---|---|---|---|---|---|
| PEL0014 | KNIGHT INDUSTRIES PTY LTD,PETROLEUM DEVELOPMENT PTY LTD | 19961003 | 19981002 | PETROLEUM | Petroleum | 0m | On-site |
| EL0653 | ALBURY BRICKWORKS | 19731101 | 19741201 | MINERALS | Brick clay Clay shale | 0m | On-site |
| EL0111 | WALTON, R | 19680501 | 19690501 | MINERALS | Au Sn | 0m | On-site |

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

# State Environmental Planning Policy

**201 Borella Road, Albury, NSW 2640**

## State Significant Precincts

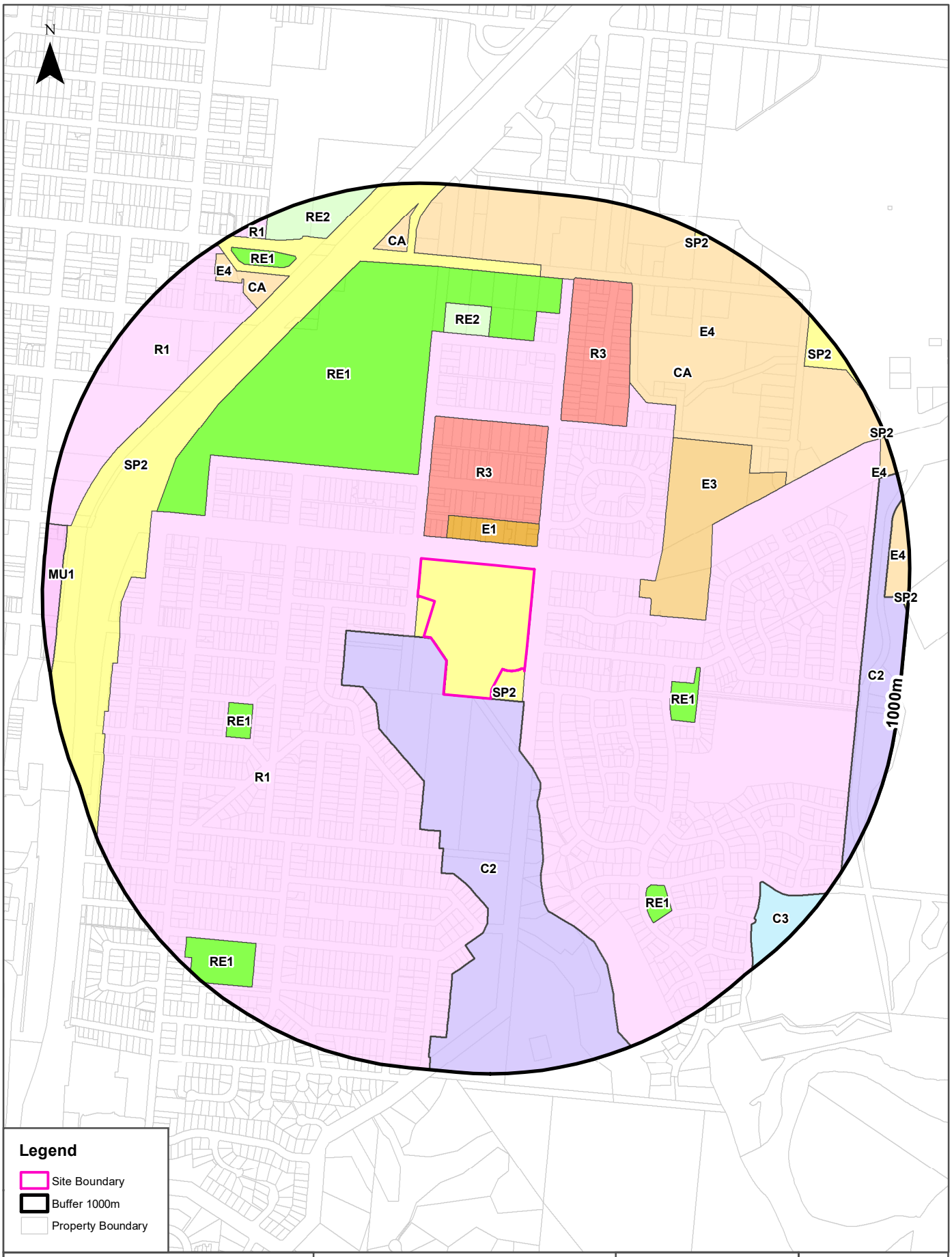
What SEPP State Significant Precincts exist within the dataset buffer?

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

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

**201 Borella Road, Albury, NSW 2640**




Data Sources: Property Boundaries & Topographic Data: © Department Finance, Services & Innovation 2023
Planning: NSW Crown Copyright - Planning & Environment

Coordinate System: GDA 1994 MGA Zone 56

Date: 29 September 2023

# Environmental Planning Instrument

**201 Borella Road, Albury, NSW 2640**

## Land Zoning

What EPI Land Zones exist within the dataset buffer?

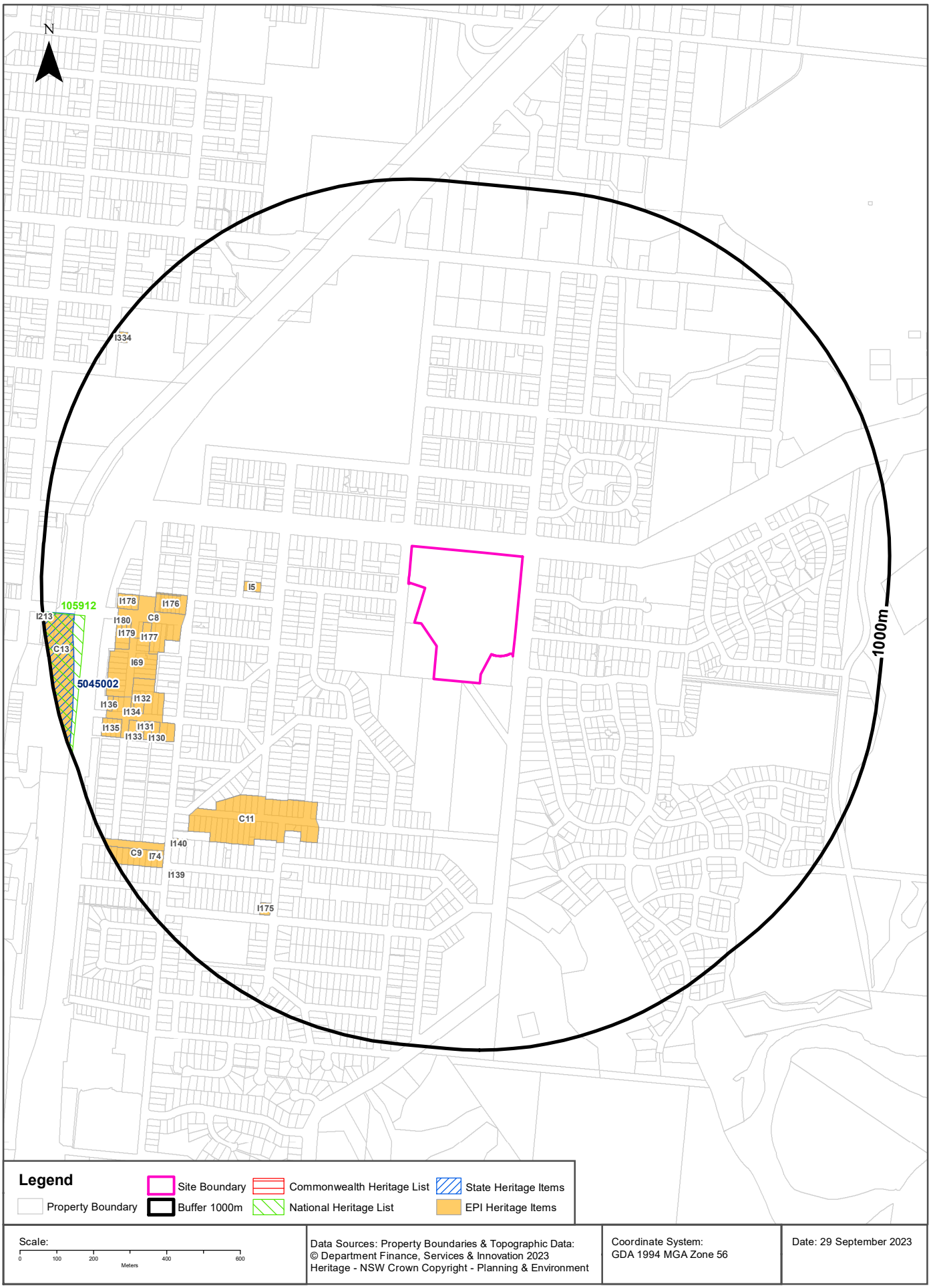
| Zone | Description | Purpose | EPI Name | Published Date | Commenced Date | Currency Date | Amendment | Distance | Direction |
|---|---|---|---|---|---|---|---|---|---|
| SP2 | Infrastructure | Health Services Facility | Albury Local Environmental Plan 2010 | 21/04/2023 | 26/04/2023 | 26/04/2023 | Map Amendment No 1 | 0m | On-site |
| R1 | General Residential | | Albury Local Environmental Plan 2010 | 21/04/2023 | 26/04/2023 | 26/04/2023 | Map Amendment No 1 | 0m | South East |
| C2 | Environmental Conservation | | Albury Local Environmental Plan 2010 | 21/04/2023 | 26/04/2023 | 26/04/2023 | Map Amendment No 1 | 0m | South |
| R3 | Medium Density Residential | | Albury Local Environmental Plan 2010 | 21/04/2023 | 26/04/2023 | 26/04/2023 | Map Amendment No 1 | 61m | North |
| E1 | Local Centre | | Albury Local Environmental Plan 2010 | 21/04/2023 | 26/04/2023 | 26/04/2023 | Map Amendment No 1 | 61m | North |
| RE1 | Public Recreation | | Albury Local Environmental Plan 2010 | 21/04/2023 | 26/04/2023 | 26/04/2023 | Map Amendment No 1 | 224m | North West |
| E3 | Productivity Support | | Albury Local Environmental Plan 2010 | 21/04/2023 | 26/04/2023 | 26/04/2023 | Map Amendment No 1 | 283m | North East |
| RE1 | Public Recreation | | Albury Local Environmental Plan 2010 | 21/04/2023 | 26/04/2023 | 26/04/2023 | Map Amendment No 1 | 392m | East |
| R3 | Medium Density Residential | | Albury Local Environmental Plan 2010 | 21/04/2023 | 26/04/2023 | 26/04/2023 | Map Amendment No 1 | 405m | North East |
| RE1 | Public Recreation | | Albury Local Environmental Plan 2010 | 21/04/2023 | 26/04/2023 | 26/04/2023 | Map Amendment No 1 | 490m | South West |
| CA | Complex Area | | Albury Local Environmental Plan 2010 | 21/04/2023 | 26/04/2023 | 26/04/2023 | Map Amendment No 1 | 508m | North |
| E4 | General Industrial | | Albury Local Environmental Plan 2010 | 21/04/2023 | 26/04/2023 | 26/04/2023 | Map Amendment No 1 | 508m | North East |
| RE2 | Private Recreation | | Albury Local Environmental Plan 2010 | 21/04/2023 | 26/04/2023 | 26/04/2023 | Map Amendment No 1 | 606m | North |
| RE1 | Public Recreation | | Albury Local Environmental Plan 2010 | 21/04/2023 | 26/04/2023 | 26/04/2023 | Map Amendment No 1 | 653m | South East |
| SP2 | Infrastructure | Transport Infrastructure | Albury Local Environmental Plan 2010 | 21/04/2023 | 26/04/2023 | 26/04/2023 | Map Amendment No 1 | 675m | North West |
| R1 | General Residential | | Albury Local Environmental Plan 2010 | 21/04/2023 | 26/04/2023 | 26/04/2023 | Map Amendment No 1 | 781m | North West |
| CA | Complex Area | | Albury Local Environmental Plan 2010 | 21/04/2023 | 26/04/2023 | 26/04/2023 | Map Amendment No 1 | 798m | North West |
| E4 | General Industrial | | Albury Local Environmental Plan 2010 | 21/04/2023 | 26/04/2023 | 26/04/2023 | Map Amendment No 1 | 798m | North West |
| CA | Complex Area | | Albury Local Environmental Plan 2010 | 21/04/2023 | 26/04/2023 | 26/04/2023 | Map Amendment No 1 | 818m | North |
| E4 | General Industrial | | Albury Local Environmental Plan 2010 | 21/04/2023 | 26/04/2023 | 26/04/2023 | Map Amendment No 1 | 818m | North |

| Zone | Description | Purpose | EPI Name | Published Date | Commenced Date | Currency Date | Amendment | Distance | Direction |
|---|---|---|---|---|---|---|---|---|---|
| RE1 | Public Recreation | | Albury Local Environmental Plan 2010 | 21/04/2023 | 26/04/2023 | 26/04/2023 | Map Amendment No 1 | 831m | South West |
| C3 | Environmental Management | | Albury Local Environmental Plan 2010 | 21/04/2023 | 26/04/2023 | 26/04/2023 | Map Amendment No 1 | 843m | South East |
| RE1 | Public Recreation | | Albury Local Environmental Plan 2010 | 21/04/2023 | 26/04/2023 | 26/04/2023 | Map Amendment No 1 | 857m | North West |
| RE2 | Private Recreation | | Albury Local Environmental Plan 2010 | 21/04/2023 | 26/04/2023 | 26/04/2023 | Map Amendment No 1 | 890m | North |
| SP2 | Infrastructure | Airport | Albury Local Environmental Plan 2010 | 21/04/2023 | 26/04/2023 | 26/04/2023 | Map Amendment No 1 | 899m | North East |
| E4 | General Industrial | | Albury Local Environmental Plan 2010 | 21/04/2023 | 26/04/2023 | 26/04/2023 | Map Amendment No 1 | 934m | East |
| MU1 | Mixed Use | | Albury Local Environmental Plan 2010 | 21/04/2023 | 26/04/2023 | 26/04/2023 | Map Amendment No 1 | 947m | West |
| SP2 | Infrastructure | Water Supply Systems | Albury Local Environmental Plan 2010 | 21/04/2023 | 26/04/2023 | 26/04/2023 | Map Amendment No 1 | 977m | East |

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# Heritage Items

**201 Borella Road, Albury, NSW 2640**



# Heritage

**201 Borella Road, Albury, NSW 2640**

## Commonwealth Heritage List

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

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

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

What are the National Heritage List Items located within the dataset buffer?
Note. Please click on Place Id to activate a hyperlink to online website.

| Place Id | Name | Address | Place File No | Class | Status | Register Date | Distance | Direction |
|---|---|---|---|---|---|---|---|---|
| 105912 | Albury Railway Station and Yard | Hume Hwy, Albury NSW | 1/05/340/0013 | Historic | Nomination now ineligible for PPAL | | 885m | West |

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

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

| Map Id | Name | Address | LGA | Listing Date | Listing No | Plan No | Distance | Direction |
|---|---|---|---|---|---|---|---|---|
| 5045002 | Albury Railway Station and Yard Group | Railway Place Albury | ALBURY CITY | 02/04/1999 | 01073 | 2649 | 914m | West |

Heritage Data Source: NSW Crown Copyright - Office of Environment & Heritage
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## Environmental Planning Instrument - Heritage

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

| Map Id | Name | Classification | Significance | EPI Name | Published Date | Commenced Date | Currency Date | Distance | Direction |
|---|---|---|---|---|---|---|---|---|---|
| I5 | House "Beaumont" | Item - General | Local | Albury Local Environmental Plan 2010 | 13/08/2010 | 13/08/2010 | 13/08/2010 | 402m | West |
| C11 | Mount Street Conservation Area | Conservation Area - General | Local | Albury Local Environmental Plan 2010 | 13/08/2010 | 13/08/2010 | 13/08/2010 | 462m | South West |
| C8 | Hanel Street Conservation Area | Conservation Area - General | Local | Albury Local Environmental Plan 2010 | 13/08/2010 | 13/08/2010 | 13/08/2010 | 604m | West |

| Map Id | Name | Classification | Significance | EPI Name | Published Date | Commenced Date | Currency Date | Distance | Direction |
|---|---|---|---|---|---|---|---|---|---|
| I176 | Houses | Item - General | Local | Albury Local Environmental Plan 2010 | 13/08/2010 | 13/08/2010 | 13/08/2010 | 604m | West |
| I69 | Houses | Item - General | Local | Albury Local Environmental Plan 2010 | 13/08/2010 | 13/08/2010 | 13/08/2010 | 705m | West |
| I177 | House | Item - General | Local | Albury Local Environmental Plan 2010 | 13/08/2010 | 13/08/2010 | 13/08/2010 | 708m | West |
| I178 | Houses | Item - General | Local | Albury Local Environmental Plan 2010 | 13/08/2010 | 13/08/2010 | 13/08/2010 | 735m | West |
| I130 | House | Item - General | Local | Albury Local Environmental Plan 2010 | 13/08/2010 | 13/08/2010 | 13/08/2010 | 745m | West |
| I175 | House | Item - General | Local | Albury Local Environmental Plan 2010 | 13/08/2010 | 13/08/2010 | 13/08/2010 | 755m | South West |
| I179 | House | Item - General | Local | Albury Local Environmental Plan 2010 | 13/08/2010 | 13/08/2010 | 13/08/2010 | 761m | West |
| I132 | House "Grestford" | Item - General | Local | Albury Local Environmental Plan 2010 | 13/08/2010 | 13/08/2010 | 13/08/2010 | 763m | West |
| I131 | House | Item - General | Local | Albury Local Environmental Plan 2010 | 13/08/2010 | 13/08/2010 | 13/08/2010 | 763m | West |
| I180 | House | Item - General | Local | Albury Local Environmental Plan 2010 | 13/08/2010 | 13/08/2010 | 13/08/2010 | 773m | West |
| I134 | Corner Store | Item - General | Local | Albury Local Environmental Plan 2010 | 13/08/2010 | 13/08/2010 | 13/08/2010 | 791m | West |
| I140 | House | Item - General | Local | Albury Local Environmental Plan 2010 | 13/08/2010 | 13/08/2010 | 13/08/2010 | 801m | South West |
| I133 | House | Item - General | Local | Albury Local Environmental Plan 2010 | 13/08/2010 | 13/08/2010 | 13/08/2010 | 801m | West |
| I135 | Houses | Item - General | Local | Albury Local Environmental Plan 2010 | 13/08/2010 | 13/08/2010 | 13/08/2010 | 839m | West |
| I136 | House | Item - General | Local | Albury Local Environmental Plan 2010 | 13/08/2010 | 13/08/2010 | 13/08/2010 | 845m | West |
| C9 | Kenilworth Street Conservation Area | Conservation Area - General | Local | Albury Local Environmental Plan 2010 | 13/08/2010 | 13/08/2010 | 13/08/2010 | 858m | South West |
| I139 | House | Item - General | Local | Albury Local Environmental Plan 2010 | 13/08/2010 | 13/08/2010 | 13/08/2010 | 858m | South West |
| I74 | Houses | Item - General | Local | Albury Local Environmental Plan 2010 | 13/08/2010 | 13/08/2010 | 13/08/2010 | 872m | South West |
| C13 | Railway Conservation Area | Conservation Area - General | Local | Albury Local Environmental Plan 2010 | 13/08/2010 | 13/08/2010 | 13/08/2010 | 914m | West |
| I334 | Remnant Box Gum Woodland | Item - General | Local | Albury Local Environmental Plan 2010 | 13/08/2010 | 13/08/2010 | 13/08/2010 | 954m | North West |
| I213 | Bunge Flour Mill | Item - General | Local | Albury Local Environmental Plan 2010 | 13/08/2010 | 13/08/2010 | 13/08/2010 | 993m | West |

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# Natural Hazards - Bush Fire Prone Land

**201 Borella Road, Albury, NSW 2640**




Data Sources: Bush Fire Prone Land: © NSW Rural Fire Service 2023. Property Boundaries: © Department Finance, Services & Innovation 2023

Coordinate System: GDA 1994 MGA Zone 56

Date: 29 September 2023

# Natural Hazards

**201 Borella Road, Albury, NSW 2640**

## Bush Fire Prone Land

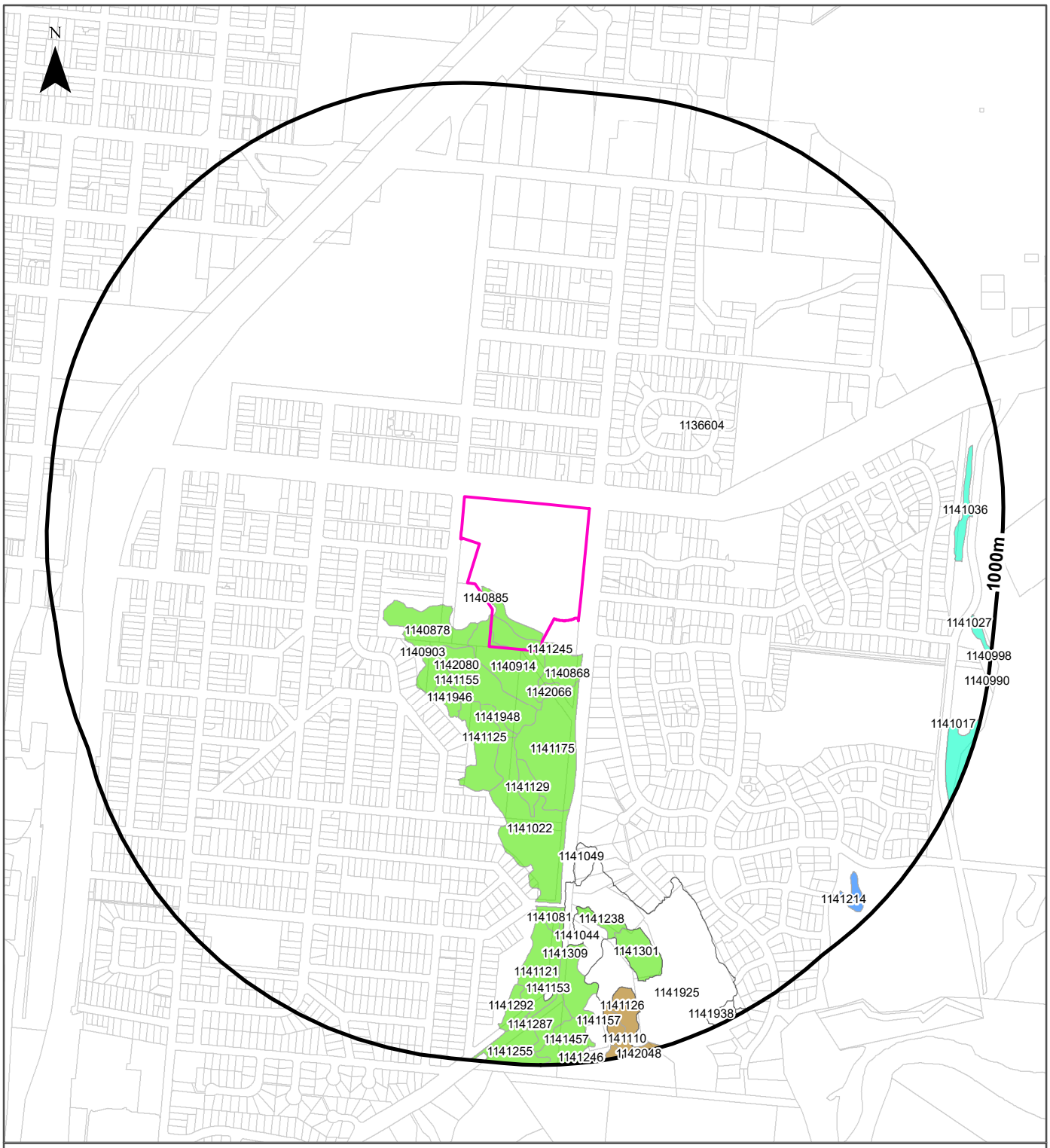
What are the nearest Bush Fire Prone Land Categories that exist within the dataset buffer?

| Bush Fire Prone Land Category | Distance | Direction |
|---|---|---|
| Vegetation Category 1 | 0m | On-site |
| Vegetation Category 2 | 0m | On-site |
| Vegetation Buffer | 0m | On-site |
| Vegetation Category 3 | 488m | South |

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

# Ecological Constraints - Vegetation & Ramsar Wetlands

**201 Borella Road, Albury, NSW 2640**




- Site Boundary
- ReportBuffer
- Property Boundary
- Ramsar Wetland

**Native Vegetation**

- Alpine Complex
- Arid Shrublands (Acacia sub-formation)
- Arid Shrublands (Chenopod sub-formation)
- Dry Sclerophyll Forests (Shrub/grass sub-formation)
- Dry Sclerophyll Forests (Shrubby sub-formation)
- Forested Wetlands
- Freshwater Wetlands
- Grasslands
- Grassy Woodlands
- Heathlands
- Rainforests
- Saline Wetlands
- Semi-arid Woodlands (Grassy sub-formation)
- Semi-arid Woodlands (Shrubby sub-formation)
- Wet Sclerophyll Forests (Grassy sub-formation)
- Wet Sclerophyll Forests (Shrubby sub-formation)
- Non vegetated
- Unattributed
- Not classified
- Other

Scale: 0 100 200 400 600 Meters

Data Sources: Property Boundaries & Topographic Data: © Department Finance, Services & Innovation 2023

Coordinate System: GDA 1994 MGA Zone 56

Date: 29 September 2023

# Ecological Constraints

**201 Borella Road, Albury, NSW 2640**

## Native Vegetation

What native vegetation exists within the dataset buffer?

| Map ID | Vegetation Formation | Plant Community Type and Vegetation Formation | Vegetation Class | Dist | Dir |
|---|---|---|---|---|---|
| 1136604 | Not classified | (Not classified) Not classified | Not classified | 0m | On-site |
| 1140885 | Dry Sclerophyll Forests (Shrub/grass sub-formation) | (Dry Sclerophyll Forests (Shrub/grass sub-formation)) White Box - Blakelys Red Gum - Red Box - Red Stringybark shrubby woodland on shallow soils on metamorphic hills in the Albury region of the NSW South Western Slopes Bioregion | Upper Riverina Dry Sclerophyll Forests | 0m | On-site |
| 1140914 | Dry Sclerophyll Forests (Shrub/grass sub-formation) | (Dry Sclerophyll Forests (Shrub/grass sub-formation)) White Box - Blakelys Red Gum - Red Box - Red Stringybark shrubby woodland on shallow soils on metamorphic hills in the Albury region of the NSW South Western Slopes Bioregion | Upper Riverina Dry Sclerophyll Forests | 0m | On-site |
| 1141245 | Dry Sclerophyll Forests (Shrub/grass sub-formation) | (Dry Sclerophyll Forests (Shrub/grass sub-formation)) Red Stringybark - Red Box - Long-leaved Box - Inland Scribbly Gum tussock grass - shrub low open forest on hills in the southern part of the NSW South Western Slopes Bioregion | Upper Riverina Dry Sclerophyll Forests | 0m | On-site |
| 1140868 | Dry Sclerophyll Forests (Shrub/grass sub-formation) | (Dry Sclerophyll Forests (Shrub/grass sub-formation)) White Box - Blakelys Red Gum - Red Box - Red Stringybark shrubby woodland on shallow soils on metamorphic hills in the Albury region of the NSW South Western Slopes Bioregion | Upper Riverina Dry Sclerophyll Forests | 6m | South |
| 1140878 | Dry Sclerophyll Forests (Shrub/grass sub-formation) | (Dry Sclerophyll Forests (Shrub/grass sub-formation)) White Box - Blakelys Red Gum - Red Box - Red Stringybark shrubby woodland on shallow soils on metamorphic hills in the Albury region of the NSW South Western Slopes Bioregion | Upper Riverina Dry Sclerophyll Forests | 33m | South West |
| 1142080 | Dry Sclerophyll Forests (Shrub/grass sub-formation) | (Dry Sclerophyll Forests (Shrub/grass sub-formation)) Red Stringybark - Red Box - Long-leaved Box - Inland Scribbly Gum tussock grass - shrub low open forest on hills in the southern part of the NSW South Western Slopes Bioregion | Upper Riverina Dry Sclerophyll Forests | 37m | South |
| 1142066 | Dry Sclerophyll Forests (Shrub/grass sub-formation) | (Dry Sclerophyll Forests (Shrub/grass sub-formation)) Red Stringybark - Red Box - Long-leaved Box - Inland Scribbly Gum tussock grass - shrub low open forest on hills in the southern part of the NSW South Western Slopes Bioregion | Upper Riverina Dry Sclerophyll Forests | 75m | South |
| 1141155 | Dry Sclerophyll Forests (Shrub/grass sub-formation) | (Dry Sclerophyll Forests (Shrub/grass sub-formation)) Red Stringybark - Red Box - Long-leaved Box - Inland Scribbly Gum tussock grass - shrub low open forest on hills in the southern part of the NSW South Western Slopes Bioregion | Upper Riverina Dry Sclerophyll Forests | 93m | South West |
| 1141175 | Dry Sclerophyll Forests (Shrub/grass sub-formation) | (Dry Sclerophyll Forests (Shrub/grass sub-formation)) Red Stringybark - Red Box - Long-leaved Box - Inland Scribbly Gum tussock grass - shrub low open forest on hills in the southern part of the NSW South Western Slopes Bioregion | Upper Riverina Dry Sclerophyll Forests | 96m | South |
| 1140903 | Dry Sclerophyll Forests (Shrub/grass sub-formation) | (Dry Sclerophyll Forests (Shrub/grass sub-formation)) White Box - Blakelys Red Gum - Red Box - Red Stringybark shrubby woodland on shallow soils on metamorphic hills in the Albury region of the NSW South Western Slopes Bioregion | Upper Riverina Dry Sclerophyll Forests | 109m | South West |
| 1141946 | Dry Sclerophyll Forests (Shrub/grass sub-formation) | (Dry Sclerophyll Forests (Shrub/grass sub-formation)) White Box - Blakelys Red Gum - Red Box - Red Stringybark shrubby woodland on shallow soils on metamorphic hills in the Albury region of the NSW South Western Slopes Bioregion | Upper Riverina Dry Sclerophyll Forests | 122m | South West |
| 1141125 | Dry Sclerophyll Forests (Shrub/grass sub-formation) | (Dry Sclerophyll Forests (Shrub/grass sub-formation)) White Box - Blakelys Red Gum - Red Box - Red Stringybark shrubby woodland on shallow soils on metamorphic hills in the Albury region of the NSW South Western Slopes Bioregion | Upper Riverina Dry Sclerophyll Forests | 124m | South |

| Map ID | Vegetation Formation | Plant Community Type and Vegetation Formation | Vegetation Class | Dist | Dir |
|---|---|---|---|---|---|
| 1141948 | Dry Sclerophyll Forests (Shrub/grass sub-formation) | (Dry Sclerophyll Forests (Shrub/grass sub-formation)) White Box - Blakelys Red Gum - Red Box - Red Stringybark shrubby woodland on shallow soils on metamorphic hills in the Albury region of the NSW South Western Slopes Bioregion | Upper Riverina Dry Sclerophyll Forests | 138m | South |
| 1141022 | Dry Sclerophyll Forests (Shrub/grass sub-formation) | (Dry Sclerophyll Forests (Shrub/grass sub-formation)) White Box - Blakelys Red Gum - Red Box - Red Stringybark shrubby woodland on shallow soils on metamorphic hills in the Albury region of the NSW South Western Slopes Bioregion | Upper Riverina Dry Sclerophyll Forests | 214m | South |
| 1141129 | Dry Sclerophyll Forests (Shrub/grass sub-formation) | (Dry Sclerophyll Forests (Shrub/grass sub-formation)) White Box - Blakelys Red Gum - Red Box - Red Stringybark shrubby woodland on shallow soils on metamorphic hills in the Albury region of the NSW South Western Slopes Bioregion | Upper Riverina Dry Sclerophyll Forests | 265m | South |
| 1141049 | Not classified | (Not classified) Not classified | Not classified | 472m | South |
| 1141925 | Not classified | (Not classified) Not classified | Not classified | 519m | South |
| 1141081 | Dry Sclerophyll Forests (Shrub/grass sub-formation) | (Dry Sclerophyll Forests (Shrub/grass sub-formation)) White Box - Blakelys Red Gum - Red Box - Red Stringybark shrubby woodland on shallow soils on metamorphic hills in the Albury region of the NSW South Western Slopes Bioregion | Upper Riverina Dry Sclerophyll Forests | 615m | South |
| 1141121 | Dry Sclerophyll Forests (Shrub/grass sub-formation) | (Dry Sclerophyll Forests (Shrub/grass sub-formation)) White Box - Blakelys Red Gum - Red Box - Red Stringybark shrubby woodland on shallow soils on metamorphic hills in the Albury region of the NSW South Western Slopes Bioregion | Upper Riverina Dry Sclerophyll Forests | 621m | South |
| 1141238 | Dry Sclerophyll Forests (Shrub/grass sub-formation) | (Dry Sclerophyll Forests (Shrub/grass sub-formation)) White Box - Blakelys Red Gum - Red Box - Red Stringybark shrubby woodland on shallow soils on metamorphic hills in the Albury region of the NSW South Western Slopes Bioregion | Upper Riverina Dry Sclerophyll Forests | 623m | South |
| 1141044 | Not classified | (Not classified) Not classified | Not classified | 639m | South |
| 1141301 | Dry Sclerophyll Forests (Shrub/grass sub-formation) | (Dry Sclerophyll Forests (Shrub/grass sub-formation)) White Box - Blakelys Red Gum - Red Box - Red Stringybark shrubby woodland on shallow soils on metamorphic hills in the Albury region of the NSW South Western Slopes Bioregion | Upper Riverina Dry Sclerophyll Forests | 698m | South |
| 1141309 | Dry Sclerophyll Forests (Shrub/grass sub-formation) | (Dry Sclerophyll Forests (Shrub/grass sub-formation)) White Box - Blakelys Red Gum - Red Box - Red Stringybark shrubby woodland on shallow soils on metamorphic hills in the Albury region of the NSW South Western Slopes Bioregion | Upper Riverina Dry Sclerophyll Forests | 712m | South |
| 1141292 | Dry Sclerophyll Forests (Shrub/grass sub-formation) | (Dry Sclerophyll Forests (Shrub/grass sub-formation)) White Box - Blakelys Red Gum - Red Box - Red Stringybark shrubby woodland on shallow soils on metamorphic hills in the Albury region of the NSW South Western Slopes Bioregion | Upper Riverina Dry Sclerophyll Forests | 806m | South |
| 1141153 | Not classified | (Not classified) Not classified | Not classified | 808m | South |
| 1141287 | Dry Sclerophyll Forests (Shrub/grass sub-formation) | (Dry Sclerophyll Forests (Shrub/grass sub-formation)) White Box - Blakelys Red Gum - Red Box - Red Stringybark shrubby woodland on shallow soils on metamorphic hills in the Albury region of the NSW South Western Slopes Bioregion | Upper Riverina Dry Sclerophyll Forests | 824m | South |
| 1141126 | Grassy Woodlands | (Grassy Woodlands) White Box grassy woodland in the upper slopes sub-region of the NSW South Western Slopes Bioregion | Western Slopes Grassy Woodlands | 834m | South |
| 1141157 | Not classified | (Not classified) Not classified | Not classified | 837m | South |
| 114111C | Grassy Woodlands | (Grassy Woodlands) White Box grassy woodland in the upper slopes sub-region of the NSW South Western Slopes Bioregion | Western Slopes Grassy Woodlands | 875m | South |
| 1141036 | Forested Wetlands | (Forested Wetlands) River Red Gum herbaceous-grassy very tall open forest wetland on inner floodplains in the lower slopes sub-region of the NSW South Western Slopes Bioregion and the eastern Riverina Bioregion. | Inland Riverine Forests | 882m | East |
| 1141255 | Dry Sclerophyll Forests (Shrub/grass sub-formation) | (Dry Sclerophyll Forests (Shrub/grass sub-formation)) White Box - Blakelys Red Gum - Red Box - Red Stringybark shrubby woodland on shallow soils on metamorphic hills in the Albury region of the NSW South Western Slopes Bioregion | Upper Riverina Dry Sclerophyll Forests | 884m | South |

| Map ID | Vegetation Formation | Plant Community Type and Vegetation Formation | Vegetation Class | Dist | Dir |
|---|---|---|---|---|---|
| 1141457 | Dry Sclerophyll Forests (Shrub/grass sub-formation) | (Dry Sclerophyll Forests (Shrub/grass sub-formation)) White Box - Blakelys Red Gum - Red Box - Red Stringybark shrubby woodland on shallow soils on metamorphic hills in the Albury region of the NSW South Western Slopes Bioregion | Upper Riverina Dry Sclerophyll Forests | 887m | South |
| 1141214 | Freshwater Wetlands | (Freshwater Wetlands) Tussock grass - sedgeland fen - rushland - reedland wetland in impeded creeks in valleys in the upper slopes sub-region of the NSW South Western Slopes Bioregion | Inland Floodplain Swamps | 898m | South East |
| 1141017 | Forested Wetlands | (Forested Wetlands) River Red Gum herbaceous-grassy very tall open forest wetland on inner floodplains in the lower slopes sub-region of the NSW South Western Slopes Bioregion and the eastern Riverina Bioregion. | Inland Riverine Forests | 927m | South East |
| 1141027 | Forested Wetlands | (Forested Wetlands) River Red Gum herbaceous-grassy very tall open forest wetland on inner floodplains in the lower slopes sub-region of the NSW South Western Slopes Bioregion and the eastern Riverina Bioregion. | Inland Riverine Forests | 935m | East |
| 1141938 | Not classified | (Not classified) Not classified | Not classified | 957m | South East |
| 1141200 | Grassy Woodlands | (Grassy Woodlands) White Box grassy woodland in the upper slopes sub-region of the NSW South Western Slopes Bioregion | Western Slopes Grassy Woodlands | 966m | South |
| 1141246 | Dry Sclerophyll Forests (Shrub/grass sub-formation) | (Dry Sclerophyll Forests (Shrub/grass sub-formation)) White Box - Blakelys Red Gum - Red Box - Red Stringybark shrubby woodland on shallow soils on metamorphic hills in the Albury region of the NSW South Western Slopes Bioregion | Upper Riverina Dry Sclerophyll Forests | 976m | South |
| 1142048 | Grassy Woodlands | (Grassy Woodlands) White Box grassy woodland in the upper slopes sub-region of the NSW South Western Slopes Bioregion | Western Slopes Grassy Woodlands | 979m | South |
| 1140998 | Forested Wetlands | (Forested Wetlands) River Red Gum herbaceous-grassy very tall open forest wetland on inner floodplains in the lower slopes sub-region of the NSW South Western Slopes Bioregion and the eastern Riverina Bioregion. | Inland Riverine Forests | 987m | East |
| 1140990 | Forested Wetlands | (Forested Wetlands) River Red Gum herbaceous-grassy very tall open forest wetland on inner floodplains in the lower slopes sub-region of the NSW South Western Slopes Bioregion and the eastern Riverina Bioregion. | Inland Riverine Forests | 994m | East |
| 1141282 | Dry Sclerophyll Forests (Shrub/grass sub-formation) | (Dry Sclerophyll Forests (Shrub/grass sub-formation)) White Box - Blakelys Red Gum - Red Box - Red Stringybark shrubby woodland on shallow soils on metamorphic hills in the Albury region of the NSW South Western Slopes Bioregion | Upper Riverina Dry Sclerophyll Forests | 996m | South |

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

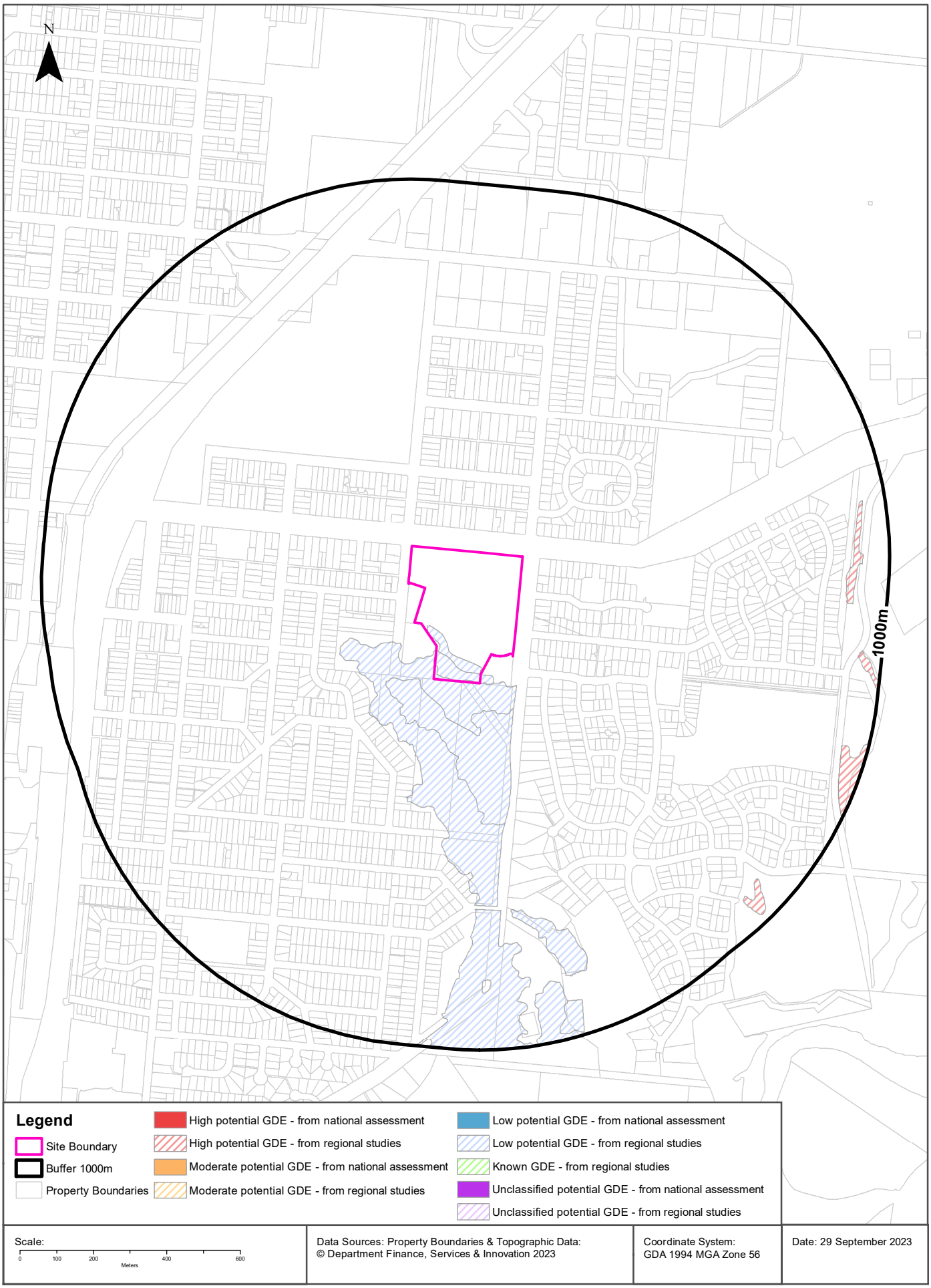
What Ramsar Wetland areas exist within the dataset buffer?

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

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

# Ecological Constraints - Groundwater Dependent Ecosystems Atlas

**201 Borella Road, Albury, NSW 2640**



# Ecological Constraints

**201 Borella Road, Albury, NSW 2640**

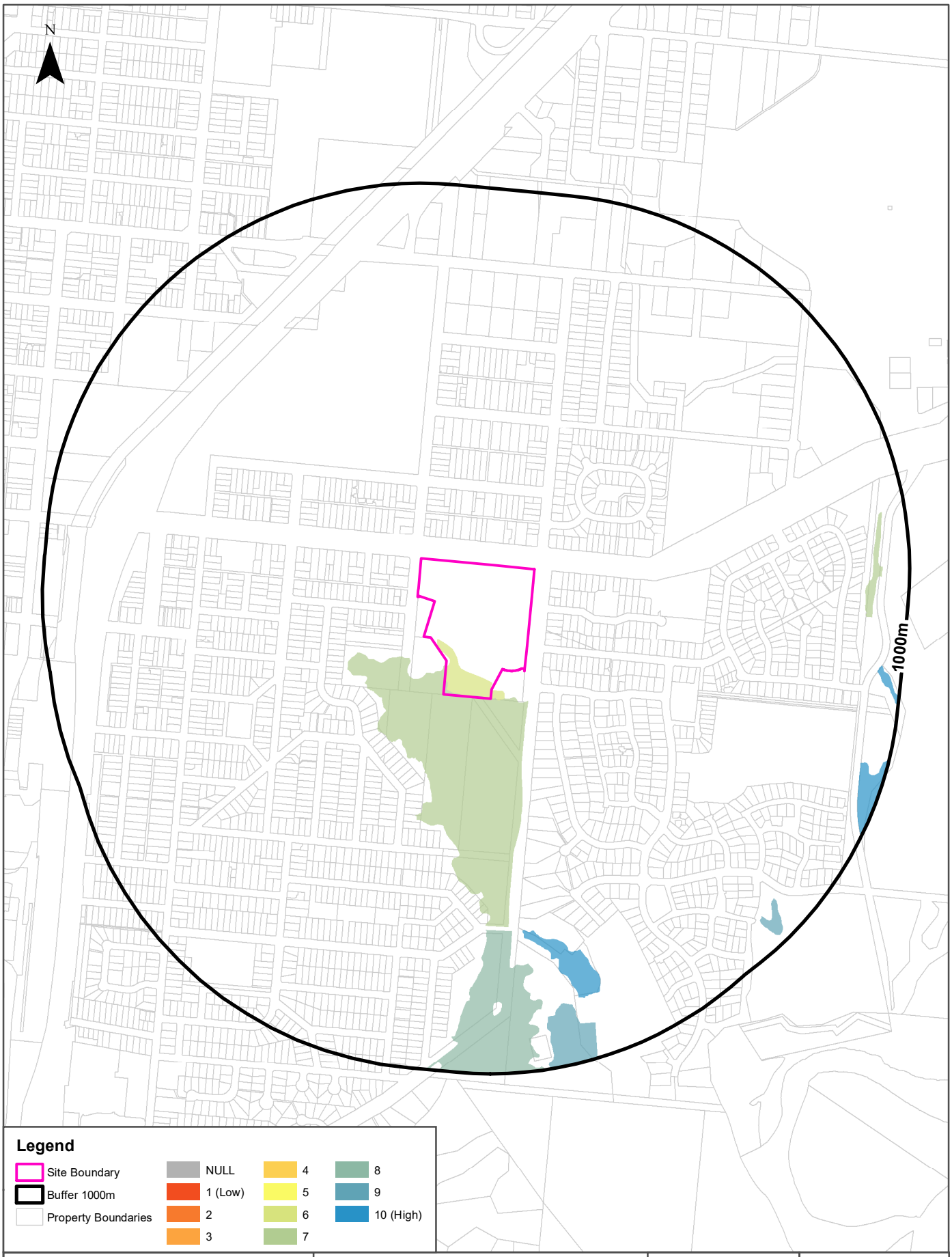
## Groundwater Dependent Ecosystems Atlas

| Type | GDE Potential | Geomorphology | Ecosystem Type | Aquifer Geology | Distance | Direction |
|---|---|---|---|---|---|---|
| Terrestrial | Low potential GDE - from regional studies | Dissected high plateaus on various resistant rocks, with isolated high plains. | Vegetation | | 0m | On-site |
| Terrestrial | Low potential GDE - from regional studies | Ridges and minor tablelands stepping down westwards and breaking into detached hills with intervening alluvial valley floors. Some strong structural control on landforms. | Vegetation | | 615m | South |
| Terrestrial | High potential GDE - from regional studies | Dissected high plateaus on various resistant rocks, with isolated high plains. | Vegetation | | 882m | East |

Groundwater Dependent Ecosystems Atlas Data Source: The Bureau of Meteorology
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# Ecological Constraints - Inflow Dependent Ecosystems Likelihood

201 Borella Road, Albury, NSW 2640



# Ecological Constraints

**201 Borella Road, Albury, NSW 2640**

## Inflow Dependent Ecosystems Likelihood

| Type | IDE Likelihood | Geomorphology | Ecosystem Type | Aquifer Geology | Distance | Direction |
|---|---|---|---|---|---|---|
| Terrestrial | 6 | Dissected high plateaus on various resistant rocks, with isolated high plains. | Vegetation | | 0m | On-site |
| Terrestrial | 7 | Dissected high plateaus on various resistant rocks, with isolated high plains. | Vegetation | | 0m | On-site |
| Terrestrial | 8 | Ridges and minor tablelands stepping down westwards and breaking into detached hills with intervening alluvial valley floors. Some strong structural control on landforms. | Vegetation | | 615m | South |
| Terrestrial | 10 | Dissected high plateaus on various resistant rocks, with isolated high plains. | Vegetation | | 623m | South |
| Terrestrial | 9 | Ridges and minor tablelands stepping down westwards and breaking into detached hills with intervening alluvial valley floors. Some strong structural control on landforms. | Vegetation | | 834m | South |
| Terrestrial | 9 | Dissected high plateaus on various resistant rocks, with isolated high plains. | Vegetation | | 898m | South East |

Inflow Dependent Ecosystems Likelihood Data Source: The Bureau of Meteorology

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# Ecological Constraints

**201 Borella Road, Albury, NSW 2640**

## NSW BioNet Atlas

Species on the NSW BioNet Atlas that have a NSW or federal conservation status, a NSW sensitivity status, or are listed under a migratory species agreement, and are within 10km of the site?

| Kingdom | Class | Scientific | Common | NSW Conservation Status | NSW Sensitivity Class | Federal Conservation Status | Migratory Species Agreements |
|---|---|---|---|---|---|---|---|
| Animalia | Amphibia | Crinia sloanei | Sloane's Froglet | Endangered | Not Sensitive | Endangered | |
| Animalia | Amphibia | Heleioporus australiacus | Giant Burrowing Frog | Vulnerable | Not Sensitive | Vulnerable | |
| Animalia | Amphibia | Litoria raniformis | Southern Bell Frog | Endangered | Not Sensitive | Vulnerable | |
| Animalia | Aves | Anseranas semipalmata | Magpie Goose | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Aves | Anthochaera phrygia | Regent Honeyeater | Critically Endangered | Category 2 | Critically Endangered | |
| Animalia | Aves | Apus pacificus | Fork-tailed Swift | Not Listed | Not Sensitive | Not Listed | ROKAMBA;CAMBA; JAMBA |
| Animalia | Aves | Artamus cyanopterus cyanopterus | Dusky Woodswallow | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Aves | Botaurus poiciloptilus | Australasian Bittern | Endangered | Not Sensitive | Endangered | |
| Animalia | Aves | Burhinus grallarius | Bush Stone-curlew | Endangered | Not Sensitive | Not Listed | |
| Animalia | Aves | Calidris acuminata | Sharp-tailed Sandpiper | Not Listed | Not Sensitive | Not Listed | ROKAMBA;CAMBA; JAMBA |
| Animalia | Aves | Callocephalon fimbriatum | Gang-gang Cockatoo | Vulnerable | Category 3 | Endangered | |
| Animalia | Aves | Certhionyx variegatus | Pied Honeyeater | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Aves | Chthonicola sagittata | Speckled Warbler | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Aves | Circus assimilis | Spotted Harrier | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Aves | Climacteris picumnus victoriae | Brown Treecreeper (eastern subspecies) | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Aves | Daphoenositta chrysoptera | Varied Sittella | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Aves | Falco subniger | Black Falcon | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Aves | Gallinago hardwickii | Latham's Snipe | Not Listed | Not Sensitive | Not Listed | ROKAMBA;JAMBA |
| Animalia | Aves | Glossopsitta porphyrocephala | Purple-crowned Lorikeet | Vulnerable | Category 3 | Not Listed | |
| Animalia | Aves | Glossopsitta pusilla | Little Lorikeet | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Aves | Grantiella picta | Painted Honeyeater | Vulnerable | Not Sensitive | Vulnerable | |
| Animalia | Aves | Grus rubicunda | Brolga | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Aves | Haliaeetus leucogaster | White-bellied Sea-Eagle | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Aves | Hieraaetus morphnoides | Little Eagle | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Aves | Hirundapus caudacutus | White-throated Needletail | Not Listed | Not Sensitive | Vulnerable | ROKAMBA;CAMBA; JAMBA |
| Animalia | Aves | Hydroprogne caspia | Caspian Tern | Not Listed | Not Sensitive | Not Listed | JAMBA |
| Animalia | Aves | Lathamus discolor | Swift Parrot | Endangered | Not Sensitive | Critically Endangered | |

| Kingdom | Class | Scientific | Common | NSW Conservation Status | NSW Sensitivity Class | Federal Conservation Status | Migratory Species Agreements |
|---|---|---|---|---|---|---|---|
| Animalia | Aves | Melanodryas cucullata cucullata | Hooded Robin (south-eastern form) | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Aves | Melithreptus gularis gularis | Black-chinned Honeyeater (eastern subspecies) | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Aves | Neophema chrysostoma | Blue-winged Parrot | Vulnerable | Not Sensitive | Vulnerable | |
| Animalia | Aves | Neophema pulchella | Turquoise Parrot | Vulnerable | Category 3 | Not Listed | |
| Animalia | Aves | Ninox connivens | Barking Owl | Vulnerable | Category 3 | Not Listed | |
| Animalia | Aves | Oxyura australis | Blue-billed Duck | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Aves | Petroica boodang | Scarlet Robin | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Aves | Petroica phoenicea | Flame Robin | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Aves | Polytelis swainsonii | Superb Parrot | Vulnerable | Category 3 | Vulnerable | |
| Animalia | Aves | Pomatostomus temporalis temporalis | Grey-crowned Babbler (eastern subspecies) | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Aves | Stagonopleura guttata | Diamond Firetail | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Aves | Stictonetta naevosa | Freckled Duck | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Aves | Tringa glareola | Wood Sandpiper | Not Listed | Not Sensitive | Not Listed | ROKAMBA;CAMBA; JAMBA |
| Animalia | Aves | Tringa stagnatilis | Marsh Sandpiper | Not Listed | Not Sensitive | Not Listed | ROKAMBA;CAMBA; JAMBA |
| Animalia | Mammalia | Dasyurus maculatus | Spotted-tailed Quoll | Vulnerable | Not Sensitive | Endangered | |
| Animalia | Mammalia | Falsistrellus tasmaniensis | Eastern False Pipistrelle | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Mammalia | Petaurus norfolcensis | Squirrel Glider | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Mammalia | Phascolarctos cinereus | Koala | Endangered | Not Sensitive | Endangered | |
| Animalia | Mammalia | Pteropus poliocephalus | Grey-headed Flying-fox | Vulnerable | Not Sensitive | Vulnerable | |
| Animalia | Mammalia | Saccolaimus flaviventris | Yellow-bellied Sheathtail-bat | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Reptilia | Aprasia parapulchella | Pink-tailed Legless Lizard | Vulnerable | Not Sensitive | Vulnerable | |
| Plantae | Flora | Amphibromus fluitans | Floating Swamp Wallaby-grass | Vulnerable | Not Sensitive | Vulnerable | |
| Plantae | Flora | Caladenia concolor | Crimson Spider Orchid | Endangered | Category 2 | Vulnerable | |
| Plantae | Flora | Caladenia rosella | Rosella Spider Orchid | Presumed Extinct | Category 2 | Endangered | |
| Plantae | Flora | Leucochrysum albicans subsp. tricolor | Hoary Sunray | Endangered | Not Sensitive | Endangered | |
| Plantae | Flora | Pilularia novae-hollandiae | Austral Pillwort | Endangered | Category 3 | Not Listed | |
| Plantae | Flora | Senecio garlandii | Woolly Ragwort | Vulnerable | Not Sensitive | Not Listed | |
| Plantae | Flora | Swainsona sericea | Silky Swainson-pea | Vulnerable | Not Sensitive | Not Listed | |

Data does not include NSW category 1 sensitive species.
NSW BioNet: © State of NSW and Office of Environment and Heritage

# Location Confidences

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

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

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# ADVANCE LEGAL SEARCHERS PTY LTD

(ACN 147 943 842)
ABN 82 147 943 842

18/36 Osborne Road,
Manly NSW 2095

Mobile: +61412 169 809
Email: search@alsearchers.com.au


16th January, 2025

**JONES ENVIRONMENTAL CONSULTING PTY LTD**
**497 Parnall Street,**
**LAVINGTON, NSW 2641**

**Attention: Patricia Jones,**

**RE:** **201 Borella Road,**
**East Albury**

## Current Search

Folio Identifier 14/1175382 (title attached)
DP 1175382 (plan attached)
Dated 15th January, 2025
Registered Proprietor:
**HEALTH ADMINISTRATION CORPORATION** *(ABN 45 100 538 161)*

# Title Tree
# Lot 14 DP 1175382

Folio Identifier 14/1175382

Folio Identifier 2/1076041

Folio Identifier 1153/820832

Crown Land

****

**Index**

T – Transfer
*(L) – Lease*

****

# Summary of Proprietor(s)
# Lot 14 DP 1175382

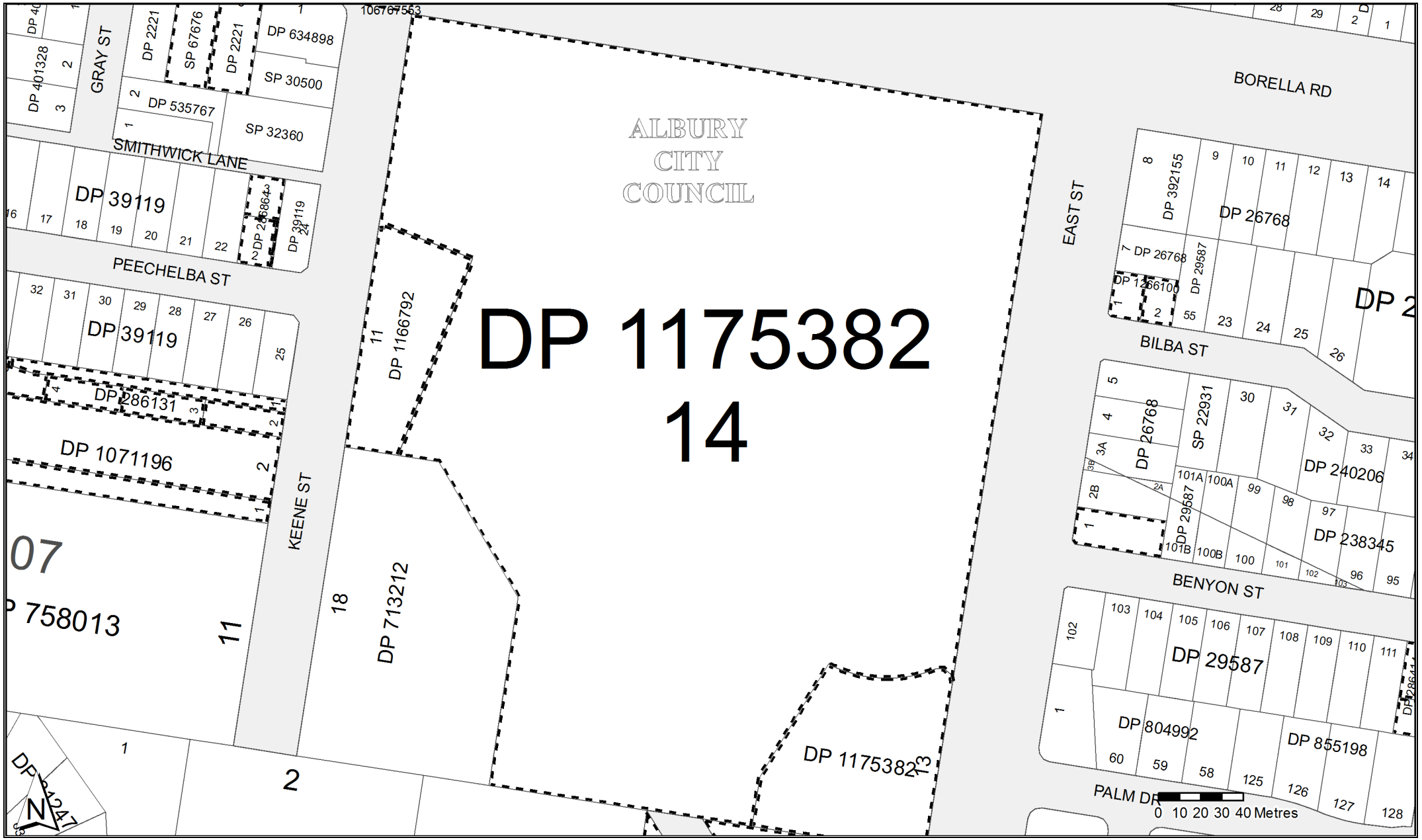
| Year | Proprietor(s) | |
|---|---|---|
| | **(Lot 14 DP 1175382)** | |
| 21 Mar 2013 – todate | Health Administration Corporation *(ABN 45 100 538 161)* | |
| *(13 May 2015 todate)* | *(lease to Secretary to the Department of Health & Human Services)* | *(L)* |
| *(13 May 2013 todate)* | *(various sub – leases shown on Folio Identifier 14/1175382 (attached))* | *(L)* |
| *(21 Mar 2013 todate)* | *(various leases and sub – leases shown on Historical Folio 14/1175382 (attached))* | *(L)* |
| | **(Lot 2 DP 1076041)** | |
| 21 Nov 2005 | Health Administration Corporation (*ABN 45 100 538 161)* | T |
| 10 Mar 2005 | University of New South Wales (*ABN 57 195 873 179)* | |
| | **(Lot 1153 DP 820832)** | |
| 05 Feb 1992 | University of New South Wales (*ABN 57 195 873 179)* | |
| *(05 Feb 1992 to 10 Mar 2005* | *(various leases and sub – leases shown on Historical Folio 1153 DP 820832 (attached))* | |
| | **(Portion 108 Parish Albury)** | |
| Prior to 05 Feb 1992) | Crown Land | |
| *(29 Nov 1991 to 05 Feb 1992)* | *(Appropriated and Vested to Health Administration Corporation vide Government Gazette 29 Nov 1991 Folio 10031)* | |
| *(24 Apr 1981 to 29 Nov 1991)* | *(Resumed by Albury Council for Water Supply Purposes vide Government Gazette 24 Apr 1981)* | |
| *25 Mar 1887 to 07 Dec 1979)* | *(Dedicated for Municipal Cattle Sales Yard vide Government Gazette 25 Mar 1887)* | |

****

# Cadastral Records Enquiry Report : Lot 14 DP 1175382

**Ref :** NOUSER

**Locality :** EAST ALBURY
**Parish :** ALBURY
**LGA :** ALBURY CITY
**County :** GOULBURN





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| | Status | Surv/Comp | Purpose |
|---|---|---|---|
| DP2221 | | | |
| Lot(s): 3 | | | |
| DP286979 | PRE-ALLOCATED | UNAVAILABLE | NEIGHBOURHOOD PLAN |
| DP26768 | | | |
| Lot(s): 1 | | | |
| CA95246 - LOT 1 DP26768 | | | |
| DP286131 | | | |
| Lot(s): 1, 2, 3, 4, 5 | | | |
| DP39119 | HISTORICAL | SURVEY | UNRESEARCHED |
| DP286414 | | | |
| Lot(s): 2, 3 | | | |
| DP29587 | HISTORICAL | SURVEY | UNRESEARCHED |
| DP286864 | | | |
| Lot(s): 1, 2, 3 | | | |
| DP39119 | HISTORICAL | SURVEY | UNRESEARCHED |
| DP1023464 | | | |
| Lot(s): 7011 | | | |
| NSW GAZ. 14-08-2009 Folio : 4782<br>ADDITION TO RESERVED CROWN LAND<br>RESERVE NO. 1011568 - LOT 7011 DP1023464 | | | |
| DP1071196 | | | |
| Lot(s): 1, 2 | | | |
| CA123866 - LOTS 1-2 DP1071196 | | | |
| DP1135051 | | | |
| Lot(s): 1 | | | |
| DP350522 | HISTORICAL | SURVEY | UNRESEARCHED |
| DP1166792 | | | |
| Lot(s): 11 | | | |
| DP820832 | HISTORICAL | SURVEY | SUBDIVISION |
| DP1076041 | HISTORICAL | SURVEY | SUBDIVISION |
| DP1175382 | | | |
| Lot(s): 13 | | | |
| DP1166792 | HISTORICAL | SURVEY | SUBDIVISION |
| Lot(s): 13, 14 | | | |
| DP820832 | HISTORICAL | SURVEY | SUBDIVISION |
| DP1076041 | HISTORICAL | SURVEY | SUBDIVISION |
| DP1266100 | | | |
| Lot(s): 1, 2 | | | |
| DP26768 | HISTORICAL | SURVEY | UNRESEARCHED |
| SP67676 | | | |
| DP2221 | HISTORICAL | COMPILATION | UNRESEARCHED |
| Road | | | |
| Polygon Id(s): 106767553 | | | |
| DP1278390 | REGISTERED | SURVEY | SURVEY INFORMATION ONLY |

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| Plan | Surv/Comp | Purpose |
|---|---|---|
| DP2221 | COMPILATION | UNRESEARCHED |
| DP26111 | SURVEY | UNRESEARCHED |
| DP26768 | SURVEY | UNRESEARCHED |
| DP29587 | SURVEY | UNRESEARCHED |
| DP31247 | SURVEY | UNRESEARCHED |
| DP39119 | SURVEY | UNRESEARCHED |
| DP215357 | SURVEY | SUBDIVISION |
| DP238345 | SURVEY | SUBDIVISION |
| DP240206 | SURVEY | SUBDIVISION |
| DP243192 | SURVEY | SUBDIVISION |
| DP286131 | SURVEY | NEIGHBOURHOOD PLAN |
| DP286414 | SURVEY | NEIGHBOURHOOD PLAN |
| DP286414 | UNRESEARCHED | NEIGHBOURHOOD PLAN |
| DP286864 | SURVEY | NEIGHBOURHOOD PLAN |
| DP286864 | UNRESEARCHED | NEIGHBOURHOOD PLAN |
| DP392155 | SURVEY | UNRESEARCHED |
| DP395495 | SURVEY | UNRESEARCHED |
| DP401327 | SURVEY | UNRESEARCHED |
| DP401328 | SURVEY | UNRESEARCHED |
| DP535767 | SURVEY | SUBDIVISION |
| DP628254 | SURVEY | SUBDIVISION |
| DP634898 | SURVEY | SUBDIVISION |
| DP713212 | SURVEY | OLD SYSTEM CONVERSION |
| DP758013 | COMPILATION | CROWN ADMIN NO. |
| DP804992 | SURVEY | OLD SYSTEM CONVERSION |
| DP855198 | SURVEY | SUBDIVISION |
| DP1023464 | COMPILATION | DEPARTMENTAL |
| DP1071196 | COMPILATION | DEPARTMENTAL |
| DP1135051 | COMPILATION | DEPARTMENTAL |
| DP1166792 | SURVEY | SUBDIVISION |
| DP1175382 | SURVEY | SUBDIVISION |
| DP1175382 | UNRESEARCHED | SUBDIVISION |
| DP1266100 | SURVEY | SUBDIVISION |
| SP22931 | COMPILATION | STRATA PLAN |
| SP30500 | COMPILATION | STRATA PLAN |
| SP32360 | COMPILATION | STRATA PLAN |
| SP67676 | COMPILATION | STRATA PLAN |

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Req:R642622 /Doc:DL AB926485 /Rev:23-Nov-2005 /NSW LRS /Pgs:ALL /Prt:15-Jan-2025 17:39 /Seq:1 of 1
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Form: 01T
Licence: 04-11-044
Licensee: Kemp Strang

# TRANSFER

New South Wales
Real Property Act 1900

AB926485F

PRIVACY NOTE: Section 31B of the Real Property Act 1900 (RP Act) authorises the required by this form for the establishment and maintenance of the Real Property Ac the Register is made available to any person for search upon payment of a fee, if any

**STAMP DUTY** Office of State Revenue use only

NEW SOUTH WALES DUTY
19-10-2005 0003032187-001
SECTION 275-TRANSFER
NO DUTY PAYABLE

**(A) TORRENS TITLE** If appropriate, specify the part transferred
Certificate of Title Folio Identifier 2/1076041

**(B) LODGED BY**

| Delivery Box | Name, Address or DX and Telephone | CODE |
|---|---|---|
| 48T | KS/JAE/UNSW<br>LLPN : 123819E<br>CITYLINK<br>Reference (optional): 437618_1.kj | T<br>TW<br>(Sheriff) |

**(C) TRANSFEROR** HEALTH ADMINISTRATION CORPORATION ABN 45 100 538 161

**(D) CONSIDERATION** The transferor acknowledges receipt of the consideration of $214,500.00 and as regards

**(E) ESTATE** the land specified above transfers to the transferee an estate in fee simple.

**(F) SHARE TRANSFERRED** WHOLE

**(G)** Encumbrances (if applicable): 1. 2. 3.

**(H) TRANSFEREE** UNIVERSITY OF NEW SOUTH WALES ABN 57 195 873 179

**(I) TENANCY:**

**DATE** 15/11/05.

(J) Certified correct for the purposes of the Real Property Act 1900 and executed on behalf of the corporation named below by the authorised person(s) whose signature(s) appear(s) below pursuant to the authority specified.
Corporation: Health Administration Corporation
Authority: Section 21(1) Heath Administration Act 1982
Signature of authorised person:
Name of authorised person:
Office held:

Witness
Stuart Gordon BALL
Senior Property Officer

**Signed by me ..... as delegate of the HEALTH ADMINISTRATION CORPORATION, pursuant to section 21 (1) Health Administration Act, 1982 and I hereby certify that I have no notice of the revocation of such delegation.**

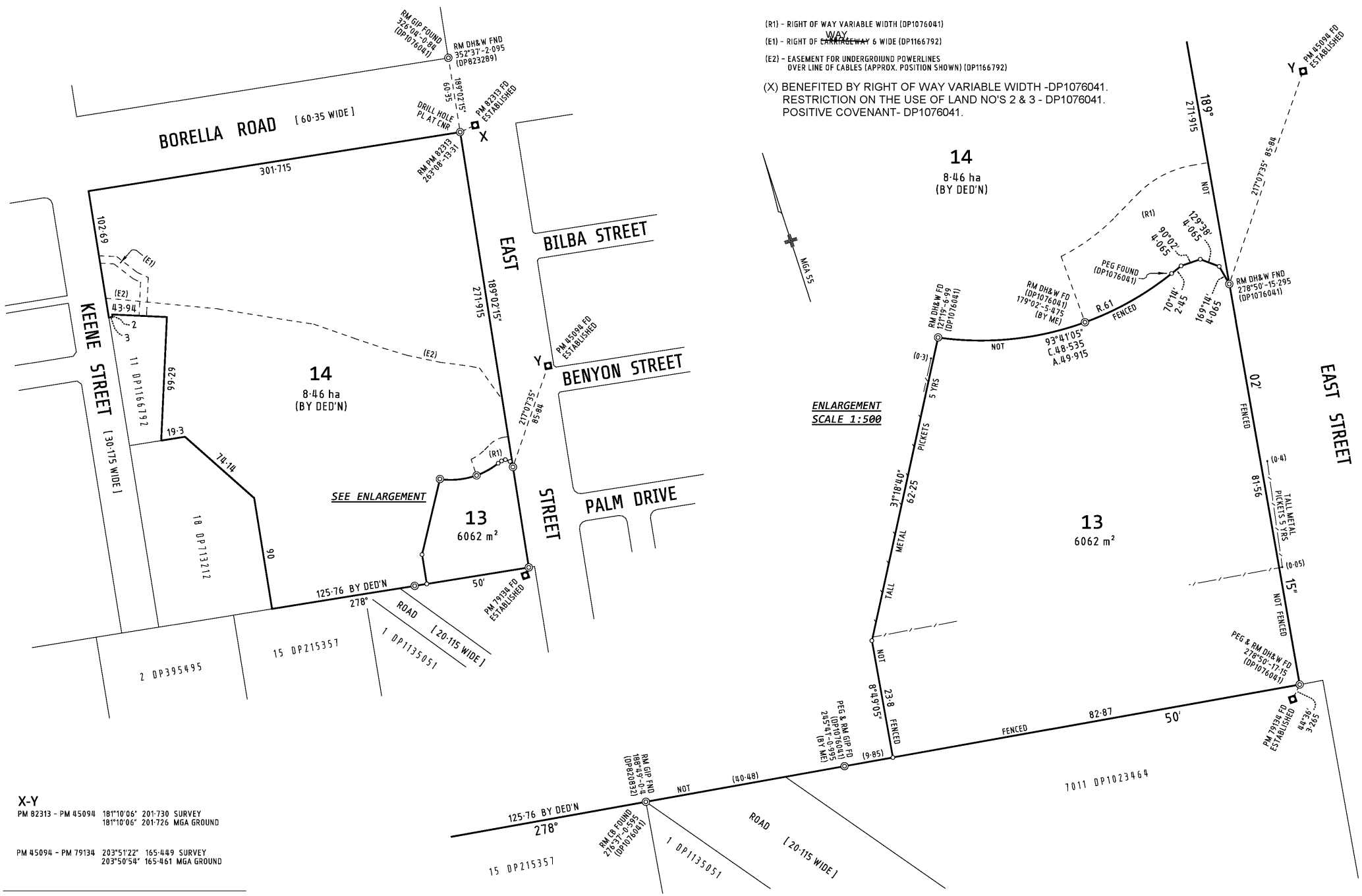
Signature of authorised person:
Name of authorised person: Dennis Jenner
Office held: Director Asset Management Implementation

Certified correct for the purposes of the Real Property Act 1900 by the person whose signature appears below.

Signature:
Signatory's name: James Andrew Eager
Signatory's capacity: Solicitor for the Transferee



ALL HANDWRITING MUST BE IN BLOCK CAPITALS




X-Y
PM 82313 - PM 45094 181°10'06" 201·730 SURVEY
181°10'06" 201·726 MGA GROUND

PM 45094 - PM 79134 203°51'22" 165·449 SURVEY
203°50'54" 165·461 MGA GROUND

SURVEYING AND SPATIAL INFORMATION REGULATION 2006: CL.61(2)

| MARK | MGA COORDINATES EAST | NORTH | ZONE | CL | ORD |
|---|---|---|---|---|---|
| PM 79134 | 494529·094 | 6007136·311 | 55 | C | 3 |
| PM 45094 | 494595·964 | 6007287·580 | 55 | B | 2 |
| PM 82313 | 494600·075 | 6007489·178 | 55 | B | 2 |

SOURCE: SCIMS 08/05/2012 COMBINED SCALE FACTOR 0·999572

0 10 20 30 40 50 TABLE OF MM 90 100 110 120 130 140 150

| | | | |
|---|---|---|---|
| Surveyor: Nicholas Ford<br>Date of Survey: 01/05/2012<br>Surveyor's Ref: 11373 | **PLAN OF SUBDIVISION OF LOT 2 IN DP1076041 AND LOT 12 IN DP1166792** | LGA: ALBURY CITY<br>Locality: EAST ALBURY<br>Subdivision No.: 4503<br>Lengths are in metres. Reduction Ratio 1:2000 | Registered:<br>21.3.2014 | DP1175382 |

Req:R642605 /Doc:DP 1175382 P /Rev:21-Mar-2014 /NSW LRS /Pgs:ALL /Prt:15-Jan-2025 17:34 /Seq:1 of 3
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Req:R642605 /Doc:DP 1175382 P /Rev:21-Mar-2014 /NSW LRS /Pgs:ALL /Prt:15-Jan-2025 17:34 /Seq:2 of 3
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PLAN FORM 6 **WARNING: Creasing or folding will lead to rejection** ePlan

# DEPOSITED PLAN ADMINISTRATION SHEET



Office Use Only

# DP1175382

Office Use Only

Registered: 21.3.2014

Title System: TORRENS

Purpose: SUBDIVISION

SIGNATURES, SEALS AND STATEMENTS of intention to dedicate public roads, public reserves and drainage reserves or create easements, restrictions on the use of land and positive covenants

**PURSUANT TO SECTION 88B OF THE CONVEYANCING ACT 1919 IT IS INTENDED TO CREATE:**

**1. POSITIVE COVENANT**

If space is insufficient use PLAN FORM 6A annexure sheet

## PLAN OF SUBDIVISION OF LOT 2 IN DP1076041 AND LOT 12 IN DP1166792

LGA: ALBURY CITY

Locality: EAST ALBURY

Parish: ALBURY

County: GOULBURN

## Crown Lands NSW/Western Lands Office Approval

I.....in approving this plan certify
(Authorised Officer)
that all necessary approvals in regard to the allocation of the land shown herein have been given

Signature: .....

Date: .....

File Number: .....

Office: .....

## Subdivision Certificate

I certify that the provisions of s.109J of the Environmental Planning and Assessment Act 1979 have been satisfied in relation to:

the proposed .....SUBDIVISION..... set out herein
(insert 'subdivision' or 'new road')

.....

* Authorised Person/~~*General Manager/*Accredited Certifier~~

Consent Authority: ALBURY CITY COUNCIL

Date of Endorsement: 2 AUGUST 2012

Accreditation no: .....

Subdivision Certificate no: 4503

File no: RF 12/01279

* Strike through inapplicable parts.

## Survey Certificate

I, ...Nicholas Ford.....

of WALPOLE SURVEYING, 418 WILSON ST, ALBURY, NSW 2640

a surveyor registered under the Surveying and Spatial Information Act 2002, certify that the survey represented in this plan is accurate, has been made in accordance with the Surveying and Spatial Information Regulation 2006 and was completed on: 01/05/2012

The survey relates to LOT 13 & PART 14

(specify the land actually surveyed or specify any land shown in the plan that is not the subject of the survey)

Signature .....Dated: 05/07/2013
Surveyor registered under the Surveying and Spatial Information Act 2002

Datum Line: ...X - Y.....

Type: URBAN

## Plans used in the preparation of survey/~~compilation~~

DP1076041
DP1166792

If space is insufficient use PLAN FORM 6A annexure sheet

*Surveyor's Reference:* 11373

Req:R642605 /Doc:DP 1175382 P /Rev:21-Mar-2014 /NSW LRS /Pgs:ALL /Prt:15-Jan-2025 17:34 /Seq:3 of 3
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PLAN FORM 6A **WARNING: Creasing or folding will lead to rejection** ePlan

## DEPOSITED PLAN ADMINISTRATION SHEET



# PLAN OF SUBDIVISION OF LOT 2 IN DP1076041 AND LOT 12 IN DP1166792

Office Use Only

# DP1175382

Office Use Only

**Registered:** 21.3.2014

Subdivision Certificate No.: 4503 Date of Endorsement: 2 AUGUST 2012

Signed by me..Dennis Tenner.....
as delegate of the HEALTH ADMINISTRATION CORPORATION, pursuant to section 21 (1) Health Administration Act 1982 and I hereby certify that I have no notice of the revocation of such delegation.

X .....

Executed by The University of New South Wales ABN 57 195 873 179 by its duly authorised Attorney who warrants that the Power of Attorney has not been revoked

*Surveyor's Reference:* 11373

NEW SOUTH WALES LAND REGISTRY SERVICES - HISTORICAL SEARCH

SEARCH DATE
15/1/2025 5:34PM

FOLIO: 2/1076041

First Title(s): 1153/820832
Prior Title(s): 1153/820832

| Recorded | Number | Type of Instrument | C.T. Issue |
|---|---|---|---|
| 10/3/2005 | DP1076041 | DEPOSITED PLAN | FOLIO CREATED EDITION 1 |
| 24/8/2005 | AB646545 | REQUEST | |
| 21/11/2005 | AB926485 | TRANSFER | EDITION 2 |
| 25/10/2012 | AH120091 | APPLICATION FOR REPLACEMENT CERTIFICATE OF TITLE | EDITION 3 |
| 21/3/2014 | DP1175382 | DEPOSITED PLAN | FOLIO CANCELLED |

*** END OF SEARCH ***

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NEW SOUTH WALES LAND REGISTRY SERVICES - HISTORICAL SEARCH

SEARCH DATE
15/1/2025 5:34PM

FOLIO: 14/1175382

First Title(s): 1153/820832
Prior Title(s): 2/1076041

| Recorded | Number | Type of Instrument | C.T. Issue |
|---|---|---|---|
| 21/3/2014 | DP1175382 | DEPOSITED PLAN | FOLIO CREATED EDITION 1 |
| 13/5/2015 | AJ470934 | LEASE | EDITION 2 |
| 11/12/2015 | AJ969410 | SUB-LEASE | |
| 5/8/2016 | AK602373 | SUB-LEASE | |
| 13/1/2017 | AM53353 | DEPARTMENTAL DEALING | |
| 10/2/2017 | AK767525 | SUB-LEASE | |
| 10/2/2017 | AK767526 | SUB-LEASE | |
| 10/2/2017 | AK767527 | SUB-LEASE | |
| 10/2/2017 | AK781715 | SUB-LEASE | |
| 10/2/2017 | AK781846 | SUB-LEASE | |
| 10/2/2017 | AM307 | SUB-LEASE | |
| 24/3/2017 | AM250362 | SUB-LEASE | |
| 3/12/2019 | AP697287 | SUB-LEASE | |
| 25/6/2022 | AS245338 | SUB-LEASE | EDITION 3 |
| 17/1/2023 | AS789090 | SUB-LEASE | |
| 17/1/2023 | AS789091 | SUB-LEASE | |
| 17/1/2023 | AS789092 | SUB-LEASE | |
| 17/1/2023 | AS789093 | SUB-LEASE | EDITION 4 |
| 19/2/2024 | AT805210 | WITHDRAWN - SUB-LEASE | |

*** END OF SEARCH ***

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NEW SOUTH WALES LAND REGISTRY SERVICES - HISTORICAL SEARCH

SEARCH DATE
15/1/2025 5:34PM

FOLIO: 1153/820832

First Title(s): 1153/820832
Prior Title(s): CROWN LAND

| Recorded | Number | Type of Instrument | C.T. Issue |
|---|---|---|---|
| 6/8/1991 | DP820832 | DEPOSITED PLAN | LOT RECORDED FOLIO NOT CREATED |
| 5/2/1992 | PA62916 | PRIMARY APPLICATION | FOLIO CREATED EDITION 1 |
| 17/2/1995 | O28496 | LEASE | EDITION 2 |
| 25/9/1995 | O557602 | LEASE | EDITION 3 |
| 24/11/1997 | 3605646 | TRANSFER OF LEASE | |
| 8/10/2002 | 8972417 | LEASE | EDITION 4 |
| 2/12/2003 | AA215017 | TRANSFER OF LEASE | |
| 10/3/2005 | DP1076041 | DEPOSITED PLAN | FOLIO CANCELLED |

*** END OF SEARCH ***

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NEW SOUTH WALES LAND REGISTRY SERVICES - TITLE SEARCH

FOLIO: 14/1175382

| SEARCH DATE | TIME | EDITION NO | DATE |
|---|---|---|---|
| 15/1/2025 | 5:34 PM | 4 | 17/1/2023 |

LAND

LOT 14 IN DEPOSITED PLAN 1175382
AT EAST ALBURY
LOCAL GOVERNMENT AREA ALBURY CITY
PARISH OF ALBURY COUNTY OF GOULBURN
TITLE DIAGRAM DP1175382

FIRST SCHEDULE

HEALTH ADMINISTRATION CORPORATION

SECOND SCHEDULE (5 NOTIFICATIONS)

1 LAND EXCLUDES MINERALS -SEE MEMORANDUM T447400
2 DP1076041 RIGHT OF WAY VARIABLE WIDTH AFFECTING THE PART(S) SHOWN SO BURDENED IN THE TITLE DIAGRAM
3 DP1166792 RIGHT OF WAY 6 METRE(S) WIDE AFFECTING THE PART(S) SHOWN SO BURDENED IN THE TITLE DIAGRAM
4 DP1166792 EASEMENT FOR UNDERGROUND POWERLINES OVER LINE OF CABLES AFFECTING THE PART(S) SHOWN SO BURDENED IN THE TITLE DIAGRAM
5 AJ470934 LEASE TO SECRETARY TO THE DEPARTMENT OF HEALTH & HUMAN SERVICES EXPIRES: 30/6/2035.
AJ969410 LEASE OF LEASE AJ470934 TO ALBURY WODONGA HEALTH EXPIRES: 29/6/2035.
AK602373 LEASE OF LEASE AJ969410 TO REGIONAL IMAGING PTY LTD OF PREMISES KNOWN AS THE RADIOLOGY SUITE IN THE ALBURY WODONGA HEALTH - ALBURY CAMPUS, BORELLA ROAD, ALBURY. EXPIRES: 30/6/2018.
AK767525 LEASE OF LEASE AJ969410 TO RAMSAY HEALTH CARE AUSTRALIA PTY LIMITED OF PREMISES KNOWN AS THE BORDER ONCOLOGY HOSPITAL BEING SUITE 2, LEVEL 2 AND ALL LEVEL 3, ALBURY WODONGA REGIONAL CANCER CENTRE, BORELLA ROAD, ALBURY. EXPIRES: 30/6/2026.
AK767527 LEASE OF LEASE AJ969410 TO GENESIS CANCER CARE VICTORIA PTY LIMITED OF PREMISES KNOWN AS THE GENESISCARE FACILITY, ALBURY WODONGA REGIONAL CANCER CENTRE, BORELLA ROAD, ALBURY. EXPIRES: 30/6/2026.
AM307 LEASE OF LEASE AJ969410 TO SPECIALIST DIAGNOSTIC SERVICES PTY LTD OF PREMISES KNOWN AS PATHOLOGY COLLECTION CENTRE, ALBURY WODONGA

END OF PAGE 1 - CONTINUED OVER

SECOND SCHEDULE (5 NOTIFICATIONS) (CONTINUED)
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| | |
|---|---|
| | REGIONAL CANCER CENTRE, BORELLA ROAD, ALBURY. EXPIRES: 28/11/2020. |
| AM250362 | LEASE OF LEASE AJ969410 TO GOULBURN VALLEY HEALTH EXPIRES: 6/10/2017. OF PREMISES KNOWN AS THE HUME RICS UNIT, ALBURY WODONGA REGIONAL CANCER CENTRE, BORELLA ROAD, ALBURY, NSW |
| AP697287 | LEASE OF LEASE AJ470934 TO SPECIALIST DIAGNOSTIC SERVICES PTY LTD OF PREMISES KNOWN AS "THE PATHOLOGY DEPARTMENT", ALBURY CAMPUS, ALBURY WODONGA HEALTH, BORELLA ROAD, ALBURY. EXPIRES: 29/2/2024. |
| AS245338 | LEASE OF LEASE AJ470934 TO RAMSAY HEALTH CARE AUSTRALIA PTY LTD OF PREMISES KNOWN AS PHARMACY SUITE, ALBURY WODONGA REGIONAL CANCER CENTRE. EXPIRES: 30/6/2023. |
| AS789090 | LEASE OF LEASE AJ969410 TO BORDER ONCOLOGY SERVICES PTY LTD OF THE BORDER ONCOLOGY SERVICE IN THE ALBURY WODONGA REGIONAL CANCER CENTRE, BORELLA ROAD, ALBURY. EXPIRES: 4/9/2026. |
| AS789091 | LEASE OF LEASE AJ969410 TO I-MED VICTORIA PTY LIMITED OF THE RADIOLOGY SUITE AT ALBURY WODONGA HEALTH - ALBURY CAMPTUS, BORELLA ROAD, ALBURY. EXPIRES: 30/6/2027. |
| AS789092 | LEASE OF LEASE AJ969410 TO BORDER MEDICAL ONCOLOGY RESEARCH UNIT PTY LTD OF THE BORDER MEDICAL ONCOLOGY RESEARCH UNIT IN THE ALBURY WODONGA REGIONAL CANCER CENTRE, BORELLA ROAD, ALBURY. EXPIRES: 4/9/2026. |
| AS789093 | LEASE OF LEASE AJ969410 TO HEALIUS PATHOLOGY PTY LTD OF THE PATHOLOGY ROOM 1 AND ROOM 2, ALBURY WODONGA REGIONAL CANCER CENTRE, 201 BORELLA ROAD, ALBURY. EXPIRES: 29/2/2024. |

NOTATIONS
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UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***

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# Appendix D - Bore Logs

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# SOIL LOG SB1

**PROJECT NUMBER** JE10388
**PROJECT NAME** Soil Investigation
**CLIENT** Civil Test Pty Ltd
**ADDRESS** 201 Borella Rd, Albury, NSW

**DRILLING DATE** 18/12/2023
**TOTAL DEPTH** 5.2
**DIAMETER** 100

**COORDINATES (Eastings)** 55 H 494466.41 m E
**COORDINATES (Northings)** 6007206.54 m S
**COORD SYS** UTM
**COMPLETION** 18/12/2023
**SURFACE ELEVATION** 170

**Drill Rig** Trailer mounted multi drill

**LOGGED BY** RJ
**CHECKED BY** PJ

| PID | Samples | Analysed | Drilling Method | Depth (m) | Graphic Log | Moisture | Material Description | Additional Observations | Elevation (m) |
|---|---|---|---|---|---|---|---|---|---|
| 0.1 | SB1_0.0-0.2 | Y | SS | 0 | | D | Asphalt | FILL: | 170 |
| | | | | | | | Sandy Gravel: Pale Brown/Grey, sand coarse grained, gravel fine grained | | |
| | | | | | | | Sandy Gravel: Dark Grey, sand coarse grained, gravel fine grained | NATURAL: | |
| 0.1 | SB1_0.5-0.7 | N | | 0.5 | | | Silty CLAY: Pale Brown/Yellow | | 169.5 |
| 0.0 | SB1_1.0-1.2 | Y | | 1 | | | | | 169 |
| | | | | 1.5 | | | | | 168.5 |
| 0.0 | SB1_2.0-2.2 | N | | 2 | | | Sandy CLAY: Pale Brown/Pale Orange, sand medium to coarse grained, with traces of gravel | | 168 |
| | | | | 2.5 | | | | | 167.5 |
| 0.1 | SB1_3.0-3.2 | N | | 3 | | | | | 167 |
| | | | | 3.5 | | | | | 166.5 |
| 0.0 | SB1_4.0-4.2 | N | | 4 | | | | | 166 |
| | | | | 4.5 | | | | | 165.5 |
| 0.0 | SB1_5.0-5.2 | N | | 5 | | | | | 165 |
| | | | | 5.5 | | | Termination Depth at: 5.2 m | | 164.5 |

**Disclaimer** This bore log is intended for environmental not geotechnical purposes.



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# SOIL LOG SB2

**PROJECT NUMBER** JE10388
**PROJECT NAME** Soil Investigation
**CLIENT** Civil Test Pty Ltd
**ADDRESS** 201 Borella Rd, Albury, NSW

**DRILLING DATE** 13/12/2023
**TOTAL DEPTH** 10.2
**DIAMETER** 100

**COORDINATES (Eastings)** 55 H 49447847 m E
**COORDINATES (Northings)** 6007224.95 m S
**COORD SYS** UTM
**COMPLETION** 13/12/2023
**SURFACE ELEVATION** 168

**Drill Rig** Trailer mounted multi drill

**LOGGED BY** RJ
**CHECKED BY** PJ

| PID | Samples | Analysed | Drilling Method | Depth (m) | Graphic Log | Moisture | Material Description | Additional Observations | Elevation (m) |
|---|---|---|---|---|---|---|---|---|---|
| 0.1 | SB2_0.0-0.2 | N | SS | 0 | | M | Asphalt | FILL: | |
| | | | | | | | Sandy Gravel: Dark Grey, sand coarse grained, gravel fine grained | | |
| 0.1 | SB2_0.5-0.7 | Y | | 0.5 | | | Silty CLAY: Pale Brown/Pale Orange Grey | NATURAL: | 167.5 |
| 0.0 | SB2_1.0-1.2 | N | | 1 | | | | | 167 |
| | | | | 1.5 | | | | | 166.5 |
| 0.0 | SB2_2.2-2.2 | Y | | 2 | | | Silty CLAY: Pale Brown/Grey, traces of fine to medium grained | | 166 |
| | | | | 2.5 | | | | | 165.5 |
| 0.0 | SB2_3.0-3.2 | N | | 3 | | | | | 165 |
| | | | | 3.5 | | | | | 164.5 |
| 0.0 | SB2_4.0-4.2 | N | | 4 | | | | | 164 |
| | | | | 4.5 | | | Silty CLAY: Pale Brown/Pale Grey | | 163.5 |
| 0.0 | SB2_5.0-5.2 | N | | 5 | | | | | 163 |
| | | | | 5.5 | | | | | 162.5 |
| 0.0 | SB2_6.0-6.2 | N | | 6 | | | | | 162 |
| | | | | 6.5 | | | | | 161.5 |
| 0.0 | SB2_7.0-7.2 | N | | 7 | | D | Silty CLAY: Pale Brown/Pale Orange/Pale Grey, traces of fine to medium grained sand | | 161 |
| | | | | 7.5 | | | | | 160.5 |
| 0.0 | SB2_8.0-8.2 | N | | 8 | | | | | 160 |
| | | | | 8.5 | | | Silty CLAY: Pale Brown/Pale Orange/Grey, traces of fine to medium grained sand | | 159.5 |
| 0.0 | SB2_9.0-9.2 | N | | 9 | | | | | 159 |
| | | | | 9.5 | | | | | 158.5 |
| 0.0 | SB2_10.0-10.2 | N | | 10 | | | | | 158 |
| | | | | 10.5 | | | Termination Depth at: 10.2 m | | 157.5 |

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# SOIL LOG SB3

**PROJECT NUMBER** JE10388
**PROJECT NAME** Soil Investigation
**CLIENT** Civil Test Pty Ltd
**ADDRESS** 201 Borella Rd, Albury, NSW

**DRILLING DATE** 14/12/2023
**TOTAL DEPTH** 3.2
**DIAMETER** 100

**COORDINATES (Eastings)** 55 H 494436.16 m E
**COORDINATES (Northings)** 6007234.04 m S
**COORD SYS** UTM
**COMPLETION** 14/12/2023
**SURFACE ELEVATION** 170

**Drill Rig** Trailer mounted multi drill

**LOGGED BY** RJ
**CHECKED BY** PJ

| PID | Samples | Analysed | Drilling Method | Depth (m) | Graphic Log | Moisture | Material Description | Additional Observations | Elevation (m) |
|---|---|---|---|---|---|---|---|---|---|
| 0.1 | SB3_0.0-0.2 | Y | SS | 0 | | M | Asphalt | FILL: | 170 |
| | | | | 0.2 | | | Sandy Gravel: Brown, sand coarse grained, gravel fine grained | | 169.8 |
| | | | | 0.4 | | | Sandy Gravel: Dark Grey, sand coarse grained, gravel fine grained, with clay | | 169.6 |
| 0.1 | SB3_0.5-0.7 | N | | 0.6 | | | Sandy CLAY: Brown, sand fine to medium grained, traces fine grained gravel | | 169.4 |
| | | | | 0.8 | | | | | 169.2 |
| 0.0 | SB3_1.0-1.2 | N | | 1 | | | | | 169 |
| | | | | 1.2 | | | | | 168.8 |
| | | | | 1.4 | | | Sandy CLAY: Brown, sand fine to coarse grained, with traces of silt, grey mottling | NATURAL: | 168.6 |
| | | | | 1.6 | | | | | 168.4 |
| | | | | 1.8 | | | | | 168.2 |
| 0.0 | SB3_2.0-2.2 | Y | | 2 | | | | | 168 |
| | | | | 2.2 | | | | | 167.8 |
| | | | | 2.4 | | D | Schist: Brown | Extremely weathered. | 167.6 |
| | | | | 2.6 | | | | | 167.4 |
| | | | | 2.8 | | | Schist: Brown | Distincly weathered. | 167.2 |
| 0.1 | SB3_3.0-3.2 | N | | 3 | | | | | 167 |
| | | | | 3.2 | | | | | 166.8 |
| | | | | | | | Termination Depth at: 3.2 m | | |
| | | | | 3.4 | | | | | 166.6 |
| | | | | 3.6 | | | | | 166.4 |
| | | | | 3.8 | | | | | 166.2 |

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# SOIL LOG SB4

**PROJECT NUMBER** JE10388
**PROJECT NAME** Soil Investigation
**CLIENT** Civil Test Pty Ltd
**ADDRESS** 201 Borella Rd, Albury, NSW

**DRILLING DATE** 12/12/2023
**TOTAL DEPTH** 5.2
**DIAMETER** 100

**COORDINATES (Eastings)** 55 H 494389.40 m E
**COORDINATES (Northings)** 6007248.53 m S
**COORD SYS** UTM
**COMPLETION** 12/12/2023
**SURFACE ELEVATION** 171

**Drill Rig** Trailer mounted multi drill

**LOGGED BY** RJ
**CHECKED BY** PJ

| PID | Samples | Analysed | Drilling Method | Depth (m) | Graphic Log | Moisture | Material Description | Additional Observations | Elevation (m) |
|---|---|---|---|---|---|---|---|---|---|
| 0.1 | SB4_0.0-0.2 | Y | SS | 0 | | D | Asphalt | FILL: | 171 |
| | | | | | | | Sandy Gravel: Brown, sand coarse grained, gravel fine grained, traces of silt | | |
| | | | | | | | Gravelly Sand: Brown, gravel fine grained, sand coarse grained, traces of silt | | |
| 0.1 | SB4_0.5-0.7 | N | | 0.5 | | | Schist: Pale Brown | Extremely weathered | 170.5 |
| | | | | | | | Schist: Brown/Black | Distinctly weathered | |
| 0.0 | SB4_1.0-1.2 | Y | | 1 | | | | | 170 |
| | | | NM LC | 1.5 | | | Schist: Pale Brown/Grey/Black | | 169.5 |
| | | | | 2 | | | | | 169 |
| | | | | 2.5 | | | | | 168.5 |
| | | | | 3 | | | Schist: Pale Brown/Grey | | 168 |
| | | | | 3.5 | | | | | 167.5 |
| | | | | 4 | | | | | 167 |
| | | | | 4.5 | | | | | 166.5 |
| | | | | 5 | | | | | 166 |
| | | | | 5.5 | | | Termination Depth at: 5.2 m | | 165.5 |

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# SOIL LOG SB5

**PROJECT NUMBER** JE10388
**PROJECT NAME** Soil Investigation
**CLIENT** Civil Test Pty Ltd
**ADDRESS** 201 Borella Rd, Albury, NSW

**DRILLING DATE** 14/12/2023
**TOTAL DEPTH** 10.2
**DIAMETER** 100

**COORDINATES (Eastings)** 55 H 494399.37 m E
**COORDINATES (Northings)** 6007274.57 m S
**COORD SYS** UTM
**COMPLETION** 14/12/2023
**SURFACE ELEVATION** 169

**Drill Rig** Trailer mounted multi drill

**LOGGED BY** RJ
**CHECKED BY** PJ

| PID | Samples | Analysed | Drilling Method | Depth (m) | Graphic Log | Moisture | Material Description | Additional Observations | Elevation (m) |
|---|---|---|---|---|---|---|---|---|---|
| 0.1 | SB5_0.0-0.2 | Y | SS | 0 | | D | Asphalt | FILL: | 169 |
| | | | | 0.5 | | M | Sandy Gravel: Pale Brown/Grey, sand coarse grained, gravel fine grained | | 168.5 |
| 0.1 | SB5_0.5-0.7 | N | | | | D | Gravelly Sand: Grey, sand coarse grained, gravel fine grained | NATURAL: | |
| | | | | 1 | | | Gravelly Sand: Pale Brown, sand coarse grained, gravel fine grained | | 168 |
| 0.1 | SB5_1.0-1.2 | Y | | | | | Silty CLAY: Pale Brown | | |
| | | | | 1.5 | | | Sandy CLAY: Orange/Pale Brown/Pale Grey, sand fine to medium grained | | 167.5 |
| 0.0 | SB5_2.2-2.2 | N | NM LC | 2 | | | Schist: Pale Grey/Pale Brown | Distincly weathered | 167 |
| | | | | 2.5 | | | Schist: Pale Grey/Pale Brown | | 166.5 |
| | | | | 3 | | | | | 166 |
| | | | | 3.5 | | | | | 165.5 |
| | | | | 4 | | | Schist: Pale Brown/Pale grey/Pale Orange | | 165 |
| | | | | 4.5 | | | | | 164.5 |
| | | | | 5 | | | | | 164 |
| | | | | 5.5 | | | Schist: Pale Brown, mottled brown | | 163.5 |
| | | | | 6 | | | | | 163 |
| | | | | 6.5 | | | Schist: Pale brown, mottles orange grey | | 162.5 |
| | | | | 7 | | | Schist: Pale Brown/ Pale Grey/Red/Orange | | 162 |
| | | | | 7.5 | | | | | 161.5 |
| | | | | 8 | | | | | 161 |
| | | | | 8.5 | | | Schist: pale Brown/Grey/Pale Red | | 160.5 |
| | | | | 9 | | | | | 160 |
| | | | | 9.5 | | | | | 159.5 |
| | | | | 10 | | | Sandstone: Brown | | 159 |
| | | | | 10.5 | | | Termination Depth at: 10.2 m | | 158.5 |

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# SOIL LOG SB6

**PROJECT NUMBER** JE10388
**PROJECT NAME** Soil Investigation
**CLIENT** Civil Test Pty Ltd
**ADDRESS** 201 Borella Rd, Albury, NSW

**DRILLING DATE** 19/12/2023
**TOTAL DEPTH** 1.85
**DIAMETER** 100

**COORDINATES (Eastings)** 55 H 494385.31 m E
**COORDINATES (Northings)** 6007305.65 m S
**COORD SYS** UTM
**COMPLETION** 19/12/2023
**SURFACE ELEVATION** 169

**Drill Rig** Trailer mounted multi drill

**LOGGED BY** RJ
**CHECKED BY** PJ

| PID | Samples | Analysed | Drilling Method | Depth (m) | Graphic Log | Moisture | Material Description | Additional Observations | Elevation (m) |
|---|---|---|---|---|---|---|---|---|---|
| | SB6_0.0-0.2 | Y | SS | 0.1 | | M | Asphalt | FILL: | 168.9 |
| 0.1 | | | | 0.2 | | | Sandy Gravel: Brown, sand coarse grained, gravel fine grained | | 168.8 |
| | | | | 0.3 | | | | | 168.7 |
| | | | | 0.4 | | | Sandy CLAY: Brown, traces of fine grained gravel | | 168.6 |
| | SB6_0.5-0.7 | N | | 0.5 | | | | | 168.5 |
| 0.0 | | | | 0.6 | | | | | 168.4 |
| | | | | 0.7 | | | | | 168.3 |
| | | | | 0.8 | | | Sany CLAY: Brown, mottled orange, sand fine to coarse grained, traces of fine grained gravel | NATURAL: | 168.2 |
| | | | | 0.9 | | | | | 168.1 |
| | SB6_1.0-1.2 | Y | | 1 | | | | | 168 |
| 0.0 | | | | 1.1 | | | | | 167.9 |
| | | | | 1.2 | | | | | 167.8 |
| | | | | 1.3 | | | | | 167.7 |
| | | | | 1.4 | | | | | 167.6 |
| | SB6_1.5-1.5 | Y | | 1.5 | | | | | 167.5 |
| 0.0 | | | | 1.6 | | | | | 167.4 |
| | | | | 1.7 | | | | | 167.3 |
| | | | | 1.8 | | | | | 167.2 |
| | | | | 1.9 | | | Termination Depth at: 1.85 m | | 167.1 |

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# SOIL LOG SB7

**PROJECT NUMBER** JE10388
**PROJECT NAME** Soil Investigation
**CLIENT** Civil Test Pty Ltd
**ADDRESS** 201 Borella Rd, Albury, NSW

**DRILLING DATE** 19/12/2023
**TOTAL DEPTH** 3.45
**DIAMETER** 100

**COORDINATES (Eastings)** 55 H 494381.82 m E
**COORDINATES (Northings)** 6007328.76 m S
**COORD SYS** UTM
**COMPLETION** 19/12/2023
**SURFACE ELEVATION** 167

**Drill Rig** Trailer mounted multi drill

**LOGGED BY** RJ
**CHECKED BY** PJ

| PID | Samples | Analysed | Drilling Method | Depth (m) | Graphic Log | Moisture | Material Description | Additional Observations | Elevation (m) |
|---|---|---|---|---|---|---|---|---|---|
| 0.0 | SB7_0.0-0.2 | N | SS | 0.2 | | M | Asphalt<br>Sandy Gravel: Brown, sand coarse grained, gravel fine grained<br>Sandy CLAY: Brown, traces of fine grained gravel | FILL: | 166.8 |
| | | | | 0.4 | | | Sandy CLAY: Brown, with fine grained gravel | NATURAL: | 166.6 |
| 0.1 | SB7_0.5-0.7 | Y | | 0.6 | | | Sandy CLAY: Brown, sand medium to coarse grained, with traces of fine grained gravel | | 166.4 |
| | | | | 0.8 | | | | | 166.2 |
| 0.0 | SB7_1.0-1.2 | N | | 1 | | | | | 166 |
| | | | | 1.2 | | | | | 165.8 |
| | | | | 1.4 | | | | | 165.6 |
| | | | | 1.6 | | | | | 165.4 |
| | | | | 1.8 | | | | | 165.2 |
| 0.0 | SB7_2.0-2.2 | Y | | 2 | | | | | 165 |
| | | | | 2.2 | | | | | 164.8 |
| | | | | 2.4 | | | Sandy CLAY: Brown, mottled grey, sand fine to coarse grained, gravel fine to medium grained | | 164.6 |
| | | | | 2.6 | | | | | 164.4 |
| | | | | 2.8 | | | | | 164.2 |
| 0.1 | SB7_3.0-3.2 | N | | 3 | | | | | 164 |
| | | | | 3.2 | | | | | 163.8 |
| | | | | 3.4 | | | | | 163.6 |
| | | | | 3.6 | | | Termination Depth at: 3.45 m | | 163.4 |
| | | | | 3.8 | | | | | 163.2 |

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# SOIL LOG SB8

**PROJECT NUMBER** JE10388
**PROJECT NAME** Soil Investigation
**CLIENT** Civil Test Pty Ltd
**ADDRESS** 201 Borella Rd, Albury, NSW

**DRILLING DATE** 15/12/2023
**TOTAL DEPTH** 15
**DIAMETER** 100

**COORDINATES (Eastings)** 55 H 494366.42 m E
**COORDINATES (Northings)** 6007345.62 m S
**COORD SYS** UTM
**COMPLETION** 15/12/2023
**SURFACE ELEVATION** 166

**Drill Rig** Trailer mounted multi drill

**LOGGED BY** RJ
**CHECKED BY** PJ

| PID | Samples | Analysed | Drilling Method | Depth (m) | Graphic Log | Moisture | Material Description | Additional Observations | Elevation (m) |
|---|---|---|---|---|---|---|---|---|---|
| 0.1 | SB8_0.0-0.2 | Y | SS | | | M | Concrete | FILL: | |
| 0.0 | SB8_0.5-0.7 | N | | | | | Gravelly Sand: Pale Grey, sand coarse grained, gravel fine grained | | |
| 0.0 | SB8_1.0-1.2 | Y | | 1 | | | Sandy CLAY: Brown, mottled orange grey, sand fine to coarse, traces of fine grained gravel | | 165 |
| 0.1 | SB8_2.2-2.2 | N | | 2 | | | Sandy CLAY: Brown, mottled orange, sand fine to coarse grained, traces of fine grained gravel | NATURAL: | 164 |
| 0.0 | SB8_3.0-3.2 | N | | 3 | | | Sandy CLAY: Brown, mottled grey, sand fine to coarse grained | | 163 |
| | | | | | | | Sandy CLAY: Brown, sand fine to coarse grained | | |
| 0.1 | SB8_4.0-4.2 | N | | 4 | | | | | 162 |
| | | | | | | | Schist: Pale Brown, mottled orange | Extremely weathered | |
| 0.0 | SB8_5.0-5.2 | N | | 5 | | | | | 161 |
| 0.0 | SB8_6.0-6.2 | N | | 6 | | | | | 160 |
| 0.0 | SB8_7.0-7.2 | N | | 7 | | | | | 159 |
| 0.0 | SB8_8.0-8.2 | N | | 8 | | | Schist: Brown | | 158 |
| | | | | 9 | | | | | 157 |
| | | | | 10 | | | | | 156 |
| | | | | 11 | | | | | 155 |
| | | | | 12 | | | | | 154 |
| | | | | 13 | | | | | 153 |
| | | | | 14 | | | | | 152 |
| | | | | 15 | | | Termination Depth at: 15 m | | 151 |

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# SOIL LOG SB9

**PROJECT NUMBER** JE10388
**PROJECT NAME** Soil Investigation
**CLIENT** Civil Test Pty Ltd
**ADDRESS** 201 Borella Rd, Albury, NSW

**DRILLING DATE** 14/12/2023
**TOTAL DEPTH** 5
**DIAMETER** 100

**COORDINATES (Eastings)** 55 H 494323.59 m E
**COORDINATES (Northings)** 6007353.04 m S
**COORD SYS** UTM
**COMPLETION** 14/12/2023
**SURFACE ELEVATION** 166

**Drill Rig** Trailer mounted multi drill

**LOGGED BY** RJ
**CHECKED BY** PJ

| PID | Samples | Analysed | Drilling Method | Depth (m) | Graphic Log | Moisture | Material Description | Additional Observations | Elevation (m) |
|---|---|---|---|---|---|---|---|---|---|
| 0.1 | SB9_0.0-0.2 | N | SS | 0 | | M | Asphalt | FILL: | |
| | | | | | | | Sandy Gravel: Grey/Pale Brown, sand coarse grained, gravel fine grained | | |
| 0.1 | SB9_0.5-0.7 | Y | | 0.5 | | D | Schist: pale Brown/Pale yellow | Extremely weathered | 165.5 |
| | | | | 1 | | | Schist: White/Pale Grey | | 165 |
| | | | | 1.5 | | | Schist: Pale Brown/Pale orange/Grey/White | Distinctly weathered | 164.5 |
| | | | | 2 | | | | | 164 |
| | | | | 2.5 | | | Schist: Pale Brown/Grey/Pale Orange | | 163.5 |
| | | | | 3 | | | Schist: Pale Grey/White/Pale Brown | | 163 |
| | | | | 3.5 | | | | | 162.5 |
| | | | | 4 | | | Schist: Pale Brown/Pale Yellow/Pale Grey | | 162 |
| | | | | 4.5 | | | | | 161.5 |
| | | | | 5 | | | | | 161 |
| | | | | | | | Termination Depth at: 5 m | | |
| | | | | 5.5 | | | | | 160.5 |

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# SOIL LOG SB10

**PROJECT NUMBER** JE10388
**PROJECT NAME** Soil Investigation
**CLIENT** Civil Test Pty Ltd
**ADDRESS** 201 Borella Rd, Albury, NSW

**DRILLING DATE** 19/12/2023
**TOTAL DEPTH** 2.3
**DIAMETER** 100

**COORDINATES (Eastings)** 55 H 494389.22 m E
**COORDINATES (Northings)** 6007385.48 m S
**COORD SYS** UTM
**COMPLETION** 19/12/2023
**SURFACE ELEVATION** 169

**Drill Rig** Trailer mounted multi drill

**LOGGED BY** RJ
**CHECKED BY** PJ

| PID | Samples | Analysed | Drilling Method | Depth (m) | Graphic Log | Moisture | Material Description | Additional Observations | Elevation (m) |
|---|---|---|---|---|---|---|---|---|---|
| 0.1 | SB10_0.0-0.2 | Y | HA | 0.2 | | M | Clayey Sand: Brown, sand coarse grained, trace fine grained gravel | FILL: | 168.8 |
| | | | | 0.4 | | | Sandy CLAY: Brown, mottled orange, sand medium to coarse grained, traces of fine grained gravel | | 168.6 |
| 0.1 | SB10_0.5-0.7 | N | | 0.6 | | | | | 168.4 |
| | | | | 0.8 | | | | | 168.2 |
| 0.0 | SB10_1.0-1.2 | Y | | 1 | | | | | 168 |
| | | | | 1.2 | | | | | 167.8 |
| | | | | 1.4 | | | | | 167.6 |
| | | | | 1.6 | | | Sandy CLAY: Brown, mottled orange and grey, sand fine to coarse grained, traces of fine grained gravel | NATURAL: | 167.4 |
| | | | | 1.8 | | | | | 167.2 |
| | | | | 2 | | | | | 167 |
| | | | | 2.2 | | | | | 166.8 |
| | | | | 2.4 | | | Termination Depth at: 2.3 m | | 166.6 |
| | | | | 2.6 | | | | | 166.4 |
| | | | | 2.8 | | | | | 166.2 |

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# SOIL LOG SB11

**PROJECT NUMBER** JE10388
**PROJECT NAME** Soil Investigation
**CLIENT** Civil Test Pty Ltd
**ADDRESS** 201 Borella Rd, Albury, NSW

**DRILLING DATE** 18/12/2023
**TOTAL DEPTH** 15
**DIAMETER** 100

**COORDINATES (Eastings)** 55 H 494343.92 m E
**COORDINATES (Northings)** 6007411.48 m S
**COORD SYS** UTM
**COMPLETION** 18/12/2023
**SURFACE ELEVATION** 167

**Drill Rig** Trailer mounted multi drill

**LOGGED BY** RJ
**CHECKED BY** PJ

| PID | Samples | Analysed | Drilling Method | Depth (m) | Graphic Log | Moisture | Material Description | Well Diagram | Additional Observations | Elevation (m) |
|---|---|---|---|---|---|---|---|---|---|---|
| 0.1 | SB11_0.0-0.2 | N | SS | 0 | | D | Clayey Gravel: Pale Brown/Grey, gravel fine grained | concrete cement grout | FILL: | |
| 0.1 | SB11_0.5-0.7 | Y | | | | M | | | | |
| 0.0 | SB11_1.0-1.2 | N | | 1 | | D | Gravelly Sand: Pale Brown, sand coarse grained, gravel fine grained | | | 166 |
| | | | | | | | Silty CLAY: Brown, traces of fine grained gravel | | | |
| 0.0 | SB11_2.2-2.2 | Y | | 2 | | | Silty CLAY: Pale Brown/Pale Orange, mottled grey, traces of fine to medium gravels | | NATURAL: | 165 |
| 0.0 | SB11_3.0-3.2 | N | | 3 | | | Silty CLAY: Pale Brown/Pale Orange, traces of fine to medium grained gravel | | | 164 |
| 0.1 | SB11_4.0-4.2 | N | | 4 | | | | bentonite | | 163 |
| 0.0 | SB11_5.0-5.2 | N | | 5 | | | Silty CLAY: Pale Brown/Pale Orange, mottled grey, traces of fine to medium grained gravel | | | 162 |
| 0.0 | SB11_6.0-6.2 | N | | 6 | | | | | | 161 |
| 0.0 | SB11_7.0-7.2 | N | | 7 | | | | | | 160 |
| 0.0 | SB11_8.0-8.2 | N | | 8 | | | | | | 159 |
| 0.0 | SB11_9.0-9.2 | N | | 9 | | | Silty CLAY: Pale Brown/Pale Orange | | | 158 |
| 0.0 | SB11_10-10.2 | N | | 10 | | | | | | 157 |
| | | | | 11 | | | | filter pack | | 156 |
| | | | | 12 | | | Silty CLAY: Brown | | | 155 |
| | | | | 13 | | | | | | 154 |
| | | | | 14 | | | | | | 153 |
| | | | | 15 | | | Termination Depth at: 15 m | | | 152 |

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# SOIL LOG SB12

**PROJECT NUMBER** JE10388
**PROJECT NAME** Soil Investigation
**CLIENT** Civil Test Pty Ltd
**ADDRESS** 201 Borella Rd, Albury, NSW

**DRILLING DATE** 19/12/2023
**TOTAL DEPTH** 1.85
**DIAMETER** 100

**COORDINATES (Eastings)** 55 H 494305.39 m E
**COORDINATES (Northings)** 6007477.19 m S
**COORD SYS** UTM
**COMPLETION** 19/12/2023
**SURFACE ELEVATION** 168

**Drill Rig** Trailer mounted multi drill

**LOGGED BY** RJ
**CHECKED BY** PJ

| PID | Samples | Analysed | Drilling Method | Depth (m) | Graphic Log | Moisture | Material Description | Additional Observations | Elevation (m) |
|---|---|---|---|---|---|---|---|---|---|
| 0.1 | SB12_0.0-0.2 | Y | SS | 0.2 | | D | Sandy CLAY: Brown, sand fine to coarse grained | FILL: | 167.8 |
| | | | | 0.4 | | | Sandy CLAY: Brown, mottled orange, sand medium to coarse grained, traces of fine grained gravel | | 167.6 |
| 0.0 | SB12_0.5-0.7 | N | | 0.6 | | | | | 167.4 |
| | | | | 0.8 | | | | | 167.2 |
| 0.0 | SB12_1.0-1.2 | N | | 1 | | M | | | 167 |
| | | | | 1.2 | | | | | 166.8 |
| 0.0 | SB12_1.5-1.5 | Y | | 1.4 | | | | | 166.6 |
| | | | | 1.6 | | | Sandy CLAY: Brown, mottled orange and grey, sand fine to coarse grained, traces of fine grained gravel | NATURAL: | 166.4 |
| | | | | 1.8 | | | | | 166.2 |
| | | | | 2 | | | Termination Depth at: 1.85 m | | 166 |
| | | | | 2.2 | | | | | 165.8 |
| | | | | 2.4 | | | | | 165.6 |
| | | | | 2.6 | | | | | 165.4 |
| | | | | 2.8 | | | | | 165.2 |

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# Appendix E - Calibration Certificates

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| Serial Number |
| --- |
| T-107202 |

# EQUIPMENT QUALITY REPORT

## PID Calibration

The equipment has been issued as follows:

[X] Equipment is clean [X] Pump and battery voltage check Cal. gas expiry date: Aug-2025

| Calibration Results | | | |
| --- | --- | --- | --- |
| Parameter | Standard | Result | |
| Fresh Air | 0.0 ppm | | 0.1 ppm |
| Isobutylene | 100 ppm | | 100ppm |
| | | | |
| | | | |
| | | | |

Date: 12/12/2023

Calibrated by: PJ

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| Serial Number |
| --- |
| T-107202 |

# EQUIPMENT QUALITY REPORT

## PID Calibration

The equipment has been issued as follows:

[X] Equipment is clean [X] Pump and battery voltage check Cal. gas expiry date: Aug-2025

| Calibration Results | | | |
| --- | --- | --- | --- |
| Parameter | Standard | Result | |
| Fresh Air | 0.0 ppm | | 0.0 ppm |
| Isobutylene | 100 ppm | | 100ppm |
| | | | |
| | | | |
| | | | |

Date: 13/12/2023

Calibrated by: PJ

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| Serial Number |
| --- |
| T-107202 |

# EQUIPMENT QUALITY REPORT

## PID Calibration

The equipment has been issued as follows:

[X] Equipment is clean [X] Pump and battery voltage check Cal. gas expiry date: Aug-2025

| Calibration Results | | | |
| --- | --- | --- | --- |
| Parameter | Standard | Result | |
| Fresh Air | 0.0 ppm | | 0.3 ppm |
| Isobutylene | 100 ppm | | 99ppm |
| | | | |
| | | | |
| | | | |

Date: 14/12/2023

Calibrated by: PJ

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| Serial Number |
| --- |
| T-107202 |

# EQUIPMENT QUALITY REPORT

## PID Calibration

The equipment has been issued as follows:

[X] Equipment is clean [X] Pump and battery voltage check Cal. gas expiry date: Aug-2025

| Calibration Results | | | |
| --- | --- | --- | --- |
| Parameter | Standard | Result | |
| Fresh Air | 0.0 ppm | | 0.0 ppm |
| Isobutylene | 100 ppm | | 100ppm |
| | | | |
| | | | |
| | | | |

Date: 15/12/2023

Calibrated by: PJ

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| Serial Number |
| --- |
| T-107202 |

# EQUIPMENT QUALITY REPORT

## PID Calibration

The equipment has been issued as follows:

[X] Equipment is clean [X] Pump and battery voltage check Cal. gas expiry date: Aug-2025

| Calibration Results | | | |
| --- | --- | --- | --- |
| Parameter | Standard | Result | |
| Fresh Air | 0.0 ppm | | 0.0 ppm |
| Isobutylene | 100 ppm | | 102ppm |
| | | | |
| | | | |
| | | | |

Date: 18/12/2023

Calibrated by: PJ

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| Serial Number |
| --- |
| T-107202 |

# EQUIPMENT QUALITY REPORT

## PID Calibration

The equipment has been issued as follows:

[X] Equipment is clean [X] Pump and battery voltage check Cal. gas expiry date: Aug-2025

| Calibration Results | | | |
| --- | --- | --- | --- |
| Parameter | Standard | Result | |
| Fresh Air | 0.0 ppm | | 0.0 ppm |
| Isobutylene | 100 ppm | | 100ppm |
| | | | |
| | | | |
| | | | |

Date: 19/12/2023

Calibrated by: PJ

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# Appendix F - Laboratory Reports

# CERTIFICATE OF ANALYSIS

| | | | |
|---|---|---|---|
| **Work Order** | : **EM2322709** | Page | : 1 of 35 |
| Client | : **Jones Environmental** | Laboratory | : Environmental Division Melbourne |
| Contact | : PATRICIA JONES | Contact | : Hannah White |
| Address | : 497 Parnall Street<br>Lavington Lavington 2641 | Address | : 4 Westall Rd Springvale VIC Australia 3171 |
| Telephone | : ---- | Telephone | : +61-3-8549 9600 |
| Project | : JE10388 | Date Samples Received | : 19-Dec-2023 12:50 |
| Order number | : ---- | Date Analysis Commenced | : 20-Dec-2023 |
| C-O-C number | : ---- | Issue Date | : 09-Jan-2024 14:38 |
| Sampler | : RUSSELL JONES | | |
| Site | : ---- | | |
| Quote number | : EN/222 | | |
| No. of samples received | : 61 | | |
| No. of samples analysed | : 22 | | |

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Descriptive Results
- Surrogate Control Limits

**Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.**

## *Signatories*

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

| *Signatories* | *Position* | *Accreditation Category* |
|---|---|---|
| Aleksandar Vujkovic | Laboratory Technician | Newcastle - Inorganics, Mayfield West, NSW |
| Ankit Joshi | Senior Chemist - Inorganics | Sydney Inorganics, Smithfield, NSW |
| Arenie Vijayaratnam | Senior Inorganic Chemist | Melbourne Inorganics, Springvale, VIC |
| Eric Chau | Metals Team Leader | Melbourne Inorganics, Springvale, VIC |
| Jarwis Nheu | Non-Metals Team Leader | Melbourne Inorganics, Springvale, VIC |
| MINNIE TRAN | Approved Asbestos Identifier | Melbourne Asbestos, Springvale, VIC |
| Scott Beddoes | Senior Chemist - Inorganics | Melbourne Inorganics, Springvale, VIC |
| Xing Lin | Senior Organic Chemist | Melbourne Inorganics, Springvale, VIC |
| Xing Lin | Senior Organic Chemist | Melbourne Organics, Springvale, VIC |

## General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contract for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

- EA150H: Soil particle density results fell outside the scope of AS1289.3.6.3 for samples EM2322709-028, -045 & -047. Results should be scrutinised accordingly.
- ED006 : (Potassium/magnesium) for sample EM2322709 #27, #34 amd #43has been detected at less than LOR therefore the (Magnesium/Potassium) ratio calculation cannot be performed.
- ALS is not NATA accredited for the analysis of Exchangeable Cations on Alkaline Soils when performed under ALS Method ED006.
- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a.h)anthracene (1.0), Benzo(g.h.i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero, for 'TEQ 1/2LOR' are treated as half the reported LOR, and for 'TEQ LOR' are treated as being equal to the reported LOR. Note: TEQ 1/2LOR and TEQ LOR will calculate as 0.6mg/Kg and 1.2mg/Kg respectively for samples with non-detects for all of the eight TEQ PAHs.
- EP080: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP068: Where reported, Total Chlordane (sum) is the sum of the reported concentrations of cis-Chlordane and trans-Chlordane at or above the LOR.
- EP068: Where reported, Total OCP is the sum of the reported concentrations of all Organochlorine Pesticides at or above LOR.
- EP075(SIM): Where reported, Total Cresol is the sum of the reported concentrations of 2-Methylphenol and 3- & 4-Methylphenol at or above the LOR.
- EK040T: EM2322696 #3, poor matrix spike recovery for total fluoride due to matrix effects.
- A sampling ID discrepancy has been noted on the COC. Please inform ALS if changes are to be made to the SRN.
- An additional water sample, QC5 has been received and added to the WO as #062. The sample will be kept on hold pending further instructions.
- EK040T: EM2322709 #34, poor matrix spike recovery for total fluoride due to matrix effects.
- EA200 'Am' Amosite (brown asbestos)
- EA200 'Cr' Crocidolite (blue asbestos)
- EA200 'Trace' - Asbestos fibres ("Free Fibres") detected by trace analysis per AS4964. The result can be interpreted that the sample contains detectable 'respirable' asbestos fibres
- EA200: Asbestos Identification Samples were analysed by Polarised Light Microscopy including dispersion staining.
- EA200 Legend
- EA200 'Ch' Chrysotile (white asbestos)
- EA200: 'UMF' Unknown Mineral Fibres. "-" indicates fibres detected may or may not be asbestos fibres. Confirmation by alternative techniques is recommended.
- EA200: For samples larger than 30g, the <2mm fraction may be sub-sampled prior to trace analysis as outlined in ISO23909:2008(E) Sect 6.3.2-2
- ED007 and ED008: When Exchangeable Al is reported from these methods, it should be noted that Rayment & Lyons (2011) suggests Exchange Acidity by 1M KCl - Method 15G1 (ED005) is a more suitable method for the determination of exchange acidity (H+ + Al3+).
- EA200: 'Yes' - Asbestos detected by polarised light microscopy including dispersion staining.

- EA200: 'No*' - No asbestos found, at the reporting limit of 0.1g/kg, by polarised light microscopy including dispersion staining. Asbestos material was detected and positively identified at concentrations estimated to be below 0.1g/kg.
- EA200: 'No' - No asbestos found at the reporting limit 0.1g/kg, by polarised light microscopy including dispersion staining.

## Analytical Results

| Sub-Matrix: SOIL (Matrix: SOIL) | | | Sample ID | SB1_0.0-0.2 | SB1_1.0-1.2 | SB2_0.5-0.7 | SB2_2.0-2.2 | SB3_0.0-0.2 |
|---|---|---|---|---|---|---|---|---|
| | | | Sampling date / time | 18-Dec-2023 00:00 | 18-Dec-2023 00:00 | 13-Dec-2023 00:00 | 13-Dec-2023 00:00 | 14-Dec-2023 00:00 |
| Compound | CAS Number | LOR | Unit | EM2322709-001 | EM2322709-003 | EM2322709-009 | EM2322709-011 | EM2322709-020 |
| | | | | Result | Result | Result | Result | Result |
| **EA001: pH in soil using 0.01M CaCl extract** | | | | | | | | |
| pH (CaCl2) | ---- | 0.1 | pH Unit | ---- | 6.6 | ---- | 7.6 | ---- |
| **EA002-AD: pH (Soils) dried at 40°C** | | | | | | | | |
| pH Value | ---- | 0.1 | pH Unit | ---- | 8.3 | ---- | 8.6 | ---- |
| **EA010-AD: Conductivity (Soils) dried at 40°C** | | | | | | | | |
| Electrical Conductivity @ 25°C | ---- | 1 | µS/cm | ---- | 94 | ---- | 136 | ---- |
| **EA055: Moisture Content (Dried @ 105-110°C)** | | | | | | | | |
| Moisture Content | ---- | 1.0 | % | 5.0 | 10.8 | 12.4 | 10.3 | 2.9 |
| **EA200: AS 4964 - 2004 Identification of Asbestos in Soils** | | | | | | | | |
| Asbestos Detected | 1332-21-4 | 0.1 | g/kg | No | ---- | No | ---- | No |
| Asbestos (Trace) | 1332-21-4 | - | - | No | ---- | No | ---- | No |
| Asbestos Type | 1332-21-4 | - | -- | - | ---- | - | ---- | - |
| Synthetic Mineral Fibre | ---- | - | -- | No | ---- | No | ---- | No |
| Organic Fibre | ---- | - | -- | No | ---- | No | ---- | No |
| Sample weight (dry) | ---- | 0.01 | g | 181 | ---- | 151 | ---- | 112 |
| APPROVED IDENTIFIER: | ---- | - | -- | M. TRAN | ---- | M. TRAN | ---- | M. TRAN |
| **ED006: Exchangeable Cations on Alkaline Soils** | | | | | | | | |
| ø Exchangeable Calcium | ---- | 0.2 | meq/100g | ---- | 3.6 | ---- | 4.0 | ---- |
| ø Exchangeable Magnesium | ---- | 0.2 | meq/100g | ---- | 9.3 | ---- | 8.8 | ---- |
| ø Exchangeable Potassium | ---- | 0.2 | meq/100g | ---- | 0.3 | ---- | 0.4 | ---- |
| ø Exchangeable Sodium | ---- | 0.2 | meq/100g | ---- | 1.5 | ---- | 3.7 | ---- |
| ø Cation Exchange Capacity | ---- | 0.2 | meq/100g | ---- | 14.8 | ---- | 16.8 | ---- |
| ø Exchangeable Calcium Percent | ---- | 0.2 | % | ---- | 24.4 | ---- | 23.6 | ---- |
| ø Exchangeable Magnesium Percent | ---- | 0.2 | % | ---- | 62.9 | ---- | 52.0 | ---- |
| ø Exchangeable Potassium Percent | ---- | 0.2 | % | ---- | 2.2 | ---- | 2.2 | ---- |
| ø Exchangeable Sodium Percent | ---- | 0.2 | % | ---- | 10.4 | ---- | 22.2 | ---- |
| ø Calcium/Magnesium Ratio | ---- | 0.2 | - | ---- | 0.4 | ---- | 0.4 | ---- |
| ø Magnesium/Potassium Ratio | ---- | 0.2 | - | ---- | 28.2 | ---- | 23.5 | ---- |

## Analytical Results

| Sub-Matrix: SOIL (Matrix: SOIL) | | | | Sample ID | SB1_0.0-0.2 | SB1_1.0-1.2 | SB2_0.5-0.7 | SB2_2.0-2.2 | SB3_0.0-0.2 |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Sampling date / time | 18-Dec-2023 00:00 | 18-Dec-2023 00:00 | 13-Dec-2023 00:00 | 13-Dec-2023 00:00 | 14-Dec-2023 00:00 |
| Compound | CAS Number | LOR | Unit | | EM2322709-001 | EM2322709-003 | EM2322709-009 | EM2322709-011 | EM2322709-020 |
| | | | | | Result | Result | Result | Result | Result |
| **EG005(ED093)T: Total Metals by ICP-AES** | | | | | | | | | |
| **Arsenic** | 7440-38-2 | 5 | mg/kg | | **82** | **8** | <5 | <5 | **86** |
| **Barium** | 7440-39-3 | 10 | mg/kg | | **50** | **200** | **80** | **70** | **30** |
| **Beryllium** | 7440-41-7 | 1 | mg/kg | | **1** | **2** | **1** | **1** | **1** |
| **Boron** | 7440-42-8 | 50 | mg/kg | | <50 | <50 | <50 | <50 | <50 |
| **Cadmium** | 7440-43-9 | 1 | mg/kg | | <1 | <1 | <1 | <1 | <1 |
| **Chromium** | 7440-47-3 | 2 | mg/kg | | **17** | **30** | **25** | **25** | **20** |
| **Cobalt** | 7440-48-4 | 2 | mg/kg | | **8** | **19** | **4** | **11** | **8** |
| **Copper** | 7440-50-8 | 5 | mg/kg | | **26** | **17** | **12** | **14** | **23** |
| **Iron** | 7439-89-6 | 0.005 | % | | **----** | **3.16** | **----** | **2.13** | **----** |
| **Lead** | 7439-92-1 | 5 | mg/kg | | **12** | **40** | **14** | **15** | **15** |
| **Manganese** | 7439-96-5 | 5 | mg/kg | | **180** | **820** | **117** | **154** | **184** |
| **Nickel** | 7440-02-0 | 2 | mg/kg | | **13** | **14** | **12** | **12** | **16** |
| **Selenium** | 7782-49-2 | 5 | mg/kg | | <5 | <5 | <5 | <5 | <5 |
| **Vanadium** | 7440-62-2 | 5 | mg/kg | | **22** | **51** | **31** | **34** | **19** |
| **Zinc** | 7440-66-6 | 5 | mg/kg | | **36** | **27** | **25** | **24** | **40** |
| **EG035T: Total Recoverable Mercury by FIMS** | | | | | | | | | |
| **Mercury** | 7439-97-6 | 0.1 | mg/kg | | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| **EK026SF: Total CN by Segmented Flow Analyser** | | | | | | | | | |
| **Total Cyanide** | 57-12-5 | 1 | mg/kg | | <1 | <1 | <1 | <1 | <1 |
| **EK040T: Fluoride Total** | | | | | | | | | |
| **Fluoride** | 16984-48-8 | 40 | mg/kg | | **440** | **280** | **210** | **260** | **530** |
| **EP004: Organic Matter** | | | | | | | | | |
| **Organic Matter** | ---- | 0.5 | % | | **----** | <0.5 | **----** | <0.5 | **----** |
| **Total Organic Carbon** | ---- | 0.5 | % | | **----** | <0.5 | **----** | <0.5 | **----** |
| **EP066: Polychlorinated Biphenyls (PCB)** | | | | | | | | | |
| **Total Polychlorinated biphenyls** | ---- | 0.1 | mg/kg | | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| **EP068A: Organochlorine Pesticides (OC)** | | | | | | | | | |

## Analytical Results

| Sub-Matrix: SOIL (Matrix: SOIL) | | | | Sample ID | SB1_0.0-0.2 | SB1_1.0-1.2 | SB2_0.5-0.7 | SB2_2.0-2.2 | SB3_0.0-0.2 |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Sampling date / time | 18-Dec-2023 00:00 | 18-Dec-2023 00:00 | 13-Dec-2023 00:00 | 13-Dec-2023 00:00 | 14-Dec-2023 00:00 |
| Compound | CAS Number | LOR | Unit | | EM2322709-001 | EM2322709-003 | EM2322709-009 | EM2322709-011 | EM2322709-020 |
| | | | | | Result | Result | Result | Result | Result |
| **EP068A: Organochlorine Pesticides (OC) - Continued** | | | | | | | | | |
| **alpha-BHC** | 319-84-6 | 0.05 | mg/kg | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Hexachlorobenzene (HCB)** | 118-74-1 | 0.05 | mg/kg | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **beta-BHC** | 319-85-7 | 0.05 | mg/kg | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **gamma-BHC** | 58-89-9 | 0.05 | mg/kg | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **delta-BHC** | 319-86-8 | 0.05 | mg/kg | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Heptachlor** | 76-44-8 | 0.05 | mg/kg | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Aldrin** | 309-00-2 | 0.05 | mg/kg | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Heptachlor epoxide** | 1024-57-3 | 0.05 | mg/kg | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| ^ **Total Chlordane (sum)** | ---- | 0.05 | mg/kg | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **trans-Chlordane** | 5103-74-2 | 0.05 | mg/kg | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **alpha-Endosulfan** | 959-98-8 | 0.05 | mg/kg | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **cis-Chlordane** | 5103-71-9 | 0.05 | mg/kg | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Dieldrin** | 60-57-1 | 0.05 | mg/kg | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **4.4`-DDE** | 72-55-9 | 0.05 | mg/kg | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Endrin** | 72-20-8 | 0.05 | mg/kg | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **beta-Endosulfan** | 33213-65-9 | 0.05 | mg/kg | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| ^ **Endosulfan (sum)** | 115-29-7 | 0.05 | mg/kg | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **4.4`-DDD** | 72-54-8 | 0.05 | mg/kg | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Endrin aldehyde** | 7421-93-4 | 0.05 | mg/kg | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Endosulfan sulfate** | 1031-07-8 | 0.05 | mg/kg | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **4.4`-DDT** | 50-29-3 | 0.2 | mg/kg | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| **Endrin ketone** | 53494-70-5 | 0.05 | mg/kg | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Methoxychlor** | 72-43-5 | 0.2 | mg/kg | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| ^ **Sum of Aldrin + Dieldrin** | 309-00-2/60-57-1 | 0.05 | mg/kg | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| ^ **Sum of DDD + DDE + DDT** | 72-54-8/72-55-9/50-2 | 0.05 | mg/kg | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **EP068B: Organophosphorus Pesticides (OP)** | | | | | | | | | |

## Analytical Results

| Sub-Matrix: SOIL (Matrix: SOIL) | | | | Sample ID | SB1_0.0-0.2 | SB1_1.0-1.2 | SB2_0.5-0.7 | SB2_2.0-2.2 | SB3_0.0-0.2 |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Sampling date / time | 18-Dec-2023 00:00 | 18-Dec-2023 00:00 | 13-Dec-2023 00:00 | 13-Dec-2023 00:00 | 14-Dec-2023 00:00 |
| Compound | CAS Number | LOR | Unit | | EM2322709-001 | EM2322709-003 | EM2322709-009 | EM2322709-011 | EM2322709-020 |
| | | | | | Result | Result | Result | Result | Result |
| **EP068B: Organophosphorus Pesticides (OP) - Continued** | | | | | | | | | |
| **Dichlorvos** | 62-73-7 | 0.05 | mg/kg | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Demeton-S-methyl** | 919-86-8 | 0.05 | mg/kg | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Monocrotophos** | 6923-22-4 | 0.2 | mg/kg | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| **Dimethoate** | 60-51-5 | 0.05 | mg/kg | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Diazinon** | 333-41-5 | 0.05 | mg/kg | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Chlorpyrifos-methyl** | 5598-13-0 | 0.05 | mg/kg | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Parathion-methyl** | 298-00-0 | 0.2 | mg/kg | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| **Malathion** | 121-75-5 | 0.05 | mg/kg | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Fenthion** | 55-38-9 | 0.05 | mg/kg | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Chlorpyrifos** | 2921-88-2 | 0.05 | mg/kg | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Parathion** | 56-38-2 | 0.2 | mg/kg | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| **Pirimphos-ethyl** | 23505-41-1 | 0.05 | mg/kg | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Chlorfenvinphos** | 470-90-6 | 0.05 | mg/kg | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Bromophos-ethyl** | 4824-78-6 | 0.05 | mg/kg | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Fenamiphos** | 22224-92-6 | 0.05 | mg/kg | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Prothiofos** | 34643-46-4 | 0.05 | mg/kg | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Ethion** | 563-12-2 | 0.05 | mg/kg | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Carbophenothion** | 786-19-6 | 0.05 | mg/kg | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Azinphos Methyl** | 86-50-0 | 0.05 | mg/kg | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **EP075(SIM)A: Phenolic Compounds** | | | | | | | | | |
| **Phenol** | 108-95-2 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| **2-Chlorophenol** | 95-57-8 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| **2-Methylphenol** | 95-48-7 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| **3- & 4-Methylphenol** | 1319-77-3 | 1 | mg/kg | | <1 | <1 | <1 | <1 | <1 |
| **2-Nitrophenol** | 88-75-5 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| **2.4-Dimethylphenol** | 105-67-9 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| **2.4-Dichlorophenol** | 120-83-2 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |

## Analytical Results

| Sub-Matrix: SOIL (Matrix: SOIL) | | | Sample ID | SB1_0.0-0.2 | SB1_1.0-1.2 | SB2_0.5-0.7 | SB2_2.0-2.2 | SB3_0.0-0.2 |
|---|---|---|---|---|---|---|---|---|
| | | | Sampling date / time | 18-Dec-2023 00:00 | 18-Dec-2023 00:00 | 13-Dec-2023 00:00 | 13-Dec-2023 00:00 | 14-Dec-2023 00:00 |
| Compound | CAS Number | LOR | Unit | EM2322709-001 | EM2322709-003 | EM2322709-009 | EM2322709-011 | EM2322709-020 |
| | | | | Result | Result | Result | Result | Result |
| **EP075(SIM)A: Phenolic Compounds - Continued** | | | | | | | | |
| 2.6-Dichlorophenol | 87-65-0 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 4-Chloro-3-methylphenol | 59-50-7 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 2.4.6-Trichlorophenol | 88-06-2 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 2.4.5-Trichlorophenol | 95-95-4 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Pentachlorophenol | 87-86-5 | 2 | mg/kg | <2 | <2 | <2 | <2 | <2 |
| **EP075(SIM)B: Polynuclear Aromatic Hydrocarbons** | | | | | | | | |
| Naphthalene | 91-20-3 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Acenaphthylene | 208-96-8 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Acenaphthene | 83-32-9 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Fluorene | 86-73-7 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Phenanthrene | 85-01-8 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Anthracene | 120-12-7 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Fluoranthene | 206-44-0 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Pyrene | 129-00-0 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Benz(a)anthracene | 56-55-3 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Chrysene | 218-01-9 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Benzo(b+j)fluoranthene | 205-99-2 205-82-3 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Benzo(k)fluoranthene | 207-08-9 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Benzo(a)pyrene | 50-32-8 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Indeno(1.2.3.cd)pyrene | 193-39-5 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Dibenz(a.h)anthracene | 53-70-3 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Benzo(g.h.i)perylene | 191-24-2 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| ^ Sum of polycyclic aromatic hydrocarbons | ---- | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| ^ Benzo(a)pyrene TEQ (zero) | ---- | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| ^ Benzo(a)pyrene TEQ (half LOR) | ---- | 0.5 | mg/kg | **0.6** | **0.6** | **0.6** | **0.6** | **0.6** |
| ^ Benzo(a)pyrene TEQ (LOR) | ---- | 0.5 | mg/kg | **1.2** | **1.2** | **1.2** | **1.2** | **1.2** |
| **EP080/071: Total Petroleum Hydrocarbons** | | | | | | | | |

## Analytical Results

| Sub-Matrix: SOIL (Matrix: SOIL) | | | | Sample ID | SB1_0.0-0.2 | SB1_1.0-1.2 | SB2_0.5-0.7 | SB2_2.0-2.2 | SB3_0.0-0.2 |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Sampling date / time | 18-Dec-2023 00:00 | 18-Dec-2023 00:00 | 13-Dec-2023 00:00 | 13-Dec-2023 00:00 | 14-Dec-2023 00:00 |
| Compound | CAS Number | LOR | Unit | | EM2322709-001 | EM2322709-003 | EM2322709-009 | EM2322709-011 | EM2322709-020 |
| | | | | | Result | Result | Result | Result | Result |
| **EP080/071: Total Petroleum Hydrocarbons - Continued** | | | | | | | | | |
| C6 - C9 Fraction | ---- | 10 | mg/kg | | <10 | <10 | <10 | <10 | <10 |
| C10 - C14 Fraction | ---- | 50 | mg/kg | | <50 | <50 | <50 | <50 | <50 |
| C15 - C28 Fraction | ---- | 100 | mg/kg | | <100 | <100 | <100 | <100 | <100 |
| C29 - C36 Fraction | ---- | 100 | mg/kg | | <100 | <100 | <100 | <100 | <100 |
| ^ C10 - C36 Fraction (sum) | ---- | 50 | mg/kg | | <50 | <50 | <50 | <50 | <50 |
| **EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions** | | | | | | | | | |
| C6 - C10 Fraction | C6_C10 | 10 | mg/kg | | <10 | <10 | <10 | <10 | <10 |
| ^ C6 - C10 Fraction minus BTEX (F1) | C6_C10-BTEX | 10 | mg/kg | | <10 | <10 | <10 | <10 | <10 |
| >C10 - C16 Fraction | ---- | 50 | mg/kg | | <50 | <50 | <50 | <50 | <50 |
| >C16 - C34 Fraction | ---- | 100 | mg/kg | | <100 | <100 | <100 | <100 | <100 |
| >C34 - C40 Fraction | ---- | 100 | mg/kg | | <100 | <100 | <100 | <100 | <100 |
| ^ >C10 - C40 Fraction (sum) | ---- | 50 | mg/kg | | <50 | <50 | <50 | <50 | <50 |
| ^ >C10 - C16 Fraction minus Naphthalene (F2) | ---- | 50 | mg/kg | | ---- | ---- | <50 | ---- | ---- |
| ^ >C10 - C16 Fraction minus Naphthalene (F2) | ---- | 50 | mg/kg | | <50 | <50 | ---- | <50 | <50 |
| **EP080: BTEXN** | | | | | | | | | |
| Benzene | 71-43-2 | 0.2 | mg/kg | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| Toluene | 108-88-3 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Ethylbenzene | 100-41-4 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| meta- & para-Xylene | 108-38-3 106-42-3 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| ortho-Xylene | 95-47-6 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| ^ Sum of BTEX | ---- | 0.2 | mg/kg | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| ^ Total Xylenes | ---- | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Naphthalene | 91-20-3 | 1 | mg/kg | | <1 | <1 | <1 | <1 | <1 |
| **EP066S: PCB Surrogate** | | | | | | | | | |
| Decachlorobiphenyl | 2051-24-3 | 0.1 | % | | **108** | **92.2** | **86.0** | **95.3** | **95.6** |
| **EP068S: Organochlorine Pesticide Surrogate** | | | | | | | | | |

## Analytical Results

| Sub-Matrix: SOIL (Matrix: SOIL) | | | Sample ID | SB1_0.0-0.2 | SB1_1.0-1.2 | SB2_0.5-0.7 | SB2_2.0-2.2 | SB3_0.0-0.2 |
|---|---|---|---|---|---|---|---|---|
| | | | Sampling date / time | 18-Dec-2023 00:00 | 18-Dec-2023 00:00 | 13-Dec-2023 00:00 | 13-Dec-2023 00:00 | 14-Dec-2023 00:00 |
| Compound | CAS Number | LOR | Unit | EM2322709-001 | EM2322709-003 | EM2322709-009 | EM2322709-011 | EM2322709-020 |
| | | | | Result | Result | Result | Result | Result |
| **EP068S: Organochlorine Pesticide Surrogate - Continued** | | | | | | | | |
| Dibromo-DDE | 21655-73-2 | 0.05 | % | 93.0 | 93.0 | 108 | 114 | 125 |
| **EP068T: Organophosphorus Pesticide Surrogate** | | | | | | | | |
| DEF | 78-48-8 | 0.05 | % | 80.4 | 101 | 96.7 | 103 | 107 |
| **EP075(SIM)S: Phenolic Compound Surrogates** | | | | | | | | |
| Phenol-d6 | 13127-88-3 | 0.5 | % | 93.2 | 84.3 | 89.8 | 87.5 | 90.3 |
| 2-Chlorophenol-D4 | 93951-73-6 | 0.5 | % | 93.4 | 86.3 | 85.4 | 83.3 | 91.4 |
| 2.4.6-Tribromophenol | 118-79-6 | 0.5 | % | 86.9 | 77.7 | 83.7 | 82.0 | 80.5 |
| **EP075(SIM)T: PAH Surrogates** | | | | | | | | |
| 2-Fluorobiphenyl | 321-60-8 | 0.5 | % | 96.2 | 89.8 | 88.6 | 86.1 | 96.4 |
| Anthracene-d10 | 1719-06-8 | 0.5 | % | 102 | 93.3 | 94.3 | 92.6 | 100 |
| 4-Terphenyl-d14 | 1718-51-0 | 0.5 | % | 101 | 96.3 | 96.1 | 94.2 | 105 |
| **EP080S: TPH(V)/BTEX Surrogates** | | | | | | | | |
| 1.2-Dichloroethane-D4 | 17060-07-0 | 0.2 | % | 77.8 | 71.4 | 70.6 | 85.1 | 75.8 |
| Toluene-D8 | 2037-26-5 | 0.2 | % | 81.1 | 76.8 | 76.1 | 88.8 | 79.9 |
| 4-Bromofluorobenzene | 460-00-4 | 0.2 | % | 100 | 95.7 | 93.8 | 110 | 98.4 |

## Analytical Results

| Sub-Matrix: SOIL (Matrix: SOIL) | | | Sample ID | SB3_2.0-2.2 | SB4_0.0-0.2 | SB4_1.0-1.2 | SB5_0.0-0.2 | SB5_1.0-1.2 |
|---|---|---|---|---|---|---|---|---|
| | | | Sampling date / time | 14-Dec-2023 00:00 | 12-Dec-2023 00:00 | 12-Dec-2023 00:00 | 14-Dec-2023 00:00 | 14-Dec-2023 00:00 |
| Compound | CAS Number | LOR | Unit | EM2322709-023 | EM2322709-025 | EM2322709-027 | EM2322709-028 | EM2322709-030 |
| | | | | Result | Result | Result | Result | Result |
| **EA001: pH in soil using 0.01M CaCl extract** | | | | | | | | |
| pH (CaCl2) | ---- | 0.1 | pH Unit | ---- | 8.4 | 7.6 | 7.8 | 6.9 |
| **EA002-AD: pH (Soils) dried at 40°C** | | | | | | | | |
| pH Value | ---- | 0.1 | pH Unit | ---- | 9.7 | 9.0 | 8.6 | 8.2 |
| **EA010-AD: Conductivity (Soils) dried at 40°C** | | | | | | | | |
| Electrical Conductivity @ 25°C | ---- | 1 | µS/cm | ---- | 92 | 55 | 115 | 159 |
| **EA055: Moisture Content (Dried @ 105-110°C)** | | | | | | | | |
| Moisture Content | ---- | 1.0 | % | 10.0 | 3.4 | 1.5 | <1.0 | 9.3 |
| **EA150: Soil Classification based on Particle Size** | | | | | | | | |
| Clay (<2 µm) | ---- | 1 | % | ---- | 4 | 13 | 5 | ---- |
| **EA152: Soil Particle Density** | | | | | | | | |
| Soil Particle Density (Clay/Silt/Sand) | ---- | 0.01 | g/cm3 | ---- | 2.68 | 2.75 | 2.35 | ---- |
| **ED006: Exchangeable Cations on Alkaline Soils** | | | | | | | | |
| ø Exchangeable Calcium | ---- | 0.2 | meq/100g | ---- | 6.1 | 1.2 | 1.8 | 2.0 |
| ø Exchangeable Magnesium | ---- | 0.2 | meq/100g | ---- | 1.7 | 3.4 | 1.2 | 11.5 |
| ø Exchangeable Potassium | ---- | 0.2 | meq/100g | ---- | 0.3 | <0.2 | 0.4 | 0.3 |
| ø Exchangeable Sodium | ---- | 0.2 | meq/100g | ---- | <0.2 | 1.0 | 0.3 | 2.9 |
| ø Cation Exchange Capacity | ---- | 0.2 | meq/100g | ---- | 8.1 | 5.7 | 3.7 | 16.8 |
| ø Exchangeable Calcium Percent | ---- | 0.2 | % | ---- | 75.2 | 21.5 | 48.6 | 12.2 |
| ø Exchangeable Magnesium Percent | ---- | 0.2 | % | ---- | 21.4 | 60.3 | 32.6 | 68.7 |
| ø Exchangeable Potassium Percent | ---- | 0.2 | % | ---- | 3.4 | <0.2 | 11.6 | 2.0 |
| ø Exchangeable Sodium Percent | ---- | 0.2 | % | ---- | <0.2 | 18.2 | 7.3 | 17.1 |
| ø Calcium/Magnesium Ratio | ---- | 0.2 | - | ---- | 3.5 | 0.4 | 1.5 | <0.2 |
| ø Magnesium/Potassium Ratio | ---- | 0.2 | - | ---- | 6.2 | ---- | 2.8 | 34.7 |
| **EG005(ED093)T: Total Metals by ICP-AES** | | | | | | | | |
| Arsenic | 7440-38-2 | 5 | mg/kg | <5 | 6 | 204 | 44 | 150 |
| Barium | 7440-39-3 | 10 | mg/kg | 90 | 30 | 60 | 40 | 90 |
| Beryllium | 7440-41-7 | 1 | mg/kg | <1 | <1 | 3 | <1 | 2 |

## Analytical Results

| Sub-Matrix: SOIL (Matrix: SOIL) | | | | Sample ID | SB3_2.0-2.2 | SB4_0.0-0.2 | SB4_1.0-1.2 | SB5_0.0-0.2 | SB5_1.0-1.2 |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Sampling date / time | 14-Dec-2023 00:00 | 12-Dec-2023 00:00 | 12-Dec-2023 00:00 | 14-Dec-2023 00:00 | 14-Dec-2023 00:00 |
| Compound | CAS Number | LOR | Unit | | EM2322709-023 | EM2322709-025 | EM2322709-027 | EM2322709-028 | EM2322709-030 |
| | | | | | Result | Result | Result | Result | Result |
| **EG005(ED093)T: Total Metals by ICP-AES - Continued** | | | | | | | | | |
| **Boron** | 7440-42-8 | 50 | mg/kg | | <50 | <50 | <50 | <50 | <50 |
| **Cadmium** | 7440-43-9 | 1 | mg/kg | | <1 | <1 | <1 | <1 | <1 |
| **Chromium** | 7440-47-3 | 2 | mg/kg | | **25** | **16** | **38** | **16** | **27** |
| **Cobalt** | 7440-48-4 | 2 | mg/kg | | **6** | **7** | **14** | **12** | **9** |
| **Copper** | 7440-50-8 | 5 | mg/kg | | **15** | **9** | **20** | **15** | **19** |
| **Iron** | 7439-89-6 | 0.005 | % | | **----** | **1.46** | **3.17** | **2.14** | **3.04** |
| **Lead** | 7439-92-1 | 5 | mg/kg | | **11** | **6** | **13** | **10** | **48** |
| **Manganese** | 7439-96-5 | 5 | mg/kg | | **168** | **178** | **238** | **177** | **99** |
| **Nickel** | 7440-02-0 | 2 | mg/kg | | **11** | **20** | **17** | **12** | **13** |
| **Selenium** | 7782-49-2 | 5 | mg/kg | | <5 | <5 | <5 | <5 | <5 |
| **Vanadium** | 7440-62-2 | 5 | mg/kg | | **28** | **21** | **36** | **30** | **42** |
| **Zinc** | 7440-66-6 | 5 | mg/kg | | **25** | **29** | **180** | **39** | **55** |
| **EG035T: Total Recoverable Mercury by FIMS** | | | | | | | | | |
| **Mercury** | 7439-97-6 | 0.1 | mg/kg | | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| **EK026SF: Total CN by Segmented Flow Analyser** | | | | | | | | | |
| **Total Cyanide** | 57-12-5 | 1 | mg/kg | | <1 | <1 | <1 | <1 | <1 |
| **EK040T: Fluoride Total** | | | | | | | | | |
| **Fluoride** | 16984-48-8 | 40 | mg/kg | | **280** | **360** | **180** | **390** | **300** |
| **EP004: Organic Matter** | | | | | | | | | |
| **Organic Matter** | ---- | 0.5 | % | | **----** | <0.5 | <0.5 | **3.1** | <0.5 |
| **Total Organic Carbon** | ---- | 0.5 | % | | **----** | <0.5 | <0.5 | **1.8** | <0.5 |
| **EP066: Polychlorinated Biphenyls (PCB)** | | | | | | | | | |
| **Total Polychlorinated biphenyls** | ---- | 0.1 | mg/kg | | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| **EP068A: Organochlorine Pesticides (OC)** | | | | | | | | | |
| **alpha-BHC** | 319-84-6 | 0.05 | mg/kg | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Hexachlorobenzene (HCB)** | 118-74-1 | 0.05 | mg/kg | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **beta-BHC** | 319-85-7 | 0.05 | mg/kg | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |

## Analytical Results

| Sub-Matrix: SOIL (Matrix: SOIL) | | | | Sample ID | SB3_2.0-2.2 | SB4_0.0-0.2 | SB4_1.0-1.2 | SB5_0.0-0.2 | SB5_1.0-1.2 |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Sampling date / time | 14-Dec-2023 00:00 | 12-Dec-2023 00:00 | 12-Dec-2023 00:00 | 14-Dec-2023 00:00 | 14-Dec-2023 00:00 |
| Compound | CAS Number | LOR | Unit | | EM2322709-023 | EM2322709-025 | EM2322709-027 | EM2322709-028 | EM2322709-030 |
| | | | | | Result | Result | Result | Result | Result |
| **EP068A: Organochlorine Pesticides (OC) - Continued** | | | | | | | | | |
| **gamma-BHC** | 58-89-9 | 0.05 | mg/kg | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **delta-BHC** | 319-86-8 | 0.05 | mg/kg | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Heptachlor** | 76-44-8 | 0.05 | mg/kg | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Aldrin** | 309-00-2 | 0.05 | mg/kg | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Heptachlor epoxide** | 1024-57-3 | 0.05 | mg/kg | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| ^ **Total Chlordane (sum)** | ---- | 0.05 | mg/kg | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **trans-Chlordane** | 5103-74-2 | 0.05 | mg/kg | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **alpha-Endosulfan** | 959-98-8 | 0.05 | mg/kg | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **cis-Chlordane** | 5103-71-9 | 0.05 | mg/kg | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Dieldrin** | 60-57-1 | 0.05 | mg/kg | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **4.4`-DDE** | 72-55-9 | 0.05 | mg/kg | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Endrin** | 72-20-8 | 0.05 | mg/kg | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **beta-Endosulfan** | 33213-65-9 | 0.05 | mg/kg | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| ^ **Endosulfan (sum)** | 115-29-7 | 0.05 | mg/kg | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **4.4`-DDD** | 72-54-8 | 0.05 | mg/kg | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Endrin aldehyde** | 7421-93-4 | 0.05 | mg/kg | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Endosulfan sulfate** | 1031-07-8 | 0.05 | mg/kg | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **4.4`-DDT** | 50-29-3 | 0.2 | mg/kg | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| **Endrin ketone** | 53494-70-5 | 0.05 | mg/kg | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Methoxychlor** | 72-43-5 | 0.2 | mg/kg | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| ^ **Sum of Aldrin + Dieldrin** | 309-00-2/60-57-1 | 0.05 | mg/kg | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| ^ **Sum of DDD + DDE + DDT** | 72-54-8/72-55-9/50-29-3 | 0.05 | mg/kg | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **EP068B: Organophosphorus Pesticides (OP)** | | | | | | | | | |
| **Dichlorvos** | 62-73-7 | 0.05 | mg/kg | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Demeton-S-methyl** | 919-86-8 | 0.05 | mg/kg | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Monocrotophos** | 6923-22-4 | 0.2 | mg/kg | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |

## Analytical Results

| Sub-Matrix: SOIL (Matrix: SOIL) | | | Sample ID | SB3_2.0-2.2 | SB4_0.0-0.2 | SB4_1.0-1.2 | SB5_0.0-0.2 | SB5_1.0-1.2 |
|---|---|---|---|---|---|---|---|---|
| | | | Sampling date / time | 14-Dec-2023 00:00 | 12-Dec-2023 00:00 | 12-Dec-2023 00:00 | 14-Dec-2023 00:00 | 14-Dec-2023 00:00 |
| Compound | CAS Number | LOR | Unit | EM2322709-023 | EM2322709-025 | EM2322709-027 | EM2322709-028 | EM2322709-030 |
| | | | | Result | Result | Result | Result | Result |
| **EP068B: Organophosphorus Pesticides (OP) - Continued** | | | | | | | | |
| **Dimethoate** | 60-51-5 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Diazinon** | 333-41-5 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Chlorpyrifos-methyl** | 5598-13-0 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Parathion-methyl** | 298-00-0 | 0.2 | mg/kg | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| **Malathion** | 121-75-5 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Fenthion** | 55-38-9 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Chlorpyrifos** | 2921-88-2 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Parathion** | 56-38-2 | 0.2 | mg/kg | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| **Pirimphos-ethyl** | 23505-41-1 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Chlorfenvinphos** | 470-90-6 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Bromophos-ethyl** | 4824-78-6 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Fenamiphos** | 22224-92-6 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Prothiofos** | 34643-46-4 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Ethion** | 563-12-2 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Carbophenothion** | 786-19-6 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Azinphos Methyl** | 86-50-0 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **EP075(SIM)A: Phenolic Compounds** | | | | | | | | |
| **Phenol** | 108-95-2 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| **2-Chlorophenol** | 95-57-8 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| **2-Methylphenol** | 95-48-7 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| **3- & 4-Methylphenol** | 1319-77-3 | 1 | mg/kg | <1 | <1 | <1 | <1 | <1 |
| **2-Nitrophenol** | 88-75-5 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| **2.4-Dimethylphenol** | 105-67-9 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| **2.4-Dichlorophenol** | 120-83-2 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| **2.6-Dichlorophenol** | 87-65-0 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| **4-Chloro-3-methylphenol** | 59-50-7 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| **2.4.6-Trichlorophenol** | 88-06-2 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |

## Analytical Results

| Sub-Matrix: SOIL (Matrix: SOIL) | | | | Sample ID | SB3_2.0-2.2 | SB4_0.0-0.2 | SB4_1.0-1.2 | SB5_0.0-0.2 | SB5_1.0-1.2 |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Sampling date / time | 14-Dec-2023 00:00 | 12-Dec-2023 00:00 | 12-Dec-2023 00:00 | 14-Dec-2023 00:00 | 14-Dec-2023 00:00 |
| Compound | CAS Number | LOR | Unit | | EM2322709-023 | EM2322709-025 | EM2322709-027 | EM2322709-028 | EM2322709-030 |
| | | | | | Result | Result | Result | Result | Result |
| **EP075(SIM)A: Phenolic Compounds - Continued** | | | | | | | | | |
| 2.4.5-Trichlorophenol | 95-95-4 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Pentachlorophenol | 87-86-5 | 2 | mg/kg | | <2 | <2 | <2 | <2 | <2 |
| **EP075(SIM)B: Polynuclear Aromatic Hydrocarbons** | | | | | | | | | |
| Naphthalene | 91-20-3 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Acenaphthylene | 208-96-8 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Acenaphthene | 83-32-9 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Fluorene | 86-73-7 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Phenanthrene | 85-01-8 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Anthracene | 120-12-7 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Fluoranthene | 206-44-0 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Pyrene | 129-00-0 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Benz(a)anthracene | 56-55-3 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Chrysene | 218-01-9 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Benzo(b+j)fluoranthene | 205-99-2 205-82-3 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Benzo(k)fluoranthene | 207-08-9 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Benzo(a)pyrene | 50-32-8 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Indeno(1.2.3.cd)pyrene | 193-39-5 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Dibenz(a.h)anthracene | 53-70-3 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Benzo(g.h.i)perylene | 191-24-2 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| ^ Sum of polycyclic aromatic hydrocarbons | ---- | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| ^ Benzo(a)pyrene TEQ (zero) | ---- | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| ^ Benzo(a)pyrene TEQ (half LOR) | ---- | 0.5 | mg/kg | | **0.6** | **0.6** | **0.6** | **0.6** | **0.6** |
| ^ Benzo(a)pyrene TEQ (LOR) | ---- | 0.5 | mg/kg | | **1.2** | **1.2** | **1.2** | **1.2** | **1.2** |
| **EP080/071: Total Petroleum Hydrocarbons** | | | | | | | | | |
| C6 - C9 Fraction | ---- | 10 | mg/kg | | <10 | <10 | <10 | <10 | <10 |
| C10 - C14 Fraction | ---- | 50 | mg/kg | | <50 | <50 | <50 | <50 | <50 |
| C15 - C28 Fraction | ---- | 100 | mg/kg | | <100 | <100 | <100 | **140** | <100 |

## Analytical Results

| Sub-Matrix: SOIL (Matrix: SOIL) | | | | Sample ID | SB3_2.0-2.2 | SB4_0.0-0.2 | SB4_1.0-1.2 | SB5_0.0-0.2 | SB5_1.0-1.2 |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Sampling date / time | 14-Dec-2023 00:00 | 12-Dec-2023 00:00 | 12-Dec-2023 00:00 | 14-Dec-2023 00:00 | 14-Dec-2023 00:00 |
| Compound | CAS Number | LOR | Unit | | EM2322709-023 | EM2322709-025 | EM2322709-027 | EM2322709-028 | EM2322709-030 |
| | | | | | Result | Result | Result | Result | Result |
| **EP080/071: Total Petroleum Hydrocarbons - Continued** | | | | | | | | | |
| C29 - C36 Fraction | ---- | 100 | mg/kg | | <100 | <100 | <100 | **420** | <100 |
| ^ C10 - C36 Fraction (sum) | ---- | 50 | mg/kg | | <50 | <50 | <50 | **560** | <50 |
| **EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions** | | | | | | | | | |
| C6 - C10 Fraction | C6_C10 | 10 | mg/kg | | <10 | <10 | <10 | <10 | <10 |
| ^ C6 - C10 Fraction minus BTEX (F1) | C6_C10-BTEX | 10 | mg/kg | | <10 | <10 | <10 | <10 | <10 |
| >C10 - C16 Fraction | ---- | 50 | mg/kg | | <50 | <50 | <50 | <50 | <50 |
| >C16 - C34 Fraction | ---- | 100 | mg/kg | | <100 | <100 | <100 | **370** | <100 |
| >C34 - C40 Fraction | ---- | 100 | mg/kg | | <100 | <100 | <100 | **620** | <100 |
| ^ >C10 - C40 Fraction (sum) | ---- | 50 | mg/kg | | <50 | <50 | <50 | **990** | <50 |
| ^ >C10 - C16 Fraction minus Naphthalene (F2) | ---- | 50 | mg/kg | | <50 | <50 | <50 | <50 | <50 |
| **EP080: BTEXN** | | | | | | | | | |
| Benzene | 71-43-2 | 0.2 | mg/kg | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| Toluene | 108-88-3 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Ethylbenzene | 100-41-4 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| meta- & para-Xylene | 108-38-3 106-42-3 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| ortho-Xylene | 95-47-6 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| ^ Sum of BTEX | ---- | 0.2 | mg/kg | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| ^ Total Xylenes | ---- | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Naphthalene | 91-20-3 | 1 | mg/kg | | <1 | <1 | <1 | <1 | <1 |
| **EP066S: PCB Surrogate** | | | | | | | | | |
| Decachlorobiphenyl | 2051-24-3 | 0.1 | % | | **77.9** | **86.0** | **100** | **94.7** | **103** |
| **EP068S: Organochlorine Pesticide Surrogate** | | | | | | | | | |
| Dibromo-DDE | 21655-73-2 | 0.05 | % | | **92.9** | **93.3** | **107** | **109** | **115** |
| **EP068T: Organophosphorus Pesticide Surrogate** | | | | | | | | | |
| DEF | 78-48-8 | 0.05 | % | | **87.3** | **96.9** | **106** | **102** | **104** |
| **EP075(SIM)S: Phenolic Compound Surrogates** | | | | | | | | | |

## Analytical Results

| Sub-Matrix: SOIL (Matrix: SOIL) | | | | Sample ID | SB3_2.0-2.2 | SB4_0.0-0.2 | SB4_1.0-1.2 | SB5_0.0-0.2 | SB5_1.0-1.2 |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Sampling date / time | 14-Dec-2023 00:00 | 12-Dec-2023 00:00 | 12-Dec-2023 00:00 | 14-Dec-2023 00:00 | 14-Dec-2023 00:00 |
| Compound | CAS Number | LOR | Unit | | EM2322709-023 | EM2322709-025 | EM2322709-027 | EM2322709-028 | EM2322709-030 |
| | | | | | Result | Result | Result | Result | Result |
| **EP075(SIM)S: Phenolic Compound Surrogates - Continued** | | | | | | | | | |
| **Phenol-d6** | 13127-88-3 | 0.5 | % | | **89.0** | **90.5** | **90.4** | **89.3** | **93.2** |
| **2-Chlorophenol-D4** | 93951-73-6 | 0.5 | % | | **86.6** | **87.1** | **86.3** | **89.6** | **93.7** |
| **2.4.6-Tribromophenol** | 118-79-6 | 0.5 | % | | **80.4** | **83.6** | **85.5** | **88.9** | **94.2** |
| **EP075(SIM)T: PAH Surrogates** | | | | | | | | | |
| **2-Fluorobiphenyl** | 321-60-8 | 0.5 | % | | **90.5** | **90.5** | **88.5** | **93.2** | **94.2** |
| **Anthracene-d10** | 1719-06-8 | 0.5 | % | | **93.4** | **97.9** | **95.5** | **104** | **99.3** |
| **4-Terphenyl-d14** | 1718-51-0 | 0.5 | % | | **95.8** | **99.3** | **97.7** | **104** | **95.0** |
| **EP080S: TPH(V)/BTEX Surrogates** | | | | | | | | | |
| **1.2-Dichloroethane-D4** | 17060-07-0 | 0.2 | % | | **73.3** | **71.3** | **75.1** | **78.7** | **75.4** |
| **Toluene-D8** | 2037-26-5 | 0.2 | % | | **78.6** | **77.3** | **76.0** | **84.8** | **79.7** |
| **4-Bromofluorobenzene** | 460-00-4 | 0.2 | % | | **97.4** | **94.9** | **95.8** | **101** | **99.0** |

## Analytical Results

| Sub-Matrix: SOIL (Matrix: SOIL) | | | Sample ID | SB8_0.0-0.2 | SB8_1.0-1.2 | SB8_4.0-4.2 | SB9_0.5-0.7 | SB11_0.5-0.7 |
|---|---|---|---|---|---|---|---|---|
| | | | Sampling date / time | 15-Dec-2023 00:00 | 15-Dec-2023 00:00 | 15-Dec-2023 00:00 | 14-Dec-2023 00:00 | 18-Dec-2023 00:00 |
| Compound | CAS Number | LOR | Unit | EM2322709-032 | EM2322709-034 | EM2322709-037 | EM2322709-043 | EM2322709-045 |
| | | | | Result | Result | Result | Result | Result |
| **EA001: pH in soil using 0.01M CaCl extract** | | | | | | | | |
| pH (CaCl2) | ---- | 0.1 | pH Unit | 7.1 | 7.2 | 7.7 | 6.9 | 6.8 |
| **EA002-AD: pH (Soils) dried at 40°C** | | | | | | | | |
| pH Value | ---- | 0.1 | pH Unit | 8.0 | 8.7 | 8.5 | 8.4 | 6.9 |
| **EA010-AD: Conductivity (Soils) dried at 40°C** | | | | | | | | |
| Electrical Conductivity @ 25°C | ---- | 1 | µS/cm | 47 | 64 | 207 | 33 | 66 |
| **EA055: Moisture Content (Dried @ 105-110°C)** | | | | | | | | |
| Moisture Content | ---- | 1.0 | % | 10.7 | 10.4 | 7.7 | 6.0 | 9.9 |
| **EA150: Soil Classification based on Particle Size** | | | | | | | | |
| Clay (<2 µm) | ---- | 1 | % | 32 | ---- | ---- | 7 | 33 |
| **EA152: Soil Particle Density** | | | | | | | | |
| Soil Particle Density (Clay/Silt/Sand) | ---- | 0.01 | g/cm3 | 2.73 | ---- | ---- | 2.63 | 2.93 |
| **ED006: Exchangeable Cations on Alkaline Soils** | | | | | | | | |
| ø Exchangeable Calcium | ---- | 0.2 | meq/100g | 4.2 | 1.7 | 3.0 | 2.3 | ---- |
| ø Exchangeable Magnesium | ---- | 0.2 | meq/100g | 5.5 | 5.1 | 6.7 | 2.3 | ---- |
| ø Exchangeable Potassium | ---- | 0.2 | meq/100g | 0.4 | <0.2 | 0.2 | <0.2 | ---- |
| ø Exchangeable Sodium | ---- | 0.2 | meq/100g | 0.9 | 2.2 | 3.8 | 0.2 | ---- |
| ø Cation Exchange Capacity | ---- | 0.2 | meq/100g | 10.9 | 9.3 | 13.8 | 5.0 | ---- |
| ø Exchangeable Calcium Percent | ---- | 0.2 | % | 38.3 | 18.7 | 22.0 | 46.5 | ---- |
| ø Exchangeable Magnesium Percent | ---- | 0.2 | % | 50.2 | 55.2 | 48.6 | 45.3 | ---- |
| ø Exchangeable Potassium Percent | ---- | 0.2 | % | 3.5 | 2.0 | 1.9 | 3.3 | ---- |
| ø Exchangeable Sodium Percent | ---- | 0.2 | % | 8.0 | 24.1 | 27.5 | 4.9 | ---- |
| ø Calcium/Magnesium Ratio | ---- | 0.2 | - | 0.8 | 0.3 | 0.4 | 1.0 | ---- |
| ø Magnesium/Potassium Ratio | ---- | 0.2 | - | 14.5 | ---- | 26.1 | ---- | ---- |
| **ED007: Exchangeable Cations** | | | | | | | | |
| Exchangeable Calcium | ---- | 0.1 | meq/100g | ---- | ---- | ---- | ---- | 2.6 |
| Exchangeable Magnesium | ---- | 0.1 | meq/100g | ---- | ---- | ---- | ---- | 9.4 |
| Exchangeable Potassium | ---- | 0.1 | meq/100g | ---- | ---- | ---- | ---- | 1.1 |

## Analytical Results

| Sub-Matrix: SOIL (Matrix: SOIL) | | | Sample ID | SB8_0.0-0.2 | SB8_1.0-1.2 | SB8_4.0-4.2 | SB9_0.5-0.7 | SB11_0.5-0.7 |
|---|---|---|---|---|---|---|---|---|
| | | | Sampling date / time | 15-Dec-2023 00:00 | 15-Dec-2023 00:00 | 15-Dec-2023 00:00 | 14-Dec-2023 00:00 | 18-Dec-2023 00:00 |
| Compound | CAS Number | LOR | Unit | EM2322709-032 | EM2322709-034 | EM2322709-037 | EM2322709-043 | EM2322709-045 |
| | | | | Result | Result | Result | Result | Result |
| **ED007: Exchangeable Cations - Continued** | | | | | | | | |
| Exchangeable Sodium | ---- | 0.1 | meq/100g | ---- | ---- | ---- | ---- | 0.4 |
| Cation Exchange Capacity | ---- | 0.1 | meq/100g | ---- | ---- | ---- | ---- | 13.5 |
| **EG005(ED093)T: Total Metals by ICP-AES** | | | | | | | | |
| Arsenic | 7440-38-2 | 5 | mg/kg | 11 | 22 | 40 | 40 | 9 |
| Barium | 7440-39-3 | 10 | mg/kg | 60 | 60 | 70 | 30 | 150 |
| Beryllium | 7440-41-7 | 1 | mg/kg | 2 | 2 | 2 | <1 | 1 |
| Boron | 7440-42-8 | 50 | mg/kg | <50 | <50 | <50 | <50 | <50 |
| Cadmium | 7440-43-9 | 1 | mg/kg | <1 | <1 | <1 | <1 | <1 |
| Chromium | 7440-47-3 | 2 | mg/kg | 28 | 24 | 30 | 6 | 33 |
| Cobalt | 7440-48-4 | 2 | mg/kg | 8 | 10 | 27 | 5 | 11 |
| Copper | 7440-50-8 | 5 | mg/kg | 17 | 19 | 15 | 18 | 23 |
| Iron | 7439-89-6 | 0.005 | % | 2.44 | 2.99 | 3.00 | 0.907 | 2.92 |
| Lead | 7439-92-1 | 5 | mg/kg | 18 | 29 | 35 | 19 | 20 |
| Manganese | 7439-96-5 | 5 | mg/kg | 110 | 265 | 470 | 61 | 620 |
| Nickel | 7440-02-0 | 2 | mg/kg | 14 | 13 | 15 | 4 | 15 |
| Selenium | 7782-49-2 | 5 | mg/kg | <5 | <5 | <5 | <5 | <5 |
| Vanadium | 7440-62-2 | 5 | mg/kg | 36 | 42 | 37 | 9 | 45 |
| Zinc | 7440-66-6 | 5 | mg/kg | 29 | 25 | 44 | 26 | 32 |
| **EG035T: Total Recoverable Mercury by FIMS** | | | | | | | | |
| Mercury | 7439-97-6 | 0.1 | mg/kg | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| **EK026SF: Total CN by Segmented Flow Analyser** | | | | | | | | |
| Total Cyanide | 57-12-5 | 1 | mg/kg | <1 | <1 | <1 | <1 | <1 |
| **EK040T: Fluoride Total** | | | | | | | | |
| Fluoride | 16984-48-8 | 40 | mg/kg | 240 | 240 | 260 | 130 | 250 |
| **EP004: Organic Matter** | | | | | | | | |
| Organic Matter | ---- | 0.5 | % | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Total Organic Carbon | ---- | 0.5 | % | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |

## Analytical Results

| Sub-Matrix: SOIL (Matrix: SOIL) | | | Sample ID | SB8_0.0-0.2 | SB8_1.0-1.2 | SB8_4.0-4.2 | SB9_0.5-0.7 | SB11_0.5-0.7 |
|---|---|---|---|---|---|---|---|---|
| | | | Sampling date / time | 15-Dec-2023 00:00 | 15-Dec-2023 00:00 | 15-Dec-2023 00:00 | 14-Dec-2023 00:00 | 18-Dec-2023 00:00 |
| Compound | CAS Number | LOR | Unit | EM2322709-032 | EM2322709-034 | EM2322709-037 | EM2322709-043 | EM2322709-045 |
| | | | | Result | Result | Result | Result | Result |
| **EP066: Polychlorinated Biphenyls (PCB)** | | | | | | | | |
| Total Polychlorinated biphenyls | ---- | 0.1 | mg/kg | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| **EP068A: Organochlorine Pesticides (OC)** | | | | | | | | |
| alpha-BHC | 319-84-6 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Hexachlorobenzene (HCB) | 118-74-1 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| beta-BHC | 319-85-7 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| gamma-BHC | 58-89-9 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| delta-BHC | 319-86-8 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Heptachlor | 76-44-8 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Aldrin | 309-00-2 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Heptachlor epoxide | 1024-57-3 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| ^ Total Chlordane (sum) | ---- | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| trans-Chlordane | 5103-74-2 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| alpha-Endosulfan | 959-98-8 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| cis-Chlordane | 5103-71-9 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Dieldrin | 60-57-1 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| 4.4`-DDE | 72-55-9 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Endrin | 72-20-8 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| beta-Endosulfan | 33213-65-9 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| ^ Endosulfan (sum) | 115-29-7 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| 4.4`-DDD | 72-54-8 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Endrin aldehyde | 7421-93-4 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Endosulfan sulfate | 1031-07-8 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| 4.4`-DDT | 50-29-3 | 0.2 | mg/kg | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| Endrin ketone | 53494-70-5 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Methoxychlor | 72-43-5 | 0.2 | mg/kg | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| ^ Sum of Aldrin + Dieldrin | 309-00-2/60-57-1 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |

## Analytical Results

| Sub-Matrix: SOIL (Matrix: SOIL) | | | Sample ID | SB8_0.0-0.2 | SB8_1.0-1.2 | SB8_4.0-4.2 | SB9_0.5-0.7 | SB11_0.5-0.7 |
|---|---|---|---|---|---|---|---|---|
| | | | Sampling date / time | 15-Dec-2023 00:00 | 15-Dec-2023 00:00 | 15-Dec-2023 00:00 | 14-Dec-2023 00:00 | 18-Dec-2023 00:00 |
| Compound | CAS Number | LOR | Unit | EM2322709-032 | EM2322709-034 | EM2322709-037 | EM2322709-043 | EM2322709-045 |
| | | | | Result | Result | Result | Result | Result |
| **EP068A: Organochlorine Pesticides (OC) - Continued** | | | | | | | | |
| ^ **Sum of DDD + DDE + DDT** | 72-54-8/72-55-9/50-2 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **EP068B: Organophosphorus Pesticides (OP)** | | | | | | | | |
| **Dichlorvos** | 62-73-7 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Demeton-S-methyl** | 919-86-8 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Monocrotophos** | 6923-22-4 | 0.2 | mg/kg | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| **Dimethoate** | 60-51-5 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Diazinon** | 333-41-5 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Chlorpyrifos-methyl** | 5598-13-0 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Parathion-methyl** | 298-00-0 | 0.2 | mg/kg | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| **Malathion** | 121-75-5 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Fenthion** | 55-38-9 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Chlorpyrifos** | 2921-88-2 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Parathion** | 56-38-2 | 0.2 | mg/kg | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| **Pirimphos-ethyl** | 23505-41-1 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Chlorfenvinphos** | 470-90-6 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Bromophos-ethyl** | 4824-78-6 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Fenamiphos** | 22224-92-6 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Prothiofos** | 34643-46-4 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Ethion** | 563-12-2 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Carbophenothion** | 786-19-6 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **Azinphos Methyl** | 86-50-0 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **EP075(SIM)A: Phenolic Compounds** | | | | | | | | |
| **Phenol** | 108-95-2 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| **2-Chlorophenol** | 95-57-8 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| **2-Methylphenol** | 95-48-7 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| **3- & 4-Methylphenol** | 1319-77-3 | 1 | mg/kg | <1 | <1 | <1 | <1 | <1 |

## Analytical Results

| Sub-Matrix: SOIL (Matrix: SOIL) | | | | Sample ID | SB8_0.0-0.2 | SB8_1.0-1.2 | SB8_4.0-4.2 | SB9_0.5-0.7 | SB11_0.5-0.7 |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Sampling date / time | 15-Dec-2023 00:00 | 15-Dec-2023 00:00 | 15-Dec-2023 00:00 | 14-Dec-2023 00:00 | 18-Dec-2023 00:00 |
| Compound | CAS Number | LOR | Unit | | EM2322709-032 | EM2322709-034 | EM2322709-037 | EM2322709-043 | EM2322709-045 |
| | | | | | Result | Result | Result | Result | Result |
| **EP075(SIM)A: Phenolic Compounds - Continued** | | | | | | | | | |
| 2-Nitrophenol | 88-75-5 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 2.4-Dimethylphenol | 105-67-9 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 2.4-Dichlorophenol | 120-83-2 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 2.6-Dichlorophenol | 87-65-0 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 4-Chloro-3-methylphenol | 59-50-7 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 2.4.6-Trichlorophenol | 88-06-2 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 2.4.5-Trichlorophenol | 95-95-4 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Pentachlorophenol | 87-86-5 | 2 | mg/kg | | <2 | <2 | <2 | <2 | <2 |
| **EP075(SIM)B: Polynuclear Aromatic Hydrocarbons** | | | | | | | | | |
| Naphthalene | 91-20-3 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Acenaphthylene | 208-96-8 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Acenaphthene | 83-32-9 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Fluorene | 86-73-7 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Phenanthrene | 85-01-8 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Anthracene | 120-12-7 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Fluoranthene | 206-44-0 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Pyrene | 129-00-0 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Benz(a)anthracene | 56-55-3 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Chrysene | 218-01-9 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Benzo(b+j)fluoranthene | 205-99-2 205-82-3 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Benzo(k)fluoranthene | 207-08-9 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Benzo(a)pyrene | 50-32-8 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Indeno(1.2.3.cd)pyrene | 193-39-5 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Dibenz(a.h)anthracene | 53-70-3 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Benzo(g.h.i)perylene | 191-24-2 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| ^ Sum of polycyclic aromatic hydrocarbons | ---- | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| ^ Benzo(a)pyrene TEQ (zero) | ---- | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |

## Analytical Results

| Sub-Matrix: SOIL (Matrix: SOIL) | | | | Sample ID | SB8_0.0-0.2 | SB8_1.0-1.2 | SB8_4.0-4.2 | SB9_0.5-0.7 | SB11_0.5-0.7 |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Sampling date / time | 15-Dec-2023 00:00 | 15-Dec-2023 00:00 | 15-Dec-2023 00:00 | 14-Dec-2023 00:00 | 18-Dec-2023 00:00 |
| Compound | CAS Number | LOR | Unit | | EM2322709-032 | EM2322709-034 | EM2322709-037 | EM2322709-043 | EM2322709-045 |
| | | | | | Result | Result | Result | Result | Result |
| **EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued** | | | | | | | | | |
| ^ **Benzo(a)pyrene TEQ (half LOR)** | ---- | 0.5 | mg/kg | | **0.6** | **0.6** | **0.6** | **0.6** | **0.6** |
| ^ **Benzo(a)pyrene TEQ (LOR)** | ---- | 0.5 | mg/kg | | **1.2** | **1.2** | **1.2** | **1.2** | **1.2** |
| **EP080/071: Total Petroleum Hydrocarbons** | | | | | | | | | |
| **C6 - C9 Fraction** | ---- | 10 | mg/kg | | <10 | <10 | <10 | <10 | <10 |
| **C10 - C14 Fraction** | ---- | 50 | mg/kg | | <50 | <50 | <50 | <50 | <50 |
| **C15 - C28 Fraction** | ---- | 100 | mg/kg | | <100 | <100 | <100 | <100 | <100 |
| **C29 - C36 Fraction** | ---- | 100 | mg/kg | | <100 | <100 | <100 | <100 | <100 |
| ^ **C10 - C36 Fraction (sum)** | ---- | 50 | mg/kg | | <50 | <50 | <50 | <50 | <50 |
| **EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions** | | | | | | | | | |
| **C6 - C10 Fraction** | C6_C10 | 10 | mg/kg | | <10 | <10 | <10 | <10 | <10 |
| ^ **C6 - C10 Fraction minus BTEX (F1)** | C6_C10-BTEX | 10 | mg/kg | | <10 | <10 | <10 | <10 | <10 |
| **>C10 - C16 Fraction** | ---- | 50 | mg/kg | | <50 | <50 | <50 | <50 | <50 |
| **>C16 - C34 Fraction** | ---- | 100 | mg/kg | | <100 | <100 | <100 | <100 | <100 |
| **>C34 - C40 Fraction** | ---- | 100 | mg/kg | | <100 | <100 | <100 | <100 | <100 |
| ^ **>C10 - C40 Fraction (sum)** | ---- | 50 | mg/kg | | <50 | <50 | <50 | <50 | <50 |
| ^ **>C10 - C16 Fraction minus Naphthalene (F2)** | ---- | 50 | mg/kg | | **----** | <50 | **----** | **----** | **----** |
| ^ **>C10 - C16 Fraction minus Naphthalene (F2)** | ---- | 50 | mg/kg | | <50 | **----** | <50 | <50 | <50 |
| **EP080: BTEXN** | | | | | | | | | |
| **Benzene** | 71-43-2 | 0.2 | mg/kg | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| **Toluene** | 108-88-3 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| **Ethylbenzene** | 100-41-4 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| **meta- & para-Xylene** | 108-38-3 106-42-3 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| **ortho-Xylene** | 95-47-6 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| ^ **Sum of BTEX** | ---- | 0.2 | mg/kg | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| ^ **Total Xylenes** | ---- | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |

## Analytical Results

| Sub-Matrix: SOIL (Matrix: SOIL) | | | Sample ID | SB8_0.0-0.2 | SB8_1.0-1.2 | SB8_4.0-4.2 | SB9_0.5-0.7 | SB11_0.5-0.7 |
|---|---|---|---|---|---|---|---|---|
| | | | Sampling date / time | 15-Dec-2023 00:00 | 15-Dec-2023 00:00 | 15-Dec-2023 00:00 | 14-Dec-2023 00:00 | 18-Dec-2023 00:00 |
| Compound | CAS Number | LOR | Unit | EM2322709-032 | EM2322709-034 | EM2322709-037 | EM2322709-043 | EM2322709-045 |
| | | | | Result | Result | Result | Result | Result |
| **EP080: BTEXN - Continued** | | | | | | | | |
| Naphthalene | 91-20-3 | 1 | mg/kg | <1 | <1 | <1 | <1 | <1 |
| **EP066S: PCB Surrogate** | | | | | | | | |
| Decachlorobiphenyl | 2051-24-3 | 0.1 | % | 100 | 106 | 102 | 125 | 98.1 |
| **EP068S: Organochlorine Pesticide Surrogate** | | | | | | | | |
| Dibromo-DDE | 21655-73-2 | 0.05 | % | 94.1 | 104 | 95.0 | 115 | 97.5 |
| **EP068T: Organophosphorus Pesticide Surrogate** | | | | | | | | |
| DEF | 78-48-8 | 0.05 | % | 81.0 | 91.6 | 80.8 | 105 | 99.8 |
| **EP075(SIM)S: Phenolic Compound Surrogates** | | | | | | | | |
| Phenol-d6 | 13127-88-3 | 0.5 | % | 94.6 | 104 | 99.5 | 90.4 | 84.5 |
| 2-Chlorophenol-D4 | 93951-73-6 | 0.5 | % | 86.2 | 92.5 | 89.7 | 89.9 | 86.3 |
| 2.4.6-Tribromophenol | 118-79-6 | 0.5 | % | 81.0 | 93.4 | 89.4 | 88.0 | 77.1 |
| **EP075(SIM)T: PAH Surrogates** | | | | | | | | |
| 2-Fluorobiphenyl | 321-60-8 | 0.5 | % | 88.1 | 92.7 | 90.8 | 95.6 | 92.4 |
| Anthracene-d10 | 1719-06-8 | 0.5 | % | 98.9 | 103 | 101 | 100 | 95.7 |
| 4-Terphenyl-d14 | 1718-51-0 | 0.5 | % | 109 | 103 | 101 | 98.0 | 102 |
| **EP080S: TPH(V)/BTEX Surrogates** | | | | | | | | |
| 1.2-Dichloroethane-D4 | 17060-07-0 | 0.2 | % | 71.9 | 74.7 | 75.9 | 75.8 | 78.2 |
| Toluene-D8 | 2037-26-5 | 0.2 | % | 76.1 | 78.2 | 81.0 | 77.8 | 81.1 |
| 4-Bromofluorobenzene | 460-00-4 | 0.2 | % | 93.7 | 96.4 | 96.4 | 95.1 | 100 |

## Analytical Results

| Sub-Matrix: SOIL (Matrix: SOIL) | | | Sample ID | SB11_2.0-2.2 | ---- | ---- | ---- | ---- |
|---|---|---|---|---|---|---|---|---|
| | | | Sampling date / time | 18-Dec-2023 00:00 | ---- | ---- | ---- | ---- |
| Compound | CAS Number | LOR | Unit | EM2322709-047 | -------- | -------- | -------- | -------- |
| | | | | Result | ---- | ---- | ---- | ---- |
| **EA001: pH in soil using 0.01M CaCl extract** | | | | | | | | |
| pH (CaCl2) | ---- | 0.1 | pH Unit | **7.6** | ---- | ---- | ---- | ---- |
| **EA002-AD: pH (Soils) dried at 40°C** | | | | | | | | |
| pH Value | ---- | 0.1 | pH Unit | **8.8** | ---- | ---- | ---- | ---- |
| **EA010-AD: Conductivity (Soils) dried at 40°C** | | | | | | | | |
| Electrical Conductivity @ 25°C | ---- | 1 | µS/cm | **145** | ---- | ---- | ---- | ---- |
| **EA055: Moisture Content (Dried @ 105-110°C)** | | | | | | | | |
| Moisture Content | ---- | 1.0 | % | **8.6** | ---- | ---- | ---- | ---- |
| **EA150: Soil Classification based on Particle Size** | | | | | | | | |
| Clay (<2 µm) | ---- | 1 | % | **28** | ---- | ---- | ---- | ---- |
| **EA152: Soil Particle Density** | | | | | | | | |
| Soil Particle Density (Clay/Silt/Sand) | ---- | 0.01 | g/cm3 | **3.03** | ---- | ---- | ---- | ---- |
| **ED006: Exchangeable Cations on Alkaline Soils** | | | | | | | | |
| ø Exchangeable Calcium | ---- | 0.2 | meq/100g | **3.4** | ---- | ---- | ---- | ---- |
| ø Exchangeable Magnesium | ---- | 0.2 | meq/100g | **8.1** | ---- | ---- | ---- | ---- |
| ø Exchangeable Potassium | ---- | 0.2 | meq/100g | **0.5** | ---- | ---- | ---- | ---- |
| ø Exchangeable Sodium | ---- | 0.2 | meq/100g | **2.9** | ---- | ---- | ---- | ---- |
| ø Cation Exchange Capacity | ---- | 0.2 | meq/100g | **14.9** | ---- | ---- | ---- | ---- |
| ø Exchangeable Calcium Percent | ---- | 0.2 | % | **22.8** | ---- | ---- | ---- | ---- |
| ø Exchangeable Magnesium Percent | ---- | 0.2 | % | **54.4** | ---- | ---- | ---- | ---- |
| ø Exchangeable Potassium Percent | ---- | 0.2 | % | **3.2** | ---- | ---- | ---- | ---- |
| ø Exchangeable Sodium Percent | ---- | 0.2 | % | **19.5** | ---- | ---- | ---- | ---- |
| ø Calcium/Magnesium Ratio | ---- | 0.2 | - | **0.4** | ---- | ---- | ---- | ---- |
| ø Magnesium/Potassium Ratio | ---- | 0.2 | - | **16.7** | ---- | ---- | ---- | ---- |
| **EG005(ED093)T: Total Metals by ICP-AES** | | | | | | | | |
| Arsenic | 7440-38-2 | 5 | mg/kg | **8** | ---- | ---- | ---- | ---- |
| Barium | 7440-39-3 | 10 | mg/kg | **160** | ---- | ---- | ---- | ---- |
| Beryllium | 7440-41-7 | 1 | mg/kg | **1** | ---- | ---- | ---- | ---- |

## Analytical Results

| Sub-Matrix: SOIL (Matrix: SOIL) | | | | Sample ID | SB11_2.0-2.2 | ---- | ---- | ---- | ---- |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Sampling date / time | 18-Dec-2023 00:00 | ---- | ---- | ---- | ---- |
| Compound | CAS Number | LOR | Unit | | EM2322709-047 | -------- | -------- | -------- | -------- |
| | | | | | Result | ---- | ---- | ---- | ---- |
| **EG005(ED093)T: Total Metals by ICP-AES - Continued** | | | | | | | | | |
| **Boron** | 7440-42-8 | 50 | mg/kg | | <50 | ---- | ---- | ---- | ---- |
| **Cadmium** | 7440-43-9 | 1 | mg/kg | | <1 | ---- | ---- | ---- | ---- |
| **Chromium** | 7440-47-3 | 2 | mg/kg | | **33** | ---- | ---- | ---- | ---- |
| **Cobalt** | 7440-48-4 | 2 | mg/kg | | **14** | ---- | ---- | ---- | ---- |
| **Copper** | 7440-50-8 | 5 | mg/kg | | **17** | ---- | ---- | ---- | ---- |
| **Iron** | 7439-89-6 | 0.005 | % | | **2.96** | ---- | ---- | ---- | ---- |
| **Lead** | 7439-92-1 | 5 | mg/kg | | **22** | ---- | ---- | ---- | ---- |
| **Manganese** | 7439-96-5 | 5 | mg/kg | | **597** | ---- | ---- | ---- | ---- |
| **Nickel** | 7440-02-0 | 2 | mg/kg | | **11** | ---- | ---- | ---- | ---- |
| **Selenium** | 7782-49-2 | 5 | mg/kg | | <5 | ---- | ---- | ---- | ---- |
| **Vanadium** | 7440-62-2 | 5 | mg/kg | | **54** | ---- | ---- | ---- | ---- |
| **Zinc** | 7440-66-6 | 5 | mg/kg | | **21** | ---- | ---- | ---- | ---- |
| **EG035T: Total Recoverable Mercury by FIMS** | | | | | | | | | |
| **Mercury** | 7439-97-6 | 0.1 | mg/kg | | <0.1 | ---- | ---- | ---- | ---- |
| **EK026SF: Total CN by Segmented Flow Analyser** | | | | | | | | | |
| **Total Cyanide** | 57-12-5 | 1 | mg/kg | | <1 | ---- | ---- | ---- | ---- |
| **EK040T: Fluoride Total** | | | | | | | | | |
| **Fluoride** | 16984-48-8 | 40 | mg/kg | | **170** | ---- | ---- | ---- | ---- |
| **EP004: Organic Matter** | | | | | | | | | |
| **Organic Matter** | ---- | 0.5 | % | | <0.5 | ---- | ---- | ---- | ---- |
| **Total Organic Carbon** | ---- | 0.5 | % | | <0.5 | ---- | ---- | ---- | ---- |
| **EP066: Polychlorinated Biphenyls (PCB)** | | | | | | | | | |
| **Total Polychlorinated biphenyls** | ---- | 0.1 | mg/kg | | <0.1 | ---- | ---- | ---- | ---- |
| **EP068A: Organochlorine Pesticides (OC)** | | | | | | | | | |
| **alpha-BHC** | 319-84-6 | 0.05 | mg/kg | | <0.05 | ---- | ---- | ---- | ---- |
| **Hexachlorobenzene (HCB)** | 118-74-1 | 0.05 | mg/kg | | <0.05 | ---- | ---- | ---- | ---- |
| **beta-BHC** | 319-85-7 | 0.05 | mg/kg | | <0.05 | ---- | ---- | ---- | ---- |

## Analytical Results

| Sub-Matrix: SOIL (Matrix: SOIL) | | | | Sample ID | SB11_2.0-2.2 | ---- | ---- | ---- | ---- |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Sampling date / time | 18-Dec-2023 00:00 | ---- | ---- | ---- | ---- |
| Compound | CAS Number | LOR | Unit | | EM2322709-047 | -------- | -------- | -------- | -------- |
| | | | | | Result | ---- | ---- | ---- | ---- |
| **EP068A: Organochlorine Pesticides (OC) - Continued** | | | | | | | | | |
| **gamma-BHC** | 58-89-9 | 0.05 | mg/kg | | <0.05 | ---- | ---- | ---- | ---- |
| **delta-BHC** | 319-86-8 | 0.05 | mg/kg | | <0.05 | ---- | ---- | ---- | ---- |
| **Heptachlor** | 76-44-8 | 0.05 | mg/kg | | <0.05 | ---- | ---- | ---- | ---- |
| **Aldrin** | 309-00-2 | 0.05 | mg/kg | | <0.05 | ---- | ---- | ---- | ---- |
| **Heptachlor epoxide** | 1024-57-3 | 0.05 | mg/kg | | <0.05 | ---- | ---- | ---- | ---- |
| ^ **Total Chlordane (sum)** | ---- | 0.05 | mg/kg | | <0.05 | ---- | ---- | ---- | ---- |
| **trans-Chlordane** | 5103-74-2 | 0.05 | mg/kg | | <0.05 | ---- | ---- | ---- | ---- |
| **alpha-Endosulfan** | 959-98-8 | 0.05 | mg/kg | | <0.05 | ---- | ---- | ---- | ---- |
| **cis-Chlordane** | 5103-71-9 | 0.05 | mg/kg | | <0.05 | ---- | ---- | ---- | ---- |
| **Dieldrin** | 60-57-1 | 0.05 | mg/kg | | <0.05 | ---- | ---- | ---- | ---- |
| **4.4`-DDE** | 72-55-9 | 0.05 | mg/kg | | <0.05 | ---- | ---- | ---- | ---- |
| **Endrin** | 72-20-8 | 0.05 | mg/kg | | <0.05 | ---- | ---- | ---- | ---- |
| **beta-Endosulfan** | 33213-65-9 | 0.05 | mg/kg | | <0.05 | ---- | ---- | ---- | ---- |
| ^ **Endosulfan (sum)** | 115-29-7 | 0.05 | mg/kg | | <0.05 | ---- | ---- | ---- | ---- |
| **4.4`-DDD** | 72-54-8 | 0.05 | mg/kg | | <0.05 | ---- | ---- | ---- | ---- |
| **Endrin aldehyde** | 7421-93-4 | 0.05 | mg/kg | | <0.05 | ---- | ---- | ---- | ---- |
| **Endosulfan sulfate** | 1031-07-8 | 0.05 | mg/kg | | <0.05 | ---- | ---- | ---- | ---- |
| **4.4`-DDT** | 50-29-3 | 0.2 | mg/kg | | <0.2 | ---- | ---- | ---- | ---- |
| **Endrin ketone** | 53494-70-5 | 0.05 | mg/kg | | <0.05 | ---- | ---- | ---- | ---- |
| **Methoxychlor** | 72-43-5 | 0.2 | mg/kg | | <0.2 | ---- | ---- | ---- | ---- |
| ^ **Sum of Aldrin + Dieldrin** | 309-00-2/60-57-1 | 0.05 | mg/kg | | <0.05 | ---- | ---- | ---- | ---- |
| ^ **Sum of DDD + DDE + DDT** | 72-54-8/72-55-9/50-29-3 | 0.05 | mg/kg | | <0.05 | ---- | ---- | ---- | ---- |
| **EP068B: Organophosphorus Pesticides (OP)** | | | | | | | | | |
| **Dichlorvos** | 62-73-7 | 0.05 | mg/kg | | <0.05 | ---- | ---- | ---- | ---- |
| **Demeton-S-methyl** | 919-86-8 | 0.05 | mg/kg | | <0.05 | ---- | ---- | ---- | ---- |
| **Monocrotophos** | 6923-22-4 | 0.2 | mg/kg | | <0.2 | ---- | ---- | ---- | ---- |

## Analytical Results

| Sub-Matrix: SOIL (Matrix: SOIL) | | | | Sample ID | SB11_2.0-2.2 | ---- | ---- | ---- | ---- |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Sampling date / time | 18-Dec-2023 00:00 | ---- | ---- | ---- | ---- |
| Compound | CAS Number | LOR | Unit | | EM2322709-047 | -------- | -------- | -------- | -------- |
| | | | | | Result | ---- | ---- | ---- | ---- |
| **EP068B: Organophosphorus Pesticides (OP) - Continued** | | | | | | | | | |
| **Dimethoate** | 60-51-5 | 0.05 | mg/kg | | <0.05 | ---- | ---- | ---- | ---- |
| **Diazinon** | 333-41-5 | 0.05 | mg/kg | | <0.05 | ---- | ---- | ---- | ---- |
| **Chlorpyrifos-methyl** | 5598-13-0 | 0.05 | mg/kg | | <0.05 | ---- | ---- | ---- | ---- |
| **Parathion-methyl** | 298-00-0 | 0.2 | mg/kg | | <0.2 | ---- | ---- | ---- | ---- |
| **Malathion** | 121-75-5 | 0.05 | mg/kg | | <0.05 | ---- | ---- | ---- | ---- |
| **Fenthion** | 55-38-9 | 0.05 | mg/kg | | <0.05 | ---- | ---- | ---- | ---- |
| **Chlorpyrifos** | 2921-88-2 | 0.05 | mg/kg | | <0.05 | ---- | ---- | ---- | ---- |
| **Parathion** | 56-38-2 | 0.2 | mg/kg | | <0.2 | ---- | ---- | ---- | ---- |
| **Pirimphos-ethyl** | 23505-41-1 | 0.05 | mg/kg | | <0.05 | ---- | ---- | ---- | ---- |
| **Chlorfenvinphos** | 470-90-6 | 0.05 | mg/kg | | <0.05 | ---- | ---- | ---- | ---- |
| **Bromophos-ethyl** | 4824-78-6 | 0.05 | mg/kg | | <0.05 | ---- | ---- | ---- | ---- |
| **Fenamiphos** | 22224-92-6 | 0.05 | mg/kg | | <0.05 | ---- | ---- | ---- | ---- |
| **Prothiofos** | 34643-46-4 | 0.05 | mg/kg | | <0.05 | ---- | ---- | ---- | ---- |
| **Ethion** | 563-12-2 | 0.05 | mg/kg | | <0.05 | ---- | ---- | ---- | ---- |
| **Carbophenothion** | 786-19-6 | 0.05 | mg/kg | | <0.05 | ---- | ---- | ---- | ---- |
| **Azinphos Methyl** | 86-50-0 | 0.05 | mg/kg | | <0.05 | ---- | ---- | ---- | ---- |
| **EP075(SIM)A: Phenolic Compounds** | | | | | | | | | |
| **Phenol** | 108-95-2 | 0.5 | mg/kg | | <0.5 | ---- | ---- | ---- | ---- |
| **2-Chlorophenol** | 95-57-8 | 0.5 | mg/kg | | <0.5 | ---- | ---- | ---- | ---- |
| **2-Methylphenol** | 95-48-7 | 0.5 | mg/kg | | <0.5 | ---- | ---- | ---- | ---- |
| **3- & 4-Methylphenol** | 1319-77-3 | 1 | mg/kg | | <1 | ---- | ---- | ---- | ---- |
| **2-Nitrophenol** | 88-75-5 | 0.5 | mg/kg | | <0.5 | ---- | ---- | ---- | ---- |
| **2.4-Dimethylphenol** | 105-67-9 | 0.5 | mg/kg | | <0.5 | ---- | ---- | ---- | ---- |
| **2.4-Dichlorophenol** | 120-83-2 | 0.5 | mg/kg | | <0.5 | ---- | ---- | ---- | ---- |
| **2.6-Dichlorophenol** | 87-65-0 | 0.5 | mg/kg | | <0.5 | ---- | ---- | ---- | ---- |
| **4-Chloro-3-methylphenol** | 59-50-7 | 0.5 | mg/kg | | <0.5 | ---- | ---- | ---- | ---- |
| **2.4.6-Trichlorophenol** | 88-06-2 | 0.5 | mg/kg | | <0.5 | ---- | ---- | ---- | ---- |

## Analytical Results

| Sub-Matrix: SOIL (Matrix: SOIL) | | | | Sample ID | SB11_2.0-2.2 | ---- | ---- | ---- | ---- |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Sampling date / time | 18-Dec-2023 00:00 | ---- | ---- | ---- | ---- |
| Compound | CAS Number | LOR | Unit | | EM2322709-047 | -------- | -------- | -------- | -------- |
| | | | | | Result | ---- | ---- | ---- | ---- |
| **EP075(SIM)A: Phenolic Compounds - Continued** | | | | | | | | | |
| **2.4.5-Trichlorophenol** | 95-95-4 | 0.5 | mg/kg | | <0.5 | ---- | ---- | ---- | ---- |
| **Pentachlorophenol** | 87-86-5 | 2 | mg/kg | | <2 | ---- | ---- | ---- | ---- |
| **EP075(SIM)B: Polynuclear Aromatic Hydrocarbons** | | | | | | | | | |
| **Naphthalene** | 91-20-3 | 0.5 | mg/kg | | <0.5 | ---- | ---- | ---- | ---- |
| **Acenaphthylene** | 208-96-8 | 0.5 | mg/kg | | <0.5 | ---- | ---- | ---- | ---- |
| **Acenaphthene** | 83-32-9 | 0.5 | mg/kg | | <0.5 | ---- | ---- | ---- | ---- |
| **Fluorene** | 86-73-7 | 0.5 | mg/kg | | <0.5 | ---- | ---- | ---- | ---- |
| **Phenanthrene** | 85-01-8 | 0.5 | mg/kg | | <0.5 | ---- | ---- | ---- | ---- |
| **Anthracene** | 120-12-7 | 0.5 | mg/kg | | <0.5 | ---- | ---- | ---- | ---- |
| **Fluoranthene** | 206-44-0 | 0.5 | mg/kg | | <0.5 | ---- | ---- | ---- | ---- |
| **Pyrene** | 129-00-0 | 0.5 | mg/kg | | <0.5 | ---- | ---- | ---- | ---- |
| **Benz(a)anthracene** | 56-55-3 | 0.5 | mg/kg | | <0.5 | ---- | ---- | ---- | ---- |
| **Chrysene** | 218-01-9 | 0.5 | mg/kg | | <0.5 | ---- | ---- | ---- | ---- |
| **Benzo(b+j)fluoranthene** | 205-99-2 205-82-3 | 0.5 | mg/kg | | <0.5 | ---- | ---- | ---- | ---- |
| **Benzo(k)fluoranthene** | 207-08-9 | 0.5 | mg/kg | | <0.5 | ---- | ---- | ---- | ---- |
| **Benzo(a)pyrene** | 50-32-8 | 0.5 | mg/kg | | <0.5 | ---- | ---- | ---- | ---- |
| **Indeno(1.2.3.cd)pyrene** | 193-39-5 | 0.5 | mg/kg | | <0.5 | ---- | ---- | ---- | ---- |
| **Dibenz(a.h)anthracene** | 53-70-3 | 0.5 | mg/kg | | <0.5 | ---- | ---- | ---- | ---- |
| **Benzo(g.h.i)perylene** | 191-24-2 | 0.5 | mg/kg | | <0.5 | ---- | ---- | ---- | ---- |
| ^ **Sum of polycyclic aromatic hydrocarbons** | ---- | 0.5 | mg/kg | | <0.5 | ---- | ---- | ---- | ---- |
| ^ **Benzo(a)pyrene TEQ (zero)** | ---- | 0.5 | mg/kg | | <0.5 | ---- | ---- | ---- | ---- |
| ^ **Benzo(a)pyrene TEQ (half LOR)** | ---- | 0.5 | mg/kg | | **0.6** | ---- | ---- | ---- | ---- |
| ^ **Benzo(a)pyrene TEQ (LOR)** | ---- | 0.5 | mg/kg | | **1.2** | ---- | ---- | ---- | ---- |
| **EP080/071: Total Petroleum Hydrocarbons** | | | | | | | | | |
| **C6 - C9 Fraction** | ---- | 10 | mg/kg | | <10 | ---- | ---- | ---- | ---- |
| **C10 - C14 Fraction** | ---- | 50 | mg/kg | | <50 | ---- | ---- | ---- | ---- |
| **C15 - C28 Fraction** | ---- | 100 | mg/kg | | <100 | ---- | ---- | ---- | ---- |

## Analytical Results

| Sub-Matrix: SOIL (Matrix: SOIL) | | | | Sample ID | SB11_2.0-2.2 | ---- | ---- | ---- | ---- |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Sampling date / time | 18-Dec-2023 00:00 | ---- | ---- | ---- | ---- |
| Compound | CAS Number | LOR | Unit | | EM2322709-047 | -------- | -------- | -------- | -------- |
| | | | | | Result | ---- | ---- | ---- | ---- |
| **EP080/071: Total Petroleum Hydrocarbons - Continued** | | | | | | | | | |
| C29 - C36 Fraction | ---- | 100 | mg/kg | | <100 | ---- | ---- | ---- | ---- |
| ^ C10 - C36 Fraction (sum) | ---- | 50 | mg/kg | | <50 | ---- | ---- | ---- | ---- |
| **EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions** | | | | | | | | | |
| C6 - C10 Fraction | C6_C10 | 10 | mg/kg | | <10 | ---- | ---- | ---- | ---- |
| ^ C6 - C10 Fraction minus BTEX (F1) | C6_C10-BTEX | 10 | mg/kg | | <10 | ---- | ---- | ---- | ---- |
| >C10 - C16 Fraction | ---- | 50 | mg/kg | | <50 | ---- | ---- | ---- | ---- |
| >C16 - C34 Fraction | ---- | 100 | mg/kg | | <100 | ---- | ---- | ---- | ---- |
| >C34 - C40 Fraction | ---- | 100 | mg/kg | | <100 | ---- | ---- | ---- | ---- |
| ^ >C10 - C40 Fraction (sum) | ---- | 50 | mg/kg | | <50 | ---- | ---- | ---- | ---- |
| ^ >C10 - C16 Fraction minus Naphthalene (F2) | ---- | 50 | mg/kg | | <50 | ---- | ---- | ---- | ---- |
| **EP080: BTEXN** | | | | | | | | | |
| Benzene | 71-43-2 | 0.2 | mg/kg | | <0.2 | ---- | ---- | ---- | ---- |
| Toluene | 108-88-3 | 0.5 | mg/kg | | <0.5 | ---- | ---- | ---- | ---- |
| Ethylbenzene | 100-41-4 | 0.5 | mg/kg | | <0.5 | ---- | ---- | ---- | ---- |
| meta- & para-Xylene | 108-38-3 106-42-3 | 0.5 | mg/kg | | <0.5 | ---- | ---- | ---- | ---- |
| ortho-Xylene | 95-47-6 | 0.5 | mg/kg | | <0.5 | ---- | ---- | ---- | ---- |
| ^ Sum of BTEX | ---- | 0.2 | mg/kg | | <0.2 | ---- | ---- | ---- | ---- |
| ^ Total Xylenes | ---- | 0.5 | mg/kg | | <0.5 | ---- | ---- | ---- | ---- |
| Naphthalene | 91-20-3 | 1 | mg/kg | | <1 | ---- | ---- | ---- | ---- |
| **EP066S: PCB Surrogate** | | | | | | | | | |
| Decachlorobiphenyl | 2051-24-3 | 0.1 | % | | **103** | ---- | ---- | ---- | ---- |
| **EP068S: Organochlorine Pesticide Surrogate** | | | | | | | | | |
| Dibromo-DDE | 21655-73-2 | 0.05 | % | | **92.7** | ---- | ---- | ---- | ---- |
| **EP068T: Organophosphorus Pesticide Surrogate** | | | | | | | | | |
| DEF | 78-48-8 | 0.05 | % | | **73.7** | ---- | ---- | ---- | ---- |
| **EP075(SIM)S: Phenolic Compound Surrogates** | | | | | | | | | |

## Analytical Results

| Sub-Matrix: SOIL (Matrix: SOIL) | | | | Sample ID | SB11_2.0-2.2 | ---- | ---- | ---- | ---- |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Sampling date / time | 18-Dec-2023 00:00 | ---- | ---- | ---- | ---- |
| Compound | CAS Number | LOR | Unit | | EM2322709-047 | -------- | -------- | -------- | -------- |
| | | | | | Result | ---- | ---- | ---- | ---- |
| **EP075(SIM)S: Phenolic Compound Surrogates - Continued** | | | | | | | | | |
| **Phenol-d6** | 13127-88-3 | 0.5 | % | | **87.3** | ---- | ---- | ---- | ---- |
| **2-Chlorophenol-D4** | 93951-73-6 | 0.5 | % | | **89.1** | ---- | ---- | ---- | ---- |
| **2.4.6-Tribromophenol** | 118-79-6 | 0.5 | % | | **80.1** | ---- | ---- | ---- | ---- |
| **EP075(SIM)T: PAH Surrogates** | | | | | | | | | |
| **2-Fluorobiphenyl** | 321-60-8 | 0.5 | % | | **93.8** | ---- | ---- | ---- | ---- |
| **Anthracene-d10** | 1719-06-8 | 0.5 | % | | **97.0** | ---- | ---- | ---- | ---- |
| **4-Terphenyl-d14** | 1718-51-0 | 0.5 | % | | **103** | ---- | ---- | ---- | ---- |
| **EP080S: TPH(V)/BTEX Surrogates** | | | | | | | | | |
| **1.2-Dichloroethane-D4** | 17060-07-0 | 0.2 | % | | **71.7** | ---- | ---- | ---- | ---- |
| **Toluene-D8** | 2037-26-5 | 0.2 | % | | **74.5** | ---- | ---- | ---- | ---- |
| **4-Bromofluorobenzene** | 460-00-4 | 0.2 | % | | **92.3** | ---- | ---- | ---- | ---- |

## Analytical Results

| Sub-Matrix: WATER (Matrix: WATER) | | | | Sample ID | QC1 | QC2 | QC3 | QC4 | QC8 |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Sampling date / time | 12-Dec-2023 00:00 | 13-Dec-2023 00:00 | 14-Dec-2023 00:00 | 15-Dec-2023 00:00 | 18-Dec-2023 00:00 |
| Compound | CAS Number | LOR | Unit | | EM2322709-056 | EM2322709-057 | EM2322709-058 | EM2322709-059 | EM2322709-061 |
| | | | | | Result | Result | Result | Result | Result |
| **EG020F: Dissolved Metals by ICP-MS** | | | | | | | | | |
| **Arsenic** | 7440-38-2 | 0.001 | mg/L | | <0.001 | <0.001 | <0.001 | <0.001 | ---- |
| **Boron** | 7440-42-8 | 0.05 | mg/L | | <0.05 | <0.05 | <0.05 | <0.05 | ---- |
| **Barium** | 7440-39-3 | 0.001 | mg/L | | <0.001 | <0.001 | <0.001 | <0.001 | ---- |
| **Beryllium** | 7440-41-7 | 0.001 | mg/L | | <0.001 | <0.001 | <0.001 | <0.001 | ---- |
| **Cadmium** | 7440-43-9 | 0.0001 | mg/L | | <0.0001 | <0.0001 | <0.0001 | <0.0001 | ---- |
| **Cobalt** | 7440-48-4 | 0.001 | mg/L | | <0.001 | <0.001 | <0.001 | <0.001 | ---- |
| **Chromium** | 7440-47-3 | 0.001 | mg/L | | <0.001 | <0.001 | <0.001 | <0.001 | ---- |
| **Copper** | 7440-50-8 | 0.001 | mg/L | | <0.001 | <0.001 | <0.001 | <0.001 | ---- |
| **Manganese** | 7439-96-5 | 0.001 | mg/L | | <0.001 | <0.001 | <0.001 | <0.001 | ---- |
| **Nickel** | 7440-02-0 | 0.001 | mg/L | | <0.001 | <0.001 | <0.001 | <0.001 | ---- |
| **Lead** | 7439-92-1 | 0.001 | mg/L | | <0.001 | <0.001 | <0.001 | <0.001 | ---- |
| **Selenium** | 7782-49-2 | 0.01 | mg/L | | <0.01 | <0.01 | <0.01 | <0.01 | ---- |
| **Vanadium** | 7440-62-2 | 0.01 | mg/L | | <0.01 | <0.01 | <0.01 | <0.01 | ---- |
| **Zinc** | 7440-66-6 | 0.005 | mg/L | | <0.005 | <0.005 | <0.005 | <0.005 | ---- |
| **EG035F: Dissolved Mercury by FIMS** | | | | | | | | | |
| **Mercury** | 7439-97-6 | 0.0001 | mg/L | | <0.0001 | <0.0001 | <0.0001 | <0.0001 | ---- |
| **EP080/071: Total Petroleum Hydrocarbons** | | | | | | | | | |
| **C6 - C9 Fraction** | ---- | 20 | µg/L | | ---- | ---- | ---- | ---- | <20 |
| **EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions** | | | | | | | | | |
| **C6 - C10 Fraction** | C6_C10 | 20 | µg/L | | ---- | ---- | ---- | ---- | <20 |
| ^ **C6 - C10 Fraction minus BTEX (F1)** | C6_C10-BTEX | 20 | µg/L | | ---- | ---- | ---- | ---- | <20 |
| **EP080: BTEXN** | | | | | | | | | |
| **Benzene** | 71-43-2 | 1 | µg/L | | ---- | ---- | ---- | ---- | <1 |
| **Toluene** | 108-88-3 | 2 | µg/L | | ---- | ---- | ---- | ---- | <2 |
| **Ethylbenzene** | 100-41-4 | 2 | µg/L | | ---- | ---- | ---- | ---- | <2 |
| **meta- & para-Xylene** | 108-38-3 106-42-3 | 2 | µg/L | | ---- | ---- | ---- | ---- | <2 |
| **ortho-Xylene** | 95-47-6 | 2 | µg/L | | ---- | ---- | ---- | ---- | <2 |

## Analytical Results

| Sub-Matrix: WATER (Matrix: WATER) | | | | Sample ID | QC1 | QC2 | QC3 | QC4 | QC8 |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Sampling date / time | 12-Dec-2023 00:00 | 13-Dec-2023 00:00 | 14-Dec-2023 00:00 | 15-Dec-2023 00:00 | 18-Dec-2023 00:00 |
| Compound | CAS Number | LOR | Unit | | EM2322709-056 | EM2322709-057 | EM2322709-058 | EM2322709-059 | EM2322709-061 |
| | | | | | Result | Result | Result | Result | Result |
| **EP080: BTEXN - Continued** | | | | | | | | | |
| ^ **Total Xylenes** | ---- | 2 | µg/L | | ---- | ---- | ---- | ---- | <2 |
| ^ **Sum of BTEX** | ---- | 1 | µg/L | | ---- | ---- | ---- | ---- | <1 |
| **Naphthalene** | 91-20-3 | 5 | µg/L | | ---- | ---- | ---- | ---- | <5 |
| **EP080S: TPH(V)/BTEX Surrogates** | | | | | | | | | |
| **1.2-Dichloroethane-D4** | 17060-07-0 | 2 | % | | ---- | ---- | ---- | ---- | **91.5** |
| **Toluene-D8** | 2037-26-5 | 2 | % | | ---- | ---- | ---- | ---- | **101** |
| **4-Bromofluorobenzene** | 460-00-4 | 2 | % | | ---- | ---- | ---- | ---- | **85.2** |

## Analytical Results

| Sub-Matrix: WATER (Matrix: WATER) | | | | Sample ID | QC5 | ---- | ---- | ---- | ---- |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Sampling date / time | 18-Dec-2023 00:00 | ---- | ---- | ---- | ---- |
| Compound | CAS Number | LOR | Unit | | EM2322709-062 | -------- | -------- | -------- | -------- |
| | | | | | Result | ---- | ---- | ---- | ---- |
| **EG020F: Dissolved Metals by ICP-MS** | | | | | | | | | |
| **Arsenic** | 7440-38-2 | 0.001 | mg/L | | <0.001 | ---- | ---- | ---- | ---- |
| **Boron** | 7440-42-8 | 0.05 | mg/L | | <0.05 | ---- | ---- | ---- | ---- |
| **Barium** | 7440-39-3 | 0.001 | mg/L | | <0.001 | ---- | ---- | ---- | ---- |
| **Beryllium** | 7440-41-7 | 0.001 | mg/L | | <0.001 | ---- | ---- | ---- | ---- |
| **Cadmium** | 7440-43-9 | 0.0001 | mg/L | | <0.0001 | ---- | ---- | ---- | ---- |
| **Cobalt** | 7440-48-4 | 0.001 | mg/L | | <0.001 | ---- | ---- | ---- | ---- |
| **Chromium** | 7440-47-3 | 0.001 | mg/L | | <0.001 | ---- | ---- | ---- | ---- |
| **Copper** | 7440-50-8 | 0.001 | mg/L | | <0.001 | ---- | ---- | ---- | ---- |
| **Manganese** | 7439-96-5 | 0.001 | mg/L | | <0.001 | ---- | ---- | ---- | ---- |
| **Nickel** | 7440-02-0 | 0.001 | mg/L | | <0.001 | ---- | ---- | ---- | ---- |
| **Lead** | 7439-92-1 | 0.001 | mg/L | | <0.001 | ---- | ---- | ---- | ---- |
| **Selenium** | 7782-49-2 | 0.01 | mg/L | | <0.01 | ---- | ---- | ---- | ---- |
| **Vanadium** | 7440-62-2 | 0.01 | mg/L | | <0.01 | ---- | ---- | ---- | ---- |
| **Zinc** | 7440-66-6 | 0.005 | mg/L | | <0.005 | ---- | ---- | ---- | ---- |
| **EG035F: Dissolved Mercury by FIMS** | | | | | | | | | |
| **Mercury** | 7439-97-6 | 0.0001 | mg/L | | <0.0001 | ---- | ---- | ---- | ---- |

## Analytical Results

### Descriptive Results

Sub-Matrix: **SOIL**

| Method: Compound | Sample ID - Sampling date / time | Analytical Results |
|---|---|---|
| **EA200: AS 4964 - 2004 Identification of Asbestos in Soils** | | |
| EA200: Description | SB1_0.0-0.2 - 18-Dec-2023 00:00 | Grey rocky soil. |
| EA200: Description | SB2_0.5-0.7 - 13-Dec-2023 00:00 | Beige clay like soil. |
| EA200: Description | SB3_0.0-0.2 - 14-Dec-2023 00:00 | Grey rocky soil. |

## Surrogate Control Limits

| Sub-Matrix: SOIL | | Recovery Limits (%) | |
|---|---|---|---|
| Compound | CAS Number | Low | High |
| **EP066S: PCB Surrogate** | | | |
| Decachlorobiphenyl | 2051-24-3 | 36 | 140 |
| **EP068S: Organochlorine Pesticide Surrogate** | | | |
| Dibromo-DDE | 21655-73-2 | 62 | 128 |
| **EP068T: Organophosphorus Pesticide Surrogate** | | | |
| DEF | 78-48-8 | 40 | 139 |
| **EP075(SIM)S: Phenolic Compound Surrogates** | | | |
| Phenol-d6 | 13127-88-3 | 54 | 125 |
| 2-Chlorophenol-D4 | 93951-73-6 | 65 | 123 |
| 2.4.6-Tribromophenol | 118-79-6 | 34 | 122 |
| **EP075(SIM)T: PAH Surrogates** | | | |
| 2-Fluorobiphenyl | 321-60-8 | 61 | 125 |
| Anthracene-d10 | 1719-06-8 | 62 | 130 |
| 4-Terphenyl-d14 | 1718-51-0 | 67 | 133 |
| **EP080S: TPH(V)/BTEX Surrogates** | | | |
| 1.2-Dichloroethane-D4 | 17060-07-0 | 51 | 125 |
| Toluene-D8 | 2037-26-5 | 55 | 125 |
| 4-Bromofluorobenzene | 460-00-4 | 56 | 124 |

| Sub-Matrix: WATER | | Recovery Limits (%) | |
|---|---|---|---|
| Compound | CAS Number | Low | High |
| **EP080S: TPH(V)/BTEX Surrogates** | | | |
| 1.2-Dichloroethane-D4 | 17060-07-0 | 73 | 129 |
| Toluene-D8 | 2037-26-5 | 70 | 125 |
| 4-Bromofluorobenzene | 460-00-4 | 71 | 129 |

## Inter-Laboratory Testing

Analysis conducted by ALS Newcastle, NATA accreditation no. 825, site no. 1656 (Chemistry) 9854 (Biology).

(SOIL) EA150: Soil Classification based on Particle Size

(SOIL) EA152: Soil Particle Density

Analysis conducted by ALS Sydney, NATA accreditation no. 825, site no. 10911 (Chemistry) 14913 (Biology).

(SOIL) EP004: Organic Matter

# QUALITY CONTROL REPORT

| | | | |
|---|---|---|---|
| **Work Order** | : **EM2322709** | Page | : 1 of 41 |
| Client | : **Jones Environmental** | Laboratory | : Environmental Division Melbourne |
| Contact | : PATRICIA JONES | Contact | : Hannah White |
| Address | : 497 Parnall Street<br>Lavington Lavington 2641 | Address | : 4 Westall Rd Springvale VIC Australia 3171 |
| Telephone | : ---- | Telephone | : +61-3-8549 9600 |
| Project | : JE10388 | Date Samples Received | : 19-Dec-2023 |
| Order number | : ---- | Date Analysis Commenced | : 20-Dec-2023 |
| C-O-C number | : ---- | Issue Date | : 09-Jan-2024 |
| Sampler | : RUSSELL JONES | | |
| Site | : ---- | | |
| Quote number | : EN/222 | | |
| No. of samples received | : 61 | | |
| No. of samples analysed | : 22 | | |

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

## *Signatories*

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

| *Signatories* | *Position* | *Accreditation Category* |
|---|---|---|
| Aleksandar Vujkovic | Laboratory Technician | Newcastle - Inorganics, Mayfield West, NSW |
| Ankit Joshi | Senior Chemist - Inorganics | Sydney Inorganics, Smithfield, NSW |
| Arenie Vijayaratnam | Senior Inorganic Chemist | Melbourne Inorganics, Springvale, VIC |
| Eric Chau | Metals Team Leader | Melbourne Inorganics, Springvale, VIC |
| Jarwis Nheu | Non-Metals Team Leader | Melbourne Inorganics, Springvale, VIC |
| MINNIE TRAN | Approved Asbestos Identifier | Melbourne Asbestos, Springvale, VIC |
| Scott Beddoes | Senior Chemist - Inorganics | Melbourne Inorganics, Springvale, VIC |
| Xing Lin | Senior Organic Chemist | Melbourne Inorganics, Springvale, VIC |
| Xing Lin | Senior Organic Chemist | Melbourne Organics, Springvale, VIC |

## General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis. Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Key : Anonymous = Refers to samples which are not specifically part of this work order but formed part of the QC process lot
CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
RPD = Relative Percentage Difference
# = Indicates failed QC
* = The final LOR has been raised due to dilution or other sample specific cause; adjusted LOR is shown in brackets. The duplicate ranges for Acceptable RPD% are applied to the final LOR where applicable.

## Laboratory Duplicate (DUP) Report

The quality control term Laboratory Duplicate refers to a randomly selected intralaboratory split. Laboratory duplicates provide information regarding method precision and sample heterogeneity. The permitted ranges for the Relative Percent Deviation (RPD) of Laboratory Duplicates are specified in ALS Method QWI-EN/38 and are dependent on the magnitude of results in comparison to the level of reporting: Result < 10 times LOR: No Limit; Result between 10 and 20 times LOR: 0% - 50%; Result > 20 times LOR: 0% - 20%.

Sub-Matrix: **SOIL**

| | | | | Laboratory Duplicate (DUP) Report | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| *Laboratory sample ID* | *Sample ID* | *Method: Compound* | *CAS Number* | *LOR* | *Unit* | *Original Result* | *Duplicate Result* | *RPD (%)* | *Acceptable RPD (%)* |
| **EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 5520519)** | | | | | | | | | |
| EM2321941-007 | Anonymous | EG005T: Beryllium | 7440-41-7 | 1 | mg/kg | <1 | <1 | 0.0 | No Limit |
| | | EG005T: Cadmium | 7440-43-9 | 1 | mg/kg | <1 | <1 | 0.0 | No Limit |
| | | EG005T: Barium | 7440-39-3 | 10 | mg/kg | 70 | 80 | 0.0 | No Limit |
| | | EG005T: Chromium | 7440-47-3 | 2 | mg/kg | 18 | 17 | 0.0 | No Limit |
| | | EG005T: Cobalt | 7440-48-4 | 2 | mg/kg | 4 | 4 | 0.0 | No Limit |
| | | EG005T: Nickel | 7440-02-0 | 2 | mg/kg | 11 | 11 | 0.0 | No Limit |
| | | EG005T: Arsenic | 7440-38-2 | 5 | mg/kg | <5 | <5 | 0.0 | No Limit |
| | | EG005T: Copper | 7440-50-8 | 5 | mg/kg | 36 | 32 | 13.1 | No Limit |
| | | EG005T: Lead | 7439-92-1 | 5 | mg/kg | 88 | 60 | 37.5 | 0% - 50% |
| | | EG005T: Manganese | 7439-96-5 | 5 | mg/kg | 307 | 289 | 6.0 | 0% - 20% |
| | | EG005T: Selenium | 7782-49-2 | 5 | mg/kg | <5 | <5 | 0.0 | No Limit |
| | | EG005T: Vanadium | 7440-62-2 | 5 | mg/kg | 23 | 22 | 0.0 | No Limit |
| | | EG005T: Zinc | 7440-66-6 | 5 | mg/kg | 148 | 138 | 7.6 | 0% - 20% |
| | | EG005T: Boron | 7440-42-8 | 50 | mg/kg | <50 | <50 | 0.0 | No Limit |
| | | EG005T: Iron | 7439-89-6 | 50 | mg/kg | 15300 | 13800 | 10.6 | 0% - 20% |
| EM2322709-009 | SB2_0.5-0.7 | EG005T: Beryllium | 7440-41-7 | 1 | mg/kg | 1 | <1 | 0.0 | No Limit |
| | | EG005T: Cadmium | 7440-43-9 | 1 | mg/kg | <1 | <1 | 0.0 | No Limit |
| | | EG005T: Barium | 7440-39-3 | 10 | mg/kg | 80 | 60 | 22.0 | No Limit |
| | | EG005T: Chromium | 7440-47-3 | 2 | mg/kg | 25 | 20 | 19.8 | 0% - 50% |
| | | EG005T: Cobalt | 7440-48-4 | 2 | mg/kg | 4 | 4 | 0.0 | No Limit |
| | | EG005T: Nickel | 7440-02-0 | 2 | mg/kg | 12 | 10 | 13.1 | No Limit |

Sub-Matrix: **SOIL**

| | | | | Laboratory Duplicate (DUP) Report | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| *Laboratory sample ID* | *Sample ID* | *Method: Compound* | *CAS Number* | *LOR* | *Unit* | *Original Result* | *Duplicate Result* | *RPD (%)* | *Acceptable RPD (%)* |
| **EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 5520519) - continued** | | | | | | | | | |
| EM2322709-009 | SB2_0.5-0.7 | EG005T: Arsenic | 7440-38-2 | 5 | mg/kg | <5 | <5 | 0.0 | No Limit |
| | | EG005T: Copper | 7440-50-8 | 5 | mg/kg | 12 | 12 | 0.0 | No Limit |
| | | EG005T: Lead | 7439-92-1 | 5 | mg/kg | 14 | 12 | 17.1 | No Limit |
| | | EG005T: Manganese | 7439-96-5 | 5 | mg/kg | 117 | 118 | 0.0 | 0% - 20% |
| | | EG005T: Selenium | 7782-49-2 | 5 | mg/kg | <5 | <5 | 0.0 | No Limit |
| | | EG005T: Vanadium | 7440-62-2 | 5 | mg/kg | 31 | 31 | 0.0 | No Limit |
| | | EG005T: Zinc | 7440-66-6 | 5 | mg/kg | 25 | 21 | 18.7 | No Limit |
| | | EG005T: Boron | 7440-42-8 | 50 | mg/kg | <50 | <50 | 0.0 | No Limit |
| | | EG005T: Iron | 7439-89-6 | 50 | mg/kg | 21700 | 18200 | 17.3 | 0% - 20% |
| **EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 5521170)** | | | | | | | | | |
| EM2322709-032 | SB8_0.0-0.2 | EG005T: Beryllium | 7440-41-7 | 1 | mg/kg | 2 | 2 | 0.0 | No Limit |
| | | EG005T: Cadmium | 7440-43-9 | 1 | mg/kg | <1 | <1 | 0.0 | No Limit |
| | | EG005T: Barium | 7440-39-3 | 10 | mg/kg | 60 | 60 | 0.0 | No Limit |
| | | EG005T: Chromium | 7440-47-3 | 2 | mg/kg | 28 | 26 | 7.1 | 0% - 50% |
| | | EG005T: Cobalt | 7440-48-4 | 2 | mg/kg | 8 | 8 | 0.0 | No Limit |
| | | EG005T: Nickel | 7440-02-0 | 2 | mg/kg | 14 | 13 | 0.0 | No Limit |
| | | EG005T: Arsenic | 7440-38-2 | 5 | mg/kg | 11 | 10 | 0.0 | No Limit |
| | | EG005T: Copper | 7440-50-8 | 5 | mg/kg | 17 | 16 | 0.0 | No Limit |
| | | EG005T: Lead | 7439-92-1 | 5 | mg/kg | 18 | 18 | 0.0 | No Limit |
| | | EG005T: Manganese | 7439-96-5 | 5 | mg/kg | 110 | 106 | 4.3 | 0% - 20% |
| | | EG005T: Selenium | 7782-49-2 | 5 | mg/kg | <5 | <5 | 0.0 | No Limit |
| | | EG005T: Vanadium | 7440-62-2 | 5 | mg/kg | 36 | 35 | 4.3 | No Limit |
| | | EG005T: Zinc | 7440-66-6 | 5 | mg/kg | 29 | 30 | 0.0 | No Limit |
| | | EG005T: Boron | 7440-42-8 | 50 | mg/kg | <50 | <50 | 0.0 | No Limit |
| | | EG005T: Iron | 7439-89-6 | 50 | mg/kg | 2.44 % | 23900 | 1.9 | 0% - 20% |
| EM2322717-001 | Anonymous | EG005T: Beryllium | 7440-41-7 | 1 | mg/kg | <1 | <1 | 0.0 | No Limit |
| | | EG005T: Cadmium | 7440-43-9 | 1 | mg/kg | <1 | <1 | 0.0 | No Limit |
| | | EG005T: Barium | 7440-39-3 | 10 | mg/kg | 60 | 50 | 19.1 | No Limit |
| | | EG005T: Chromium | 7440-47-3 | 2 | mg/kg | 12 | 11 | 11.5 | No Limit |
| | | EG005T: Cobalt | 7440-48-4 | 2 | mg/kg | 2 | <2 | 0.0 | No Limit |
| | | EG005T: Nickel | 7440-02-0 | 2 | mg/kg | 6 | 4 | 33.1 | No Limit |
| | | EG005T: Arsenic | 7440-38-2 | 5 | mg/kg | <5 | <5 | 0.0 | No Limit |
| | | EG005T: Copper | 7440-50-8 | 5 | mg/kg | 19 | 15 | 23.0 | No Limit |
| | | EG005T: Lead | 7439-92-1 | 5 | mg/kg | 10 | 8 | 17.1 | No Limit |
| | | EG005T: Manganese | 7439-96-5 | 5 | mg/kg | 100 | 105 | 4.9 | 0% - 20% |
| | | EG005T: Selenium | 7782-49-2 | 5 | mg/kg | <5 | <5 | 0.0 | No Limit |
| | | EG005T: Vanadium | 7440-62-2 | 5 | mg/kg | 10 | 8 | 28.9 | No Limit |
| | | EG005T: Zinc | 7440-66-6 | 5 | mg/kg | 100 | 93 | 7.2 | 0% - 20% |

Sub-Matrix: **SOIL**

| Laboratory sample ID | Sample ID | Method: Compound | CAS Number | Laboratory Duplicate (DUP) Report | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | LOR | Unit | Original Result | Duplicate Result | RPD (%) | Acceptable RPD (%) |
| **EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 5521170) - continued** | | | | | | | | | |
| EM2322717-001 | Anonymous | EG005T: Boron | 7440-42-8 | 50 | mg/kg | <50 | <50 | 0.0 | No Limit |
| | | EG005T: Iron | 7439-89-6 | 50 | mg/kg | 5400 | 5460 | 1.3 | 0% - 20% |
| **EA001: pH in soil using 0.01M CaCl extract (QC Lot: 5507316)** | | | | | | | | | |
| EM2322696-003 | Anonymous | EA001: pH (CaCl2) | ---- | 0.1 | pH Unit | 7.6 | 7.6 | 0.0 | 0% - 20% |
| **EA001: pH in soil using 0.01M CaCl extract (QC Lot: 5508032)** | | | | | | | | | |
| EM2322696-009 | Anonymous | EA001: pH (CaCl2) | ---- | 0.1 | pH Unit | 7.6 | 7.6 | 0.0 | 0% - 20% |
| EM2322696-031 | Anonymous | EA001: pH (CaCl2) | ---- | 0.1 | pH Unit | 8.3 | 8.3 | 0.0 | 0% - 20% |
| **EA001: pH in soil using 0.01M CaCl extract (QC Lot: 5508033)** | | | | | | | | | |
| EM2322709-037 | SB8_4.0-4.2 | EA001: pH (CaCl2) | ---- | 0.1 | pH Unit | 7.7 | 7.7 | 0.0 | 0% - 20% |
| **EA002-AD: pH (Soils) dried at 40°C (QC Lot: 5507346)** | | | | | | | | | |
| EM2322628-001 | Anonymous | EA002-AD: pH Value | ---- | 0.1 | pH Unit | 9.8 | 9.8 | 0.0 | 0% - 20% |
| EM2322709-034 | SB8_1.0-1.2 | EA002-AD: pH Value | ---- | 0.1 | pH Unit | 8.7 | 8.7 | 0.0 | 0% - 20% |
| **EA010-AD: Conductivity (Soils) dried at 40°C (QC Lot: 5507345)** | | | | | | | | | |
| EM2322628-001 | Anonymous | EA010-AD: Electrical Conductivity @ 25°C | ---- | 1 | µS/cm | 158 | 158 | 0.0 | 0% - 20% |
| EM2322709-034 | SB8_1.0-1.2 | EA010-AD: Electrical Conductivity @ 25°C | ---- | 1 | µS/cm | 64 | 63 | 0.0 | 0% - 20% |
| **EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 5515577)** | | | | | | | | | |
| EM2322649-006 | Anonymous | EA055: Moisture Content | ---- | 0.1 | % | 20.2 | 20.0 | 1.1 | 0% - 20% |
| **EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 5518396)** | | | | | | | | | |
| EM2322709-001 | SB1_0.0-0.2 | EA055: Moisture Content | ---- | 0.1 (1.0)* | % | 5.0 | 4.7 | 7.0 | No Limit |
| EM2322709-037 | SB8_4.0-4.2 | EA055: Moisture Content | ---- | 0.1 (1.0)* | % | 7.7 | 8.1 | 5.2 | No Limit |
| **ED006: Exchangeable Cations on Alkaline Soils (QC Lot: 5507356)** | | | | | | | | | |
| EM2322628-001 | Anonymous | ED006: Calcium/Magnesium Ratio | ---- | 0.1 (0.2)* | - | 1.2 | 1.2 | 0.0 | No Limit |
| | | ED006: Magnesium/Potassium Ratio | ---- | 0.1 (0.2)* | - | 15.0 | 13.5 | 10.3 | 0% - 20% |
| | | ED006: Exchangeable Calcium Percent | ---- | 0.2 | % | 52.0 | 52.1 | 0.0 | 0% - 20% |
| | | ED006: Exchangeable Magnesium Percent | ---- | 0.2 | % | 42.0 | 42.2 | 0.5 | 0% - 20% |
| | | ED006: Exchangeable Potassium Percent | ---- | 0.2 | % | 2.8 | 3.1 | 10.8 | 0% - 50% |
| | | ED006: Exchangeable Sodium Percent | ---- | 0.2 | % | 3.2 | 2.6 | 20.7 | 0% - 50% |
| | | ED006: Exchangeable Calcium | ---- | 0.2 | meq/100g | 7.5 | 7.2 | 5.0 | 0% - 20% |
| | | ED006: Exchangeable Magnesium | ---- | 0.2 | meq/100g | 6.1 | 5.8 | 4.7 | 0% - 20% |
| | | ED006: Exchangeable Potassium | ---- | 0.2 | meq/100g | 0.4 | 0.4 | 0.0 | No Limit |
| | | ED006: Exchangeable Sodium | ---- | 0.2 | meq/100g | 0.4 | 0.4 | 25.8 | No Limit |
| | | ED006: Cation Exchange Capacity | ---- | 0.2 | meq/100g | 14.5 | 13.7 | 5.1 | 0% - 20% |
| EM2322709-032 | SB8_0.0-0.2 | ED006: Calcium/Magnesium Ratio | ---- | 0.1 (0.2)* | - | 0.8 | 0.8 | 0.0 | No Limit |
| | | ED006: Magnesium/Potassium Ratio | ---- | 0.1 (0.2)* | - | 14.5 | 12.1 | 17.7 | 0% - 20% |
| | | ED006: Exchangeable Calcium Percent | ---- | 0.2 | % | 38.3 | 37.3 | 2.7 | 0% - 20% |
| | | ED006: Exchangeable Magnesium Percent | ---- | 0.2 | % | 50.2 | 49.0 | 2.5 | 0% - 20% |

Sub-Matrix: **SOIL**

| Laboratory sample ID | Sample ID | Method: Compound | CAS Number | Laboratory Duplicate (DUP) Report | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | LOR | Unit | Original Result | Duplicate Result | RPD (%) | Acceptable RPD (%) |
| **ED006: Exchangeable Cations on Alkaline Soils (QC Lot: 5507356) - continued** | | | | | | | | | |
| EM2322709-032 | SB8_0.0-0.2 | ED006: Exchangeable Potassium Percent | ---- | 0.2 | % | 3.5 | 4.0 | 15.2 | 0% - 20% |
| | | ED006: Exchangeable Sodium Percent | ---- | 0.2 | % | 8.0 | 9.7 | 18.9 | 0% - 20% |
| | | ED006: Exchangeable Calcium | ---- | 0.2 | meq/100g | 4.2 | 4.6 | 10.4 | 0% - 20% |
| | | ED006: Exchangeable Magnesium | ---- | 0.2 | meq/100g | 5.5 | 6.1 | 10.5 | 0% - 20% |
| | | ED006: Exchangeable Potassium | ---- | 0.2 | meq/100g | 0.4 | 0.5 | 28.1 | No Limit |
| | | ED006: Exchangeable Sodium | ---- | 0.2 | meq/100g | 0.9 | 1.2 | 31.8 | No Limit |
| | | ED006: Cation Exchange Capacity | ---- | 0.2 | meq/100g | 10.9 | 12.4 | 13.0 | 0% - 20% |
| **ED007: Exchangeable Cations (QC Lot: 5507358)** | | | | | | | | | |
| EM2322707-001 | Anonymous | ED007: Exchangeable Calcium | ---- | 0.1 | meq/100g | 11.5 | 11.8 | 2.5 | 0% - 20% |
| | | ED007: Exchangeable Magnesium | ---- | 0.1 | meq/100g | 3.8 | 3.9 | 0.0 | 0% - 20% |
| | | ED007: Exchangeable Potassium | ---- | 0.1 | meq/100g | 0.9 | 0.9 | 0.0 | No Limit |
| | | ED007: Exchangeable Sodium | ---- | 0.1 | meq/100g | 0.4 | 0.4 | 0.0 | No Limit |
| | | ED007: Cation Exchange Capacity | ---- | 0.1 | meq/100g | 16.6 | 17.0 | 2.3 | 0% - 20% |
| **EG035T: Total Recoverable Mercury by FIMS (QC Lot: 5520520)** | | | | | | | | | |
| EM2321941-007 | Anonymous | EG035T: Mercury | 7439-97-6 | 0.1 | mg/kg | <0.1 | <0.1 | 0.0 | No Limit |
| EM2322709-009 | SB2_0.5-0.7 | EG035T: Mercury | 7439-97-6 | 0.1 | mg/kg | <0.1 | <0.1 | 0.0 | No Limit |
| **EG035T: Total Recoverable Mercury by FIMS (QC Lot: 5521171)** | | | | | | | | | |
| EM2322709-032 | SB8_0.0-0.2 | EG035T: Mercury | 7439-97-6 | 0.1 | mg/kg | <0.1 | <0.1 | 0.0 | No Limit |
| EM2322717-001 | Anonymous | EG035T: Mercury | 7439-97-6 | 0.1 | mg/kg | <0.1 | <0.1 | 0.0 | No Limit |
| **EK026SF: Total CN by Segmented Flow Analyser (QC Lot: 5510523)** | | | | | | | | | |
| EM2322656-011 | Anonymous | EK026SF: Total Cyanide | 57-12-5 | 1 | mg/kg | 30 | 31 | 0.0 | 0% - 20% |
| **EK026SF: Total CN by Segmented Flow Analyser (QC Lot: 5511613)** | | | | | | | | | |
| EM2322708-001 | Anonymous | EK026SF: Total Cyanide | 57-12-5 | 1 | mg/kg | <1 | <1 | 0.0 | No Limit |
| **EK026SF: Total CN by Segmented Flow Analyser (QC Lot: 5516736)** | | | | | | | | | |
| EM2322696-009 | Anonymous | EK026SF: Total Cyanide | 57-12-5 | 1 | mg/kg | 1 | 1 | 0.0 | No Limit |
| EM2322709-037 | SB8_4.0-4.2 | EK026SF: Total Cyanide | 57-12-5 | 1 | mg/kg | <1 | <1 | 0.0 | No Limit |
| **EK026SF: Total CN by Segmented Flow Analyser (QC Lot: 5518682)** | | | | | | | | | |
| EM2322709-001 | SB1_0.0-0.2 | EK026SF: Total Cyanide | 57-12-5 | 1 | mg/kg | <1 | <1 | 0.0 | No Limit |
| EM2322670-020 | Anonymous | EK026SF: Total Cyanide | 57-12-5 | 1 | mg/kg | 1 | <1 | 0.0 | No Limit |
| **EK040T: Fluoride Total (QC Lot: 5508384)** | | | | | | | | | |
| EM2322605-001 | Anonymous | EK040T: Fluoride | 16984-48-8 | 40 | mg/kg | 170 | 160 | 11.0 | No Limit |
| EM2322709-001 | SB1_0.0-0.2 | EK040T: Fluoride | 16984-48-8 | 40 | mg/kg | 440 | 450 | 2.6 | 0% - 50% |
| **EK040T: Fluoride Total (QC Lot: 5508385)** | | | | | | | | | |
| EM2322709-034 | SB8_1.0-1.2 | EK040T: Fluoride | 16984-48-8 | 40 | mg/kg | 240 | 220 | 9.2 | No Limit |
| **EP004: Organic Matter (QC Lot: 5519420)** | | | | | | | | | |
| EM2322591-002 | Anonymous | EP004: Organic Matter | ---- | 0.5 | % | 2.3 | 2.0 | 12.4 | No Limit |

Sub-Matrix: **SOIL**

| | | | | Laboratory Duplicate (DUP) Report | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| *Laboratory sample ID* | *Sample ID* | *Method: Compound* | *CAS Number* | *LOR* | *Unit* | *Original Result* | *Duplicate Result* | *RPD (%)* | *Acceptable RPD (%)* |
| **EP004: Organic Matter (QC Lot: 5519420) - continued** | | | | | | | | | |
| EM2322591-002 | Anonymous | EP004: Total Organic Carbon | ---- | 0.5 | % | 1.3 | 1.2 | 12.3 | No Limit |
| EM2322709-037 | SB8_4.0-4.2 | EP004: Organic Matter | ---- | 0.5 | % | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP004: Total Organic Carbon | ---- | 0.5 | % | <0.5 | <0.5 | 0.0 | No Limit |
| **EP004: Organic Matter (QC Lot: 5523079)** | | | | | | | | | |
| EM2322696-022 | Anonymous | EP004: Organic Matter | ---- | 0.5 | % | 2.2 | 2.1 | 0.0 | No Limit |
| | | EP004: Total Organic Carbon | ---- | 0.5 | % | 1.3 | 1.2 | 0.0 | No Limit |
| **EP066: Polychlorinated Biphenyls (PCB) (QC Lot: 5508013)** | | | | | | | | | |
| EM2322709-009 | SB2_0.5-0.7 | EP066: Total Polychlorinated biphenyls | ---- | 0.1 | mg/kg | <0.1 | <0.1 | 0.0 | No Limit |
| **EP066: Polychlorinated Biphenyls (PCB) (QC Lot: 5509015)** | | | | | | | | | |
| EM2322709-030 | SB5_1.0-1.2 | EP066: Total Polychlorinated biphenyls | ---- | 0.1 | mg/kg | <0.1 | <0.1 | 0.0 | No Limit |
| **EP066: Polychlorinated Biphenyls (PCB) (QC Lot: 5510504)** | | | | | | | | | |
| EM2322534-001 | Anonymous | EP066: Total Polychlorinated biphenyls | ---- | 0.1 | mg/kg | <0.1 | <0.1 | 0.0 | No Limit |
| **EP066: Polychlorinated Biphenyls (PCB) (QC Lot: 5511755)** | | | | | | | | | |
| EM2322717-007 | Anonymous | EP066: Total Polychlorinated biphenyls | ---- | 0.1 | mg/kg | <0.1 | <0.1 | 0.0 | No Limit |
| EM2322709-001 | SB1_0.0-0.2 | EP066: Total Polychlorinated biphenyls | ---- | 0.1 | mg/kg | <0.1 | <0.1 | 0.0 | No Limit |
| **EP068A: Organochlorine Pesticides (OC) (QC Lot: 5508011)** | | | | | | | | | |
| EM2322709-009 | SB2_0.5-0.7 | EP068: alpha-BHC | 319-84-6 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Hexachlorobenzene (HCB) | 118-74-1 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: beta-BHC | 319-85-7 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: gamma-BHC | 58-89-9 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: delta-BHC | 319-86-8 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Heptachlor | 76-44-8 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Aldrin | 309-00-2 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Heptachlor epoxide | 1024-57-3 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: trans-Chlordane | 5103-74-2 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: alpha-Endosulfan | 959-98-8 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: cis-Chlordane | 5103-71-9 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Dieldrin | 60-57-1 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: 4.4`-DDE | 72-55-9 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Endrin | 72-20-8 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: beta-Endosulfan | 33213-65-9 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: 4.4`-DDD | 72-54-8 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Endrin aldehyde | 7421-93-4 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Endosulfan sulfate | 1031-07-8 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Endrin ketone | 53494-70-5 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: 4.4`-DDT | 50-29-3 | 0.2 | mg/kg | <0.2 | <0.2 | 0.0 | No Limit |
| | | EP068: Methoxychlor | 72-43-5 | 0.2 | mg/kg | <0.2 | <0.2 | 0.0 | No Limit |

Sub-Matrix: **SOIL**

| | | | | Laboratory Duplicate (DUP) Report | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| *Laboratory sample ID* | *Sample ID* | *Method: Compound* | *CAS Number* | *LOR* | *Unit* | *Original Result* | *Duplicate Result* | *RPD (%)* | *Acceptable RPD (%)* |
| **EP068A: Organochlorine Pesticides (OC) (QC Lot: 5509014)** | | | | | | | | | |
| EM2322696-014 | Anonymous | EP068: alpha-BHC | 319-84-6 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Hexachlorobenzene (HCB) | 118-74-1 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: beta-BHC | 319-85-7 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: gamma-BHC | 58-89-9 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: delta-BHC | 319-86-8 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Heptachlor | 76-44-8 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Aldrin | 309-00-2 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Heptachlor epoxide | 1024-57-3 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: trans-Chlordane | 5103-74-2 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: alpha-Endosulfan | 959-98-8 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: cis-Chlordane | 5103-71-9 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Dieldrin | 60-57-1 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: 4.4`-DDE | 72-55-9 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Endrin | 72-20-8 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: beta-Endosulfan | 33213-65-9 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: 4.4`-DDD | 72-54-8 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Endrin aldehyde | 7421-93-4 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Endosulfan sulfate | 1031-07-8 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Endrin ketone | 53494-70-5 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: 4.4`-DDT | 50-29-3 | 0.2 | mg/kg | <0.2 | <0.2 | 0.0 | No Limit |
| | | EP068: Methoxychlor | 72-43-5 | 0.2 | mg/kg | <0.2 | <0.2 | 0.0 | No Limit |
| **EP068A: Organochlorine Pesticides (OC) (QC Lot: 5510502)** | | | | | | | | | |
| EM2322709-034 | SB8_1.0-1.2 | EP068: alpha-BHC | 319-84-6 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Hexachlorobenzene (HCB) | 118-74-1 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: beta-BHC | 319-85-7 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: gamma-BHC | 58-89-9 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: delta-BHC | 319-86-8 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Heptachlor | 76-44-8 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Aldrin | 309-00-2 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Heptachlor epoxide | 1024-57-3 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: trans-Chlordane | 5103-74-2 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: alpha-Endosulfan | 959-98-8 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: cis-Chlordane | 5103-71-9 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Dieldrin | 60-57-1 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: 4.4`-DDE | 72-55-9 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Endrin | 72-20-8 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: beta-Endosulfan | 33213-65-9 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: 4.4`-DDD | 72-54-8 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |

Sub-Matrix: **SOIL**

| Laboratory sample ID | Sample ID | Method: Compound | CAS Number | Laboratory Duplicate (DUP) Report | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | LOR | Unit | Original Result | Duplicate Result | RPD (%) | Acceptable RPD (%) |
| **EP068A: Organochlorine Pesticides (OC) (QC Lot: 5510502) - continued** | | | | | | | | | |
| EM2322709-034 | SB8_1.0-1.2 | EP068: Endrin aldehyde | 7421-93-4 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Endosulfan sulfate | 1031-07-8 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Endrin ketone | 53494-70-5 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: 4.4`-DDT | 50-29-3 | 0.2 | mg/kg | <0.2 | <0.2 | 0.0 | No Limit |
| | | EP068: Methoxychlor | 72-43-5 | 0.2 | mg/kg | <0.2 | <0.2 | 0.0 | No Limit |
| EM2322534-001 | Anonymous | EP068: alpha-BHC | 319-84-6 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Hexachlorobenzene (HCB) | 118-74-1 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: beta-BHC | 319-85-7 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: gamma-BHC | 58-89-9 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: delta-BHC | 319-86-8 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Heptachlor | 76-44-8 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Aldrin | 309-00-2 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Heptachlor epoxide | 1024-57-3 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: trans-Chlordane | 5103-74-2 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: alpha-Endosulfan | 959-98-8 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: cis-Chlordane | 5103-71-9 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Dieldrin | 60-57-1 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: 4.4`-DDE | 72-55-9 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Endrin | 72-20-8 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: beta-Endosulfan | 33213-65-9 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: 4.4`-DDD | 72-54-8 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Endrin aldehyde | 7421-93-4 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Endosulfan sulfate | 1031-07-8 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Endrin ketone | 53494-70-5 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: 4.4`-DDT | 50-29-3 | 0.2 | mg/kg | <0.2 | <0.2 | 0.0 | No Limit |
| | | EP068: Methoxychlor | 72-43-5 | 0.2 | mg/kg | <0.2 | <0.2 | 0.0 | No Limit |
| **EP068A: Organochlorine Pesticides (OC) (QC Lot: 5511754)** | | | | | | | | | |
| EM2322717-007 | Anonymous | EP068: alpha-BHC | 319-84-6 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Hexachlorobenzene (HCB) | 118-74-1 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: beta-BHC | 319-85-7 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: gamma-BHC | 58-89-9 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: delta-BHC | 319-86-8 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Heptachlor | 76-44-8 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Aldrin | 309-00-2 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Heptachlor epoxide | 1024-57-3 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: trans-Chlordane | 5103-74-2 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: alpha-Endosulfan | 959-98-8 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: cis-Chlordane | 5103-71-9 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |

Sub-Matrix: **SOIL**

| Laboratory sample ID | Sample ID | Method: Compound | CAS Number | Laboratory Duplicate (DUP) Report | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | LOR | Unit | Original Result | Duplicate Result | RPD (%) | Acceptable RPD (%) |
| **EP068A: Organochlorine Pesticides (OC) (QC Lot: 5511754) - continued** | | | | | | | | | |
| EM2322717-007 | Anonymous | EP068: Dieldrin | 60-57-1 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: 4.4`-DDE | 72-55-9 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Endrin | 72-20-8 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: beta-Endosulfan | 33213-65-9 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: 4.4`-DDD | 72-54-8 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Endrin aldehyde | 7421-93-4 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Endosulfan sulfate | 1031-07-8 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Endrin ketone | 53494-70-5 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: 4.4`-DDT | 50-29-3 | 0.2 | mg/kg | <0.2 | <0.2 | 0.0 | No Limit |
| | | EP068: Methoxychlor | 72-43-5 | 0.2 | mg/kg | <0.2 | <0.2 | 0.0 | No Limit |
| EM2322709-001 | SB1_0.0-0.2 | EP068: alpha-BHC | 319-84-6 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Hexachlorobenzene (HCB) | 118-74-1 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: beta-BHC | 319-85-7 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: gamma-BHC | 58-89-9 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: delta-BHC | 319-86-8 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Heptachlor | 76-44-8 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Aldrin | 309-00-2 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Heptachlor epoxide | 1024-57-3 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: trans-Chlordane | 5103-74-2 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: alpha-Endosulfan | 959-98-8 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: cis-Chlordane | 5103-71-9 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Dieldrin | 60-57-1 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: 4.4`-DDE | 72-55-9 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Endrin | 72-20-8 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: beta-Endosulfan | 33213-65-9 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: 4.4`-DDD | 72-54-8 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Endrin aldehyde | 7421-93-4 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Endosulfan sulfate | 1031-07-8 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Endrin ketone | 53494-70-5 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: 4.4`-DDT | 50-29-3 | 0.2 | mg/kg | <0.2 | <0.2 | 0.0 | No Limit |
| | | EP068: Methoxychlor | 72-43-5 | 0.2 | mg/kg | <0.2 | <0.2 | 0.0 | No Limit |
| **EP068B: Organophosphorus Pesticides (OP) (QC Lot: 5508011)** | | | | | | | | | |
| EM2322709-009 | SB2_0.5-0.7 | EP068: Dichlorvos | 62-73-7 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Demeton-S-methyl | 919-86-8 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Dimethoate | 60-51-5 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Diazinon | 333-41-5 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Chlorpyrifos-methyl | 5598-13-0 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Malathion | 121-75-5 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |

Sub-Matrix: **SOIL**

| | | | | Laboratory Duplicate (DUP) Report | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| *Laboratory sample ID* | *Sample ID* | *Method: Compound* | *CAS Number* | *LOR* | *Unit* | *Original Result* | *Duplicate Result* | *RPD (%)* | *Acceptable RPD (%)* |
| **EP068B: Organophosphorus Pesticides (OP) (QC Lot: 5508011) - continued** | | | | | | | | | |
| EM2322709-009 | SB2_0.5-0.7 | EP068: Fenthion | 55-38-9 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Chlorpyrifos | 2921-88-2 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Pirimphos-ethyl | 23505-41-1 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Chlorfenvinphos | 470-90-6 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Bromophos-ethyl | 4824-78-6 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Fenamiphos | 22224-92-6 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Prothiofos | 34643-46-4 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Ethion | 563-12-2 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Carbophenothion | 786-19-6 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Azinphos Methyl | 86-50-0 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Monocrotophos | 6923-22-4 | 0.2 | mg/kg | <0.2 | <0.2 | 0.0 | No Limit |
| | | EP068: Parathion-methyl | 298-00-0 | 0.2 | mg/kg | <0.2 | <0.2 | 0.0 | No Limit |
| | | EP068: Parathion | 56-38-2 | 0.2 | mg/kg | <0.2 | <0.2 | 0.0 | No Limit |
| **EP068B: Organophosphorus Pesticides (OP) (QC Lot: 5509014)** | | | | | | | | | |
| EM2322696-014 | Anonymous | EP068: Dichlorvos | 62-73-7 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Demeton-S-methyl | 919-86-8 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Dimethoate | 60-51-5 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Diazinon | 333-41-5 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Chlorpyrifos-methyl | 5598-13-0 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Malathion | 121-75-5 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Fenthion | 55-38-9 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Chlorpyrifos | 2921-88-2 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Pirimphos-ethyl | 23505-41-1 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Chlorfenvinphos | 470-90-6 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Bromophos-ethyl | 4824-78-6 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Fenamiphos | 22224-92-6 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Prothiofos | 34643-46-4 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Ethion | 563-12-2 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Carbophenothion | 786-19-6 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Azinphos Methyl | 86-50-0 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Monocrotophos | 6923-22-4 | 0.2 | mg/kg | <0.2 | <0.2 | 0.0 | No Limit |
| | | EP068: Parathion-methyl | 298-00-0 | 0.2 | mg/kg | <0.2 | <0.2 | 0.0 | No Limit |
| | | EP068: Parathion | 56-38-2 | 0.2 | mg/kg | <0.2 | <0.2 | 0.0 | No Limit |
| **EP068B: Organophosphorus Pesticides (OP) (QC Lot: 5510502)** | | | | | | | | | |
| EM2322709-034 | SB8_1.0-1.2 | EP068: Dichlorvos | 62-73-7 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Demeton-S-methyl | 919-86-8 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Dimethoate | 60-51-5 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |

Sub-Matrix: **SOIL**

| Laboratory sample ID | Sample ID | Method: Compound | CAS Number | Laboratory Duplicate (DUP) Report | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | LOR | Unit | Original Result | Duplicate Result | RPD (%) | Acceptable RPD (%) |
| **EP068B: Organophosphorus Pesticides (OP) (QC Lot: 5510502) - continued** | | | | | | | | | |
| EM2322709-034 | SB8_1.0-1.2 | EP068: Diazinon | 333-41-5 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Chlorpyrifos-methyl | 5598-13-0 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Malathion | 121-75-5 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Fenthion | 55-38-9 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Chlorpyrifos | 2921-88-2 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Pirimphos-ethyl | 23505-41-1 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Chlorfenvinphos | 470-90-6 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Bromophos-ethyl | 4824-78-6 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Fenamiphos | 22224-92-6 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Prothiofos | 34643-46-4 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Ethion | 563-12-2 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Carbophenothion | 786-19-6 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Azinphos Methyl | 86-50-0 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Monocrotophos | 6923-22-4 | 0.2 | mg/kg | <0.2 | <0.2 | 0.0 | No Limit |
| | | EP068: Parathion-methyl | 298-00-0 | 0.2 | mg/kg | <0.2 | <0.2 | 0.0 | No Limit |
| | | EP068: Parathion | 56-38-2 | 0.2 | mg/kg | <0.2 | <0.2 | 0.0 | No Limit |
| EM2322534-001 | Anonymous | EP068: Dichlorvos | 62-73-7 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Demeton-S-methyl | 919-86-8 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Dimethoate | 60-51-5 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Diazinon | 333-41-5 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Chlorpyrifos-methyl | 5598-13-0 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Malathion | 121-75-5 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Fenthion | 55-38-9 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Chlorpyrifos | 2921-88-2 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Pirimphos-ethyl | 23505-41-1 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Chlorfenvinphos | 470-90-6 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Bromophos-ethyl | 4824-78-6 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Fenamiphos | 22224-92-6 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Prothiofos | 34643-46-4 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Ethion | 563-12-2 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Carbophenothion | 786-19-6 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Azinphos Methyl | 86-50-0 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Monocrotophos | 6923-22-4 | 0.2 | mg/kg | <0.2 | <0.2 | 0.0 | No Limit |
| | | EP068: Parathion-methyl | 298-00-0 | 0.2 | mg/kg | <0.2 | <0.2 | 0.0 | No Limit |
| | | EP068: Parathion | 56-38-2 | 0.2 | mg/kg | <0.2 | <0.2 | 0.0 | No Limit |
| **EP068B: Organophosphorus Pesticides (OP) (QC Lot: 5511754)** | | | | | | | | | |
| EM2322717-007 | Anonymous | EP068: Dichlorvos | 62-73-7 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Demeton-S-methyl | 919-86-8 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |

Sub-Matrix: **SOIL**

| | | | | Laboratory Duplicate (DUP) Report | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Laboratory sample ID | Sample ID | Method: Compound | CAS Number | LOR | Unit | Original Result | Duplicate Result | RPD (%) | Acceptable RPD (%) |
| **EP068B: Organophosphorus Pesticides (OP) (QC Lot: 5511754) - continued** | | | | | | | | | |
| EM2322717-007 | Anonymous | EP068: Dimethoate | 60-51-5 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Diazinon | 333-41-5 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Chlorpyrifos-methyl | 5598-13-0 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Malathion | 121-75-5 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Fenthion | 55-38-9 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Chlorpyrifos | 2921-88-2 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Pirimphos-ethyl | 23505-41-1 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Chlorfenvinphos | 470-90-6 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Bromophos-ethyl | 4824-78-6 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Fenamiphos | 22224-92-6 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Prothiofos | 34643-46-4 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Ethion | 563-12-2 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Carbophenothion | 786-19-6 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Azinphos Methyl | 86-50-0 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Monocrotophos | 6923-22-4 | 0.2 | mg/kg | <0.2 | <0.2 | 0.0 | No Limit |
| | | EP068: Parathion-methyl | 298-00-0 | 0.2 | mg/kg | <0.2 | <0.2 | 0.0 | No Limit |
| | | EP068: Parathion | 56-38-2 | 0.2 | mg/kg | <0.2 | <0.2 | 0.0 | No Limit |
| EM2322709-001 | SB1_0.0-0.2 | EP068: Dichlorvos | 62-73-7 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Demeton-S-methyl | 919-86-8 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Dimethoate | 60-51-5 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Diazinon | 333-41-5 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Chlorpyrifos-methyl | 5598-13-0 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Malathion | 121-75-5 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Fenthion | 55-38-9 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Chlorpyrifos | 2921-88-2 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Pirimphos-ethyl | 23505-41-1 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Chlorfenvinphos | 470-90-6 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Bromophos-ethyl | 4824-78-6 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Fenamiphos | 22224-92-6 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Prothiofos | 34643-46-4 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Ethion | 563-12-2 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Carbophenothion | 786-19-6 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Azinphos Methyl | 86-50-0 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Monocrotophos | 6923-22-4 | 0.2 | mg/kg | <0.2 | <0.2 | 0.0 | No Limit |
| | | EP068: Parathion-methyl | 298-00-0 | 0.2 | mg/kg | <0.2 | <0.2 | 0.0 | No Limit |
| | | EP068: Parathion | 56-38-2 | 0.2 | mg/kg | <0.2 | <0.2 | 0.0 | No Limit |
| **EP075(SIM)A: Phenolic Compounds (QC Lot: 5508010)** | | | | | | | | | |
| EM2322739-001 | Anonymous | EP075(SIM): Phenol | 108-95-2 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |

Sub-Matrix: **SOIL**

| | | | | Laboratory Duplicate (DUP) Report | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| *Laboratory sample ID* | *Sample ID* | *Method: Compound* | *CAS Number* | *LOR* | *Unit* | *Original Result* | *Duplicate Result* | *RPD (%)* | *Acceptable RPD (%)* |
| **EP075(SIM)A: Phenolic Compounds (QC Lot: 5508010) - continued** | | | | | | | | | |
| EM2322739-001 | Anonymous | EP075(SIM): 2-Chlorophenol | 95-57-8 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2-Methylphenol | 95-48-7 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2-Nitrophenol | 88-75-5 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2.4-Dimethylphenol | 105-67-9 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2.4-Dichlorophenol | 120-83-2 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2.6-Dichlorophenol | 87-65-0 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 4-Chloro-3-methylphenol | 59-50-7 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2.4.6-Trichlorophenol | 88-06-2 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2.4.5-Trichlorophenol | 95-95-4 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 3- & 4-Methylphenol | 1319-77-3 | 1 | mg/kg | <1 | <1 | 0.0 | No Limit |
| | | EP075(SIM): Pentachlorophenol | 87-86-5 | 2 | mg/kg | <2 | <2 | 0.0 | No Limit |
| EM2322709-009 | SB2_0.5-0.7 | EP075(SIM): Phenol | 108-95-2 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2-Chlorophenol | 95-57-8 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2-Methylphenol | 95-48-7 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2-Nitrophenol | 88-75-5 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2.4-Dimethylphenol | 105-67-9 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2.4-Dichlorophenol | 120-83-2 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2.6-Dichlorophenol | 87-65-0 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 4-Chloro-3-methylphenol | 59-50-7 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2.4.6-Trichlorophenol | 88-06-2 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2.4.5-Trichlorophenol | 95-95-4 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 3- & 4-Methylphenol | 1319-77-3 | 1 | mg/kg | <1 | <1 | 0.0 | No Limit |
| | | EP075(SIM): Pentachlorophenol | 87-86-5 | 2 | mg/kg | <2 | <2 | 0.0 | No Limit |
| **EP075(SIM)A: Phenolic Compounds (QC Lot: 5509013)** | | | | | | | | | |
| EM2322696-014 | Anonymous | EP075(SIM): Phenol | 108-95-2 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2-Chlorophenol | 95-57-8 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2-Methylphenol | 95-48-7 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2-Nitrophenol | 88-75-5 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2.4-Dimethylphenol | 105-67-9 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2.4-Dichlorophenol | 120-83-2 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2.6-Dichlorophenol | 87-65-0 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 4-Chloro-3-methylphenol | 59-50-7 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2.4.6-Trichlorophenol | 88-06-2 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2.4.5-Trichlorophenol | 95-95-4 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 3- & 4-Methylphenol | 1319-77-3 | 1 | mg/kg | <1 | <1 | 0.0 | No Limit |
| | | EP075(SIM): Pentachlorophenol | 87-86-5 | 2 | mg/kg | <2 | <2 | 0.0 | No Limit |
| EM2322709-030 | SB5_1.0-1.2 | EP075(SIM): Phenol | 108-95-2 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2-Chlorophenol | 95-57-8 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |

Sub-Matrix: **SOIL**

| | | | | Laboratory Duplicate (DUP) Report | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| *Laboratory sample ID* | *Sample ID* | *Method: Compound* | *CAS Number* | *LOR* | *Unit* | *Original Result* | *Duplicate Result* | *RPD (%)* | *Acceptable RPD (%)* |
| **EP075(SIM)A: Phenolic Compounds (QC Lot: 5509013) - continued** | | | | | | | | | |
| EM2322709-030 | SB5_1.0-1.2 | EP075(SIM): 2-Methylphenol | 95-48-7 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2-Nitrophenol | 88-75-5 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2.4-Dimethylphenol | 105-67-9 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2.4-Dichlorophenol | 120-83-2 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2.6-Dichlorophenol | 87-65-0 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 4-Chloro-3-methylphenol | 59-50-7 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2.4.6-Trichlorophenol | 88-06-2 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2.4.5-Trichlorophenol | 95-95-4 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 3- & 4-Methylphenol | 1319-77-3 | 1 | mg/kg | <1 | <1 | 0.0 | No Limit |
| | | EP075(SIM): Pentachlorophenol | 87-86-5 | 2 | mg/kg | <2 | <2 | 0.0 | No Limit |
| **EP075(SIM)A: Phenolic Compounds (QC Lot: 5510503)** | | | | | | | | | |
| EM2322709-034 | SB8_1.0-1.2 | EP075(SIM): Phenol | 108-95-2 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2-Chlorophenol | 95-57-8 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2-Methylphenol | 95-48-7 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2-Nitrophenol | 88-75-5 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2.4-Dimethylphenol | 105-67-9 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2.4-Dichlorophenol | 120-83-2 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2.6-Dichlorophenol | 87-65-0 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 4-Chloro-3-methylphenol | 59-50-7 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2.4.6-Trichlorophenol | 88-06-2 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2.4.5-Trichlorophenol | 95-95-4 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 3- & 4-Methylphenol | 1319-77-3 | 1 | mg/kg | <1 | <1 | 0.0 | No Limit |
| | | EP075(SIM): Pentachlorophenol | 87-86-5 | 2 | mg/kg | <2 | <2 | 0.0 | No Limit |
| EM2322534-001 | Anonymous | EP075(SIM): Phenol | 108-95-2 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2-Chlorophenol | 95-57-8 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2-Methylphenol | 95-48-7 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2-Nitrophenol | 88-75-5 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2.4-Dimethylphenol | 105-67-9 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2.4-Dichlorophenol | 120-83-2 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2.6-Dichlorophenol | 87-65-0 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 4-Chloro-3-methylphenol | 59-50-7 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2.4.6-Trichlorophenol | 88-06-2 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2.4.5-Trichlorophenol | 95-95-4 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 3- & 4-Methylphenol | 1319-77-3 | 1 | mg/kg | <1 | <1 | 0.0 | No Limit |
| | | EP075(SIM): Pentachlorophenol | 87-86-5 | 2 | mg/kg | <2 | <2 | 0.0 | No Limit |
| **EP075(SIM)A: Phenolic Compounds (QC Lot: 5511752)** | | | | | | | | | |
| EM2322709-001 | SB1_0.0-0.2 | EP075(SIM): Phenol | 108-95-2 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |

Sub-Matrix: **SOIL**

| | | | | Laboratory Duplicate (DUP) Report | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| *Laboratory sample ID* | *Sample ID* | *Method: Compound* | *CAS Number* | *LOR* | *Unit* | *Original Result* | *Duplicate Result* | *RPD (%)* | *Acceptable RPD (%)* |
| **EP075(SIM)A: Phenolic Compounds (QC Lot: 5511752) - continued** | | | | | | | | | |
| EM2322709-001 | SB1_0.0-0.2 | EP075(SIM): 2-Chlorophenol | 95-57-8 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2-Methylphenol | 95-48-7 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2-Nitrophenol | 88-75-5 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2.4-Dimethylphenol | 105-67-9 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2.4-Dichlorophenol | 120-83-2 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2.6-Dichlorophenol | 87-65-0 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 4-Chloro-3-methylphenol | 59-50-7 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2.4.6-Trichlorophenol | 88-06-2 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2.4.5-Trichlorophenol | 95-95-4 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 3- & 4-Methylphenol | 1319-77-3 | 1 | mg/kg | <1 | <1 | 0.0 | No Limit |
| | | EP075(SIM): Pentachlorophenol | 87-86-5 | 2 | mg/kg | <2 | <2 | 0.0 | No Limit |
| **EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 5508010)** | | | | | | | | | |
| EM2322739-001 | Anonymous | EP075(SIM): Naphthalene | 91-20-3 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Acenaphthylene | 208-96-8 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Acenaphthene | 83-32-9 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Fluorene | 86-73-7 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Phenanthrene | 85-01-8 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Anthracene | 120-12-7 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Fluoranthene | 206-44-0 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Pyrene | 129-00-0 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Benz(a)anthracene | 56-55-3 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Chrysene | 218-01-9 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Benzo(b+j)fluoranthene | 205-99-2<br>205-82-3 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Benzo(k)fluoranthene | 207-08-9 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Benzo(a)pyrene | 50-32-8 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Indeno(1.2.3.cd)pyrene | 193-39-5 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Dibenz(a.h)anthracene | 53-70-3 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Benzo(g.h.i)perylene | 191-24-2 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| EM2322709-009 | SB2_0.5-0.7 | EP075(SIM): Naphthalene | 91-20-3 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Acenaphthylene | 208-96-8 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Acenaphthene | 83-32-9 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Fluorene | 86-73-7 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Phenanthrene | 85-01-8 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Anthracene | 120-12-7 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Fluoranthene | 206-44-0 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Pyrene | 129-00-0 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Benz(a)anthracene | 56-55-3 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |

Sub-Matrix: **SOIL**

| | | | | Laboratory Duplicate (DUP) Report | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| *Laboratory sample ID* | *Sample ID* | *Method: Compound* | *CAS Number* | *LOR* | *Unit* | *Original Result* | *Duplicate Result* | *RPD (%)* | *Acceptable RPD (%)* |
| **EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 5508010) - continued** | | | | | | | | | |
| EM2322709-009 | SB2_0.5-0.7 | EP075(SIM): Chrysene | 218-01-9 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Benzo(b+j)fluoranthene | 205-99-2<br>205-82-3 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Benzo(k)fluoranthene | 207-08-9 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Benzo(a)pyrene | 50-32-8 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Indeno(1.2.3.cd)pyrene | 193-39-5 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Dibenz(a.h)anthracene | 53-70-3 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Benzo(g.h.i)perylene | 191-24-2 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| **EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 5509013)** | | | | | | | | | |
| EM2322696-014 | Anonymous | EP075(SIM): Naphthalene | 91-20-3 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Acenaphthylene | 208-96-8 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Acenaphthene | 83-32-9 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Fluorene | 86-73-7 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Phenanthrene | 85-01-8 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Anthracene | 120-12-7 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Fluoranthene | 206-44-0 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Pyrene | 129-00-0 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Benz(a)anthracene | 56-55-3 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Chrysene | 218-01-9 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Benzo(b+j)fluoranthene | 205-99-2<br>205-82-3 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Benzo(k)fluoranthene | 207-08-9 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Benzo(a)pyrene | 50-32-8 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Indeno(1.2.3.cd)pyrene | 193-39-5 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Dibenz(a.h)anthracene | 53-70-3 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Benzo(g.h.i)perylene | 191-24-2 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| EM2322709-030 | SB5_1.0-1.2 | EP075(SIM): Naphthalene | 91-20-3 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Acenaphthylene | 208-96-8 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Acenaphthene | 83-32-9 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Fluorene | 86-73-7 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Phenanthrene | 85-01-8 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Anthracene | 120-12-7 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Fluoranthene | 206-44-0 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Pyrene | 129-00-0 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Benz(a)anthracene | 56-55-3 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Chrysene | 218-01-9 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Benzo(b+j)fluoranthene | 205-99-2<br>205-82-3 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |

Sub-Matrix: **SOIL**

| | | | | Laboratory Duplicate (DUP) Report | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| *Laboratory sample ID* | *Sample ID* | *Method: Compound* | *CAS Number* | *LOR* | *Unit* | *Original Result* | *Duplicate Result* | *RPD (%)* | *Acceptable RPD (%)* |
| **EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 5509013) - continued** | | | | | | | | | |
| EM2322709-030 | SB5_1.0-1.2 | EP075(SIM): Benzo(k)fluoranthene | 207-08-9 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Benzo(a)pyrene | 50-32-8 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Indeno(1.2.3.cd)pyrene | 193-39-5 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Dibenz(a.h)anthracene | 53-70-3 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Benzo(g.h.i)perylene | 191-24-2 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| **EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 5510503)** | | | | | | | | | |
| EM2322709-034 | SB8_1.0-1.2 | EP075(SIM): Naphthalene | 91-20-3 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Acenaphthylene | 208-96-8 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Acenaphthene | 83-32-9 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Fluorene | 86-73-7 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Phenanthrene | 85-01-8 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Anthracene | 120-12-7 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Fluoranthene | 206-44-0 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Pyrene | 129-00-0 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Benz(a)anthracene | 56-55-3 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Chrysene | 218-01-9 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Benzo(b+j)fluoranthene | 205-99-2<br>205-82-3 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Benzo(k)fluoranthene | 207-08-9 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Benzo(a)pyrene | 50-32-8 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Indeno(1.2.3.cd)pyrene | 193-39-5 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Dibenz(a.h)anthracene | 53-70-3 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Benzo(g.h.i)perylene | 191-24-2 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| EM2322534-001 | Anonymous | EP075(SIM): Naphthalene | 91-20-3 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Acenaphthylene | 208-96-8 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Acenaphthene | 83-32-9 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Fluorene | 86-73-7 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Phenanthrene | 85-01-8 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Anthracene | 120-12-7 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Fluoranthene | 206-44-0 | 0.5 | mg/kg | 0.7 | 0.6 | 0.0 | No Limit |
| | | EP075(SIM): Pyrene | 129-00-0 | 0.5 | mg/kg | 0.8 | 0.6 | 21.9 | No Limit |
| | | EP075(SIM): Benz(a)anthracene | 56-55-3 | 0.5 | mg/kg | 0.6 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Chrysene | 218-01-9 | 0.5 | mg/kg | 0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Benzo(b+j)fluoranthene | 205-99-2<br>205-82-3 | 0.5 | mg/kg | 0.8 | 0.7 | 0.0 | No Limit |
| | | EP075(SIM): Benzo(k)fluoranthene | 207-08-9 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Benzo(a)pyrene | 50-32-8 | 0.5 | mg/kg | 0.6 | 0.6 | 0.0 | No Limit |
| | | EP075(SIM): Indeno(1.2.3.cd)pyrene | 193-39-5 | 0.5 | mg/kg | 0.5 | <0.5 | 0.0 | No Limit |

Sub-Matrix: **SOIL**

| | | | | Laboratory Duplicate (DUP) Report | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| *Laboratory sample ID* | *Sample ID* | *Method: Compound* | *CAS Number* | *LOR* | *Unit* | *Original Result* | *Duplicate Result* | *RPD (%)* | *Acceptable RPD (%)* |
| **EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 5510503) - continued** | | | | | | | | | |
| EM2322534-001 | Anonymous | EP075(SIM): Dibenz(a.h)anthracene | 53-70-3 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Benzo(g.h.i)perylene | 191-24-2 | 0.5 | mg/kg | 0.8 | 0.5 | 39.5 | No Limit |
| **EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 5511752)** | | | | | | | | | |
| EM2322709-001 | SB1_0.0-0.2 | EP075(SIM): Naphthalene | 91-20-3 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Acenaphthylene | 208-96-8 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Acenaphthene | 83-32-9 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Fluorene | 86-73-7 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Phenanthrene | 85-01-8 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Anthracene | 120-12-7 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Fluoranthene | 206-44-0 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Pyrene | 129-00-0 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Benz(a)anthracene | 56-55-3 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Chrysene | 218-01-9 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Benzo(b+j)fluoranthene | 205-99-2<br>205-82-3 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Benzo(k)fluoranthene | 207-08-9 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Benzo(a)pyrene | 50-32-8 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Indeno(1.2.3.cd)pyrene | 193-39-5 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Dibenz(a.h)anthracene | 53-70-3 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Benzo(g.h.i)perylene | 191-24-2 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| **EP080/071: Total Petroleum Hydrocarbons (QC Lot: 5507502)** | | | | | | | | | |
| EM2322709-001 | SB1_0.0-0.2 | EP080: C6 - C9 Fraction | ---- | 10 | mg/kg | <10 | <10 | 0.0 | No Limit |
| EM2322709-032 | SB8_0.0-0.2 | EP080: C6 - C9 Fraction | ---- | 10 | mg/kg | <10 | <10 | 0.0 | No Limit |
| **EP080/071: Total Petroleum Hydrocarbons (QC Lot: 5508012)** | | | | | | | | | |
| EM2322739-001 | Anonymous | EP071: C15 - C28 Fraction | ---- | 100 | mg/kg | <100 | <100 | 0.0 | No Limit |
| | | EP071: C29 - C36 Fraction | ---- | 100 | mg/kg | <100 | <100 | 0.0 | No Limit |
| | | EP071: C10 - C14 Fraction | ---- | 50 | mg/kg | <50 | <50 | 0.0 | No Limit |
| EM2322709-009 | SB2_0.5-0.7 | EP071: C15 - C28 Fraction | ---- | 100 | mg/kg | <100 | <100 | 0.0 | No Limit |
| | | EP071: C29 - C36 Fraction | ---- | 100 | mg/kg | <100 | <100 | 0.0 | No Limit |
| | | EP071: C10 - C14 Fraction | ---- | 50 | mg/kg | <50 | <50 | 0.0 | No Limit |
| **EP080/071: Total Petroleum Hydrocarbons (QC Lot: 5509012)** | | | | | | | | | |
| EM2322696-014 | Anonymous | EP071: C15 - C28 Fraction | ---- | 100 | mg/kg | <100 | <100 | 0.0 | No Limit |
| | | EP071: C29 - C36 Fraction | ---- | 100 | mg/kg | <100 | <100 | 0.0 | No Limit |
| | | EP071: C10 - C14 Fraction | ---- | 50 | mg/kg | <50 | <50 | 0.0 | No Limit |
| EM2322709-030 | SB5_1.0-1.2 | EP071: C15 - C28 Fraction | ---- | 100 | mg/kg | <100 | <100 | 0.0 | No Limit |
| | | EP071: C29 - C36 Fraction | ---- | 100 | mg/kg | <100 | <100 | 0.0 | No Limit |
| | | EP071: C10 - C14 Fraction | ---- | 50 | mg/kg | <50 | <50 | 0.0 | No Limit |

Sub-Matrix: **SOIL**

| | | | | Laboratory Duplicate (DUP) Report | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| *Laboratory sample ID* | *Sample ID* | *Method: Compound* | *CAS Number* | *LOR* | *Unit* | *Original Result* | *Duplicate Result* | *RPD (%)* | *Acceptable RPD (%)* |
| **EP080/071: Total Petroleum Hydrocarbons (QC Lot: 5510501)** | | | | | | | | | |
| EM2322709-034 | SB8_1.0-1.2 | EP071: C15 - C28 Fraction | ---- | 100 | mg/kg | <100 | <100 | 0.0 | No Limit |
| | | EP071: C29 - C36 Fraction | ---- | 100 | mg/kg | <100 | <100 | 0.0 | No Limit |
| | | EP071: C10 - C14 Fraction | ---- | 50 | mg/kg | <50 | <50 | 0.0 | No Limit |
| EM2322534-001 | Anonymous | EP071: C15 - C28 Fraction | ---- | 100 | mg/kg | <100 | <100 | 0.0 | No Limit |
| | | EP071: C29 - C36 Fraction | ---- | 100 | mg/kg | 120 | 120 | 8.5 | No Limit |
| | | EP071: C10 - C14 Fraction | ---- | 50 | mg/kg | <50 | <50 | 0.0 | No Limit |
| **EP080/071: Total Petroleum Hydrocarbons (QC Lot: 5511753)** | | | | | | | | | |
| EM2322709-001 | SB1_0.0-0.2 | EP071: C15 - C28 Fraction | ---- | 100 | mg/kg | <100 | <100 | 0.0 | No Limit |
| | | EP071: C29 - C36 Fraction | ---- | 100 | mg/kg | <100 | <100 | 0.0 | No Limit |
| | | EP071: C10 - C14 Fraction | ---- | 50 | mg/kg | <50 | <50 | 0.0 | No Limit |
| **EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 5507502)** | | | | | | | | | |
| EM2322709-001 | SB1_0.0-0.2 | EP080: C6 - C10 Fraction | C6_C10 | 10 | mg/kg | <10 | <10 | 0.0 | No Limit |
| EM2322709-032 | SB8_0.0-0.2 | EP080: C6 - C10 Fraction | C6_C10 | 10 | mg/kg | <10 | <10 | 0.0 | No Limit |
| **EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 5508012)** | | | | | | | | | |
| EM2322739-001 | Anonymous | EP071: >C16 - C34 Fraction | ---- | 100 | mg/kg | <100 | <100 | 0.0 | No Limit |
| | | EP071: >C34 - C40 Fraction | ---- | 100 | mg/kg | <100 | <100 | 0.0 | No Limit |
| | | EP071: >C10 - C16 Fraction | ---- | 50 | mg/kg | <50 | <50 | 0.0 | No Limit |
| EM2322709-009 | SB2_0.5-0.7 | EP071: >C16 - C34 Fraction | ---- | 100 | mg/kg | <100 | <100 | 0.0 | No Limit |
| | | EP071: >C34 - C40 Fraction | ---- | 100 | mg/kg | <100 | <100 | 0.0 | No Limit |
| | | EP071: >C10 - C16 Fraction | ---- | 50 | mg/kg | <50 | <50 | 0.0 | No Limit |
| **EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 5509012)** | | | | | | | | | |
| EM2322696-014 | Anonymous | EP071: >C16 - C34 Fraction | ---- | 100 | mg/kg | <100 | <100 | 0.0 | No Limit |
| | | EP071: >C34 - C40 Fraction | ---- | 100 | mg/kg | <100 | <100 | 0.0 | No Limit |
| | | EP071: >C10 - C16 Fraction | ---- | 50 | mg/kg | <50 | <50 | 0.0 | No Limit |
| EM2322709-030 | SB5_1.0-1.2 | EP071: >C16 - C34 Fraction | ---- | 100 | mg/kg | <100 | <100 | 0.0 | No Limit |
| | | EP071: >C34 - C40 Fraction | ---- | 100 | mg/kg | <100 | <100 | 0.0 | No Limit |
| | | EP071: >C10 - C16 Fraction | ---- | 50 | mg/kg | <50 | <50 | 0.0 | No Limit |
| **EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 5510501)** | | | | | | | | | |
| EM2322709-034 | SB8_1.0-1.2 | EP071: >C16 - C34 Fraction | ---- | 100 | mg/kg | <100 | <100 | 0.0 | No Limit |
| | | EP071: >C34 - C40 Fraction | ---- | 100 | mg/kg | <100 | <100 | 0.0 | No Limit |
| | | EP071: >C10 - C16 Fraction | ---- | 50 | mg/kg | <50 | <50 | 0.0 | No Limit |
| EM2322534-001 | Anonymous | EP071: >C16 - C34 Fraction | ---- | 100 | mg/kg | 120 | 120 | 0.0 | No Limit |
| | | EP071: >C34 - C40 Fraction | ---- | 100 | mg/kg | 100 | <100 | 0.0 | No Limit |
| | | EP071: >C10 - C16 Fraction | ---- | 50 | mg/kg | <50 | <50 | 0.0 | No Limit |
| **EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 5511753)** | | | | | | | | | |
| EM2322709-001 | SB1_0.0-0.2 | EP071: >C16 - C34 Fraction | ---- | 100 | mg/kg | <100 | <100 | 0.0 | No Limit |
| | | EP071: >C34 - C40 Fraction | ---- | 100 | mg/kg | <100 | <100 | 0.0 | No Limit |

Sub-Matrix: **SOIL**

| Laboratory sample ID | Sample ID | Method: Compound | CAS Number | Laboratory Duplicate (DUP) Report | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | LOR | Unit | Original Result | Duplicate Result | RPD (%) | Acceptable RPD (%) |
| **EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 5511753) - continued** | | | | | | | | | |
| EM2322709-001 | SB1_0.0-0.2 | EP071: >C10 - C16 Fraction | ---- | 50 | mg/kg | <50 | <50 | 0.0 | No Limit |
| **EP080: BTEXN (QC Lot: 5507502)** | | | | | | | | | |
| EM2322709-001 | SB1_0.0-0.2 | EP080: Benzene | 71-43-2 | 0.2 | mg/kg | <0.2 | <0.2 | 0.0 | No Limit |
| | | EP080: Toluene | 108-88-3 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP080: Ethylbenzene | 100-41-4 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP080: meta- & para-Xylene | 108-38-3<br>106-42-3 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP080: ortho-Xylene | 95-47-6 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP080: Naphthalene | 91-20-3 | 1 | mg/kg | <1 | <1 | 0.0 | No Limit |
| EM2322709-032 | SB8_0.0-0.2 | EP080: Benzene | 71-43-2 | 0.2 | mg/kg | <0.2 | <0.2 | 0.0 | No Limit |
| | | EP080: Toluene | 108-88-3 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP080: Ethylbenzene | 100-41-4 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP080: meta- & para-Xylene | 108-38-3<br>106-42-3 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP080: ortho-Xylene | 95-47-6 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP080: Naphthalene | 91-20-3 | 1 | mg/kg | <1 | <1 | 0.0 | No Limit |

Sub-Matrix: **WATER**

| Laboratory sample ID | Sample ID | Method: Compound | CAS Number | Laboratory Duplicate (DUP) Report | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | LOR | Unit | Original Result | Duplicate Result | RPD (%) | Acceptable RPD (%) |
| **EG020F: Dissolved Metals by ICP-MS (QC Lot: 5526344)** | | | | | | | | | |
| EM2322439-001 | Anonymous | EG020A-F: Cadmium | 7440-43-9 | 0.0001 | mg/L | 0.0025 | 0.0022 | 10.7 | 0% - 20% |
| | | EG020A-F: Arsenic | 7440-38-2 | 0.001 | mg/L | 0.002 | 0.002 | 0.0 | No Limit |
| | | EG020A-F: Beryllium | 7440-41-7 | 0.001 | mg/L | 0.004 | 0.004 | 0.0 | No Limit |
| | | EG020A-F: Barium | 7440-39-3 | 0.001 | mg/L | 0.010 | 0.010 | 0.0 | 0% - 50% |
| | | EG020A-F: Chromium | 7440-47-3 | 0.001 | mg/L | 0.001 | 0.001 | 0.0 | No Limit |
| | | EG020A-F: Cobalt | 7440-48-4 | 0.001 | mg/L | 0.738 | 0.745 | 1.0 | 0% - 20% |
| | | EG020A-F: Copper | 7440-50-8 | 0.001 | mg/L | 0.489 | 0.496 | 1.4 | 0% - 20% |
| | | EG020A-F: Lead | 7439-92-1 | 0.001 | mg/L | 0.031 | 0.032 | 0.0 | 0% - 20% |
| | | EG020A-F: Manganese | 7439-96-5 | 0.001 | mg/L | 5.83 | 5.92 | 1.5 | 0% - 20% |
| | | EG020A-F: Nickel | 7440-02-0 | 0.001 | mg/L | 0.638 | 0.635 | 0.5 | 0% - 20% |
| | | EG020A-F: Zinc | 7440-66-6 | 0.005 | mg/L | 2.14 | 2.18 | 2.1 | 0% - 20% |
| | | EG020A-F: Selenium | 7782-49-2 | 0.01 | mg/L | <0.01 | <0.01 | 0.0 | No Limit |
| | | EG020A-F: Vanadium | 7440-62-2 | 0.01 | mg/L | <0.01 | <0.01 | 0.0 | No Limit |
| | | EG020A-F: Boron | 7440-42-8 | 0.05 | mg/L | <0.05 | <0.05 | 0.0 | No Limit |
| EM2322709-059 | QC4 | EG020A-F: Cadmium | 7440-43-9 | 0.0001 | mg/L | <0.0001 | <0.0001 | 0.0 | No Limit |
| | | EG020A-F: Arsenic | 7440-38-2 | 0.001 | mg/L | <0.001 | <0.001 | 0.0 | No Limit |
| | | EG020A-F: Beryllium | 7440-41-7 | 0.001 | mg/L | <0.001 | <0.001 | 0.0 | No Limit |
| | | EG020A-F: Barium | 7440-39-3 | 0.001 | mg/L | <0.001 | <0.001 | 0.0 | No Limit |
| | | EG020A-F: Chromium | 7440-47-3 | 0.001 | mg/L | <0.001 | <0.001 | 0.0 | No Limit |

Sub-Matrix: **WATER**

| | | | | Laboratory Duplicate (DUP) Report | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| *Laboratory sample ID* | *Sample ID* | *Method: Compound* | *CAS Number* | *LOR* | *Unit* | *Original Result* | *Duplicate Result* | *RPD (%)* | *Acceptable RPD (%)* |
| **EG020F: Dissolved Metals by ICP-MS (QC Lot: 5526344) - continued** | | | | | | | | | |
| EM2322709-059 | QC4 | EG020A-F: Cobalt | 7440-48-4 | 0.001 | mg/L | <0.001 | <0.001 | 0.0 | No Limit |
| | | EG020A-F: Copper | 7440-50-8 | 0.001 | mg/L | <0.001 | <0.001 | 0.0 | No Limit |
| | | EG020A-F: Lead | 7439-92-1 | 0.001 | mg/L | <0.001 | <0.001 | 0.0 | No Limit |
| | | EG020A-F: Manganese | 7439-96-5 | 0.001 | mg/L | <0.001 | <0.001 | 0.0 | No Limit |
| | | EG020A-F: Nickel | 7440-02-0 | 0.001 | mg/L | <0.001 | <0.001 | 0.0 | No Limit |
| | | EG020A-F: Zinc | 7440-66-6 | 0.005 | mg/L | <0.005 | <0.005 | 0.0 | No Limit |
| | | EG020A-F: Selenium | 7782-49-2 | 0.01 | mg/L | <0.01 | <0.01 | 0.0 | No Limit |
| | | EG020A-F: Vanadium | 7440-62-2 | 0.01 | mg/L | <0.01 | <0.01 | 0.0 | No Limit |
| | | EG020A-F: Boron | 7440-42-8 | 0.05 | mg/L | <0.05 | <0.05 | 0.0 | No Limit |
| **EG035F: Dissolved Mercury by FIMS (QC Lot: 5526345)** | | | | | | | | | |
| EM2322709-056 | QC1 | EG035F: Mercury | 7439-97-6 | 0.0001 | mg/L | <0.0001 | <0.0001 | 0.0 | No Limit |
| **EP080/071: Total Petroleum Hydrocarbons (QC Lot: 5507397)** | | | | | | | | | |
| EM2322628-012 | Anonymous | EP080: C6 - C9 Fraction | ---- | 20 | µg/L | <20 | <20 | 0.0 | No Limit |
| EM2322698-005 | Anonymous | EP080: C6 - C9 Fraction | ---- | 20 | µg/L | <20 | <20 | 0.0 | No Limit |
| **EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 5507397)** | | | | | | | | | |
| EM2322628-012 | Anonymous | EP080: C6 - C10 Fraction | C6_C10 | 20 | µg/L | <20 | <20 | 0.0 | No Limit |
| EM2322698-005 | Anonymous | EP080: C6 - C10 Fraction | C6_C10 | 20 | µg/L | <20 | <20 | 0.0 | No Limit |
| **EP080: BTEXN (QC Lot: 5507397)** | | | | | | | | | |
| EM2322628-012 | Anonymous | EP080: Benzene | 71-43-2 | 1 | µg/L | <1 | <1 | 0.0 | No Limit |
| | | EP080: Toluene | 108-88-3 | 2 | µg/L | <2 | <2 | 0.0 | No Limit |
| | | EP080: Ethylbenzene | 100-41-4 | 2 | µg/L | <2 | <2 | 0.0 | No Limit |
| | | EP080: meta- & para-Xylene | 108-38-3<br>106-42-3 | 2 | µg/L | <2 | <2 | 0.0 | No Limit |
| | | EP080: ortho-Xylene | 95-47-6 | 2 | µg/L | <2 | <2 | 0.0 | No Limit |
| | | EP080: Naphthalene | 91-20-3 | 5 | µg/L | <5 | <5 | 0.0 | No Limit |
| EM2322698-005 | Anonymous | EP080: Benzene | 71-43-2 | 1 | µg/L | <1 | <1 | 0.0 | No Limit |
| | | EP080: Toluene | 108-88-3 | 2 | µg/L | <2 | <2 | 0.0 | No Limit |
| | | EP080: Ethylbenzene | 100-41-4 | 2 | µg/L | <2 | <2 | 0.0 | No Limit |
| | | EP080: meta- & para-Xylene | 108-38-3<br>106-42-3 | 2 | µg/L | <2 | <2 | 0.0 | No Limit |
| | | EP080: ortho-Xylene | 95-47-6 | 2 | µg/L | <2 | <2 | 0.0 | No Limit |
| | | EP080: Naphthalene | 91-20-3 | 5 | µg/L | <5 | <5 | 0.0 | No Limit |

## Method Blank (MB) and Laboratory Control Sample (LCS) Report

The quality control term Method / Laboratory Blank refers to an analyte free matrix to which all reagents are added in the same volumes or proportions as used in standard sample preparation. The purpose of this QC parameter is to monitor potential laboratory contamination. The quality control term Laboratory Control Sample (LCS) refers to a certified reference material, or a known interference free matrix spiked with target analytes. The purpose of this QC parameter is to monitor method precision and accuracy independent of sample matrix. Dynamic Recovery Limits are based on statistical evaluation of processed LCS.

Sub-Matrix: **SOIL**

| | | | | Method Blank (MB) Report | Laboratory Control Spike (LCS) Report | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | Spike | Spike Recovery (%) | Acceptable Limits (%) | |
| Method: Compound | CAS Number | LOR | Unit | Result | Concentration | LCS | Low | High |
| **EG005(ED093)T: Total Metals by ICP-AES (QCLot: 5520519)** | | | | | | | | |
| EG005T: Arsenic | 7440-38-2 | 5 | mg/kg | <5 | 123 mg/kg | 91.9 | 70.0 | 130 |
| EG005T: Barium | 7440-39-3 | 10 | mg/kg | <10 | 99.3 mg/kg | 92.8 | 70.0 | 130 |
| EG005T: Beryllium | 7440-41-7 | 1 | mg/kg | <1 | 0.67 mg/kg | 80.2 | 70.0 | 130 |
| EG005T: Boron | 7440-42-8 | 50 | mg/kg | <50 | ---- | ---- | ---- | ---- |
| EG005T: Cadmium | 7440-43-9 | 1 | mg/kg | <1 | 1.23 mg/kg | 62.5 | 50.0 | 130 |
| EG005T: Chromium | 7440-47-3 | 2 | mg/kg | <2 | 20.2 mg/kg | 96.6 | 70.0 | 130 |
| EG005T: Cobalt | 7440-48-4 | 2 | mg/kg | <2 | 11.2 mg/kg | 84.3 | 70.0 | 130 |
| EG005T: Copper | 7440-50-8 | 5 | mg/kg | <5 | 55.9 mg/kg | 92.7 | 70.0 | 130 |
| EG005T: Iron | 7439-89-6 | 50 | mg/kg | <50 | 33227 mg/kg | 98.3 | 70.0 | 130 |
| EG005T: Lead | 7439-92-1 | 5 | mg/kg | <5 | 62.4 mg/kg | 85.8 | 70.0 | 130 |
| EG005T: Manganese | 7439-96-5 | 5 | mg/kg | <5 | 590 mg/kg | 85.8 | 70.0 | 130 |
| EG005T: Nickel | 7440-02-0 | 2 | mg/kg | <2 | 15.4 mg/kg | 90.7 | 70.0 | 130 |
| EG005T: Selenium | 7782-49-2 | 5 | mg/kg | <5 | ---- | ---- | ---- | ---- |
| EG005T: Vanadium | 7440-62-2 | 5 | mg/kg | <5 | 61.3 mg/kg | 86.1 | 70.0 | 130 |
| EG005T: Zinc | 7440-66-6 | 5 | mg/kg | <5 | 162 mg/kg | 74.2 | 70.0 | 130 |
| **EG005(ED093)T: Total Metals by ICP-AES (QCLot: 5521170)** | | | | | | | | |
| EG005T: Arsenic | 7440-38-2 | 5 | mg/kg | <5 | 123 mg/kg | 108 | 70.0 | 130 |
| EG005T: Barium | 7440-39-3 | 10 | mg/kg | <10 | 99.3 mg/kg | 95.5 | 70.0 | 130 |
| EG005T: Beryllium | 7440-41-7 | 1 | mg/kg | <1 | 0.67 mg/kg | 98.0 | 70.0 | 130 |
| EG005T: Boron | 7440-42-8 | 50 | mg/kg | <50 | ---- | ---- | ---- | ---- |
| EG005T: Cadmium | 7440-43-9 | 1 | mg/kg | <1 | 1.23 mg/kg | 77.9 | 50.0 | 130 |
| EG005T: Chromium | 7440-47-3 | 2 | mg/kg | <2 | 20.2 mg/kg | 109 | 70.0 | 130 |
| EG005T: Cobalt | 7440-48-4 | 2 | mg/kg | <2 | 11.2 mg/kg | 95.9 | 70.0 | 130 |
| EG005T: Copper | 7440-50-8 | 5 | mg/kg | <5 | 55.9 mg/kg | 103 | 70.0 | 130 |
| EG005T: Iron | 7439-89-6 | 50 | mg/kg | <50 | 33227 mg/kg | 111 | 70.0 | 130 |
| EG005T: Lead | 7439-92-1 | 5 | mg/kg | <5 | 62.4 mg/kg | 98.2 | 70.0 | 130 |
| EG005T: Manganese | 7439-96-5 | 5 | mg/kg | <5 | 590 mg/kg | 96.6 | 70.0 | 130 |
| EG005T: Nickel | 7440-02-0 | 2 | mg/kg | <2 | 15.4 mg/kg | 105 | 70.0 | 130 |
| EG005T: Selenium | 7782-49-2 | 5 | mg/kg | <5 | ---- | ---- | ---- | ---- |
| EG005T: Vanadium | 7440-62-2 | 5 | mg/kg | <5 | 61.3 mg/kg | 100 | 70.0 | 130 |

Sub-Matrix: **SOIL**

| Method: Compound | CAS Number | LOR | Unit | Method Blank (MB) Report: Result | Laboratory Control Spike (LCS) Report: Spike Concentration | Spike Recovery (%): LCS | Acceptable Limits (%): Low | Acceptable Limits (%): High |
|---|---|---|---|---|---|---|---|---|
| **EG005(ED093)T: Total Metals by ICP-AES (QCLot: 5521170) - continued** | | | | | | | | |
| EG005T: Zinc | 7440-66-6 | 5 | mg/kg | <5 | 162 mg/kg | 82.4 | 70.0 | 130 |
| **EA001: pH in soil using 0.01M CaCl extract (QCLot: 5507316)** | | | | | | | | |
| EA001: pH (CaCl2) | ---- | ---- | pH Unit | ---- | 4 pH Unit | 101 | 98.8 | 101 |
| | | | | ---- | 7 pH Unit | 100 | 99.3 | 101 |
| **EA001: pH in soil using 0.01M CaCl extract (QCLot: 5508032)** | | | | | | | | |
| EA001: pH (CaCl2) | ---- | ---- | pH Unit | ---- | 4 pH Unit | 99.2 | 98.8 | 101 |
| | | | | ---- | 7 pH Unit | 99.7 | 99.3 | 101 |
| **EA001: pH in soil using 0.01M CaCl extract (QCLot: 5508033)** | | | | | | | | |
| EA001: pH (CaCl2) | ---- | ---- | pH Unit | ---- | 4 pH Unit | 100 | 98.8 | 101 |
| | | | | ---- | 7 pH Unit | 99.8 | 99.3 | 101 |
| **EA002-AD: pH (Soils) dried at 40°C (QCLot: 5507346)** | | | | | | | | |
| EA002-AD: pH Value | ---- | ---- | pH Unit | ---- | 4 pH Unit | 100 | 98.8 | 101 |
| | | | | ---- | 7 pH Unit | 100 | 99.3 | 101 |
| **EA010-AD: Conductivity (Soils) dried at 40°C (QCLot: 5507345)** | | | | | | | | |
| EA010-AD: Electrical Conductivity @ 25°C | ---- | 1 | µS/cm | <1 | 1413 µS/cm | 101 | 90.0 | 110 |
| **ED006: Exchangeable Cations on Alkaline Soils (QCLot: 5507356)** | | | | | | | | |
| ED006: Exchangeable Calcium | ---- | 0.2 | meq/100g | <0.2 | 33 meq/100g | 89.9 | 66.6 | 101 |
| ED006: Exchangeable Magnesium | ---- | 0.2 | meq/100g | <0.2 | 32 meq/100g | 91.0 | 66.9 | 120 |
| ED006: Exchangeable Potassium | ---- | 0.2 | meq/100g | <0.2 | 2.2 meq/100g | 106 | 72.8 | 119 |
| ED006: Exchangeable Sodium | ---- | 0.2 | meq/100g | <0.2 | 5.6 meq/100g | 88.4 | 67.5 | 112 |
| ED006: Cation Exchange Capacity | ---- | 0.2 | meq/100g | <0.2 | ---- | ---- | ---- | ---- |
| ED006: Exchangeable Calcium Percent | ---- | 0.2 | % | <0.2 | ---- | ---- | ---- | ---- |
| ED006: Exchangeable Magnesium Percent | ---- | 0.2 | % | <0.2 | ---- | ---- | ---- | ---- |
| ED006: Exchangeable Potassium Percent | ---- | 0.2 | % | <0.2 | ---- | ---- | ---- | ---- |
| ED006: Exchangeable Sodium Percent | ---- | 0.2 | % | <0.2 | ---- | ---- | ---- | ---- |
| ED006: Calcium/Magnesium Ratio | ---- | 0.1 | - | <0.1 | ---- | ---- | ---- | ---- |
| ED006: Magnesium/Potassium Ratio | ---- | 0.1 | - | <0.1 | ---- | ---- | ---- | ---- |
| **ED007: Exchangeable Cations (QCLot: 5507358)** | | | | | | | | |
| ED007: Exchangeable Calcium | ---- | 0.1 | meq/100g | <0.1 | 24.13 meq/100g | 96.2 | 80.0 | 130 |
| ED007: Exchangeable Magnesium | ---- | 0.1 | meq/100g | <0.1 | 1.96 meq/100g | 125 | 72.2 | 130 |
| ED007: Exchangeable Potassium | ---- | 0.1 | meq/100g | <0.1 | 1.01 meq/100g | 121 | 77.4 | 130 |
| ED007: Exchangeable Sodium | ---- | 0.1 | meq/100g | <0.1 | 0.86 meq/100g | 95.6 | 89.2 | 130 |
| ED007: Cation Exchange Capacity | ---- | 0.1 | meq/100g | <0.1 | ---- | ---- | ---- | ---- |
| **EG035T: Total Recoverable Mercury by FIMS (QCLot: 5520520)** | | | | | | | | |

Sub-Matrix: **SOIL**

| Method: Compound | CAS Number | LOR | Unit | Method Blank (MB) Report | Laboratory Control Spike (LCS) Report | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | Spike | Spike Recovery (%) | Acceptable Limits (%) | |
| | | | | Result | Concentration | LCS | Low | High |
| **EG035T: Total Recoverable Mercury by FIMS (QCLot: 5520520) - continued** | | | | | | | | |
| EG035T: Mercury | 7439-97-6 | 0.1 | mg/kg | <0.1 | 0.64 mg/kg | 89.8 | 70.0 | 130 |
| **EG035T: Total Recoverable Mercury by FIMS (QCLot: 5521171)** | | | | | | | | |
| EG035T: Mercury | 7439-97-6 | 0.1 | mg/kg | <0.1 | 0.64 mg/kg | 87.5 | 70.0 | 130 |
| **EK026SF: Total CN by Segmented Flow Analyser (QCLot: 5510523)** | | | | | | | | |
| EK026SF: Total Cyanide | 57-12-5 | 1 | mg/kg | <1 | 20 mg/kg | 99.4 | 70.0 | 130 |
| **EK026SF: Total CN by Segmented Flow Analyser (QCLot: 5511613)** | | | | | | | | |
| EK026SF: Total Cyanide | 57-12-5 | 1 | mg/kg | <1 | 20 mg/kg | 101 | 70.0 | 130 |
| **EK026SF: Total CN by Segmented Flow Analyser (QCLot: 5516736)** | | | | | | | | |
| EK026SF: Total Cyanide | 57-12-5 | 1 | mg/kg | <1 | 20 mg/kg | 107 | 70.0 | 130 |
| **EK026SF: Total CN by Segmented Flow Analyser (QCLot: 5518682)** | | | | | | | | |
| EK026SF: Total Cyanide | 57-12-5 | 1 | mg/kg | <1 | 20 mg/kg | 100 | 70.0 | 130 |
| **EK040T: Fluoride Total (QCLot: 5508384)** | | | | | | | | |
| EK040T: Fluoride | 16984-48-8 | 40 | mg/kg | <40 | 334 mg/kg | 95.8 | 93.1 | 107 |
| **EK040T: Fluoride Total (QCLot: 5508385)** | | | | | | | | |
| EK040T: Fluoride | 16984-48-8 | 40 | mg/kg | <40 | 334 mg/kg | 95.8 | 93.1 | 107 |
| **EP004: Organic Matter (QCLot: 5519420)** | | | | | | | | |
| EP004: Organic Matter | ---- | 0.5 | % | <0.5 | 2.53 % | 85.0 | 82.0 | 98.0 |
| EP004: Total Organic Carbon | ---- | 0.5 | % | <0.5 | 1.46 % | 85.6 | 81.0 | 99.0 |
| **EP004: Organic Matter (QCLot: 5523079)** | | | | | | | | |
| EP004: Organic Matter | ---- | 0.5 | % | <0.5 | 2.53 % | 87.4 | 82.0 | 98.0 |
| EP004: Total Organic Carbon | ---- | 0.5 | % | <0.5 | 1.46 % | 87.7 | 81.0 | 99.0 |
| **EP066: Polychlorinated Biphenyls (PCB) (QCLot: 5508013)** | | | | | | | | |
| EP066: Total Polychlorinated biphenyls | ---- | 0.1 | mg/kg | <0.1 | 1 mg/kg | 105 | 68.0 | 133 |
| **EP066: Polychlorinated Biphenyls (PCB) (QCLot: 5509015)** | | | | | | | | |
| EP066: Total Polychlorinated biphenyls | ---- | 0.1 | mg/kg | <0.1 | 1 mg/kg | 108 | 68.0 | 133 |
| **EP066: Polychlorinated Biphenyls (PCB) (QCLot: 5510504)** | | | | | | | | |
| EP066: Total Polychlorinated biphenyls | ---- | 0.1 | mg/kg | <0.1 | 1 mg/kg | 94.2 | 68.0 | 133 |
| **EP066: Polychlorinated Biphenyls (PCB) (QCLot: 5511755)** | | | | | | | | |
| EP066: Total Polychlorinated biphenyls | ---- | 0.1 | mg/kg | <0.1 | 1 mg/kg | 102 | 68.0 | 133 |
| **EP068A: Organochlorine Pesticides (OC) (QCLot: 5508011)** | | | | | | | | |
| EP068: alpha-BHC | 319-84-6 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 116 | 71.8 | 126 |
| EP068: Hexachlorobenzene (HCB) | 118-74-1 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 100 | 72.2 | 125 |
| EP068: beta-BHC | 319-85-7 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 104 | 70.0 | 124 |
| EP068: gamma-BHC | 58-89-9 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 104 | 69.1 | 124 |

Sub-Matrix: **SOIL**

| Method: Compound | CAS Number | LOR | Unit | Method Blank (MB) Report | Laboratory Control Spike (LCS) Report | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | Spike | Spike Recovery (%) | Acceptable Limits (%) | |
| | | | | Result | Concentration | LCS | Low | High |
| **EP068A: Organochlorine Pesticides (OC) (QCLot: 5508011) - continued** | | | | | | | | |
| EP068: delta-BHC | 319-86-8 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 102 | 69.2 | 125 |
| EP068: Heptachlor | 76-44-8 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 101 | 66.6 | 122 |
| EP068: Aldrin | 309-00-2 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 104 | 68.8 | 123 |
| EP068: Heptachlor epoxide | 1024-57-3 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 102 | 67.2 | 124 |
| EP068: trans-Chlordane | 5103-74-2 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 106 | 66.0 | 126 |
| EP068: alpha-Endosulfan | 959-98-8 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 105 | 70.2 | 126 |
| EP068: cis-Chlordane | 5103-71-9 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 103 | 72.1 | 124 |
| EP068: Dieldrin | 60-57-1 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 106 | 68.0 | 122 |
| EP068: 4.4`-DDE | 72-55-9 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 104 | 68.9 | 124 |
| EP068: Endrin | 72-20-8 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 97.2 | 55.8 | 130 |
| EP068: beta-Endosulfan | 33213-65-9 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 103 | 67.9 | 124 |
| EP068: 4.4`-DDD | 72-54-8 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 102 | 72.0 | 127 |
| EP068: Endrin aldehyde | 7421-93-4 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 97.6 | 66.3 | 131 |
| EP068: Endosulfan sulfate | 1031-07-8 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 97.9 | 62.4 | 131 |
| EP068: 4.4`-DDT | 50-29-3 | 0.2 | mg/kg | <0.2 | 0.5 mg/kg | 94.2 | 55.4 | 130 |
| EP068: Endrin ketone | 53494-70-5 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 101 | 68.8 | 128 |
| EP068: Methoxychlor | 72-43-5 | 0.2 | mg/kg | <0.2 | 0.5 mg/kg | 93.7 | 55.5 | 132 |
| **EP068A: Organochlorine Pesticides (OC) (QCLot: 5509014)** | | | | | | | | |
| EP068: alpha-BHC | 319-84-6 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 104 | 71.8 | 126 |
| EP068: Hexachlorobenzene (HCB) | 118-74-1 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 98.2 | 72.2 | 125 |
| EP068: beta-BHC | 319-85-7 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 107 | 70.0 | 124 |
| EP068: gamma-BHC | 58-89-9 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 106 | 69.1 | 124 |
| EP068: delta-BHC | 319-86-8 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 105 | 69.2 | 125 |
| EP068: Heptachlor | 76-44-8 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 101 | 66.6 | 122 |
| EP068: Aldrin | 309-00-2 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 106 | 68.8 | 123 |
| EP068: Heptachlor epoxide | 1024-57-3 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 104 | 67.2 | 124 |
| EP068: trans-Chlordane | 5103-74-2 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 114 | 66.0 | 126 |
| EP068: alpha-Endosulfan | 959-98-8 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 106 | 70.2 | 126 |
| EP068: cis-Chlordane | 5103-71-9 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 106 | 72.1 | 124 |
| EP068: Dieldrin | 60-57-1 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 106 | 68.0 | 122 |
| EP068: 4.4`-DDE | 72-55-9 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 104 | 68.9 | 124 |
| EP068: Endrin | 72-20-8 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 102 | 55.8 | 130 |
| EP068: beta-Endosulfan | 33213-65-9 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 105 | 67.9 | 124 |
| EP068: 4.4`-DDD | 72-54-8 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 106 | 72.0 | 127 |

Sub-Matrix: **SOIL**

| Method: Compound | CAS Number | LOR | Unit | Method Blank (MB) Report | Laboratory Control Spike (LCS) Report | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | Spike | Spike Recovery (%) | Acceptable Limits (%) | |
| | | | | Result | Concentration | LCS | Low | High |
| **EP068A: Organochlorine Pesticides (OC) (QCLot: 5509014) - continued** | | | | | | | | |
| EP068: Endrin aldehyde | 7421-93-4 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 101 | 66.3 | 131 |
| EP068: Endosulfan sulfate | 1031-07-8 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 103 | 62.4 | 131 |
| EP068: 4.4`-DDT | 50-29-3 | 0.2 | mg/kg | <0.2 | 0.5 mg/kg | 102 | 55.4 | 130 |
| EP068: Endrin ketone | 53494-70-5 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 106 | 68.8 | 128 |
| EP068: Methoxychlor | 72-43-5 | 0.2 | mg/kg | <0.2 | 0.5 mg/kg | 103 | 55.5 | 132 |
| **EP068A: Organochlorine Pesticides (OC) (QCLot: 5510502)** | | | | | | | | |
| EP068: alpha-BHC | 319-84-6 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 95.0 | 71.8 | 126 |
| EP068: Hexachlorobenzene (HCB) | 118-74-1 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 97.6 | 72.2 | 125 |
| EP068: beta-BHC | 319-85-7 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 95.5 | 70.0 | 124 |
| EP068: gamma-BHC | 58-89-9 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 95.5 | 69.1 | 124 |
| EP068: delta-BHC | 319-86-8 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 98.2 | 69.2 | 125 |
| EP068: Heptachlor | 76-44-8 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 90.2 | 66.6 | 122 |
| EP068: Aldrin | 309-00-2 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 95.6 | 68.8 | 123 |
| EP068: Heptachlor epoxide | 1024-57-3 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 95.2 | 67.2 | 124 |
| EP068: trans-Chlordane | 5103-74-2 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 93.5 | 66.0 | 126 |
| EP068: alpha-Endosulfan | 959-98-8 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 94.4 | 70.2 | 126 |
| EP068: cis-Chlordane | 5103-71-9 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 94.5 | 72.1 | 124 |
| EP068: Dieldrin | 60-57-1 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 98.0 | 68.0 | 122 |
| EP068: 4.4`-DDE | 72-55-9 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 93.1 | 68.9 | 124 |
| EP068: Endrin | 72-20-8 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 94.4 | 55.8 | 130 |
| EP068: beta-Endosulfan | 33213-65-9 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 93.0 | 67.9 | 124 |
| EP068: 4.4`-DDD | 72-54-8 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 93.3 | 72.0 | 127 |
| EP068: Endrin aldehyde | 7421-93-4 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 90.4 | 66.3 | 131 |
| EP068: Endosulfan sulfate | 1031-07-8 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 92.0 | 62.4 | 131 |
| EP068: 4.4`-DDT | 50-29-3 | 0.2 | mg/kg | <0.2 | 0.5 mg/kg | 85.4 | 55.4 | 130 |
| EP068: Endrin ketone | 53494-70-5 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 91.9 | 68.8 | 128 |
| EP068: Methoxychlor | 72-43-5 | 0.2 | mg/kg | <0.2 | 0.5 mg/kg | 83.0 | 55.5 | 132 |
| **EP068A: Organochlorine Pesticides (OC) (QCLot: 5511754)** | | | | | | | | |
| EP068: alpha-BHC | 319-84-6 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 115 | 71.8 | 126 |
| EP068: Hexachlorobenzene (HCB) | 118-74-1 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 114 | 72.2 | 125 |
| EP068: beta-BHC | 319-85-7 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 114 | 70.0 | 124 |
| EP068: gamma-BHC | 58-89-9 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 112 | 69.1 | 124 |
| EP068: delta-BHC | 319-86-8 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 114 | 69.2 | 125 |
| EP068: Heptachlor | 76-44-8 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 119 | 66.6 | 122 |

Sub-Matrix: **SOIL**

| Method: Compound | CAS Number | LOR | Unit | Method Blank (MB) Report: Result | Laboratory Control Spike (LCS) Report: Spike Concentration | Spike Recovery (%): LCS | Acceptable Limits (%): Low | Acceptable Limits (%): High |
|---|---|---|---|---|---|---|---|---|
| **EP068A: Organochlorine Pesticides (OC) (QCLot: 5511754) - continued** | | | | | | | | |
| EP068: Aldrin | 309-00-2 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 117 | 68.8 | 123 |
| EP068: Heptachlor epoxide | 1024-57-3 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 116 | 67.2 | 124 |
| EP068: trans-Chlordane | 5103-74-2 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 112 | 66.0 | 126 |
| EP068: alpha-Endosulfan | 959-98-8 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 114 | 70.2 | 126 |
| EP068: cis-Chlordane | 5103-71-9 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 114 | 72.1 | 124 |
| EP068: Dieldrin | 60-57-1 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 119 | 68.0 | 122 |
| EP068: 4.4`-DDE | 72-55-9 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 112 | 68.9 | 124 |
| EP068: Endrin | 72-20-8 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 113 | 55.8 | 130 |
| EP068: beta-Endosulfan | 33213-65-9 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 111 | 67.9 | 124 |
| EP068: 4.4`-DDD | 72-54-8 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 113 | 72.0 | 127 |
| EP068: Endrin aldehyde | 7421-93-4 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 90.8 | 66.3 | 131 |
| EP068: Endosulfan sulfate | 1031-07-8 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 74.7 | 62.4 | 131 |
| EP068: 4.4`-DDT | 50-29-3 | 0.2 | mg/kg | <0.2 | 0.5 mg/kg | 88.8 | 55.4 | 130 |
| EP068: Endrin ketone | 53494-70-5 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 90.4 | 68.8 | 128 |
| EP068: Methoxychlor | 72-43-5 | 0.2 | mg/kg | <0.2 | 0.5 mg/kg | 91.6 | 55.5 | 132 |
| **EP068B: Organophosphorus Pesticides (OP) (QCLot: 5508011)** | | | | | | | | |
| EP068: Dichlorvos | 62-73-7 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 99.5 | 65.6 | 127 |
| EP068: Demeton-S-methyl | 919-86-8 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 96.6 | 63.0 | 129 |
| EP068: Monocrotophos | 6923-22-4 | 0.2 | mg/kg | <0.2 | 0.5 mg/kg | 78.4 | 10.0 | 136 |
| EP068: Dimethoate | 60-51-5 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 100 | 58.3 | 128 |
| EP068: Diazinon | 333-41-5 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 104 | 69.0 | 122 |
| EP068: Chlorpyrifos-methyl | 5598-13-0 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 100 | 68.0 | 122 |
| EP068: Parathion-methyl | 298-00-0 | 0.2 | mg/kg | <0.2 | 0.5 mg/kg | 103 | 59.6 | 124 |
| EP068: Malathion | 121-75-5 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 100 | 63.8 | 128 |
| EP068: Fenthion | 55-38-9 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 102 | 71.1 | 124 |
| EP068: Chlorpyrifos | 2921-88-2 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 98.6 | 67.4 | 126 |
| EP068: Parathion | 56-38-2 | 0.2 | mg/kg | <0.2 | 0.5 mg/kg | 95.0 | 57.9 | 122 |
| EP068: Pirimphos-ethyl | 23505-41-1 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 103 | 66.2 | 123 |
| EP068: Chlorfenvinphos | 470-90-6 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 98.7 | 59.8 | 123 |
| EP068: Bromophos-ethyl | 4824-78-6 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 98.6 | 65.4 | 127 |
| EP068: Fenamiphos | 22224-92-6 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 96.5 | 52.1 | 128 |
| EP068: Prothiofos | 34643-46-4 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 99.3 | 65.2 | 122 |
| EP068: Ethion | 563-12-2 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 100 | 63.2 | 124 |
| EP068: Carbophenothion | 786-19-6 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 94.4 | 65.9 | 127 |

Sub-Matrix: **SOIL**

| Method: Compound | CAS Number | LOR | Unit | Method Blank (MB) Report: Result | Laboratory Control Spike (LCS) Report: Spike Concentration | Spike Recovery (%): LCS | Acceptable Limits (%): Low | Acceptable Limits (%): High |
|---|---|---|---|---|---|---|---|---|
| **EP068B: Organophosphorus Pesticides (OP) (QCLot: 5508011) - continued** | | | | | | | | |
| EP068: Azinphos Methyl | 86-50-0 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 90.4 | 43.1 | 131 |
| **EP068B: Organophosphorus Pesticides (OP) (QCLot: 5509014)** | | | | | | | | |
| EP068: Dichlorvos | 62-73-7 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 98.6 | 65.6 | 127 |
| EP068: Demeton-S-methyl | 919-86-8 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 96.2 | 63.0 | 129 |
| EP068: Monocrotophos | 6923-22-4 | 0.2 | mg/kg | <0.2 | 0.5 mg/kg | 83.2 | 10.0 | 136 |
| EP068: Dimethoate | 60-51-5 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 104 | 58.3 | 128 |
| EP068: Diazinon | 333-41-5 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 99.7 | 69.0 | 122 |
| EP068: Chlorpyrifos-methyl | 5598-13-0 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 99.6 | 68.0 | 122 |
| EP068: Parathion-methyl | 298-00-0 | 0.2 | mg/kg | <0.2 | 0.5 mg/kg | 94.4 | 59.6 | 124 |
| EP068: Malathion | 121-75-5 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 102 | 63.8 | 128 |
| EP068: Fenthion | 55-38-9 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 101 | 71.1 | 124 |
| EP068: Chlorpyrifos | 2921-88-2 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 100 | 67.4 | 126 |
| EP068: Parathion | 56-38-2 | 0.2 | mg/kg | <0.2 | 0.5 mg/kg | 99.4 | 57.9 | 122 |
| EP068: Pirimphos-ethyl | 23505-41-1 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 104 | 66.2 | 123 |
| EP068: Chlorfenvinphos | 470-90-6 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 102 | 59.8 | 123 |
| EP068: Bromophos-ethyl | 4824-78-6 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 105 | 65.4 | 127 |
| EP068: Fenamiphos | 22224-92-6 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 98.0 | 52.1 | 128 |
| EP068: Prothiofos | 34643-46-4 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 101 | 65.2 | 122 |
| EP068: Ethion | 563-12-2 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 104 | 63.2 | 124 |
| EP068: Carbophenothion | 786-19-6 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 99.4 | 65.9 | 127 |
| EP068: Azinphos Methyl | 86-50-0 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 99.8 | 43.1 | 131 |
| **EP068B: Organophosphorus Pesticides (OP) (QCLot: 5510502)** | | | | | | | | |
| EP068: Dichlorvos | 62-73-7 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 103 | 65.6 | 127 |
| EP068: Demeton-S-methyl | 919-86-8 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 83.6 | 63.0 | 129 |
| EP068: Monocrotophos | 6923-22-4 | 0.2 | mg/kg | <0.2 | 0.5 mg/kg | 51.7 | 10.0 | 136 |
| EP068: Dimethoate | 60-51-5 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 83.5 | 58.3 | 128 |
| EP068: Diazinon | 333-41-5 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 91.9 | 69.0 | 122 |
| EP068: Chlorpyrifos-methyl | 5598-13-0 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 88.2 | 68.0 | 122 |
| EP068: Parathion-methyl | 298-00-0 | 0.2 | mg/kg | <0.2 | 0.5 mg/kg | 69.8 | 59.6 | 124 |
| EP068: Malathion | 121-75-5 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 83.0 | 63.8 | 128 |
| EP068: Fenthion | 55-38-9 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 89.4 | 71.1 | 124 |
| EP068: Chlorpyrifos | 2921-88-2 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 89.2 | 67.4 | 126 |
| EP068: Parathion | 56-38-2 | 0.2 | mg/kg | <0.2 | 0.5 mg/kg | 71.4 | 57.9 | 122 |
| EP068: Pirimphos-ethyl | 23505-41-1 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 90.4 | 66.2 | 123 |

Sub-Matrix: **SOIL**

| Method: Compound | CAS Number | LOR | Unit | Method Blank (MB) Report | Laboratory Control Spike (LCS) Report | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | Spike | Spike Recovery (%) | Acceptable Limits (%) | |
| | | | | Result | Concentration | LCS | Low | High |
| **EP068B: Organophosphorus Pesticides (OP) (QCLot: 5510502) - continued** | | | | | | | | |
| EP068: Chlorfenvinphos | 470-90-6 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 83.0 | 59.8 | 123 |
| EP068: Bromophos-ethyl | 4824-78-6 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 92.9 | 65.4 | 127 |
| EP068: Fenamiphos | 22224-92-6 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 71.2 | 52.1 | 128 |
| EP068: Prothiofos | 34643-46-4 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 89.7 | 65.2 | 122 |
| EP068: Ethion | 563-12-2 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 87.8 | 63.2 | 124 |
| EP068: Carbophenothion | 786-19-6 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 86.3 | 65.9 | 127 |
| EP068: Azinphos Methyl | 86-50-0 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 74.7 | 43.1 | 131 |
| **EP068B: Organophosphorus Pesticides (OP) (QCLot: 5511754)** | | | | | | | | |
| EP068: Dichlorvos | 62-73-7 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 93.3 | 65.6 | 127 |
| EP068: Demeton-S-methyl | 919-86-8 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 95.6 | 63.0 | 129 |
| EP068: Monocrotophos | 6923-22-4 | 0.2 | mg/kg | <0.2 | 0.5 mg/kg | 81.4 | 10.0 | 136 |
| EP068: Dimethoate | 60-51-5 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 114 | 58.3 | 128 |
| EP068: Diazinon | 333-41-5 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 118 | 69.0 | 122 |
| EP068: Chlorpyrifos-methyl | 5598-13-0 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 113 | 68.0 | 122 |
| EP068: Parathion-methyl | 298-00-0 | 0.2 | mg/kg | <0.2 | 0.5 mg/kg | 113 | 59.6 | 124 |
| EP068: Malathion | 121-75-5 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 117 | 63.8 | 128 |
| EP068: Fenthion | 55-38-9 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 113 | 71.1 | 124 |
| EP068: Chlorpyrifos | 2921-88-2 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 114 | 67.4 | 126 |
| EP068: Parathion | 56-38-2 | 0.2 | mg/kg | <0.2 | 0.5 mg/kg | 111 | 57.9 | 122 |
| EP068: Pirimphos-ethyl | 23505-41-1 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 115 | 66.2 | 123 |
| EP068: Chlorfenvinphos | 470-90-6 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 113 | 59.8 | 123 |
| EP068: Bromophos-ethyl | 4824-78-6 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 117 | 65.4 | 127 |
| EP068: Fenamiphos | 22224-92-6 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 113 | 52.1 | 128 |
| EP068: Prothiofos | 34643-46-4 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 113 | 65.2 | 122 |
| EP068: Ethion | 563-12-2 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 113 | 63.2 | 124 |
| EP068: Carbophenothion | 786-19-6 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 87.3 | 65.9 | 127 |
| EP068: Azinphos Methyl | 86-50-0 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 76.4 | 43.1 | 131 |
| **EP075(SIM)A: Phenolic Compounds (QCLot: 5508010)** | | | | | | | | |
| EP075(SIM): Phenol | 108-95-2 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 88.9 | 81.2 | 121 |
| EP075(SIM): 2-Chlorophenol | 95-57-8 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 94.3 | 83.2 | 120 |
| EP075(SIM): 2-Methylphenol | 95-48-7 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 95.7 | 81.6 | 123 |
| EP075(SIM): 3- & 4-Methylphenol | 1319-77-3 | 1 | mg/kg | <1 | 6 mg/kg | 96.5 | 79.7 | 129 |
| EP075(SIM): 2-Nitrophenol | 88-75-5 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 79.2 | 49.8 | 129 |
| EP075(SIM): 2.4-Dimethylphenol | 105-67-9 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 106 | 81.5 | 127 |

Sub-Matrix: **SOIL**

| Method: Compound | CAS Number | LOR | Unit | Method Blank (MB) Report: Result | Laboratory Control Spike (LCS) Report: Spike Concentration | Spike Recovery (%): LCS | Acceptable Limits (%): Low | Acceptable Limits (%): High |
|---|---|---|---|---|---|---|---|---|
| **EP075(SIM)A: Phenolic Compounds (QCLot: 5508010) - continued** | | | | | | | | |
| EP075(SIM): 2.4-Dichlorophenol | 120-83-2 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 105 | 74.2 | 125 |
| EP075(SIM): 2.6-Dichlorophenol | 87-65-0 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 105 | 79.8 | 121 |
| EP075(SIM): 4-Chloro-3-methylphenol | 59-50-7 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 101 | 71.5 | 121 |
| EP075(SIM): 2.4.6-Trichlorophenol | 88-06-2 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 85.6 | 67.8 | 119 |
| EP075(SIM): 2.4.5-Trichlorophenol | 95-95-4 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 98.7 | 64.5 | 126 |
| EP075(SIM): Pentachlorophenol | 87-86-5 | 2 | mg/kg | <2 | 6 mg/kg | 80.3 | 10.0 | 118 |
| **EP075(SIM)A: Phenolic Compounds (QCLot: 5509013)** | | | | | | | | |
| EP075(SIM): Phenol | 108-95-2 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 104 | 81.2 | 121 |
| EP075(SIM): 2-Chlorophenol | 95-57-8 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 103 | 83.2 | 120 |
| EP075(SIM): 2-Methylphenol | 95-48-7 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 106 | 81.6 | 123 |
| EP075(SIM): 3- & 4-Methylphenol | 1319-77-3 | 1 | mg/kg | <1 | 6 mg/kg | 105 | 79.7 | 129 |
| EP075(SIM): 2-Nitrophenol | 88-75-5 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 94.7 | 49.8 | 129 |
| EP075(SIM): 2.4-Dimethylphenol | 105-67-9 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 103 | 81.5 | 127 |
| EP075(SIM): 2.4-Dichlorophenol | 120-83-2 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 100 | 74.2 | 125 |
| EP075(SIM): 2.6-Dichlorophenol | 87-65-0 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 102 | 79.8 | 121 |
| EP075(SIM): 4-Chloro-3-methylphenol | 59-50-7 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 102 | 71.5 | 121 |
| EP075(SIM): 2.4.6-Trichlorophenol | 88-06-2 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 98.3 | 67.8 | 119 |
| EP075(SIM): 2.4.5-Trichlorophenol | 95-95-4 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 101 | 64.5 | 126 |
| EP075(SIM): Pentachlorophenol | 87-86-5 | 2 | mg/kg | <2 | 6 mg/kg | 70.0 | 10.0 | 118 |
| **EP075(SIM)A: Phenolic Compounds (QCLot: 5510503)** | | | | | | | | |
| EP075(SIM): Phenol | 108-95-2 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 98.2 | 81.2 | 121 |
| EP075(SIM): 2-Chlorophenol | 95-57-8 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 97.0 | 83.2 | 120 |
| EP075(SIM): 2-Methylphenol | 95-48-7 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 83.9 | 81.6 | 123 |
| EP075(SIM): 3- & 4-Methylphenol | 1319-77-3 | 1 | mg/kg | <1 | 6 mg/kg | 96.1 | 79.7 | 129 |
| EP075(SIM): 2-Nitrophenol | 88-75-5 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 71.1 | 49.8 | 129 |
| EP075(SIM): 2.4-Dimethylphenol | 105-67-9 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 99.3 | 81.5 | 127 |
| EP075(SIM): 2.4-Dichlorophenol | 120-83-2 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 104 | 74.2 | 125 |
| EP075(SIM): 2.6-Dichlorophenol | 87-65-0 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 97.1 | 79.8 | 121 |
| EP075(SIM): 4-Chloro-3-methylphenol | 59-50-7 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 94.8 | 71.5 | 121 |
| EP075(SIM): 2.4.6-Trichlorophenol | 88-06-2 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 78.0 | 67.8 | 119 |
| EP075(SIM): 2.4.5-Trichlorophenol | 95-95-4 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 100 | 64.5 | 126 |
| EP075(SIM): Pentachlorophenol | 87-86-5 | 2 | mg/kg | <2 | 6 mg/kg | 67.7 | 10.0 | 118 |
| **EP075(SIM)A: Phenolic Compounds (QCLot: 5511752)** | | | | | | | | |
| EP075(SIM): Phenol | 108-95-2 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 91.0 | 81.2 | 121 |

Sub-Matrix: **SOIL**

| Method: Compound | CAS Number | LOR | Unit | Method Blank (MB) Report: Result | Laboratory Control Spike (LCS) Report: Spike Concentration | Spike Recovery (%): LCS | Acceptable Limits (%): Low | Acceptable Limits (%): High |
|---|---|---|---|---|---|---|---|---|
| **EP075(SIM)A: Phenolic Compounds (QCLot: 5511752) - continued** | | | | | | | | |
| EP075(SIM): 2-Chlorophenol | 95-57-8 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 90.3 | 83.2 | 120 |
| EP075(SIM): 2-Methylphenol | 95-48-7 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 92.3 | 81.6 | 123 |
| EP075(SIM): 3- & 4-Methylphenol | 1319-77-3 | 1 | mg/kg | <1 | 6 mg/kg | 91.1 | 79.7 | 129 |
| EP075(SIM): 2-Nitrophenol | 88-75-5 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 83.2 | 49.8 | 129 |
| EP075(SIM): 2.4-Dimethylphenol | 105-67-9 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 91.2 | 81.5 | 127 |
| EP075(SIM): 2.4-Dichlorophenol | 120-83-2 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 87.7 | 74.2 | 125 |
| EP075(SIM): 2.6-Dichlorophenol | 87-65-0 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 90.2 | 79.8 | 121 |
| EP075(SIM): 4-Chloro-3-methylphenol | 59-50-7 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 87.5 | 71.5 | 121 |
| EP075(SIM): 2.4.6-Trichlorophenol | 88-06-2 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 82.6 | 67.8 | 119 |
| EP075(SIM): 2.4.5-Trichlorophenol | 95-95-4 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 86.4 | 64.5 | 126 |
| EP075(SIM): Pentachlorophenol | 87-86-5 | 2 | mg/kg | <2 | 6 mg/kg | 66.3 | 10.0 | 118 |
| **EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 5508010)** | | | | | | | | |
| EP075(SIM): Naphthalene | 91-20-3 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 98.8 | 85.7 | 123 |
| EP075(SIM): Acenaphthylene | 208-96-8 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 95.7 | 81.0 | 123 |
| EP075(SIM): Acenaphthene | 83-32-9 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 95.2 | 83.6 | 120 |
| EP075(SIM): Fluorene | 86-73-7 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 95.2 | 81.3 | 126 |
| EP075(SIM): Phenanthrene | 85-01-8 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 98.8 | 79.4 | 123 |
| EP075(SIM): Anthracene | 120-12-7 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 97.2 | 81.7 | 127 |
| EP075(SIM): Fluoranthene | 206-44-0 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 99.5 | 78.3 | 124 |
| EP075(SIM): Pyrene | 129-00-0 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 99.1 | 79.9 | 128 |
| EP075(SIM): Benz(a)anthracene | 56-55-3 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 104 | 76.9 | 123 |
| EP075(SIM): Chrysene | 218-01-9 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 105 | 80.9 | 130 |
| EP075(SIM): Benzo(b+j)fluoranthene | 205-99-2<br>205-82-3 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 91.3 | 70.0 | 121 |
| EP075(SIM): Benzo(k)fluoranthene | 207-08-9 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 100 | 80.4 | 130 |
| EP075(SIM): Benzo(a)pyrene | 50-32-8 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 90.2 | 70.2 | 123 |
| EP075(SIM): Indeno(1.2.3.cd)pyrene | 193-39-5 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 89.7 | 67.9 | 122 |
| EP075(SIM): Dibenz(a.h)anthracene | 53-70-3 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 89.6 | 65.8 | 123 |
| EP075(SIM): Benzo(g.h.i)perylene | 191-24-2 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 89.0 | 65.8 | 127 |
| **EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 5509013)** | | | | | | | | |
| EP075(SIM): Naphthalene | 91-20-3 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 105 | 85.7 | 123 |
| EP075(SIM): Acenaphthylene | 208-96-8 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 99.6 | 81.0 | 123 |
| EP075(SIM): Acenaphthene | 83-32-9 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 105 | 83.6 | 120 |
| EP075(SIM): Fluorene | 86-73-7 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 103 | 81.3 | 126 |

Sub-Matrix: **SOIL**

| Method: Compound | CAS Number | LOR | Unit | Method Blank (MB) Report | Laboratory Control Spike (LCS) Report | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | Spike | Spike Recovery (%) | Acceptable Limits (%) | |
| | | | | Result | Concentration | LCS | Low | High |
| **EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 5509013) - continued** | | | | | | | | |
| EP075(SIM): Phenanthrene | 85-01-8 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 108 | 79.4 | 123 |
| EP075(SIM): Anthracene | 120-12-7 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 105 | 81.7 | 127 |
| EP075(SIM): Fluoranthene | 206-44-0 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 100 | 78.3 | 124 |
| EP075(SIM): Pyrene | 129-00-0 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 101 | 79.9 | 128 |
| EP075(SIM): Benz(a)anthracene | 56-55-3 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 107 | 76.9 | 123 |
| EP075(SIM): Chrysene | 218-01-9 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 108 | 80.9 | 130 |
| EP075(SIM): Benzo(b+j)fluoranthene | 205-99-2<br>205-82-3 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 111 | 70.0 | 121 |
| EP075(SIM): Benzo(k)fluoranthene | 207-08-9 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 96.7 | 80.4 | 130 |
| EP075(SIM): Benzo(a)pyrene | 50-32-8 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 102 | 70.2 | 123 |
| EP075(SIM): Indeno(1.2.3.cd)pyrene | 193-39-5 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 90.9 | 67.9 | 122 |
| EP075(SIM): Dibenz(a.h)anthracene | 53-70-3 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 90.6 | 65.8 | 123 |
| EP075(SIM): Benzo(g.h.i)perylene | 191-24-2 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 91.8 | 65.8 | 127 |
| **EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 5510503)** | | | | | | | | |
| EP075(SIM): Naphthalene | 91-20-3 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 98.3 | 85.7 | 123 |
| EP075(SIM): Acenaphthylene | 208-96-8 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 91.1 | 81.0 | 123 |
| EP075(SIM): Acenaphthene | 83-32-9 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 95.1 | 83.6 | 120 |
| EP075(SIM): Fluorene | 86-73-7 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 93.5 | 81.3 | 126 |
| EP075(SIM): Phenanthrene | 85-01-8 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 99.2 | 79.4 | 123 |
| EP075(SIM): Anthracene | 120-12-7 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 94.7 | 81.7 | 127 |
| EP075(SIM): Fluoranthene | 206-44-0 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 101 | 78.3 | 124 |
| EP075(SIM): Pyrene | 129-00-0 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 107 | 79.9 | 128 |
| EP075(SIM): Benz(a)anthracene | 56-55-3 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 106 | 76.9 | 123 |
| EP075(SIM): Chrysene | 218-01-9 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 116 | 80.9 | 130 |
| EP075(SIM): Benzo(b+j)fluoranthene | 205-99-2<br>205-82-3 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 83.5 | 70.0 | 121 |
| EP075(SIM): Benzo(k)fluoranthene | 207-08-9 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 105 | 80.4 | 130 |
| EP075(SIM): Benzo(a)pyrene | 50-32-8 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 94.0 | 70.2 | 123 |
| EP075(SIM): Indeno(1.2.3.cd)pyrene | 193-39-5 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 88.6 | 67.9 | 122 |
| EP075(SIM): Dibenz(a.h)anthracene | 53-70-3 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 88.4 | 65.8 | 123 |
| EP075(SIM): Benzo(g.h.i)perylene | 191-24-2 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 95.1 | 65.8 | 127 |
| **EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 5511752)** | | | | | | | | |
| EP075(SIM): Naphthalene | 91-20-3 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 93.9 | 85.7 | 123 |
| EP075(SIM): Acenaphthylene | 208-96-8 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 88.3 | 81.0 | 123 |
| EP075(SIM): Acenaphthene | 83-32-9 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 93.8 | 83.6 | 120 |

Sub-Matrix: **SOIL**

| Method: Compound | CAS Number | LOR | Unit | Method Blank (MB) Report: Result | Laboratory Control Spike (LCS) Report: Spike Concentration | Spike Recovery (%): LCS | Acceptable Limits (%): Low | Acceptable Limits (%): High |
|---|---|---|---|---|---|---|---|---|
| **EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 5511752) - continued** | | | | | | | | |
| EP075(SIM): Fluorene | 86-73-7 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 90.6 | 81.3 | 126 |
| EP075(SIM): Phenanthrene | 85-01-8 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 96.2 | 79.4 | 123 |
| EP075(SIM): Anthracene | 120-12-7 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 94.4 | 81.7 | 127 |
| EP075(SIM): Fluoranthene | 206-44-0 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 84.9 | 78.3 | 124 |
| EP075(SIM): Pyrene | 129-00-0 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 83.7 | 79.9 | 128 |
| EP075(SIM): Benz(a)anthracene | 56-55-3 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 93.5 | 76.9 | 123 |
| EP075(SIM): Chrysene | 218-01-9 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 96.0 | 80.9 | 130 |
| EP075(SIM): Benzo(b+j)fluoranthene | 205-99-2<br>205-82-3 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 92.2 | 70.0 | 121 |
| EP075(SIM): Benzo(k)fluoranthene | 207-08-9 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 85.5 | 80.4 | 130 |
| EP075(SIM): Benzo(a)pyrene | 50-32-8 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 89.3 | 70.2 | 123 |
| EP075(SIM): Indeno(1.2.3.cd)pyrene | 193-39-5 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 94.1 | 67.9 | 122 |
| EP075(SIM): Dibenz(a.h)anthracene | 53-70-3 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 92.4 | 65.8 | 123 |
| EP075(SIM): Benzo(g.h.i)perylene | 191-24-2 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 101 | 65.8 | 127 |
| **EP080/071: Total Petroleum Hydrocarbons (QCLot: 5507502)** | | | | | | | | |
| EP080: C6 - C9 Fraction | ---- | 10 | mg/kg | <10 | 36 mg/kg | 94.9 | 58.6 | 131 |
| **EP080/071: Total Petroleum Hydrocarbons (QCLot: 5508012)** | | | | | | | | |
| EP071: C10 - C14 Fraction | ---- | 50 | mg/kg | <50 | 860 mg/kg | 79.1 | 75.0 | 128 |
| EP071: C15 - C28 Fraction | ---- | 100 | mg/kg | <100 | 2770 mg/kg | 92.7 | 82.0 | 123 |
| EP071: C29 - C36 Fraction | ---- | 100 | mg/kg | <100 | 1520 mg/kg | 92.0 | 82.4 | 121 |
| **EP080/071: Total Petroleum Hydrocarbons (QCLot: 5509012)** | | | | | | | | |
| EP071: C10 - C14 Fraction | ---- | 50 | mg/kg | <50 | 860 mg/kg | 89.7 | 75.0 | 128 |
| EP071: C15 - C28 Fraction | ---- | 100 | mg/kg | <100 | 2770 mg/kg | 97.8 | 82.0 | 123 |
| EP071: C29 - C36 Fraction | ---- | 100 | mg/kg | <100 | 1520 mg/kg | 101 | 82.4 | 121 |
| **EP080/071: Total Petroleum Hydrocarbons (QCLot: 5510501)** | | | | | | | | |
| EP071: C10 - C14 Fraction | ---- | 50 | mg/kg | <50 | 860 mg/kg | 75.9 | 75.0 | 128 |
| EP071: C15 - C28 Fraction | ---- | 100 | mg/kg | <100 | 2770 mg/kg | 83.4 | 82.0 | 123 |
| EP071: C29 - C36 Fraction | ---- | 100 | mg/kg | <100 | 1520 mg/kg | 86.6 | 82.4 | 121 |
| **EP080/071: Total Petroleum Hydrocarbons (QCLot: 5511753)** | | | | | | | | |
| EP071: C10 - C14 Fraction | ---- | 50 | mg/kg | <50 | 860 mg/kg | 109 | 75.0 | 128 |
| EP071: C15 - C28 Fraction | ---- | 100 | mg/kg | <100 | 2770 mg/kg | 111 | 82.0 | 123 |
| EP071: C29 - C36 Fraction | ---- | 100 | mg/kg | <100 | 1520 mg/kg | 110 | 82.4 | 121 |
| **EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 5507502)** | | | | | | | | |
| EP080: C6 - C10 Fraction | C6_C10 | 10 | mg/kg | <10 | 45 mg/kg | 91.9 | 59.3 | 128 |

Sub-Matrix: **SOIL**

| Method: Compound | CAS Number | LOR | Unit | Method Blank (MB) Report: Result | Laboratory Control Spike (LCS) Report: Spike Concentration | Spike Recovery (%): LCS | Acceptable Limits (%): Low | Acceptable Limits (%): High |
|---|---|---|---|---|---|---|---|---|
| **EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 5508012)** | | | | | | | | |
| EP071: >C10 - C16 Fraction | ---- | 50 | mg/kg | <50 | 1130 mg/kg | 97.2 | 77.0 | 130 |
| EP071: >C16 - C34 Fraction | ---- | 100 | mg/kg | <100 | 3730 mg/kg | 90.0 | 81.5 | 120 |
| EP071: >C34 - C40 Fraction | ---- | 100 | mg/kg | <100 | 260 mg/kg | 87.9 | 73.3 | 137 |
| **EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 5509012)** | | | | | | | | |
| EP071: >C10 - C16 Fraction | ---- | 50 | mg/kg | <50 | 1130 mg/kg | 93.2 | 77.0 | 130 |
| EP071: >C16 - C34 Fraction | ---- | 100 | mg/kg | <100 | 3730 mg/kg | 98.6 | 81.5 | 120 |
| EP071: >C34 - C40 Fraction | ---- | 100 | mg/kg | <100 | 260 mg/kg | 94.7 | 73.3 | 137 |
| **EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 5510501)** | | | | | | | | |
| EP071: >C10 - C16 Fraction | ---- | 50 | mg/kg | <50 | 1130 mg/kg | 79.1 | 77.0 | 130 |
| EP071: >C16 - C34 Fraction | ---- | 100 | mg/kg | <100 | 3730 mg/kg | 84.7 | 81.5 | 120 |
| EP071: >C34 - C40 Fraction | ---- | 100 | mg/kg | <100 | 260 mg/kg | 76.8 | 73.3 | 137 |
| **EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 5511753)** | | | | | | | | |
| EP071: >C10 - C16 Fraction | ---- | 50 | mg/kg | <50 | 1130 mg/kg | 110 | 77.0 | 130 |
| EP071: >C16 - C34 Fraction | ---- | 100 | mg/kg | <100 | 3730 mg/kg | 111 | 81.5 | 120 |
| EP071: >C34 - C40 Fraction | ---- | 100 | mg/kg | <100 | 260 mg/kg | 112 | 73.3 | 137 |
| **EP080: BTEXN (QCLot: 5507502)** | | | | | | | | |
| EP080: Benzene | 71-43-2 | 0.2 | mg/kg | <0.2 | 2 mg/kg | 91.3 | 61.6 | 117 |
| EP080: Toluene | 108-88-3 | 0.5 | mg/kg | <0.5 | 2 mg/kg | 99.0 | 65.8 | 125 |
| EP080: Ethylbenzene | 100-41-4 | 0.5 | mg/kg | <0.5 | 2 mg/kg | 94.8 | 65.8 | 124 |
| EP080: meta- & para-Xylene | 108-38-3<br>106-42-3 | 0.5 | mg/kg | <0.5 | 4 mg/kg | 101 | 64.8 | 134 |
| EP080: ortho-Xylene | 95-47-6 | 0.5 | mg/kg | <0.5 | 2 mg/kg | 102 | 68.7 | 132 |
| EP080: Naphthalene | 91-20-3 | 1 | mg/kg | <1 | 0.5 mg/kg | 97.0 | 61.8 | 123 |

Sub-Matrix: **WATER**

| Method: Compound | CAS Number | LOR | Unit | Method Blank (MB) Report: Result | Laboratory Control Spike (LCS) Report: Spike Concentration | Spike Recovery (%): LCS | Acceptable Limits (%): Low | Acceptable Limits (%): High |
|---|---|---|---|---|---|---|---|---|
| **EG020F: Dissolved Metals by ICP-MS (QCLot: 5526344)** | | | | | | | | |
| EG020A-F: Arsenic | 7440-38-2 | 0.001 | mg/L | <0.001 | 0.1 mg/L | 98.5 | 89.0 | 111 |
| EG020A-F: Beryllium | 7440-41-7 | 0.001 | mg/L | <0.001 | 0.1 mg/L | 98.0 | 85.0 | 112 |
| EG020A-F: Barium | 7440-39-3 | 0.001 | mg/L | <0.001 | 0.1 mg/L | 96.5 | 83.6 | 113 |
| EG020A-F: Cadmium | 7440-43-9 | 0.0001 | mg/L | <0.0001 | 0.1 mg/L | 96.0 | 83.5 | 111 |
| EG020A-F: Chromium | 7440-47-3 | 0.001 | mg/L | <0.001 | 0.1 mg/L | 94.4 | 83.2 | 109 |
| EG020A-F: Cobalt | 7440-48-4 | 0.001 | mg/L | <0.001 | 0.1 mg/L | 97.6 | 84.3 | 110 |
| EG020A-F: Copper | 7440-50-8 | 0.001 | mg/L | <0.001 | 0.1 mg/L | 95.0 | 83.1 | 107 |

Sub-Matrix: **WATER**

| Method: Compound | CAS Number | LOR | Unit | Method Blank (MB) Report: Result | Laboratory Control Spike (LCS) Report: Spike Concentration | Spike Recovery (%): LCS | Acceptable Limits (%): Low | Acceptable Limits (%): High |
|---|---|---|---|---|---|---|---|---|
| **EG020F: Dissolved Metals by ICP-MS (QCLot: 5526344) - continued** | | | | | | | | |
| EG020A-F: Lead | 7439-92-1 | 0.001 | mg/L | <0.001 | 0.1 mg/L | 95.6 | 84.6 | 108 |
| EG020A-F: Manganese | 7439-96-5 | 0.001 | mg/L | <0.001 | 0.1 mg/L | 94.4 | 84.8 | 110 |
| EG020A-F: Nickel | 7440-02-0 | 0.001 | mg/L | <0.001 | 0.1 mg/L | 97.5 | 84.3 | 110 |
| EG020A-F: Selenium | 7782-49-2 | 0.01 | mg/L | <0.01 | 0.1 mg/L | 104 | 82.3 | 113 |
| EG020A-F: Vanadium | 7440-62-2 | 0.01 | mg/L | <0.01 | 0.1 mg/L | 95.5 | 83.7 | 110 |
| EG020A-F: Zinc | 7440-66-6 | 0.005 | mg/L | <0.005 | 0.1 mg/L | 110 | 86.3 | 112 |
| EG020A-F: Boron | 7440-42-8 | 0.05 | mg/L | <0.05 | 0.5 mg/L | 96.9 | 85.4 | 115 |
| **EG035F: Dissolved Mercury by FIMS (QCLot: 5526345)** | | | | | | | | |
| EG035F: Mercury | 7439-97-6 | 0.0001 | mg/L | <0.0001 | 0.01 mg/L | 82.3 | 71.6 | 116 |
| **EP080/071: Total Petroleum Hydrocarbons (QCLot: 5507397)** | | | | | | | | |
| EP080: C6 - C9 Fraction | ---- | 20 | µg/L | <20 | 360 µg/L | 106 | 66.2 | 134 |
| **EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 5507397)** | | | | | | | | |
| EP080: C6 - C10 Fraction | C6_C10 | 20 | µg/L | <20 | 450 µg/L | 101 | 66.2 | 132 |
| **EP080: BTEXN (QCLot: 5507397)** | | | | | | | | |
| EP080: Benzene | 71-43-2 | 1 | µg/L | <1 | 20 µg/L | 101 | 68.8 | 127 |
| EP080: Toluene | 108-88-3 | 2 | µg/L | <2 | 20 µg/L | 112 | 72.9 | 129 |
| EP080: Ethylbenzene | 100-41-4 | 2 | µg/L | <2 | 20 µg/L | 109 | 71.7 | 130 |
| EP080: meta- & para-Xylene | 108-38-3<br>106-42-3 | 2 | µg/L | <2 | 40 µg/L | 117 | 72.3 | 136 |
| EP080: ortho-Xylene | 95-47-6 | 2 | µg/L | <2 | 20 µg/L | 120 | 75.9 | 134 |
| EP080: Naphthalene | 91-20-3 | 5 | µg/L | <5 | 5 µg/L | 118 | 68.3 | 131 |

## Matrix Spike (MS) Report

The quality control term Matrix Spike (MS) refers to an intralaboratory split sample spiked with a representative set of target analytes. The purpose of this QC parameter is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

Sub-Matrix: **SOIL**

| Laboratory sample ID | Sample ID | Method: Compound | CAS Number | Matrix Spike (MS) Report: Spike Concentration | SpikeRecovery(%): MS | Acceptable Limits (%): Low | Acceptable Limits (%): High |
|---|---|---|---|---|---|---|---|
| **EG005(ED093)T: Total Metals by ICP-AES (QCLot: 5520519)** | | | | | | | |
| EM2322675-002 | Anonymous | EG005T: Arsenic | 7440-38-2 | 50 mg/kg | 89.2 | 78.0 | 124 |
| | | EG005T: Cadmium | 7440-43-9 | 50 mg/kg | 91.2 | 79.7 | 116 |
| | | EG005T: Chromium | 7440-47-3 | 50 mg/kg | 98.0 | 79.0 | 121 |
| | | EG005T: Copper | 7440-50-8 | 250 mg/kg | 105 | 80.0 | 120 |
| | | EG005T: Lead | 7439-92-1 | 250 mg/kg | 93.8 | 80.0 | 120 |
| | | EG005T: Nickel | 7440-02-0 | 50 mg/kg | 113 | 78.0 | 120 |

Sub-Matrix: **SOIL**

| | | | | Matrix Spike (MS) Report | | | |
|---|---|---|---|---|---|---|---|
| | | | | Spike | SpikeRecovery(%) | Acceptable Limits (%) | |
| Laboratory sample ID | Sample ID | Method: Compound | CAS Number | Concentration | MS | Low | High |
| **EG005(ED093)T: Total Metals by ICP-AES (QCLot: 5520519) - continued** | | | | | | | |
| EM2322675-002 | Anonymous | EG005T: Zinc | 7440-66-6 | 250 mg/kg | 88.1 | 80.0 | 120 |
| **EG005(ED093)T: Total Metals by ICP-AES (QCLot: 5521170)** | | | | | | | |
| EM2322709-034 | SB8_1.0-1.2 | EG005T: Arsenic | 7440-38-2 | 50 mg/kg | 104 | 78.0 | 124 |
| | | EG005T: Cadmium | 7440-43-9 | 50 mg/kg | 102 | 79.7 | 116 |
| | | EG005T: Chromium | 7440-47-3 | 50 mg/kg | 103 | 79.0 | 121 |
| | | EG005T: Copper | 7440-50-8 | 250 mg/kg | 108 | 80.0 | 120 |
| | | EG005T: Lead | 7439-92-1 | 250 mg/kg | 110 | 80.0 | 120 |
| | | EG005T: Nickel | 7440-02-0 | 50 mg/kg | 107 | 78.0 | 120 |
| | | EG005T: Zinc | 7440-66-6 | 250 mg/kg | 102 | 80.0 | 120 |
| **EG035T: Total Recoverable Mercury by FIMS (QCLot: 5520520)** | | | | | | | |
| EM2322675-002 | Anonymous | EG035T: Mercury | 7439-97-6 | 0.5 mg/kg | 97.2 | 76.0 | 116 |
| **EG035T: Total Recoverable Mercury by FIMS (QCLot: 5521171)** | | | | | | | |
| EM2322709-034 | SB8_1.0-1.2 | EG035T: Mercury | 7439-97-6 | 0.5 mg/kg | 109 | 76.0 | 116 |
| **EK026SF: Total CN by Segmented Flow Analyser (QCLot: 5510523)** | | | | | | | |
| EM2322656-013 | Anonymous | EK026SF: Total Cyanide | 57-12-5 | 20 mg/kg | 103 | 70.0 | 130 |
| **EK026SF: Total CN by Segmented Flow Analyser (QCLot: 5511613)** | | | | | | | |
| EM2322708-001 | Anonymous | EK026SF: Total Cyanide | 57-12-5 | 20 mg/kg | 103 | 70.0 | 130 |
| **EK026SF: Total CN by Segmented Flow Analyser (QCLot: 5516736)** | | | | | | | |
| EM2322696-022 | Anonymous | EK026SF: Total Cyanide | 57-12-5 | 20 mg/kg | 94.8 | 70.0 | 130 |
| **EK026SF: Total CN by Segmented Flow Analyser (QCLot: 5518682)** | | | | | | | |
| EM2322646-008 | Anonymous | EK026SF: Total Cyanide | 57-12-5 | 20 mg/kg | 100 | 70.0 | 130 |
| **EK040T: Fluoride Total (QCLot: 5508384)** | | | | | | | |
| EM2322696-003 | Anonymous | EK040T: Fluoride | 16984-48-8 | 400 mg/kg | # 67.3 | 70.0 | 130 |
| **EK040T: Fluoride Total (QCLot: 5508385)** | | | | | | | |
| EM2322709-037 | SB8_4.0-4.2 | EK040T: Fluoride | 16984-48-8 | 400 mg/kg | # 58.0 | 70.0 | 130 |
| **EP004: Organic Matter (QCLot: 5519420)** | | | | | | | |
| EM2322591-002 | Anonymous | EP004: Organic Matter | ---- | 2.67 % | 103 | 70.0 | 130 |
| | | EP004: Total Organic Carbon | ---- | 1.55 % | 103 | 70.0 | 130 |
| **EP004: Organic Matter (QCLot: 5523079)** | | | | | | | |
| EM2322696-022 | Anonymous | EP004: Organic Matter | ---- | 1.72 % | 81.2 | 70.0 | 130 |
| | | EP004: Total Organic Carbon | ---- | 1 % | 80.8 | 70.0 | 130 |
| **EP066: Polychlorinated Biphenyls (PCB) (QCLot: 5508013)** | | | | | | | |
| EM2322709-011 | SB2_2.0-2.2 | EP066: Total Polychlorinated biphenyls | ---- | 1 mg/kg | 94.2 | 63.2 | 144 |
| **EP066: Polychlorinated Biphenyls (PCB) (QCLot: 5509015)** | | | | | | | |

Sub-Matrix: **SOIL**

| | | | | Matrix Spike (MS) Report | | | |
|---|---|---|---|---|---|---|---|
| | | | | Spike | SpikeRecovery(%) | Acceptable Limits (%) | |
| Laboratory sample ID | Sample ID | Method: Compound | CAS Number | Concentration | MS | Low | High |
| **EP066: Polychlorinated Biphenyls (PCB) (QCLot: 5509015) - continued** | | | | | | | |
| EM2322709-023 | SB3_2.0-2.2 | EP066: Total Polychlorinated biphenyls | ---- | 1 mg/kg | 97.1 | 63.2 | 144 |
| **EP066: Polychlorinated Biphenyls (PCB) (QCLot: 5510504)** | | | | | | | |
| EM2322534-003 | Anonymous | EP066: Total Polychlorinated biphenyls | ---- | 1 mg/kg | 107 | 63.2 | 144 |
| **EP066: Polychlorinated Biphenyls (PCB) (QCLot: 5511755)** | | | | | | | |
| EM2322709-045 | SB11_0.5-0.7 | EP066: Total Polychlorinated biphenyls | ---- | 1 mg/kg | 109 | 63.2 | 144 |
| **EP068A: Organochlorine Pesticides (OC) (QCLot: 5508011)** | | | | | | | |
| EM2322709-009 | SB2_0.5-0.7 | EP068: gamma-BHC | 58-89-9 | 0.5 mg/kg | 94.3 | 51.4 | 139 |
| | | EP068: Heptachlor | 76-44-8 | 0.5 mg/kg | 95.3 | 49.1 | 130 |
| | | EP068: Aldrin | 309-00-2 | 0.5 mg/kg | 120 | 38.4 | 135 |
| | | EP068: Dieldrin | 60-57-1 | 0.5 mg/kg | 100 | 58.4 | 136 |
| | | EP068: Endrin | 72-20-8 | 0.5 mg/kg | 93.8 | 33.0 | 146 |
| | | EP068: 4.4`-DDT | 50-29-3 | 0.5 mg/kg | 84.1 | 20.0 | 133 |
| **EP068A: Organochlorine Pesticides (OC) (QCLot: 5509014)** | | | | | | | |
| EM2322696-017 | Anonymous | EP068: gamma-BHC | 58-89-9 | 0.5 mg/kg | 108 | 51.4 | 139 |
| | | EP068: Heptachlor | 76-44-8 | 0.5 mg/kg | 99.2 | 49.1 | 130 |
| | | EP068: Aldrin | 309-00-2 | 0.5 mg/kg | 123 | 38.4 | 135 |
| | | EP068: Dieldrin | 60-57-1 | 0.5 mg/kg | 103 | 58.4 | 136 |
| | | EP068: Endrin | 72-20-8 | 0.5 mg/kg | 101 | 33.0 | 146 |
| | | EP068: 4.4`-DDT | 50-29-3 | 0.5 mg/kg | 77.7 | 20.0 | 133 |
| **EP068A: Organochlorine Pesticides (OC) (QCLot: 5510502)** | | | | | | | |
| EM2322591-001 | Anonymous | EP068: gamma-BHC | 58-89-9 | 0.5 mg/kg | 91.7 | 51.4 | 139 |
| | | EP068: Heptachlor | 76-44-8 | 0.5 mg/kg | 85.8 | 49.1 | 130 |
| | | EP068: Aldrin | 309-00-2 | 0.5 mg/kg | 93.5 | 38.4 | 135 |
| | | EP068: Dieldrin | 60-57-1 | 0.5 mg/kg | 96.6 | 58.4 | 136 |
| | | EP068: Endrin | 72-20-8 | 0.5 mg/kg | 82.9 | 33.0 | 146 |
| | | EP068: 4.4`-DDT | 50-29-3 | 0.5 mg/kg | 71.3 | 20.0 | 133 |
| **EP068A: Organochlorine Pesticides (OC) (QCLot: 5511754)** | | | | | | | |
| EM2322709-045 | SB11_0.5-0.7 | EP068: gamma-BHC | 58-89-9 | 0.5 mg/kg | 103 | 51.4 | 139 |
| | | EP068: Heptachlor | 76-44-8 | 0.5 mg/kg | 113 | 49.1 | 130 |
| | | EP068: Aldrin | 309-00-2 | 0.5 mg/kg | 114 | 38.4 | 135 |
| | | EP068: Dieldrin | 60-57-1 | 0.5 mg/kg | 112 | 58.4 | 136 |
| | | EP068: Endrin | 72-20-8 | 0.5 mg/kg | 101 | 33.0 | 146 |
| | | EP068: 4.4`-DDT | 50-29-3 | 0.5 mg/kg | 83.4 | 20.0 | 133 |
| **EP068B: Organophosphorus Pesticides (OP) (QCLot: 5508011)** | | | | | | | |
| EM2322709-009 | SB2_0.5-0.7 | EP068: Diazinon | 333-41-5 | 0.5 mg/kg | 102 | 65.1 | 135 |
| | | EP068: Chlorpyrifos-methyl | 5598-13-0 | 0.5 mg/kg | 93.3 | 56.3 | 127 |
| | | EP068: Pirimphos-ethyl | 23505-41-1 | 0.5 mg/kg | 95.8 | 55.0 | 133 |

Sub-Matrix: **SOIL**

| | | | | Matrix Spike (MS) Report | | | |
|---|---|---|---|---|---|---|---|
| | | | | Spike | SpikeRecovery(%) | Acceptable Limits (%) | |
| Laboratory sample ID | Sample ID | Method: Compound | CAS Number | Concentration | MS | Low | High |
| **EP068B: Organophosphorus Pesticides (OP) (QCLot: 5508011) - continued** | | | | | | | |
| EM2322709-009 | SB2_0.5-0.7 | EP068: Bromophos-ethyl | 4824-78-6 | 0.5 mg/kg | 95.2 | 55.1 | 133 |
| | | EP068: Prothiofos | 34643-46-4 | 0.5 mg/kg | 93.4 | 43.8 | 128 |
| **EP068B: Organophosphorus Pesticides (OP) (QCLot: 5509014)** | | | | | | | |
| EM2322696-017 | Anonymous | EP068: Diazinon | 333-41-5 | 0.5 mg/kg | 99.5 | 65.1 | 135 |
| | | EP068: Chlorpyrifos-methyl | 5598-13-0 | 0.5 mg/kg | 96.1 | 56.3 | 127 |
| | | EP068: Pirimphos-ethyl | 23505-41-1 | 0.5 mg/kg | 98.6 | 55.0 | 133 |
| | | EP068: Bromophos-ethyl | 4824-78-6 | 0.5 mg/kg | 98.5 | 55.1 | 133 |
| | | EP068: Prothiofos | 34643-46-4 | 0.5 mg/kg | 98.1 | 43.8 | 128 |
| **EP068B: Organophosphorus Pesticides (OP) (QCLot: 5510502)** | | | | | | | |
| EM2322591-001 | Anonymous | EP068: Diazinon | 333-41-5 | 0.5 mg/kg | 82.4 | 65.1 | 135 |
| | | EP068: Chlorpyrifos-methyl | 5598-13-0 | 0.5 mg/kg | 81.2 | 56.3 | 127 |
| | | EP068: Pirimphos-ethyl | 23505-41-1 | 0.5 mg/kg | 81.6 | 55.0 | 133 |
| | | EP068: Bromophos-ethyl | 4824-78-6 | 0.5 mg/kg | 86.1 | 55.1 | 133 |
| | | EP068: Prothiofos | 34643-46-4 | 0.5 mg/kg | 76.2 | 43.8 | 128 |
| **EP068B: Organophosphorus Pesticides (OP) (QCLot: 5511754)** | | | | | | | |
| EM2322709-045 | SB11_0.5-0.7 | EP068: Diazinon | 333-41-5 | 0.5 mg/kg | 108 | 65.1 | 135 |
| | | EP068: Chlorpyrifos-methyl | 5598-13-0 | 0.5 mg/kg | 107 | 56.3 | 127 |
| | | EP068: Pirimphos-ethyl | 23505-41-1 | 0.5 mg/kg | 104 | 55.0 | 133 |
| | | EP068: Bromophos-ethyl | 4824-78-6 | 0.5 mg/kg | 110 | 55.1 | 133 |
| | | EP068: Prothiofos | 34643-46-4 | 0.5 mg/kg | 89.7 | 43.8 | 128 |
| **EP075(SIM)A: Phenolic Compounds (QCLot: 5508010)** | | | | | | | |
| EM2322696-003 | Anonymous | EP075(SIM): Phenol | 108-95-2 | 3 mg/kg | 80.5 | 77.1 | 119 |
| | | EP075(SIM): 2-Chlorophenol | 95-57-8 | 3 mg/kg | 87.1 | 78.9 | 123 |
| | | EP075(SIM): 2-Nitrophenol | 88-75-5 | 3 mg/kg | 56.1 | 43.8 | 136 |
| | | EP075(SIM): 4-Chloro-3-methylphenol | 59-50-7 | 3 mg/kg | 103 | 61.5 | 120 |
| | | EP075(SIM): Pentachlorophenol | 87-86-5 | 3 mg/kg | 69.9 | 15.3 | 139 |
| **EP075(SIM)A: Phenolic Compounds (QCLot: 5509013)** | | | | | | | |
| EM2322696-016 | Anonymous | EP075(SIM): Phenol | 108-95-2 | 3 mg/kg | 94.2 | 77.1 | 119 |
| | | EP075(SIM): 2-Chlorophenol | 95-57-8 | 3 mg/kg | 96.1 | 78.9 | 123 |
| | | EP075(SIM): 2-Nitrophenol | 88-75-5 | 3 mg/kg | 88.7 | 43.8 | 136 |
| | | EP075(SIM): 4-Chloro-3-methylphenol | 59-50-7 | 3 mg/kg | 91.4 | 61.5 | 120 |
| | | EP075(SIM): Pentachlorophenol | 87-86-5 | 3 mg/kg | 87.0 | 15.3 | 139 |
| **EP075(SIM)A: Phenolic Compounds (QCLot: 5510503)** | | | | | | | |
| EM2322534-002 | Anonymous | EP075(SIM): Phenol | 108-95-2 | 3 mg/kg | 88.5 | 77.1 | 119 |
| | | EP075(SIM): 2-Chlorophenol | 95-57-8 | 3 mg/kg | 88.6 | 78.9 | 123 |
| | | EP075(SIM): 2-Nitrophenol | 88-75-5 | 3 mg/kg | 66.3 | 43.8 | 136 |
| | | EP075(SIM): 4-Chloro-3-methylphenol | 59-50-7 | 3 mg/kg | 103 | 61.5 | 120 |

Sub-Matrix: **SOIL**

| | | | | Matrix Spike (MS) Report | | | |
|---|---|---|---|---|---|---|---|
| | | | | Spike | SpikeRecovery(%) | Acceptable Limits (%) | |
| Laboratory sample ID | Sample ID | Method: Compound | CAS Number | Concentration | MS | Low | High |
| **EP075(SIM)A: Phenolic Compounds (QCLot: 5510503) - continued** | | | | | | | |
| EM2322534-002 | Anonymous | EP075(SIM): Pentachlorophenol | 87-86-5 | 3 mg/kg | 68.5 | 15.3 | 139 |
| **EP075(SIM)A: Phenolic Compounds (QCLot: 5511752)** | | | | | | | |
| EM2322709-047 | SB11_2.0-2.2 | EP075(SIM): Phenol | 108-95-2 | 3 mg/kg | 86.3 | 77.1 | 119 |
| | | EP075(SIM): 2-Chlorophenol | 95-57-8 | 3 mg/kg | 87.4 | 78.9 | 123 |
| | | EP075(SIM): 2-Nitrophenol | 88-75-5 | 3 mg/kg | 80.4 | 43.8 | 136 |
| | | EP075(SIM): 4-Chloro-3-methylphenol | 59-50-7 | 3 mg/kg | 82.5 | 61.5 | 120 |
| | | EP075(SIM): Pentachlorophenol | 87-86-5 | 3 mg/kg | 84.6 | 15.3 | 139 |
| **EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 5508010)** | | | | | | | |
| EM2322696-003 | Anonymous | EP075(SIM): Acenaphthene | 83-32-9 | 3 mg/kg | 86.0 | 77.2 | 116 |
| | | EP075(SIM): Pyrene | 129-00-0 | 3 mg/kg | 89.2 | 65.5 | 136 |
| **EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 5509013)** | | | | | | | |
| EM2322696-016 | Anonymous | EP075(SIM): Acenaphthene | 83-32-9 | 3 mg/kg | 97.7 | 77.2 | 116 |
| | | EP075(SIM): Pyrene | 129-00-0 | 3 mg/kg | 91.6 | 65.5 | 136 |
| **EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 5510503)** | | | | | | | |
| EM2322534-002 | Anonymous | EP075(SIM): Acenaphthene | 83-32-9 | 3 mg/kg | 86.6 | 77.2 | 116 |
| | | EP075(SIM): Pyrene | 129-00-0 | 3 mg/kg | 90.0 | 65.5 | 136 |
| **EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 5511752)** | | | | | | | |
| EM2322709-047 | SB11_2.0-2.2 | EP075(SIM): Acenaphthene | 83-32-9 | 3 mg/kg | 88.5 | 77.2 | 116 |
| | | EP075(SIM): Pyrene | 129-00-0 | 3 mg/kg | 81.3 | 65.5 | 136 |
| **EP080/071: Total Petroleum Hydrocarbons (QCLot: 5507502)** | | | | | | | |
| EM2322709-003 | SB1_1.0-1.2 | EP080: C6 - C9 Fraction | ---- | 28 mg/kg | 83.0 | 33.4 | 124 |
| **EP080/071: Total Petroleum Hydrocarbons (QCLot: 5508012)** | | | | | | | |
| EM2322696-007 | Anonymous | EP071: C10 - C14 Fraction | ---- | 860 mg/kg | 80.6 | 71.2 | 125 |
| | | EP071: C15 - C28 Fraction | ---- | 2770 mg/kg | 93.7 | 75.6 | 122 |
| | | EP071: C29 - C36 Fraction | ---- | 1520 mg/kg | 93.3 | 78.0 | 120 |
| **EP080/071: Total Petroleum Hydrocarbons (QCLot: 5509012)** | | | | | | | |
| EM2322696-016 | Anonymous | EP071: C10 - C14 Fraction | ---- | 860 mg/kg | 90.6 | 71.2 | 125 |
| | | EP071: C15 - C28 Fraction | ---- | 2770 mg/kg | 97.6 | 75.6 | 122 |
| | | EP071: C29 - C36 Fraction | ---- | 1520 mg/kg | 100 | 78.0 | 120 |
| **EP080/071: Total Petroleum Hydrocarbons (QCLot: 5510501)** | | | | | | | |
| EM2322591-002 | Anonymous | EP071: C10 - C14 Fraction | ---- | 860 mg/kg | 79.4 | 71.2 | 125 |
| | | EP071: C15 - C28 Fraction | ---- | 2770 mg/kg | 86.9 | 75.6 | 122 |
| | | EP071: C29 - C36 Fraction | ---- | 1520 mg/kg | 89.8 | 78.0 | 120 |
| **EP080/071: Total Petroleum Hydrocarbons (QCLot: 5511753)** | | | | | | | |
| EM2322709-047 | SB11_2.0-2.2 | EP071: C10 - C14 Fraction | ---- | 860 mg/kg | 107 | 71.2 | 125 |

Sub-Matrix: **SOIL**

| Laboratory sample ID | Sample ID | Method: Compound | CAS Number | Matrix Spike (MS) Report: Spike Concentration | SpikeRecovery(%): MS | Acceptable Limits (%): Low | Acceptable Limits (%): High |
|---|---|---|---|---|---|---|---|
| **EP080/071: Total Petroleum Hydrocarbons (QCLot: 5511753) - continued** | | | | | | | |
| EM2322709-047 | SB11_2.0-2.2 | EP071: C15 - C28 Fraction | ---- | 2770 mg/kg | 108 | 75.6 | 122 |
| | | EP071: C29 - C36 Fraction | ---- | 1520 mg/kg | 106 | 78.0 | 120 |
| **EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 5507502)** | | | | | | | |
| EM2322709-003 | SB1_1.0-1.2 | EP080: C6 - C10 Fraction | C6_C10 | 33 mg/kg | 76.5 | 30.8 | 120 |
| **EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 5508012)** | | | | | | | |
| EM2322696-007 | Anonymous | EP071: >C10 - C16 Fraction | ---- | 1130 mg/kg | 98.5 | 72.2 | 128 |
| | | EP071: >C16 - C34 Fraction | ---- | 3730 mg/kg | 91.0 | 76.5 | 119 |
| | | EP071: >C34 - C40 Fraction | ---- | 260 mg/kg | 90.3 | 66.8 | 138 |
| **EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 5509012)** | | | | | | | |
| EM2322696-016 | Anonymous | EP071: >C10 - C16 Fraction | ---- | 1130 mg/kg | 93.7 | 72.2 | 128 |
| | | EP071: >C16 - C34 Fraction | ---- | 3730 mg/kg | 98.1 | 76.5 | 119 |
| | | EP071: >C34 - C40 Fraction | ---- | 260 mg/kg | 85.8 | 66.8 | 138 |
| **EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 5510501)** | | | | | | | |
| EM2322591-002 | Anonymous | EP071: >C10 - C16 Fraction | ---- | 1130 mg/kg | 82.4 | 72.2 | 128 |
| | | EP071: >C16 - C34 Fraction | ---- | 3730 mg/kg | 88.1 | 76.5 | 119 |
| | | EP071: >C34 - C40 Fraction | ---- | 260 mg/kg | 79.8 | 66.8 | 138 |
| **EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 5511753)** | | | | | | | |
| EM2322709-047 | SB11_2.0-2.2 | EP071: >C10 - C16 Fraction | ---- | 1130 mg/kg | 108 | 72.2 | 128 |
| | | EP071: >C16 - C34 Fraction | ---- | 3730 mg/kg | 108 | 76.5 | 119 |
| | | EP071: >C34 - C40 Fraction | ---- | 260 mg/kg | 108 | 66.8 | 138 |
| **EP080: BTEXN (QCLot: 5507502)** | | | | | | | |
| EM2322709-003 | SB1_1.0-1.2 | EP080: Benzene | 71-43-2 | 2 mg/kg | 92.6 | 54.4 | 127 |
| | | EP080: Toluene | 108-88-3 | 2 mg/kg | 94.7 | 57.1 | 131 |

Sub-Matrix: **WATER**

| Laboratory sample ID | Sample ID | Method: Compound | CAS Number | Matrix Spike (MS) Report: Spike Concentration | SpikeRecovery(%): MS | Acceptable Limits (%): Low | Acceptable Limits (%): High |
|---|---|---|---|---|---|---|---|
| **EG020F: Dissolved Metals by ICP-MS (QCLot: 5526344)** | | | | | | | |
| EM2322439-001 | Anonymous | EG020A-F: Arsenic | 7440-38-2 | 0.2 mg/L | 97.0 | 76.6 | 124 |
| | | EG020A-F: Beryllium | 7440-41-7 | 0.2 mg/L | 94.7 | 73.0 | 120 |
| | | EG020A-F: Barium | 7440-39-3 | 0.2 mg/L | 95.1 | 75.0 | 127 |
| | | EG020A-F: Cadmium | 7440-43-9 | 0.05 mg/L | 98.9 | 74.6 | 118 |
| | | EG020A-F: Chromium | 7440-47-3 | 0.2 mg/L | 90.5 | 71.0 | 135 |
| | | EG020A-F: Cobalt | 7440-48-4 | 0.2 mg/L | 97.3 | 78.0 | 132 |
| | | EG020A-F: Copper | 7440-50-8 | 0.2 mg/L | 91.6 | 76.0 | 130 |
| | | EG020A-F: Lead | 7439-92-1 | 0.2 mg/L | 93.6 | 75.0 | 133 |

Sub-Matrix: **WATER**

| | | | | Matrix Spike (MS) Report | | | |
|---|---|---|---|---|---|---|---|
| | | | | Spike | SpikeRecovery(%) | Acceptable Limits (%) | |
| Laboratory sample ID | Sample ID | Method: Compound | CAS Number | Concentration | MS | Low | High |
| **EG020F: Dissolved Metals by ICP-MS (QCLot: 5526344) - continued** | | | | | | | |
| EM2322439-001 | Anonymous | EG020A-F: Manganese | 7439-96-5 | 0.2 mg/L | # Not Determined | 64.0 | 134 |
| | | EG020A-F: Nickel | 7440-02-0 | 0.2 mg/L | 95.4 | 73.0 | 131 |
| | | EG020A-F: Vanadium | 7440-62-2 | 0.2 mg/L | 90.9 | 73.0 | 131 |
| | | EG020A-F: Zinc | 7440-66-6 | 0.2 mg/L | # Not Determined | 75.0 | 131 |
| **EG035F: Dissolved Mercury by FIMS (QCLot: 5526345)** | | | | | | | |
| EM2322709-057 | QC2 | EG035F: Mercury | 7439-97-6 | 0.01 mg/L | 84.3 | 70.0 | 120 |
| **EP080/071: Total Petroleum Hydrocarbons (QCLot: 5507397)** | | | | | | | |
| EM2322628-015 | Anonymous | EP080: C6 - C9 Fraction | ---- | 280 µg/L | 75.0 | 33.9 | 126 |
| **EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 5507397)** | | | | | | | |
| EM2322628-015 | Anonymous | EP080: C6 - C10 Fraction | C6_C10 | 330 µg/L | 71.1 | 34.0 | 122 |
| **EP080: BTEXN (QCLot: 5507397)** | | | | | | | |
| EM2322628-015 | Anonymous | EP080: Benzene | 71-43-2 | 20 µg/L | 84.5 | 56.3 | 133 |
| | | EP080: Toluene | 108-88-3 | 20 µg/L | 90.1 | 60.4 | 132 |

# QA/QC Compliance Assessment to assist with Quality Review

| | | | |
|---|---|---|---|
| **Work Order** | : **EM2322709** | Page | : 1 of 19 |
| Client | : **Jones Environmental** | Laboratory | : Environmental Division Melbourne |
| Contact | : PATRICIA JONES | Telephone | : +61-3-8549 9600 |
| Project | : JE10388 | Date Samples Received | : 19-Dec-2023 |
| Site | : ---- | Issue Date | : 09-Jan-2024 |
| Sampler | : RUSSELL JONES | No. of samples received | : 61 |
| Order number | : ---- | No. of samples analysed | : 22 |

**This report is automatically generated by the ALS LIMS through interpretation of the ALS Quality Control Report and several Quality Assurance parameters measured by ALS. This automated reporting highlights any non-conformances, facilitates faster and more accurate data validation and is designed to assist internal expert and external Auditor review. Many components of this report contribute to the overall DQO assessment and reporting for guideline compliance.**

Brief method summaries and references are also provided to assist in traceability.

## *Summary of Outliers*

### *Outliers : Quality Control Samples*

This report highlights outliers flagged in the Quality Control (QC) Report.

- **NO Method Blank value outliers occur.**
- **NO Duplicate outliers occur.**
- **NO Laboratory Control outliers occur.**
- **Matrix Spike outliers exist - please see following pages for full details.**
- **For all regular sample matrices, NO surrogate recovery outliers occur.**

### *Outliers : Analysis Holding Time Compliance*

- **Analysis Holding Time Outliers exist - please see following pages for full details.**

### *Outliers : Frequency of Quality Control Samples*

- **NO Quality Control Sample Frequency Outliers exist.**

## Outliers : Quality Control Samples

*Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes*

Matrix: **SOIL**

| Compound Group Name | Laboratory Sample ID | Client Sample ID | Analyte | CAS Number | Data | Limits | Comment |
|---|---|---|---|---|---|---|---|
| **Matrix Spike (MS) Recoveries** | | | | | | | |
| EK040T: Fluoride Total | EM2322696--003 | Anonymous | **Fluoride** | 16984-48-8 | 67.3 % | 70.0-130% | **Recovery less than lower data quality objective** |
| EK040T: Fluoride Total | EM2322709--037 | SB8_4.0-4.2 | **Fluoride** | 16984-48-8 | 58.0 % | 70.0-130% | **Recovery less than lower data quality objective** |

Matrix: **WATER**

| Compound Group Name | Laboratory Sample ID | Client Sample ID | Analyte | CAS Number | Data | Limits | Comment |
|---|---|---|---|---|---|---|---|
| **Matrix Spike (MS) Recoveries** | | | | | | | |
| EG020F: Dissolved Metals by ICP-MS | EM2322439--001 | Anonymous | **Manganese** | 7439-96-5 | Not Determined | ---- | **MS recovery not determined, background level greater than or equal to 4x spike level.** |
| EG020F: Dissolved Metals by ICP-MS | EM2322439--001 | Anonymous | **Zinc** | 7440-66-6 | Not Determined | ---- | **MS recovery not determined, background level greater than or equal to 4x spike level.** |

## Outliers : Analysis Holding Time Compliance

Matrix: **SOIL**

| *Method* / **Container** / Client Sample ID(s) | | *Extraction / Preparation* | | | *Analysis* | | |
|---|---|---|---|---|---|---|---|
| | | *Date extracted* | *Due for extraction* | ***Days overdue*** | *Date analysed* | *Due for analysis* | ***Days overdue*** |
| **EA001: pH in soil using 0.01M CaCl extract** | | | | | | | |
| **Soil Glass Jar - Unpreserved** | | | | | | | |
| SB4_0.0-0.2, | SB4_1.0-1.2 | 21-Dec-2023 | 19-Dec-2023 | **2** | ---- | ---- | ---- |
| **EA002-AD: pH (Soils) dried at 40°C** | | | | | | | |
| **Soil Glass Jar - Unpreserved** | | | | | | | |
| SB4_0.0-0.2, | SB4_1.0-1.2 | 28-Dec-2023 | 19-Dec-2023 | **9** | ---- | ---- | ---- |
| **Soil Glass Jar - Unpreserved** | | | | | | | |
| SB2_2.0-2.2 | | 28-Dec-2023 | 20-Dec-2023 | **8** | ---- | ---- | ---- |
| **Soil Glass Jar - Unpreserved** | | | | | | | |
| SB5_0.0-0.2, | SB5_1.0-1.2, | 28-Dec-2023 | 21-Dec-2023 | **7** | ---- | ---- | ---- |
| SB9_0.5-0.7 | | | | | | | |
| **Soil Glass Jar - Unpreserved** | | | | | | | |
| SB8_0.0-0.2, | SB8_1.0-1.2, | 28-Dec-2023 | 22-Dec-2023 | **6** | ---- | ---- | ---- |
| SB8_4.0-4.2 | | | | | | | |
| **Soil Glass Jar - Unpreserved** | | | | | | | |
| SB1_1.0-1.2, | SB11_0.5-0.7, | 28-Dec-2023 | 25-Dec-2023 | **3** | ---- | ---- | ---- |
| SB11_2.0-2.2 | | | | | | | |
| **EA010-AD: Conductivity (Soils) dried at 40°C** | | | | | | | |
| **Soil Glass Jar - Unpreserved** | | | | | | | |
| SB4_0.0-0.2, | SB4_1.0-1.2 | 28-Dec-2023 | 19-Dec-2023 | **9** | ---- | ---- | ---- |

Matrix: **SOIL**

| Method / Container / Client Sample ID(s) | Extraction / Preparation: Date extracted | Extraction / Preparation: Due for extraction | Extraction / Preparation: Days overdue | Analysis: Date analysed | Analysis: Due for analysis | Analysis: Days overdue |
|---|---|---|---|---|---|---|
| **EA010-AD: Conductivity (Soils) dried at 40°C - Analysis Holding Time Compliance** | | | | | | |
| **Soil Glass Jar - Unpreserved** | | | | | | |
| SB2_2.0-2.2 | 28-Dec-2023 | 20-Dec-2023 | **8** | ---- | ---- | ---- |
| **Soil Glass Jar - Unpreserved** | | | | | | |
| SB5_0.0-0.2, SB5_1.0-1.2, SB9_0.5-0.7 | 28-Dec-2023 | 21-Dec-2023 | **7** | ---- | ---- | ---- |
| **Soil Glass Jar - Unpreserved** | | | | | | |
| SB8_0.0-0.2, SB8_1.0-1.2, SB8_4.0-4.2 | 28-Dec-2023 | 22-Dec-2023 | **6** | ---- | ---- | ---- |
| **Soil Glass Jar - Unpreserved** | | | | | | |
| SB1_1.0-1.2, SB11_0.5-0.7, SB11_2.0-2.2 | 28-Dec-2023 | 25-Dec-2023 | **3** | ---- | ---- | ---- |
| **EA055: Moisture Content (Dried @ 105-110°C)** | | | | | | |
| **Soil Glass Jar - Unpreserved** | | | | | | |
| SB4_0.0-0.2, SB4_1.0-1.2 | ---- | ---- | ---- | 28-Dec-2023 | 26-Dec-2023 | **2** |

## Analysis Holding Time Compliance

If samples are identified below as having been analysed or extracted outside of recommended holding times, this should be taken into consideration when interpreting results.

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times (referencing USEPA SW 846, APHA, AS and NEPM) based on the sample container provided. Dates reported represent first date of extraction or analysis and preclude subsequent dilutions and reruns. A listing of breaches (if any) is provided herein.

Holding time for leachate methods (e.g. TCLP) vary according to the analytes reported. Assessment compares the leach date with the shortest analyte holding time for the equivalent soil method. These are: organics 14 days, mercury 28 days & other metals 180 days. A recorded breach does not guarantee a breach for all non-volatile parameters.

Holding times for ***VOC in soils*** vary according to analytes of interest. Vinyl Chloride and Styrene holding time is 7 days; others 14 days. A recorded breach does not guarantee a breach for all VOC analytes and should be verified in case the reported breach is a false positive or Vinyl Chloride and Styrene are not key analytes of interest/concern.

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

| Method / Container / Client Sample ID(s) | Sample Date | Extraction / Preparation: Date extracted | Extraction / Preparation: Due for extraction | Extraction / Preparation: Evaluation | Analysis: Date analysed | Analysis: Due for analysis | Analysis: Evaluation |
|---|---|---|---|---|---|---|---|
| **EA001: pH in soil using 0.01M CaCl extract** | | | | | | | |
| **Soil Glass Jar - Unpreserved (EA001)** | | | | | | | |
| SB4_0.0-0.2, SB4_1.0-1.2 | **12-Dec-2023** | **21-Dec-2023** | 19-Dec-2023 | × | **21-Dec-2023** | 21-Dec-2023 | ✓ |
| **Soil Glass Jar - Unpreserved (EA001)** | | | | | | | |
| SB2_2.0-2.2 | **13-Dec-2023** | **20-Dec-2023** | 20-Dec-2023 | ✓ | **20-Dec-2023** | 21-Dec-2023 | ✓ |
| **Soil Glass Jar - Unpreserved (EA001)** | | | | | | | |
| SB5_0.0-0.2, SB5_1.0-1.2, SB9_0.5-0.7 | **14-Dec-2023** | **21-Dec-2023** | 21-Dec-2023 | ✓ | **21-Dec-2023** | 21-Dec-2023 | ✓ |
| **Soil Glass Jar - Unpreserved (EA001)** | | | | | | | |
| SB8_0.0-0.2, SB8_1.0-1.2, SB8_4.0-4.2 | **15-Dec-2023** | **21-Dec-2023** | 22-Dec-2023 | ✓ | **21-Dec-2023** | 21-Dec-2023 | ✓ |
| **Soil Glass Jar - Unpreserved (EA001)** | | | | | | | |
| SB1_1.0-1.2, SB11_0.5-0.7, SB11_2.0-2.2 | **18-Dec-2023** | **21-Dec-2023** | 25-Dec-2023 | ✓ | **21-Dec-2023** | 21-Dec-2023 | ✓ |

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

| Method / Container / Client Sample ID(s) | | Sample Date | Extraction / Preparation | | | Analysis | | |
|---|---|---|---|---|---|---|---|---|
| | | | Date extracted | Due for extraction | Evaluation | Date analysed | Due for analysis | Evaluation |
| **EA002-AD: pH (Soils) dried at 40°C** | | | | | | | | |
| **Soil Glass Jar - Unpreserved (EA002-AD)** | | | | | | | | |
| SB4_0.0-0.2, | SB4_1.0-1.2 | **12-Dec-2023** | **28-Dec-2023** | 19-Dec-2023 | × | **28-Dec-2023** | 28-Dec-2023 | ✓ |
| **Soil Glass Jar - Unpreserved (EA002-AD)** | | | | | | | | |
| SB2_2.0-2.2 | | **13-Dec-2023** | **28-Dec-2023** | 20-Dec-2023 | × | **28-Dec-2023** | 28-Dec-2023 | ✓ |
| **Soil Glass Jar - Unpreserved (EA002-AD)** | | | | | | | | |
| SB5_0.0-0.2, | SB5_1.0-1.2, | **14-Dec-2023** | **28-Dec-2023** | 21-Dec-2023 | × | **28-Dec-2023** | 28-Dec-2023 | ✓ |
| SB9_0.5-0.7 | | | | | | | | |
| **Soil Glass Jar - Unpreserved (EA002-AD)** | | | | | | | | |
| SB8_0.0-0.2, | SB8_1.0-1.2, | **15-Dec-2023** | **28-Dec-2023** | 22-Dec-2023 | × | **28-Dec-2023** | 28-Dec-2023 | ✓ |
| SB8_4.0-4.2 | | | | | | | | |
| **Soil Glass Jar - Unpreserved (EA002-AD)** | | | | | | | | |
| SB1_1.0-1.2, | SB11_0.5-0.7, | **18-Dec-2023** | **28-Dec-2023** | 25-Dec-2023 | × | **28-Dec-2023** | 28-Dec-2023 | ✓ |
| SB11_2.0-2.2 | | | | | | | | |
| **EA010-AD: Conductivity (Soils) dried at 40°C** | | | | | | | | |
| **Soil Glass Jar - Unpreserved (EA010-AD)** | | | | | | | | |
| SB4_0.0-0.2, | SB4_1.0-1.2 | **12-Dec-2023** | **28-Dec-2023** | 19-Dec-2023 | × | **28-Dec-2023** | 25-Jan-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (EA010-AD)** | | | | | | | | |
| SB2_2.0-2.2 | | **13-Dec-2023** | **28-Dec-2023** | 20-Dec-2023 | × | **28-Dec-2023** | 25-Jan-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (EA010-AD)** | | | | | | | | |
| SB5_0.0-0.2, | SB5_1.0-1.2, | **14-Dec-2023** | **28-Dec-2023** | 21-Dec-2023 | × | **28-Dec-2023** | 25-Jan-2024 | ✓ |
| SB9_0.5-0.7 | | | | | | | | |
| **Soil Glass Jar - Unpreserved (EA010-AD)** | | | | | | | | |
| SB8_0.0-0.2, | SB8_1.0-1.2, | **15-Dec-2023** | **28-Dec-2023** | 22-Dec-2023 | × | **28-Dec-2023** | 25-Jan-2024 | ✓ |
| SB8_4.0-4.2 | | | | | | | | |
| **Soil Glass Jar - Unpreserved (EA010-AD)** | | | | | | | | |
| SB1_1.0-1.2, | SB11_0.5-0.7, | **18-Dec-2023** | **28-Dec-2023** | 25-Dec-2023 | × | **28-Dec-2023** | 25-Jan-2024 | ✓ |
| SB11_2.0-2.2 | | | | | | | | |
| **EA055: Moisture Content (Dried @ 105-110°C)** | | | | | | | | |
| **Soil Glass Jar - Unpreserved (EA055)** | | | | | | | | |
| SB4_0.0-0.2, | SB4_1.0-1.2 | **12-Dec-2023** | **----** | ---- | ---- | **28-Dec-2023** | 26-Dec-2023 | × |
| **Soil Glass Jar - Unpreserved (EA055)** | | | | | | | | |
| SB2_0.5-0.7, | SB2_2.0-2.2 | **13-Dec-2023** | **----** | ---- | ---- | **27-Dec-2023** | 27-Dec-2023 | ✓ |
| **Soil Glass Jar - Unpreserved (EA055)** | | | | | | | | |
| SB3_0.0-0.2, | SB3_2.0-2.2, | **14-Dec-2023** | **----** | ---- | ---- | **28-Dec-2023** | 28-Dec-2023 | ✓ |
| SB5_0.0-0.2, | SB5_1.0-1.2, | | | | | | | |
| SB9_0.5-0.7 | | | | | | | | |
| **Soil Glass Jar - Unpreserved (EA055)** | | | | | | | | |
| SB8_0.0-0.2, | SB8_1.0-1.2, | **15-Dec-2023** | **----** | ---- | ---- | **28-Dec-2023** | 29-Dec-2023 | ✓ |
| SB8_4.0-4.2 | | | | | | | | |
| **Soil Glass Jar - Unpreserved (EA055)** | | | | | | | | |
| SB1_0.0-0.2, | SB1_1.0-1.2, | **18-Dec-2023** | **----** | ---- | ---- | **28-Dec-2023** | 01-Jan-2024 | ✓ |
| SB11_0.5-0.7, | SB11_2.0-2.2 | | | | | | | |

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

| Method / Container / Client Sample ID(s) | Sample Date | Extraction / Preparation | | | Analysis | | |
|---|---|---|---|---|---|---|---|
| | | Date extracted | Due for extraction | Evaluation | Date analysed | Due for analysis | Evaluation |
| **EA150: Soil Classification based on Particle Size** | | | | | | | |
| **Snap Lock Bag - Friable Asbestos/PSD Bag (EA150H)** SB4_0.0-0.2, SB4_1.0-1.2 | **12-Dec-2023** | **----** | ---- | ---- | **04-Jan-2024** | 09-Jun-2024 | ✓ |
| **Snap Lock Bag - Friable Asbestos/PSD Bag (EA150H)** SB5_0.0-0.2, SB9_0.5-0.7 | **14-Dec-2023** | **----** | ---- | ---- | **04-Jan-2024** | 11-Jun-2024 | ✓ |
| **Snap Lock Bag - Friable Asbestos/PSD Bag (EA150H)** SB8_0.0-0.2 | **15-Dec-2023** | **----** | ---- | ---- | **04-Jan-2024** | 12-Jun-2024 | ✓ |
| **Snap Lock Bag - Friable Asbestos/PSD Bag (EA150H)** SB11_0.5-0.7, SB11_2.0-2.2 | **18-Dec-2023** | **----** | ---- | ---- | **04-Jan-2024** | 15-Jun-2024 | ✓ |
| **EA152: Soil Particle Density** | | | | | | | |
| **Snap Lock Bag - Friable Asbestos/PSD Bag (EA152)** SB4_0.0-0.2, SB4_1.0-1.2 | **12-Dec-2023** | **----** | ---- | ---- | **04-Jan-2024** | 09-Jun-2024 | ✓ |
| **Snap Lock Bag - Friable Asbestos/PSD Bag (EA152)** SB5_0.0-0.2, SB9_0.5-0.7 | **14-Dec-2023** | **----** | ---- | ---- | **04-Jan-2024** | 11-Jun-2024 | ✓ |
| **Snap Lock Bag - Friable Asbestos/PSD Bag (EA152)** SB8_0.0-0.2 | **15-Dec-2023** | **----** | ---- | ---- | **04-Jan-2024** | 12-Jun-2024 | ✓ |
| **Snap Lock Bag - Friable Asbestos/PSD Bag (EA152)** SB11_0.5-0.7, SB11_2.0-2.2 | **18-Dec-2023** | **----** | ---- | ---- | **04-Jan-2024** | 15-Jun-2024 | ✓ |
| **EA200: AS 4964 - 2004 Identification of Asbestos in Soils** | | | | | | | |
| **Snap Lock Bag - Friable Asbestos/PSD Bag (EA200)** SB2_0.5-0.7 | **13-Dec-2023** | **----** | ---- | ---- | **21-Dec-2023** | 10-Jun-2024 | ✓ |
| **Snap Lock Bag - Friable Asbestos/PSD Bag (EA200)** SB3_0.0-0.2 | **14-Dec-2023** | **----** | ---- | ---- | **21-Dec-2023** | 11-Jun-2024 | ✓ |
| **Snap Lock Bag - Friable Asbestos/PSD Bag (EA200)** SB1_0.0-0.2 | **18-Dec-2023** | **----** | ---- | ---- | **21-Dec-2023** | 15-Jun-2024 | ✓ |
| **ED006: Exchangeable Cations on Alkaline Soils** | | | | | | | |
| **Soil Glass Jar - Unpreserved (ED006)** SB4_0.0-0.2, SB4_1.0-1.2 | **12-Dec-2023** | **20-Dec-2023** | 09-Jan-2024 | ✓ | **08-Jan-2024** | 09-Jan-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (ED006)** SB2_2.0-2.2 | **13-Dec-2023** | **20-Dec-2023** | 10-Jan-2024 | ✓ | **08-Jan-2024** | 10-Jan-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (ED006)** SB5_0.0-0.2, SB5_1.0-1.2, SB9_0.5-0.7 | **14-Dec-2023** | **20-Dec-2023** | 11-Jan-2024 | ✓ | **08-Jan-2024** | 11-Jan-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (ED006)** SB8_0.0-0.2, SB8_1.0-1.2, SB8_4.0-4.2 | **15-Dec-2023** | **20-Dec-2023** | 12-Jan-2024 | ✓ | **08-Jan-2024** | 12-Jan-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (ED006)** SB1_1.0-1.2, SB11_0.5-0.7, SB11_2.0-2.2 | **18-Dec-2023** | **20-Dec-2023** | 15-Jan-2024 | ✓ | **08-Jan-2024** | 15-Jan-2024 | ✓ |

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

| Method / Container / Client Sample ID(s) | Sample Date | Extraction / Preparation | | | Analysis | | |
|---|---|---|---|---|---|---|---|
| | | Date extracted | Due for extraction | Evaluation | Date analysed | Due for analysis | Evaluation |
| **ED007: Exchangeable Cations** | | | | | | | |
| **Soil Glass Jar - Unpreserved (ED007)**<br>SB4_0.0-0.2, SB4_1.0-1.2 | **12-Dec-2023** | **20-Dec-2023** | 09-Jan-2024 | ✓ | **08-Jan-2024** | 09-Jan-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (ED007)**<br>SB2_2.0-2.2 | **13-Dec-2023** | **20-Dec-2023** | 10-Jan-2024 | ✓ | **08-Jan-2024** | 10-Jan-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (ED007)**<br>SB5_0.0-0.2, SB5_1.0-1.2, SB9_0.5-0.7 | **14-Dec-2023** | **20-Dec-2023** | 11-Jan-2024 | ✓ | **08-Jan-2024** | 11-Jan-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (ED007)**<br>SB8_0.0-0.2, SB8_1.0-1.2, SB8_4.0-4.2 | **15-Dec-2023** | **20-Dec-2023** | 12-Jan-2024 | ✓ | **08-Jan-2024** | 12-Jan-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (ED007)**<br>SB1_1.0-1.2, SB11_0.5-0.7, SB11_2.0-2.2 | **18-Dec-2023** | **20-Dec-2023** | 15-Jan-2024 | ✓ | **08-Jan-2024** | 15-Jan-2024 | ✓ |
| **ED008: Exchangeable Cations** | | | | | | | |
| **Soil Glass Jar - Unpreserved (ED008)**<br>SB4_0.0-0.2, SB4_1.0-1.2 | **12-Dec-2023** | **20-Dec-2023** | 09-Jan-2024 | ✓ | **08-Jan-2024** | 09-Jan-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (ED008)**<br>SB2_2.0-2.2 | **13-Dec-2023** | **20-Dec-2023** | 10-Jan-2024 | ✓ | **08-Jan-2024** | 10-Jan-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (ED008)**<br>SB5_0.0-0.2, SB5_1.0-1.2, SB9_0.5-0.7 | **14-Dec-2023** | **20-Dec-2023** | 11-Jan-2024 | ✓ | **08-Jan-2024** | 11-Jan-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (ED008)**<br>SB8_0.0-0.2, SB8_1.0-1.2, SB8_4.0-4.2 | **15-Dec-2023** | **20-Dec-2023** | 12-Jan-2024 | ✓ | **08-Jan-2024** | 12-Jan-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (ED008)**<br>SB1_1.0-1.2, SB11_0.5-0.7, SB11_2.0-2.2 | **18-Dec-2023** | **20-Dec-2023** | 15-Jan-2024 | ✓ | **08-Jan-2024** | 15-Jan-2024 | ✓ |
| **EG005(ED093)T: Total Metals by ICP-AES** | | | | | | | |
| **Soil Glass Jar - Unpreserved (EG005T)**<br>SB4_0.0-0.2, SB4_1.0-1.2 | **12-Dec-2023** | **02-Jan-2024** | 09-Jun-2024 | ✓ | **02-Jan-2024** | 09-Jun-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (EG005T)**<br>SB2_0.5-0.7, SB2_2.0-2.2 | **13-Dec-2023** | **02-Jan-2024** | 10-Jun-2024 | ✓ | **02-Jan-2024** | 10-Jun-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (EG005T)**<br>SB3_0.0-0.2, SB3_2.0-2.2, SB5_0.0-0.2, SB5_1.0-1.2, SB9_0.5-0.7 | **14-Dec-2023** | **02-Jan-2024** | 11-Jun-2024 | ✓ | **02-Jan-2024** | 11-Jun-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (EG005T)**<br>SB8_0.0-0.2, SB8_1.0-1.2, SB8_4.0-4.2 | **15-Dec-2023** | **02-Jan-2024** | 12-Jun-2024 | ✓ | **02-Jan-2024** | 12-Jun-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (EG005T)**<br>SB1_0.0-0.2, SB1_1.0-1.2, SB11_0.5-0.7, SB11_2.0-2.2 | **18-Dec-2023** | **02-Jan-2024** | 15-Jun-2024 | ✓ | **02-Jan-2024** | 15-Jun-2024 | ✓ |

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

| Method / Container / Client Sample ID(s) | Sample Date | Extraction / Preparation | | | Analysis | | |
|---|---|---|---|---|---|---|---|
| | | Date extracted | Due for extraction | Evaluation | Date analysed | Due for analysis | Evaluation |
| **EG035T: Total Recoverable Mercury by FIMS** | | | | | | | |
| **Soil Glass Jar - Unpreserved (EG035T)**<br>SB4_0.0-0.2, SB4_1.0-1.2 | **12-Dec-2023** | **02-Jan-2024** | 09-Jan-2024 | ✓ | **02-Jan-2024** | 09-Jan-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (EG035T)**<br>SB2_0.5-0.7, SB2_2.0-2.2 | **13-Dec-2023** | **02-Jan-2024** | 10-Jan-2024 | ✓ | **02-Jan-2024** | 10-Jan-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (EG035T)**<br>SB3_0.0-0.2, SB3_2.0-2.2,<br>SB5_0.0-0.2, SB5_1.0-1.2,<br>SB9_0.5-0.7 | **14-Dec-2023** | **02-Jan-2024** | 11-Jan-2024 | ✓ | **02-Jan-2024** | 11-Jan-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (EG035T)**<br>SB8_0.0-0.2, SB8_1.0-1.2,<br>SB8_4.0-4.2 | **15-Dec-2023** | **02-Jan-2024** | 12-Jan-2024 | ✓ | **02-Jan-2024** | 12-Jan-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (EG035T)**<br>SB1_0.0-0.2, SB1_1.0-1.2,<br>SB11_0.5-0.7, SB11_2.0-2.2 | **18-Dec-2023** | **02-Jan-2024** | 15-Jan-2024 | ✓ | **02-Jan-2024** | 15-Jan-2024 | ✓ |
| **EK026SF: Total CN by Segmented Flow Analyser** | | | | | | | |
| **Soil Glass Jar - Unpreserved (EK026SF)**<br>SB4_0.0-0.2, SB4_1.0-1.2 | **12-Dec-2023** | **21-Dec-2023** | 26-Dec-2023 | ✓ | **28-Dec-2023** | 04-Jan-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (EK026SF)**<br>SB2_0.5-0.7, SB2_2.0-2.2 | **13-Dec-2023** | **27-Dec-2023** | 27-Dec-2023 | ✓ | **29-Dec-2023** | 10-Jan-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (EK026SF)**<br>SB3_0.0-0.2, SB3_2.0-2.2,<br>SB5_0.0-0.2, SB5_1.0-1.2,<br>SB9_0.5-0.7 | **14-Dec-2023** | **28-Dec-2023** | 28-Dec-2023 | ✓ | **02-Jan-2024** | 11-Jan-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (EK026SF)**<br>SB8_0.0-0.2, SB8_1.0-1.2,<br>SB8_4.0-4.2 | **15-Dec-2023** | **28-Dec-2023** | 29-Dec-2023 | ✓ | **02-Jan-2024** | 11-Jan-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (EK026SF)**<br>SB1_0.0-0.2, SB1_1.0-1.2,<br>SB11_0.5-0.7, SB11_2.0-2.2 | **18-Dec-2023** | **29-Dec-2023** | 01-Jan-2024 | ✓ | **03-Jan-2024** | 12-Jan-2024 | ✓ |

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

| Method / Container / Client Sample ID(s) | Sample Date | Extraction / Preparation | | | Analysis | | |
|---|---|---|---|---|---|---|---|
| | | Date extracted | Due for extraction | Evaluation | Date analysed | Due for analysis | Evaluation |
| **EK040T: Fluoride Total** | | | | | | | |
| **Soil Glass Jar - Unpreserved (EK040T)** SB4_0.0-0.2, SB4_1.0-1.2 | **12-Dec-2023** | **21-Dec-2023** | 09-Jan-2024 | ✓ | **29-Dec-2023** | 09-Jan-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (EK040T)** SB2_0.5-0.7, SB2_2.0-2.2 | **13-Dec-2023** | **21-Dec-2023** | 10-Jan-2024 | ✓ | **29-Dec-2023** | 10-Jan-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (EK040T)** SB3_0.0-0.2, SB3_2.0-2.2, SB5_0.0-0.2, SB5_1.0-1.2, SB9_0.5-0.7 | **14-Dec-2023** | **21-Dec-2023** | 11-Jan-2024 | ✓ | **29-Dec-2023** | 11-Jan-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (EK040T)** SB8_0.0-0.2, SB8_1.0-1.2, SB8_4.0-4.2 | **15-Dec-2023** | **21-Dec-2023** | 12-Jan-2024 | ✓ | **29-Dec-2023** | 12-Jan-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (EK040T)** SB1_0.0-0.2, SB1_1.0-1.2, SB11_0.5-0.7, SB11_2.0-2.2 | **18-Dec-2023** | **21-Dec-2023** | 15-Jan-2024 | ✓ | **29-Dec-2023** | 15-Jan-2024 | ✓ |
| **EP004: Organic Matter** | | | | | | | |
| **Soil Glass Jar - Unpreserved (EP004)** SB4_0.0-0.2, SB4_1.0-1.2 | **12-Dec-2023** | **04-Jan-2024** | 09-Jan-2024 | ✓ | **04-Jan-2024** | 09-Jan-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (EP004)** SB2_2.0-2.2 | **13-Dec-2023** | **04-Jan-2024** | 10-Jan-2024 | ✓ | **04-Jan-2024** | 10-Jan-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (EP004)** SB5_0.0-0.2 | **14-Dec-2023** | **04-Jan-2024** | 11-Jan-2024 | ✓ | **04-Jan-2024** | 11-Jan-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (EP004)** SB5_1.0-1.2, SB9_0.5-0.7 | **14-Dec-2023** | **09-Jan-2024** | 11-Jan-2024 | ✓ | **09-Jan-2024** | 11-Jan-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (EP004)** SB8_0.0-0.2, SB8_1.0-1.2, SB8_4.0-4.2 | **15-Dec-2023** | **09-Jan-2024** | 12-Jan-2024 | ✓ | **09-Jan-2024** | 12-Jan-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (EP004)** SB1_1.0-1.2 | **18-Dec-2023** | **04-Jan-2024** | 15-Jan-2024 | ✓ | **04-Jan-2024** | 15-Jan-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (EP004)** SB11_0.5-0.7, SB11_2.0-2.2 | **18-Dec-2023** | **09-Jan-2024** | 15-Jan-2024 | ✓ | **09-Jan-2024** | 15-Jan-2024 | ✓ |

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

| Method / Container / Client Sample ID(s) | Sample Date | Extraction / Preparation | | | Analysis | | |
|---|---|---|---|---|---|---|---|
| | | Date extracted | Due for extraction | Evaluation | Date analysed | Due for analysis | Evaluation |
| **EP066: Polychlorinated Biphenyls (PCB)** | | | | | | | |
| **Soil Glass Jar - Unpreserved (EP066)**<br>SB4_0.0-0.2, SB4_1.0-1.2 | **12-Dec-2023** | **21-Dec-2023** | 26-Dec-2023 | ✓ | **22-Dec-2023** | 30-Jan-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (EP066)**<br>SB2_0.5-0.7 | **13-Dec-2023** | **21-Dec-2023** | 27-Dec-2023 | ✓ | **21-Dec-2023** | 30-Jan-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (EP066)**<br>SB2_2.0-2.2 | **13-Dec-2023** | **21-Dec-2023** | 27-Dec-2023 | ✓ | **22-Dec-2023** | 30-Jan-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (EP066)**<br>SB3_0.0-0.2, SB3_2.0-2.2,<br>SB5_0.0-0.2, SB5_1.0-1.2,<br>SB9_0.5-0.7 | **14-Dec-2023** | **22-Dec-2023** | 28-Dec-2023 | ✓ | **27-Dec-2023** | 31-Jan-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (EP066)**<br>SB8_0.0-0.2, SB8_1.0-1.2,<br>SB8_4.0-4.2 | **15-Dec-2023** | **22-Dec-2023** | 29-Dec-2023 | ✓ | **22-Dec-2023** | 31-Jan-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (EP066)**<br>SB1_0.0-0.2, SB1_1.0-1.2,<br>SB11_0.5-0.7, SB11_2.0-2.2 | **18-Dec-2023** | **22-Dec-2023** | 01-Jan-2024 | ✓ | **27-Dec-2023** | 31-Jan-2024 | ✓ |
| **EP068A: Organochlorine Pesticides (OC)** | | | | | | | |
| **Soil Glass Jar - Unpreserved (EP068)**<br>SB4_0.0-0.2, SB4_1.0-1.2 | **12-Dec-2023** | **21-Dec-2023** | 26-Dec-2023 | ✓ | **21-Dec-2023** | 30-Jan-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (EP068)**<br>SB2_0.5-0.7, SB2_2.0-2.2 | **13-Dec-2023** | **21-Dec-2023** | 27-Dec-2023 | ✓ | **21-Dec-2023** | 30-Jan-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (EP068)**<br>SB3_0.0-0.2, SB3_2.0-2.2,<br>SB5_0.0-0.2, SB5_1.0-1.2,<br>SB9_0.5-0.7 | **14-Dec-2023** | **22-Dec-2023** | 28-Dec-2023 | ✓ | **28-Dec-2023** | 31-Jan-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (EP068)**<br>SB8_0.0-0.2, SB8_1.0-1.2,<br>SB8_4.0-4.2 | **15-Dec-2023** | **22-Dec-2023** | 29-Dec-2023 | ✓ | **22-Dec-2023** | 31-Jan-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (EP068)**<br>SB1_0.0-0.2, SB1_1.0-1.2,<br>SB11_0.5-0.7, SB11_2.0-2.2 | **18-Dec-2023** | **22-Dec-2023** | 01-Jan-2024 | ✓ | **28-Dec-2023** | 31-Jan-2024 | ✓ |

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

| Method / Container / Client Sample ID(s) | Sample Date | Extraction / Preparation | | | Analysis | | |
|---|---|---|---|---|---|---|---|
| | | Date extracted | Due for extraction | Evaluation | Date analysed | Due for analysis | Evaluation |
| **EP068B: Organophosphorus Pesticides (OP)** | | | | | | | |
| **Soil Glass Jar - Unpreserved (EP068)**<br>SB4_0.0-0.2, SB4_1.0-1.2 | **12-Dec-2023** | **21-Dec-2023** | 26-Dec-2023 | ✓ | **21-Dec-2023** | 30-Jan-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (EP068)**<br>SB2_0.5-0.7, SB2_2.0-2.2 | **13-Dec-2023** | **21-Dec-2023** | 27-Dec-2023 | ✓ | **21-Dec-2023** | 30-Jan-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (EP068)**<br>SB3_0.0-0.2, SB3_2.0-2.2,<br>SB5_0.0-0.2, SB5_1.0-1.2,<br>SB9_0.5-0.7 | **14-Dec-2023** | **22-Dec-2023** | 28-Dec-2023 | ✓ | **28-Dec-2023** | 31-Jan-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (EP068)**<br>SB8_0.0-0.2, SB8_1.0-1.2,<br>SB8_4.0-4.2 | **15-Dec-2023** | **22-Dec-2023** | 29-Dec-2023 | ✓ | **22-Dec-2023** | 31-Jan-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (EP068)**<br>SB1_0.0-0.2, SB1_1.0-1.2,<br>SB11_0.5-0.7, SB11_2.0-2.2 | **18-Dec-2023** | **22-Dec-2023** | 01-Jan-2024 | ✓ | **28-Dec-2023** | 31-Jan-2024 | ✓ |
| **EP075(SIM)A: Phenolic Compounds** | | | | | | | |
| **Soil Glass Jar - Unpreserved (EP075(SIM))**<br>SB4_0.0-0.2, SB4_1.0-1.2 | **12-Dec-2023** | **21-Dec-2023** | 26-Dec-2023 | ✓ | **21-Dec-2023** | 30-Jan-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (EP075(SIM))**<br>SB2_0.5-0.7, SB2_2.0-2.2 | **13-Dec-2023** | **21-Dec-2023** | 27-Dec-2023 | ✓ | **21-Dec-2023** | 30-Jan-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (EP075(SIM))**<br>SB3_0.0-0.2, SB3_2.0-2.2,<br>SB5_0.0-0.2, SB5_1.0-1.2,<br>SB9_0.5-0.7 | **14-Dec-2023** | **22-Dec-2023** | 28-Dec-2023 | ✓ | **28-Dec-2023** | 31-Jan-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (EP075(SIM))**<br>SB8_0.0-0.2, SB8_1.0-1.2,<br>SB8_4.0-4.2 | **15-Dec-2023** | **22-Dec-2023** | 29-Dec-2023 | ✓ | **22-Dec-2023** | 31-Jan-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (EP075(SIM))**<br>SB1_0.0-0.2, SB1_1.0-1.2,<br>SB11_0.5-0.7, SB11_2.0-2.2 | **18-Dec-2023** | **22-Dec-2023** | 01-Jan-2024 | ✓ | **28-Dec-2023** | 31-Jan-2024 | ✓ |

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

| Method / Container / Client Sample ID(s) | Sample Date | Extraction / Preparation | | | Analysis | | |
|---|---|---|---|---|---|---|---|
| | | Date extracted | Due for extraction | Evaluation | Date analysed | Due for analysis | Evaluation |
| **EP075(SIM)B: Polynuclear Aromatic Hydrocarbons** | | | | | | | |
| **Soil Glass Jar - Unpreserved (EP075(SIM))** SB4_0.0-0.2, SB4_1.0-1.2 | **12-Dec-2023** | **21-Dec-2023** | 26-Dec-2023 | ✓ | **21-Dec-2023** | 30-Jan-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (EP075(SIM))** SB2_0.5-0.7, SB2_2.0-2.2 | **13-Dec-2023** | **21-Dec-2023** | 27-Dec-2023 | ✓ | **21-Dec-2023** | 30-Jan-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (EP075(SIM))** SB3_0.0-0.2, SB3_2.0-2.2, SB5_0.0-0.2, SB5_1.0-1.2, SB9_0.5-0.7 | **14-Dec-2023** | **22-Dec-2023** | 28-Dec-2023 | ✓ | **28-Dec-2023** | 31-Jan-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (EP075(SIM))** SB8_0.0-0.2, SB8_1.0-1.2, SB8_4.0-4.2 | **15-Dec-2023** | **22-Dec-2023** | 29-Dec-2023 | ✓ | **22-Dec-2023** | 31-Jan-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (EP075(SIM))** SB1_0.0-0.2, SB1_1.0-1.2, SB11_0.5-0.7, SB11_2.0-2.2 | **18-Dec-2023** | **22-Dec-2023** | 01-Jan-2024 | ✓ | **28-Dec-2023** | 31-Jan-2024 | ✓ |
| **EP080/071: Total Petroleum Hydrocarbons** | | | | | | | |
| **Soil Glass Jar - Unpreserved (EP080)** SB4_0.0-0.2, SB4_1.0-1.2 | **12-Dec-2023** | **20-Dec-2023** | 26-Dec-2023 | ✓ | **21-Dec-2023** | 26-Dec-2023 | ✓ |
| **Soil Glass Jar - Unpreserved (EP071)** SB4_0.0-0.2, SB4_1.0-1.2 | **12-Dec-2023** | **21-Dec-2023** | 26-Dec-2023 | ✓ | **21-Dec-2023** | 30-Jan-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (EP080)** SB2_0.5-0.7, SB2_2.0-2.2 | **13-Dec-2023** | **20-Dec-2023** | 27-Dec-2023 | ✓ | **21-Dec-2023** | 27-Dec-2023 | ✓ |
| **Soil Glass Jar - Unpreserved (EP071)** SB2_0.5-0.7, SB2_2.0-2.2 | **13-Dec-2023** | **21-Dec-2023** | 27-Dec-2023 | ✓ | **21-Dec-2023** | 30-Jan-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (EP080)** SB3_0.0-0.2, SB3_2.0-2.2, SB5_0.0-0.2, SB5_1.0-1.2, SB9_0.5-0.7 | **14-Dec-2023** | **20-Dec-2023** | 28-Dec-2023 | ✓ | **21-Dec-2023** | 28-Dec-2023 | ✓ |
| **Soil Glass Jar - Unpreserved (EP071)** SB3_0.0-0.2, SB3_2.0-2.2, SB5_0.0-0.2, SB5_1.0-1.2, SB9_0.5-0.7 | **14-Dec-2023** | **22-Dec-2023** | 28-Dec-2023 | ✓ | **28-Dec-2023** | 31-Jan-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (EP080)** SB8_0.0-0.2, SB8_1.0-1.2, SB8_4.0-4.2 | **15-Dec-2023** | **20-Dec-2023** | 29-Dec-2023 | ✓ | **21-Dec-2023** | 29-Dec-2023 | ✓ |
| **Soil Glass Jar - Unpreserved (EP071)** SB8_0.0-0.2, SB8_1.0-1.2, SB8_4.0-4.2 | **15-Dec-2023** | **22-Dec-2023** | 29-Dec-2023 | ✓ | **22-Dec-2023** | 31-Jan-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (EP080)** SB1_0.0-0.2, SB1_1.0-1.2, SB11_0.5-0.7, SB11_2.0-2.2 | **18-Dec-2023** | **20-Dec-2023** | 01-Jan-2024 | ✓ | **21-Dec-2023** | 01-Jan-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (EP071)** SB1_0.0-0.2, SB1_1.0-1.2, SB11_0.5-0.7, SB11_2.0-2.2 | **18-Dec-2023** | **22-Dec-2023** | 01-Jan-2024 | ✓ | **28-Dec-2023** | 31-Jan-2024 | ✓ |

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

| Method / Container / Client Sample ID(s) | | Sample Date | Extraction / Preparation | | | Analysis | | |
|---|---|---|---|---|---|---|---|---|
| | | | Date extracted | Due for extraction | Evaluation | Date analysed | Due for analysis | Evaluation |
| **EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions** | | | | | | | | |
| **Soil Glass Jar - Unpreserved (EP080)** | | | | | | | | |
| SB4_0.0-0.2, | SB4_1.0-1.2 | **12-Dec-2023** | **20-Dec-2023** | 26-Dec-2023 | ✓ | **21-Dec-2023** | 26-Dec-2023 | ✓ |
| **Soil Glass Jar - Unpreserved (EP071)** | | | | | | | | |
| SB4_0.0-0.2, | SB4_1.0-1.2 | **12-Dec-2023** | **21-Dec-2023** | 26-Dec-2023 | ✓ | **21-Dec-2023** | 30-Jan-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (EP080)** | | | | | | | | |
| SB2_0.5-0.7, | SB2_2.0-2.2 | **13-Dec-2023** | **20-Dec-2023** | 27-Dec-2023 | ✓ | **21-Dec-2023** | 27-Dec-2023 | ✓ |
| **Soil Glass Jar - Unpreserved (EP071)** | | | | | | | | |
| SB2_0.5-0.7, | SB2_2.0-2.2 | **13-Dec-2023** | **21-Dec-2023** | 27-Dec-2023 | ✓ | **21-Dec-2023** | 30-Jan-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (EP080)** | | | | | | | | |
| SB3_0.0-0.2, SB5_0.0-0.2, SB9_0.5-0.7 | SB3_2.0-2.2, SB5_1.0-1.2, | **14-Dec-2023** | **20-Dec-2023** | 28-Dec-2023 | ✓ | **21-Dec-2023** | 28-Dec-2023 | ✓ |
| **Soil Glass Jar - Unpreserved (EP071)** | | | | | | | | |
| SB3_0.0-0.2, SB5_0.0-0.2, SB9_0.5-0.7 | SB3_2.0-2.2, SB5_1.0-1.2, | **14-Dec-2023** | **22-Dec-2023** | 28-Dec-2023 | ✓ | **28-Dec-2023** | 31-Jan-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (EP080)** | | | | | | | | |
| SB8_0.0-0.2, SB8_4.0-4.2 | SB8_1.0-1.2, | **15-Dec-2023** | **20-Dec-2023** | 29-Dec-2023 | ✓ | **21-Dec-2023** | 29-Dec-2023 | ✓ |
| **Soil Glass Jar - Unpreserved (EP071)** | | | | | | | | |
| SB8_0.0-0.2, SB8_4.0-4.2 | SB8_1.0-1.2, | **15-Dec-2023** | **22-Dec-2023** | 29-Dec-2023 | ✓ | **22-Dec-2023** | 31-Jan-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (EP080)** | | | | | | | | |
| SB1_0.0-0.2, SB11_0.5-0.7, | SB1_1.0-1.2, SB11_2.0-2.2 | **18-Dec-2023** | **20-Dec-2023** | 01-Jan-2024 | ✓ | **21-Dec-2023** | 01-Jan-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (EP071)** | | | | | | | | |
| SB1_0.0-0.2, SB11_0.5-0.7, | SB1_1.0-1.2, SB11_2.0-2.2 | **18-Dec-2023** | **22-Dec-2023** | 01-Jan-2024 | ✓ | **28-Dec-2023** | 31-Jan-2024 | ✓ |
| **EP080: BTEXN** | | | | | | | | |
| **Soil Glass Jar - Unpreserved (EP080)** | | | | | | | | |
| SB4_0.0-0.2, | SB4_1.0-1.2 | **12-Dec-2023** | **20-Dec-2023** | 26-Dec-2023 | ✓ | **21-Dec-2023** | 26-Dec-2023 | ✓ |
| **Soil Glass Jar - Unpreserved (EP080)** | | | | | | | | |
| SB2_0.5-0.7, | SB2_2.0-2.2 | **13-Dec-2023** | **20-Dec-2023** | 27-Dec-2023 | ✓ | **21-Dec-2023** | 27-Dec-2023 | ✓ |
| **Soil Glass Jar - Unpreserved (EP080)** | | | | | | | | |
| SB3_0.0-0.2, SB5_0.0-0.2, SB9_0.5-0.7 | SB3_2.0-2.2, SB5_1.0-1.2, | **14-Dec-2023** | **20-Dec-2023** | 28-Dec-2023 | ✓ | **21-Dec-2023** | 28-Dec-2023 | ✓ |
| **Soil Glass Jar - Unpreserved (EP080)** | | | | | | | | |
| SB8_0.0-0.2, SB8_4.0-4.2 | SB8_1.0-1.2, | **15-Dec-2023** | **20-Dec-2023** | 29-Dec-2023 | ✓ | **21-Dec-2023** | 29-Dec-2023 | ✓ |
| **Soil Glass Jar - Unpreserved (EP080)** | | | | | | | | |
| SB1_0.0-0.2, SB11_0.5-0.7, | SB1_1.0-1.2, SB11_2.0-2.2 | **18-Dec-2023** | **20-Dec-2023** | 01-Jan-2024 | ✓ | **21-Dec-2023** | 01-Jan-2024 | ✓ |

Matrix: **WATER**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

| Method / Container / Client Sample ID(s) | Sample Date | Extraction / Preparation | | | Analysis | | |
|---|---|---|---|---|---|---|---|
| | | Date extracted | Due for extraction | Evaluation | Date analysed | Due for analysis | Evaluation |
| **EG020F: Dissolved Metals by ICP-MS** | | | | | | | |
| **Clear Plastic Bottle - Nitric Acid; Filtered (EG020A-F)** QC1, QC3 | **12-Dec-2023** | **----** | ---- | **----** | **05-Jan-2024** | 09-Jun-2024 | ✓ |
| **Clear Plastic Bottle - Nitric Acid; Filtered (EG020A-F)** QC2, QC4 | **13-Dec-2023** | **----** | ---- | **----** | **05-Jan-2024** | 10-Jun-2024 | ✓ |
| **Clear Plastic Bottle - Nitric Acid; Filtered (EG020A-F)** QC5 | **16-Dec-2023** | **----** | ---- | **----** | **05-Jan-2024** | 13-Jun-2024 | ✓ |
| **EG035F: Dissolved Mercury by FIMS** | | | | | | | |
| **Clear Plastic Bottle - Nitric Acid; Filtered (EG035F)** QC1, QC3 | **12-Dec-2023** | **----** | ---- | **----** | **05-Jan-2024** | 09-Jan-2024 | ✓ |
| **Clear Plastic Bottle - Nitric Acid; Filtered (EG035F)** QC2, QC4 | **13-Dec-2023** | **----** | ---- | **----** | **05-Jan-2024** | 10-Jan-2024 | ✓ |
| **Clear Plastic Bottle - Nitric Acid; Filtered (EG035F)** QC5 | **16-Dec-2023** | **----** | ---- | **----** | **05-Jan-2024** | 13-Jan-2024 | ✓ |
| **EP080/071: Total Petroleum Hydrocarbons** | | | | | | | |
| **Amber VOC Vial - Sulfuric Acid (EP080)** QC8 | **16-Dec-2023** | **20-Dec-2023** | 30-Dec-2023 | ✓ | **22-Dec-2023** | 30-Dec-2023 | ✓ |
| **EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions** | | | | | | | |
| **Amber VOC Vial - Sulfuric Acid (EP080)** QC8 | **16-Dec-2023** | **20-Dec-2023** | 30-Dec-2023 | ✓ | **22-Dec-2023** | 30-Dec-2023 | ✓ |
| **EP080: BTEXN** | | | | | | | |
| **Amber VOC Vial - Sulfuric Acid (EP080)** QC8 | **16-Dec-2023** | **20-Dec-2023** | 30-Dec-2023 | ✓ | **22-Dec-2023** | 30-Dec-2023 | ✓ |

# Quality Control Parameter Frequency Compliance

The following report summarises the frequency of laboratory QC samples analysed within the analytical lot(s) in which the submitted sample(s) was(were) processed. Actual rate should be greater than or equal to the expected rate. A listing of breaches is provided in the Summary of Outliers.

Matrix: **SOIL**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

| Quality Control Sample Type | | Count | | Rate (%) | | | Quality Control Specification |
|---|---|---|---|---|---|---|---|
| *Analytical Methods* | *Method* | *QC* | *Regular* | ***Actual*** | ***Expected*** | *Evaluation* | |
| **Laboratory Duplicates (DUP)** | | | | | | | |
| Electrical Conductivity (1:5) on 40°C dried soil | EA010-AD | 2 | 18 | **11.11** | **10.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Exchangeable Cations | ED007 | 1 | 5 | **20.00** | **10.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Exchangeable Cations on Alkaline Soils | ED006 | 2 | 13 | **15.38** | **10.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Moisture Content | EA055 | 3 | 21 | **14.29** | **10.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Organic Matter | EP004 | 3 | 27 | **11.11** | **10.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| PAH/Phenols (SIM) | EP075(SIM) | 7 | 53 | **13.21** | **10.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Pesticides by GCMS | EP068 | 6 | 42 | **14.29** | **10.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| pH (1:5) on 40°C dried soil | EA002-AD | 2 | 18 | **11.11** | **10.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| pH in soil using a 0.01M CaCl2 extract | EA001 | 4 | 27 | **14.81** | **10.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Polychlorinated Biphenyls (PCB) | EP066 | 5 | 34 | **14.71** | **10.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Total Cyanide by Segmented Flow Analyser | EK026SF | 6 | 42 | **14.29** | **10.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Total Fluoride | EK040T | 3 | 25 | **12.00** | **10.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Total Mercury by FIMS | EG035T | 4 | 40 | **10.00** | **10.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Total Metals by ICP-AES | EG005T | 4 | 40 | **10.00** | **10.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| TRH - Semivolatile Fraction | EP071 | 7 | 43 | **16.28** | **10.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| TRH Volatiles/BTEX | EP080 | 2 | 16 | **12.50** | **10.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| **Laboratory Control Samples (LCS)** | | | | | | | |
| Electrical Conductivity (1:5) on 40°C dried soil | EA010-AD | 1 | 18 | **5.56** | **5.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Exchangeable Cations | ED007 | 1 | 5 | **20.00** | **5.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Exchangeable Cations on Alkaline Soils | ED006 | 1 | 13 | **7.69** | **5.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Organic Matter | EP004 | 2 | 27 | **7.41** | **5.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| PAH/Phenols (SIM) | EP075(SIM) | 4 | 53 | **7.55** | **5.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Pesticides by GCMS | EP068 | 4 | 42 | **9.52** | **5.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| pH (1:5) on 40°C dried soil | EA002-AD | 2 | 18 | **11.11** | **10.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| pH in soil using a 0.01M CaCl2 extract | EA001 | 6 | 27 | **22.22** | **10.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Polychlorinated Biphenyls (PCB) | EP066 | 4 | 34 | **11.76** | **5.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Total Cyanide by Segmented Flow Analyser | EK026SF | 4 | 42 | **9.52** | **5.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Total Fluoride | EK040T | 2 | 25 | **8.00** | **5.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Total Mercury by FIMS | EG035T | 2 | 40 | **5.00** | **5.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Total Metals by ICP-AES | EG005T | 2 | 40 | **5.00** | **5.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| TRH - Semivolatile Fraction | EP071 | 4 | 43 | **9.30** | **5.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| TRH Volatiles/BTEX | EP080 | 1 | 16 | **6.25** | **5.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| **Method Blanks (MB)** | | | | | | | |
| Electrical Conductivity (1:5) on 40°C dried soil | EA010-AD | 1 | 18 | **5.56** | **5.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Exchangeable Cations | ED007 | 1 | 5 | **20.00** | **5.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Exchangeable Cations on Alkaline Soils | ED006 | 1 | 13 | **7.69** | **5.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |

Matrix: **SOIL**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

| Quality Control Sample Type | | Count | | Rate (%) | | | Quality Control Specification |
|---|---|---|---|---|---|---|---|
| Analytical Methods | Method | QC | Regular | Actual | Expected | Evaluation | |
| **Method Blanks (MB) - Continued** | | | | | | | |
| Organic Matter | EP004 | 2 | 27 | 7.41 | 5.00 | ✓ | NEPM 2013 B3 & ALS QC Standard |
| PAH/Phenols (SIM) | EP075(SIM) | 4 | 53 | 7.55 | 5.00 | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Pesticides by GCMS | EP068 | 4 | 42 | 9.52 | 5.00 | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Polychlorinated Biphenyls (PCB) | EP066 | 4 | 34 | 11.76 | 5.00 | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Total Cyanide by Segmented Flow Analyser | EK026SF | 4 | 42 | 9.52 | 5.00 | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Total Fluoride | EK040T | 2 | 25 | 8.00 | 5.00 | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Total Mercury by FIMS | EG035T | 2 | 40 | 5.00 | 5.00 | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Total Metals by ICP-AES | EG005T | 2 | 40 | 5.00 | 5.00 | ✓ | NEPM 2013 B3 & ALS QC Standard |
| TRH - Semivolatile Fraction | EP071 | 4 | 43 | 9.30 | 5.00 | ✓ | NEPM 2013 B3 & ALS QC Standard |
| TRH Volatiles/BTEX | EP080 | 1 | 16 | 6.25 | 5.00 | ✓ | NEPM 2013 B3 & ALS QC Standard |
| **Matrix Spikes (MS)** | | | | | | | |
| Organic Matter | EP004 | 2 | 27 | 7.41 | 5.00 | ✓ | NEPM 2013 B3 & ALS QC Standard |
| PAH/Phenols (SIM) | EP075(SIM) | 4 | 53 | 7.55 | 5.00 | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Pesticides by GCMS | EP068 | 4 | 42 | 9.52 | 5.00 | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Polychlorinated Biphenyls (PCB) | EP066 | 4 | 34 | 11.76 | 5.00 | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Total Cyanide by Segmented Flow Analyser | EK026SF | 4 | 42 | 9.52 | 5.00 | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Total Fluoride | EK040T | 2 | 25 | 8.00 | 5.00 | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Total Mercury by FIMS | EG035T | 2 | 40 | 5.00 | 5.00 | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Total Metals by ICP-AES | EG005T | 2 | 40 | 5.00 | 5.00 | ✓ | NEPM 2013 B3 & ALS QC Standard |
| TRH - Semivolatile Fraction | EP071 | 4 | 43 | 9.30 | 5.00 | ✓ | NEPM 2013 B3 & ALS QC Standard |
| TRH Volatiles/BTEX | EP080 | 1 | 16 | 6.25 | 5.00 | ✓ | NEPM 2013 B3 & ALS QC Standard |

Matrix: **WATER**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

| Quality Control Sample Type | | Count | | Rate (%) | | | Quality Control Specification |
|---|---|---|---|---|---|---|---|
| Analytical Methods | Method | QC | Regular | Actual | Expected | Evaluation | |
| **Laboratory Duplicates (DUP)** | | | | | | | |
| Dissolved Mercury by FIMS | EG035F | 1 | 7 | 14.29 | 10.00 | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Dissolved Metals by ICP-MS - Suite A | EG020A-F | 2 | 20 | 10.00 | 10.00 | ✓ | NEPM 2013 B3 & ALS QC Standard |
| TRH Volatiles/BTEX | EP080 | 2 | 19 | 10.53 | 10.00 | ✓ | NEPM 2013 B3 & ALS QC Standard |
| **Laboratory Control Samples (LCS)** | | | | | | | |
| Dissolved Mercury by FIMS | EG035F | 1 | 7 | 14.29 | 5.00 | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Dissolved Metals by ICP-MS - Suite A | EG020A-F | 1 | 20 | 5.00 | 5.00 | ✓ | NEPM 2013 B3 & ALS QC Standard |
| TRH Volatiles/BTEX | EP080 | 1 | 19 | 5.26 | 5.00 | ✓ | NEPM 2013 B3 & ALS QC Standard |
| **Method Blanks (MB)** | | | | | | | |
| Dissolved Mercury by FIMS | EG035F | 1 | 7 | 14.29 | 5.00 | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Dissolved Metals by ICP-MS - Suite A | EG020A-F | 1 | 20 | 5.00 | 5.00 | ✓ | NEPM 2013 B3 & ALS QC Standard |
| TRH Volatiles/BTEX | EP080 | 1 | 19 | 5.26 | 5.00 | ✓ | NEPM 2013 B3 & ALS QC Standard |
| **Matrix Spikes (MS)** | | | | | | | |
| Dissolved Mercury by FIMS | EG035F | 1 | 7 | 14.29 | 5.00 | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Dissolved Metals by ICP-MS - Suite A | EG020A-F | 1 | 20 | 5.00 | 5.00 | ✓ | NEPM 2013 B3 & ALS QC Standard |

Matrix: **WATER**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

| Quality Control Sample Type | | Count | | Rate (%) | | | Quality Control Specification |
|---|---|---|---|---|---|---|---|
| *Analytical Methods* | *Method* | *QC* | *Regular* | ***Actual*** | ***Expected*** | *Evaluation* | |
| Matrix Spikes (MS) - Continued | | | | | | | |
| TRH Volatiles/BTEX | EP080 | 1 | 19 | **5.26** | **5.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |

## Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided within the Method Descriptions.

| Analytical Methods | Method | Matrix | Method Descriptions |
|---|---|---|---|
| pH in soil using a 0.01M CaCl2 extract | EA001 | SOIL | In house: Referenced to Rayment and Lyons 4B3 (mod.) or 4B4 (mod.) 10 g of soil is mixed with 50 mL of 0.01M CaCl2 and tumbled end over end for 1 hour. pH is measured from the continuous suspension. This method is compliant with NEPM Schedule B(3). |
| pH (1:5) on 40°C dried soil | EA002-AD | SOIL | In house: Referenced to Rayment and Lyons 4A1 and APHA 4500H+. pH is determined on 40°C dried soil after a 1:5 soil/water leach. This method is compliant with NEPM Schedule B(3) |
| Electrical Conductivity (1:5) on 40°C dried soil | EA010-AD | SOIL | In house: Referenced to Rayment and Lyons 3A1 and APHA 2510. Conductivity is determined on soil samples dried at 40°C using a 1:5 soil/water leach. This method is compliant with NEPM Schedule B(3). |
| Moisture Content | EA055 | SOIL | In house: A gravimetric procedure based on weight loss over a 12 hour drying period at 105-110 degrees C. This method is compliant with NEPM Schedule B(3). |
| Particle Size Analysis by Hydrometer | EA150H | SOIL | Particle Size Analysis by Hydrometer according to AS1289.3.6.3 |
| Soil Particle Density | EA152 | SOIL | Soil Particle Density by AS 1289.3.5.1: Methods of testing soils for engineering purposes - Soil classification tests - Determination of the soil particle density of a soil - Standard method |
| Asbestos Identification in Soils | EA200 | SOIL | AS 4964 Method for the qualitative identification of asbestos in bulk samples Analysis by Polarised Light Microscopy including dispersion staining |
| Exchangeable Cations on Alkaline Soils | * ED006 | SOIL | In house: Referenced to Soil Survey Test Method C5. Soluble salts are removed from the sample prior to analysis. Cations are exchanged from the sample by contact with alcoholic ammonium chloride at pH 8.5. They are then quantitated in the final solution by ICPAES and reported as meq/100g of original soil. |
| Exchangeable Cations | ED007 | SOIL | In house: Referenced to Rayment & Lyons Method 15A1. Cations are exchanged from the sample by contact with Ammonium Chloride. They are then quantitated in the final solution by ICPAES and reported as meq/100g of original soil. This method is compliant with NEPM Schedule B(3). |
| Exchangeable Cations with pre-treatment | ED008 | SOIL | In house: Referenced to Rayment & Lyons Method 15A2. Soluble salts are removed from the sample prior to analysis. Cations are exchanged from the sample by contact with Ammonium Chloride. They are then quantitated in the final solution by ICPAES and reported as meq/100g of original soil. This method is compliant with NEPM Schedule B(3). |
| Total Metals by ICP-AES | EG005T | SOIL | In house: Referenced to APHA 3120; USEPA SW 846 - 6010. Metals are determined following an appropriate acid digestion of the soil. The ICPAES technique ionises samples in a plasma, emitting a characteristic spectrum based on metals present. Intensities at selected wavelengths are compared against those of matrix matched standards. This method is compliant with NEPM Schedule B(3) |
| Total Mercury by FIMS | EG035T | SOIL | In house: Referenced to APHA 3112 Hg - B (Flow-injection (SnCl2) (Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. Mercury in solids are determined following an appropriate acid digestion. Ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3) |

| Analytical Methods | Method | Matrix | Method Descriptions |
|---|---|---|---|
| Total Cyanide by Segmented Flow Analyser | EK026SF | SOIL | In house: Referenced to APHA 4500-CN C / ASTM D7511 / ISO 14403. Caustic leachates of soil samples are introduced into an automated segmented flow analyser. Complex bound cyanide is decomposed in a continuously flowing stream, at a pH of 3.8, by the effect of UV light. A UV-B lamp (312 nm) and a decomposition spiral of borosilicate glass are used to filter out UV light with a wavelength of less than 290 nm thus preventing the conversion of thiocyanate into cyanide. The hydrogen cyanide present at a pH of 3.8 is separated by gas dialysis. The hydrogen cyanide is then determined photometrically, based on the reaction of cyanide with chloramine-T to form cyanogen chloride. This then reacts with 4-pyridine carboxylic acid and 1,3-dimethylbarbituric acid to give a red colour which is measured at 600 nm. This method is compliant with NEPM Schedule B(3). |
| Total Fluoride | EK040T | SOIL | (In-house) Total fluoride is determined by ion specific electrode (ISE) in a solution obtained after a Sodium Carbonate / Potassium Carbonate fusion dissolution. |
| Organic Matter | EP004 | SOIL | In house: Referenced to AS1289.4.1.1. Dichromate oxidation method after Walkley and Black. This method is compliant with NEPM Schedule B(3) |
| Polychlorinated Biphenyls (PCB) | EP066 | SOIL | In house: Referenced to USEPA SW 846 - 8270 Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM Schedule B(3). |
| Pesticides by GCMS | EP068 | SOIL | In house: Referenced to USEPA SW 846 - 8270 Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This technique is compliant with NEPM Schedule B(3). |
| TRH - Semivolatile Fraction | EP071 | SOIL | In house: Referenced to USEPA SW 846 - 8015 Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C10 - C40. Compliant with NEPM Schedule B(3). |
| PAH/Phenols (SIM) | EP075(SIM) | SOIL | In house: Referenced to USEPA SW 846 - 8270. Extracts are analysed by Capillary GC/MS in Selective Ion Mode (SIM) and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM Schedule B(3) |
| TRH Volatiles/BTEX | EP080 | SOIL | In house: Referenced to USEPA SW 846 - 8260. Extracts are analysed by Purge and Trap, Capillary GC/MS. Quantification is by comparison against an established 5 point calibration curve. Compliant with NEPM Schedule B(3) amended. |
| Dissolved Metals by ICP-MS - Suite A | EG020A-F | WATER | In house: Referenced to APHA 3125; USEPA SW846 - 6020, ALS QWI-EN/EG020. Samples are 0.45µm filtered prior to analysis. The ICPMS technique utilizes a highly efficient argon plasma to ionize selected elements. Ions are then passed into a high vacuum mass spectrometer, which separates the analytes based on their distinct mass to charge ratios prior to their measurement by a discrete dynode ion detector. |
| Dissolved Mercury by FIMS | EG035F | WATER | In house: Referenced to APHA 3112 Hg - B (Flow-injection (SnCl2)(Cold Vapour generation) AAS) Samples are 0.45µm filtered prior to analysis. FIM-AAS is an automated flameless atomic absorption technique. A bromate/bromide reagent is used to oxidise any organic mercury compounds in the filtered sample. The ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3). |
| TRH Volatiles/BTEX | EP080 | WATER | In house: Referenced to USEPA SW 846 - 8260 Water samples are directly purged prior to analysis by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. Alternatively, a sample is equilibrated in a headspace vial and a portion of the headspace determined by GCMS analysis. This method is compliant with the QC requirements of NEPM Schedule B(3) |

| Preparation Methods | Method | Matrix | Method Descriptions |
|---|---|---|---|
| NaOH leach for CN in Soils | CN-PR | SOIL | In house: APHA 4500 CN. Samples are extracted by end-over-end tumbling with NaOH. |
| pH in soil using a 0.01M CaCl2 extract | EA001-PR | SOIL | In house: Referenced to Rayment and Lyons 4B1, 10 g of soil is mixed with 50 mL of 0.01M CaCl2 and tumbled end over end for 1 hour. pH is measured from the continuous suspension. This method is compliant with NEPM Schedule B(3). |
| Exchangeable Cations Preparation Method (Alkaline Soils) | * ED006PR | SOIL | In house: Referenced to Rayment and Lyons method 15C1. |
| Exchangeable Cations Preparation Method | ED007PR | SOIL | In house: Referenced to Rayment & Lyons method 15A1. A 1M NH4Cl extraction by end over end tumbling at a ratio of 1:20. There is no pretreatment for soluble salts. Extracts can be run by ICP for cations. |
| Total Fluoride | EK040T-PR | SOIL | In house: Samples are fused with Sodium Carbonate / Potassium Carbonate flux. |
| 1:5 solid / water leach following drying at 40°C | EN34-AD | SOIL | 10 g of 40°C dried soil is mixed with 50 mL of reagent grade water and tumbled end over end for 1 hour. Water soluble salts are leached from the soil by the continuous suspension. Samples are settled and the water filtered off for analysis. |
| Hot Block Digest for metals in soils sediments and sludges | EN69 | SOIL | In house: Referenced to USEPA 200.2. Hot Block Acid Digestion 1.0g of sample is heated with Nitric and Hydrochloric acids, then cooled. Peroxide is added and samples heated and cooled again before being filtered and bulked to volume for analysis. Digest is appropriate for determination of selected metals in sludge, sediments, and soils. This method is compliant with NEPM Schedule B(3). |
| Organic Matter | EP004-PR | SOIL | In house: Referenced to AS1289.4.1.1. Dichromate oxidation method after Walkley and Black. This method is compliant with NEPM Schedule B(3). |
| Methanolic Extraction of Soils for Purge and Trap | ORG16 | SOIL | In house: Referenced to USEPA SW 846 - 5030A. 5g of solid is shaken with surrogate and 10mL methanol prior to analysis by Purge and Trap - GC/MS. |
| Tumbler Extraction of Solids | ORG17 | SOIL | In house: Mechanical agitation (tumbler). 10g of sample, Na2SO4 and surrogate are extracted with 30mL 1:1 DCM/Acetone by end over end tumble. The solvent is decanted, dehydrated and concentrated (by KD) to the desired volume for analysis. |
| Volatiles Water Preparation | ORG16-W | WATER | A 5 mL aliquot or 5 mL of a diluted sample is added to a 40 mL VOC vial for purging. |

# SAMPLE RECEIPT NOTIFICATION (SRN)

**Work Order** : **EM2322709**

| | | | |
|---|---|---|---|
| Client | : **Jones Environmental** | Laboratory | : Environmental Division Melbourne |
| Contact | : PATRICIA JONES | Contact | : Hannah White |
| Address | : 497 Parnall Street<br>Lavington Lavington 2641 | Address | : 4 Westall Rd Springvale VIC Australia 3171 |
| E-mail | : patricia@jonesenvironmental.net | E-mail | : Hannah.White@alsglobal.com |
| Telephone | : ---- | Telephone | : +61-3-8549 9600 |
| Facsimile | : ---- | Facsimile | : +61-3-8549 9626 |
| Project | : JE10388 | Page | : 1 of 5 |
| Order number | : ---- | Quote number | : EM2017JONENV0002 (EN/222) |
| C-O-C number | : ---- | QC Level | : NEPM 2013 B3 & ALS QC Standard |
| Site | : ---- | | |
| Sampler | : RUSSELL JONES | | |

## Dates

| | | | |
|---|---|---|---|
| Date Samples Received | : 19-Dec-2023 12:50 | Issue Date | : 20-Dec-2023 |
| Client Requested Due Date | : 08-Jan-2024 | Scheduled Reporting Date | : **08-Jan-2024** |

## Delivery Details

| | | | |
|---|---|---|---|
| Mode of Delivery | : Carrier | Security Seal | : Not Available |
| No. of coolers/boxes | : 3 | Temperature | : 12°c - Ice Bricks present |
| Receipt Detail | : | No. of samples received / analysed | : 62 / 22 |

## General Comments

- This report contains the following information:
  - Sample Container(s)/Preservation Non-Compliances
  - Summary of Sample(s) and Requested Analysis
  - Proactive Holding Time Report
  - Requested Deliverables
- **Please direct any queries related to sample condition / numbering / breakages to Client Services.**
- Sample Disposal - Aqueous (3 weeks), Solid (2 months) from receipt of samples.
- **Analytical work for this work order will be conducted at ALS Springvale, ALS Sydney and ALS Newcastle.**
- **Please refer to the Proactive Holding Time Report table below which summarises breaches of recommended holding times that have occurred prior to samples/instructions being received at the laboratory. The laboratory will process these samples unless instructions are received from you indicating you do not wish to proceed. The absence of this summary table indicates that all samples have been received within the recommended holding times for the analysis requested.**
- A sampling ID discrepancy has been noted on the COC. Please inform ALS if changes are to be made to the SRN.
- An additional water sample, QC5 has been received and added to the WO as #062. The sample will be kept on hold pending further instructions.
- Please be aware that APHA/NEPM recommends water and soil samples be chilled to less than or equal to 6°C for chemical analysis, and less than or equal to 10°C but unfrozen for Microbiological analysis. Where samples are received above this temperature, it should be taken into consideration when interpreting results. Refer to ALS EnviroMail 85 for ALS recommendations of the best practice for chilling samples after sampling and for maintaining a cool temperature during transit.

## Sample Container(s)/Preservation Non-Compliances

All comparisons are made against pretreatment/preservation AS, APHA, USEPA standards.

- **No sample container / preservation non-compliance exists.**

## Summary of Sample(s) and Requested Analysis

Some items described below may be part of a laboratory process necessary for the execution of client requested tasks. Packages may contain additional analyses, such as the determination of moisture content and preparation tasks, that are included in the package.
If no sampling time is provided, the sampling time will default 00:00 on the date of sampling. If no sampling date is provided, the sampling date will be assumed by the laboratory and displayed in brackets without a time component

Matrix: **SOIL**

| Laboratory sample ID | Sampling date / time | Sample ID | SOIL - EA055-103 Moisture Content | SOIL - EK026SF (Solids) Total Cyanide By Segmented Flow Analyser | SOIL - EK040T Total Fluoride | SOIL - EP066 (solids) Polychlorinated Biphenyls by GCMS | SOIL - S-03 15 Metals (NEPM 2013 Suite - incl. Digestion) | SOIL - S-12 OC/OP Pesticides | SOIL - S-24 TRH/BTEXN/PAH + Phenols |
|---|---|---|---|---|---|---|---|---|---|
| EM2322709-001 | 18-Dec-2023 00:00 | SB1_0.0-0.2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| EM2322709-003 | 18-Dec-2023 00:00 | SB1_1.0-1.2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| EM2322709-009 | 13-Dec-2023 00:00 | SB2_0.5-0.7 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| EM2322709-011 | 13-Dec-2023 00:00 | SB2_2.0-2.2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| EM2322709-020 | 14-Dec-2023 00:00 | SB3_0.0-0.2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| EM2322709-023 | 14-Dec-2023 00:00 | SB3_2.0-2.2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| EM2322709-025 | 12-Dec-2023 00:00 | SB4_0.0-0.2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| EM2322709-027 | 12-Dec-2023 00:00 | SB4_1.0-1.2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| EM2322709-028 | 14-Dec-2023 00:00 | SB5_0.0-0.2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| EM2322709-030 | 14-Dec-2023 00:00 | SB5_1.0-1.2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| EM2322709-032 | 15-Dec-2023 00:00 | SB8_0.0-0.2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| EM2322709-034 | 15-Dec-2023 00:00 | SB8_1.0-1.2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| EM2322709-037 | 15-Dec-2023 00:00 | SB8_4.0-4.2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| EM2322709-043 | 14-Dec-2023 00:00 | SB9_0.5-0.7 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| EM2322709-045 | 18-Dec-2023 00:00 | SB11_0.5-0.7 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| EM2322709-047 | 18-Dec-2023 00:00 | SB11_2.0-2.2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

Matrix: **SOIL**

| Laboratory sample ID | Sampling date / time | Sample ID | (On Hold) SOIL No analysis requested | SOIL - EA200 Asbestos Identification in Soils - | SOIL - P-22 (Melb) minus PSD Soil Characterisation Suite (minus PSD) | SOIL - P-22 (Melb) Soil Characterisation Package |
|---|---|---|---|---|---|---|
| EM2322709-001 | 18-Dec-2023 00:00 | SB1_0.0-0.2 | | ✓ | | |
| EM2322709-002 | 18-Dec-2023 00:00 | SB1_0.5-0.7 | ✓ | | | |
| EM2322709-003 | 18-Dec-2023 00:00 | SB1_1.0-1.2 | | | ✓ | |
| EM2322709-004 | 18-Dec-2023 00:00 | SB1_2.0-2.2 | ✓ | | | |
| EM2322709-005 | 18-Dec-2023 00:00 | SB1_3.0-3.2 | ✓ | | | |
| EM2322709-006 | 18-Dec-2023 00:00 | SB1_4.0-4.2 | ✓ | | | |
| EM2322709-007 | 18-Dec-2023 00:00 | SB1_5.0-5.2 | ✓ | | | |
| EM2322709-008 | 13-Dec-2023 00:00 | SB2_0.0-0.2 | ✓ | | | |

| | | | (On Hold) SOIL<br>No analysis requested | SOIL - EA200<br>Asbestos Identification in Soils - | SOIL - P-22 (Melb) minus PSD<br>Soil Characterisation Suite (minus PSD) | SOIL - P-22 (Melb)<br>Soil Characterisation Package |
|---|---|---|---|---|---|---|
| EM2322709-009 | 13-Dec-2023 00:00 | SB2_0.5-0.7 | | ✓ | | |
| EM2322709-010 | 13-Dec-2023 00:00 | SB2_1.0-1.2 | ✓ | | | |
| EM2322709-011 | 13-Dec-2023 00:00 | SB2_2.0-2.2 | | | ✓ | |
| EM2322709-012 | 13-Dec-2023 00:00 | SB2_3.0-3.2 | ✓ | | | |
| EM2322709-013 | 13-Dec-2023 00:00 | SB2_4.0-4.2 | ✓ | | | |
| EM2322709-014 | 13-Dec-2023 00:00 | SB2_5.0-5.2 | ✓ | | | |
| EM2322709-015 | 13-Dec-2023 00:00 | SB2_6.0-6.2 | ✓ | | | |
| EM2322709-016 | 13-Dec-2023 00:00 | SB2_7.0-7.2 | ✓ | | | |
| EM2322709-017 | 13-Dec-2023 00:00 | SB2_8.0-8.2 | ✓ | | | |
| EM2322709-018 | 13-Dec-2023 00:00 | SB2_9.0-9.2 | ✓ | | | |
| EM2322709-019 | 13-Dec-2023 00:00 | SB2_10.0-10.2 | ✓ | | | |
| EM2322709-020 | 14-Dec-2023 00:00 | SB3_0.0-0.2 | | ✓ | | |
| EM2322709-021 | 14-Dec-2023 00:00 | SB3_0.5-0.7 | ✓ | | | |
| EM2322709-022 | 14-Dec-2023 00:00 | SB3_1.0-1.2 | ✓ | | | |
| EM2322709-024 | 14-Dec-2023 00:00 | SB3_3.0-3.2 | ✓ | | | |
| EM2322709-025 | 12-Dec-2023 00:00 | SB4_0.0-0.2 | | | | ✓ |
| EM2322709-026 | 12-Dec-2023 00:00 | SB4_0.5-0.7 | ✓ | | | |
| EM2322709-027 | 12-Dec-2023 00:00 | SB4_1.0-1.2 | | | | ✓ |
| EM2322709-028 | 14-Dec-2023 00:00 | SB5_0.0-0.2 | | | | ✓ |
| EM2322709-029 | 14-Dec-2023 00:00 | SB5_0.5-0.7 | ✓ | | | |
| EM2322709-030 | 14-Dec-2023 00:00 | SB5_1.0-1.2 | | | ✓ | |
| EM2322709-031 | 14-Dec-2023 00:00 | SB5_2.0-2.2 | ✓ | | | |
| EM2322709-032 | 15-Dec-2023 00:00 | SB8_0.0-0.2 | | | | ✓ |
| EM2322709-033 | 15-Dec-2023 00:00 | SB8_0.5-0.7 | ✓ | | | |
| EM2322709-034 | 15-Dec-2023 00:00 | SB8_1.0-1.2 | | | ✓ | |
| EM2322709-035 | 15-Dec-2023 00:00 | SB8_2.0-2.2 | ✓ | | | |
| EM2322709-036 | 15-Dec-2023 00:00 | SB8_3.0-3.2 | ✓ | | | |
| EM2322709-037 | 15-Dec-2023 00:00 | SB8_4.0-4.2 | | | ✓ | |
| EM2322709-038 | 15-Dec-2023 00:00 | SB8_5.0-5.2 | ✓ | | | |
| EM2322709-039 | 15-Dec-2023 00:00 | SB8_6.0-6.2 | ✓ | | | |
| EM2322709-040 | 15-Dec-2023 00:00 | SB8_7.0-7.2 | ✓ | | | |
| EM2322709-041 | 15-Dec-2023 00:00 | SB8_8.0-8.2 | ✓ | | | |
| EM2322709-042 | 14-Dec-2023 00:00 | SB9_0.0-0.2 | ✓ | | | |
| EM2322709-043 | 14-Dec-2023 00:00 | SB9_0.5-0.7 | | | | ✓ |
| EM2322709-044 | 18-Dec-2023 00:00 | SB11_0.0-0.2 | ✓ | | | |
| EM2322709-045 | 18-Dec-2023 00:00 | SB11_0.5-0.7 | | | | ✓ |
| EM2322709-046 | 18-Dec-2023 00:00 | SB11_1.0-1.2 | ✓ | | | |
| EM2322709-047 | 18-Dec-2023 00:00 | SB11_2.0-2.2 | | | | ✓ |
| EM2322709-048 | 18-Dec-2023 00:00 | SB11_3.0-3.2 | ✓ | | | |
| EM2322709-049 | 18-Dec-2023 00:00 | SB11_4.0-4.2 | ✓ | | | |
| EM2322709-050 | 18-Dec-2023 00:00 | SB11_5.0-5.2 | ✓ | | | |

| | | | (On Hold) SOIL No analysis requested | SOIL - EA200 Asbestos Identification in Soils - | SOIL - P-22 (Melb) minus PSD Soil Characterisation Suite (minus PSD) | SOIL - P-22 (Melb) Soil Characterisation Package |
|---|---|---|---|---|---|---|
| EM2322709-051 | 18-Dec-2023 00:00 | SB11_6.0-6.2 | ✓ | | | |
| EM2322709-052 | 18-Dec-2023 00:00 | SB11_7.0-7.2 | ✓ | | | |
| EM2322709-053 | 18-Dec-2023 00:00 | SB11_8.0-8.2 | ✓ | | | |
| EM2322709-054 | 18-Dec-2023 00:00 | SB11_9.0-9.2 | ✓ | | | |
| EM2322709-055 | 18-Dec-2023 00:00 | SB11_10.0-10.2 | ✓ | | | |

Matrix: **WATER**

| *Laboratory sample ID* | *Sampling date / time* | *Sample ID* | (On Hold) WATER No analysis requested | WATER - W-03 15 Metals (NEPM Suite) | WATER - W-18 TRH(C6 - C9)/BTEXN |
|---|---|---|---|---|---|
| EM2322709-056 | 12-Dec-2023 00:00 | QC1 | | ✓ | |
| EM2322709-057 | 13-Dec-2023 00:00 | QC2 | | ✓ | |
| EM2322709-058 | 12-Dec-2023 00:00 | QC3 | | ✓ | |
| EM2322709-059 | 13-Dec-2023 00:00 | QC4 | | ✓ | |
| EM2322709-060 | 16-Dec-2023 00:00 | QC7 | | ✓ | |
| EM2322709-061 | 16-Dec-2023 00:00 | QC8 | | | ✓ |
| EM2322709-062 | 16-Dec-2023 00:00 | QC5 | ✓ | | |

## Proactive Holding Time Report

Sample(s) have been received within the recommended holding times for the requested analysis.

## Requested Deliverables

**Esdat Uploads**

| | | |
|---|---|---|
| - EDI Format - ESDAT (ESDAT) | Email | jonesenvironmental@esdat.com.au |

**PATRICIA JONES**

| | | |
|---|---|---|
| - *AU Certificate of Analysis - NATA (COA) | Email | patricia@jonesenvironmental.net |
| - *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI) | Email | patricia@jonesenvironmental.net |
| - *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC) | Email | patricia@jonesenvironmental.net |
| - A4 - AU Sample Receipt Notification - Environmental HT (SRN) | Email | patricia@jonesenvironmental.net |
| - A4 - AU Tax Invoice (INV) | Email | patricia@jonesenvironmental.net |
| - Attachment - Report (SUBCO) | Email | patricia@jonesenvironmental.net |
| - Chain of Custody (CoC) (COC) | Email | patricia@jonesenvironmental.net |
| - EDI Format - ENMRG (ENMRG) | Email | patricia@jonesenvironmental.net |
| - EDI Format - ESDAT (ESDAT) | Email | patricia@jonesenvironmental.net |

**RUSSELL JONES**

| | | |
|---|---|---|
| - A4 - AU Tax Invoice (INV) | Email | russell@jonesenvironmental.net |

## Inter-Laboratory Testing

Analysis conducted by ALS Newcastle, NATA accreditation no. 825, site no. 1656 (Chemistry) 9854 (Biology).

(SOIL) EA150: Soil Classification based on Particle Size

(SOIL) EA152: Soil Particle Density

Analysis conducted by ALS Sydney, NATA accreditation no. 825, site no. 10911 (Chemistry) 14913 (Biology).

(SOIL) EP004: Organic Matter

# CHAIN OF CUSTODY

# FREIGHT

| | | | |
|---|---|---|---|
| CLIENT: JEC | TURNAROUND REQUIREMENTS : (Standard TAT may be longer for some tests e.g. Ultra Trace Organics) | ✠ Standard TAT (List due date): 2 dav TAT<br>☐ Non Standard or urgent TAT (List due date): | FOR LABORATORY USE ONLY (Circle)<br>Custody Seal Intact? Yes No N/A<br>Free ice / frozen ice bricks present upon receipt? Yes No N/A<br>Random Sample Temperature on Receipt: °C<br>Other comment: |
| OFFICE: | | | |
| PROJECT: JE10388 | | COC SEQUENCE NUMBER (Circle)<br>COC: 1 2 3 4 5 6 7<br>OF: 1 2 3 4 5 6 7 | |
| ORDER NUMBER: | | | |
| PROJECT MANAGER: Patricia Jones | CONTACT PH: 0424490551 | | |
| SAMPLER: Russell Jones | SAMPLER MOBILE: | RELINQUISHED BY: | RECEIVED BY: Andrew (ALS) |
| | EDD FORMAT (or default): | | |
| Email Reports to (will default to PM if no other addresses are listed): patricia@jonesenvironmental.net | | DATE/TIME: | DATE/TIME: 19.12.23 1250 |
| Email Invoice to (will default to PM if no other addresses are listed): russell@jonesenvironmental.net | | 18/12/23 | |

| RELINQUISHED BY: | RECEIVED BY: |
|---|---|
| DATE/TIME: | DATE/TIME: |

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL:

| ALS USE | SAMPLE DETAILS MATRIX: SOLID (S) WATER (W) | | | CONTAINER INFORMATION | | ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to attract suite price) Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required). | | | | | Additional Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| LAB ID | SAMPLE ID | DATE / TIME | MATRIX | TYPE & PRESERVATIVE (refer to codes below) | TOTAL CONTAINERS | TRH/BTEX/PAH | TPH(c6-c9)/BTEX | TPH/BTEX | Metals | | Comments on likely contaminant levels, dilutions, or samples requiring specific QC analysis etc. |
| | SB1 0.0-0.2 | 18/12/23 | S | 1 x soil jar + asbestos bag | | | | | | | |
| | SB1 0.5-0.7 | 18/12/23 | S | 1 x soil jar + asbestos bag | | | | | | | |
| | SB1 1.0-1.2 | 18/12/23 | S | 1 x soil jar | | | | | | | |
| | SB1 2.0-2.2 | 18/12/23 | S | 1 x soil jar | | | | | | | |
| | SB1 3.0-3.2 | 18/12/23 | S | 1 x soil jar | | | | | | | |
| | SB1 4.0-4.2 | 18/12/23 | S | 1 x soil jar | | | | | | | |
| | SB1 5.0-5.2 | 18/12/23 | S | 1 x soil jar | | | | | | | |
| | SB2 0.0-0.2 | 13/12/23 | S | 1 x soil jar + asbestos bag | | | | | | | |
| | SB2 0.5-0.7 | 13/12/23 | S | 1 x soil jar + asbestos bag | | | | | | | |
| | SB2 1.0-1.2 | 13/12/23 | S | 1 x soil jar | | | | | | | |
| | SB2 2.0-2.2 | 13/12/23 | S | 1 x soil jar | | | | | | | |
| | SB2 3.0-3.2 | 13/12/23 | S | 1 x soil jar | | | | | | | |
| | SB2 4.0-4.2 | 13/12/23 | S | 1 x soil jar | | | | | | | |
| | SB2 5.0-5.2 | 13/12/23 | S | 1 x soil jar | | | | | | | |
| | SB2 6.0-6.2 | 13/12/23 | S | 1 x soil jar | | | | | | | |
| | SB2 7.0-7.2 | 13/12/23 | S | 1 x soil jar | | | | | | | |
| | SB2 8.0-8.2 | 13/12/23 | S | 1 x soil jar | | | | | | | |
| | SB2 9.0-9.2 | 13/12/23 | S | 1 x soil jar | | | | | | | |
| | SB2 10.0-10.2 | 13/12/23 | S | 1 x soil jar | | | | | | | |
| | SB3 0.0-0.2 | 14/12/23 | S | 1 x soil jar + asbestos bag | | | | | | | |
| | SB3 0.5-0.7 | 14/12/23 | S | 1 x soil jar + asbestos bag | | | | | | | |
| | SB3 1.0-1.2 | 14/12/23 | S | 1 x soil jar | | | | | | | |
| | SB3 2.0-2.2 | 14/12/23 | S | 1 x soil jar | | | | | | | |
| | SB3 3.0-3.2 | 14/12/23 | S | 1 x soil jar | | | | | | | |
| | SB4 0.0-0.2 | 12/12/23 | S | 1 x soil jar + asbestos bag | | | | | | | |
| | SB4 0.5-0.7 | 12/12/23 | S | 1 x soil jar + asbestos bag | | | | | | | |
| | SB4 1.0-1.2 | 12/12/23 | S | 1 x soil jar + asbestos bag | | | | | | | |
| | SB5 0.0-0.2 | 14/12/23 | S | 1 x soil jar + asbestos bag | | | | | | | |
| | SB5 0.5-0.7 | 14/12/23 | S | 1 x soil jar + asbestos bag | | | | | | | |
| | SB5 1.0-1.2 | 14/12/23 | S | 1 x soil jar | | | | | | | |
| | SB5 2.0-2.2 | 14/12/23 | S | 1 x soil jar | | | | | | | |
| | SB8 0.0-0.2 | 15/12/23 | S | 1 x soil jar + asbestos bag | | | | | | | |
| | SB8 0.5-0.7 | 15/12/23 | S | 1 x soil jar + asbestos bag | | | | | | | |
| | SB8 1.0-1.2 | 15/12/23 | S | 1 x soil jar | | | | | | | |
| | SB8 2.0-2.2 | 15/12/23 | S | 1 x soil jar | | | | | | | |
| | SB8 3.0-3.2 | 15/12/23 | S | 1 x soil jar | | | | | | | |
| | SB8 4.0-4.2 | 15/12/23 | S | 1 x soil jar | | | | | | | |
| | SB8 5.0-5.2 | 15/12/23 | S | 1 x soil jar | | | | | | | |
| | SB8 6.0-6.2 | 15/12/23 | S | 1 x soil jar | | | | | | | |
| | SB8 7.0-7.2 | 15/12/23 | S | 1 x soil jar | | | | | | | |
| | SB8 8.0-8.2 | 15/12/23 | S | 1 x soil jar | | | | | | | |
| | SB9 0.0-0.2 | 14/12/23 | S | 1 x soil jar + asbestos bag | | | | | | | |
| | SB9 0.5-0.7 | 14/12/23 | S | 1 x soil jar + asbestos bag | | | | | | | |
| | SB11 0.0-0.2 | 18/12/23 | S | 1 x soil jar + asbestos bag | | | | | | | |
| | SB11 0.5-0.7 | 18/12/23 | S | 1 x soil jar + asbestos bag | | | | | | | |
| | SB11 1.0-1.2 | 18/12/23 | S | 1 x soil jar | | | | | | | |
| | SB11 2.0-2.2 | 18/12/23 | S | 1 x soil jar | | | | | | | |
| | SB11 3.0-3.2 | 18/12/23 | S | 1 x soil jar | | | | | | | |
| | SB11 4.0-4.2 | 18/12/23 | S | 1 x soil jar | | | | | | | |
| | SB11 5.0-5.2 | 18/12/23 | S | 1 x soil jar | | | | | | | |
| | SB11 6.0-6.2 | 18/12/23 | S | 1 x soil jar | | | | | | | |
| | SB11 7.0-7.2 | 18/12/23 | S | 1 x soil jar | | | | | | | |
| | SB11 8.0-8.2 | 18/12/23 | S | 1 x soil jar | | | | | | | |
| | SB11 9.0-9.2 | 18/12/23 | S | 1 x soil jar | | | | | | | |
| | SB11 10.0-10.2 | 18/12/23 | S | 1 x soil jar | | | | | | | |
| | 1 x metals | 12/12/23 | W | 1 x metals | | | | | x | | |
| | 1 x metals | 13/12/23 | W | 1 x metals | | | | | x | | |
| | 1 x metals | 12/12/23 | W | 1 x metals | | | | | x | | |
| | 1 x metals | 13/12/23 | W | 1 x metals | | | | | x | | |
| | 1 x metals | 16/12/23 | W | 1 x metals | | | | | x | | |
| | 2 x vials | 16/12/23 | W | 2 x vials | | | x | | | | |
| | | | | TOTAL | | | | | | | |

Environmental Division
Melbourne
Work Order Reference
EM2322709

Telephone : +61-3-8549 9600

*Water Container Codes:* P = Unpreserved Plastic; N = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; SH = Sodium Hydroxide/Cd Preserved; S = Sodium Hydroxide Preserved Plastic; AG = Amber Glass Unpreserved; AP - Airfreight Unpreserved Plastic
V = VOA Vial HCl Preserved; VB = VOA Vial Sodium Bisulphate Preserved; VS = VOA Vial Sulfuric Preserved; AV = Airfreight Unpreserved Vial SG = Sulfuric Preserved Amber Glass; H = HCl preserved Plastic; HS = HCl preserved Speciation bottle; SP = Sulfuric Preserved Plastic; F = Formaldehyde Preserved Glass;
Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottles; ST = Sterile Bottle; ASS = Plastic Bag for Acid Sulphate Soils; B = Unpreserved Bag

# CHAIN OF CUSTODY

ALS

| | | | |
|---|---|---|---|
| CLIENT: JEC | TURNAROUND REQUIREMENTS : (Standard TAT may be longer for some tests e.g. Ultra Trace Organics) | ✻ Standard TAT (List due date): | FOR LABORATORY USE ONLY (Circle) |
| OFFICE: | | ☐ Non Standard or urgent TAT (List due date): | Custody Seal Intact? Yes No N/A |
| PROJECT: JE10388 | | COC SEQUENCE NUMBER (Circle) | Free ice / frozen ice bricks present upon receipt? Yes No N/A |
| ORDER NUMBER: | | COC: 1 2 3 4 5 6 7 | Random Sample Temperature on Receipt: °C |
| PROJECT MANAGER: Patricia Jones | CONTACT PH: 0424490551 | OF: 1 2 3 4 5 6 7 | Other comment: |
| SAMPLER: Russell Jones | SAMPLER MOBILE: | RELINQUISHED BY: | RECEIVED BY: |
| | EDD FORMAT (or default): | DATE/TIME: 18/12/23 | DATE/TIME: |
| Email Reports to (will default to PM if no other addresses are listed): patricia@jonesenvironmental.net | | RELINQUISHED BY: | RECEIVED BY: |
| Email Invoice to (will default to PM if no other addresses are listed): russell@jonesenvironmental.net | | DATE/TIME: | DATE/TIME: |

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL:

| ALS USE | SAMPLE DETAILS MATRIX: SOLID (S) WATER (W) | | | CONTAINER INFORMATION | | ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to attract suite price) Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required). | | | | | | | | | | Additional Information |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LAB ID | SAMPLE ID | DATE / TIME | MATRIX | TYPE & PRESERVATIVE (refer to codes below) | TOTAL CONTAINERS | TRH/BTEX/PAH/Phenols | TPH(c6-c9)/BTEX | TPH/BTEX | S-3 | OC/OP | EA200G | P-22 | EP066 | Floride | Cyanide | Comments on likely contaminant levels, dilutions, or samples requiring specific QC analysis etc. |
| 1 | SB1 0.0-0.2 | 18/12/23 | S | 1 x soil jar + asbestos bag | | x | | | x | x | x | | x | x | x | |
| 2 | SB1 0.5-0.7 | 18/12/23 | S | 1 x soil jar + asbestos bag | | | | | | | | | | | | |
| 3 | SB1 1.0-1.2 | 18/12/23 | S | 1 x soil jar | | x | | | x | x | | x | x | x | x | |
| 4 | SB1 2.0-2.2 | 18/12/23 | S | 1 x soil jar | | | | | | | | | | | | |
| 5 | SB1 3.0-3.2 | 18/12/23 | S | 1 x soil jar | | | | | | | | | | | | |
| 6 | SB1 4.0-4.2 | 18/12/23 | S | 1 x soil jar | | | | | | | | | | | | |
| 7 | SB1 5.0-5.2 | 18/12/23 | S | 1 x soil jar | | | | | | | | | | | | |
| 8 | SB2 0.0-0.2 | 13/12/23 | S | 1 x soil jar + asbestos bag | | | | | | | | | | | | |
| 9 | SB2 0.5-0.7 | 13/12/23 | S | 1 x soil jar + asbestos bag | | x | | | x | x | x | | x | x | x | |
| 10 | SB2 1.0-1.2 | 13/12/23 | S | 1 x soil jar | | | | | | | | | | | | |
| 11 | SB2 2.0-2.2 | 13/12/23 | S | 1 x soil jar | | x | | | x | x | | x | x | x | x | |
| 12 | SB2 3.0-3.2 | 13/12/23 | S | 1 x soil jar | | | | | | | | | | | | |
| 13 | SB2 4.0-4.2 | 13/12/23 | S | 1 x soil jar | | | | | | | | | | | | |
| 14 | SB2 5.0-5.2 | 13/12/23 | S | 1 x soil jar | | | | | | | | | | | | |
| 15 | SB2 6.0-6.2 | 13/12/23 | S | 1 x soil jar | | | | | | | | | | | | |
| 16 | SB2 7.0-7.2 | 13/12/23 | S | 1 x soil jar | | | | | | | | | | | | |
| 17 | SB2 8.0-8.2 | 13/12/23 | S | 1 x soil jar | | | | | | | | | | | | |
| 18 | SB2 9.0-9.2 | 13/12/23 | S | 1 x soil jar | | | | | | | | | | | | |
| 19 | SB2 10.0-10.2 | 13/12/23 | S | 1 x soil jar | | | | | | | | | | | | |
| 20 | SB3 0.0-0.2 | 14/12/23 | S | 1 x soil jar + asbestos bag | | x | | | x | x | x | | x | x | x | |
| 21 | SB3 0.5-0.7 | 14/12/23 | S | 1 x soil jar + asbestos bag | | | | | | | | | | | | |
| 22 | SB3 1.0-1.2 | 14/12/23 | S | 1 x soil jar | | | | | | | | | | | | |
| 23 | SB3 2.0-2.2 | 14/12/23 | S | 1 x soil jar | | x | | | x | x | x | | x | x | x | |
| 24 | SB3 3.0-3.2 | 14/12/23 | S | 1 x soil jar | | | | | | | | | | | | |
| 25 | SB4 0.0-0.2 | 12/12/23 | S | 1 x soil jar + asbestos bag | | x | | | x | x | | x | x | x | x | |
| 26 | SB4 0.5-0.7 | 12/12/23 | S | 1 x soil jar + asbestos bag | | | | | | | | | | | | |
| 27 | SB4 1.0-1.2 | 12/12/23 | S | 1 x soil jar + asbestos bag | | x | | | x | x | | x | x | x | x | |
| 28 | SB5 0.0-0.2 | 14/12/23 | S | 1 x soil jar + asbestos bag | | x | | | x | x | | x | x | x | x | |
| 29 | SB5 0.5-0.7 | 14/12/23 | S | 1 x soil jar + asbestos bag | | | | | | | | | | | | |
| 30 | SB5 1.0-1.2 | 14/12/23 | S | 1 x soil jar | | x | | | x | x | | x | x | x | x | |
| 31 | SB5 2.0-2.2 | 14/12/23 | S | 1 x soil jar | | | | | | | | | | | | |
| 32 | SB8 0.0-0.2 | 15/12/23 | S | 1 x soil jar + asbestos bag | | x | | | x | x | | x | x | x | x | |
| 33 | SB8 0.5-0.7 | 15/12/23 | S | 1 x soil jar + asbestos bag | | | | | | | | | | | | |
| 34 | SB8 1.0-1.2 | 15/12/23 | S | 1 x soil jar | | x | | | x | x | | x | x | x | x | |
| 35 | SB8 2.0-2.2 | 15/12/23 | S | 1 x soil jar | | | | | | | | | | | | |
| 36 | SB8 3.0-3.2 | 15/12/23 | S | 1 x soil jar | | | | | | | | | | | | |
| 37 | SB8 4.0-4.2 | 15/12/23 | S | 1 x soil jar | | x | | | x | x | | x | x | x | x | |
| 38 | SB8 5.0-5.2 | 15/12/23 | S | 1 x soil jar | | | | | | | | | | | | |
| 39 | SB8 6.0-6.2 | 15/12/23 | S | 1 x soil jar | | | | | | | | | | | | |
| 40 | SB8 7.0-7.2 SB8-7.0-7.2 | 15/12/23 | S | 1 x soil jar | | | | | | | | | | | | |
| 41 | SB8 8.0-8.2 SB8-8.0-8.2 | 15/12/23 | S | 1 x soil jar | | | | | | | | | | | | |
| 42 | SB9 0.0-0.2 | 14/12/23 | S | 1 x soil jar + asbestos bag | | | | | | | | | | | | |
| 43 | SB9 0.5-0.7 | 14/12/23 | S | 1 x soil jar + asbestos bag | | x | | | x | x | | x | x | x | x | |
| 44 | SB11 0.0-0.2 | 18/12/23 | S | 1 x soil jar + asbestos bag | | | | | | | | | | | | |
| 45 | SB11 0.5-0.7 | 18/12/23 | S | 1 x soil jar + asbestos bag | | x | | | x | x | | x | x | x | x | |
| 46 | SB11 1.0-1.2 | 18/12/23 | S | 1 x soil jar | | | | | | | | | | | | |
| 47 | SB11 2.0-2.2 | 18/12/23 | S | 1 x soil jar | | x | | | x | x | | x | x | x | x | |
| 48 | SB11 3.0-3.2 | 18/12/23 | S | 1 x soil jar | | | | | | | | | | | | |
| 49 | SB11 4.0-4.2 | 18/12/23 | S | 1 x soil jar | | | | | | | | | | | | |
| 50 | SB11 5.0-5.2 | 18/12/23 | S | 1 x soil jar | | | | | | | | | | | | |
| 51 | SB11 6.0-6.2 | 18/12/23 | S | 1 x soil jar | | | | | | | | | | | | |
| 52 | SB11 7.0-7.2 | 18/12/23 | S | 1 x soil jar | | | | | | | | | | | | |
| 53 | SB11 8.0-8.2 | 18/12/23 | S | 1 x soil jar | | | | | | | | | | | | |
| 54 | SB11 9.0-9.2 | 18/12/23 | S | 1 x soil jar | | | | | | | | | | | | |
| 55 | SB11 10.0-10.2 | 18/12/23 | S | 1 x soil jar | | | | | | | | | | | | |
| 56 | QC1 | 12/12/23 | W | 1 x metals | | | | | x | | | | | | | |
| 57 | QC2 | 13/12/23 | W | 1 x metals | | | | | x | | | | | | | |
| 58 | QC3 | 12/12/23 | W | 1 x metals | | | | | x | | | | | | | |
| 59 | QC4 | 13/12/23 | W | 1 x metals | | | | | x | | | | | | | |
| 60 | QC7 | 16/12/23 | W | 1 x metals | | | | | x | | | | | | | |
| 61 | QC8 | 16/12/23 | W | 2 x vials | | | x | | | | | | | | | |
| 62 QCS | | 16/12/23 | W | TOTAL | | | | | | | | | | | | |

***Water Container Codes:*** P = Unpreserved Plastic; N = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; SH = Sodium Hydroxide/Cd Preserved; S = Sodium Hydroxide Preserved Plastic; AG = Amber Glass Unpreserved; AP - Airfreight Unpreserved Plastic
V = VOA Vial HCl Preserved; VB = VOA Vial Sodium Bisulphate Preserved; VS = VOA Vial Sulfuric Preserved; AV = Airfreight Unpreserved Vial SG = Sulfuric Preserved Amber Glass; H = HCl preserved Plastic; HS = HCl preserved Speciation bottle; SP = Sulfuric Preserved Plastic; F = Formaldehyde Preserved Glass;
Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottles; ST = Sterile Bottle; ASS = Plastic Bag for Acid Sulphate Soils; B = Unpreserved Bag.

# CERTIFICATE OF ANALYSIS

| | | | |
|---|---|---|---|
| **Work Order** | : **EM2322818** | Page | : 1 of 17 |
| Client | : **Jones Environmental** | Laboratory | : Environmental Division Melbourne |
| Contact | : PATRICIA JONES | Contact | : Hannah White |
| Address | : 497 Parnall Street<br>Lavington Lavington 2641 | Address | : 4 Westall Rd Springvale VIC Australia 3171 |
| Telephone | : ---- | Telephone | : +61-3-8549 9600 |
| Project | : JE10388 | Date Samples Received | : 20-Dec-2023 12:40 |
| Order number | : ---- | Date Analysis Commenced | : 21-Dec-2023 |
| C-O-C number | : ---- | Issue Date | : 05-Jan-2024 14:57 |
| Sampler | : RUSSELL JONES | | |
| Site | : ---- | | |
| Quote number | : EN/222 | | |
| No. of samples received | : 20 | | |
| No. of samples analysed | : 12 | | |

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Descriptive Results
- Surrogate Control Limits

**Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.**

## *Signatories*

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

| *Signatories* | *Position* | *Accreditation Category* |
|---|---|---|
| Arenie Vijayaratnam | Senior Inorganic Chemist | Melbourne Inorganics, Springvale, VIC |
| Dilani Fernando | Laboratory Coordinator | Melbourne Inorganics, Springvale, VIC |
| Jarwis Nheu | Non-Metals Team Leader | Melbourne Inorganics, Springvale, VIC |
| MINNIE TRAN | Approved Asbestos Identifier | Melbourne Asbestos, Springvale, VIC |
| Nancy Wang | 2IC Organic Chemist | Melbourne Inorganics, Springvale, VIC |
| Nancy Wang | 2IC Organic Chemist | Melbourne Organics, Springvale, VIC |

## General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contract for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

- EK040T: Matrix spike failed for Total Flouride on sample EM2322818-003 due to matrix interferences.
- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a.h)anthracene (1.0), Benzo(g.h.i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero, for 'TEQ 1/2LOR' are treated as half the reported LOR, and for 'TEQ LOR' are treated as being equal to the reported LOR. Note: TEQ 1/2LOR and TEQ LOR will calculate as 0.6mg/Kg and 1.2mg/Kg respectively for samples with non-detects for all of the eight TEQ PAHs.
- EP080: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP068: Where reported, Total Chlordane (sum) is the sum of the reported concentrations of cis-Chlordane and trans-Chlordane at or above the LOR.
- EP068: Where reported, Total OCP is the sum of the reported concentrations of all Organochlorine Pesticides at or above LOR.
- EP075(SIM): Where reported, Total Cresol is the sum of the reported concentrations of 2-Methylphenol and 3- & 4-Methylphenol at or above the LOR.
- **EA200: As only one sample container was submitted for multiple tests, at the client's request, sub sampling was conducted for samples 003, 004 and 008 prior to Asbestos analysis. As this has the potential to understate detection, results should be scrutinised accordingly.**
- Received SB10 2,0-2.2 as an extra sample.
- EA200 'Am' Amosite (brown asbestos)
- EA200 'Cr' Crocidolite (blue asbestos)
- EA200 'Trace' - Asbestos fibres ("Free Fibres") detected by trace analysis per AS4964. The result can be interpreted that the sample contains detectable 'respirable' asbestos fibres
- EA200: Asbestos Identification Samples were analysed by Polarised Light Microscopy including dispersion staining.
- EA200 Legend
- EA200 'Ch' Chrysotile (white asbestos)
- EA200: 'UMF' Unknown Mineral Fibres. "-" indicates fibres detected may or may not be asbestos fibres. Confirmation by alternative techniques is recommended.
- EA200: For samples larger than 30g, the <2mm fraction may be sub-sampled prior to trace analysis as outlined in ISO23909:2008(E) Sect 6.3.2-2
- EA200: 'Yes' - Asbestos detected by polarised light microscopy including dispersion staining.
- EA200: 'No*' - No asbestos found, at the reporting limit of 0.1g/kg, by polarised light microscopy including dispersion staining. Asbestos material was detected and positively identified at concentrations estimated to be below 0.1g/kg.
- EA200: 'No' - No asbestos found at the reporting limit 0.1g/kg, by polarised light microscopy including dispersion staining.

## Analytical Results

| Sub-Matrix: SOIL (Matrix: SOIL) | | | | Sample ID | SB6_0.0-0.2 | SB6_1.0-1.2 | SB6_1.5 | SB7_0.5-0.7 | SB7_2.0-2.2 |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Sampling date / time | 19-Dec-2023 00:00 | 19-Dec-2023 00:00 | 19-Dec-2023 00:00 | 19-Dec-2023 00:00 | 19-Dec-2023 00:00 |
| Compound | CAS Number | LOR | Unit | | EM2322818-001 | EM2322818-003 | EM2322818-004 | EM2322818-006 | EM2322818-008 |
| | | | | | Result | Result | Result | Result | Result |
| **EA055: Moisture Content (Dried @ 105-110°C)** | | | | | | | | | |
| Moisture Content | ---- | 1.0 | % | | 6.9 | 17.7 | 13.9 | 14.4 | 9.8 |
| **EA200: AS 4964 - 2004 Identification of Asbestos in Soils** | | | | | | | | | |
| Asbestos Detected | 1332-21-4 | 0.1 | g/kg | | No | No | No | No | No |
| Asbestos (Trace) | 1332-21-4 | - | - | | No | No | No | No | No |
| Asbestos Type | 1332-21-4 | - | -- | | - | - | - | - | - |
| Sample weight (dry) | ---- | 0.01 | g | | 291 | 42.5 | 43.7 | 167 | 45.0 |
| APPROVED IDENTIFIER: | ---- | - | -- | | M. TRAN | M. TRAN | M. TRAN | M. TRAN | M. TRAN |
| Synthetic Mineral Fibre | ---- | - | -- | | No | No | No | No | No |
| Organic Fibre | ---- | - | -- | | No | No | No | No | No |
| **EG005(ED093)T: Total Metals by ICP-AES** | | | | | | | | | |
| Arsenic | 7440-38-2 | 5 | mg/kg | | 50 | 23 | 36 | 19 | 31 |
| Barium | 7440-39-3 | 10 | mg/kg | | 50 | 50 | 50 | 60 | 70 |
| Beryllium | 7440-41-7 | 1 | mg/kg | | <1 | 1 | 2 | 2 | 2 |
| Boron | 7440-42-8 | 50 | mg/kg | | <50 | <50 | <50 | <50 | <50 |
| Cadmium | 7440-43-9 | 1 | mg/kg | | <1 | <1 | <1 | <1 | <1 |
| Chromium | 7440-47-3 | 2 | mg/kg | | 16 | 28 | 37 | 28 | 28 |
| Cobalt | 7440-48-4 | 2 | mg/kg | | 6 | 11 | 21 | 11 | 11 |
| Copper | 7440-50-8 | 5 | mg/kg | | 15 | 14 | 18 | 15 | 16 |
| Lead | 7439-92-1 | 5 | mg/kg | | 9 | 21 | 34 | 38 | 30 |
| Manganese | 7439-96-5 | 5 | mg/kg | | 206 | 118 | 173 | 330 | 188 |
| Nickel | 7440-02-0 | 2 | mg/kg | | 10 | 13 | 18 | 14 | 14 |
| Selenium | 7782-49-2 | 5 | mg/kg | | <5 | <5 | <5 | <5 | <5 |
| Vanadium | 7440-62-2 | 5 | mg/kg | | 31 | 39 | 48 | 42 | 42 |
| Zinc | 7440-66-6 | 5 | mg/kg | | 35 | 36 | 54 | 28 | 44 |
| **EG035T: Total Recoverable Mercury by FIMS** | | | | | | | | | |
| Mercury | 7439-97-6 | 0.1 | mg/kg | | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| **EK026SF: Total CN by Segmented Flow Analyser** | | | | | | | | | |

## Analytical Results

| Sub-Matrix: SOIL (Matrix: SOIL) | | | Sample ID | SB6_0.0-0.2 | SB6_1.0-1.2 | SB6_1.5 | SB7_0.5-0.7 | SB7_2.0-2.2 |
|---|---|---|---|---|---|---|---|---|
| | | | Sampling date / time | 19-Dec-2023 00:00 | 19-Dec-2023 00:00 | 19-Dec-2023 00:00 | 19-Dec-2023 00:00 | 19-Dec-2023 00:00 |
| Compound | CAS Number | LOR | Unit | EM2322818-001 | EM2322818-003 | EM2322818-004 | EM2322818-006 | EM2322818-008 |
| | | | | Result | Result | Result | Result | Result |
| **EK026SF: Total CN by Segmented Flow Analyser - Continued** | | | | | | | | |
| Total Cyanide | 57-12-5 | 1 | mg/kg | <1 | <1 | <1 | <1 | <1 |
| **EK040T: Fluoride Total** | | | | | | | | |
| Fluoride | 16984-48-8 | 40 | mg/kg | **280** | **330** | **380** | **310** | **380** |
| **EP066: Polychlorinated Biphenyls (PCB)** | | | | | | | | |
| Total Polychlorinated biphenyls | ---- | 0.1 | mg/kg | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| **EP068A: Organochlorine Pesticides (OC)** | | | | | | | | |
| alpha-BHC | 319-84-6 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Hexachlorobenzene (HCB) | 118-74-1 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| beta-BHC | 319-85-7 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| gamma-BHC | 58-89-9 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| delta-BHC | 319-86-8 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Heptachlor | 76-44-8 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Aldrin | 309-00-2 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Heptachlor epoxide | 1024-57-3 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| ^ Total Chlordane (sum) | ---- | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| trans-Chlordane | 5103-74-2 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| alpha-Endosulfan | 959-98-8 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| cis-Chlordane | 5103-71-9 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Dieldrin | 60-57-1 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| 4.4`-DDE | 72-55-9 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Endrin | 72-20-8 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| beta-Endosulfan | 33213-65-9 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| ^ Endosulfan (sum) | 115-29-7 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| 4.4`-DDD | 72-54-8 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Endrin aldehyde | 7421-93-4 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Endosulfan sulfate | 1031-07-8 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| 4.4`-DDT | 50-29-3 | 0.2 | mg/kg | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |

## Analytical Results

| Sub-Matrix: SOIL (Matrix: SOIL) | | | Sample ID | SB6_0.0-0.2 | SB6_1.0-1.2 | SB6_1.5 | SB7_0.5-0.7 | SB7_2.0-2.2 |
|---|---|---|---|---|---|---|---|---|
| | | | Sampling date / time | 19-Dec-2023 00:00 | 19-Dec-2023 00:00 | 19-Dec-2023 00:00 | 19-Dec-2023 00:00 | 19-Dec-2023 00:00 |
| Compound | CAS Number | LOR | Unit | EM2322818-001 | EM2322818-003 | EM2322818-004 | EM2322818-006 | EM2322818-008 |
| | | | | Result | Result | Result | Result | Result |
| **EP068A: Organochlorine Pesticides (OC) - Continued** | | | | | | | | |
| Endrin ketone | 53494-70-5 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Methoxychlor | 72-43-5 | 0.2 | mg/kg | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| ^ Sum of Aldrin + Dieldrin | 309-00-2/60-57-1 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| ^ Sum of DDD + DDE + DDT | 72-54-8/72-55-9/50-2 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **EP068B: Organophosphorus Pesticides (OP)** | | | | | | | | |
| Dichlorvos | 62-73-7 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Demeton-S-methyl | 919-86-8 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Monocrotophos | 6923-22-4 | 0.2 | mg/kg | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| Dimethoate | 60-51-5 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Diazinon | 333-41-5 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Chlorpyrifos-methyl | 5598-13-0 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Parathion-methyl | 298-00-0 | 0.2 | mg/kg | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| Malathion | 121-75-5 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Fenthion | 55-38-9 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Chlorpyrifos | 2921-88-2 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Parathion | 56-38-2 | 0.2 | mg/kg | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| Pirimphos-ethyl | 23505-41-1 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Chlorfenvinphos | 470-90-6 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Bromophos-ethyl | 4824-78-6 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Fenamiphos | 22224-92-6 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Prothiofos | 34643-46-4 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Ethion | 563-12-2 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Carbophenothion | 786-19-6 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Azinphos Methyl | 86-50-0 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| **EP075(SIM)A: Phenolic Compounds** | | | | | | | | |
| Phenol | 108-95-2 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |

## Analytical Results

| Sub-Matrix: SOIL (Matrix: SOIL) | | | Sample ID | SB6_0.0-0.2 | SB6_1.0-1.2 | SB6_1.5 | SB7_0.5-0.7 | SB7_2.0-2.2 |
|---|---|---|---|---|---|---|---|---|
| | | | Sampling date / time | 19-Dec-2023 00:00 | 19-Dec-2023 00:00 | 19-Dec-2023 00:00 | 19-Dec-2023 00:00 | 19-Dec-2023 00:00 |
| Compound | CAS Number | LOR | Unit | EM2322818-001 | EM2322818-003 | EM2322818-004 | EM2322818-006 | EM2322818-008 |
| | | | | Result | Result | Result | Result | Result |
| **EP075(SIM)A: Phenolic Compounds - Continued** | | | | | | | | |
| 2-Chlorophenol | 95-57-8 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 2-Methylphenol | 95-48-7 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 3- & 4-Methylphenol | 1319-77-3 | 1 | mg/kg | <1 | <1 | <1 | <1 | <1 |
| 2-Nitrophenol | 88-75-5 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 2.4-Dimethylphenol | 105-67-9 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 2.4-Dichlorophenol | 120-83-2 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 2.6-Dichlorophenol | 87-65-0 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 4-Chloro-3-methylphenol | 59-50-7 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 2.4.6-Trichlorophenol | 88-06-2 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 2.4.5-Trichlorophenol | 95-95-4 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Pentachlorophenol | 87-86-5 | 2 | mg/kg | <2 | <2 | <2 | <2 | <2 |
| **EP075(SIM)B: Polynuclear Aromatic Hydrocarbons** | | | | | | | | |
| Naphthalene | 91-20-3 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Acenaphthylene | 208-96-8 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Acenaphthene | 83-32-9 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Fluorene | 86-73-7 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Phenanthrene | 85-01-8 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Anthracene | 120-12-7 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Fluoranthene | 206-44-0 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Pyrene | 129-00-0 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Benz(a)anthracene | 56-55-3 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Chrysene | 218-01-9 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Benzo(b+j)fluoranthene | 205-99-2 205-82-3 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Benzo(k)fluoranthene | 207-08-9 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Benzo(a)pyrene | 50-32-8 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Indeno(1.2.3.cd)pyrene | 193-39-5 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Dibenz(a.h)anthracene | 53-70-3 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |

## Analytical Results

| Sub-Matrix: SOIL (Matrix: SOIL) | | | | Sample ID | SB6_0.0-0.2 | SB6_1.0-1.2 | SB6_1.5 | SB7_0.5-0.7 | SB7_2.0-2.2 |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Sampling date / time | 19-Dec-2023 00:00 | 19-Dec-2023 00:00 | 19-Dec-2023 00:00 | 19-Dec-2023 00:00 | 19-Dec-2023 00:00 |
| Compound | CAS Number | LOR | Unit | | EM2322818-001 | EM2322818-003 | EM2322818-004 | EM2322818-006 | EM2322818-008 |
| | | | | | Result | Result | Result | Result | Result |
| **EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued** | | | | | | | | | |
| **Benzo(g.h.i)perylene** | 191-24-2 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| ^ **Sum of polycyclic aromatic hydrocarbons** | ---- | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| ^ **Benzo(a)pyrene TEQ (zero)** | ---- | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| ^ **Benzo(a)pyrene TEQ (half LOR)** | ---- | 0.5 | mg/kg | | **0.6** | **0.6** | **0.6** | **0.6** | **0.6** |
| ^ **Benzo(a)pyrene TEQ (LOR)** | ---- | 0.5 | mg/kg | | **1.2** | **1.2** | **1.2** | **1.2** | **1.2** |
| **EP080/071: Total Petroleum Hydrocarbons** | | | | | | | | | |
| **C6 - C9 Fraction** | ---- | 10 | mg/kg | | <10 | <10 | <10 | <10 | <10 |
| **C10 - C14 Fraction** | ---- | 50 | mg/kg | | <50 | <50 | <50 | <50 | <50 |
| **C15 - C28 Fraction** | ---- | 100 | mg/kg | | <100 | <100 | <100 | <100 | <100 |
| **C29 - C36 Fraction** | ---- | 100 | mg/kg | | <100 | <100 | <100 | <100 | <100 |
| ^ **C10 - C36 Fraction (sum)** | ---- | 50 | mg/kg | | <50 | <50 | <50 | <50 | <50 |
| **EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions** | | | | | | | | | |
| **C6 - C10 Fraction** | C6_C10 | 10 | mg/kg | | <10 | <10 | <10 | <10 | <10 |
| ^ **C6 - C10 Fraction minus BTEX (F1)** | C6_C10-BTEX | 10 | mg/kg | | <10 | <10 | <10 | <10 | <10 |
| **>C10 - C16 Fraction** | ---- | 50 | mg/kg | | <50 | <50 | <50 | <50 | <50 |
| **>C16 - C34 Fraction** | ---- | 100 | mg/kg | | <100 | <100 | <100 | <100 | <100 |
| **>C34 - C40 Fraction** | ---- | 100 | mg/kg | | <100 | <100 | <100 | <100 | <100 |
| ^ **>C10 - C40 Fraction (sum)** | ---- | 50 | mg/kg | | <50 | <50 | <50 | <50 | <50 |
| ^ **>C10 - C16 Fraction minus Naphthalene (F2)** | ---- | 50 | mg/kg | | <50 | <50 | <50 | <50 | <50 |
| **EP080: BTEXN** | | | | | | | | | |
| **Benzene** | 71-43-2 | 0.2 | mg/kg | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| **Toluene** | 108-88-3 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| **Ethylbenzene** | 100-41-4 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| **meta- & para-Xylene** | 108-38-3 106-42-3 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| **ortho-Xylene** | 95-47-6 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| ^ **Sum of BTEX** | ---- | 0.2 | mg/kg | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |

## Analytical Results

| Sub-Matrix: SOIL (Matrix: SOIL) | | | Sample ID | SB6_0.0-0.2 | SB6_1.0-1.2 | SB6_1.5 | SB7_0.5-0.7 | SB7_2.0-2.2 |
|---|---|---|---|---|---|---|---|---|
| | | | Sampling date / time | 19-Dec-2023 00:00 | 19-Dec-2023 00:00 | 19-Dec-2023 00:00 | 19-Dec-2023 00:00 | 19-Dec-2023 00:00 |
| Compound | CAS Number | LOR | Unit | EM2322818-001 | EM2322818-003 | EM2322818-004 | EM2322818-006 | EM2322818-008 |
| | | | | Result | Result | Result | Result | Result |
| **EP080: BTEXN - Continued** | | | | | | | | |
| ^ **Total Xylenes** | ---- | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| **Naphthalene** | 91-20-3 | 1 | mg/kg | <1 | <1 | <1 | <1 | <1 |
| **EP066S: PCB Surrogate** | | | | | | | | |
| **Decachlorobiphenyl** | 2051-24-3 | 0.1 | % | **75.6** | **79.6** | **71.5** | **76.5** | **82.5** |
| **EP068S: Organochlorine Pesticide Surrogate** | | | | | | | | |
| **Dibromo-DDE** | 21655-73-2 | 0.05 | % | **106** | **110** | **110** | **110** | **117** |
| **EP068T: Organophosphorus Pesticide Surrogate** | | | | | | | | |
| **DEF** | 78-48-8 | 0.05 | % | **78.4** | **91.7** | **58.9** | **77.0** | **85.4** |
| **EP075(SIM)S: Phenolic Compound Surrogates** | | | | | | | | |
| **Phenol-d6** | 13127-88-3 | 0.5 | % | **92.7** | **91.5** | **92.9** | **92.8** | **91.4** |
| **2-Chlorophenol-D4** | 93951-73-6 | 0.5 | % | **96.8** | **95.2** | **95.2** | **91.2** | **94.0** |
| **2.4.6-Tribromophenol** | 118-79-6 | 0.5 | % | **93.2** | **91.2** | **96.1** | **88.4** | **98.9** |
| **EP075(SIM)T: PAH Surrogates** | | | | | | | | |
| **2-Fluorobiphenyl** | 321-60-8 | 0.5 | % | **99.8** | **102** | **103** | **93.0** | **101** |
| **Anthracene-d10** | 1719-06-8 | 0.5 | % | **104** | **104** | **106** | **99.1** | **106** |
| **4-Terphenyl-d14** | 1718-51-0 | 0.5 | % | **103** | **108** | **108** | **95.1** | **104** |
| **EP080S: TPH(V)/BTEX Surrogates** | | | | | | | | |
| **1.2-Dichloroethane-D4** | 17060-07-0 | 0.2 | % | **105** | **88.2** | **88.0** | **84.7** | **89.6** |
| **Toluene-D8** | 2037-26-5 | 0.2 | % | **89.9** | **84.6** | **73.8** | **71.0** | **81.7** |
| **4-Bromofluorobenzene** | 460-00-4 | 0.2 | % | **112** | **95.7** | **87.9** | **92.2** | **92.0** |

## Analytical Results

| Sub-Matrix: SOIL (Matrix: SOIL) | | | | Sample ID | SB10_0.0-0.2 | SB10_1.0-1.2 | SB12_0.0-0.2 | SB12_1.5 | QC5 |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Sampling date / time | 19-Dec-2023 00:00 | 19-Dec-2023 00:00 | 19-Dec-2023 00:00 | 19-Dec-2023 00:00 | 19-Dec-2023 00:00 |
| Compound | CAS Number | LOR | Unit | | EM2322818-010 | EM2322818-012 | EM2322818-013 | EM2322818-016 | EM2322818-017 |
| | | | | | Result | Result | Result | Result | Result |
| **EA055: Moisture Content (Dried @ 105-110°C)** | | | | | | | | | |
| Moisture Content | ---- | 1.0 | % | | 5.9 | 13.9 | 4.6 | 7.6 | 4.4 |
| **EA200: AS 4964 - 2004 Identification of Asbestos in Soils** | | | | | | | | | |
| Asbestos Detected | 1332-21-4 | 0.1 | g/kg | | No | No | No | No | ---- |
| Asbestos (Trace) | 1332-21-4 | - | - | | No | No | No | No | ---- |
| Asbestos Type | 1332-21-4 | - | -- | | - | - | - | - | ---- |
| Sample weight (dry) | ---- | 0.01 | g | | 199 | 192 | 187 | 177 | ---- |
| APPROVED IDENTIFIER: | ---- | - | -- | | M. TRAN | M. TRAN | M. TRAN | M. TRAN | ---- |
| Synthetic Mineral Fibre | ---- | - | -- | | Yes | No | No | No | ---- |
| Organic Fibre | ---- | - | -- | | Yes | No | Yes | No | ---- |
| **EG005(ED093)T: Total Metals by ICP-AES** | | | | | | | | | |
| Arsenic | 7440-38-2 | 5 | mg/kg | | 66 | 8 | 10 | 11 | 9 |
| Barium | 7440-39-3 | 10 | mg/kg | | 90 | 50 | 70 | 70 | 70 |
| Beryllium | 7440-41-7 | 1 | mg/kg | | 1 | <1 | <1 | <1 | <1 |
| Boron | 7440-42-8 | 50 | mg/kg | | <50 | <50 | <50 | <50 | <50 |
| Cadmium | 7440-43-9 | 1 | mg/kg | | <1 | <1 | <1 | <1 | <1 |
| Chromium | 7440-47-3 | 2 | mg/kg | | 9 | 23 | 16 | 19 | 16 |
| Cobalt | 7440-48-4 | 2 | mg/kg | | 5 | 4 | 8 | 9 | 7 |
| Copper | 7440-50-8 | 5 | mg/kg | | 6 | 15 | 11 | 12 | 11 |
| Lead | 7439-92-1 | 5 | mg/kg | | 11 | 12 | 16 | 17 | 14 |
| Manganese | 7439-96-5 | 5 | mg/kg | | 216 | 277 | 332 | 443 | 307 |
| Nickel | 7440-02-0 | 2 | mg/kg | | 5 | 8 | 9 | 9 | 8 |
| Selenium | 7782-49-2 | 5 | mg/kg | | <5 | <5 | <5 | <5 | <5 |
| Vanadium | 7440-62-2 | 5 | mg/kg | | 28 | 32 | 25 | 27 | 24 |
| Zinc | 7440-66-6 | 5 | mg/kg | | 45 | 22 | 30 | 24 | 28 |
| **EG035T: Total Recoverable Mercury by FIMS** | | | | | | | | | |
| Mercury | 7439-97-6 | 0.1 | mg/kg | | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| **EK026SF: Total CN by Segmented Flow Analyser** | | | | | | | | | |

## Analytical Results

| Sub-Matrix: SOIL (Matrix: SOIL) | | | Sample ID | SB10_0.0-0.2 | SB10_1.0-1.2 | SB12_0.0-0.2 | SB12_1.5 | QC5 |
|---|---|---|---|---|---|---|---|---|
| | | | Sampling date / time | 19-Dec-2023 00:00 | 19-Dec-2023 00:00 | 19-Dec-2023 00:00 | 19-Dec-2023 00:00 | 19-Dec-2023 00:00 |
| Compound | CAS Number | LOR | Unit | EM2322818-010 | EM2322818-012 | EM2322818-013 | EM2322818-016 | EM2322818-017 |
| | | | | Result | Result | Result | Result | Result |
| **EK026SF: Total CN by Segmented Flow Analyser - Continued** | | | | | | | | |
| Total Cyanide | 57-12-5 | 1 | mg/kg | <1 | <1 | <1 | <1 | ---- |
| **EK040T: Fluoride Total** | | | | | | | | |
| Fluoride | 16984-48-8 | 40 | mg/kg | **380** | **270** | **240** | **210** | ---- |
| **EP066: Polychlorinated Biphenyls (PCB)** | | | | | | | | |
| Total Polychlorinated biphenyls | ---- | 0.1 | mg/kg | <0.1 | <0.1 | <0.1 | <0.1 | ---- |
| **EP068A: Organochlorine Pesticides (OC)** | | | | | | | | |
| alpha-BHC | 319-84-6 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | ---- |
| Hexachlorobenzene (HCB) | 118-74-1 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | ---- |
| beta-BHC | 319-85-7 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | ---- |
| gamma-BHC | 58-89-9 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | ---- |
| delta-BHC | 319-86-8 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | ---- |
| Heptachlor | 76-44-8 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | ---- |
| Aldrin | 309-00-2 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | ---- |
| Heptachlor epoxide | 1024-57-3 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | ---- |
| ^ Total Chlordane (sum) | ---- | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | ---- |
| trans-Chlordane | 5103-74-2 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | ---- |
| alpha-Endosulfan | 959-98-8 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | ---- |
| cis-Chlordane | 5103-71-9 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | ---- |
| Dieldrin | 60-57-1 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | ---- |
| 4.4`-DDE | 72-55-9 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | ---- |
| Endrin | 72-20-8 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | ---- |
| beta-Endosulfan | 33213-65-9 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | ---- |
| ^ Endosulfan (sum) | 115-29-7 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | ---- |
| 4.4`-DDD | 72-54-8 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | ---- |
| Endrin aldehyde | 7421-93-4 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | ---- |
| Endosulfan sulfate | 1031-07-8 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | ---- |
| 4.4`-DDT | 50-29-3 | 0.2 | mg/kg | <0.2 | <0.2 | <0.2 | <0.2 | ---- |

## Analytical Results

| Sub-Matrix: SOIL (Matrix: SOIL) | | | Sample ID | SB10_0.0-0.2 | SB10_1.0-1.2 | SB12_0.0-0.2 | SB12_1.5 | QC5 |
|---|---|---|---|---|---|---|---|---|
| | | | Sampling date / time | 19-Dec-2023 00:00 | 19-Dec-2023 00:00 | 19-Dec-2023 00:00 | 19-Dec-2023 00:00 | 19-Dec-2023 00:00 |
| Compound | CAS Number | LOR | Unit | EM2322818-010 | EM2322818-012 | EM2322818-013 | EM2322818-016 | EM2322818-017 |
| | | | | Result | Result | Result | Result | Result |
| **EP068A: Organochlorine Pesticides (OC) - Continued** | | | | | | | | |
| Endrin ketone | 53494-70-5 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | ---- |
| Methoxychlor | 72-43-5 | 0.2 | mg/kg | <0.2 | <0.2 | <0.2 | <0.2 | ---- |
| ^ Sum of Aldrin + Dieldrin | 309-00-2/60-57-1 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | ---- |
| ^ Sum of DDD + DDE + DDT | 72-54-8/72-55-9/50-2 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | ---- |
| **EP068B: Organophosphorus Pesticides (OP)** | | | | | | | | |
| Dichlorvos | 62-73-7 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | ---- |
| Demeton-S-methyl | 919-86-8 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | ---- |
| Monocrotophos | 6923-22-4 | 0.2 | mg/kg | <0.2 | <0.2 | <0.2 | <0.2 | ---- |
| Dimethoate | 60-51-5 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | ---- |
| Diazinon | 333-41-5 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | ---- |
| Chlorpyrifos-methyl | 5598-13-0 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | ---- |
| Parathion-methyl | 298-00-0 | 0.2 | mg/kg | <0.2 | <0.2 | <0.2 | <0.2 | ---- |
| Malathion | 121-75-5 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | ---- |
| Fenthion | 55-38-9 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | ---- |
| Chlorpyrifos | 2921-88-2 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | ---- |
| Parathion | 56-38-2 | 0.2 | mg/kg | <0.2 | <0.2 | <0.2 | <0.2 | ---- |
| Pirimphos-ethyl | 23505-41-1 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | ---- |
| Chlorfenvinphos | 470-90-6 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | ---- |
| Bromophos-ethyl | 4824-78-6 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | ---- |
| Fenamiphos | 22224-92-6 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | ---- |
| Prothiofos | 34643-46-4 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | ---- |
| Ethion | 563-12-2 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | ---- |
| Carbophenothion | 786-19-6 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | ---- |
| Azinphos Methyl | 86-50-0 | 0.05 | mg/kg | <0.05 | <0.05 | <0.05 | <0.05 | ---- |
| **EP075(SIM)A: Phenolic Compounds** | | | | | | | | |
| Phenol | 108-95-2 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | ---- |

## Analytical Results

| Sub-Matrix: SOIL (Matrix: SOIL) | | | Sample ID | SB10_0.0-0.2 | SB10_1.0-1.2 | SB12_0.0-0.2 | SB12_1.5 | QC5 |
|---|---|---|---|---|---|---|---|---|
| | | | Sampling date / time | 19-Dec-2023 00:00 | 19-Dec-2023 00:00 | 19-Dec-2023 00:00 | 19-Dec-2023 00:00 | 19-Dec-2023 00:00 |
| Compound | CAS Number | LOR | Unit | EM2322818-010 | EM2322818-012 | EM2322818-013 | EM2322818-016 | EM2322818-017 |
| | | | | Result | Result | Result | Result | Result |
| **EP075(SIM)A: Phenolic Compounds - Continued** | | | | | | | | |
| 2-Chlorophenol | 95-57-8 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | ---- |
| 2-Methylphenol | 95-48-7 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | ---- |
| 3- & 4-Methylphenol | 1319-77-3 | 1 | mg/kg | <1 | <1 | <1 | <1 | ---- |
| 2-Nitrophenol | 88-75-5 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | ---- |
| 2.4-Dimethylphenol | 105-67-9 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | ---- |
| 2.4-Dichlorophenol | 120-83-2 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | ---- |
| 2.6-Dichlorophenol | 87-65-0 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | ---- |
| 4-Chloro-3-methylphenol | 59-50-7 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | ---- |
| 2.4.6-Trichlorophenol | 88-06-2 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | ---- |
| 2.4.5-Trichlorophenol | 95-95-4 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | ---- |
| Pentachlorophenol | 87-86-5 | 2 | mg/kg | <2 | <2 | <2 | <2 | ---- |
| **EP075(SIM)B: Polynuclear Aromatic Hydrocarbons** | | | | | | | | |
| Naphthalene | 91-20-3 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | ---- |
| Acenaphthylene | 208-96-8 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | ---- |
| Acenaphthene | 83-32-9 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | ---- |
| Fluorene | 86-73-7 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | ---- |
| Phenanthrene | 85-01-8 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | ---- |
| Anthracene | 120-12-7 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | ---- |
| Fluoranthene | 206-44-0 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | ---- |
| Pyrene | 129-00-0 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | ---- |
| Benz(a)anthracene | 56-55-3 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | ---- |
| Chrysene | 218-01-9 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | ---- |
| Benzo(b+j)fluoranthene | 205-99-2 205-82-3 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | ---- |
| Benzo(k)fluoranthene | 207-08-9 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | ---- |
| Benzo(a)pyrene | 50-32-8 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | ---- |
| Indeno(1.2.3.cd)pyrene | 193-39-5 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | ---- |
| Dibenz(a.h)anthracene | 53-70-3 | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | ---- |

## Analytical Results

| Sub-Matrix: SOIL (Matrix: SOIL) | | | | Sample ID | SB10_0.0-0.2 | SB10_1.0-1.2 | SB12_0.0-0.2 | SB12_1.5 | QC5 |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Sampling date / time | 19-Dec-2023 00:00 | 19-Dec-2023 00:00 | 19-Dec-2023 00:00 | 19-Dec-2023 00:00 | 19-Dec-2023 00:00 |
| Compound | CAS Number | LOR | Unit | | EM2322818-010 | EM2322818-012 | EM2322818-013 | EM2322818-016 | EM2322818-017 |
| | | | | | Result | Result | Result | Result | Result |
| **EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued** | | | | | | | | | |
| Benzo(g.h.i)perylene | 191-24-2 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | ---- |
| ^ Sum of polycyclic aromatic hydrocarbons | ---- | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | ---- |
| ^ Benzo(a)pyrene TEQ (zero) | ---- | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | ---- |
| ^ Benzo(a)pyrene TEQ (half LOR) | ---- | 0.5 | mg/kg | | **0.6** | **0.6** | **0.6** | **0.6** | ---- |
| ^ Benzo(a)pyrene TEQ (LOR) | ---- | 0.5 | mg/kg | | **1.2** | **1.2** | **1.2** | **1.2** | ---- |
| **EP080/071: Total Petroleum Hydrocarbons** | | | | | | | | | |
| C6 - C9 Fraction | ---- | 10 | mg/kg | | <10 | <10 | <10 | <10 | ---- |
| C10 - C14 Fraction | ---- | 50 | mg/kg | | <50 | <50 | <50 | <50 | ---- |
| C15 - C28 Fraction | ---- | 100 | mg/kg | | <100 | <100 | <100 | <100 | ---- |
| C29 - C36 Fraction | ---- | 100 | mg/kg | | <100 | <100 | <100 | <100 | ---- |
| ^ C10 - C36 Fraction (sum) | ---- | 50 | mg/kg | | <50 | <50 | <50 | <50 | ---- |
| **EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions** | | | | | | | | | |
| C6 - C10 Fraction | C6_C10 | 10 | mg/kg | | <10 | <10 | <10 | <10 | ---- |
| ^ C6 - C10 Fraction minus BTEX (F1) | C6_C10-BTEX | 10 | mg/kg | | <10 | <10 | <10 | <10 | ---- |
| >C10 - C16 Fraction | ---- | 50 | mg/kg | | <50 | <50 | <50 | <50 | ---- |
| >C16 - C34 Fraction | ---- | 100 | mg/kg | | <100 | <100 | <100 | <100 | ---- |
| >C34 - C40 Fraction | ---- | 100 | mg/kg | | <100 | <100 | <100 | <100 | ---- |
| ^ >C10 - C40 Fraction (sum) | ---- | 50 | mg/kg | | <50 | <50 | <50 | <50 | ---- |
| ^ >C10 - C16 Fraction minus Naphthalene (F2) | ---- | 50 | mg/kg | | <50 | <50 | <50 | <50 | ---- |
| **EP080: BTEXN** | | | | | | | | | |
| Benzene | 71-43-2 | 0.2 | mg/kg | | <0.2 | <0.2 | <0.2 | <0.2 | ---- |
| Toluene | 108-88-3 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | ---- |
| Ethylbenzene | 100-41-4 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | ---- |
| meta- & para-Xylene | 108-38-3 106-42-3 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | ---- |
| ortho-Xylene | 95-47-6 | 0.5 | mg/kg | | <0.5 | <0.5 | <0.5 | <0.5 | ---- |
| ^ Sum of BTEX | ---- | 0.2 | mg/kg | | <0.2 | <0.2 | <0.2 | <0.2 | ---- |

## Analytical Results

| Sub-Matrix: SOIL (Matrix: SOIL) | | | Sample ID | SB10_0.0-0.2 | SB10_1.0-1.2 | SB12_0.0-0.2 | SB12_1.5 | QC5 |
|---|---|---|---|---|---|---|---|---|
| | | | Sampling date / time | 19-Dec-2023 00:00 | 19-Dec-2023 00:00 | 19-Dec-2023 00:00 | 19-Dec-2023 00:00 | 19-Dec-2023 00:00 |
| Compound | CAS Number | LOR | Unit | EM2322818-010 | EM2322818-012 | EM2322818-013 | EM2322818-016 | EM2322818-017 |
| | | | | Result | Result | Result | Result | Result |
| **EP080: BTEXN - Continued** | | | | | | | | |
| ^ **Total Xylenes** | ---- | 0.5 | mg/kg | <0.5 | <0.5 | <0.5 | <0.5 | ---- |
| **Naphthalene** | 91-20-3 | 1 | mg/kg | <1 | <1 | <1 | <1 | ---- |
| **EP066S: PCB Surrogate** | | | | | | | | |
| **Decachlorobiphenyl** | 2051-24-3 | 0.1 | % | **76.3** | **60.9** | **59.0** | **75.2** | ---- |
| **EP068S: Organochlorine Pesticide Surrogate** | | | | | | | | |
| **Dibromo-DDE** | 21655-73-2 | 0.05 | % | **106** | **107** | **108** | **106** | ---- |
| **EP068T: Organophosphorus Pesticide Surrogate** | | | | | | | | |
| **DEF** | 78-48-8 | 0.05 | % | **88.7** | **74.6** | **71.6** | **75.2** | ---- |
| **EP075(SIM)S: Phenolic Compound Surrogates** | | | | | | | | |
| **Phenol-d6** | 13127-88-3 | 0.5 | % | **86.9** | **78.8** | **91.2** | **88.2** | ---- |
| **2-Chlorophenol-D4** | 93951-73-6 | 0.5 | % | **89.0** | **81.7** | **93.1** | **90.1** | ---- |
| **2.4.6-Tribromophenol** | 118-79-6 | 0.5 | % | **94.2** | **81.5** | **91.6** | **88.2** | ---- |
| **EP075(SIM)T: PAH Surrogates** | | | | | | | | |
| **2-Fluorobiphenyl** | 321-60-8 | 0.5 | % | **95.5** | **89.2** | **102** | **95.9** | ---- |
| **Anthracene-d10** | 1719-06-8 | 0.5 | % | **99.6** | **93.3** | **104** | **98.7** | ---- |
| **4-Terphenyl-d14** | 1718-51-0 | 0.5 | % | **96.2** | **91.3** | **106** | **96.1** | ---- |
| **EP080S: TPH(V)/BTEX Surrogates** | | | | | | | | |
| **1.2-Dichloroethane-D4** | 17060-07-0 | 0.2 | % | **88.7** | **88.7** | **92.8** | **90.0** | ---- |
| **Toluene-D8** | 2037-26-5 | 0.2 | % | **79.5** | **79.9** | **91.8** | **87.1** | ---- |
| **4-Bromofluorobenzene** | 460-00-4 | 0.2 | % | **94.7** | **91.7** | **99.4** | **89.4** | ---- |

## Analytical Results

| Sub-Matrix: WATER (Matrix: WATER) | | | | Sample ID | QC9 | QC10 | ---- | ---- | ---- |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Sampling date / time | 19-Dec-2023 00:00 | 19-Dec-2023 00:00 | ---- | ---- | ---- |
| Compound | CAS Number | LOR | Unit | | EM2322818-018 | EM2322818-019 | -------- | -------- | -------- |
| | | | | | Result | Result | ---- | ---- | ---- |
| **EG020F: Dissolved Metals by ICP-MS** | | | | | | | | | |
| **Arsenic** | 7440-38-2 | 0.001 | mg/L | | <0.001 | ---- | ---- | ---- | ---- |
| **Cadmium** | 7440-43-9 | 0.0001 | mg/L | | <0.0001 | ---- | ---- | ---- | ---- |
| **Chromium** | 7440-47-3 | 0.001 | mg/L | | <0.001 | ---- | ---- | ---- | ---- |
| **Copper** | 7440-50-8 | 0.001 | mg/L | | <0.001 | ---- | ---- | ---- | ---- |
| **Nickel** | 7440-02-0 | 0.001 | mg/L | | <0.001 | ---- | ---- | ---- | ---- |
| **Lead** | 7439-92-1 | 0.001 | mg/L | | <0.001 | ---- | ---- | ---- | ---- |
| **Zinc** | 7440-66-6 | 0.005 | mg/L | | <0.005 | ---- | ---- | ---- | ---- |
| **EG035F: Dissolved Mercury by FIMS** | | | | | | | | | |
| **Mercury** | 7439-97-6 | 0.0001 | mg/L | | <0.0001 | ---- | ---- | ---- | ---- |
| **EP080/071: Total Petroleum Hydrocarbons** | | | | | | | | | |
| **C6 - C9 Fraction** | ---- | 20 | µg/L | | ---- | <20 | ---- | ---- | ---- |
| **EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions** | | | | | | | | | |
| **C6 - C10 Fraction** | C6_C10 | 20 | µg/L | | ---- | <20 | ---- | ---- | ---- |
| ^ **C6 - C10 Fraction minus BTEX (F1)** | C6_C10-BTEX | 20 | µg/L | | ---- | <20 | ---- | ---- | ---- |
| **EP080: BTEXN** | | | | | | | | | |
| **Benzene** | 71-43-2 | 1 | µg/L | | ---- | <1 | ---- | ---- | ---- |
| **Toluene** | 108-88-3 | 2 | µg/L | | ---- | <2 | ---- | ---- | ---- |
| **Ethylbenzene** | 100-41-4 | 2 | µg/L | | ---- | <2 | ---- | ---- | ---- |
| **meta- & para-Xylene** | 108-38-3 106-42-3 | 2 | µg/L | | ---- | <2 | ---- | ---- | ---- |
| **ortho-Xylene** | 95-47-6 | 2 | µg/L | | ---- | <2 | ---- | ---- | ---- |
| ^ **Total Xylenes** | ---- | 2 | µg/L | | ---- | <2 | ---- | ---- | ---- |
| ^ **Sum of BTEX** | ---- | 1 | µg/L | | ---- | <1 | ---- | ---- | ---- |
| **Naphthalene** | 91-20-3 | 5 | µg/L | | ---- | <5 | ---- | ---- | ---- |
| **EP080S: TPH(V)/BTEX Surrogates** | | | | | | | | | |
| **1.2-Dichloroethane-D4** | 17060-07-0 | 2 | % | | ---- | **96.0** | ---- | ---- | ---- |
| **Toluene-D8** | 2037-26-5 | 2 | % | | ---- | **92.8** | ---- | ---- | ---- |
| **4-Bromofluorobenzene** | 460-00-4 | 2 | % | | ---- | **100** | ---- | ---- | ---- |

## Analytical Results

### Descriptive Results

Sub-Matrix: **SOIL**

| *Method: Compound* | *Sample ID - Sampling date / time* | *Analytical Results* |
|---|---|---|
| **EA200: AS 4964 - 2004 Identification of Asbestos in Soils** | | |
| EA200: Description | SB6_0.0-0.2 - 19-Dec-2023 00:00 | Grey rocky soil. |
| EA200: Description | SB6_1.0-1.2 - 19-Dec-2023 00:00 | Beige clay like soil. |
| EA200: Description | SB6_1.5 - 19-Dec-2023 00:00 | Beige clay like soil. |
| EA200: Description | SB7_0.5-0.7 - 19-Dec-2023 00:00 | Beige clay like soil. |
| EA200: Description | SB7_2.0-2.2 - 19-Dec-2023 00:00 | Beige clay like soil. |
| EA200: Description | SB10_0.0-0.2 - 19-Dec-2023 00:00 | Beige grey rocky soil with organic matter and synthetic mineral fibres. |
| EA200: Description | SB10_1.0-1.2 - 19-Dec-2023 00:00 | Beige clay like soil. |
| EA200: Description | SB12_0.0-0.2 - 19-Dec-2023 00:00 | Beige rocky soil with organic matter. |
| EA200: Description | SB12_1.5 - 19-Dec-2023 00:00 | Beige rocky soil. |

## Surrogate Control Limits

| Sub-Matrix: SOIL | | Recovery Limits (%) | |
|---|---|---|---|
| Compound | CAS Number | Low | High |
| **EP066S: PCB Surrogate** | | | |
| Decachlorobiphenyl | 2051-24-3 | 36 | 140 |
| **EP068S: Organochlorine Pesticide Surrogate** | | | |
| Dibromo-DDE | 21655-73-2 | 62 | 128 |
| **EP068T: Organophosphorus Pesticide Surrogate** | | | |
| DEF | 78-48-8 | 40 | 139 |
| **EP075(SIM)S: Phenolic Compound Surrogates** | | | |
| Phenol-d6 | 13127-88-3 | 54 | 125 |
| 2-Chlorophenol-D4 | 93951-73-6 | 65 | 123 |
| 2.4.6-Tribromophenol | 118-79-6 | 34 | 122 |
| **EP075(SIM)T: PAH Surrogates** | | | |
| 2-Fluorobiphenyl | 321-60-8 | 61 | 125 |
| Anthracene-d10 | 1719-06-8 | 62 | 130 |
| 4-Terphenyl-d14 | 1718-51-0 | 67 | 133 |
| **EP080S: TPH(V)/BTEX Surrogates** | | | |
| 1.2-Dichloroethane-D4 | 17060-07-0 | 51 | 125 |
| Toluene-D8 | 2037-26-5 | 55 | 125 |
| 4-Bromofluorobenzene | 460-00-4 | 56 | 124 |

| Sub-Matrix: WATER | | Recovery Limits (%) | |
|---|---|---|---|
| Compound | CAS Number | Low | High |
| **EP080S: TPH(V)/BTEX Surrogates** | | | |
| 1.2-Dichloroethane-D4 | 17060-07-0 | 73 | 129 |
| Toluene-D8 | 2037-26-5 | 70 | 125 |
| 4-Bromofluorobenzene | 460-00-4 | 71 | 129 |

# QUALITY CONTROL REPORT

| | | | |
|---|---|---|---|
| **Work Order** | : **EM2322818** | Page | : 1 of 17 |
| Client | : **Jones Environmental** | Laboratory | : Environmental Division Melbourne |
| Contact | : PATRICIA JONES | Contact | : Hannah White |
| Address | : 497 Parnall Street<br>Lavington Lavington 2641 | Address | : 4 Westall Rd Springvale VIC Australia 3171 |
| Telephone | : ---- | Telephone | : +61-3-8549 9600 |
| Project | : JE10388 | Date Samples Received | : 20-Dec-2023 |
| Order number | : ---- | Date Analysis Commenced | : 21-Dec-2023 |
| C-O-C number | : ---- | Issue Date | : 05-Jan-2024 |
| Sampler | : RUSSELL JONES | | |
| Site | : ---- | | |
| Quote number | : EN/222 | | |
| No. of samples received | : 20 | | |
| No. of samples analysed | : 12 | | |

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

## *Signatories*

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

| *Signatories* | *Position* | *Accreditation Category* |
|---|---|---|
| Arenie Vijayaratnam | Senior Inorganic Chemist | Melbourne Inorganics, Springvale, VIC |
| Dilani Fernando | Laboratory Coordinator | Melbourne Inorganics, Springvale, VIC |
| Jarwis Nheu | Non-Metals Team Leader | Melbourne Inorganics, Springvale, VIC |
| MINNIE TRAN | Approved Asbestos Identifier | Melbourne Asbestos, Springvale, VIC |
| Nancy Wang | 2IC Organic Chemist | Melbourne Inorganics, Springvale, VIC |
| Nancy Wang | 2IC Organic Chemist | Melbourne Organics, Springvale, VIC |

## General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis. Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Key : Anonymous = Refers to samples which are not specifically part of this work order but formed part of the QC process lot
CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
RPD = Relative Percentage Difference
# = Indicates failed QC
* = The final LOR has been raised due to dilution or other sample specific cause; adjusted LOR is shown in brackets. The duplicate ranges for Acceptable RPD% are applied to the final LOR where applicable.

## Laboratory Duplicate (DUP) Report

The quality control term Laboratory Duplicate refers to a randomly selected intralaboratory split. Laboratory duplicates provide information regarding method precision and sample heterogeneity. The permitted ranges for the Relative Percent Deviation (RPD) of Laboratory Duplicates are specified in ALS Method QWI-EN/38 and are dependent on the magnitude of results in comparison to the level of reporting: Result < 10 times LOR: No Limit; Result between 10 and 20 times LOR: 0% - 50%; Result > 20 times LOR: 0% - 20%.

Sub-Matrix: **SOIL**

| | | | | Laboratory Duplicate (DUP) Report | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| *Laboratory sample ID* | *Sample ID* | *Method: Compound* | *CAS Number* | *LOR* | *Unit* | *Original Result* | *Duplicate Result* | *RPD (%)* | *Acceptable RPD (%)* |
| **EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 5511574)** | | | | | | | | | |
| EM2322390-001 | Anonymous | EG005T: Beryllium | 7440-41-7 | 1 | mg/kg | <1 | <1 | 0.0 | No Limit |
| | | EG005T: Cadmium | 7440-43-9 | 1 | mg/kg | <1 | <1 | 0.0 | No Limit |
| | | EG005T: Barium | 7440-39-3 | 10 | mg/kg | 130 | 140 | 0.0 | 0% - 50% |
| | | EG005T: Chromium | 7440-47-3 | 2 | mg/kg | 50 | 51 | 2.8 | 0% - 20% |
| | | EG005T: Cobalt | 7440-48-4 | 2 | mg/kg | 4 | 4 | 0.0 | No Limit |
| | | EG005T: Nickel | 7440-02-0 | 2 | mg/kg | 10 | 10 | 0.0 | No Limit |
| | | EG005T: Arsenic | 7440-38-2 | 5 | mg/kg | 8 | 9 | 0.0 | No Limit |
| | | EG005T: Copper | 7440-50-8 | 5 | mg/kg | 37 | 38 | 0.0 | No Limit |
| | | EG005T: Lead | 7439-92-1 | 5 | mg/kg | 120 | 122 | 2.2 | 0% - 20% |
| | | EG005T: Manganese | 7439-96-5 | 5 | mg/kg | 175 | 180 | 2.7 | 0% - 20% |
| | | EG005T: Selenium | 7782-49-2 | 5 | mg/kg | <5 | <5 | 0.0 | No Limit |
| | | EG005T: Vanadium | 7440-62-2 | 5 | mg/kg | 18 | 19 | 0.0 | No Limit |
| | | EG005T: Zinc | 7440-66-6 | 5 | mg/kg | 508 | 520 | 2.3 | 0% - 20% |
| | | EG005T: Boron | 7440-42-8 | 50 | mg/kg | <50 | <50 | 0.0 | No Limit |
| EM2322759-005 | Anonymous | EG005T: Beryllium | 7440-41-7 | 1 | mg/kg | <1 | <1 | 0.0 | No Limit |
| | | EG005T: Cadmium | 7440-43-9 | 1 | mg/kg | <1 | <1 | 0.0 | No Limit |
| | | EG005T: Barium | 7440-39-3 | 10 | mg/kg | <10 | <10 | 0.0 | No Limit |
| | | EG005T: Chromium | 7440-47-3 | 2 | mg/kg | 25 | 25 | 0.0 | 0% - 50% |
| | | EG005T: Cobalt | 7440-48-4 | 2 | mg/kg | 15 | 15 | 0.0 | No Limit |
| | | EG005T: Nickel | 7440-02-0 | 2 | mg/kg | 50 | 50 | 0.0 | 0% - 20% |
| | | EG005T: Arsenic | 7440-38-2 | 5 | mg/kg | 7 | 7 | 0.0 | No Limit |

Sub-Matrix: **SOIL**

| | | | | Laboratory Duplicate (DUP) Report | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| *Laboratory sample ID* | *Sample ID* | *Method: Compound* | *CAS Number* | *LOR* | *Unit* | *Original Result* | *Duplicate Result* | *RPD (%)* | *Acceptable RPD (%)* |
| **EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 5511574) - continued** | | | | | | | | | |
| EM2322759-005 | Anonymous | EG005T: Copper | 7440-50-8 | 5 | mg/kg | 21 | 21 | 0.0 | No Limit |
| | | EG005T: Lead | 7439-92-1 | 5 | mg/kg | 20 | 20 | 0.0 | No Limit |
| | | EG005T: Manganese | 7439-96-5 | 5 | mg/kg | 150 | 149 | 0.0 | 0% - 20% |
| | | EG005T: Selenium | 7782-49-2 | 5 | mg/kg | <5 | <5 | 0.0 | No Limit |
| | | EG005T: Vanadium | 7440-62-2 | 5 | mg/kg | 11 | 11 | 0.0 | No Limit |
| | | EG005T: Zinc | 7440-66-6 | 5 | mg/kg | 98 | 99 | 0.0 | 0% - 50% |
| | | EG005T: Boron | 7440-42-8 | 50 | mg/kg | <50 | <50 | 0.0 | No Limit |
| **EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 5511575)** | | | | | | | | | |
| EM2322818-008 | SB7_2.0-2.2 | EG005T: Beryllium | 7440-41-7 | 1 | mg/kg | 2 | 2 | 0.0 | No Limit |
| | | EG005T: Cadmium | 7440-43-9 | 1 | mg/kg | <1 | <1 | 0.0 | No Limit |
| | | EG005T: Barium | 7440-39-3 | 10 | mg/kg | 70 | 70 | 0.0 | No Limit |
| | | EG005T: Chromium | 7440-47-3 | 2 | mg/kg | 28 | 29 | 0.0 | 0% - 50% |
| | | EG005T: Cobalt | 7440-48-4 | 2 | mg/kg | 11 | 11 | 0.0 | No Limit |
| | | EG005T: Nickel | 7440-02-0 | 2 | mg/kg | 14 | 14 | 0.0 | No Limit |
| | | EG005T: Arsenic | 7440-38-2 | 5 | mg/kg | 31 | 31 | 0.0 | No Limit |
| | | EG005T: Copper | 7440-50-8 | 5 | mg/kg | 16 | 16 | 0.0 | No Limit |
| | | EG005T: Lead | 7439-92-1 | 5 | mg/kg | 30 | 30 | 0.0 | No Limit |
| | | EG005T: Manganese | 7439-96-5 | 5 | mg/kg | 188 | 191 | 1.2 | 0% - 20% |
| | | EG005T: Selenium | 7782-49-2 | 5 | mg/kg | <5 | <5 | 0.0 | No Limit |
| | | EG005T: Vanadium | 7440-62-2 | 5 | mg/kg | 42 | 42 | 0.0 | No Limit |
| | | EG005T: Zinc | 7440-66-6 | 5 | mg/kg | 44 | 44 | 0.0 | No Limit |
| | | EG005T: Boron | 7440-42-8 | 50 | mg/kg | <50 | <50 | 0.0 | No Limit |
| EM2322825-004 | Anonymous | EG005T: Beryllium | 7440-41-7 | 1 | mg/kg | <1 | <1 | 0.0 | No Limit |
| | | EG005T: Cadmium | 7440-43-9 | 1 | mg/kg | <1 | <1 | 0.0 | No Limit |
| | | EG005T: Barium | 7440-39-3 | 10 | mg/kg | 120 | 120 | 0.0 | 0% - 50% |
| | | EG005T: Chromium | 7440-47-3 | 2 | mg/kg | 28 | 28 | 0.0 | 0% - 50% |
| | | EG005T: Cobalt | 7440-48-4 | 2 | mg/kg | 13 | 13 | 0.0 | No Limit |
| | | EG005T: Nickel | 7440-02-0 | 2 | mg/kg | 48 | 48 | 0.0 | 0% - 20% |
| | | EG005T: Arsenic | 7440-38-2 | 5 | mg/kg | <5 | <5 | 0.0 | No Limit |
| | | EG005T: Copper | 7440-50-8 | 5 | mg/kg | 13 | 14 | 0.0 | No Limit |
| | | EG005T: Lead | 7439-92-1 | 5 | mg/kg | 6 | 6 | 0.0 | No Limit |
| | | EG005T: Manganese | 7439-96-5 | 5 | mg/kg | 355 | 355 | 0.0 | 0% - 20% |
| | | EG005T: Selenium | 7782-49-2 | 5 | mg/kg | <5 | <5 | 0.0 | No Limit |
| | | EG005T: Vanadium | 7440-62-2 | 5 | mg/kg | 27 | 27 | 0.0 | No Limit |
| | | EG005T: Zinc | 7440-66-6 | 5 | mg/kg | 27 | 27 | 0.0 | No Limit |
| | | EG005T: Boron | 7440-42-8 | 50 | mg/kg | <50 | <50 | 0.0 | No Limit |
| **EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 5511684)** | | | | | | | | | |

Sub-Matrix: **SOIL**

| Laboratory sample ID | Sample ID | Method: Compound | CAS Number | Laboratory Duplicate (DUP) Report | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | LOR | Unit | Original Result | Duplicate Result | RPD (%) | Acceptable RPD (%) |
| **EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 5511684) - continued** | | | | | | | | | |
| EM2322818-001 | SB6_0.0-0.2 | EA055: Moisture Content | ---- | 0.1 (1.0)* | % | 6.9 | 8.1 | 16.1 | No Limit |
| EM2322825-001 | Anonymous | EA055: Moisture Content | ---- | 0.1 (1.0)* | % | 14.6 | 16.0 | 9.3 | 0% - 50% |
| **EG035T: Total Recoverable Mercury by FIMS (QC Lot: 5511573)** | | | | | | | | | |
| EM2322390-001 | Anonymous | EG035T: Mercury | 7439-97-6 | 0.1 | mg/kg | <0.1 | <0.1 | 0.0 | No Limit |
| EM2322759-005 | Anonymous | EG035T: Mercury | 7439-97-6 | 0.1 | mg/kg | <0.1 | <0.1 | 0.0 | No Limit |
| **EG035T: Total Recoverable Mercury by FIMS (QC Lot: 5511576)** | | | | | | | | | |
| EM2322825-004 | Anonymous | EG035T: Mercury | 7439-97-6 | 0.1 | mg/kg | <0.1 | <0.1 | 0.0 | No Limit |
| **EK026SF: Total CN by Segmented Flow Analyser (QC Lot: 5516732)** | | | | | | | | | |
| EM2322354-107 | Anonymous | EK026SF: Total Cyanide | 57-12-5 | 1 | mg/kg | <1 | <1 | 0.0 | No Limit |
| EM2322818-016 | SB12_1.5 | EK026SF: Total Cyanide | 57-12-5 | 1 | mg/kg | <1 | <1 | 0.0 | No Limit |
| **EK040T: Fluoride Total (QC Lot: 5511547)** | | | | | | | | | |
| EM2322818-001 | SB6_0.0-0.2 | EK040T: Fluoride | 16984-48-8 | 40 | mg/kg | 280 | 280 | 0.0 | No Limit |
| EM2322825-001 | Anonymous | EK040T: Fluoride | 16984-48-8 | 40 | mg/kg | 140 | 110 | 19.9 | No Limit |
| **EP066: Polychlorinated Biphenyls (PCB) (QC Lot: 5511556)** | | | | | | | | | |
| EM2322818-001 | SB6_0.0-0.2 | EP066: Total Polychlorinated biphenyls | ---- | 0.1 | mg/kg | <0.1 | <0.1 | 0.0 | No Limit |
| **EP068A: Organochlorine Pesticides (OC) (QC Lot: 5511555)** | | | | | | | | | |
| EM2322825-004 | Anonymous | EP068: alpha-BHC | 319-84-6 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Hexachlorobenzene (HCB) | 118-74-1 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: beta-BHC | 319-85-7 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: gamma-BHC | 58-89-9 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: delta-BHC | 319-86-8 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Heptachlor | 76-44-8 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Aldrin | 309-00-2 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Heptachlor epoxide | 1024-57-3 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: trans-Chlordane | 5103-74-2 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: alpha-Endosulfan | 959-98-8 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: cis-Chlordane | 5103-71-9 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Dieldrin | 60-57-1 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: 4.4`-DDE | 72-55-9 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Endrin | 72-20-8 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: beta-Endosulfan | 33213-65-9 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: 4.4`-DDD | 72-54-8 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Endrin aldehyde | 7421-93-4 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Endosulfan sulfate | 1031-07-8 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Endrin ketone | 53494-70-5 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: 4.4`-DDT | 50-29-3 | 0.2 | mg/kg | <0.2 | <0.2 | 0.0 | No Limit |
| | | EP068: Methoxychlor | 72-43-5 | 0.2 | mg/kg | <0.2 | <0.2 | 0.0 | No Limit |

Sub-Matrix: **SOIL**

| Laboratory sample ID | Sample ID | Method: Compound | CAS Number | Laboratory Duplicate (DUP) Report | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | LOR | Unit | Original Result | Duplicate Result | RPD (%) | Acceptable RPD (%) |
| **EP068A: Organochlorine Pesticides (OC) (QC Lot: 5511555) - continued** | | | | | | | | | |
| EM2322818-001 | SB6_0.0-0.2 | EP068: alpha-BHC | 319-84-6 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Hexachlorobenzene (HCB) | 118-74-1 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: beta-BHC | 319-85-7 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: gamma-BHC | 58-89-9 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: delta-BHC | 319-86-8 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Heptachlor | 76-44-8 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Aldrin | 309-00-2 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Heptachlor epoxide | 1024-57-3 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: trans-Chlordane | 5103-74-2 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: alpha-Endosulfan | 959-98-8 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: cis-Chlordane | 5103-71-9 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Dieldrin | 60-57-1 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: 4.4`-DDE | 72-55-9 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Endrin | 72-20-8 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: beta-Endosulfan | 33213-65-9 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: 4.4`-DDD | 72-54-8 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Endrin aldehyde | 7421-93-4 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Endosulfan sulfate | 1031-07-8 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Endrin ketone | 53494-70-5 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: 4.4`-DDT | 50-29-3 | 0.2 | mg/kg | <0.2 | <0.2 | 0.0 | No Limit |
| | | EP068: Methoxychlor | 72-43-5 | 0.2 | mg/kg | <0.2 | <0.2 | 0.0 | No Limit |
| **EP068B: Organophosphorus Pesticides (OP) (QC Lot: 5511555)** | | | | | | | | | |
| EM2322825-004 | Anonymous | EP068: Dichlorvos | 62-73-7 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Demeton-S-methyl | 919-86-8 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Dimethoate | 60-51-5 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Diazinon | 333-41-5 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Chlorpyrifos-methyl | 5598-13-0 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Malathion | 121-75-5 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Fenthion | 55-38-9 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Chlorpyrifos | 2921-88-2 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Pirimphos-ethyl | 23505-41-1 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Chlorfenvinphos | 470-90-6 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Bromophos-ethyl | 4824-78-6 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Fenamiphos | 22224-92-6 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Prothiofos | 34643-46-4 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Ethion | 563-12-2 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Carbophenothion | 786-19-6 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Azinphos Methyl | 86-50-0 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |

Sub-Matrix: **SOIL**

| Laboratory sample ID | Sample ID | Method: Compound | CAS Number | Laboratory Duplicate (DUP) Report | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | LOR | Unit | Original Result | Duplicate Result | RPD (%) | Acceptable RPD (%) |
| **EP068B: Organophosphorus Pesticides (OP) (QC Lot: 5511555) - continued** | | | | | | | | | |
| EM2322825-004 | Anonymous | EP068: Monocrotophos | 6923-22-4 | 0.2 | mg/kg | <0.2 | <0.2 | 0.0 | No Limit |
| | | EP068: Parathion-methyl | 298-00-0 | 0.2 | mg/kg | <0.2 | <0.2 | 0.0 | No Limit |
| | | EP068: Parathion | 56-38-2 | 0.2 | mg/kg | <0.2 | <0.2 | 0.0 | No Limit |
| EM2322818-001 | SB6_0.0-0.2 | EP068: Dichlorvos | 62-73-7 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Demeton-S-methyl | 919-86-8 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Dimethoate | 60-51-5 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Diazinon | 333-41-5 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Chlorpyrifos-methyl | 5598-13-0 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Malathion | 121-75-5 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Fenthion | 55-38-9 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Chlorpyrifos | 2921-88-2 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Pirimphos-ethyl | 23505-41-1 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Chlorfenvinphos | 470-90-6 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Bromophos-ethyl | 4824-78-6 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Fenamiphos | 22224-92-6 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Prothiofos | 34643-46-4 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Ethion | 563-12-2 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Carbophenothion | 786-19-6 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Azinphos Methyl | 86-50-0 | 0.05 | mg/kg | <0.05 | <0.05 | 0.0 | No Limit |
| | | EP068: Monocrotophos | 6923-22-4 | 0.2 | mg/kg | <0.2 | <0.2 | 0.0 | No Limit |
| | | EP068: Parathion-methyl | 298-00-0 | 0.2 | mg/kg | <0.2 | <0.2 | 0.0 | No Limit |
| | | EP068: Parathion | 56-38-2 | 0.2 | mg/kg | <0.2 | <0.2 | 0.0 | No Limit |
| **EP075(SIM)A: Phenolic Compounds (QC Lot: 5511554)** | | | | | | | | | |
| EM2322825-004 | Anonymous | EP075(SIM): Phenol | 108-95-2 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2-Chlorophenol | 95-57-8 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2-Methylphenol | 95-48-7 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2-Nitrophenol | 88-75-5 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2.4-Dimethylphenol | 105-67-9 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2.4-Dichlorophenol | 120-83-2 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2.6-Dichlorophenol | 87-65-0 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 4-Chloro-3-methylphenol | 59-50-7 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2.4.6-Trichlorophenol | 88-06-2 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2.4.5-Trichlorophenol | 95-95-4 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 3- & 4-Methylphenol | 1319-77-3 | 1 | mg/kg | <1 | <1 | 0.0 | No Limit |
| | | EP075(SIM): Pentachlorophenol | 87-86-5 | 2 | mg/kg | <2 | <2 | 0.0 | No Limit |
| EM2322818-001 | SB6_0.0-0.2 | EP075(SIM): Phenol | 108-95-2 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2-Chlorophenol | 95-57-8 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2-Methylphenol | 95-48-7 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |

Sub-Matrix: **SOIL**

| | | | | Laboratory Duplicate (DUP) Report | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| *Laboratory sample ID* | *Sample ID* | *Method: Compound* | *CAS Number* | *LOR* | *Unit* | *Original Result* | *Duplicate Result* | *RPD (%)* | *Acceptable RPD (%)* |
| **EP075(SIM)A: Phenolic Compounds (QC Lot: 5511554) - continued** | | | | | | | | | |
| EM2322818-001 | SB6_0.0-0.2 | EP075(SIM): 2-Nitrophenol | 88-75-5 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2.4-Dimethylphenol | 105-67-9 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2.4-Dichlorophenol | 120-83-2 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2.6-Dichlorophenol | 87-65-0 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 4-Chloro-3-methylphenol | 59-50-7 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2.4.6-Trichlorophenol | 88-06-2 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 2.4.5-Trichlorophenol | 95-95-4 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): 3- & 4-Methylphenol | 1319-77-3 | 1 | mg/kg | <1 | <1 | 0.0 | No Limit |
| | | EP075(SIM): Pentachlorophenol | 87-86-5 | 2 | mg/kg | <2 | <2 | 0.0 | No Limit |
| **EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 5511554)** | | | | | | | | | |
| EM2322825-004 | Anonymous | EP075(SIM): Naphthalene | 91-20-3 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Acenaphthylene | 208-96-8 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Acenaphthene | 83-32-9 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Fluorene | 86-73-7 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Phenanthrene | 85-01-8 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Anthracene | 120-12-7 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Fluoranthene | 206-44-0 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Pyrene | 129-00-0 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Benz(a)anthracene | 56-55-3 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Chrysene | 218-01-9 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Benzo(b+j)fluoranthene | 205-99-2<br>205-82-3 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Benzo(k)fluoranthene | 207-08-9 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Benzo(a)pyrene | 50-32-8 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Indeno(1.2.3.cd)pyrene | 193-39-5 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Dibenz(a.h)anthracene | 53-70-3 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Benzo(g.h.i)perylene | 191-24-2 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| EM2322818-001 | SB6_0.0-0.2 | EP075(SIM): Naphthalene | 91-20-3 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Acenaphthylene | 208-96-8 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Acenaphthene | 83-32-9 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Fluorene | 86-73-7 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Phenanthrene | 85-01-8 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Anthracene | 120-12-7 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Fluoranthene | 206-44-0 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Pyrene | 129-00-0 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Benz(a)anthracene | 56-55-3 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Chrysene | 218-01-9 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |

Sub-Matrix: **SOIL**

| Laboratory sample ID | Sample ID | Method: Compound | CAS Number | Laboratory Duplicate (DUP) Report | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | LOR | Unit | Original Result | Duplicate Result | RPD (%) | Acceptable RPD (%) |
| **EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 5511554) - continued** | | | | | | | | | |
| EM2322818-001 | SB6_0.0-0.2 | EP075(SIM): Benzo(b+j)fluoranthene | 205-99-2<br>205-82-3 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Benzo(k)fluoranthene | 207-08-9 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Benzo(a)pyrene | 50-32-8 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Indeno(1.2.3.cd)pyrene | 193-39-5 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Dibenz(a.h)anthracene | 53-70-3 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP075(SIM): Benzo(g.h.i)perylene | 191-24-2 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| **EP080/071: Total Petroleum Hydrocarbons (QC Lot: 5511546)** | | | | | | | | | |
| EM2322818-001 | SB6_0.0-0.2 | EP080: C6 - C9 Fraction | ---- | 10 | mg/kg | <10 | <10 | 0.0 | No Limit |
| **EP080/071: Total Petroleum Hydrocarbons (QC Lot: 5511553)** | | | | | | | | | |
| EM2322825-004 | Anonymous | EP071: C15 - C28 Fraction | ---- | 100 | mg/kg | <100 | <100 | 0.0 | No Limit |
| | | EP071: C29 - C36 Fraction | ---- | 100 | mg/kg | <100 | <100 | 0.0 | No Limit |
| | | EP071: C10 - C14 Fraction | ---- | 50 | mg/kg | <50 | <50 | 0.0 | No Limit |
| EM2322818-001 | SB6_0.0-0.2 | EP071: C15 - C28 Fraction | ---- | 100 | mg/kg | <100 | <100 | 0.0 | No Limit |
| | | EP071: C29 - C36 Fraction | ---- | 100 | mg/kg | <100 | <100 | 0.0 | No Limit |
| | | EP071: C10 - C14 Fraction | ---- | 50 | mg/kg | <50 | <50 | 0.0 | No Limit |
| **EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 5511546)** | | | | | | | | | |
| EM2322818-001 | SB6_0.0-0.2 | EP080: C6 - C10 Fraction | C6_C10 | 10 | mg/kg | <10 | <10 | 0.0 | No Limit |
| **EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 5511553)** | | | | | | | | | |
| EM2322825-004 | Anonymous | EP071: >C16 - C34 Fraction | ---- | 100 | mg/kg | <100 | <100 | 0.0 | No Limit |
| | | EP071: >C34 - C40 Fraction | ---- | 100 | mg/kg | <100 | <100 | 0.0 | No Limit |
| | | EP071: >C10 - C16 Fraction | ---- | 50 | mg/kg | <50 | <50 | 0.0 | No Limit |
| EM2322818-001 | SB6_0.0-0.2 | EP071: >C16 - C34 Fraction | ---- | 100 | mg/kg | <100 | <100 | 0.0 | No Limit |
| | | EP071: >C34 - C40 Fraction | ---- | 100 | mg/kg | <100 | <100 | 0.0 | No Limit |
| | | EP071: >C10 - C16 Fraction | ---- | 50 | mg/kg | <50 | <50 | 0.0 | No Limit |
| **EP080: BTEXN (QC Lot: 5511546)** | | | | | | | | | |
| EM2322818-001 | SB6_0.0-0.2 | EP080: Benzene | 71-43-2 | 0.2 | mg/kg | <0.2 | <0.2 | 0.0 | No Limit |
| | | EP080: Toluene | 108-88-3 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP080: Ethylbenzene | 100-41-4 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP080: meta- & para-Xylene | 108-38-3<br>106-42-3 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP080: ortho-Xylene | 95-47-6 | 0.5 | mg/kg | <0.5 | <0.5 | 0.0 | No Limit |
| | | EP080: Naphthalene | 91-20-3 | 1 | mg/kg | <1 | <1 | 0.0 | No Limit |

Sub-Matrix: **WATER**

| Laboratory sample ID | Sample ID | Method: Compound | CAS Number | Laboratory Duplicate (DUP) Report | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | LOR | Unit | Original Result | Duplicate Result | RPD (%) | Acceptable RPD (%) |
| **EG020F: Dissolved Metals by ICP-MS (QC Lot: 5517367)** | | | | | | | | | |
| EM2322673-001 | Anonymous | EG020A-F: Cadmium | 7440-43-9 | 0.0001 | mg/L | <0.0001 | <0.0001 | 0.0 | No Limit |

Sub-Matrix: **WATER**

| | | | | Laboratory Duplicate (DUP) Report | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| *Laboratory sample ID* | *Sample ID* | *Method: Compound* | *CAS Number* | *LOR* | *Unit* | *Original Result* | *Duplicate Result* | *RPD (%)* | *Acceptable RPD (%)* |
| **EG020F: Dissolved Metals by ICP-MS (QC Lot: 5517367) - continued** | | | | | | | | | |
| EM2322673-001 | Anonymous | EG020A-F: Arsenic | 7440-38-2 | 0.001 | mg/L | 0.005 | 0.005 | 0.0 | No Limit |
| | | EG020A-F: Chromium | 7440-47-3 | 0.001 | mg/L | <0.001 | <0.001 | 0.0 | No Limit |
| | | EG020A-F: Copper | 7440-50-8 | 0.001 | mg/L | 0.009 | 0.010 | 0.0 | No Limit |
| | | EG020A-F: Lead | 7439-92-1 | 0.001 | mg/L | <0.001 | <0.001 | 0.0 | No Limit |
| | | EG020A-F: Nickel | 7440-02-0 | 0.001 | mg/L | 0.020 | 0.020 | 0.0 | 0% - 50% |
| | | EG020A-F: Zinc | 7440-66-6 | 0.005 | mg/L | 0.102 | 0.100 | 1.9 | 0% - 20% |
| EM2322702-006 | Anonymous | EG020A-F: Cadmium | 7440-43-9 | 0.0001 | mg/L | <0.0001 | <0.0001 | 0.0 | No Limit |
| | | EG020A-F: Arsenic | 7440-38-2 | 0.001 | mg/L | <0.001 | <0.001 | 0.0 | No Limit |
| | | EG020A-F: Chromium | 7440-47-3 | 0.001 | mg/L | <0.001 | <0.001 | 0.0 | No Limit |
| | | EG020A-F: Copper | 7440-50-8 | 0.001 | mg/L | 0.002 | 0.001 | 52.8 | No Limit |
| | | EG020A-F: Lead | 7439-92-1 | 0.001 | mg/L | <0.001 | <0.001 | 0.0 | No Limit |
| | | EG020A-F: Nickel | 7440-02-0 | 0.001 | mg/L | <0.001 | 0.001 | 0.0 | No Limit |
| | | EG020A-F: Zinc | 7440-66-6 | 0.005 | mg/L | 0.010 | 0.011 | 0.0 | No Limit |
| **EG035F: Dissolved Mercury by FIMS (QC Lot: 5517364)** | | | | | | | | | |
| EM2322449-001 | Anonymous | EG035F: Mercury | 7439-97-6 | 0.0001 | mg/L | <0.0001 | <0.0001 | 0.0 | No Limit |
| **EP080/071: Total Petroleum Hydrocarbons (QC Lot: 5511669)** | | | | | | | | | |
| EM2322869-001 | Anonymous | EP080: C6 - C9 Fraction | ---- | 20 (200)* | µg/L | 7160 | 7320 | 2.2 | 0% - 20% |
| **EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 5511669)** | | | | | | | | | |
| EM2322869-001 | Anonymous | EP080: C6 - C10 Fraction | C6_C10 | 20 (200)* | µg/L | 9140 | 9410 | 3.0 | 0% - 20% |
| **EP080: BTEXN (QC Lot: 5511669)** | | | | | | | | | |
| EM2322869-001 | Anonymous | EP080: Benzene | 71-43-2 | 1 (10)* | µg/L | 1150 | 1170 | 1.7 | 0% - 20% |
| | | EP080: Ethylbenzene | 100-41-4 | 2 (10)* | µg/L | 1050 | 1080 | 3.2 | 0% - 20% |
| | | EP080: meta- & para-Xylene | 108-38-3<br>106-42-3 | 2 (20)* | µg/L | 1400 | 1450 | 3.9 | 0% - 20% |
| | | EP080: ortho-Xylene | 95-47-6 | 2 (10)* | µg/L | 1040 | 1040 | 0.8 | 0% - 20% |
| | | EP080: Naphthalene | 91-20-3 | 5 (10)* | µg/L | 182 | 205 | 11.4 | 0% - 20% |
| EM2322869-001 | Anonymous | EP080: Toluene | 108-88-3 | 2 | µg/L | 369 | 357 | 3.3 | 0% - 20% |

## Method Blank (MB) and Laboratory Control Sample (LCS) Report

The quality control term Method / Laboratory Blank refers to an analyte free matrix to which all reagents are added in the same volumes or proportions as used in standard sample preparation. The purpose of this QC parameter is to monitor potential laboratory contamination. The quality control term Laboratory Control Sample (LCS) refers to a certified reference material, or a known interference free matrix spiked with target analytes. The purpose of this QC parameter is to monitor method precision and accuracy independent of sample matrix. Dynamic Recovery Limits are based on statistical evaluation of processed LCS.

Sub-Matrix: **SOIL**

| | | | | Method Blank (MB) Report | Laboratory Control Spike (LCS) Report | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | Spike | Spike Recovery (%) | Acceptable Limits (%) | |
| Method: Compound | CAS Number | LOR | Unit | Result | Concentration | LCS | Low | High |
| **EG005(ED093)T: Total Metals by ICP-AES (QCLot: 5511574)** | | | | | | | | |
| EG005T: Arsenic | 7440-38-2 | 5 | mg/kg | <5 | 123 mg/kg | 95.9 | 70.0 | 130 |
| EG005T: Barium | 7440-39-3 | 10 | mg/kg | <10 | 99.3 mg/kg | 92.0 | 70.0 | 130 |
| EG005T: Beryllium | 7440-41-7 | 1 | mg/kg | <1 | 0.67 mg/kg | 97.0 | 70.0 | 130 |
| EG005T: Boron | 7440-42-8 | 50 | mg/kg | <50 | ---- | ---- | ---- | ---- |
| EG005T: Cadmium | 7440-43-9 | 1 | mg/kg | <1 | 1.23 mg/kg | 61.7 | 50.0 | 130 |
| EG005T: Chromium | 7440-47-3 | 2 | mg/kg | <2 | 20.2 mg/kg | 95.0 | 70.0 | 130 |
| EG005T: Cobalt | 7440-48-4 | 2 | mg/kg | <2 | 11.2 mg/kg | 90.2 | 70.0 | 130 |
| EG005T: Copper | 7440-50-8 | 5 | mg/kg | <5 | 55.9 mg/kg | 92.3 | 70.0 | 130 |
| EG005T: Lead | 7439-92-1 | 5 | mg/kg | <5 | 62.4 mg/kg | 92.5 | 70.0 | 130 |
| EG005T: Manganese | 7439-96-5 | 5 | mg/kg | <5 | 590 mg/kg | 92.3 | 70.0 | 130 |
| EG005T: Nickel | 7440-02-0 | 2 | mg/kg | <2 | 15.4 mg/kg | 93.2 | 70.0 | 130 |
| EG005T: Selenium | 7782-49-2 | 5 | mg/kg | <5 | ---- | ---- | ---- | ---- |
| EG005T: Vanadium | 7440-62-2 | 5 | mg/kg | <5 | 61.3 mg/kg | 86.2 | 70.0 | 130 |
| EG005T: Zinc | 7440-66-6 | 5 | mg/kg | <5 | 162 mg/kg | 74.9 | 70.0 | 130 |
| **EG005(ED093)T: Total Metals by ICP-AES (QCLot: 5511575)** | | | | | | | | |
| EG005T: Arsenic | 7440-38-2 | 5 | mg/kg | <5 | 123 mg/kg | 93.9 | 70.0 | 130 |
| EG005T: Barium | 7440-39-3 | 10 | mg/kg | <10 | 99.3 mg/kg | 89.9 | 70.0 | 130 |
| EG005T: Beryllium | 7440-41-7 | 1 | mg/kg | <1 | 0.67 mg/kg | 90.5 | 70.0 | 130 |
| EG005T: Boron | 7440-42-8 | 50 | mg/kg | <50 | ---- | ---- | ---- | ---- |
| EG005T: Cadmium | 7440-43-9 | 1 | mg/kg | <1 | 1.23 mg/kg | 60.5 | 50.0 | 130 |
| EG005T: Chromium | 7440-47-3 | 2 | mg/kg | <2 | 20.2 mg/kg | 92.8 | 70.0 | 130 |
| EG005T: Cobalt | 7440-48-4 | 2 | mg/kg | <2 | 11.2 mg/kg | 89.0 | 70.0 | 130 |
| EG005T: Copper | 7440-50-8 | 5 | mg/kg | <5 | 55.9 mg/kg | 90.8 | 70.0 | 130 |
| EG005T: Lead | 7439-92-1 | 5 | mg/kg | <5 | 62.4 mg/kg | 91.2 | 70.0 | 130 |
| EG005T: Manganese | 7439-96-5 | 5 | mg/kg | <5 | 590 mg/kg | 91.0 | 70.0 | 130 |
| EG005T: Nickel | 7440-02-0 | 2 | mg/kg | <2 | 15.4 mg/kg | 91.4 | 70.0 | 130 |
| EG005T: Selenium | 7782-49-2 | 5 | mg/kg | <5 | ---- | ---- | ---- | ---- |
| EG005T: Vanadium | 7440-62-2 | 5 | mg/kg | <5 | 61.3 mg/kg | 83.8 | 70.0 | 130 |
| EG005T: Zinc | 7440-66-6 | 5 | mg/kg | <5 | 162 mg/kg | 74.2 | 70.0 | 130 |
| **EG035T: Total Recoverable Mercury by FIMS (QCLot: 5511573)** | | | | | | | | |

Sub-Matrix: **SOIL**

| Method: Compound | CAS Number | LOR | Unit | Method Blank (MB) Report: Result | Laboratory Control Spike (LCS) Report: Spike Concentration | Spike Recovery (%): LCS | Acceptable Limits (%): Low | Acceptable Limits (%): High |
|---|---|---|---|---|---|---|---|---|
| **EG035T: Total Recoverable Mercury by FIMS (QCLot: 5511573) - continued** | | | | | | | | |
| EG035T: Mercury | 7439-97-6 | 0.1 | mg/kg | <0.1 | 0.64 mg/kg | 94.5 | 70.0 | 130 |
| **EG035T: Total Recoverable Mercury by FIMS (QCLot: 5511576)** | | | | | | | | |
| EG035T: Mercury | 7439-97-6 | 0.1 | mg/kg | <0.1 | 0.64 mg/kg | 93.0 | 70.0 | 130 |
| **EK026SF: Total CN by Segmented Flow Analyser (QCLot: 5516732)** | | | | | | | | |
| EK026SF: Total Cyanide | 57-12-5 | 1 | mg/kg | <1 | 20 mg/kg | 105 | 70.0 | 130 |
| **EK040T: Fluoride Total (QCLot: 5511547)** | | | | | | | | |
| EK040T: Fluoride | 16984-48-8 | 40 | mg/kg | <40 | 334 mg/kg | 95.8 | 93.1 | 107 |
| **EP066: Polychlorinated Biphenyls (PCB) (QCLot: 5511556)** | | | | | | | | |
| EP066: Total Polychlorinated biphenyls | ---- | 0.1 | mg/kg | <0.1 | 1 mg/kg | 103 | 68.0 | 133 |
| **EP068A: Organochlorine Pesticides (OC) (QCLot: 5511555)** | | | | | | | | |
| EP068: alpha-BHC | 319-84-6 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 103 | 71.8 | 126 |
| EP068: Hexachlorobenzene (HCB) | 118-74-1 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 103 | 72.2 | 125 |
| EP068: beta-BHC | 319-85-7 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 100 | 70.0 | 124 |
| EP068: gamma-BHC | 58-89-9 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 103 | 69.1 | 124 |
| EP068: delta-BHC | 319-86-8 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 104 | 69.2 | 125 |
| EP068: Heptachlor | 76-44-8 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 100 | 66.6 | 122 |
| EP068: Aldrin | 309-00-2 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 101 | 68.8 | 123 |
| EP068: Heptachlor epoxide | 1024-57-3 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 104 | 67.2 | 124 |
| EP068: trans-Chlordane | 5103-74-2 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 100.0 | 66.0 | 126 |
| EP068: alpha-Endosulfan | 959-98-8 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 98.0 | 70.2 | 126 |
| EP068: cis-Chlordane | 5103-71-9 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 102 | 72.1 | 124 |
| EP068: Dieldrin | 60-57-1 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 106 | 68.0 | 122 |
| EP068: 4.4`-DDE | 72-55-9 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 98.3 | 68.9 | 124 |
| EP068: Endrin | 72-20-8 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 102 | 55.8 | 130 |
| EP068: beta-Endosulfan | 33213-65-9 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 97.8 | 67.9 | 124 |
| EP068: 4.4`-DDD | 72-54-8 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 96.3 | 72.0 | 127 |
| EP068: Endrin aldehyde | 7421-93-4 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 104 | 66.3 | 131 |
| EP068: Endosulfan sulfate | 1031-07-8 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 102 | 62.4 | 131 |
| EP068: 4.4`-DDT | 50-29-3 | 0.2 | mg/kg | <0.2 | 0.5 mg/kg | 99.8 | 55.4 | 130 |
| EP068: Endrin ketone | 53494-70-5 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 99.8 | 68.8 | 128 |
| EP068: Methoxychlor | 72-43-5 | 0.2 | mg/kg | <0.2 | 0.5 mg/kg | 99.6 | 55.5 | 132 |
| **EP068B: Organophosphorus Pesticides (OP) (QCLot: 5511555)** | | | | | | | | |
| EP068: Dichlorvos | 62-73-7 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 108 | 65.6 | 127 |
| EP068: Demeton-S-methyl | 919-86-8 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 90.1 | 63.0 | 129 |

Sub-Matrix: **SOIL**

| Method: Compound | CAS Number | LOR | Unit | Method Blank (MB) Report: Result | Laboratory Control Spike (LCS) Report: Spike Concentration | Spike Recovery (%): LCS | Acceptable Limits (%): Low | Acceptable Limits (%): High |
|---|---|---|---|---|---|---|---|---|
| **EP068B: Organophosphorus Pesticides (OP) (QCLot: 5511555) - continued** | | | | | | | | |
| EP068: Monocrotophos | 6923-22-4 | 0.2 | mg/kg | <0.2 | 0.5 mg/kg | 81.9 | 10.0 | 136 |
| EP068: Dimethoate | 60-51-5 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 94.6 | 58.3 | 128 |
| EP068: Diazinon | 333-41-5 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 97.0 | 69.0 | 122 |
| EP068: Chlorpyrifos-methyl | 5598-13-0 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 96.2 | 68.0 | 122 |
| EP068: Parathion-methyl | 298-00-0 | 0.2 | mg/kg | <0.2 | 0.5 mg/kg | 91.4 | 59.6 | 124 |
| EP068: Malathion | 121-75-5 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 96.8 | 63.8 | 128 |
| EP068: Fenthion | 55-38-9 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 96.8 | 71.1 | 124 |
| EP068: Chlorpyrifos | 2921-88-2 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 98.3 | 67.4 | 126 |
| EP068: Parathion | 56-38-2 | 0.2 | mg/kg | <0.2 | 0.5 mg/kg | 91.2 | 57.9 | 122 |
| EP068: Pirimphos-ethyl | 23505-41-1 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 97.0 | 66.2 | 123 |
| EP068: Chlorfenvinphos | 470-90-6 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 94.7 | 59.8 | 123 |
| EP068: Bromophos-ethyl | 4824-78-6 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 99.8 | 65.4 | 127 |
| EP068: Fenamiphos | 22224-92-6 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 85.7 | 52.1 | 128 |
| EP068: Prothiofos | 34643-46-4 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 96.6 | 65.2 | 122 |
| EP068: Ethion | 563-12-2 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 97.7 | 63.2 | 124 |
| EP068: Carbophenothion | 786-19-6 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 98.1 | 65.9 | 127 |
| EP068: Azinphos Methyl | 86-50-0 | 0.05 | mg/kg | <0.05 | 0.5 mg/kg | 94.8 | 43.1 | 131 |
| **EP075(SIM)A: Phenolic Compounds (QCLot: 5511554)** | | | | | | | | |
| EP075(SIM): Phenol | 108-95-2 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 101 | 81.2 | 121 |
| EP075(SIM): 2-Chlorophenol | 95-57-8 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 102 | 83.2 | 120 |
| EP075(SIM): 2-Methylphenol | 95-48-7 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 102 | 81.6 | 123 |
| EP075(SIM): 3- & 4-Methylphenol | 1319-77-3 | 1 | mg/kg | <1 | 6 mg/kg | 102 | 79.7 | 129 |
| EP075(SIM): 2-Nitrophenol | 88-75-5 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 96.1 | 49.8 | 129 |
| EP075(SIM): 2.4-Dimethylphenol | 105-67-9 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 99.4 | 81.5 | 127 |
| EP075(SIM): 2.4-Dichlorophenol | 120-83-2 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 98.8 | 74.2 | 125 |
| EP075(SIM): 2.6-Dichlorophenol | 87-65-0 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 102 | 79.8 | 121 |
| EP075(SIM): 4-Chloro-3-methylphenol | 59-50-7 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 99.2 | 71.5 | 121 |
| EP075(SIM): 2.4.6-Trichlorophenol | 88-06-2 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 101 | 67.8 | 119 |
| EP075(SIM): 2.4.5-Trichlorophenol | 95-95-4 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 101 | 64.5 | 126 |
| EP075(SIM): Pentachlorophenol | 87-86-5 | 2 | mg/kg | <2 | 6 mg/kg | 83.6 | 10.0 | 118 |
| **EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 5511554)** | | | | | | | | |
| EP075(SIM): Naphthalene | 91-20-3 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 105 | 85.7 | 123 |
| EP075(SIM): Acenaphthylene | 208-96-8 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 103 | 81.0 | 123 |
| EP075(SIM): Acenaphthene | 83-32-9 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 108 | 83.6 | 120 |

Sub-Matrix: **SOIL**

| Method: Compound | CAS Number | LOR | Unit | Method Blank (MB) Report: Result | Laboratory Control Spike (LCS) Report: Spike Concentration | Spike Recovery (%): LCS | Acceptable Limits (%): Low | Acceptable Limits (%): High |
|---|---|---|---|---|---|---|---|---|
| **EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 5511554) - continued** | | | | | | | | |
| EP075(SIM): Fluorene | 86-73-7 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 107 | 81.3 | 126 |
| EP075(SIM): Phenanthrene | 85-01-8 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 109 | 79.4 | 123 |
| EP075(SIM): Anthracene | 120-12-7 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 106 | 81.7 | 127 |
| EP075(SIM): Fluoranthene | 206-44-0 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 104 | 78.3 | 124 |
| EP075(SIM): Pyrene | 129-00-0 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 105 | 79.9 | 128 |
| EP075(SIM): Benz(a)anthracene | 56-55-3 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 106 | 76.9 | 123 |
| EP075(SIM): Chrysene | 218-01-9 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 109 | 80.9 | 130 |
| EP075(SIM): Benzo(b+j)fluoranthene | 205-99-2<br>205-82-3 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 110 | 70.0 | 121 |
| EP075(SIM): Benzo(k)fluoranthene | 207-08-9 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 96.6 | 80.4 | 130 |
| EP075(SIM): Benzo(a)pyrene | 50-32-8 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 101 | 70.2 | 123 |
| EP075(SIM): Indeno(1.2.3.cd)pyrene | 193-39-5 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 95.4 | 67.9 | 122 |
| EP075(SIM): Dibenz(a.h)anthracene | 53-70-3 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 94.7 | 65.8 | 123 |
| EP075(SIM): Benzo(g.h.i)perylene | 191-24-2 | 0.5 | mg/kg | <0.5 | 3 mg/kg | 98.7 | 65.8 | 127 |
| **EP080/071: Total Petroleum Hydrocarbons (QCLot: 5511546)** | | | | | | | | |
| EP080: C6 - C9 Fraction | ---- | 10 | mg/kg | <10 | 36 mg/kg | 90.8 | 58.6 | 131 |
| **EP080/071: Total Petroleum Hydrocarbons (QCLot: 5511553)** | | | | | | | | |
| EP071: C10 - C14 Fraction | ---- | 50 | mg/kg | <50 | 860 mg/kg | 103 | 75.0 | 128 |
| EP071: C15 - C28 Fraction | ---- | 100 | mg/kg | <100 | 2770 mg/kg | 104 | 82.0 | 123 |
| EP071: C29 - C36 Fraction | ---- | 100 | mg/kg | <100 | 1520 mg/kg | 107 | 82.4 | 121 |
| **EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 5511546)** | | | | | | | | |
| EP080: C6 - C10 Fraction | C6_C10 | 10 | mg/kg | <10 | 45 mg/kg | 87.7 | 59.3 | 128 |
| **EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 5511553)** | | | | | | | | |
| EP071: >C10 - C16 Fraction | ---- | 50 | mg/kg | <50 | 1130 mg/kg | 104 | 77.0 | 130 |
| EP071: >C16 - C34 Fraction | ---- | 100 | mg/kg | <100 | 3730 mg/kg | 104 | 81.5 | 120 |
| EP071: >C34 - C40 Fraction | ---- | 100 | mg/kg | <100 | 260 mg/kg | 105 | 73.3 | 137 |
| **EP080: BTEXN (QCLot: 5511546)** | | | | | | | | |
| EP080: Benzene | 71-43-2 | 0.2 | mg/kg | <0.2 | 2 mg/kg | 82.7 | 61.6 | 117 |
| EP080: Toluene | 108-88-3 | 0.5 | mg/kg | <0.5 | 2 mg/kg | 92.0 | 65.8 | 125 |
| EP080: Ethylbenzene | 100-41-4 | 0.5 | mg/kg | <0.5 | 2 mg/kg | 86.3 | 65.8 | 124 |
| EP080: meta- & para-Xylene | 108-38-3<br>106-42-3 | 0.5 | mg/kg | <0.5 | 4 mg/kg | 96.5 | 64.8 | 134 |
| EP080: ortho-Xylene | 95-47-6 | 0.5 | mg/kg | <0.5 | 2 mg/kg | 94.5 | 68.7 | 132 |
| EP080: Naphthalene | 91-20-3 | 1 | mg/kg | <1 | 0.5 mg/kg | 97.1 | 61.8 | 123 |

Sub-Matrix: **WATER**

| Method: Compound | CAS Number | LOR | Unit | Method Blank (MB) Report: Result | Laboratory Control Spike (LCS) Report: Spike Concentration | Spike Recovery (%): LCS | Acceptable Limits (%): Low | Acceptable Limits (%): High |
|---|---|---|---|---|---|---|---|---|
| **EG020F: Dissolved Metals by ICP-MS (QCLot: 5517367)** | | | | | | | | |
| EG020A-F: Arsenic | 7440-38-2 | 0.001 | mg/L | <0.001 | 0.1 mg/L | 99.5 | 89.0 | 111 |
| EG020A-F: Cadmium | 7440-43-9 | 0.0001 | mg/L | <0.0001 | 0.1 mg/L | 99.4 | 83.5 | 111 |
| EG020A-F: Chromium | 7440-47-3 | 0.001 | mg/L | <0.001 | 0.1 mg/L | 98.6 | 83.2 | 109 |
| EG020A-F: Copper | 7440-50-8 | 0.001 | mg/L | <0.001 | 0.1 mg/L | 96.2 | 83.1 | 107 |
| EG020A-F: Lead | 7439-92-1 | 0.001 | mg/L | <0.001 | 0.1 mg/L | 96.8 | 84.6 | 108 |
| EG020A-F: Nickel | 7440-02-0 | 0.001 | mg/L | <0.001 | 0.1 mg/L | 96.5 | 84.3 | 110 |
| EG020A-F: Zinc | 7440-66-6 | 0.005 | mg/L | <0.005 | 0.1 mg/L | 102 | 86.3 | 112 |
| **EG035F: Dissolved Mercury by FIMS (QCLot: 5517364)** | | | | | | | | |
| EG035F: Mercury | 7439-97-6 | 0.0001 | mg/L | <0.0001 | 0.01 mg/L | 109 | 71.6 | 116 |
| **EP080/071: Total Petroleum Hydrocarbons (QCLot: 5511669)** | | | | | | | | |
| EP080: C6 - C9 Fraction | ---- | 20 | µg/L | <20 | 360 µg/L | 106 | 66.2 | 134 |
| **EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 5511669)** | | | | | | | | |
| EP080: C6 - C10 Fraction | C6_C10 | 20 | µg/L | <20 | 450 µg/L | 107 | 66.2 | 132 |
| **EP080: BTEXN (QCLot: 5511669)** | | | | | | | | |
| EP080: Benzene | 71-43-2 | 1 | µg/L | <1 | 20 µg/L | 114 | 68.8 | 127 |
| EP080: Toluene | 108-88-3 | 2 | µg/L | <2 | 20 µg/L | 111 | 72.9 | 129 |
| EP080: Ethylbenzene | 100-41-4 | 2 | µg/L | <2 | 20 µg/L | 108 | 71.7 | 130 |
| EP080: meta- & para-Xylene | 108-38-3<br>106-42-3 | 2 | µg/L | <2 | 40 µg/L | 106 | 72.3 | 136 |
| EP080: ortho-Xylene | 95-47-6 | 2 | µg/L | <2 | 20 µg/L | 106 | 75.9 | 134 |
| EP080: Naphthalene | 91-20-3 | 5 | µg/L | <5 | 5 µg/L | 97.4 | 68.3 | 131 |

## Matrix Spike (MS) Report

The quality control term Matrix Spike (MS) refers to an intralaboratory split sample spiked with a representative set of target analytes. The purpose of this QC parameter is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

Sub-Matrix: **SOIL**

| Laboratory sample ID | Sample ID | Method: Compound | CAS Number | Matrix Spike (MS) Report: Spike Concentration | SpikeRecovery(%): MS | Acceptable Limits (%): Low | Acceptable Limits (%): High |
|---|---|---|---|---|---|---|---|
| **EG005(ED093)T: Total Metals by ICP-AES (QCLot: 5511574)** | | | | | | | |
| EM2322490-002 | Anonymous | EG005T: Arsenic | 7440-38-2 | 50 mg/kg | 104 | 78.0 | 124 |
| | | EG005T: Cadmium | 7440-43-9 | 50 mg/kg | 101 | 79.7 | 116 |
| | | EG005T: Chromium | 7440-47-3 | 50 mg/kg | 100 | 79.0 | 121 |
| | | EG005T: Copper | 7440-50-8 | 250 mg/kg | 101 | 80.0 | 120 |
| | | EG005T: Lead | 7439-92-1 | 250 mg/kg | 101 | 80.0 | 120 |
| | | EG005T: Nickel | 7440-02-0 | 50 mg/kg | 102 | 78.0 | 120 |

Sub-Matrix: **SOIL**

| | | | | Matrix Spike (MS) Report | | | |
|---|---|---|---|---|---|---|---|
| | | | | Spike | SpikeRecovery(%) | Acceptable Limits (%) | |
| *Laboratory sample ID* | *Sample ID* | *Method: Compound* | *CAS Number* | *Concentration* | *MS* | *Low* | *High* |
| **EG005(ED093)T: Total Metals by ICP-AES (QCLot: 5511574) - continued** | | | | | | | |
| EM2322490-002 | Anonymous | EG005T: Zinc | 7440-66-6 | 250 mg/kg | 100 | 80.0 | 120 |
| **EG005(ED093)T: Total Metals by ICP-AES (QCLot: 5511575)** | | | | | | | |
| EM2322818-017 | QC5 | EG005T: Arsenic | 7440-38-2 | 50 mg/kg | 101 | 78.0 | 124 |
| | | EG005T: Cadmium | 7440-43-9 | 50 mg/kg | 99.9 | 79.7 | 116 |
| | | EG005T: Chromium | 7440-47-3 | 50 mg/kg | 96.4 | 79.0 | 121 |
| | | EG005T: Copper | 7440-50-8 | 250 mg/kg | 102 | 80.0 | 120 |
| | | EG005T: Lead | 7439-92-1 | 250 mg/kg | 99.4 | 80.0 | 120 |
| | | EG005T: Nickel | 7440-02-0 | 50 mg/kg | 101 | 78.0 | 120 |
| | | EG005T: Zinc | 7440-66-6 | 250 mg/kg | 99.0 | 80.0 | 120 |
| **EG035T: Total Recoverable Mercury by FIMS (QCLot: 5511573)** | | | | | | | |
| EM2322490-002 | Anonymous | EG035T: Mercury | 7439-97-6 | 0.5 mg/kg | 104 | 76.0 | 116 |
| **EG035T: Total Recoverable Mercury by FIMS (QCLot: 5511576)** | | | | | | | |
| EM2322818-017 | QC5 | EG035T: Mercury | 7439-97-6 | 0.5 mg/kg | 99.0 | 76.0 | 116 |
| **EK026SF: Total CN by Segmented Flow Analyser (QCLot: 5516732)** | | | | | | | |
| EM2322818-001 | SB6_0.0-0.2 | EK026SF: Total Cyanide | 57-12-5 | 20 mg/kg | 88.9 | 70.0 | 130 |
| **EK040T: Fluoride Total (QCLot: 5511547)** | | | | | | | |
| EM2322818-003 | SB6_1.0-1.2 | EK040T: Fluoride | 16984-48-8 | 400 mg/kg | # 58.0 | 70.0 | 130 |
| **EP066: Polychlorinated Biphenyls (PCB) (QCLot: 5511556)** | | | | | | | |
| EM2322818-006 | SB7_0.5-0.7 | EP066: Total Polychlorinated biphenyls | ---- | 1 mg/kg | 94.5 | 63.2 | 144 |
| **EP068A: Organochlorine Pesticides (OC) (QCLot: 5511555)** | | | | | | | |
| EM2322818-004 | SB6_1.5 | EP068: gamma-BHC | 58-89-9 | 0.5 mg/kg | 97.1 | 51.4 | 139 |
| | | EP068: Heptachlor | 76-44-8 | 0.5 mg/kg | 90.2 | 49.1 | 130 |
| | | EP068: Aldrin | 309-00-2 | 0.5 mg/kg | 93.3 | 38.4 | 135 |
| | | EP068: Dieldrin | 60-57-1 | 0.5 mg/kg | 99.2 | 58.4 | 136 |
| | | EP068: Endrin | 72-20-8 | 0.5 mg/kg | 71.1 | 33.0 | 146 |
| | | EP068: 4.4`-DDT | 50-29-3 | 0.5 mg/kg | 76.0 | 20.0 | 133 |
| **EP068B: Organophosphorus Pesticides (OP) (QCLot: 5511555)** | | | | | | | |
| EM2322818-004 | SB6_1.5 | EP068: Diazinon | 333-41-5 | 0.5 mg/kg | 80.7 | 65.1 | 135 |
| | | EP068: Chlorpyrifos-methyl | 5598-13-0 | 0.5 mg/kg | 83.0 | 56.3 | 127 |
| | | EP068: Pirimphos-ethyl | 23505-41-1 | 0.5 mg/kg | 66.0 | 55.0 | 133 |
| | | EP068: Bromophos-ethyl | 4824-78-6 | 0.5 mg/kg | 88.1 | 55.1 | 133 |
| | | EP068: Prothiofos | 34643-46-4 | 0.5 mg/kg | 73.1 | 43.8 | 128 |
| **EP075(SIM)A: Phenolic Compounds (QCLot: 5511554)** | | | | | | | |
| EM2322818-003 | SB6_1.0-1.2 | EP075(SIM): Phenol | 108-95-2 | 3 mg/kg | 87.1 | 77.1 | 119 |
| | | EP075(SIM): 2-Chlorophenol | 95-57-8 | 3 mg/kg | 88.8 | 78.9 | 123 |
| | | EP075(SIM): 2-Nitrophenol | 88-75-5 | 3 mg/kg | 82.2 | 43.8 | 136 |

Sub-Matrix: **SOIL**

| Laboratory sample ID | Sample ID | Method: Compound | CAS Number | Matrix Spike (MS) Report: Spike Concentration | Matrix Spike (MS) Report: SpikeRecovery(%) MS | Matrix Spike (MS) Report: Acceptable Limits (%) Low | Matrix Spike (MS) Report: Acceptable Limits (%) High |
|---|---|---|---|---|---|---|---|
| **EP075(SIM)A: Phenolic Compounds (QCLot: 5511554) - continued** | | | | | | | |
| EM2322818-003 | SB6_1.0-1.2 | EP075(SIM): 4-Chloro-3-methylphenol | 59-50-7 | 3 mg/kg | 81.8 | 61.5 | 120 |
| | | EP075(SIM): Pentachlorophenol | 87-86-5 | 3 mg/kg | 75.7 | 15.3 | 139 |
| **EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 5511554)** | | | | | | | |
| EM2322818-003 | SB6_1.0-1.2 | EP075(SIM): Acenaphthene | 83-32-9 | 3 mg/kg | 90.5 | 77.2 | 116 |
| | | EP075(SIM): Pyrene | 129-00-0 | 3 mg/kg | 84.0 | 65.5 | 136 |
| **EP080/071: Total Petroleum Hydrocarbons (QCLot: 5511546)** | | | | | | | |
| EM2322818-003 | SB6_1.0-1.2 | EP080: C6 - C9 Fraction | ---- | 28 mg/kg | 61.4 | 33.4 | 124 |
| **EP080/071: Total Petroleum Hydrocarbons (QCLot: 5511553)** | | | | | | | |
| EM2322818-003 | SB6_1.0-1.2 | EP071: C10 - C14 Fraction | ---- | 860 mg/kg | 104 | 71.2 | 125 |
| | | EP071: C15 - C28 Fraction | ---- | 2770 mg/kg | 106 | 75.6 | 122 |
| | | EP071: C29 - C36 Fraction | ---- | 1520 mg/kg | 110 | 78.0 | 120 |
| **EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 5511546)** | | | | | | | |
| EM2322818-003 | SB6_1.0-1.2 | EP080: C6 - C10 Fraction | C6_C10 | 33 mg/kg | 60.0 | 30.8 | 120 |
| **EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 5511553)** | | | | | | | |
| EM2322818-003 | SB6_1.0-1.2 | EP071: >C10 - C16 Fraction | ---- | 1130 mg/kg | 104 | 72.2 | 128 |
| | | EP071: >C16 - C34 Fraction | ---- | 3730 mg/kg | 106 | 76.5 | 119 |
| | | EP071: >C34 - C40 Fraction | ---- | 260 mg/kg | 110 | 66.8 | 138 |
| **EP080: BTEXN (QCLot: 5511546)** | | | | | | | |
| EM2322818-003 | SB6_1.0-1.2 | EP080: Benzene | 71-43-2 | 2 mg/kg | 73.3 | 54.4 | 127 |
| | | EP080: Toluene | 108-88-3 | 2 mg/kg | 74.3 | 57.1 | 131 |

Sub-Matrix: **WATER**

| Laboratory sample ID | Sample ID | Method: Compound | CAS Number | Matrix Spike (MS) Report: Spike Concentration | Matrix Spike (MS) Report: SpikeRecovery(%) MS | Matrix Spike (MS) Report: Acceptable Limits (%) Low | Matrix Spike (MS) Report: Acceptable Limits (%) High |
|---|---|---|---|---|---|---|---|
| **EG020F: Dissolved Metals by ICP-MS (QCLot: 5517367)** | | | | | | | |
| EM2322673-001 | Anonymous | EG020A-F: Arsenic | 7440-38-2 | 0.2 mg/L | 102 | 76.6 | 124 |
| | | EG020A-F: Cadmium | 7440-43-9 | 0.05 mg/L | 101 | 74.6 | 118 |
| | | EG020A-F: Chromium | 7440-47-3 | 0.2 mg/L | 95.9 | 71.0 | 135 |
| | | EG020A-F: Copper | 7440-50-8 | 0.2 mg/L | 97.6 | 76.0 | 130 |
| | | EG020A-F: Lead | 7439-92-1 | 0.2 mg/L | 91.7 | 75.0 | 133 |
| | | EG020A-F: Nickel | 7440-02-0 | 0.2 mg/L | 96.4 | 73.0 | 131 |
| | | EG020A-F: Zinc | 7440-66-6 | 0.2 mg/L | 98.1 | 75.0 | 131 |
| **EG035F: Dissolved Mercury by FIMS (QCLot: 5517364)** | | | | | | | |
| EM2322449-002 | Anonymous | EG035F: Mercury | 7439-97-6 | 0.01 mg/L | 112 | 70.0 | 120 |
| **EP080/071: Total Petroleum Hydrocarbons (QCLot: 5511669)** | | | | | | | |
| EB2339996-056 | Anonymous | EP080: C6 - C9 Fraction | ---- | 280 µg/L | 85.1 | 33.9 | 126 |

Sub-Matrix: **WATER**

| | | | | Matrix Spike (MS) Report | | | |
|---|---|---|---|---|---|---|---|
| | | | | Spike | SpikeRecovery(%) | Acceptable Limits (%) | |
| *Laboratory sample ID* | *Sample ID* | *Method: Compound* | *CAS Number* | *Concentration* | *MS* | *Low* | *High* |
| **EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 5511669)** | | | | | | | |
| EB2339996-056 | Anonymous | EP080: C6 - C10 Fraction | C6_C10 | 330 µg/L | 80.3 | 34.0 | 122 |
| **EP080: BTEXN (QCLot: 5511669)** | | | | | | | |
| EB2339996-056 | Anonymous | EP080: Benzene | 71-43-2 | 20 µg/L | 108 | 56.3 | 133 |
| | | EP080: Toluene | 108-88-3 | 20 µg/L | 107 | 60.4 | 132 |

# QA/QC Compliance Assessment to assist with Quality Review

| | | | |
|---|---|---|---|
| **Work Order** | : **EM2322818** | Page | : 1 of 9 |
| Client | : **Jones Environmental** | Laboratory | : Environmental Division Melbourne |
| Contact | : PATRICIA JONES | Telephone | : +61-3-8549 9600 |
| Project | : JE10388 | Date Samples Received | : 20-Dec-2023 |
| Site | : ---- | Issue Date | : 05-Jan-2024 |
| Sampler | : RUSSELL JONES | No. of samples received | : 20 |
| Order number | : ---- | No. of samples analysed | : 12 |

**This report is automatically generated by the ALS LIMS through interpretation of the ALS Quality Control Report and several Quality Assurance parameters measured by ALS. This automated reporting highlights any non-conformances, facilitates faster and more accurate data validation and is designed to assist internal expert and external Auditor review. Many components of this report contribute to the overall DQO assessment and reporting for guideline compliance.**

Brief method summaries and references are also provided to assist in traceability.

## *Summary of Outliers*

### *Outliers : Quality Control Samples*

This report highlights outliers flagged in the Quality Control (QC) Report.

- **NO Method Blank value outliers occur.**
- **NO Duplicate outliers occur.**
- **NO Laboratory Control outliers occur.**
- **Matrix Spike outliers exist - please see following pages for full details.**
- **For all regular sample matrices, NO surrogate recovery outliers occur.**

### *Outliers : Analysis Holding Time Compliance*

- **NO Analysis Holding Time Outliers exist.**

### *Outliers : Frequency of Quality Control Samples*

- **NO Quality Control Sample Frequency Outliers exist.**

## Outliers : Quality Control Samples

*Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes*

Matrix: **SOIL**

| Compound Group Name | Laboratory Sample ID | Client Sample ID | Analyte | CAS Number | Data | Limits | Comment |
|---|---|---|---|---|---|---|---|
| **Matrix Spike (MS) Recoveries** | | | | | | | |
| EK040T: Fluoride Total | EM2322818--003 | SB6_1.0-1.2 | **Fluoride** | 16984-48-8 | 58.0 % | 70.0-130% | **Recovery less than lower data quality objective** |

# Analysis Holding Time Compliance

If samples are identified below as having been analysed or extracted outside of recommended holding times, this should be taken into consideration when interpreting results.

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times (referencing USEPA SW 846, APHA, AS and NEPM) based on the sample container provided. Dates reported represent first date of extraction or analysis and preclude subsequent dilutions and reruns. A listing of breaches (if any) is provided herein.

Holding time for leachate methods (e.g. TCLP) vary according to the analytes reported. Assessment compares the leach date with the shortest analyte holding time for the equivalent soil method. These are: organics 14 days, mercury 28 days & other metals 180 days. A recorded breach does not guarantee a breach for all non-volatile parameters.

Holding times for ***VOC in soils*** vary according to analytes of interest. Vinyl Chloride and Styrene holding time is 7 days; others 14 days. A recorded breach does not guarantee a breach for all VOC analytes and should be verified in case the reported breach is a false positive or Vinyl Chloride and Styrene are not key analytes of interest/concern.

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

| Method / Container / Client Sample ID(s) | | Sample Date | Extraction / Preparation | | | Analysis | | |
|---|---|---|---|---|---|---|---|---|
| | | | Date extracted | Due for extraction | Evaluation | Date analysed | Due for analysis | Evaluation |
| **EA055: Moisture Content (Dried @ 105-110°C)** | | | | | | | | |
| **Soil Glass Jar - Unpreserved (EA055)** | | | | | | | | |
| SB6_0.0-0.2, | SB6_1.0-1.2, | **19-Dec-2023** | **----** | ---- | ---- | **22-Dec-2023** | 02-Jan-2024 | ✓ |
| SB6_1.5, | SB7_0.5-0.7, | | | | | | | |
| SB7_2.0-2.2, | SB10_0.0-0.2, | | | | | | | |
| SB10_1.0-1.2, | SB12_0.0-0.2, | | | | | | | |
| SB12_1.5, | QC5 | | | | | | | |
| **EA200: AS 4964 - 2004 Identification of Asbestos in Soils** | | | | | | | | |
| **Snap Lock Bag - ACM/Asbestos Grab Bag (EA200)** | | | | | | | | |
| SB6_0.0-0.2, | SB7_0.5-0.7, | **19-Dec-2023** | **----** | ---- | ---- | **21-Dec-2023** | 16-Jun-2024 | ✓ |
| SB10_0.0-0.2, | SB10_1.0-1.2, | | | | | | | |
| SB12_0.0-0.2, | SB12_1.5 | | | | | | | |
| **Soil Glass Jar - Unpreserved (EA200)** | | | | | | | | |
| SB6_1.0-1.2, | SB6_1.5, | **19-Dec-2023** | **----** | ---- | ---- | **22-Dec-2023** | 16-Jun-2024 | ✓ |
| SB7_2.0-2.2 | | | | | | | | |
| **EG005(ED093)T: Total Metals by ICP-AES** | | | | | | | | |
| **Soil Glass Jar - Unpreserved (EG005T)** | | | | | | | | |
| SB6_0.0-0.2, | SB6_1.0-1.2, | **19-Dec-2023** | **22-Dec-2023** | 16-Jun-2024 | ✓ | **22-Dec-2023** | 16-Jun-2024 | ✓ |
| SB6_1.5, | SB7_0.5-0.7, | | | | | | | |
| SB7_2.0-2.2, | SB10_0.0-0.2, | | | | | | | |
| SB10_1.0-1.2, | SB12_0.0-0.2, | | | | | | | |
| SB12_1.5, | QC5 | | | | | | | |

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

| Method / Container / Client Sample ID(s) | | Sample Date | Extraction / Preparation | | | Analysis | | |
|---|---|---|---|---|---|---|---|---|
| | | | Date extracted | Due for extraction | Evaluation | Date analysed | Due for analysis | Evaluation |
| **EG035T: Total Recoverable Mercury by FIMS** | | | | | | | | |
| **Soil Glass Jar - Unpreserved (EG035T)** | | | | | | | | |
| SB6_0.0-0.2, | SB6_1.0-1.2, | **19-Dec-2023** | **22-Dec-2023** | 16-Jan-2024 | ✓ | **27-Dec-2023** | 16-Jan-2024 | ✓ |
| SB6_1.5, | SB7_0.5-0.7, | | | | | | | |
| SB7_2.0-2.2, | SB10_0.0-0.2, | | | | | | | |
| SB10_1.0-1.2, | SB12_0.0-0.2, | | | | | | | |
| SB12_1.5, | QC5 | | | | | | | |
| **EK026SF: Total CN by Segmented Flow Analyser** | | | | | | | | |
| **Soil Glass Jar - Unpreserved (EK026SF)** | | | | | | | | |
| SB6_0.0-0.2, | SB6_1.0-1.2, | **19-Dec-2023** | **28-Dec-2023** | 02-Jan-2024 | ✓ | **29-Dec-2023** | 11-Jan-2024 | ✓ |
| SB6_1.5, | SB7_0.5-0.7, | | | | | | | |
| SB7_2.0-2.2, | SB10_0.0-0.2, | | | | | | | |
| SB10_1.0-1.2, | SB12_0.0-0.2, | | | | | | | |
| SB12_1.5 | | | | | | | | |
| **EK040T: Fluoride Total** | | | | | | | | |
| **Soil Glass Jar - Unpreserved (EK040T)** | | | | | | | | |
| SB6_0.0-0.2, | SB6_1.0-1.2, | **19-Dec-2023** | **22-Dec-2023** | 16-Jan-2024 | ✓ | **03-Jan-2024** | 16-Jan-2024 | ✓ |
| SB6_1.5, | SB7_0.5-0.7, | | | | | | | |
| SB7_2.0-2.2, | SB10_0.0-0.2, | | | | | | | |
| SB10_1.0-1.2, | SB12_0.0-0.2, | | | | | | | |
| SB12_1.5 | | | | | | | | |
| **EP066: Polychlorinated Biphenyls (PCB)** | | | | | | | | |
| **Soil Glass Jar - Unpreserved (EP066)** | | | | | | | | |
| SB6_0.0-0.2, | SB6_1.0-1.2, | **19-Dec-2023** | **22-Dec-2023** | 02-Jan-2024 | ✓ | **27-Dec-2023** | 31-Jan-2024 | ✓ |
| SB6_1.5, | SB7_0.5-0.7, | | | | | | | |
| SB7_2.0-2.2, | SB10_0.0-0.2, | | | | | | | |
| SB10_1.0-1.2, | SB12_0.0-0.2, | | | | | | | |
| SB12_1.5 | | | | | | | | |
| **EP068A: Organochlorine Pesticides (OC)** | | | | | | | | |
| **Soil Glass Jar - Unpreserved (EP068)** | | | | | | | | |
| SB6_0.0-0.2, | SB6_1.0-1.2, | **19-Dec-2023** | **22-Dec-2023** | 02-Jan-2024 | ✓ | **27-Dec-2023** | 31-Jan-2024 | ✓ |
| SB6_1.5, | SB7_0.5-0.7, | | | | | | | |
| SB7_2.0-2.2, | SB10_0.0-0.2, | | | | | | | |
| SB10_1.0-1.2, | SB12_0.0-0.2, | | | | | | | |
| SB12_1.5 | | | | | | | | |
| **EP068B: Organophosphorus Pesticides (OP)** | | | | | | | | |
| **Soil Glass Jar - Unpreserved (EP068)** | | | | | | | | |
| SB6_0.0-0.2, | SB6_1.0-1.2, | **19-Dec-2023** | **22-Dec-2023** | 02-Jan-2024 | ✓ | **27-Dec-2023** | 31-Jan-2024 | ✓ |
| SB6_1.5, | SB7_0.5-0.7, | | | | | | | |
| SB7_2.0-2.2, | SB10_0.0-0.2, | | | | | | | |
| SB10_1.0-1.2, | SB12_0.0-0.2, | | | | | | | |
| SB12_1.5 | | | | | | | | |

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

| Method / Container / Client Sample ID(s) | Sample Date | Extraction / Preparation | | | Analysis | | |
|---|---|---|---|---|---|---|---|
| | | Date extracted | Due for extraction | Evaluation | Date analysed | Due for analysis | Evaluation |
| **EP075(SIM)A: Phenolic Compounds** | | | | | | | |
| **Soil Glass Jar - Unpreserved (EP075(SIM))** | | | | | | | |
| SB6_0.0-0.2, SB6_1.0-1.2, SB6_1.5, SB7_2.0-2.2, SB10_0.0-0.2, SB10_1.0-1.2, SB12_0.0-0.2, SB12_1.5 | **19-Dec-2023** | **22-Dec-2023** | 02-Jan-2024 | ✓ | **27-Dec-2023** | 31-Jan-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (EP075(SIM))** | | | | | | | |
| SB7_0.5-0.7 | **19-Dec-2023** | **22-Dec-2023** | 02-Jan-2024 | ✓ | **28-Dec-2023** | 31-Jan-2024 | ✓ |
| **EP075(SIM)B: Polynuclear Aromatic Hydrocarbons** | | | | | | | |
| **Soil Glass Jar - Unpreserved (EP075(SIM))** | | | | | | | |
| SB6_0.0-0.2, SB6_1.0-1.2, SB6_1.5, SB7_2.0-2.2, SB10_0.0-0.2, SB10_1.0-1.2, SB12_0.0-0.2, SB12_1.5 | **19-Dec-2023** | **22-Dec-2023** | 02-Jan-2024 | ✓ | **27-Dec-2023** | 31-Jan-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (EP075(SIM))** | | | | | | | |
| SB7_0.5-0.7 | **19-Dec-2023** | **22-Dec-2023** | 02-Jan-2024 | ✓ | **28-Dec-2023** | 31-Jan-2024 | ✓ |
| **EP080/071: Total Petroleum Hydrocarbons** | | | | | | | |
| **Soil Glass Jar - Unpreserved (EP080)** | | | | | | | |
| SB6_0.0-0.2, SB6_1.0-1.2, SB6_1.5, SB7_0.5-0.7, SB7_2.0-2.2, SB10_0.0-0.2, SB10_1.0-1.2, SB12_0.0-0.2, SB12_1.5 | **19-Dec-2023** | **22-Dec-2023** | 02-Jan-2024 | ✓ | **23-Dec-2023** | 02-Jan-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (EP071)** | | | | | | | |
| SB6_0.0-0.2, SB6_1.0-1.2, SB6_1.5, SB7_0.5-0.7, SB7_2.0-2.2, SB10_0.0-0.2, SB10_1.0-1.2, SB12_0.0-0.2, SB12_1.5 | **19-Dec-2023** | **22-Dec-2023** | 02-Jan-2024 | ✓ | **27-Dec-2023** | 31-Jan-2024 | ✓ |
| **EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions** | | | | | | | |
| **Soil Glass Jar - Unpreserved (EP080)** | | | | | | | |
| SB6_0.0-0.2, SB6_1.0-1.2, SB6_1.5, SB7_0.5-0.7, SB7_2.0-2.2, SB10_0.0-0.2, SB10_1.0-1.2, SB12_0.0-0.2, SB12_1.5 | **19-Dec-2023** | **22-Dec-2023** | 02-Jan-2024 | ✓ | **23-Dec-2023** | 02-Jan-2024 | ✓ |
| **Soil Glass Jar - Unpreserved (EP071)** | | | | | | | |
| SB6_0.0-0.2, SB6_1.0-1.2, SB6_1.5, SB7_0.5-0.7, SB7_2.0-2.2, SB10_0.0-0.2, SB10_1.0-1.2, SB12_0.0-0.2, SB12_1.5 | **19-Dec-2023** | **22-Dec-2023** | 02-Jan-2024 | ✓ | **27-Dec-2023** | 31-Jan-2024 | ✓ |

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

| Method / Container / Client Sample ID(s) | Sample Date | Extraction / Preparation | | | Analysis | | |
|---|---|---|---|---|---|---|---|
| | | Date extracted | Due for extraction | Evaluation | Date analysed | Due for analysis | Evaluation |
| **EP080: BTEXN** | | | | | | | |
| **Soil Glass Jar - Unpreserved (EP080)** | | | | | | | |
| SB6_0.0-0.2, SB6_1.0-1.2, SB6_1.5, SB7_0.5-0.7, SB7_2.0-2.2, SB10_0.0-0.2, SB10_1.0-1.2, SB12_0.0-0.2, SB12_1.5 | **19-Dec-2023** | **22-Dec-2023** | 02-Jan-2024 | ✓ | **23-Dec-2023** | 02-Jan-2024 | ✓ |

Matrix: **WATER**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

| Method / Container / Client Sample ID(s) | Sample Date | Extraction / Preparation | | | Analysis | | |
|---|---|---|---|---|---|---|---|
| | | Date extracted | Due for extraction | Evaluation | Date analysed | Due for analysis | Evaluation |
| **EG020F: Dissolved Metals by ICP-MS** | | | | | | | |
| **Clear Plastic Bottle - Nitric Acid; Filtered (EG020A-F)** | | | | | | | |
| QC9 | **19-Dec-2023** | **----** | ---- | ---- | **28-Dec-2023** | 16-Jun-2024 | ✓ |
| **EG035F: Dissolved Mercury by FIMS** | | | | | | | |
| **Clear Plastic Bottle - Nitric Acid; Filtered (EG035F)** | | | | | | | |
| QC9 | **19-Dec-2023** | **----** | ---- | ---- | **28-Dec-2023** | 16-Jan-2024 | ✓ |
| **EP080/071: Total Petroleum Hydrocarbons** | | | | | | | |
| **Amber VOC Vial - Sulfuric Acid (EP080)** | | | | | | | |
| QC10 | **19-Dec-2023** | **23-Dec-2023** | 02-Jan-2024 | ✓ | **23-Dec-2023** | 02-Jan-2024 | ✓ |
| **EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions** | | | | | | | |
| **Amber VOC Vial - Sulfuric Acid (EP080)** | | | | | | | |
| QC10 | **19-Dec-2023** | **23-Dec-2023** | 02-Jan-2024 | ✓ | **23-Dec-2023** | 02-Jan-2024 | ✓ |
| **EP080: BTEXN** | | | | | | | |
| **Amber VOC Vial - Sulfuric Acid (EP080)** | | | | | | | |
| QC10 | **19-Dec-2023** | **23-Dec-2023** | 02-Jan-2024 | ✓ | **23-Dec-2023** | 02-Jan-2024 | ✓ |

# Quality Control Parameter Frequency Compliance

The following report summarises the frequency of laboratory QC samples analysed within the analytical lot(s) in which the submitted sample(s) was(were) processed. Actual rate should be greater than or equal to the expected rate. A listing of breaches is provided in the Summary of Outliers.

Matrix: **SOIL**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

| Quality Control Sample Type | | Count | | Rate (%) | | | Quality Control Specification |
|---|---|---|---|---|---|---|---|
| *Analytical Methods* | *Method* | *QC* | *Regular* | ***Actual*** | ***Expected*** | *Evaluation* | |
| **Laboratory Duplicates (DUP)** | | | | | | | |
| Moisture Content | EA055 | 2 | 20 | **10.00** | **10.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| PAH/Phenols (SIM) | EP075(SIM) | 2 | 14 | **14.29** | **10.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Pesticides by GCMS | EP068 | 2 | 13 | **15.38** | **10.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Polychlorinated Biphenyls (PCB) | EP066 | 1 | 9 | **11.11** | **10.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Total Cyanide by Segmented Flow Analyser | EK026SF | 2 | 10 | **20.00** | **10.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Total Fluoride | EK040T | 2 | 11 | **18.18** | **10.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Total Mercury by FIMS | EG035T | 3 | 29 | **10.34** | **10.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Total Metals by ICP-AES | EG005T | 4 | 33 | **12.12** | **10.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| TRH - Semivolatile Fraction | EP071 | 2 | 14 | **14.29** | **10.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| TRH Volatiles/BTEX | EP080 | 1 | 10 | **10.00** | **10.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| **Laboratory Control Samples (LCS)** | | | | | | | |
| PAH/Phenols (SIM) | EP075(SIM) | 1 | 14 | **7.14** | **5.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Pesticides by GCMS | EP068 | 1 | 13 | **7.69** | **5.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Polychlorinated Biphenyls (PCB) | EP066 | 1 | 9 | **11.11** | **5.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Total Cyanide by Segmented Flow Analyser | EK026SF | 1 | 10 | **10.00** | **5.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Total Fluoride | EK040T | 1 | 11 | **9.09** | **5.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Total Mercury by FIMS | EG035T | 2 | 29 | **6.90** | **5.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Total Metals by ICP-AES | EG005T | 2 | 33 | **6.06** | **5.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| TRH - Semivolatile Fraction | EP071 | 1 | 14 | **7.14** | **5.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| TRH Volatiles/BTEX | EP080 | 1 | 10 | **10.00** | **5.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| **Method Blanks (MB)** | | | | | | | |
| PAH/Phenols (SIM) | EP075(SIM) | 1 | 14 | **7.14** | **5.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Pesticides by GCMS | EP068 | 1 | 13 | **7.69** | **5.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Polychlorinated Biphenyls (PCB) | EP066 | 1 | 9 | **11.11** | **5.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Total Cyanide by Segmented Flow Analyser | EK026SF | 1 | 10 | **10.00** | **5.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Total Fluoride | EK040T | 1 | 11 | **9.09** | **5.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Total Mercury by FIMS | EG035T | 2 | 29 | **6.90** | **5.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Total Metals by ICP-AES | EG005T | 2 | 33 | **6.06** | **5.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| TRH - Semivolatile Fraction | EP071 | 1 | 14 | **7.14** | **5.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| TRH Volatiles/BTEX | EP080 | 1 | 10 | **10.00** | **5.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| **Matrix Spikes (MS)** | | | | | | | |
| PAH/Phenols (SIM) | EP075(SIM) | 1 | 14 | **7.14** | **5.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Pesticides by GCMS | EP068 | 1 | 13 | **7.69** | **5.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Polychlorinated Biphenyls (PCB) | EP066 | 1 | 9 | **11.11** | **5.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Total Cyanide by Segmented Flow Analyser | EK026SF | 1 | 10 | **10.00** | **5.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Total Fluoride | EK040T | 1 | 11 | **9.09** | **5.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |

Matrix: **SOIL**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

| Quality Control Sample Type | | Count | | Rate (%) | | | Quality Control Specification |
|---|---|---|---|---|---|---|---|
| *Analytical Methods* | *Method* | *QC* | *Regular* | ***Actual*** | ***Expected*** | *Evaluation* | |
| Matrix Spikes (MS) - Continued | | | | | | | |
| Total Mercury by FIMS | EG035T | 2 | 29 | **6.90** | **5.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Total Metals by ICP-AES | EG005T | 2 | 33 | **6.06** | **5.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| TRH - Semivolatile Fraction | EP071 | 1 | 14 | **7.14** | **5.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| TRH Volatiles/BTEX | EP080 | 1 | 10 | **10.00** | **5.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |

Matrix: **WATER**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

| Quality Control Sample Type | | Count | | Rate (%) | | | Quality Control Specification |
|---|---|---|---|---|---|---|---|
| *Analytical Methods* | *Method* | *QC* | *Regular* | ***Actual*** | ***Expected*** | *Evaluation* | |
| Laboratory Duplicates (DUP) | | | | | | | |
| Dissolved Mercury by FIMS | EG035F | 1 | 6 | **16.67** | **10.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Dissolved Metals by ICP-MS - Suite A | EG020A-F | 2 | 19 | **10.53** | **10.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| TRH Volatiles/BTEX | EP080 | 2 | 6 | **33.33** | **10.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Laboratory Control Samples (LCS) | | | | | | | |
| Dissolved Mercury by FIMS | EG035F | 1 | 6 | **16.67** | **5.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Dissolved Metals by ICP-MS - Suite A | EG020A-F | 1 | 19 | **5.26** | **5.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| TRH Volatiles/BTEX | EP080 | 1 | 6 | **16.67** | **5.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Method Blanks (MB) | | | | | | | |
| Dissolved Mercury by FIMS | EG035F | 1 | 6 | **16.67** | **5.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Dissolved Metals by ICP-MS - Suite A | EG020A-F | 1 | 19 | **5.26** | **5.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| TRH Volatiles/BTEX | EP080 | 1 | 6 | **16.67** | **5.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Matrix Spikes (MS) | | | | | | | |
| Dissolved Mercury by FIMS | EG035F | 1 | 6 | **16.67** | **5.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Dissolved Metals by ICP-MS - Suite A | EG020A-F | 1 | 19 | **5.26** | **5.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| TRH Volatiles/BTEX | EP080 | 1 | 6 | **16.67** | **5.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |

## Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided within the Method Descriptions.

| Analytical Methods | Method | Matrix | Method Descriptions |
|---|---|---|---|
| Moisture Content | EA055 | SOIL | In house: A gravimetric procedure based on weight loss over a 12 hour drying period at 105-110 degrees C. This method is compliant with NEPM Schedule B(3). |
| Asbestos Identification in Soils | EA200 | SOIL | AS 4964 Method for the qualitative identification of asbestos in bulk samples Analysis by Polarised Light Microscopy including dispersion staining |
| Total Metals by ICP-AES | EG005T | SOIL | In house: Referenced to APHA 3120; USEPA SW 846 - 6010. Metals are determined following an appropriate acid digestion of the soil. The ICPAES technique ionises samples in a plasma, emitting a characteristic spectrum based on metals present. Intensities at selected wavelengths are compared against those of matrix matched standards. This method is compliant with NEPM Schedule B(3) |
| Total Mercury by FIMS | EG035T | SOIL | In house: Referenced to APHA 3112 Hg - B (Flow-injection (SnCl2) (Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. Mercury in solids are determined following an appropriate acid digestion. Ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3) |
| Total Cyanide by Segmented Flow Analyser | EK026SF | SOIL | In house: Referenced to APHA 4500-CN C / ASTM D7511 / ISO 14403. Caustic leachates of soil samples are introduced into an automated segmented flow analyser. Complex bound cyanide is decomposed in a continuously flowing stream, at a pH of 3.8, by the effect of UV light. A UV-B lamp (312 nm) and a decomposition spiral of borosilicate glass are used to filter out UV light with a wavelength of less than 290 nm thus preventing the conversion of thiocyanate into cyanide. The hydrogen cyanide present at a pH of 3.8 is separated by gas dialysis. The hydrogen cyanide is then determined photometrically, based on the reaction of cyanide with chloramine-T to form cyanogen chloride. This then reacts with 4-pyridine carboxylic acid and 1,3-dimethylbarbituric acid to give a red colour which is measured at 600 nm. This method is compliant with NEPM Schedule B(3). |
| Total Fluoride | EK040T | SOIL | (In-house) Total fluoride is determined by ion specific electrode (ISE) in a solution obtained after a Sodium Carbonate / Potassium Carbonate fusion dissolution. |
| Polychlorinated Biphenyls (PCB) | EP066 | SOIL | In house: Referenced to USEPA SW 846 - 8270 Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM Schedule B(3). |
| Pesticides by GCMS | EP068 | SOIL | In house: Referenced to USEPA SW 846 - 8270 Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This technique is compliant with NEPM Schedule B(3). |
| TRH - Semivolatile Fraction | EP071 | SOIL | In house: Referenced to USEPA SW 846 - 8015 Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C10 - C40. Compliant with NEPM Schedule B(3). |
| PAH/Phenols (SIM) | EP075(SIM) | SOIL | In house: Referenced to USEPA SW 846 - 8270. Extracts are analysed by Capillary GC/MS in Selective Ion Mode (SIM) and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM Schedule B(3) |

| Analytical Methods | Method | Matrix | Method Descriptions |
|---|---|---|---|
| TRH Volatiles/BTEX | EP080 | SOIL | In house: Referenced to USEPA SW 846 - 8260. Extracts are analysed by Purge and Trap, Capillary GC/MS. Quantification is by comparison against an established 5 point calibration curve. Compliant with NEPM Schedule B(3) amended. |
| Dissolved Metals by ICP-MS - Suite A | EG020A-F | WATER | In house: Referenced to APHA 3125; USEPA SW846 - 6020, ALS QWI-EN/EG020. Samples are 0.45µm filtered prior to analysis. The ICPMS technique utilizes a highly efficient argon plasma to ionize selected elements. Ions are then passed into a high vacuum mass spectrometer, which separates the analytes based on their distinct mass to charge ratios prior to their measurement by a discrete dynode ion detector. |
| Dissolved Mercury by FIMS | EG035F | WATER | In house: Referenced to APHA 3112 Hg - B (Flow-injection (SnCl2)(Cold Vapour generation) AAS) Samples are 0.45µm filtered prior to analysis. FIM-AAS is an automated flameless atomic absorption technique. A bromate/bromide reagent is used to oxidise any organic mercury compounds in the filtered sample. The ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3). |
| TRH Volatiles/BTEX | EP080 | WATER | In house: Referenced to USEPA SW 846 - 8260 Water samples are directly purged prior to analysis by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. Alternatively, a sample is equilibrated in a headspace vial and a portion of the headspace determined by GCMS analysis. This method is compliant with the QC requirements of NEPM Schedule B(3) |

| Preparation Methods | Method | Matrix | Method Descriptions |
|---|---|---|---|
| NaOH leach for CN in Soils | CN-PR | SOIL | In house: APHA 4500 CN. Samples are extracted by end-over-end tumbling with NaOH. |
| Total Fluoride | EK040T-PR | SOIL | In house: Samples are fused with Sodium Carbonate / Potassium Carbonate flux. |
| Hot Block Digest for metals in soils sediments and sludges | EN69 | SOIL | In house: Referenced to USEPA 200.2. Hot Block Acid Digestion 1.0g of sample is heated with Nitric and Hydrochloric acids, then cooled. Peroxide is added and samples heated and cooled again before being filtered and bulked to volume for analysis. Digest is appropriate for determination of selected metals in sludge, sediments, and soils. This method is compliant with NEPM Schedule B(3). |
| Methanolic Extraction of Soils for Purge and Trap | ORG16 | SOIL | In house: Referenced to USEPA SW 846 - 5030A. 5g of solid is shaken with surrogate and 10mL methanol prior to analysis by Purge and Trap - GC/MS. |
| Tumbler Extraction of Solids | ORG17 | SOIL | In house: Mechanical agitation (tumbler). 10g of sample, Na2SO4 and surrogate are extracted with 30mL 1:1 DCM/Acetone by end over end tumble. The solvent is decanted, dehydrated and concentrated (by KD) to the desired volume for analysis. |
| Volatiles Water Preparation | ORG16-W | WATER | A 5 mL aliquot or 5 mL of a diluted sample is added to a 40 mL VOC vial for purging. |

# SAMPLE RECEIPT NOTIFICATION (SRN)

**Work Order** : **EM2322818**

| | | | |
|---|---|---|---|
| Client | : **Jones Environmental** | Laboratory | : Environmental Division Melbourne |
| Contact | : PATRICIA JONES | Contact | : Hannah White |
| Address | : 497 Parnall Street<br>Lavington Lavington 2641 | Address | : 4 Westall Rd Springvale VIC Australia 3171 |
| E-mail | : patricia@jonesenvironmental.net | E-mail | : Hannah.White@alsglobal.com |
| Telephone | : ---- | Telephone | : +61-3-8549 9600 |
| Facsimile | : ---- | Facsimile | : +61-3-8549 9626 |
| Project | : JE10388 | Page | : 1 of 4 |
| Order number | : ---- | Quote number | : EM2017JONENV0002 (EN/222) |
| C-O-C number | : ---- | QC Level | : NEPM 2013 B3 & ALS QC Standard |
| Site | : ---- | | |
| Sampler | : RUSSELL JONES | | |

## Dates

| | | | |
|---|---|---|---|
| Date Samples Received | : 20-Dec-2023 12:40 | Issue Date | : 21-Dec-2023 |
| Client Requested Due Date | : 08-Jan-2024 | Scheduled Reporting Date | : **08-Jan-2024** |

## Delivery Details

| | | | |
|---|---|---|---|
| Mode of Delivery | : Carrier | Security Seal | : Intact. |
| No. of coolers/boxes | : 1 | Temperature | : 6.3°C - Ice Bricks present |
| Receipt Detail | : | No. of samples received / analysed | : 20 / 12 |

## General Comments

- This report contains the following information:
  - Sample Container(s)/Preservation Non-Compliances
  - Summary of Sample(s) and Requested Analysis
  - Proactive Holding Time Report
  - Requested Deliverables
- **Please direct any queries related to sample condition / numbering / breakages to Client Services.**
- Sample Disposal - Aqueous (3 weeks), Solid (2 months) from receipt of samples.
- **Analytical work for this work order will be conducted at ALS Springvale.**
- **Please refer to the Proactive Holding Time Report table below which summarises breaches of recommended holding times that have occurred prior to samples/instructions being received at the laboratory. The laboratory will process these samples unless instructions are received from you indicating you do not wish to proceed. The absence of this summary table indicates that all samples have been received within the recommended holding times for the analysis requested.**
- Received SB10 2,0-2.2 as an extra sample.
- Please be aware that APHA/NEPM recommends water and soil samples be chilled to less than or equal to 6°C for chemical analysis, and less than or equal to 10°C but unfrozen for Microbiological analysis. Where samples are received above this temperature, it should be taken into consideration when interpreting results. Refer to ALS EnviroMail 85 for ALS recommendations of the best practice for chilling samples after sampling and for maintaining a cool temperature during transit.

## Sample Container(s)/Preservation Non-Compliances

All comparisons are made against pretreatment/preservation AS, APHA, USEPA standards.

- **No sample container / preservation non-compliance exists.**

## Summary of Sample(s) and Requested Analysis

Some items described below may be part of a laboratory process necessary for the execution of client requested tasks. Packages may contain additional analyses, such as the determination of moisture content and preparation tasks, that are included in the package.
If no sampling time is provided, the sampling time will default 00:00 on the date of sampling. If no sampling date is provided, the sampling date will be assumed by the laboratory and displayed in brackets without a time component

Matrix: **SOIL**

| Laboratory sample ID | Sampling date / time | Sample ID | SOIL - EA055-103 Moisture Content | SOIL - EA200G Asbestos Identification in Soils - | SOIL - EK026SF (Solids) Total Cyanide By Segmented Flow Analyser | SOIL - EK040T Total Fluoride | SOIL - S-03 15 Metals (NEPM 2013 Suite - incl. Digestion) | SOIL - S-12 OC/OP Pesticides | SOIL - S-24 TRH/BTEXN/PAH + Phenols |
|---|---|---|---|---|---|---|---|---|---|
| EM2322818-001 | 19-Dec-2023 00:00 | SB6_0.0-0.2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| EM2322818-003 | 19-Dec-2023 00:00 | SB6_1.0-1.2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| EM2322818-004 | 19-Dec-2023 00:00 | SB6_1.5 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| EM2322818-006 | 19-Dec-2023 00:00 | SB7_0.5-0.7 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| EM2322818-008 | 19-Dec-2023 00:00 | SB7_2.0-2.2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| EM2322818-010 | 19-Dec-2023 00:00 | SB10_0.0-0.2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| EM2322818-012 | 19-Dec-2023 00:00 | SB10_1.0-1.2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| EM2322818-013 | 19-Dec-2023 00:00 | SB12_0.0-0.2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| EM2322818-016 | 19-Dec-2023 00:00 | SB12_1.5 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| EM2322818-017 | 19-Dec-2023 00:00 | QC5 | ✓ | | | | ✓ | | |

Matrix: **SOIL**

| Laboratory sample ID | Sampling date / time | Sample ID | (On Hold) SOIL No analysis requested | SOIL - EP066 (solids) Polychlorinated Biphenyls by GCMS |
|---|---|---|---|---|
| EM2322818-001 | 19-Dec-2023 00:00 | SB6_0.0-0.2 | | ✓ |
| EM2322818-002 | 19-Dec-2023 00:00 | SB6_0.5-0.7 | ✓ | |
| EM2322818-003 | 19-Dec-2023 00:00 | SB6_1.0-1.2 | | ✓ |
| EM2322818-004 | 19-Dec-2023 00:00 | SB6_1.5 | | ✓ |
| EM2322818-005 | 19-Dec-2023 00:00 | SB7_0.0-0.2 | ✓ | |
| EM2322818-006 | 19-Dec-2023 00:00 | SB7_0.5-0.7 | | ✓ |
| EM2322818-007 | 19-Dec-2023 00:00 | SB7_1.0-1.2 | ✓ | |
| EM2322818-008 | 19-Dec-2023 00:00 | SB7_2.0-2.2 | | ✓ |
| EM2322818-009 | 19-Dec-2023 00:00 | SB7_3.0-3.2 | ✓ | |
| EM2322818-010 | 19-Dec-2023 00:00 | SB10_0.0-0.2 | | ✓ |
| EM2322818-011 | 19-Dec-2023 00:00 | SB10_0.5-0.7 | ✓ | |
| EM2322818-012 | 19-Dec-2023 00:00 | SB10_1.0-1.2 | | ✓ |
| EM2322818-013 | 19-Dec-2023 00:00 | SB12_0.0-0.2 | | ✓ |
| EM2322818-014 | 19-Dec-2023 00:00 | SB12_0.5-0.7 | ✓ | |

| | | | (On Hold) SOIL No analysis requested | SOIL - EP066 (solids) Polychlorinated Biphenyls by GCMS |
|---|---|---|---|---|
| EM2322818-015 | 19-Dec-2023 00:00 | SB12_1.0-1.2 | ✓ | |
| EM2322818-016 | 19-Dec-2023 00:00 | SB12_1.5 | | ✓ |
| EM2322818-020 | 19-Dec-2023 00:00 | SB10 | ✓ | |

Matrix: **WATER**

| *Laboratory sample ID* | *Sampling date / time* | *Sample ID* | WATER - W-02 8 Metals | WATER - W-18 TRH(C6 - C9)/BTEXN |
|---|---|---|---|---|
| EM2322818-018 | 19-Dec-2023 00:00 | QC9 | ✓ | |
| EM2322818-019 | 19-Dec-2023 00:00 | QC10 | | ✓ |

## *Proactive Holding Time Report*

Sample(s) have been received within the recommended holding times for the requested analysis.

## *Requested Deliverables*

**Esdat Uploads**

| | | |
|---|---|---|
| - *AU Certificate of Analysis - NATA (COA) | Email | jonesenvironmental@esdat.com.au |
| - *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI) | Email | jonesenvironmental@esdat.com.au |
| - *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC) | Email | jonesenvironmental@esdat.com.au |
| - A4 - AU Sample Receipt Notification - Environmental HT (SRN) | Email | jonesenvironmental@esdat.com.au |
| - Chain of Custody (CoC) (COC) | Email | jonesenvironmental@esdat.com.au |
| - EDI Format - ENMRG (ENMRG) | Email | jonesenvironmental@esdat.com.au |
| - EDI Format - ESDAT (ESDAT) | Email | jonesenvironmental@esdat.com.au |

**Patricia Halpin**

| | | |
|---|---|---|
| - A4 - AU Tax Invoice (INV) | Email | patricia@jonesenvironmental.net |

**PATRICIA JONES**

| | | |
|---|---|---|
| - *AU Certificate of Analysis - NATA (COA) | Email | patricia@jonesenvironmental.net |
| - *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI) | Email | patricia@jonesenvironmental.net |
| - *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC) | Email | patricia@jonesenvironmental.net |
| - A4 - AU Sample Receipt Notification - Environmental HT (SRN) | Email | patricia@jonesenvironmental.net |
| - A4 - AU Tax Invoice (INV) | Email | patricia@jonesenvironmental.net |
| - Chain of Custody (CoC) (COC) | Email | patricia@jonesenvironmental.net |
| - EDI Format - ENMRG (ENMRG) | Email | patricia@jonesenvironmental.net |
| - EDI Format - ESDAT (ESDAT) | Email | patricia@jonesenvironmental.net |

**RUSSELL JONES**

| | | |
|---|---|---|
| - A4 - AU Tax Invoice (INV) | Email | russell@jonesenvironmental.net |

FREIGHT

# CHAIN OF CUSTODY ALS

| | | | |
|---|---|---|---|
| CLIENT: JEC | TURNAROUND REQUIREMENTS : ⊗ Standard TAT (List due date): | FOR LABORATORY USE ONLY (Circle) | |
| OFFICE: | (Standard TAT may be longer for some tests e.g. Ultra Trace Organics) ☐ Non Standard or urgent TAT (List due date): | Custody Seal Intact? | Yes No N/A |
| PROJECT: JE10388 | | Free ice / frozen ice bricks present upon receipt? | Yes No N/A |
| ORDER NUMBER: | COC SEQUENCE NUMBER (Circle) COC: 1 2 3 4 5 6 7 | Random Sample Temperature on Receipt: | °C |
| PROJECT MANAGER: Patricia Jones CONTACT PH: 0424490551 | OF: 1 2 3 4 5 6 7 | Other comment: | |

| | | | | |
|---|---|---|---|---|
| SAMPLER: Russell Jones | SAMPLER MOBILE: | RELINQUISHED BY: | RECEIVED BY: | RELINQUISHED BY: / RECEIVED BY: |
| | EDD FORMAT (or default): | | | |
| Email Reports to (will default to PM if no other addresses are listed): patricia@jonesenvironmental.net | | DATE/TIME: | DATE/TIME: | DATE/TIME: |
| Email Invoice to (will default to PM if no other addresses are listed): russell@jonesenvironmental.net | | 19/12/23 | | 20/12 1240 |

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL:

| ALS USE | SAMPLE DETAILS MATRIX: SOLID (S) WATER (W) | | | CONTAINER INFORMATION | | ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to attract suite price) Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required). | | | | | | | | | | | Additional Information |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LAB ID | SAMPLE ID | DATE / TIME | MATRIX | TYPE & PRESERVATIVE (refer to codes below) | TOTAL CONTAINERS | TRH/BTEX/PAH/Phenols | TPH(c6-c9)/BTEX | TPH/BTEX | S-3 | OC/OP | EA200G | P-22 | EP066 | Floride | Cyanide | Metals | Comments on likely contaminant levels, dilutions, or samples requiring specific QC analysis etc. |
| 1 | SB6 0.0-0.2 | 19/12/23 | S | 1 x soil jar + asbestos bag | | x | | | x | x | x | | x | x | x | | |
| 2 | SB6 0.5-0.7 | 19/12/23 | S | 1 x soil jar + asbestos bag | | | | | | | | | | | | | |
| 3 | SB6 1.0-1.2 | 19/12/23 | S | 1 x soil jar | | x | | | x | x | x | | x | x | x | | |
| 4 | SB6 1.5 | 19/12/23 | S | 1 x soil jar | | x | | | x | x | x | | x | x | x | | |
| 5 | SB7 0.0-0.2 | 19/12/23 | S | 1 x soil jar + asbestos bag | | | | | | | | | | | | | |
| 6 | SB7 0.5-0.7 | 19/12/23 | S | 1 x soil jar + asbestos bag | | x | | | x | x | x | | x | x | x | | |
| 7 | SB7 1.0-1.2 | 19/12/23 | S | 1 x soil jar | | | | | | | | | | | | | |
| 8 | SB7 2.0-2.2 | 19/12/23 | S | 1 x soil jar | | x | | | x | x | x | | x | x | x | | |
| 9 | SB7 3.0-3.2 | 19/12/23 | S | 1 x soil jar | | | | | | | | | | | | | |
| 10 | SB10 0.0-0.2 | 19/12/23 | S | 1 x soil jar + asbestos bag | | x | | | x | x | x | | x | x | x | | |
| 11 | SB10 0.5-0.7 | 19/12/23 | S | 1 x soil jar + asbestos bag | | | | | | | | | | | | | |
| 12 | SB10 1.0-1.2 | 19/12/23 | S | 1 x soil jar + asbestos bag | | x | | | x | x | x | | x | x | x | | |
| 13 | SB12 0.0-0.2 | 19/12/23 | S | 1 x soil jar + asbestos bag | | x | | | x | x | x | | x | x | x | | |
| 14 | SB12 0.5-0.7 | 19/12/23 | S | 1 x soil jar + asbestos bag | | | | | | | | | | | | | |
| 15 | SB12 1.0-1.2 | 19/12/23 | S | 1 x soil jar + asbestos bag | | | | | | | | | | | | | |
| 16 | SB12 1.5 | 19/12/23 | S | 1 x soil jar + asbestos bag | | x | | | x | x | x | | x | x | x | | |
| 17 | QC5 | 19/12/23 | S | 1 x soil jar | | | | | x | | | | | | | | |
| 18 | QC9 | 19/12/23 | W | 1 x metals | | | | | | | | | | | | x | |
| 19 | QC10 | 19/12/23 | W | 2 x vials | | | x | | | | | | | | | | |
| | | | | TOTAL | | | | | | | | | | | | | |

***Water Container Codes:*** P = Unpreserved Plastic; N = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; SH = Sodium Hydroxide/Cd Preserved; S = Sodium Hydroxide Preserved Plastic; AG = Amber Glass Unpreserved; AP - Airfreight Unpreserved Plastic
V = VOA Vial HCl Preserved; VB = VOA Vial Sodium Bisulphate Preserved; VS = VOA Vial Sulfuric Preserved; AV = Airfreight Unpreserved Vial SG = Sulfuric Preserved Amber Glass; H = HCl preserved Plastic; HS = HCl preserved Speciation bottle; SP = Sulfuric Preserved Plastic; F = Formaldehyde Preserved Glass;
Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottles; ST = Sterile Bottle; ASS = Plastic Bag for Acid Sulphate Soils; B = Unpreserved Bag.

Extra → 20 SB10 2.0-2.2

Environmental Division
Melbourne
Work Order Reference
EM2322818

Telephone : +61-3-8549 9600

FREIGHT

# CHAIN OF CUSTODY ALS

| | | | |
|---|---|---|---|
| CLIENT: JEC | TURNAROUND REQUIREMENTS : ⊗ Standard TAT (List due date): | FOR LABORATORY USE ONLY (Circle) | |
| OFFICE: | (Standard TAT may be longer for some tests e.g. Ultra Trace Organics) ☐ Non Standard or urgent TAT (List due date): | Custody Seal Intact? | Yes No N/A |
| PROJECT: JE10388 | | Free ice / frozen ice bricks present upon receipt? | Yes No N/A |
| ORDER NUMBER: | COC SEQUENCE NUMBER (Circle) COC: 1 2 3 4 5 6 7 | Random Sample Temperature on Receipt: | °C |
| PROJECT MANAGER: Patricia Jones CONTACT PH: 0424490551 | OF: 1 2 3 4 5 6 7 | Other comment: | |

| | | | | |
|---|---|---|---|---|
| SAMPLER: Russell Jones | SAMPLER MOBILE: | RELINQUISHED BY: | RECEIVED BY: | RELINQUISHED BY: / RECEIVED BY: |
| | EDD FORMAT (or default): | | | |
| Email Reports to (will default to PM if no other addresses are listed): patricia@jonesenvironmental.net | | DATE/TIME: | DATE/TIME: | DATE/TIME: |
| Email Invoice to (will default to PM if no other addresses are listed): russell@jonesenvironmental.net | | 19/12/23 | | 20/12 1240 |

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL:

| ALS USE | SAMPLE DETAILS MATRIX: SOLID (S) WATER (W) | | | CONTAINER INFORMATION | | ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to attract suite price) Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required). | | | | | | | | | | | Additional Information |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LAB ID | SAMPLE ID | DATE / TIME | MATRIX | TYPE & PRESERVATIVE (refer to codes below) | TOTAL CONTAINERS | TRH/BTEX/PAH/Phenols | TPH(c6-c9)/BTEX | TPH/BTEX | S-3 | OC/OP | EA200G | P-22 | EP066 | Floride | Cyanide | Metals | Comments on likely contaminant levels, dilutions, or samples requiring specific QC analysis etc. |
| 1 | SB6 0.0-0.2 | 19/12/23 | S | 1 x soil jar + asbestos bag | | x | | | x | x | x | | x | x | x | | |
| 2 | SB6 0.5-0.7 | 19/12/23 | S | 1 x soil jar + asbestos bag | | | | | | | | | | | | | |
| 3 | SB6 1.0-1.2 | 19/12/23 | S | 1 x soil jar | | x | | | x | x | x | | x | x | x | | |
| 4 | SB6 1.5 | 19/12/23 | S | 1 x soil jar | | x | | | x | x | x | | x | x | x | | |
| 5 | SB7 0.0-0.2 | 19/12/23 | S | 1 x soil jar + asbestos bag | | | | | | | | | | | | | |
| 6 | SB7 0.5-0.7 | 19/12/23 | S | 1 x soil jar + asbestos bag | | x | | | x | x | x | | x | x | x | | |
| 7 | SB7 1.0-1.2 | 19/12/23 | S | 1 x soil jar | | | | | | | | | | | | | |
| 8 | SB7 2.0-2.2 | 19/12/23 | S | 1 x soil jar | | x | | | x | x | x | | x | x | x | | |
| 9 | SB7 3.0-3.2 | 19/12/23 | S | 1 x soil jar | | | | | | | | | | | | | |
| 10 | SB10 0.0-0.2 | 19/12/23 | S | 1 x soil jar + asbestos bag | | x | | | x | x | x | | x | x | x | | |
| 11 | SB10 0.5-0.7 | 19/12/23 | S | 1 x soil jar + asbestos bag | | | | | | | | | | | | | |
| 12 | SB10 1.0-1.2 | 19/12/23 | S | 1 x soil jar + asbestos bag | | x | | | x | x | x | | x | x | x | | |
| 13 | SB12 0.0-0.2 | 19/12/23 | S | 1 x soil jar + asbestos bag | | x | | | x | x | x | | x | x | x | | |
| 14 | SB12 0.5-0.7 | 19/12/23 | S | 1 x soil jar + asbestos bag | | | | | | | | | | | | | |
| 15 | SB12 1.0-1.2 | 19/12/23 | S | 1 x soil jar + asbestos bag | | | | | | | | | | | | | |
| 16 | SB12 1.5 | 19/12/23 | S | 1 x soil jar + asbestos bag | | x | | | x | x | x | | x | x | x | | |
| 17 | QC5 | 19/12/23 | S | 1 x soil jar | | | | | x | | | | | | | | |
| 18 | QC9 | 19/12/23 | W | 1 x metals | | | | | | | | | | | | x | |
| 19 | QC10 | 19/12/23 | W | 2 x vials | | | x | | | | | | | | | | |
| | | | | TOTAL | | | | | | | | | | | | | |

***Water Container Codes:*** P = Unpreserved Plastic; N = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; SH = Sodium Hydroxide/Cd Preserved; S = Sodium Hydroxide Preserved Plastic; AG = Amber Glass Unpreserved; AP - Airfreight Unpreserved Plastic
V = VOA Vial HCl Preserved; VB = VOA Vial Sodium Bisulphate Preserved; VS = VOA Vial Sulfuric Preserved; AV = Airfreight Unpreserved Vial SG = Sulfuric Preserved Amber Glass; H = HCl preserved Plastic; HS = HCl preserved Speciation bottle; SP = Sulfuric Preserved Plastic; F = Formaldehyde Preserved Glass;
Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottles; ST = Sterile Bottle; ASS = Plastic Bag for Acid Sulphate Soils; B = Unpreserved Bag.

Extra → 20 SB10 2.0-2.2

Environmental Division
Melbourne
Work Order Reference
EM2322818

Telephone : +61-3-8549 9600

# CERTIFICATE OF ANALYSIS

| | | | |
|---|---|---|---|
| **Work Order** | : **EM2402426** | Page | : 1 of 4 |
| Client | : **Jones Environmental** | Laboratory | : Environmental Division Melbourne |
| Contact | : PATRICIA JONES | Contact | : Hannah White |
| Address | : 497 Parnall Street<br>Lavington Lavington 2641 | Address | : 4 Westall Rd Springvale VIC Australia 3171 |
| Telephone | : ---- | Telephone | : +61-3-8549 9600 |
| Project | : JE10388 | Date Samples Received | : 19-Dec-2023 12:50 |
| Order number | : ---- | Date Analysis Commenced | : 20-Feb-2024 |
| C-O-C number | : ---- | Issue Date | : 21-Feb-2024 17:59 |
| Sampler | : RUSSELL JONES | | |
| Site | : ---- | | |
| Quote number | : EN/222 | | |
| No. of samples received | : 1 | | |
| No. of samples analysed | : 1 | | |

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

**Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.**

## *Signatories*

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

| *Signatories* | *Position* | *Accreditation Category* |
|---|---|---|
| Dilani Fernando | Laboratory Coordinator | Melbourne Inorganics, Springvale, VIC |

## General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contract for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

- This is a rebatch of EM2322709.
- EN33: Where leachable PFAS analysis is requested, centrifugation rather than pressure filtration is used as the default approach for removal of particulates, in line with AS 4439.3.

## Analytical Results

| Sub-Matrix: SOIL (Matrix: SOIL) | | | Sample ID | SB4_1.0-1.2 | ---- | ---- | ---- | ---- |
|---|---|---|---|---|---|---|---|---|
| | | | Sampling date / time | 12-Dec-2023 00:00 | ---- | ---- | ---- | ---- |
| Compound | CAS Number | LOR | Unit | EM2402426-001 | -------- | -------- | -------- | -------- |
| | | | | Result | ---- | ---- | ---- | ---- |
| **EN33: TCLP Leach - Inorganics/PFAS (Plastic Vessel)** | | | | | | | | |
| **Initial pH** | ---- | 0.1 | pH Unit | **7.0** | **----** | **----** | **----** | **----** |
| **After HCl pH** | ---- | 0.1 | pH Unit | **1.4** | **----** | **----** | **----** | **----** |
| **Extraction Fluid Number** | ---- | 1 | - | **1** | **----** | **----** | **----** | **----** |
| **Final pH** | ---- | 0.1 | pH Unit | **5.1** | **----** | **----** | **----** | **----** |

## Analytical Results

| Sub-Matrix: TCLP LEACHATE (Matrix: WATER) | | | | Sample ID | SB4_1.0-1.2 | ---- | ---- | ---- | ---- |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Sampling date / time | 12-Dec-2023 00:00 | ---- | ---- | ---- | ---- |
| Compound | CAS Number | LOR | Unit | | EM2402426-001 | -------- | -------- | -------- | -------- |
| | | | | | Result | ---- | ---- | ---- | ---- |
| **EG005(ED093)C: Leachable Metals by ICPAES** | | | | | | | | | |
| **Arsenic** | 7440-38-2 | 0.1 | mg/L | | <0.1 | **----** | **----** | **----** | **----** |

# QUALITY CONTROL REPORT

| | | | |
|---|---|---|---|
| **Work Order** | : **EM2402426** | Page | : 1 of 3 |
| Client | : **Jones Environmental** | Laboratory | : Environmental Division Melbourne |
| Contact | : PATRICIA JONES | Contact | : Hannah White |
| Address | : 497 Parnall Street<br>Lavington Lavington 2641 | Address | : 4 Westall Rd Springvale VIC Australia 3171 |
| Telephone | : ---- | Telephone | : +61-3-8549 9600 |
| Project | : JE10388 | Date Samples Received | : 19-Dec-2023 |
| Order number | : ---- | Date Analysis Commenced | : 20-Feb-2024 |
| C-O-C number | : ---- | Issue Date | : 21-Feb-2024 |
| Sampler | : RUSSELL JONES | | |
| Site | : ---- | | |
| Quote number | : EN/222 | | |
| No. of samples received | : 1 | | |
| No. of samples analysed | : 1 | | |

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

## *Signatories*

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

| *Signatories* | *Position* | *Accreditation Category* |
|---|---|---|
| Dilani Fernando | Laboratory Coordinator | Melbourne Inorganics, Springvale, VIC |

## General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis. Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Key : Anonymous = Refers to samples which are not specifically part of this work order but formed part of the QC process lot
CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
RPD = Relative Percentage Difference
# = Indicates failed QC

## Laboratory Duplicate (DUP) Report

The quality control term Laboratory Duplicate refers to a randomly selected intralaboratory split. Laboratory duplicates provide information regarding method precision and sample heterogeneity. The permitted ranges for the Relative Percent Deviation (RPD) of Laboratory Duplicates are specified in ALS Method QWI-EN/38 and are dependent on the magnitude of results in comparison to the level of reporting: Result < 10 times LOR: No Limit; Result between 10 and 20 times LOR: 0% - 50%; Result > 20 times LOR: 0% - 20%.

Sub-Matrix: **WATER**

| | | | | Laboratory Duplicate (DUP) Report | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| *Laboratory sample ID* | *Sample ID* | *Method: Compound* | *CAS Number* | *LOR* | *Unit* | *Original Result* | *Duplicate Result* | *RPD (%)* | *Acceptable RPD (%)* |
| **EG005(ED093)C: Leachable Metals by ICPAES (QC Lot: 5614275)** | | | | | | | | | |
| EM2402394-009 | Anonymous | EG005C: Arsenic | 7440-38-2 | 0.1 | mg/L | <0.1 | <0.1 | 0.0 | No Limit |

## Method Blank (MB) and Laboratory Control Sample (LCS) Report

The quality control term Method / Laboratory Blank refers to an analyte free matrix to which all reagents are added in the same volumes or proportions as used in standard sample preparation. The purpose of this QC parameter is to monitor potential laboratory contamination. The quality control term Laboratory Control Sample (LCS) refers to a certified reference material, or a known interference free matrix spiked with target analytes. The purpose of this QC parameter is to monitor method precision and accuracy independent of sample matrix. Dynamic Recovery Limits are based on statistical evaluation of processed LCS.

Sub-Matrix: **WATER**

| | | | | Method Blank (MB) Report | Laboratory Control Spike (LCS) Report | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | Spike | Spike Recovery (%) | Acceptable Limits (%) | |
| Method: Compound | CAS Number | LOR | Unit | Result | Concentration | LCS | Low | High |
| **EG005(ED093)C: Leachable Metals by ICPAES (QCLot: 5614275)** | | | | | | | | |
| EG005C: Arsenic | 7440-38-2 | 0.1 | mg/L | <0.1 | 1 mg/L | 98.5 | 80.0 | 120 |

## Matrix Spike (MS) Report

The quality control term Matrix Spike (MS) refers to an intralaboratory split sample spiked with a representative set of target analytes. The purpose of this QC parameter is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

Sub-Matrix: **WATER**

| | | | | Matrix Spike (MS) Report | | | |
|---|---|---|---|---|---|---|---|
| | | | | Spike | SpikeRecovery(%) | Acceptable Limits (%) | |
| Laboratory sample ID | Sample ID | Method: Compound | CAS Number | Concentration | MS | Low | High |
| **EG005(ED093)C: Leachable Metals by ICPAES (QCLot: 5614275)** | | | | | | | |
| EM2402394-014 | Anonymous | EG005C: Arsenic | 7440-38-2 | 1 mg/L | 111 | 80.0 | 120 |

# QA/QC Compliance Assessment to assist with Quality Review

| | | | |
|---|---|---|---|
| **Work Order** | : **EM2402426** | Page | : 1 of 4 |
| Client | : **Jones Environmental** | Laboratory | : Environmental Division Melbourne |
| Contact | : PATRICIA JONES | Telephone | : +61-3-8549 9600 |
| Project | : JE10388 | Date Samples Received | : 19-Dec-2023 |
| Site | : ---- | Issue Date | : 21-Feb-2024 |
| Sampler | : RUSSELL JONES | No. of samples received | : 1 |
| Order number | : ---- | No. of samples analysed | : 1 |

**This report is automatically generated by the ALS LIMS through interpretation of the ALS Quality Control Report and several Quality Assurance parameters measured by ALS. This automated reporting highlights any non-conformances, facilitates faster and more accurate data validation and is designed to assist internal expert and external Auditor review. Many components of this report contribute to the overall DQO assessment and reporting for guideline compliance.**

Brief method summaries and references are also provided to assist in traceability.

## *Summary of Outliers*

### *Outliers : Quality Control Samples*

This report highlights outliers flagged in the Quality Control (QC) Report.

- **NO Method Blank value outliers occur.**
- **NO Duplicate outliers occur.**
- **NO Laboratory Control outliers occur.**
- **NO Matrix Spike outliers occur.**
- **For all regular sample matrices, NO surrogate recovery outliers occur.**

### *Outliers : Analysis Holding Time Compliance*

- **NO Analysis Holding Time Outliers exist.**

### *Outliers : Frequency of Quality Control Samples*

- **NO Quality Control Sample Frequency Outliers exist.**

# Analysis Holding Time Compliance

If samples are identified below as having been analysed or extracted outside of recommended holding times, this should be taken into consideration when interpreting results.

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times (referencing USEPA SW 846, APHA, AS and NEPM) based on the sample container provided. Dates reported represent first date of extraction or analysis and preclude subsequent dilutions and reruns. A listing of breaches (if any) is provided herein.

Holding time for leachate methods (e.g. TCLP) vary according to the analytes reported. Assessment compares the leach date with the shortest analyte holding time for the equivalent soil method. These are: organics 14 days, mercury 28 days & other metals 180 days. A recorded breach does not guarantee a breach for all non-volatile parameters.

Holding times for ***VOC in soils*** vary according to analytes of interest. Vinyl Chloride and Styrene holding time is 7 days; others 14 days. A recorded breach does not guarantee a breach for all VOC analytes and should be verified in case the reported breach is a false positive or Vinyl Chloride and Styrene are not key analytes of interest/concern.

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

| Method / Container / Client Sample ID(s) | Sample Date | Extraction / Preparation | | | Analysis | | |
|---|---|---|---|---|---|---|---|
| | | Date extracted | Due for extraction | Evaluation | Date analysed | Due for analysis | Evaluation |
| **EN33: TCLP Leach - Inorganics/PFAS (Plastic Vessel)** | | | | | | | |
| **Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN33a-P)** | | | | | | | |
| SB4_1.0-1.2 | **12-Dec-2023** | **20-Feb-2024** | 09-Jun-2024 | ✓ | **----** | ---- | ---- |

Matrix: **WATER**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

| Method / Container / Client Sample ID(s) | Sample Date | Extraction / Preparation | | | Analysis | | |
|---|---|---|---|---|---|---|---|
| | | Date extracted | Due for extraction | Evaluation | Date analysed | Due for analysis | Evaluation |
| **EG005(ED093)C: Leachable Metals by ICPAES** | | | | | | | |
| **Clear Plastic Bottle - Nitric Acid; Unfiltered (EG005C)** | | | | | | | |
| SB4_1.0-1.2 | **20-Feb-2024** | **21-Feb-2024** | 18-Aug-2024 | ✓ | **21-Feb-2024** | 18-Aug-2024 | ✓ |

# Quality Control Parameter Frequency Compliance

The following report summarises the frequency of laboratory QC samples analysed within the analytical lot(s) in which the submitted sample(s) was(were) processed. Actual rate should be greater than or equal to the expected rate. A listing of breaches is provided in the Summary of Outliers.

Matrix: **WATER**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

| Quality Control Sample Type | | Count | | Rate (%) | | | Quality Control Specification |
|---|---|---|---|---|---|---|---|
| *Analytical Methods* | *Method* | *QC* | *Regular* | ***Actual*** | ***Expected*** | *Evaluation* | |
| Laboratory Duplicates (DUP) | | | | | | | |
| Leachable Metals by ICPAES | EG005C | 1 | 4 | **25.00** | **10.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Laboratory Control Samples (LCS) | | | | | | | |
| Leachable Metals by ICPAES | EG005C | 1 | 4 | **25.00** | **5.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Method Blanks (MB) | | | | | | | |
| Leachable Metals by ICPAES | EG005C | 1 | 4 | **25.00** | **5.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |
| Matrix Spikes (MS) | | | | | | | |
| Leachable Metals by ICPAES | EG005C | 1 | 4 | **25.00** | **5.00** | ✓ | NEPM 2013 B3 & ALS QC Standard |

## Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided within the Method Descriptions.

| Analytical Methods | Method | Matrix | Method Descriptions |
|---|---|---|---|
| Leachable Metals by ICPAES | EG005C | SOIL | In house: referenced to APHA 3120; USEPA SW 846 - 6010: The ICPAES technique ionises leachate sample atoms emitting a characteristic spectrum. This spectrum is then compared against matrix matched standards for quantification. This method is compliant with NEPM Schedule B(3). |

| Preparation Methods | Method | Matrix | Method Descriptions |
|---|---|---|---|
| Digestion for Total Recoverable Metals in TCLP Leachate | EN25C | SOIL | In house: Referenced to USEPA SW846-3005. Method 3005 is a Nitric/Hydrochloric acid digestion procedure used to prepare surface and ground water samples for analysis by ICPAES or ICPMS. This method is compliant with NEPM Schedule B(3) |
| TCLP for Non & Semivolatile Analytes - Plastic Leaching Vessel | EN33a-P | SOIL | In house QWI-EN/33 referenced to USEPA SW846-1311: The TCLP procedure is designed to determine the mobility of both organic and inorganic analytes present in wastes. The standard TCLP leach is for non-volatile and Semivolatile test parameters. |

# Rebatch

**Client / Client code:** JONENV
**Project:** JE10388
**Project Manger:** Patricia Jones
**Date /time sample rec:** 19/02 @4.23PM
**Date/time Instructions rec:** 19/12 @12.50PM
**Due date:** Wednesday, 21 February 2024
**Due date surcharge:** **2 DAY**

**CS Contact:** Hannah White
Additional Information:
Report receipients as per previous work order: Patricia jones - Reports and invoice, Russell Jones - Invoice, Esdat Uploads - Esdat files

**URGENT**

| Sample information | | | | | | | Analysis | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Standard | | | | | Leach | | | | |
| New Lab ID | Client ID | Sampling Date / Time | Previous Work Order Reference | Previous ALS ID | Tray Number(s) | Container | Number of Containers | | | | | EN33 (TCLP) EG005C ( As) | | | | | Shortest Holding time expiry |
| 1 | SB4_1.0-1.2 | 12/12/2023 0:00 | EM2322709 | 027 | MS:9703-9707 | JAR | | | | | | X | | | | | 09-Jun-24 |
| | 0 | 0/01/1900 0:00 | | | | | | | | | | | | | | | 28-Jun-00 |
| | 0 | 0/01/1900 0:00 | | | | | | | | | | | | | | | 28-Jun-00 |
| | 0 | 0/01/1900 0:00 | | | | | | | | | | | | | | | 28-Jun-00 |
| | 0 | 0/01/1900 0:00 | | | | | | | | | | | | | | | 28-Jun-00 |
| | 0 | 0/01/1900 0:00 | | | | | | | | | | | | | | | 28-Jun-00 |
| | 0 | 0/01/1900 0:00 | | | | | | | | | | | | | | | 28-Jun-00 |
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| | 0 | 0/01/1900 0:00 | | | | | | | | | | | | | | | 28-Jun-00 |
| | 0 | 0/01/1900 0:00 | | | | | | | | | | | | | | | 28-Jun-00 |
| | 0 | 0/01/1900 0:00 | | | | | | | | | | | | | | | 28-Jun-00 |
| | 0 | 0/01/1900 0:00 | | | | | | | | | | | | | | | 28-Jun-00 |
| | 0 | 0/01/1900 0:00 | | | | | | | | | | | | | | | 28-Jun-00 |
| | 0 | 0/01/1900 0:00 | | | | | | | | | | | | | | | 28-Jun-00 |
| | 0 | 0/01/1900 0:00 | | | | | | | | | | | | | | | 28-Jun-00 |
| | 0 | 0/01/1900 0:00 | | | | | | | | | | | | | | | 28-Jun-00 |
| | 0 | 0/01/1900 0:00 | | | | | | | | | | | | | | | 28-Jun-00 |
| | | | | | | TOTAL | 0 | | | | | | | | | | |

Environmental Division
Melbourne
Work Order Reference
EM2402426

Telephone : +61-3-8549 9600

343

# CHAIN OF CUSTODY

Eurofins

| | | | |
|---|---|---|---|
| CLIENT: JEC | TURNAROUND REQUIREMENTS : ✱ Standard TAT (List due date): | | FOR LABORATORY USE ONLY (Circle) |
| OFFICE: | (Standard TAT may be longer for some tests e.g., Ultra Trace Organics) ☐ Non Standard or urgent TAT (List due date): | | Custody Seal Intact? Yes No N/A |
| PROJECT: JE10388 | | COC SEQUENCE NUMBER (Circle) | Free ice / frozen ice bricks present upon receipt? Yes No N/A |
| ORDER NUMBER: | | CO 1 2 3 4 5 6 7 | Random Sample Temperature on Receipt: °C |
| PROJECT MANAGER: Patricia Jones | CONTACT PH: 0424490551 | OF 1 2 3 4 5 6 7 | Other comment: |
| SAMPLER: Russell Jones | SAMPLER MOBILE: | RELINQUISHED BY: | RECEIVED BY: Maura Tam |
| | EDD FORMAT (or default): | | |
| Email Reports to (will default to PM if no other addresses are listed): patricia@jonesenvironmental.net | | DATE/TIME: | DATE/TIME: 20/12 1240 |
| Email Invoice to (will default to PM if no other addresses are listed): russell@jonesenvironmental.net | | 19/12/23 | |

| RELINQUISHED BY: | RECEIVED BY: |
|---|---|
| SR (ALS) | |
| DATE/TIME: 21/12/23 | DATE/TIME: |

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL:

| ALS USE | SAMPLE DETAILS MATRIX: SOLID (S) WATER (W) | | | CONTAINER INFORMATION | | ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to attract suite price) Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required). | Additional Information |
|---|---|---|---|---|---|---|---|
| LAB ID | SAMPLE ID | DATE / TIME | MATRIX | TYPE & PRESERVATIVE (refer to codes below) | TOTAL CONTAINERS | Metals | Comments on likely contaminant levels, dilutions, or samples requiring specific QC analysis etc. |
| | QC6 | 19/12/23 | S | 1 x soil jar | | x | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | TOTAL | | | |

*Water Container Codes:* P = Unpreserved Plastic; N = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; SH = Sodium Hydroxide/Cd Preserved; S = Sodium Hydroxide Preserved Plastic; AG = Amber Glass Unpreserved; AP - Airfreight Unpreserved Plastic
V = VOA Vial HCl Preserved; VB = VOA Vial Sodium Bisulphate Preserved; VS = VOA Vial Sulfuric Preserved; AV = Airfreight Unpreserved Vial SG = Sulfuric Preserved Amber Glass; H = HCl preserved Plastic; HS = HCl preserved Speciation bottle; SP = Sulfuric Preserved Plastic; F = Formaldehyde Preserved Glass;
Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottles; ST = Sterile Bottle; ASS = Plastic Bag for Acid Sulphate Soils; B = Unpreserved Bag

DATE: 22/12/23
TIME: 9am
COURIER:
TEMPERATURE 4.6
ATTEMP TO CHILL : YES NO
J.D

21/12/23 DHUS 6492

eurofins | Environment Testing

www.eurofins.com.au EnviroSales@eurofins.com

**Eurofins Environment Testing Australia Pty Ltd**

ABN: 50 005 085 521

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

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| 46-48 Banksia Road |
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| Site# 2370 |

**Eurofins Environment Testing NZ Ltd**

NZBN: 9429046024954

| Auckland | Auckland (Asb) | Christchurch | Tauranga |
|---|---|---|---|
| 35 O'Rorke Road | Unit C1/4 Pacific Rise, | 43 Detroit Drive | 1277 Cameron Road, |
| Penrose, | Mount Wellington, | Rolleston, | Gate Pa, |
| Auckland 1061 | Auckland 1061 | Christchurch 7675 | Tauranga 3112 |
| +64 9 526 4551 | +64 9 525 0568 | +64 3 343 5201 | +64 9 525 0568 |
| IANZ# 1327 | IANZ# 1308 | IANZ# 1290 | IANZ# 1402 |


# Sample Receipt Advice

| | |
|---|---|
| **Company name:** | Jones Environmental Consulting |
| **Contact name:** | Patricia Jones |
| **Project name:** | Not provided |
| **Project ID:** | J10388 |
| **Turnaround time:** | 10 Day |
| **Date/Time received** | Dec 22, 2023 9:00 AM |
| **Eurofins reference** | 1056492 |

## Sample Information

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

## Notes

## Contact

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

**Asim Khan on phone : or by email: AsimKhan@eurofins.com**

Results will be delivered electronically via email to Patricia Jones - patricia@jonesenvironmental.net.

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| Dandenong South | Grovedale | Girraween | Mitchell | Murarrie | Mayfield West |
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| NATA# 1261 | NATA# 1261 | NATA# 1261 | NATA# 1261 | NATA# 1261 | NATA# 1261 |
| Site# 1254 | Site# 25403 | Site# 18217 | Site# 25466 | Site# 20794 | Site# 25079 & 25289 |

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| NATA# 2377 |
| Site# 2370 |

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| Penrose, | Mount Wellington, | Rolleston, | Gate Pa, |
| Auckland 1061 | Auckland 1061 | Christchurch 7675 | Tauranga 3112 |
| +64 9 526 4551 | +64 9 525 0568 | +64 3 343 5201 | +64 9 525 0568 |
| IANZ# 1327 | IANZ# 1308 | IANZ# 1290 | IANZ# 1402 |


**Company Name:** Jones Environmental Consulting
**Address:** 16 Richmond Drive
Thurgoona
NSW 2640

**Project Name:**
**Project ID:** J10388

**Order No.:**
**Report #:** 1056492
**Phone:** 0424 490 551
**Fax:**

**Received:** Dec 22, 2023 9:00 AM
**Due:** Jan 10, 2024
**Priority:** 10 Day
**Contact Name:** Patricia Jones

**Eurofins Analytical Services Manager : Asim Khan**

| Sample Detail | | | | | | Metals IWRG 621 : Metals M12 | Moisture Set |
|---|---|---|---|---|---|---|---|
| **Melbourne Laboratory - NATA # 1261 Site # 1254** | | | | | | X | X |
| **External Laboratory** | | | | | | | |
| **No** | **Sample ID** | **Sample Date** | **Sampling Time** | **Matrix** | **LAB ID** | | |
| 1 | QC6 | Dec 19, 2023 | | Soil | M23-De0053649 | X | X |
| **Test Counts** | | | | | | 1 | 1 |

**Jones Environmental Consulting**
**16 Richmond Drive**
**Thurgoona**
**NSW 2640**

**NATA Accredited**
**Accreditation Number 1261**
**Site Number 1254**

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

**Attention:** **Patricia Jones**

**Report** **1056492-S**
Project name
Project ID J10388
Received Date Dec 22, 2023

| **Client Sample ID** | | | **QC6** |
|---|---|---|---|
| **Sample Matrix** | | | **Soil** |
| **Eurofins Sample No.** | | | **M23-De0053649** |
| **Date Sampled** | | | **Dec 19, 2023** |
| Test/Reference | LOR | Unit | |
| **Heavy Metals** | | | |
| Arsenic | 2 | mg/kg | 10 |
| Cadmium | 0.4 | mg/kg | < 0.4 |
| Chromium | 5 | mg/kg | 23 |
| Copper | 5 | mg/kg | 14 |
| Lead | 5 | mg/kg | 18 |
| Mercury | 0.1 | mg/kg | < 0.1 |
| Molybdenum | 5 | mg/kg | < 5 |
| Nickel | 5 | mg/kg | 12 |
| Selenium | 2 | mg/kg | < 2 |
| Silver | 2 | mg/kg | < 2 |
| Tin | 10 | mg/kg | < 10 |
| Zinc | 5 | mg/kg | 40 |
| **Sample Properties** | | | |
| % Moisture | 1 | % | 13 |

## Sample History

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

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

| Description | Testing Site | Extracted | Holding Time |
|---|---|---|---|
| Metals IWRG 621 : Metals M12 | Melbourne | Dec 27, 2023 | 28 Days |
| - Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS | | | |
| % Moisture | Melbourne | Dec 22, 2023 | 14 Days |
| - Method: LTM-GEN-7080 Moisture | | | |

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|---|---|---|---|---|---|
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| Dandenong South | Grovedale | Girraween | Mitchell | Murarrie | Mayfield West |
| VIC 3175 | VIC 3216 | NSW 2145 | ACT 2911 | QLD 4172 | NSW 2304 |
| +61 3 8564 5000 | +61 3 8564 5000 | +61 2 9900 8400 | +61 2 6113 8091 | T: +61 7 3902 4600 | +61 2 4968 8448 |
| NATA# 1261 | NATA# 1261 | NATA# 1261 | NATA# 1261 | NATA# 1261 | NATA# 1261 |
| Site# 1254 | Site# 25403 | Site# 18217 | Site# 25466 | Site# 20794 | Site# 25079 & 25289 |

**Eurofins ARL Pty Ltd**
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|---|
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**Company Name:** Jones Environmental Consulting
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**Contact Name:** Patricia Jones

**Eurofins Analytical Services Manager : Asim Khan**

| Sample Detail | | | | | | Metals IWRG 621 : Metals M12 | Moisture Set |
|---|---|---|---|---|---|---|---|
| **Melbourne Laboratory - NATA # 1261 Site # 1254** | | | | | | X | X |
| **External Laboratory** | | | | | | | |
| **No** | **Sample ID** | **Sample Date** | **Sampling Time** | **Matrix** | **LAB ID** | | |
| 1 | QC6 | Dec 19, 2023 | | Soil | M23-De0053649 | X | X |
| **Test Counts** | | | | | | 1 | 1 |

## Internal Quality Control Review and Glossary

### General

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

### Holding Times

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

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours before sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and despite any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling; therefore, compliance with these may be outside the laboratory's control.

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

### Units

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

### Terms

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

### QC - Acceptance Criteria

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

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

| | |
|---|---|
| Results <10 times the LOR: | No Limit |
| Results between 10-20 times the LOR: | RPD must lie between 0-50% |
| Results >20 times the LOR: | RPD must lie between 0-30% |

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

Surrogate Recoveries: Recoveries must lie between 20-130% for Speciated Phenols & 50-150% for PFAS. SVOCs recoveries 20 – 150%, VOC recoveries 70 – 130%

PFAS field samples containing surrogate recoveries above the QC limit designated in QSM 5.4, where no positive PFAS results have been reported or reviewed, and no data was affected.

### QC Data General Comments

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

**Quality Control Results**

| Test | Units | Result 1 | | | Acceptance Limits | Pass Limits | Qualifying Code |
|---|---|---|---|---|---|---|---|
| **Method Blank** | | | | | | | |
| **Heavy Metals** | | | | | | | |
| Arsenic | mg/kg | < 2 | | | 2 | Pass | |
| Cadmium | mg/kg | < 0.4 | | | 0.4 | Pass | |
| Chromium | mg/kg | < 5 | | | 5 | Pass | |
| Copper | mg/kg | < 5 | | | 5 | Pass | |
| Lead | mg/kg | < 5 | | | 5 | Pass | |
| Mercury | mg/kg | < 0.1 | | | 0.1 | Pass | |
| Molybdenum | mg/kg | < 5 | | | 5 | Pass | |
| Nickel | mg/kg | < 5 | | | 5 | Pass | |
| Selenium | mg/kg | < 2 | | | 2 | Pass | |
| Silver | mg/kg | < 2 | | | 2 | Pass | |
| Tin | mg/kg | < 10 | | | 10 | Pass | |
| Zinc | mg/kg | < 5 | | | 5 | Pass | |
| **LCS - % Recovery** | | | | | | | |
| **Heavy Metals** | | | | | | | |
| Arsenic | % | 93 | | | 80-120 | Pass | |
| Cadmium | % | 114 | | | 80-120 | Pass | |
| Chromium | % | 100 | | | 80-120 | Pass | |
| Copper | % | 97 | | | 80-120 | Pass | |
| Lead | % | 102 | | | 80-120 | Pass | |
| Mercury | % | 104 | | | 80-120 | Pass | |
| Molybdenum | % | 95 | | | 80-120 | Pass | |
| Nickel | % | 94 | | | 80-120 | Pass | |
| Selenium | % | 94 | | | 80-120 | Pass | |
| Silver | % | 119 | | | 80-120 | Pass | |
| Tin | % | 96 | | | 80-120 | Pass | |
| Zinc | % | 99 | | | 80-120 | Pass | |

| Test | Lab Sample ID | QA Source | Units | Result 1 | | | Acceptance Limits | Pass Limits | Qualifying Code |
|---|---|---|---|---|---|---|---|---|---|
| **Spike - % Recovery** | | | | | | | | | |
| **Heavy Metals** | | | | Result 1 | | | | | |
| Arsenic | M23-De0052651 | NCP | % | 99 | | | 75-125 | Pass | |
| Cadmium | M23-De0052651 | NCP | % | 106 | | | 75-125 | Pass | |
| Chromium | M23-De0052651 | NCP | % | 107 | | | 75-125 | Pass | |
| Copper | M23-De0052651 | NCP | % | 105 | | | 75-125 | Pass | |
| Lead | M23-De0052651 | NCP | % | 106 | | | 75-125 | Pass | |
| Mercury | M23-De0052651 | NCP | % | 96 | | | 75-125 | Pass | |
| Molybdenum | M23-De0052651 | NCP | % | 109 | | | 75-125 | Pass | |
| Nickel | M23-De0052651 | NCP | % | 103 | | | 75-125 | Pass | |
| Selenium | M23-De0052651 | NCP | % | 96 | | | 75-125 | Pass | |
| Silver | M23-De0052651 | NCP | % | 111 | | | 75-125 | Pass | |
| Tin | M23-De0052651 | NCP | % | 109 | | | 75-125 | Pass | |
| Zinc | M23-De0052651 | NCP | % | 105 | | | 75-125 | Pass | |

| Test | Lab Sample ID | QA Source | Units | Result 1 | Result 2 | RPD | Acceptance Limits | Pass Limits | Qualifying Code |
|---|---|---|---|---|---|---|---|---|---|
| **Duplicate** | | | | | | | | | |
| **Heavy Metals** | | | | Result 1 | Result 2 | RPD | | | |
| Arsenic | M23-De0052651 | NCP | mg/kg | 3.5 | 3.5 | <1 | 30% | Pass | |
| Cadmium | M23-De0052651 | NCP | mg/kg | < 0.4 | < 0.4 | <1 | 30% | Pass | |
| Chromium | M23-De0052651 | NCP | mg/kg | 21 | 21 | 1.0 | 30% | Pass | |
| Copper | M23-De0052651 | NCP | mg/kg | 6.6 | 6.7 | <1 | 30% | Pass | |
| Lead | M23-De0052651 | NCP | mg/kg | 12 | 12 | <1 | 30% | Pass | |

| Test | Lab Sample ID | QA Source | Units | Result 1 | | | Acceptance Limits | Pass Limits | Qualifying Code |
|---|---|---|---|---|---|---|---|---|---|
| **Duplicate** | | | | | | | | | |
| **Heavy Metals** | | | | Result 1 | Result 2 | RPD | | | |
| Mercury | M23-De0052651 | NCP | mg/kg | < 0.1 | < 0.1 | <1 | 30% | Pass | |
| Molybdenum | M23-De0052651 | NCP | mg/kg | < 5 | < 5 | <1 | 30% | Pass | |
| Nickel | M23-De0052651 | NCP | mg/kg | 6.3 | 6.4 | 1.0 | 30% | Pass | |
| Selenium | M23-De0052651 | NCP | mg/kg | < 2 | < 2 | <1 | 30% | Pass | |
| Silver | M23-De0052651 | NCP | mg/kg | < 2 | < 2 | <1 | 30% | Pass | |
| Tin | M23-De0052651 | NCP | mg/kg | < 10 | < 10 | <1 | 30% | Pass | |
| Zinc | M23-De0052651 | NCP | mg/kg | 10 | 10 | <1 | 30% | Pass | |
| **Duplicate** | | | | | | | | | |
| **Sample Properties** | | | | Result 1 | Result 2 | RPD | | | |
| % Moisture | M23-De0053649 | CP | % | 13 | 16 | 22 | 30% | Pass | |

## Comments

### Sample Integrity

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

### Authorised by:

| | |
|---|---|
| Asim Khan | Analytical Services Manager |
| Emily Rosenberg | Senior Analyst-Metal |
| Mary Makarios | Senior Analyst-Sample Properties |



**Glenn Jackson**
**Managing Director**

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

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

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

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# Appendix G - Data Validation

# Data Validation Report

## Project Details:

**Site Address:** 210 Borella Road, East Albury, New South Wales

**Project:** Preliminary Site Investigation

**Project Number:** JE10388

## Laboratories Used:

**Water Primary:** ALS

**Water Secondary:** Eurofins

## Fieldwork Conducted:

| Date | Works | Primary Lab Batch | Secondary Lab Batch |
|---|---|---|---|
| 12-16 and 18 December 2023 | Soil Sampling | EM2322709 | 1056492-S |
| 19 December 2023 | Soil Sampling | EM2322818 | |

# 1. Precision and Sample Handling

| | |
|---|---|
| Were NATA registered laboratories used? | **Yes** |
| Were the laboratory methods adopted NATA endorsed? | **Yes** |
| Were the laboratory reporting limits satisfactory? | **Yes** |
| Was the NATA Seal on the reports? | **Yes** |
| Were the reports signed by an authorised person? | **Yes** |
| Were the samples in proper custody between the field and laboratory? | **Yes** |
| Were the samples properly and adequately preserved? | **Yes** |
| Were the samples received by the laboratory in good condition? | **Yes** |
| Were the samples received by the laboratory chilled? | **Yes** |
| Were all samples analysed within the specified holding times? | **Yes** |

## Comments:

## Precision and sample handling was:

☒ Satisfactory ☐ Partially Satisfactory ☐ Unsatisfactory

# 2. Field Quality Control

The steps in the sampling and analysis process are subject to natural and inherent variability, which can affect the results produced and the overall quality of the data sets generated. In order to minimise the effect of this, standard procedures are used throughout fieldwork as one aspect of the quality assurance process. To measure the effectiveness of the quality assurance, quality control tests can be conducted in the field. This assessment has included the collection of field duplicate, rinsate blank and trip blank quality control samples.

## 2.1 Field duplicates

Duplicate samples are used to identify the variation in analyte concentration between samples collected from the same sampling point and repeatability of the laboratory analysis. In addition, triplicate samples provide a check on the analytical proficiency between the laboratories used. Acceptance targets for duplicates and triplicate samples are based on the Relative Percent Difference (RPD) between results, which is calculated by the following equation:

$$\frac{|[a]-[b]|}{[a]+[b]} \times 200 = \text{RPD}$$

Where:
[a] = concentration of analyte in primary sample
[b] = concentration of analyte in replicate sample

The Australian Standard 4482.1 – 2005 (Guide to the investigation and sampling of sites with potentially contaminated soil) indicates an acceptable RPD range of 30-50%, and that the variation can be expected to be higher for organic analysis than inorganics, and for low concentrations of analytes. Noting this guidance, JEC has adopted the following criteria as control limits for RPD results on replicate samples:

- 30% where the concentration of an analyte is greater than 20 times the limit of reporting (LOR).
- 50% where the concentration of an analyte is less than 20 times the LOR.
- RPDs have not been considered where both the primary and replicate sample concentrations are reported less than 10 times the LOR, as the low concentrations exaggerate the calculated RPD.
- RPDs have not been considered for any analytes that are an arithmetical combination of multiple analytes such as: “Nitrate + Nitrite” and “Ionic Balance”, as the arithmetical operations exaggerate the calculated RPDs. Any issues will be identified by checking the RPD for each individual analyte.

## 2.2 Rinsate blanks

Rinsate blanks are collected to assess if decontamination of sampling equipment has been conducted adequately to minimise the potential for cross-contamination between sampling locations. Rinsate samples are prepared in the field, using laboratory prepared bottles of the distilled water used for the cleaning of non-disposable sampling equipment. These samples are a check on field decontamination procedures and sample device cleanliness. Analytical concentrations are expected to be reported below detection limits.

## 2.3 Trip blanks

Trip blanks are used to assess the adequacy of sample storage and transport procedures to minimise the potential for introduction of contamination. Trip blanks are prepared in the field using laboratory prepared bottles of distilled water that remain with the sample containers during sampling and during the return trip to the laboratory. At no time during these procedures are the blanks opened. Trip blanks are used and analysed where the contaminants being assessed in that batch are volatile in nature. Analytical concentrations are expected to be reported below detection limits.

## 2.4 Field QC sample summary

| | |
|---|---|
| Number of primary samples analysed | **25** |
| Number of days sampling | **6** |
| Number of rinsate blanks analysed | **6** |
| Number of sample batches analysed | **2** |
| Number of trip blanks analysed | **2** |
| Number of field duplicates analysed | **1** |
| Number of field triplicates analysed | **1** |

## 2.5 Field QC assessment

| | |
|---|---|
| Were an adequate number of Rinsate Blanks analysed (1 per day)? | **Yes** |
| Were an adequate number of Trip Blanks analysed (1 per batch)? | **Yes** |
| Were the blank samples free of contamination? | **Yes** |
| Were an adequate number of replicate samples analysed (1:20)? | **Yes** |
| Were all replicate RPDs within the control limits? | **No** |

## Comments:

## Field QC was:

☒ Satisfactory ☐ Partially Satisfactory ☐ Unsatisfactory

# 3. Laboratory Internal Quality Control

Laboratories are accredited by the National Association of Testing Authorities (NATA) on the basis of their ability to provide quantitative evidence of their ability and competence to produce reliable, quality results against recognised benchmarks. Each laboratory method used undergoes a validation process before it is adopted by the laboratory and accredited by NATA. As part of the validation process, the precision and accuracy of the method are established.

In addition, laboratories conduct their own quality control testing to indicate their performance on each reported batch of samples. The Laboratory Internal Quality Control reports are included in Appendix D and summarised below.

## 3.1 Internal laboratory QC:

| | Lab Batch: EM2322709 | Lab Batch: 1056492-S | Lab Batch: EM2322818 |
|---|---|---|---|
| Were all the laboratory method blanks free of contamination? | **Yes** | **Yes** | **Yes** |
| Number of the laboratory duplicate RPDs reported outside control limits? | **0** | **0** | **0** |
| Number of matrix spike recovery results reported outside control limits? | **4** | **0** | **1** |
| Number of laboratory control sample recovery results reported outside control limits? | **0** | **0** | **0** |

## Comments:

- Soil laboratory samples EM2322696—003, EM2322709--037 and EM2322818—003 recorded matrix spike recoveries less than the lower data quality objective of 70-130% for fluoride.
- Matrix spike recoveries could not be determined for water laboratory sample EM2322439—001 for manganese and zinc due to background levels greater than or equal to four times the spike level.

## Laboratory internal QC was:

☒ Satisfactory ☐ Partially Satisfactory ☐ Unsatisfactory

# 4. Data Usability

Following a detailed review of the field and laboratory Quality Control it is considered that the investigations have provided acceptable QA/QC results and the results of the sampling and analysis program are sufficiently reliable.

## QC Conclusion:

- ☒ Data is directly usable
- ☐ Data is usable noting the following comments
- ☐ Data is usable after the following modifications
- ☐ Data is not usable

## Comments: