Construction Sciences

Stage 1 Preliminary and Stage 2 Detailed Site Investigation

249-271 RAILWAY TERRACE, SCHOFIELDS, NSW 2762

Prepared for Provincial Investments (NSW) Pty Ltd

Ref: 10791EV.P.323-R01

08 November 2022

Document Information	
Prepared for	Provincial Investments (NSW) Pty Ltd
Report Name	Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Address	249-271 Railway Terrace, Schofields, NSW 2762
File Reference	10791EV.P.323-R01.docx

Contact Information	
Construction Sciences	ABN 74 128 806 735
Phone	+61 1300 165 769
Email	Joshua.nito@constructionsciences.net
Address	Unit 2, 4 Kellogg Road, Rooty Hill, NSW 2766

DOCUMENT HISTORY

Version	Effective Date	Author	Reviewer	Authorised
Draft	21/10/2022	Joshua Nito	Abanish Nepal	
Final	08/11/2022	Joshua Nito	Abanish Nepal / Nathan Watson	Abanish Nepal

INFORMATION ABOUT THIS REPORT

LIMITATIONS

Scope of Services: The report has been prepared in accordance with the scope of services set out in CS's Proposal under CS's Terms of Engagement, or as otherwise agreed with the Client. The scope of services may have been limited and/or amended by a range of factors including time, budget, access and site constraints.

Specific Purpose: The report is provided for the specific development and purpose as described in the report. The report may not contain sufficient information for developments or purposes other than that described in the report.

Currency of Information: The information in this report is considered accurate at the date of issue with regard to the current conditions of the site.

Reliance on Information: In preparing the report, CS (and the report Certifier if applicable) have necessarily relied upon information provided by the Client and/or their Agents. Such data may include surveys, analyses, designs, maps and plans. CS has not verified the accuracy or completeness of the data except as stated in this report.

Copyright and Reproduction: The contents of this document are and remain the intellectual property of CS. This document should only be used for the purpose for which it was commissioned and should not be used for other projects or by a third party. This report shall not be reproduced either totally or in part without the permission of CS. Where information from this report is to be included in contract documents or engineering specification for the project, the entire report should be included in order to minimise the likelihood of misinterpretation.

Construction Specifications: Unless otherwise stated, the report, or sections of the report, should not be used as part of a specification for a project, without review and agreement by CS.

Report Should Not Be Separated: The report must be read in conjunction with the attached Information Sheets and any other explanatory notes and should be kept in its entirety without separation of individual pages or sections.

Review by Others: CS cannot be held responsible for interpretations or conclusions from review by others of this report or test data, which are not otherwise supported by an expressed statement, interpretation, outcome or conclusion stated in this report.

GENERAL NOTES

Geotechnical and Environmental Reporting: Geotechnical and environmental reporting relies on the interpretation of factual information based on judgment and opinion and is far less exact than other engineering or design disciplines. Geotechnical and environmental reports are for a specific purpose, development and site as described in the report and may not contain sufficient information for other purposes, developments or sites (including adjacent sites) other than that described in the report.

Subsurface Conditions: Subsurface conditions can change with time and can vary between test locations. For example, the actual interface between the materials may be far more gradual or abrupt than indicated and contaminant presence may be affected by spatial and temporal patterns. Therefore, actual conditions in areas not sampled may differ from those predicted since no subsurface investigation, no matter how comprehensive, can reveal all subsurface details and anomalies. Construction operations at or adjacent to the site and natural events such as floods, earthquakes or groundwater fluctuations can also affect subsurface conditions and thus the continuing adequacy of a geotechnical report. CS should be kept informed of any such events and should be retained to identify variances, conduct additional tests if required, and recommend solutions to problems encountered on site.

Groundwater: Groundwater levels indicated on borehole and test pit logs are recorded at specific times. Depending on ground permeability, measured levels may or may not reflect actual levels if measured over a longer time period. Also, groundwater levels and seepage inflows may fluctuate with seasonal and environmental variations and construction activities.

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

Soil and Rock Descriptions: Soil and rock descriptions are based on AS 1726 – 1993, using visual and tactile assessment except at discrete locations where field and / or laboratory tests have been carried out. Refer to the accompanying soil and rock terms sheet for further information.

Further Advice: CS would be pleased to further discuss how any of the above issues could affect a specific project. We would also be pleased to provide further advice or assistance including:

- Assessment of suitability of designs and construction techniques;
- Contract documentation and specification;
- Construction control testing (earthworks, pavement materials, concrete);
- Construction advice (foundation assessments, excavation support).

Executive Summary

Construction Sciences Pty Ltd (CS) was engaged by Provincial Investments (NSW) Pty Ltd (the client), to undertake a stage 1 preliminary site investigation (PSI) and stage 2 detailed site investigation (DSI) for land located at 249-271 Railway Terrace, Schofields, NSW 2762 (the site).

At the commencement of this work, CS understood:

> The site is currently owned by the client;

> The site occupies an approximate area of 6.3 hectares (ha);

> The site is proposed for subdivision and subsequent redevelopment into a land use scenario comprising residential with minimal opportunities for soil access including dwellings with fully and permanently paved yard space such as high rise buildings and flats;

> The proposed land use scenario assumes a reticulated potable water supply will be available at the site; and

> The combined PSI and DSI is required to address development consent planning decision making processes referred to in State Environmental Planning Policy (Resilience and Hazards) 2021.

The objectives of this project were to:

> Assess the potential for contamination to be present at the site, arising from past and present land use activities;

> Provide advice on whether the site is suitable, in the context of land contamination, for the proposed land use scenario; and

> Provide recommendations for supplementary investigations, contamination management, or remedial works.

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

> A desktop review of site history;

> A walkover of the site;

> Fieldwork including soil sampling;

> Laboratory analysis; and

> Data assessment and reporting.

The scope of works was undertaken with reference to the relevant sections of NEPC (2013), NSW EPA (2020b) and WA DOH (2009).

Based on CS' assessment of desktop review information, fieldwork observations and laboratory analytical data, CS makes the following conclusions:

> There was a potential for contamination to be present at the site, arising from past land use activities, specifically:

  - The presence of bonded asbestos within AEC06, AEC08, AEC20, AEC24, AEC25 and AEC28;
  - The presence of friable asbestos within AEC13 and AEC24; and
  - Elevated concentrations of microbes in AEC24.

- The presence of large amount of construction and demolition waste as well as the presence of disused cars presents an aesthetics impact;
- There are data gaps associated with the contamination status of soils underneath the buildings and driveways onsite as well as the presence of septic tanks onsite; and
- The site is not yet considered to be suitable for land use scenario comprising residential with minimal opportunities for soil access including dwellings with fully and permanently paved yard space such as high rise buildings and flats.

Specific assumptions applicable to that land use scenario are presented in Section 8 of this report.

CS recommends that:

- A remedial action plan (RAP) be prepared by a suitably experienced environmental consultant to address the identified contamination risks onsite and to address the identified data gaps onsite;
- The RAP should:
  - Include a methodology to remediate/manage identified contamination onsite;
  - Include a methodology for undertaking a supplementary contamination assessment (SCA) to assess the contamination risks associated with the identified data gaps onsite; and
  - include conceptual remedial strategies to address and remediate identified contamination onsite associated with the data gap.
- A site remediation and validation report should be prepared at the completion of all management and remedial works as outlined in the RAP and the SCA, confirming that the site has been made suitable for the proposed land use scenario.

This report must be read in conjunction with the ***Information About This Report*** page at the front of this report.

Table of Contents

Appendices

Figures

Tables

1. Introduction

1.1 Background

Construction Sciences Pty Ltd (CS) was engaged by Provincial Investments (NSW) Pty Ltd (the client), to undertake a stage 1 preliminary site investigation (PSI) and stage 2 detailed site investigation (DSI) for land located at 249-271 Railway Terrace, Schofields, NSW 2762 (the site).

At the commencement of this work, CS understood:

- The site is currently owned by the client;
- The site occupies an approximate area of 6.3 hectares (ha);
- The site is proposed for subdivision and subsequent redevelopment into a land use scenario[1] comprising residential with minimal opportunities for soil access including dwellings with fully and permanently paved yard space such as high rise buildings and flats;
- The proposed land use scenario assumes a reticulated potable water supply will be available at the site; and
- The combined PSI and DSI is required to address development consent planning decision making processes referred to in State Environmental Planning Policy (Resilience and Hazards) 2021.

1.2 Objectives

The objectives of this project were to:

- Assess the potential for contamination to be present at the site, arising from past and present land use activities;
- Provide advice on whether the site is suitable, in the context of land contamination, for the proposed land use scenario; and
- Provide recommendations for supplementary investigations, contamination management, or remedial works.

1.3 Scope of Work

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

- A desktop review of site history;
- A walkover of the site;
- Fieldwork including soil sampling;
- Laboratory analysis; and
- Data assessment and reporting.

The scope of works was undertaken with reference to the relevant sections of NEPC (2013), NSW EPA (2020b) and WA DOH (2009).

[1] Adopted from Section 2.2 of NEPC (2013a) and Section 3 of NEPC (2013e)

2. Site Identification

2.1 Site Locality

The locality of the site is presented in Figure 1.

2.2 Site Layout

The site covers an area of approximately 6.3 ha.

The general layout of the site is present in Figure 2. The layout plan also includes locations on site of:

> Established site access points;

> Current and historical buildings / structural extents and driveways; and

> Surface water bodies on site and immediately adjacent to the site;

2.3 Lot Number and Deposited Plan

The site is identified under multiple lots and DP's:

> Lots 3 and 4 in DP1268701; and

> Lot 5 in DP26987.

2.4 Local Government Authority

The local government authority for the site is Blacktown City Council.

2.5 Zoning

Three Section 10.7 (2) planning certificates pertaining to the site indicates that the site is currently zoned:

> R3 – Medium Density Residential and SP2 – Infrastructure for Lots 3 and Lot 4 in DP1268701; and

> R3 – Medium Density Residential for Lot 5 in DP26987.

2.6 Geographic Coordinates

The geographic coordinates of the general centre of the site obtained from Google Earth were 33º42'28.8" S and 150º52'36.7" E.

2.7 Detail and Level Survey

A copy of a detail and level survey of the site was not provided to CS as part of this project.

3. Geology, Topography, Elevation, Hydrogeology, Hydrology and Acid Sulfate Soils

3.1 Geology

The Department of Mineral Resources Geological Survey of NSW Penrith 1:100,000 Geological Series Sheet 9130 (Edition 1) 1983, indicated that the site is mapped under the Wianamatta Group (undifferentiated) as Bringelly Shale comprising shale, carbonaceous claystone, claystone, laminite, fine to medium-grained lithic sandstone, rare coal and tuff.

3.2 Topography and Elevation

A review of elevation profile on Google Earth indicated that:

> The topography of the site is sloping gently from north-east to the south-west; and

> The surface of the site was located at an elevation of approximately 36m Australian Height Datum (AHD) in the north-east and 30m AHD in the south-west.

3.3 Hydrogeology and Hydrology

A search of https://realtimedata.waternsw.com.au/water.stm at 249-271 Railway Terrace, Schofields reported that there are no registered groundwater features located onsite or within a 500m radius of the site.

A copy of the search record is presented in Appendix A.

A review of www.nearmap.com, indicated that surface water bodies near the site included:

> A dam located within 20m from the site on Lot 1 in DP1268701;

> Eastern Creek located approximately 800m to the west.

Based on the location of the identified surface water body and site topography, the inferred groundwater flow direction at the site is considered likely to be towards the west or southwest.

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

3.4 Acid Sulfate Soils

A review of https://environment.nsw.gov.au/eSpade2WebApp indicated that the site is located in an area mapped as – *N: No known occurrence*.

Further assessment of acid sulfate soils, in the context of this project is considered not warranted.

4. Regulatory Records

4.1 Contaminated Land Management (CLM) Act 1997

4.1.1 Record of Notices

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

- Orders made under Part 3 of the Contaminated Land Management Act 1997;
- Notices available to the public under section 58 of the CLM Act;
- An approved voluntary management proposal under the CLM Act that has not been fully carried out and where NSW EPA approval has not been revoked;
- Site audit statements provided to the NSW EPA under section 53B of the CLM Act that relate to significantly contaminated land;
- Where practicable, copies of anything formerly required to be part of the public record; or
- Actions taken by NSW EPA (or the previous State Pollution Control Commission) under section 35 or 36[2] of the Environmentally Hazardous Chemicals Act 1985.

A copy of the search record is presented in Appendix B.

4.1.2 Register of Notified Sites

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

A copy of the search record is presented in Appendix B.

4.2 Protection of the Environment Operations (POEO) Act 1997

4.2.1 Register of Licences, Applications, Notices, Audits or Pollution Studies and Reduction Programs

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

A copy of the search result is presented in Appendix B.

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

4.3.1 Section 10.7 Planning Certificate

Three planning certificates issued under section 10.7(2) of the EP&A Act was obtained, and indicated that, within the meaning of the CLM Act, the site was not:

- Significantly contaminated land;

[2] Sections 35 and 36 of the Environmentally Hazardous Chemicals Act 1985 have been repealed. Notices under these sections are treated by the CLM Act as management orders.

- Subject to a management order;
- The subject of an approved voluntary management proposal;
- Subject to an ongoing maintenance order; or
- The subject of a site audit statement.

The certificates are presented in Appendix C.

4.4 Work Health and Safety (WHS) Regulation 2017

4.4.1 Schedule 11 Hazardous Chemicals

A site search with SafeWork NSW for Schedule 11 hazardous chemicals (dangerous goods)[3] on the site was undertaken.

The search did not indicate any past or present records pertaining to the storage of Schedule 11 hazardous chemicals at the site.

A copy of the search record is presented in Appendix D.

[3] Under the Work Health and Safety Regulation

5. Site History

5.1 Aerial Photography

A selection of historical aerial photographs of the site, were reviewed. Each historical aerial photograph reviewed is presented below.

Image 5.1.1 View of 1947 historical photograph

Image 5.1.2 View of 1978 historical photograph

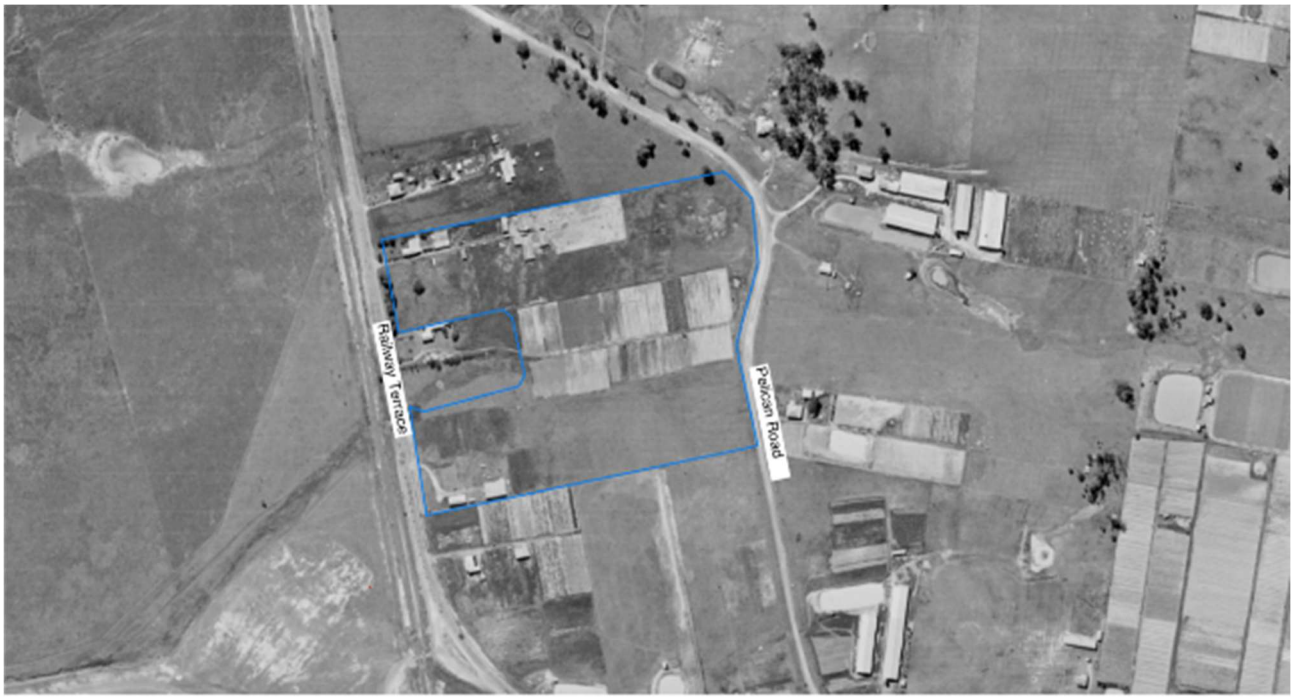


Image 5.1.3 View of 1986 historical photograph

Image 5.1.4 View of 1998 historical photograph

Image 5.1.5 View of 2005 historical photograph

Image 5.1.9 View of 2018 historical photograph

Image 5.1.11 View of 2022 historical photograph

Observations made during that review (considered relevant to this project) are presented in Table 5.1.

Table 5.1 Aerial Photography

Photo Date	Site Observations	Surrounding Land Observations
1947	Site appears undeveloped. Land use onsite appears to be open-space/grassland.	Pelican Road and Railway Terrace are visible to the east and the west of the site respectively. The roads appear unpaved. The areas surrounding the site appear undeveloped.
1978	Significant change in land-use onsite. Low-density rural residential dwellings are seen at north-western and south-western portions of the site. Ground disturbance is also seen to the east of rural residential dwellings located within the north-western portion of the site. Central portion of the site appears to be used as market garden. Based on ground disturbance seen in the image, it is likely for some stockpiling of soil to have occurred onsite.	Significant change in land-use surrounding the site to the north, east and south. These areas have been developed into low density rural residential land use. Most of the properties also comprise market garden. No significant change in land use on properties to the west.
1986	Slight increase in the number of dwellings/buildings onsite. There appears to be an increase in market garden activity onsite. No other changes since the previous image.	A dam, which is similar in shape and layout to the dam located between the northern and southern lots along the western portion of the site, is observed in this photo. Railway Terrace and Pelican Road appears to be paved. Market gardens are observed in properties immediately to the south of the site. No other changes since 1978 photo.
1998	Slight decrease in the number of dwellings/structures onsite. Some of the previously seen structures within the north-western portion are no longer present. Previously seen market garden activity also seems to have ceased. No other significant changes since the previous image.	Market garden activity surrounding the site in all directions seem to have ceased. No other changes since the previous image.
2005	No significant change since the previous image.	No significant change since the previous image.
2018	A rectangular unpaved track is seen within the central portion of the site. Stockpiling of material is visible in the photo within the south-western portion and western portion of the site. No other significant change observed since the previous image.	Significant increase in low density residential land use to the west of the site. Previously seen vacant areas have been replaced by a number of low-density residential dwellings. Areas to the east of the site is also observed to have been the subject of ongoing construction works, most likely for residential subdivision. Portion of a property to the immediate

Photo Date	Site Observations	Surrounding Land Observations
		south of the site is being developed into what appears to be high-density residential land use comprising apartments. No other change since the last image.
2022	No significant change since the previous image.	Significant increase in the number of low-density residential dwellings to the west. Properties to the east and north-east have also been converted into high-density residential land use.

The review of historical aerial photography indicated a potential for land contaminating activities to have been undertaken on the site, specifically:

> Uncontrolled filling between 1947 and 2022;

> Uncontrolled demolition and stockpiling between 1947 and 2022;

> Agricultural land use between 1947 and 1998;

> Potential use of hazardous material since 1978; and

> Market gardens and activities from 1978 to 1998.

Further assessment of these identified potential land contaminating activities, in the context of other historical evidence reviewed during this project, and observations made during the site walkover (refer to Section 0 of this report), is considered warranted.

5.2 Historical Land Titles

Historical land title ownership records of the site were reviewed. Observations of ownership details and dates (considered relevant to the project) indicated that the site has been owned by the following registered proprietors since 1893:

5.2.1 Lot 3 in DP1268701

> Farmers from 1893 to 1938;

> Dairymen from 1938 to 1947;

> A baker from 1938 to 1950;

> Married women from 1947 to 1950;

> A second dairyman from 1949 to 1960;

> A clerk and a married woman from 1960 to 1969;

> A market gardener from 1969 to 1997;

> An individual named Pio Vella from 1997 to 2004; and

> Provincial Investments (NSW) Pty Ltd from 2011 to present.

There were no leases or easements reported for the site.

5.2.2 Lot 4 in DP1268701

> Farmers from 1893 to 1938;
> A baker from 1938 to 1950;
> A married woman from 1950 to 1950;
> A police constable and a married woman from 1959 to 2011; and
> Provincial Investments (NSW) Pty Ltd from 2011 to present.

There were no leases or easements reported for the site.

5.2.3 Lot 5 in DP26987

> Farmers from 1893 to 1938;
> A baker from 1938 to 1950;
> A married woman from 1950 to 1950;
> A dairyman from 1950 to 1959;
> Cole Bros. Nurseries Pty Ltd from 1959 to 1968;
> An iron worker from 1968 to 1968;
> A factory worker, spinster/married woman from 1968 to 2008; and
> Provincial Investments (NSW) Pty Ltd from 2011 to present.

There were no leases or easements reported for the site.

The review of historical land titles indicated a potential for land contaminating activities to have been undertaken on the site, specifically:

> Ownership by farmers from 1893 to 1938;
> Ownership by a nursery from 1959 to 1968; and
> Ownership by a market gardener from 1969 to 1997.

CS notes that the ownership of the site by nursery and market gardener coincides with market garden activity observed in historical aerial photos between 1947 and 1998, as discussed in Section 5.1;

Further assessment of these identified potential land contaminating activities, in the context of other historical evidence reviewed during this project, is considered warranted.

A copy of the historical land title search record is presented in Appendix E.

5.3 Local Meteorology

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

Table 5.3 Local Meteorology

Nearest Weather Station Location and Number	Mean Annual Temperature (°C)		Mean Annual Rainfall (mm)
	Maximum	Minimum	
Box Hill (McCall Gardens) – 067104 (Rainfall) Richmond RAAF – 067105 (Temperature)	29.2	17.6	925.0

The search record is presented in Appendix F.

5.4 Complaints

There was no evidence provided to CS during the project, regarding historical complaints at the site.

5.5 Incident Reports

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

6. Site Condition

A site walkover was undertaken by suitably experienced environmental consultants from CS on 14 July 2022. During the site walkover, observations were made of land use activities being undertaken on the site, as well as on the properties located immediately adjacent to the site. For the ease of presenting the site walkover information, the site was split into three main areas as follows:

> Area 1 (southwest of site);

> Area 2 (northwest of site); and

> Area 3 (east of site).

The split is shown in Figure 3.

Information obtained during the site walkover observation is presented in Figures 4a to 4c:

6.1 Current Land Use (All Areas)

The land use scenario at the time of the walkover appeared to be low-density residential, comprising of two residential dwellings with granny-flats, sheds, demolished structures and vacant areas for cattle grazing.

6.2 Buildings, Infrastructure and Surfaces

6.2.1 Area 1

The following buildings were observed in Area 1 during the walkover, as observed in Figure 4a:

> A single-story brick-walled and tiled-roof residential building with a backyard within the south-western portion of Area 1 (residential building 1); and

> An unused, derelict granny flat (granny flat 1) to the south of the residential building;

The following infrastructure was observed in Area 1 during the walkover:

> A horse pen situated to the south of Area 1 approximately 35m east of residential building 1. Information obtained from site contact indicated that the horse pen was previously located closer to the building and moved to its current position in 2022;

The following site surfaces were observed in Area 1 during the walkover:

> A manicured lawn and asphalt driveway connecting the residential building to Railway Terrace;

> An unpaved gravel track to the south of the building; and

> The remainder of the site was unsealed and vegetated with tall grasses and weeds.

Image 6.2.1.1 View of residential building, driveway, gravel track and grass cover, facing north

Image 6.2.1.2 View of granny flat 1, facing east

6.2.2 Area 2

The following buildings were observed in Area 2 during the walkover, as observed in Figure 4b:

> A second brick walled and corrugated metal-roofed residential building (residential building 2) to the north of Area 2; and

> Dilapidated buildings and fencing observed 40m to the east of residential building 2. The residential building was inaccessible at the time of site walkover due to tall grass and soft ground. Information obtained from site contact indicated that the dilapidated buildings were part of former pigsty area.

There were no infrastructures observed in Area 2 during the walkover.

The following site surfaces were observed in Area 2 during the walkover:

> A paved gravel roadway connecting residential building 2 to Railway Terrace; and

> The remainder of the site was unsealed and vegetated with tall grasses and weeds.

Image 6.2.2.2 View of residential building 2 and paved gravel driveway, facing east

6.2.3 Area 3

No buildings or infrastructure were observed in Area 3 located to the east of the site.

Site surface in Area 3 was unsealed and vegetated with tall grasses and weeds.

6.3 Site Boundaries (All Areas)

The site was fenced in all directions either with chain link fence or electrical fence.

Image 6.3.1 View of western site boundary fencing

6.4 Surface Water and Drainage (All Areas)

There were no surface water bodies observed within the site.

Based on observations made during the walkover, site drainage mechanisms on site are considered likely to include:

> Infiltration into site soils, if soil permeability allows it; and

> Inflow to downpipes attached to building roofs and gutters and into site soils.

6.5 Staining and Odours (All Areas)

There was no visual evidence observed of significant or widespread staining on the surface of the site.

There was no olfactory evidence detected of significant or widespread odours at the site.

6.6 Chemical Inventory, Handling and Storage (All Areas)

The following chemicals, and indicative volumes, were observed stored on the site:

> Two liquefied petroleum gas (LPG) tanks of approximately 45L volume each observed on the southern wall of residential building 1 in Area 1; and

> A rusted 15L LPG tank located within the patio of the derelict granny flat 1 in Area 1;

Image 6.6.1 View of rusted 15L LPG tank at granny flat 1

Image 6.6.2 View of LPG tanks at the back of residential building 1 in Area 1

6.7 Aboveground and Underground Storage Tanks (All Areas)

There was no visual evidence observed during the walkover, of aboveground storage tanks (AST).

6.8 Onsite Septic Systems (All Areas)

One septic tank (septic tank 1) was observed approximately 10m to the south of residential building 2. The top of the tank was sealed with concrete lid and potted plants placed atop the tank lid.

A second septic tank (septic tank 2) is also inferred to be located onsite connected to residential building 1. However, it was not located during the site walkover.

Image 6.68.1.1 Potted plants on top of septic tank near residential building 2, facing south

6.9 Wastes

6.9.1 Area 1

There was visual evidence of waste observed within Area 1 during the walkover. These included the following:

- The remains of a collapsed single storey corrugated metal-roofed shed adjacent to the east of granny flat 1;
- A single isolated wooden slab, marked by two bollards and located approximately 60m to the north-east from residential building 1;
- One waste stockpile (stockpile 1) to the north of Area 1, comprised of loose bricks, corrugated metal roof wastes, tractor axle and scattered car parts including bumpers and rims with an approximate volume of 50m^3;
- Second stockpile (stockpile 2), comprised of similar material to stockpile 1 in a larger stockpile volume and located 10m to the east of stockpile 1 with an approximate volume of 120m^3;
- Third stockpile (stockpile 3), comprised of corrugated metal roofing, vegetation and car rims on top of wooden pallets and located 30m to the east of residential building 1 with an approximate volume of 40m^3;

- A nominated area comprised of stacked bricks on pallets, chopped tree logs, a discarded bathtub and loose household items and metal wastes and located 40m to the east of residential building 1 (identified as waste area 1);
- Four parked cars to the south of Area 1; and
- Items of waste material in the form of car tyres, disused furniture, disused electrical appliances, metal, bricks and timber adjacent to the building footprint of granny flat 1.

The waste items observed in Area 1 is presented graphically in Figure 4a.

Image 6.9.1.1 View of waste items in stockpile 3 including corrugated metal roof, car rims, and wooden pallets observed at Area 1, facing north

Image 6.9.1.2 View of waste area 1 comprising chopped tree logs , facing south

Image 6.9.1.3 View of waste area 1 showing for wooden pallets and stacked bricks, facing north-east

Image 6.9.1.4 View of wooden slab marked by two bollards, facing south

Image 6.9.1.5 View of collapsed roof of former shed, facing south-east

6.9.2 Area 2

There was visual evidence of waste observed within Area 2 during the walkover. These included the following:

> A small waste pile of chopped tree logs covered with tarp approximately 5m to the south of granny flat 2, potentially used for burning and with an approximate volume of 5m^3;

> Two bathtubs filled with garden soils and observed with plants growing from it;

> A rusted car, observed under the veranda of residential building 2;

> Items of waste associated with collapsed building/shed material to the north of Area 2 (approximately 2m south of granny flat 2), comprised of timber pillars, corrugated roof material likely to contain asbestos and concrete bricks (labelled as 'collapsed northern shed'); and

> Loose items on the ground within the footprint of residential building 2, comprised of wooden debris, approximately four car tyres, metals, plastic cans and bricks.

The waste items observed in Area 2 is presented graphically in Figure 4a.

Image 6.9.2.1 View of rusted car, waste car tyres and other items of waste under a carport of residential building 2

Image 6.9.2.2 View of corrugated roof likely to contain asbestos associated with collapsed shed behind Granny Flat 2 in Area 2

Image 6.9.2.3 Second view of items of waste from collapsed shed at northern extent of Area 2, facing south

Image 6.9.2.4 View of chopped logs covered by tarp adjacent to residential building 2, facing north

Image 6.9.2.5 View of bathtubs used for plant growing (far left) adjacent to septic tank (right), facing west

6.9.3 Area 3

The following waste items were observed within Area 3, observed in Figure 4c:

- A scattered area of chopped timber logs next to an unpaved access track located to the east of Area 3;
- Concrete waste, bricks and a rusted metal container adjacent to a soil stockpile (stockpile 3) located to the south-east of Area 3 with an approximate volume of 170m^3;
- Piled-up wooden planks on top of a pallet and ceramic bathtub observed to the north-east of Area 3;
- Various bricks, a tyre and metal fragments observed to the north-east of Area 3, located approximately 10m to the south of the wooden planks on top of pallet; and
- An open red barrel observed approximately 3m to the east of the collapsed northern shed, also inaccessible due to tall grass and located within the pigsty area;

Image 6.9.3.1 View of chopped timber logs at the eastern paddock, facing south-east

Image 6.9.3.2 View of a bathtub and wooden pallet/planks, facing north-east

Image 6.9.3.3 View of a tyre covered in grass within Area 3, adjacent to the bathtub

Image 6.9.3.4 View of concrete wastes in the centre of Stockpile 3 in Area 3, facing east

6.10 Hazardous Materials (All Areas)

There was visual evidence observed during the walkover, of potential asbestos containing materials (PACM) at the following locations:

- On the driveway adjacent to Granny Flat 2 in Area 2 in the form of crushed cement fragments;
- Adjacent a drinking water trough next to residential building 1 in Area 1 in the form of a cement fragment; and
- On the demolished/collapsed northern shed in the form of corrugated sheets.

A hazardous building materials survey was not within the scope of this project.

Image 6.10.1 View of a cement fragment likely to contain asbestos observed on the ground near drinking trough next to residential building 1 in Area 1

Image 6.10.2 View of crushed cement fragments likely to contain asbestos observed on the driveway of Granny Flat 2 in Area 2

6.11 Fill Material (All Areas)

There was visual evidence of potential shallow filling across the site, observed as:

- Soils underlying paved gravel driveways adjacent to residential buildings 1 and 2;
- Soils underlying existing building footprints and sheds;
- Presence of scattered inert anthropogenic materials such as bricks and concrete fragments near residential buildings 1 and 2, as well as the pigsty area;
- Presence of soil mound (~300m2) in Stockpile 3 area; and
- Areas within the northern portion of the site which appears to have been used as garden bed (~350m2) in the past.

Image 6.11.1 View of loose corrugated metal shed materials observed embedded in surface soils at pigsty area in Area 2

6.12 Phyto-toxicity (All Areas)

There was no visual evidence observed to suggest widespread or significant phytotoxic impact in the form of plant stress and/or dieback in vegetation present on the site. Similar observations were made of vegetation on land immediately beyond the site boundaries.

Image 0.1 View of healthy vegetation observed onsite, facing north

6.13 Activities on Adjacent Land

Observations made from the site boundary, indicated land use activities on adjacent properties were comprised of the following:

- North – low density rural residential development immediately to the north and commercial/industrial development further north;
- East – Pelican Road to the immediate east. Ongoing high-density residential development in the form of multi-story apartments further east;
- West – Railway Terrace to the immediate west. Sydney Train North Shore & Western (T1)[4] and Cumberland (T5)[4] train line and low-density further west; and
- South – Bingham Street, rural residential land and high-density residential land use to the immediate south.

[4] From Transport for NSW – Sydney Rail Network map

Image 6.13.1 View of rural residential land use immediately to the north of the site

Image 6.13.2 View of high-density residential land use and site fencing further east of the site

Image 6.13.4 View of high-density residential land use to the south

7. Emerging Contaminants of Concern and Chemical Control Orders

7.1 Per and Poly-Fluoroalkyl Substances (PFAS)

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

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

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

> Major primary sources of PFAS, including major commercial, industrial and government facilities, infrastructure and activities that historically or currently use or store PFAS containing products, nothing that all PFAS formulations should be considered, such as surfactants used in chrome plating or firefighting, hydraulic fluids and lubricants, and wastes and liquid wastes;

> Other primary sources where PFAS is or has been used, such as firefighting training facilities, foam deluge system installations, metal plating works, car washes, and electricity generation and distribution facilities; and

> Secondary sources where diffuse PFAS inputs are or have been received, such as landfills, wastewater treatment facilities, liquid waste treatment facilities, and bio-solids stockpiles.

CS has adapted the PFAS decision matrix presented in EnRisk (2016), along with the aforementioned guidance in Section 6 of HEPA (2020) to facilitate an assessment of the potential for PFAS to be present on site. The decision matrix is presented in Table 7.1.

Table 7.1 Adapted PFAS Decision Matrix

Preliminary PFAS Screening Question	Decision
Is there evidence of major commercial, industrial and government facilities, infrastructure and activities that historically or currently use or store PFAS containing products?	No
Is there evidence of fuel[5] fires on the site?	No
Is there evidence of foam deluge systems, metal plating works, car washes, or electricity generation / distribution on the site?	No
Is there evidence of landfill, waste water treatment, liquid waste treatment, bio-solid stockpiles or paper mill wastes on site?	No
Is there evidence of fire training occurring at the site?	No
Is there evidence of fire training occurring up gradient or adjacent to the site?	No

[5] Fuels could include solvents, petrol, diesel and kerosene.

Preliminary PFAS Screening Question	Decision
Is there evidence of the presence of an airport or fire station, up-gradient of, or adjacent to, the site?	No

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

7.2 Chemical Control Orders

Chemical control orders (CCO) are created under Part 3, Division 5 of the Environmentally Hazardous Chemicals Act 1985, and are used to selectively and specifically control particular chemicals or chemical wastes to limit their potential or actual impact on the environment. CS uses the decision matrix presented in Table 7.2 (based on the NSW EPA CCO available at the time of this project), to facilitate an assessment of the potential for those control chemicals to be present on site.

Table 7.2 CCO Decision Matrix

Preliminary CCO Screening Question	Decision
Were aluminium smelter wastes used or stored on site?[6]	No
Were dioxin contaminated wastes generated or stored on site?[7]	No
Were organotin wastes generated or stored on site?[8]	No
Were polychlorinated biphenyls (PCB) used or stored on site?[9]	No
Were scheduled chemicals[10] used, or wastes stored, on site?[11]	No

However, the historical records review indicated that the site was formerly used as market garden where there was a high potential for the application of pesticides. As such, further assessment for the extensive use of pesticides onsite is considered warranted.

[6] SPCC 1986, 'Chemical Control Order In Relation to Aluminium Smelter Wastes Containing Fluoride and/or Cyanide' dated 21 March 1986
[7] NSW EPA 1986, 'Chemical Control Order In Relation to Dioxin-Contaminated Waste Materials' dated 14 March 1986
[8] NSW EPA 1989, 'Chemical Control Order In Relation to Organotin Wastes' dated 11 March 1989
[9] NSW EPA 1997, 'Polychlorinated Biphenyl Chemical Control Order' dated 20 June 1997
[10] Primarily organochlorine pesticide (OCP) compounds, with some industrial by-products
[11] NSW EPA 2004, 'Chemical Control Order in Relation to Scheduled Chemical Wastes

8. Conceptual Site Model

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

8.1 Sources of Contamination

A number of potential land contaminating activities have been identified for the site, based on the site history review and site walkover observations. These include:

> Uncontrolled filling;

> Stockpiling;

> Uncontrolled demolition;

> Storage of waste;

> Termite treatment;

> Former market gardens; and

> Use of hazardous building materials;

The locations of these potential land contaminating activities, or areas of environmental concern (AEC), are presented in Figure 4a to 4c.

Table J1 in Appendix J of AS 4482.1-2005 and Appendix A in DUAP (2021) provides guidance on chemicals associated with the land uses activities. That guidance provides a basis for deciding on contaminants of potential concern (COPC) for each relevant land use activity. Information on COPC adopted for this investigation is presented in Section 8.5 of this report.

8.2 Land Use Scenario

8.2.1 Adopted Land Use Scenario

For the purpose of this investigation, CS understands that the proposed land use scenario for the site includes Residential with minimal opportunities for soil access including dwellings with fully and permanently paved yard space such as high rise buildings and flats.

8.2.2 Assumptions for Adopted Land Use Scenario

Section 3 of NEPC (2013e) advises that the residential with minimal access to soil land use scenario includes high-density residential, not including a private garden. This land use scenario assumes typical residential unit blocks, consisting of multistorey buildings where living areas are on the ground floor (constructed on a ground level slab or above subsurface structures including basement car parks or storage areas).

Occupants of the buildings would have access to yard spaces that are largely covered by permanent paving, with some small areas of landscaping or lawns. Opportunities for direct access to soil by residents of these buildings are therefore minimal but there may be some potential for residents to inhale, ingest or come into direct dermal contact with dust (particulates) derived from the soil on the site.

The scenario does not include landscaped/playground (including sandpit) areas used for recreation within a high-density development. These are considered a 'public open space' land use scenario

8.3 Receptors

8.3.1 Identified Receptors

Based on the adopted land use scenario, CS considers receptors at the site may include residents, intrusive maintenance workers and other workers and terrestrial ecosystems.

8.3.2 Assumptions for Identified Receptors

The human receptors at a residential with minimal access to soils site, would typically include adults, children and infants who spend the majority of their time indoors within the residential properties, with some limited use of communal outdoor areas on site. The residents that are considered to be most susceptible to health risks associated with soil contaminants are the residents of ground floor units, due to the greatest potential for outdoor soil to be tracked indoors and vapour intrusion occurring with residences immediately overlying contaminated soil.

8.4 Exposure Pathways

8.4.1 Human Health

8.4.1.1 Dermal Contact / Ingestion / Dust Inhalation

Site history information and walkover observations indicated a potential for contaminants to be present in soils at the site, which may present a dermal contact or ingestion risk to human health.

The proposed land use scenario is likely to include unsealed and open space areas, where a pathway between identified receptors and direct contact / ingestion contaminant sources, may be complete.

Further assessment of dermal contact, dust inhalation and ingestion risk is considered warranted.

8.4.1.2 Vapour Intrusion / Inhalation

Vapour intrusion / inhalation exposure risks to human health can occur when a primary or secondary vapour source[12] is present.

Site history information and walkover observations did not indicate a primary or secondary vapour sources to be present at the site, in the form of:

- Any petroleum underground storage tank (UST); or
- Historical thinner spill or solvent to have been used; or
- A potential for significantly contaminated soil and/or groundwater.

Further assessment of vapour intrusion / inhalation risks associated with primary or secondary sources, is considered not warranted.

Site history information and walkover observations also indicated a potential for historical shallow uncontrolled filling. However, CS considers that:

[12] Primary sources can include underground storage tanks, while secondary sources can include significantly contaminated soil or groundwater.

- The transport, placement and spreading of uncontrolled filling typically includes significant disturbance of soils, which would typically result in the volatilisation of contaminants that might normally present an intrusion / inhalation risk; and
- The potential for contaminants to be present in uncontrolled filling at concentrations which could present an intrusion / inhalation risk, is low.

Further assessment of vapour intrusion / inhalation risks associated with the uncontrolled filling, is considered not warranted.

8.4.1.3 Asbestos

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

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

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

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

Site history information and walkover observations indicate a potential for bonded ACM, FA and/or AF to be present in soils at the site.

The proposed land use scenario is likely to include unsealed and open space areas, where a pathway between identified receptors and asbestos in soils, may be complete.

Further assessment of asbestos exposure risk is considered warranted.

8.4.2 Hazardous Ground Gases

NSW EPA (2020a) provides advice on ground gases that if present in the pore space of soils and rocks, can adversely impact human health and safety or the integrity of structures. The ground gases that are generally of concern in this context are:

- Bulk ground gases, including methane, carbon dioxide, carbon monoxide, hydrogen, hydrogen sulphide, and petroleum vapours; and
- Trace ground gases including radon, volatile organic compounds and mercury vapour.

CS has reviewed desktop site history information review and site walkover data in the context of sources and origins of hazardous ground gases in Table 1 and Table 2 of NSW EPA (2020a). Based on that review, CS is of the opinion that further assessment of hazardous ground gases in the context of this project, is considered not warranted.

8.4.3 Aesthetics

CS has used the guidance in Section 3.6.2 and Section 3.6.3 of NEPC (2013a) to facilitate an assessment of site history review information and site walkover observations, in the context of aesthetics risk and the sensitivity of the proposed land use. For example, higher expectations apply to residential properties with gardens compared with industrial settings.

Table 8.4.3 Preliminary Aesthetics Risk Screening

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

The historical records review, observations made during the site walkover and results of the preliminary risk screening, identified the following potential aesthetics risks for the site:

> Presence of demolition waste including concrete, metals, bricks and timber scattered across all three areas onsite;

> Presence of waste tyres observed across all three areas onsite;

> Presence of disused vehicles onsite; and

> Presence of disused household waste items at all three areas onsite.

Based on this, further assessment of aesthetics risks onsite, is considered warranted.

8.4.4 Management Limits for Petroleum Hydrocarbons

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

> Formation of observable light non-aqueous phase liquids (LNAPL);

> Fire and explosive hazards; and

> Effects on buried infrastructure e.g. penetration of, or damage to, in-ground services by hydrocarbons.

Section 2.9 of NEPC (2013a) notes that CME (2008) includes management limits to avoid or minimise these potential effects. Application of management limits requires consideration of site specific factors such as depth

of building basements and services, and depth to groundwater, to determine the maximum depth to which the limits should apply. NEPC (2013a) also states that:

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

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

Site history information and walkover observations indicated a potential these policy considerations to be associated with relevant AEC's at the site, in the context of the proposed future land use scenario. On that basis, further assessment of petroleum hydrocarbons is considered warranted.

8.4.5 Terrestrial Ecosystems

Site history information and walkover observations indicated a potential for contaminants, which may present an ecological risk, may be present on site.

Section 3.4.2 of NEPC (2013a) indicates that:

> A pragmatic risk-based approach should be taken when assessing ecological risk in residential and commercial / industrial land use settings;

> In existing residential and urban development sites, there are often practical considerations that enable soil properties to be improved by addition of ameliorants with a persistent modifying effect or by the common practice of backfilling or top dressing with clean soil;

> In other cases, all of the site soils will be removed during site development works or relocated for the formation of new land forms;

> Sites may also be backfilled with clean soil/fill and the fate of any excavated contaminated soil should be considered in process; and

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

The proposed land use scenario is likely to include unsealed, open space and landscaped areas, where an ecological exposure pathway may be complete. On that basis, further assessment of terrestrial ecosystem exposure risks is considered warranted.

8.5 Source, Receptor, Pathway Model

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

Based on:

> The areas of environmental concern (AEC) at the site where sources of contamination may be present;

> The contaminants of potential concern (COPC) identified for the site;

> Receptors identified for the site; and

> The exposure pathways between those sources and receptors assessed as being potentially or actually complete,

A CSM is presented for the site in Table 8.5.

A graphical representation of AEC derived from the CSM is presented in Figures 4a to 4c.

Table 8.5 Conceptual Site Model

Area ID	Figure #	ID	AEC	Source	COPC	Exposure Pathway	Receptor
Area 1	4a	AEC01	Historically disturbed ground from 2018 (~2,550m^2 and ~1.0m depth)	Uncontrolled filling and stockpiling	Hydrocarbons, pesticides, PCB, metals, asbestos	Dermal Contact Soil Ingestion Dust Inhalation Direct Uptake Aesthetics Management Limits	Residents Intrusive Workers Terrestrial Ecosystems
Area 1	4a	AEC02	Footprint of residential building and backyard within the south-western portion of site (~850m^2 and ~0.5m depth)	Uncontrolled filling	Hydrocarbons, pesticides, PCB, metals, asbestos	Dermal Contact Soil Ingestion Dust Inhalation Direct Uptake Aesthetics Management Limits	Residents Intrusive Workers Terrestrial Ecosystems
Area 1	4a	AEC03	Asphalt driveway to the front of residential building (~50m long and ~0.5m depth)	Uncontrolled filling	Hydrocarbons, pesticides, PCB, metals, asbestos	Dermal Contact Soil Ingestion Dust Inhalation Direct Uptake Aesthetics Management Limits	Residents Intrusive Workers Terrestrial Ecosystems

Area ID	Figure #	ID	AEC	Source	COPC	Exposure Pathway	Receptor
Area 1	4a	AEC04	Gravel driveway adjacent to residential building (~30m long and ~0.5m depth)	Uncontrolled filling	Hydrocarbons, pesticides, PCB, metals, asbestos	Dermal Contact Soil Ingestion Dust Inhalation Direct Uptake Aesthetics Management Limits	Residents Intrusive Workers Terrestrial Ecosystems
Area 1	4a	AEC05	Footprint of granny flat 1 (~150m^2 and ~0.5m depth)	Uncontrolled filling, demolition and stockpiling Termite treatment Use of hazardous building materials	Hydrocarbons, pesticides, PCB, metals, asbestos	Dermal Contact Soil Ingestion Dust Inhalation Direct Uptake Aesthetics Management Limits	Residents Intrusive Workers Terrestrial Ecosystems
Area 1	4a	AEC06	Footprint of collapsed metal roof shed adjacent to granny flat 1 (~100m^2 and ~0.5m depth)	Uncontrolled filling, demolition and stockpiling Termite treatment Use of hazardous building materials	Hydrocarbons, pesticides, PCB, metals, asbestos	Dermal Contact Soil Ingestion Dust Inhalation Direct Uptake Aesthetics Management Limits	Residents Intrusive Workers Terrestrial Ecosystems

Area ID	Figure #	ID	AEC	Source	COPC	Exposure Pathway	Receptor
Area 1	4a	AEC07	Historical building footprint 1 from 1978-2009 (~200m^2 and ~0.5m depth)	Uncontrolled filling, demolition and stockpiling Termite treatment Use of hazardous building materials	Hydrocarbons, pesticides, PCB, metals, asbestos	Dermal Contact Soil Ingestion Dust Inhalation Direct Uptake Aesthetics Management Limits	Residents Intrusive Workers Terrestrial Ecosystems
Area 1	4a	AEC08	Area surrounding cattle drinking trough (~25m^2 and ~0.5m depth)	Visible fragments of PACM on the surface	Asbestos	Dust Inhalation Aesthetics	Residents Intrusive Workers Terrestrial Ecosystems
Area 1	4a	AEC09	Disused cars (~950m^2 and ~0.5m depth	Uncontrolled leaking and spills	Hydrocarbons, PAH, metals, asbestos	Dermal Contact Soil Ingestion Dust Inhalation Direct Uptake Aesthetics Management Limits	Residents Intrusive Workers Terrestrial Ecosystems
Area 1	4a	AEC10	Waste Area 1 comprised of metal, concrete, brick and tile fragments (~400m^2 and ~0.5m depth)	Uncontrolled filling and stockpiling	Hydrocarbons, pesticides, PCB, metals, asbestos	Dermal Contact Soil Ingestion Dust Inhalation Direct Uptake Aesthetics Management Limits	Residents Intrusive Workers Terrestrial Ecosystems

Area ID	Figure #	ID	AEC	Source	COPC	Exposure Pathway	Receptor
Area 1	4a	AEC11	Footprint of former horse pen from 2009 – 2018 (~100m^2 and ~0.5m depth)	Tick and lice treatment of horses	Pesticides, metals, asbestos, microbes	Dermal Contact Soil Ingestion Dust Inhalation Direct Uptake Aesthetics	Residents Intrusive Workers Terrestrial Ecosystems
Area 1	4a	AEC12	Existing horse pen (~100m^2 and ~0.5m depth)	Tick and lice treatment of horses	Pesticides, metals, asbestos, microbes	Dermal Contact Soil Ingestion Dust Inhalation Direct Uptake Aesthetics	Residents Intrusive Workers Terrestrial Ecosystems
Area 1	4a	AEC13	Stockpile of construction and demolition rubble covered with vegetation (stockpile 1) (~50m^3)	Uncontrolled filling and stockpiling	Hydrocarbons, PAH, pesticides, PCB, metals, asbestos	Dermal Contact Soil Ingestion Dust Inhalation Direct Uptake Aesthetics Management Limits	Residents Intrusive Workers Terrestrial Ecosystems
Area 1	4a	AEC14	Wooden slab footprint area (~30m^2 and ~0.5m height)	Uncontrolled filling	Hydrocarbons, PAH, pesticides, metals, asbestos	Dermal Contact Soil Ingestion Dust Inhalation Direct Uptake Aesthetics Management Limits	Residents Intrusive Workers Terrestrial Ecosystems

Area ID	Figure #	ID	AEC	Source	COPC	Exposure Pathway	Receptor
Area 1	4a	AEC15	Stockpile of demolition waste covered with vegetation (stockpile 2) (~120m^3)	Uncontrolled filling and stockpiling	Hydrocarbons, PAH, pesticides, metals, asbestos	Dermal Contact Soil Ingestion Dust Inhalation Direct Uptake Aesthetics Management Limits	Residents Intrusive Workers Terrestrial Ecosystems
Area 2	4b	AEC16	Residential building 2 driveway (~60m long and ~0.5m depth)	Uncontrolled filling	Hydrocarbons, PAH, pesticides, PCB, metals, asbestos	Dermal Contact Soil Ingestion Dust Inhalation Direct Uptake Aesthetics Management Limits	Residents Intrusive Workers Terrestrial Ecosystems
Area 2	4b	AEC17	Footprint of residential building 2 (~950m^2 and ~0.5m depth)	Uncontrolled filling Termite treatment Use of hazardous building materials	Hydrocarbons, pesticides, PCB, metals, asbestos	Dermal Contact Soil Ingestion Dust Inhalation Direct Uptake Aesthetics Management Limits	Residents Intrusive Workers Terrestrial Ecosystems
Area 2	4b	AEC18	Items of household waste comprising bathtubs filled with soil x 2 (~10m^2 and ~0.5m depth)	Uncontrolled filling	Pesticides, metals, asbestos	Dermal Contact Soil Ingestion Dust Inhalation Direct Uptake Aesthetics	Residents Intrusive Workers Terrestrial Ecosystems

Area ID	Figure #	ID	AEC	Source	COPC	Exposure Pathway	Receptor
Area 2	4b	AEC19	Septic tank 1 (~10m^2)	Septic waste	Hydrocarbons, pathogens, metals, asbestos	Dermal Contact Soil Ingestion Dust Inhalation Direct Uptake Aesthetics Management Limits	Residents Intrusive Workers Terrestrial Ecosystems
Area 2	4b	AEC20	Footprint of historical building 2 from 1978-1998 (~50m^2 and ~0.5m depth)	Uncontrolled filling, demolition and stockpiling Use of hazardous building materials	Hydrocarbons, PAH, pesticides, PCB, metals, asbestos	Dermal Contact Soil Ingestion Dust Inhalation Direct Uptake Aesthetics Management Limits	Residents Intrusive Workers Terrestrial Ecosystems
Area 2	4b	AEC21	Disturbed area (~200m^2 and ~0.5m depth)	Uncontrolled filling	Hydrocarbons, PAH, pesticides, PCB, metals, asbestos	Dermal Contact Soil Ingestion Dust Inhalation Direct Uptake Aesthetics Management Limits	Residents Intrusive Workers Terrestrial Ecosystems

Area ID	Figure #	ID	AEC	Source	COPC	Exposure Pathway	Receptor
Area 2	4b	AEC22	Footprint of former northern garden bed from 2009-2021 (~350m^2 and ~1.0m depth)	Uncontrolled filling	Hydrocarbons, PAH, pesticides, metals, asbestos	Dermal Contact Soil Ingestion Dust Inhalation Direct Uptake Aesthetics Management Limits	Residents Intrusive Workers Terrestrial Ecosystems
Area 2	4b	AEC23	Footprint of collapsed northern shed (~150m^2 and ~0.5m depth)	Uncontrolled filling, demolitions and stockpiling Termite treatment Use of hazardous building materials	Hydrocarbons, PAH, pesticides, PCB, metals, asbestos	Dermal Contact Soil Ingestion Dust Inhalation Direct Uptake Aesthetics Management Limits	Residents Intrusive Workers Terrestrial Ecosystems
Area 2	4b and 4c	AEC24	Footprint of former pigsty (~1,850m^2 and ~0.5m depth)	Uncontrolled filling, demolitions and stockpiling Termite treatment Use of hazardous building materials Former market gardens Former pigsty use	Hydrocarbons, PAH, pesticides, metals, PCB, asbestos, microbes	Dermal Contact Soil Ingestion Dust Inhalation Direct Uptake Aesthetics Management Limits	Residents Intrusive Workers Terrestrial Ecosystems

Area ID	Figure #	ID	AEC	Source	COPC	Exposure Pathway	Receptor
Area 2	4b and 4c	AEC25	Footprint of historical building 3 from 1978-1986 (~2,400m^2 and ~0.5m depth)	Uncontrolled filling, demolitions and stockpiling Termite treatment Use of hazardous building materials	Hydrocarbons, PAH, Pesticides, PCB, metal, asbestos	Dermal Contact Soil Ingestion Dust Inhalation Direct Uptake Aesthetics Management Limits	Residents Intrusive Workers Terrestrial Ecosystems
Area 1	4a	AEC26	Footprint of unused car (~50m^2 and ~0.5m depth)	Uncontrolled leaking and spills	Hydrocarbons, PAH, metals, asbestos	Dermal Contact Soil Ingestion Dust Inhalation Direct Uptake Aesthetics Management Limits	Residents Intrusive Workers Terrestrial Ecosystems
Area 3	4a and 4c	AEC27	Footprint of former road to the south from 2009-2013 (~200m long and ~0.5m depth)	Uncontrolled filling	Hydrocarbons, PAH, pesticides, PCB, metals, asbestos	Dermal Contact Soil Ingestion Dust Inhalation Direct Uptake Aesthetics Management Limits	Residents Intrusive Workers Terrestrial Ecosystems

Area ID	Figure #	ID	AEC	Source	COPC	Exposure Pathway	Receptor
Area 3	4c	AEC28	Stockpile of soil comprising metal wastes, concrete and brick and covered in vegetation (stockpile 3) (~175m^3)	Uncontrolled filling and stockpiling	Hydrocarbons, PAH, PCB, metals, asbestos	Dermal Contact Soil Ingestion Dust Inhalation Direct Uptake Aesthetics Management Limits	Residents Intrusive Workers Terrestrial Ecosystems
Area 3	4c	AEC29	4WD area comprising of a depression (~550m^2 and ~0.5m depth)	Uncontrolled filling	Hydrocarbons, PAH, pesticides, PCB, metals, asbestos	Dermal Contact Soil Ingestion Dust Inhalation Direct Uptake Aesthetics Management Limits	Residents Intrusive Workers Terrestrial Ecosystems
Area 3	4c	AEC30	Items of waste including piled-up wooden planks (~50m^2 and depth of ~0.5m)	Uncontrolled filling and stockpiling	Hydrocarbons, PAH, PCB, metals, asbestos	Dermal Contact Soil Ingestion Dust Inhalation Direct Uptake Aesthetics Management Limits	Residents Intrusive Workers Terrestrial Ecosystems

Area ID	Figure #	ID	AEC	Source	COPC	Exposure Pathway	Receptor
Area 3	4b and 4c	AEC31	Footprint of entire site (~1.6 hectares and depth of ~0.5m)	Former market garden use Uncontrolled filling	Hydrocarbons, PAH, pesticides, PCB, metals, asbestos	Dermal Contact Soil Ingestion Dust Inhalation Direct Uptake Aesthetics Management Limits	Residents Intrusive Workers Terrestrial Ecosystems
Area 1	4a	AEC32	Septic tank 2 (~10m^2)	Septic waste	Hydrocarbons, pathogens, metals, asbestos	Dermal Contact Soil Ingestion Dust Inhalation Direct Uptake Aesthetics Management Limits	Residents Intrusive Workers Terrestrial Ecosystems

9. Data Quality Objectives

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

9.1 Step 1: State the problem

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

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

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

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

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

9.2 Step 2: Identify the decision/goal of the study

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

> Is the data collected for the project, suitable for assessing land contamination exposure risks?

> Do the detected concentrations of contaminants of potential concern identified in the CSM, present an unacceptable exposure risk to the receptors identified in the CSM, based on the proposed land use scenario?

> Is the site suitable, in the context of land contamination, for the proposed land use scenario?

9.3 Step 3: Identify the information inputs

The information inputs required to make the decisions for the project set out in Section 9.2, include:

> Data obtained during the site history review and site walkover;

> Identification of sample media that needs to be collected, as set out in Section 9.7;

> Parameters that will be measured in each relevant sample, as set out in Section 9.7;

> The analytical methods required for each identified COPC, so that assessment can be made relative to adopted site criteria. These are set out in Section 9.7 of this report;

> The basis for decisions to be made from field screening, including photo-ionisation detector (PID) data, and what action is to be taken if a defined concentration is attained, as set out in Section 9.7; and

> The site criteria for the media of concern. These criteria are set out in Table 9.3.1 and will be adopted based on the proposed land use scenario[13] and identified receptors.

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

Table 6.3.1 Adopted Site Assessment Criteria

Exposure Pathway	Land Use Setting[14]	Reference
Human health direct contact	HIL B - Residential with minimal soil access	Table 1A(1) in NEPC (2013a) Table B4 in Friebel, E & Nadebaum P (2011) Table 3-5 in NSW EPA (2000)
Human health (asbestos)	Residential B	Table 7 in NEPC (2013a)[15]
Human health (aesthetics)	All	Characteristics and processes in Section 3.6.2 and 3.6.3 in NEPC (2013a)
Ecological	Urban residential space	Table 1B(1) in NEPC (2013a) Table 1B(2) in NEPC (2013a) Table 1B(3) in NEPC (2013a) Table 1B(4) in NEPC (2013a) Table 1B(5) in NEPC (2013a) Table 1B(6) in NEPC (2013a)
Management Limits (petroleum hydrocarbons)	Residential space	Table 1B(7) in NEPC (2013a)

9.4 Step 4: Define the boundaries of the study

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

> The site as defined by the boundaries set out in Section 0 and the extents shown in Figure 2; and

> Any physical constraints or existing infrastructure on site that prevents safe and reasonable access by the project team and/or typical industry equipment used for projects of this nature.

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

The temporal boundaries of the project will include:

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

> Availability of the site for access to execute fieldwork tasks; and

> Availability of project team members to execute the project.

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

> The inferred lateral boundaries of each AEC;

[14] Consideration will be given to soil type, soil texture, soil depth, groundwater depth and appropriate species protection levels.
[15] A depth of up to 10cm below ground level is adopted to define 'surface soil'.

- The inferred vertical extent of each AEC, likely to be to 0.3m into natural, to the base of stockpiled material.

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

9.5 Step 5: Develop the analytical approach

9.5.1 Duplicates and Triplicates

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

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

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

9.5.2 Trip Blanks and Trip Spikes

One trip blank and trip spike will be used for each day of sampling[16]. A minimum of one trip blank and one trip spike will be scheduled for BTEX analysis, during the project, provide sample handling, preservation and storage procedures the same for each day of sampling.

9.5.3 Rinsate Blanks

One rinsate blank will be used for each day of sampling[17].

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

9.5.4 Field Blanks

One field blank will be used for each day of sampling[18]. A minimum of one field blank will be scheduled for PFAS analysis, during the project, provided sample handling, preservation and storage procedures the same for each day of sampling.

9.5.5 Laboratory Quality Assurance and Quality Control

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

9.5.6 Data Quality Indicators

Data quality indicators (DQI) will be adopted to facilitate an assessment of the completeness, comparability, representativeness, precision and accuracy (bias) of the field and laboratory data collected. These DQI are set out in Table 9.5.6.

[16] Only where samples being collected on that day are expected to be analysed for BTEX and/or TRH C6-C10.
[17] Only where non-disposable sampling equipment is being used on that day.
[18] Only where PFAS is a contaminant of concern for samples collected on that day.

Table 9.5.6 Data Quality Indicators

Completeness			
Field Considerations	**Target**	**Laboratory Considerations**	**Target**
Experienced sampling team used	Yes	Complete SRA and COA attached	Yes
Sampling devices and equipment set out in sampling plan were used (refer Section 9.7.1).	Yes	Critical samples identified in sampling plan, analysed	Yes
Critical locations in sampling plan, sampled (refer Section 9.7.1).	Yes	Analysis undertaken addresses COPC in sampling plan (refer Section 9.7.7)	Yes
Critical samples in sampling plan, collected (refer Section 9.7.1).	Yes	Analytical methods reported in laboratory documentation and appropriate LOR used	Yes
Completed field and calibration logs attached	Yes	Sample holding times met (refer Section 1.1.18)	Yes
Completed COC attached	Yes		

Comparability			
Field Considerations	**Target**	**Laboratory Considerations**	**Target**
Same sampling team used for all work.	Yes	Same laboratory used for all analysis (refer Section 9.7.6).	Yes
Weather conditions suitable for sampling.	Yes	Comparable methods if different laboratories used Refer Section 1.1.16).	Yes
Same sample types collected and preserved in same way (refer Section 9.7.5).	Yes	Comparable LORs if different laboratories used.	Yes
Relevant samples stored in insulated containers and chilled (refer Section 9.7.5).	Yes	Comparable units of measure if different laboratories used (refer Section 1.1.16).	Yes

Representativeness			
Field Considerations	**Target**	**Laboratory Considerations**	**Target**
Media identified in sampling plan, sampled (refer Section 9.7.1).	Yes	Samples identified in sampling plan, analysed.	Yes
Samples required by sampling plan, collected (refer Section 9.7.1).	Yes		

Precision			
Field Considerations	**Target**	**Laboratory Considerations**	**Target**
Minimum 5% duplicates and triplicates collected and analysed (refer Section 9.5.1).	Yes	All laboratory duplicate RPDs within laboratory acceptance criteria (refer Section 9.5.5).	Yes
Minimum 10% duplicates and triplicates collected and analysed where PFAS is a contaminant of concern (refer Section 9.5.1).	Yes		
RPD unlimited where detected concentrations are <10 times the LOR.	Yes		
RPD within 50% where detected concentrations are 10-20 times the LOR.	Yes		
RPD within 30% where detected concentrations are >20 times the LOR.	Yes		

Accuracy (bias)			
Field Considerations	**Target**	**Laboratory Considerations**	**Target**
Trip blank analyte results less than LOR (refer Section 9.5.2).	Yes	Laboratory method blank results within laboratory acceptance limits (refer Section 9.5.5).	Yes
Trip spike analyte results less between 60% and 140% (refer Section 9.5.2).	Yes	Laboratory control sample results within laboratory acceptance limits (refer Section 9.5.5).	Yes
Rinsate blank analyte results less than LOR (refer Section 9.5.3).	Yes	Laboratory spike sample results within laboratory acceptance limits.	Yes
Field (PFAS) blank analyte results less than LOR (refer Section 9.5.4).	Yes		

9.5.7 If/Then Statements

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

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

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

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

9.6 Step 6: Specify the performance or acceptance criteria

9.6.1 If / Then Decisions

There are two types of decision error:

- Sampling errors occur when the sampling program does not adequately detect the variability of a contaminant from point to point across the site. That is, the samples collected are not representative of site conditions (e.g. an appropriate number of representative samples have not been collected from each stratum to account for estimated variability); and
- Measurement errors occur during sample collection, handling, preparation, analysis and data reduction.

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

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

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

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

9.7 Step 7: Develop the plan for obtaining data

9.7.1 Sampling Point Density and Locations

Table A in NSW EPA (1995)[19] includes guidance on minimum sampling point densities required characterising a site, based on detecting circular hot spots by using a systematic sampling pattern. Application of this guidance is recommended when:

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

Section 3.1 of NSW EPA (1995) states that judgemental or stratified sampling methods can be used if there is sufficient information about the probable distribution of the contamination. Additionally, Section 6.2.1 in NEPC

[19] The project was commissioned prior to the release of new NSW EPA (2022). As such, sampling point densities and locations adopted for this project were thus based on guidance provided in NSW EPA (1995).

(2013b) states that judgemental sampling, the selection of samples (number, location, timing, etc) is based on knowledge of the site and professional judgement. Sampling would be expected to be localised to known or potentially contaminated areas identified from knowledge of the site either from the site history or an earlier phase of site assessment. Judgemental sampling can be used to investigate sub-surface contamination issues in site assessment.

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

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

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

> Site history;

> The locations of potentially contaminated areas;

> The identified COPC;

> The identified source-pathways-receptors;

> Laydown mechanisms for COPC in each AEC;

> The likely lateral and vertical extent of potential contamination in each AEC; and

> Constraints on site which may restrict the use of certain sampling techniques.

On that basis, it is considered reasonable to adopt a mix of grid based and judgemental sampling patterns, using the sampling point densities set out in Table 9.7.1 and Figure 5.

Table 9.7.1 Sampling Point Densities and Locations

ID	AEC	Sampling Point ID	Method	Target Depth (mbgs)
AEC01	Historically disturbed ground from 2018 (~2,550m^2 and ~1.0m depth)	TP01-TP05	Test pits x 5	1.0m, refusal or 0.3m into natural
AEC02	Footprint of residential building and backyard within the south-western portion of site (~850m^2 and ~0.5m depth)	--	*To be assessed post-demolition*	
AEC03	Asphalt driveway to the front of residential building (~50m long and ~0.5m depth)	--	*To be assessed post-demolition*	
AEC04	Gravel driveway adjacent to residential building (~30m long and ~0.5m depth)	--	*To be assessed post-demolition*	

ID	AEC	Sampling Point ID	Method	Target Depth (mbgs)
AEC05	Footprint of granny flat 1 (~150m^2 and ~0.5m depth)	--	*To be assessed post-demolition*	
AEC06	Footprint of collapsed metal roof shed adjacent to granny flat 1 (~100m^2 and ~0.5m depth)	TP06	Test pit	0.5m, refusal or 0.3m into natural
AEC07	Historical building footprint 1 from 1978-2009 (~200m^2 and ~0.5m depth)	TP07-TP08	Test pits x 2	0.5m, refusal or 0.3m into natural
AEC08	Area surrounding cattle drinking trough (~25m^2 and ~0.5m depth)	TP11	Test pit	0.5m, refusal or 0.3m into natural
AEC09	Disused cars (~950m^2 and ~0.5m depth	TP12-TP17	Test pits x 6	0.5m, refusal or 0.3m into natural
AEC10	Waste Area 1 comprised of metal, concrete, brick and tile fragments (~400m^2 and ~0.5m depth)	*See AEC09 – to be assessed as part of AEC09 assessment*		
AEC11	Footprint of former horse pen from 2009 – 2018 (~100m^2 and ~0.5m depth)	TP09	Test pit	0.5m, refusal or 0.3m into natural
AEC12	Existing horse pen (~100m^2 and ~0.5m depth)	TP10	Test pit	0.5m, refusal or 0.3m into natural
AEC13	Stockpile of construction and demolition rubble covered with vegetation (stockpile 1) (~50m^3)	TP18-TP19	Test pits x 2	Base of stockpile, refusal or test pit collapse
AEC14	Wooden slab footprint area (~30m^2 and ~0.5m height)	TP20	Test pit	0.5m, refusal or 0.3m into natural
AEC15	Stockpile of demolition waste covered with	TP21-TP23	Test pits x 3	Base of stockpile, refusal or test pit collapse

ID	AEC	Sampling Point ID	Method	Target Depth (mbgs)
	vegetation (stockpile 2) (~120m^3)			
AEC16	Residential building 2 driveway (~60m long and ~0.5m depth)	--	*To be assessed post-demolition*	
AEC17	Footprint of residential building 2 (~950m^2 and ~0.5m depth)	--	*To be assessed post-demolition*	
AEC18	Items of household waste comprising bathtubs filled with soil x 2 (~10m^2 and ~0.5m depth)	TP24	Test pit	0.5m, refusal or 0.3m into natural
AEC19	Septic tank 1 (~10m^2)	--	*To be validated following removal*	
AEC20	Footprint of historical building 2 from 1978-1998 (~50m^2 and ~0.5m depth)	TP25	Test pit	0.5m, refusal or 0.3m into natural
AEC21	Disturbed area (~200m^2 and ~0.5m depth)	TP26-TP27	Test pits x 2	0.5m, refusal or 0.3m into natural
AEC22	Footprint of former northern garden bed from 2009-2021 (~350m^2 and ~1.0m depth)	TP28-TP30	Test pits x 3	1.0m, refusal or 0.3m into natural
AEC23	Footprint of collapsed northern shed (~150m^2 and ~0.5m depth)	--	*To be assessed post removal*	
AEC24	Footprint of former pigsty (~1,850m^2 and ~0.5m depth)	TP31-TP39	Test pits x 9	0.5m, refusal or 0.3m into natural
AEC25	Footprint of historical building 3 from 1978-1986 (~2,400m^2 and ~0.5m depth)	TP40-TP47	Test pits x 8	0.5m, refusal or 0.3m into natural
AEC26	Footprint of unused car (~50m^2 and ~0.5m depth)	TP48	Test pit	0.5m, refusal or 0.3m into natural

ID	AEC	Sampling Point ID	Method	Target Depth (mbgs)
AEC27	Footprint of former road to the south from 2009-2013 (~200m long and ~0.5m depth)	TP49-TP51	Test pits x 3	0.5m, refusal or 0.3m into natural
AEC28	Stockpile of soil comprising metal wastes, concrete and brick and covered in vegetation (stockpile 3) (~175m^3)	TP52-TP56	Test pits x 5	Base of stockpile, refusal or test pit collapse
AEC29	4WD area comprising of a depression (~550m^2 and ~0.5m depth)	TP57-TP58	Test pits x 2	0.5m, refusal or 0.3m into natural
AEC30	Items of waste including piled-up wooden planks (~50m^2 and depth of ~0.5m)	TP59-TP60	Test pit	0.5m, refusal or 0.3m into natural
AEC31	Footprint of entire site (~1.6 hectares and depth of ~0.5m)	TP61-TP72 and test pits excavated as part of: > AEC06; > AEC07; > AEC09; > AEC10; > AEC11; > AEC12; > AEC14; > AEC26; and > AEC29.	Test pits	0.5m, refusal or 0.3m into natural
AEC32	Septic tank 2 (~10m^2)	--	*To be validated following removal*	
	Total	TP01-TP72	Test pits x 72	

9.7.2 Sampling Method – Soils

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

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

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

9.7.3 Field Screening

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

9.7.4 Decontamination

Non-disposable sampling equipment will be decontaminated between sampling points to mitigate potential for cross contamination of samples. The decontamination method to be used will be:

- Wash off the non-disposable sampling equipment with a solution of potable water and phosphate free detergent (e.g. Decon 90);
- Rinse the washed equipment with distilled or de-ionised water; and
- Air dry the rinsed equipment.

9.7.5 Sample Identification, Preservation, Handling and Transport

Soil samples will be identified using the CS project number, sampling point identification number and sampling depth interval (e.g. TP01/0.0-1.0), and date the sample was collected.

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

Soil and water samples will be stored in insulated containers with ice.

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

9.7.6 Laboratory Selection

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

9.7.7 Laboratory Analytical Schedule

Samples scheduled for laboratory analysis will be selected based on:

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

The proposed laboratory analytical schedule (including upper limiting sample quantities) for the project is set out in Table 9.7.7.

Table 9.7.7 Laboratory Analytical Schedule

ID	AEC	Sampling Point ID	TRH / BTEX	PAH	OCP/OPP	PCB	Metals (8)	Asbestos (Material ID)	Asbestos (0.001%)	Microbes	pH/CEC
AEC01	Historically disturbed ground from 2018 (~2,550m^2 and ~1.0m depth)	TP01-TP05	2	5	2	1	5	-	10	-	-
AEC02	Footprint of residential building and backyard within the south-western portion of site (~850m^2 and ~0.5m depth)	*To be assessed post demolition*									
AEC03	Asphalt driveway to the front of residential building (~50m long and ~0.5m depth)	*To be assessed post demolition*									
AEC04	Gravel driveway adjacent to residential building (~30m long and ~0.5m depth)	*To be assessed post demolition*									
AEC05	Footprint of granny flat 1 (~150m^2 and ~0.5m depth)	*To be assessed post demolition*									
AEC06	Footprint of collapsed metal roof shed adjacent to granny flat 1 (~100m^2 and ~0.5m depth)	TP06	1	1	1	1	1	-	2	-	-
AEC07	Historical building footprint 1 from 1978-2009 (~200m^2 and ~0.5m depth)	TP07-TP08	1	2	1	1	2	-	2	-	-
AEC08	Area surrounding cattle drinking trough (~25m^2 and ~0.5m depth)	TP11	-	-	-	-	-	-	2	-	-

ID	AEC	Sampling Point ID	TRH / BTEX	PAH	OCP/OPP	PCB	Metals (8)	Asbestos (Material ID)	Asbestos (0.001%)	Microbes	pH/CEC
AEC09	Disused cars (~950m^2 and ~0.5m depth	TP12-TP17	4	7	2	2	7	-	14	-	-
AEC10	Waste Area 1 comprised of metal, concrete, brick and tile fragments (~400m^2 and ~0.5m depth)	*See AEC09*									
AEC11	Footprint of former horse pen from 2009 – 2018 (~100m^2 and ~0.5m depth)	TP09	-	-	1	-	1	-	2	-	-
AEC12	Existing horse pen (~100m^2 and ~0.5m depth)	TP10	-	-	1	-	1	-	2	-	-
AEC13	Stockpile of construction and demolition rubble covered with vegetation (stockpile 1) (~50m^3)	TP18-TP19	1	2	1	1	2	-	1	-	-
AEC14	Wooden slab footprint area (~30m^2 and ~0.5m height)	TP20	1	1	1	1	1	-	2	-	-
AEC15	Stockpile of demolition waste covered with vegetation (stockpile 2) (~120m^3)	TP21-TP23	2	3	2	2	3	-	2	-	-
AEC16	Residential building 2 driveway (~60m long and ~0.5m depth)	*To be assessed post demolition*									
AEC17	Footprint of residential building 2 (~950m^2 and ~0.5m depth)	*To be assessed post demolition*									

ID	AEC	Sampling Point ID	TRH / BTEX	PAH	OCP/OPP	PCB	Metals (8)	Asbestos (Material ID)	Asbestos (0.001%)	Microbes	pH/CEC
AEC18	Items of household waste comprising bathtubs filled with soil x 2 (~10m^2 and ~0.5m depth)	TP24	1	1	1	1	1	-	2	-	-
AEC19	Septic tank 1 (~10m^2)	*To be validated following removal*									
AEC20	Footprint of historical building 2 from 1978-1998 (~50m^2 and ~0.5m depth)	TP25	1	1	1	1	1	-	2	-	-
AEC21	Disturbed area (~200m^2 and ~0.5m depth)	TP26-TP27	1	2	1	1	2	1	4	-	-
AEC22	Footprint of former northern garden bed from 2009-2021 (~350m^2 and ~1.0m depth)	TP28-TP30	1	3	1	1	3	-	6	-	-
AEC23	Footprint of collapsed northern shed (~150m^2 and ~0.5m depth)	*To be assessed post demolition*									
AEC24	Footprint of former pigsty (~1,850m^2 and ~0.5m depth)	TP31-TP39	3	9	5	3	9	-	18	9	-
AEC25	Footprint of historical building 3 from 1978-1986 (~2,400m^2 and ~0.5m depth)	TP40-TP47	3	8	3	3	8	-	16	-	1
AEC26	Footprint of unused car (~50m^2 and ~0.5m depth)	TP48	1	1	1	1	1	-	2	-	-
AEC27	Footprint of former road to the south from 2009-2013 (~200m long and ~0.5m depth)	TP49-TP51	2	3	2	2	3	-	6	-	1

ID	AEC	Sampling Point ID	TRH / BTEX	PAH	OCP/OPP	PCB	Metals (8)	Asbestos (Material ID)	Asbestos (0.001%)	Microbes	pH/CEC
AEC28	Stockpile of soil comprising metal wastes, concrete and brick and covered in vegetation (stockpile 3) (~175m^3)	TP52-TP56	3	5	3	3	5	-	3	-	-
AEC29	4WD area comprising of a depression (~550m^2 and ~0.5m depth)	TP57-TP58	1	2	1	1	2	-	4	-	-
AEC30	Items of waste including piled-up wooden planks (~50m^2 and depth of ~0.5m)	TP59-TP60	1	2	1	1	2	-	2	-	-
AEC31	Footprint of entire site (~1.6 hectares and depth of ~0.5m)	TP61-TP72, and test pits excavated as part of: > AEC06; > AEC07; > AEC09; > AEC10; > AEC11; > AEC12; > AEC14; > AEC26; and > AEC29.	4	10	10	4	10	2	24	-	-
	Septic tank 2 (~10m^2)	TP01-TP72	35	72	44	32	74	4	130	9	3

9.7.8 Laboratory Holding Times, Analytical Methods and Limits of Reporting

Sample holding times, laboratory analytical methods and limits of reporting applicable to this project, are set out in Table 9.7.8.

Table 9.7.8 Laboratory Holding Times, Analytical Methods and Limits of Reporting

Analyte	Holding Time	Method	LOR (mg/kg)
BTEX and TRH C6-C10	14 days	USEPA 5030, 8260B and 8020	0.2-0.5
TRH C10-C40	14 days	USEPA 8015B & C	20-100
PAH	14 days	USEPA 8270	0.1-0.2
OCP	14 days	USEPA 8081	0.2
PCB	14 days	USEPA 8270	0.2
Metals	6 months	USEPA 8015B & C	0.05-2
pH	On receipt	APHA 4500 pH	-
E.Coli	24 hours	AS 4276.5:2007	-
Faecal Coliforms	24 hours	AS 4276.7:2007	-
Asbestos ID	No limit	AS4926	Absence / presence
Asbestos (WA DOH)	No limit	Inhouse	0.001% w/w

10. Fieldwork

10.1 Soils

10.1.1 Sampling

Soil sampling works were undertaken by a CS field consultant from 18 to 23 August 2022. These works included:

> Surveying of each sampling point by a service locating contractor for buried underground services;

> Excavation of 71[20] test pits (TP01 to TP72) using a five-and-a-half tonne tracked hydraulic excavator; and

> Logging and collection of physical samples from each test pit.

Soil samples were collected at each sampling point, at the surface and at regular intervals thereafter, or where visual or olfactory evidence of contamination was observed.

Samples were collected either directly from excavated soils, or from the centre of soils while still in the excavator bucket (to avoid cross contamination), as grab samples, using a fresh pair of nitrile gloves.

A 10L bulk sample was collected at each test pit sampling point, for each metre (or part thereof) of inferred fill material encountered. Sub samples of 500ml volume were taken as separate samples to 10L bulk samples.

Samples were placed in suitable laboratory prepared containers and labelled.

The 10L bulk samples were screened using a contrasting tarp due to the soil type and texture. Potential asbestos containing materials >7mm in size were weighed, the weight recorded on the relevant sampling point log, and the potential ACM placed in separate zip lock bags.

Test pits were backfilled with excavated soils and track rolled.

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

Sampling point locations were confirmed on a site plan. The sampling point location plan is presented in Figure 5.

[20] Refer to DQO assessment in Appendix M for discussion related to TP60 not being excavated, thus excavation of only 71 test pits instead of 72.

Image 10.1.1.1 View of excavation commencing at sampling point TP01, facing north

Image 10.1.1.2 View of excavated soil from sampling point TP27, facing south-west

10.1.2 Site Specific Geology

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

Field logs are presented in Appendix H.

A summary of subsurface conditions is presented in Table 10.1.2.

Table 10.1.2 Summary of Subsurface Conditions

Layer	Description	Depth (m)
Topsoil	Silty CLAY, low plasticity, fine-grained, dark grey, roots, no odour or staining, with grass and anthropogenic material on the surface	0.0 to 0.1
Fill	Silty Sandy CLAY, fine, low plasticity, dark grey, with trace sandstone and shale gravels, roots, no odour or staining	0.1 to 0.3
Natural	Silty CLAY, low to medium plasticity, fine-grained, dark grey to brown, roots and bark, no odour or staining. Material at this layer appears to be reworked	0.1 to 0.3
	CLAY, medium plasticity, red-brown to yellow, with trace fine-grained sands, trace shale gravels, dry, firm, no odour no staining	0.3 to 0.7

Image 10.1.2.1 View of topsoil (middle) and natural soils (left) encountered at TP61 (right)

Image 10.1.2.2 View of soil profile observed at TP50

10.1.3 Potential Asbestos Containing Materials

Visual evidence of potential asbestos containing materials (PACM) in the form of cement sheet fragments were encountered on the surface or in surface soils (0.0-0.1m), at the following sampling points:

- TP18;
- TP25;
- TP33;
- TP35;
- TP36;
- TP37;
- TP38;
- TP39;
- TP44;
- TP54; and
- TP56.

Samples of these potential ACM were collected.

The bulk 10L soil samples were screened for the presence of asbestos containing materials greater than 7mm in size. Materials suspected of being ACM were collected and weighed, and the weights recorded on the relevant sampling point log.

The corrugated roof of residential building 2 (as discussed in section 6.10) was also considered likely to contain asbestos. However, no samples of this material were collected.

Image 10.1.3.1 View of potential ACM fragment at TP33/0-0.1

Image 10.1.3.3 View of weighing scale used to measure the weight of PACM fragments

Image 10.1.3.4 View of PACM sample from TP36/0-0.1

Image 10.1.3.5 View of gravimetric-screened soils from 10L bucket on tarp at TP39/0-0.1

10.1.4 Odours

There was no olfactory evidence of odours in the soil samples collected.

10.1.5 Staining

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

10.1.6 Headspace Screening

Headspace screening was undertaken, by placing a sub sample from each relevant sample at each relevant sampling point, in a zip lock bag, sealing it, shaking it, then piercing the bag with the tip of the PID and results recorded.

The results of the headspace screening are presented on the logs in Appendix G. The results recorded indicated the potential for ionisable volatile organic compounds to be present in the samples screened was generally low, with values ranging from 0.1ppm to 1.5ppm across all sampled analysed for headspace screening.

A copy of the PID calibration certificate is presented in Appendix I.

11. Laboratory

The samples were transported to the analytical laboratory using chain of custody protocols. A selection of those samples were scheduled for laboratory analysis, taking into consideration the laboratory analytical schedule presented in Table 9.7.7 and observations made in the field.

A copy of the sample receipts and certificates of analysis, is presented in Appendix J.

The relevant laboratory analytical results were tabulated and presented in the attached Table LR01 (for soils and QA/QC results) and Table LR02 (RPD).

12. Assessment of Data Quality Indicators

An assessment of performance against the data quality indicators (DQI) is set out in Appendix M.

13. Discussion

13.1 Human Health - Dermal Contact / Ingestion / Dust Inhalation

The detected concentrations of the relevant COPC in the soil samples analysed, were less than the adopted human health direct contact assessment criteria.

Further assessment of human health direct contact risk is still considered not warranted.

13.2 Human Health - Asbestos

13.2.1 Bonded Asbestos Containing Materials

Visible fragments of bonded PACM were not observed on the surface of the site with the exception of:

> Fragments of asbestos observed in representative 10L field screening samples collected from the surface. This is discussed further below.

Fragments of bonded PACM greater than 7mm in size were observed during field screening of relevant bulk soil samples. The test pits where the fragments of asbestos were observed is presented in Table 13.3.1. Representative samples of the fragments were collected for laboratory analysis. Chrysotile asbestos was identified in sample TP18/0-0.6/PACM14. Chrysotile and amosite-type asbestos were identified in samples TP25/0.1-0.3/PACM13 and TP33/0-0.1/PACM04.

Quantification of asbestos in soil concentrations was undertaken using guidance presented in Section 4.10 of NEPC (2013a), using 10L bulk samples, with the following assumptions[21]:

> 15% asbestos by weight in cement bonded asbestos;

The quantification of ACM in soil was assessed using the following formula:

$$\%\ w/w\ asbestos\ in\ soil = \frac{\%\ asbestos\ content \times bonded\ ACM\ (kg)}{soil\ volume\ (L) \times soil\ density\ (kg/L)}$$

The results of the ACM quantification assessment are presented in Table **Error! Reference source not found.**.

[21] Considered to be adequately conservative within the objectives of this project.

Table Error! Reference source not found. **Quantification of ACM**

Sample ID	Soil Weight (kg)	Bonded ACM Weight (g)	Asbestos in Soil (% w/w)
TP01/0-0.1	-	Not detected	Not detected
TP01/0.1-0.3	-	Not detected	Not detected
TP02/0-0.1	-	Not detected	Not detected
TP02/0.1-0.3	-	Not detected	Not detected
TP03/0-0.01	-	Not detected	Not detected
TP03/0.1-0.3	-	Not detected	Not detected
TP04/0-0.1	-	Not detected	Not detected
TP04/0.1-0.2	-	Not detected	Not detected
TP05/0-0.1	-	Not detected	Not detected
TP05/0.1-0.3	-	Not detected	Not detected
TP06/0-0.1	-	Not detected	Not detected
TP06/0.1-0.4	-	Not detected	Not detected
TP07/0.1-0.3	-	Not detected	Not detected
TP08/0-0.1	-	Not detected	Not detected
TP09/0-0.1	-	Not detected	Not detected
TP10/0-0.1	-	Not detected	Not detected
TP11/0-0.1	-	Not detected	Not detected
TP12/0-0.1	-	Not detected	Not detected
TP13/0-0.1	-	Not detected	Not detected
TP14/0-0.1	-	Not detected	Not detected
TP15/0-0.1	-	Not detected	Not detected
TP16/0-0.1	-	Not detected	Not detected
TP17/0-0.1	-	Not detected	Not detected
TP18/0-0.6	16	70	**0.066**
TP19/0-0.6	-	Not detected	Not detected
TP20/0-0.1	-	Not detected	Not detected
TP21/0-0.9	-	Not detected	Not detected
TP22/0-0.7	-	Not detected	Not detected
TP23/0-0.5	-	Not detected	Not detected
TP24/0-0.1	-	Not detected	Not detected
TP24/0.1-0.35	-	Not detected	Not detected

Sample ID	Soil Weight (kg)	Bonded ACM Weight (g)	Asbestos in Soil (% w/w)
TP25/0-0.1	15	50	**0.05**
TP25/0.1-0.3	13	50	**0.058**
TP26/0-0.1	-	Not detected	Not detected
TP26/0.1-0.3	-	Not detected	Not detected
TP27/0-0.1	-	Not detected	Not detected
TP28/0-0.1	-	Not detected	Not detected
TP28/0.1-0.4	-	Not detected	Not detected
TP29A/0-0.1	-	Not detected	Not detected
TP29A/0.1-0.3	-	Not detected	Not detected
TP30A/0-0.1	-	Not detected	Not detected
TP30A/0.1-0.5	-	Not detected	Not detected
TP31/0-0.1	-	Not detected	Not detected
TP31/0.1-0.3	-	Not detected	Not detected
TP32/0-0.1	-	Not detected	Not detected
TP32/0.1-0.3	-	Not detected	Not detected
TP33/0-0.1	16	25	**0.023**[22]
TP33/0.1-0.3	-	Not detected	Not detected
TP34/0-0.1	-	Not detected	Not detected
TP34/0.1-0.3	-	Not detected	Not detected
TP35/0-0.1	-	Not detected	Not detected
TP35/0.1-0.4	-	Not detected	Not detected
TP36/0-0.1	15	100	**0.1**
TP36/0.1-0.4	-	Not detected	Not detected
TP37/0-0.1	15	30	**0.030**
TP37/0.1-0.45	-	Not detected	Not detected
TP38/0-0.1	-	Not detected	Not detected
TP38/0.1-0.4	-	Not detected	Not detected
TP39/0.-0.1	-	Not detected	Not detected
TP39/0.1-0.5	-	Not detected	Not detected
TP40/0-0.1	-	Not detected	Not detected

[22] Failed due to being present within the site soils.

Sample ID	Soil Weight (kg)	Bonded ACM Weight (g)	Asbestos in Soil (% w/w)
TP41/0-0.1	-	Not detected	Not detected
TP42/0-0.1	-	Not detected	Not detected
TP43/0-0.1	-	Not detected	Not detected
TP44/0-0.1	18	440	**0.367**
TP45/0-0.1	-	Not detected	Not detected
TP46/0-0.1	-	Not detected	Not detected
TP47/0-0.1	-	Not detected	Not detected
TP48/0-0.1	-	Not detected	Not detected
TP49/0-0.1	-	Not detected	Not detected
TP49/0.1-0.3	-	Not detected	Not detected
TP50/0-0.1	-	Not detected	Not detected
TP51/0-0.1	-	Not detected	Not detected
TP52/0-0.5	-	Not detected	Not detected
TP53/0-0.7	-	Not detected	Not detected
TP54/0-1.0	15	60	**0.060**
TP55/0-0.9	-	Not detected	Not detected
TP56/0-0.7	15	20	**0.020**[23]
TP57/0-0.1	-	Not detected	Not detected
TP58/0-0.1	-	Not detected	Not detected
TP59/0-0.1	-	Not detected	Not detected
TP61/0-0.1	-	Not detected	Not detected
TP61/0.1-0.2	-	Not detected	Not detected
TP62/0-0.1	-	Not detected	Not detected
TP63/0-0.1	-	Not detected	Not detected
TP64/0-0.1	-	Not detected	Not detected
TP65/0-0.1	-	Not detected	Not detected
TP66/0-0.1	-	Not detected	Not detected
TP67/0-0.1	-	Not detected	Not detected
TP68/0-0.1	-	Not detected	Not detected
TP69/0-0.1	-	Not detected	Not detected

[23] Failed due to presence within the surface soils.

Sample ID	Soil Weight (kg)	Bonded ACM Weight (g)	Asbestos in Soil (% w/w)
TP70/0-0.1	-	Not detected	Not detected
TP71/0-0.1	-	Not detected	Not detected
TP72/0-0.1	-	Not detected	Not detected

The quantified concentration of ACM was less than the adopted health screening level of 0.04 % w/w in each of the samples screened, with the exception of the following samples:

- TP18/0.0-0.6;
- TP25/0.0-0.1;
- TP25/0.1-0.3;
- TP36/0.0-0.1;
- TP37/0.0-0.1;
- TP44/0.0-0.1; and
- TP54/0.0-1.0.

NEPM (2013) also outlines that no visible asbestos should be present in surface soils. The following sample locations where fragments of asbestos containing material were observed are also therefore also considered as exceeding the relevant site assessment criteria:

- Collapsed roof sheeting located at residential building 2;
- TP33/0.0-0.1; and
- TP56/0.0-0.7.

Additionally, a PACM fragment was also observed at the time of site walkover near cattle drinking trough at AEC08[24]. Although the fragment was not observed during the intrusive fieldwork stage, CS considers that there is a potential for asbestos to be present in this area.

Furthermore, a number of crushed cement sheet fragments were observed adjacent to the driveway in AEC16.

The sampling points where the ACM concentration exceedances were found, are presented in Figure 6.

Further assessment of bonded ACM human health exposure risks is considered warranted.

13.2.2 Fibrous Asbestos / Asbestos Fines

The concentrations of FA and AF detected in the samples analysed, were less than the adopted health screening level of 0.001% w/w, with the exception of the following samples:

- TP06/0-0.1, where AF/FA was reported at a concentration of 0.11 % w/w;
- TP18/0-0.6, where AF/FA was reported at a concentration of 0.015 % w/w; and
- TP36/0-0.1 and TP36/0.1-0.4, where AF/FA was reported at a concentration of 0.074 % w/w and 0.027 % w/w, respectively.

The sampling points where the AF/FA concentration exceedances were found, are presented in Figure 6.

[24] The fragment was observed during the site walkover and not observed during the intrusive fieldwork stage.

Further assessment of fibrous asbestos / asbestos fines human health exposure risks is considered warranted.

13.3 Aesthetics

Visual and olfactory observations made of the soils encountered during fieldwork, did not indicate the presence of large quantities of construction and demolition waste, demolished structures, dis-used vehicles and other household waste items onsite.

However, observations made during the fieldwork indicate the presence of large quantities of construction and demolition waste, demolished structures, dis-used vehicles and other household waste items sotred onsite.

Section 3.6.3 of NEPC (2013a) advises that:

> Small quantities of non-hazardous inert material should not be a cause of concern or limit the use of the site in most circumstances;

> Sites with large quantities of well-covered known inert materials that present no health hazard such as brick fragments and concrete wastes (for example, broken cement blocks) are usually of low concern for both non-sensitive and sensitive land uses.

However, based on CS' observations of items of waste present onsite, CS considers that presence of such items onsite triggers further assessment of aesthetics. Presence of these items onsite may also prevent the proposed development from happening.

Based on this, further assessment/management of aesthetics risks is considered warranted.

13.4 Management Limits for Petroleum Hydrocarbons

The detected concentrations of the relevant COPC in the soil samples analysed, were less than the adopted management limits for petroleum hydrocarbon assessment criteria.

Further assessment of management limits for petroleum hydrocarbons is considered not warranted.

13.5 Pathogens

The adopted unit of measurement for pathogen concentrations in soil was based on limit of reporting (LOR) of one (1) colony forming unit per 100mL (CFU/100mL) and compared against Table 3-5 in NSW EPA (2000).

The detected units of E. Coli and faecal coliforms in the soil samples analysed, were less than the adopted criteria for Stabilisation Grade A microbiological standards (established at <100 MPN[25] per gram (dry weight) for E. Coli and <1,000 MPN per gram (dry weight) for faecal coliform), with the exception of:

> Concentration of faecal coliform in samples TP31/0.1-0.3 (reported at 2,000 CFU/100mL) and TP32/0.1-0.3 (reported at 1,000 CFU/100mL).

Further assessment of pathogens contamination in soils is considered warranted.

13.6 Terrestrial Ecosystems

The detected concentrations of the relevant COPC in the soil samples were compared against the ecological investigation limits (EILs) and ecological screening limits (ESLs) outlined in NEPC (2013a). For contaminants with no EILs prescribed in NEPC (2013a), CS calculated a site specific EIL using the guidance provided in NEPC

[25] MPN = most probable number. CS considers the CFU/100mL unit of measurement appropriate to use in place of the MPN outlined in Table 3-5 of NSW EPA (2000).

(2013a). Parameters considered to derive the site specific EILs were the ambient background concentration of contaminants in residual soils onsite using the detected concentrations reported by the laboratory for pH, cation exchange capacity (CEC) and clay content.

Using the guidance provided in NEPC (2013a), CS derived site specific EILs, which are presented in Table 13.6.

Table 13.6 Site Specific EILs

Contaminant in Soil (Aged)	ABC (mg/kg)	ACL (mg/kg)	ABC+ACL	Adopted EIL (mg/kg)[26]
Zinc	26	400	426	430
Copper	13	190[27]	203	200
Chromium (III)	13	400	413	410
Nickel	3	270	273	270
Lead	13	1100	1113	1110

The detected concentrations of the relevant COPC in the soil samples, were less than the adopted terrestrial ecosystems assessment criteria, with the exception of:

- Zinc in sample TP35/0.1-0.3 (490mg/kg) which exceeded the adopted criterion of 430mg/kg;
- Zinc in sample TP38/0-0.2 (490mg/kg) which exceeded the adopted criterion of 430mg/kg;
- Zinc in sample TP40/0-0.2 (440mg/kg) which exceeded the adopted criterion of 430mg/kg;
- Zinc in sample DUP07 (990mg/kg) (duplicate sample for a parent sample TP23/0.3-0.5) which exceeded the adopted criterion of 430mg/kg; and
- Zinc in sample DUP07A (433mg/kg) (duplicate sample for a parent sample TP23/0.3-0.5) which exceeded the adopted criterion of 430mg/kg;

These detected concentrations of zinc are only marginally higher than the relevant adopted site assessment criteria (which are tier 1 screening criteria only, and inherently conservative), and within the same order of magnitude as the relevant adopted site assessment criteria.

Furthermore, it is likely that the surface soils onsite will be scraped and excavated as part of proposed development. These works will most likely result in mixing of soils from across the site. As such, CS undertook a statistical analysis using ProUCL of the detected zinc concentrations in the samples collected from the top 0.0m to 0.3m. In order for the statistical analysis to be valid, the maximum value and the standard deviation of any one analyte dataset, cannot be greater than 50% of the relevant adopted screening criterion value.

The outputs of the ProUCL statistical analysis are presented in Appendix K. The results of the statistical analysis indicated that:

- The maximum detected zinc concentration value in the data set was 990mg/kg, which is less than 250% of the adopted criterion value (430mg/kg);

[26] ABC + ACL result rounded to nearest 10mg/kg for consistency and avoidance of false accuracy (NEPC 2013a, Case Study 5 in Section 5 of Schedule B1).
[27] CEC based

- The standard deviation of the detected zinc concentrations in the data set was 152mg/kg, which is less than the 50% of the adopted criterion value (430mg/kg);
- There is a 95% probability that the arithmetic average concentration of zinc in soils onsite, will not exceed 123mg/kg, which is less than the adopted criterion.

Further assessment of soil related terrestrial ecosystem exposure risks is considered not warranted.

13.7 Data Gaps

Due to the presence of existing structures and driveways onsite, AEC associated with these areas could not be assessed. As such, characterisation of contaminants associated with these areas requires further assessment. A list of AECs requiring further assessment is presented in Table 14.1.

14. Revised Conceptual Site Model

A conceptual site model (CSM) is a representation of site-related information regarding contamination sources and receptors, and exposure pathways between those sources and receptors. The CSM at the completion of the stage 2 detailed site investigation works, is presented for the site in Table **Error! Reference source not found.**.1 and AEC's which have been identified in the original CSM in Section 8.5 are outlined in the footnotes below.

Table Error! Reference source not found.**.1 Revised Conceptual Site Model**

ID	AEC	Source	COPC	Exposure Pathway	Receptor	Outcome
AEC01	Historically disturbed ground from 2018 (~2,550m^2 and ~1.0m depth)	Uncontrolled filling and stockpiling	Hydrocarbons, pesticides, PCB, metals, asbestos	Dermal Contact Soil Ingestion Dust Inhalation Direct Uptake Aesthetics Management Limits	Residents Intrusive Workers Terrestrial Ecosystems	Field and analytical results for soil below Tier 1 screening criteria. Further assessment, management or remediation not warranted.
AEC02	Footprint of residential building and backyard within the south-western portion of site (~850m^2 and ~0.5m depth)	Uncontrolled filling	Hydrocarbons, pesticides, PCB, metals, asbestos	Dermal Contact Soil Ingestion Dust Inhalation Direct Uptake Aesthetics Management Limits	Residents Intrusive Workers Terrestrial Ecosystems	Not assessed, to be assessed post-demolition.
AEC03	Asphalt driveway to the front of residential building (~50m long and ~0.5m depth)	Uncontrolled filling	Hydrocarbons, pesticides, PCB, metals, asbestos	Dermal Contact Soil Ingestion Dust Inhalation Direct Uptake Aesthetics Management Limits	Asphalt driveway to the front of residential building (~50m long and ~0.5m depth)	Not assessed, to be assessed post-demolition.

ID	AEC	Source	COPC	Exposure Pathway	Receptor	Outcome
AEC04	Gravel driveway adjacent to residential building (~30m long and ~0.5m depth)	Uncontrolled filling	Hydrocarbons, pesticides, PCB, metals, asbestos	Dermal Contact Soil Ingestion Dust Inhalation Direct Uptake Aesthetics Management Limits	Gravel driveway adjacent to residential building (~30m long and ~0.5m depth)	Not assessed, to be assessed post-demolition.
AEC05	Footprint of granny flat 1 (~150m^2 and ~0.5m depth)	Uncontrolled filling, demolition and stockpiling Termite treatment Use of hazardous building materials	Hydrocarbons, pesticides, PCB, metals, asbestos	Dermal Contact Soil Ingestion Dust Inhalation Direct Uptake Aesthetics Management Limits	Residents Intrusive Workers Terrestrial Ecosystems	Not assessed, to be assessed post-demolition.
AEC06	Footprint of collapsed metal roof shed adjacent to granny flat 1 (~100m^2 and ~0.5m depth)	Bonded asbestos in surface soils	Bonded asbestos	Dust Inhalation Aesthetics	Residents Intrusive Workers	Field and analytical results above Tier 1 screening criteria for friable asbestos at TP06. Collapsed shed material and roofing poses further asbestos/aesthetics risks. Further assessment, management or remediation considered warranted.

ID	AEC	Source	COPC	Exposure Pathway	Receptor	Outcome
AEC07	Historical building footprint 1 from 1978-2009 (~200m^2 and ~0.5m depth)	Uncontrolled filling, demolition and stockpiling Termite treatment Use of hazardous building materials	Hydrocarbons, pesticides, PCB, metals, asbestos	Dermal Contact Soil Ingestion Dust Inhalation Direct Uptake Aesthetics Management Limits	Residents Intrusive Workers Terrestrial Ecosystems	Field and analytical results for soil below Tier 1 screening criteria. Further assessment, management or remediation not warranted.
AEC08	Area surrounding cattle drinking trough (~25m^2 and ~0.5m depth)	Visible fragments of PACM on the surface	Bonded asbestos	Dust Inhalation	Residents Intrusive Workers	Likelihood of PACM remains near the cattle drinking trough. Further assessment, management or remediation considered warranted.
AEC09	Disused cars (~950m^2 and ~0.5m depth)	Disused parked cars	-	Aesthetics	Residents	Presence of disused cars present aesthetic risk. Further management or remediation considered warranted.
AEC10	Waste Area 1 comprised of metal, concrete, brick and tile fragments (~400m^2 and ~0.5m depth)	Items of waste	-	Aesthetics	Residents	Items of waste onsite presents aesthetics risk. Further management or remediation considered warranted.
AEC11	Footprint of former horse pen from 2009 – 2018 (~100m^2 and ~0.5m depth)	Tick and lice treatment of horses	Pesticides, metals, asbestos, microbes	Dermal Contact Soil Ingestion Dust Inhalation Direct Uptake Aesthetics	Residents Intrusive Workers Terrestrial Ecosystems	Field and analytical results for soil below Tier 1 screening criteria. Further assessment, management or remediation not warranted.

ID	AEC	Source	COPC	Exposure Pathway	Receptor	Outcome
AEC12	Existing horse pen (~100m^2 and ~0.5m depth)	Tick and lice treatment of horses	Pesticides, metals, asbestos, microbes	Dermal Contact Soil Ingestion Dust Inhalation Direct Uptake Aesthetics	Residents Intrusive Workers Terrestrial Ecosystems	Field and analytical results for soil below Tier 1 screening criteria. Further assessment, management or remediation not warranted.
AEC13	Stockpile of construction and demolition rubble covered with vegetation (stockpile 1) (~50m^3)	Uncontrolled filling and stockpiling Fibrous asbestos / asbestos fines in surface soils	Fibrous asbestos / asbestos fines, bonded asbestos	Dermal Contact Dust Inhalation Aesthetics	Residents Intrusive Workers	Field and analytical results for soil exceeds Tier 1 screening criteria for friable asbestos / asbestos fines and bonded asbestos at sampling point TP18. Further assessment, management or remediation considered warranted.
AEC14	Wooden slab footprint area (~30m^2 and ~0.5m height)	Uncontrolled filling	Hydrocarbons, PAH, pesticides, metals, asbestos	Dermal Contact Soil Ingestion Dust Inhalation Direct Uptake Aesthetics Management Limits	Residents Intrusive Workers Terrestrial Ecosystems	Field and analytical results for soil below Tier 1 screening criteria. Further assessment, management or remediation not warranted.

ID	AEC	Source	COPC	Exposure Pathway	Receptor	Outcome
AEC15	Stockpile of demolition waste covered with vegetation (stockpile 2) (~120m^3)	Items of waste	--	Aesthetics	Residents	Presence of large items of waste across the stockpile present an aesthetics risk. Further assessment, management or remediation considered warranted.
AEC16	Residential building 2 driveway (~60m long and ~0.5m depth)	Uncontrolled filling	Hydrocarbons, PAH, pesticides, PCB, metals, asbestos	Dermal Contact Soil Ingestion Dust Inhalation Direct Uptake Aesthetics Management Limits	Residents Intrusive Workers Terrestrial Ecosystems	Not assessed, to be assessed post-demolition
AEC17	Footprint of residential building 2 (~950m^2 and ~0.5m depth)	Uncontrolled filling Termite treatment Use of hazardous building materials	Hydrocarbons, pesticides, PCB, metals, asbestos	Dermal Contact Soil Ingestion Dust Inhalation Direct Uptake Aesthetics Management Limits	Residents Intrusive Workers Terrestrial Ecosystems	Not assessed, to be assessed post-demolition
AEC18	Items of household waste comprising bathtubs filled with soil x 2 (~10m^2 and ~0.5m depth)	Uncontrolled filling	Pesticides, metals, asbestos	Dermal Contact Soil Ingestion Dust Inhalation Direct Uptake Aesthetics	Residents Intrusive Workers Terrestrial Ecosystems	Field and analytical results for soil below Tier 1 screening criteria. Further assessment, management or remediation not warranted. However, the bathtubs need to be removed.

ID	AEC	Source	COPC	Exposure Pathway	Receptor	Outcome
AEC19	Septic tank 1 (~10m^2)	Septic waste	Hydrocarbons, pathogens, metals, asbestos	Dermal Contact Soil Ingestion Dust Inhalation Direct Uptake Aesthetics Management Limits	Residents Terrestrial Ecosystems	Not assessed, to be validated following septic tank removal.
AEC20	Footprint of historical building 2 from 1978-1998 (~50m^2 and ~0.5m depth)	Bonded asbestos in surface soils and at depth down to 0.3m below ground level	Bonded asbestos	Dust Inhalation	Residents	Field and analytical results for soil exceeds Tier 1 screening criteria for bonded asbestos in surface soils at sampling point TP25. Further assessment, management or remediation considered warranted.
AEC21	Disturbed area (~200m^2 and ~0.5m depth)	Uncontrolled filling	Hydrocarbons, PAH, pesticides, PCB, metals, asbestos	Dermal contact Soil Ingestion Dust inhalation Direct Uptake Aesthetics Management Limits	Residents Intrusive Workers Terrestrial Ecosystems	Field and analytical results for soil below Tier 1 screening criteria. Further assessment, management or remediation not warranted.
AEC22	Footprint of former northern garden bed from 2009-2021 (~350m^2 and ~1.0m depth)	Uncontrolled filling	Hydrocarbons, PAH, pesticides, metals, asbestos	Dermal contact Soil Ingestion Dust inhalation Direct Uptake Aesthetics Management Limits	Residents Intrusive Workers Terrestrial Ecosystems	Field and analytical results for soil below Tier 1 screening criteria. Further assessment, management or remediation not warranted.

ID	AEC	Source	COPC	Exposure Pathway	Receptor	Outcome
AEC23	Footprint of collapsed northern shed (~150m^2 and ~0.5m depth)	Uncontrolled filling, demolitions and stockpiling Termite treatment Use of hazardous building materials	Hydrocarbons, PAH, pesticides, PCB, metals, asbestos	Dermal contact Soil Ingestion Dust inhalation Direct Uptake Aesthetics Management Limits	Residents Intrusive Workers Terrestrial Ecosystems	Not assessed, to be assessed post-demolition.
AEC24	Footprint of former pigsty (~1,850m^2 and ~0.5m depth)	Uncontrolled filling, demolitions and stockpiling Termite treatment Use of hazardous building materials Former market gardens Former pigsty use	Asbestos, microbes	Dermal contact Soil Ingestion Dust inhalation Aesthetics	Residents Intrusive Workers Terrestrial Ecosystems	Field and analytical results for soil exceeds Tier 1 screening criteria for friable asbestos at sampling point TP36, bonded asbestos in surface soils at sampling points TP33, TP35, TP36, TP37, TP38 and TP39, faecal coliforms at sampling point TP31 and items of waste including waste from partially-collapsed buildings presenting an aesthetics risk. Further assessment, management or remediation considered warranted. Assessment of building footprints to be conducted post-demolition.

ID	AEC	Source	COPC	Exposure Pathway	Receptor	Outcome
AEC25	Footprint of historical building 3 from 1978-1986 (~2,400m^2 and ~0.5m depth)	Bonded asbestos in surface soils	Bonded asbestos	Dust Inhalation	Residents Intrusive Workers	Field and analytical results for soil exceeds Tier 1 screening criteria for bonded asbestos in surface soils at sampling point TP44. Further assessment, management or remediation considered warranted.
AEC26	Footprint of unused car (~50m^2 and ~0.5m depth)	Uncontrolled leaking and spills	Hydrocarbons, PAH, metals, asbestos	Dermal contact Soil Ingestion Dust inhalation Direct Uptake Aesthetics Management Limits	Residents Intrusive Workers Terrestrial Ecosystems	Field and analytical results for soil below Tier 1 screening criteria. Further assessment, management or remediation not warranted.
AEC27	Footprint of former road to the south from 2009-2013 (~200m long and ~0.5m depth)	Uncontrolled filling	Hydrocarbons, PAH, pesticides, PCB, metals, asbestos	Dermal contact Soil Ingestion Dust inhalation Direct Uptake Aesthetics Management limits	Residents Intrusive Workers Terrestrial Ecosystems	Field and analytical results for soil below Tier 1 screening criteria. Further assessment, management or remediation not warranted.

ID	AEC	Source	COPC	Exposure Pathway	Receptor	Outcome
AEC28	Stockpile of soil comprising metal wastes, concrete and brick and covered in vegetation (stockpile 3) (~175m^3)	Bonded asbestos fragments observed at surface and base of stockpile Items of waste	Bonded asbestos	Dust Inhalation Aesthetics	Residents Intrusive Workers	Field and analytical results exceed Tier 1 screening criteria for bonded asbestos in surface soils at sample points TP54 and TP56. Furthermore, items of waste material present an aesthetics risk. Further assessment, management or remediation considered warranted.
AEC29	4WD area comprising of a depression (~550m^2 and ~0.5m depth)	Uncontrolled filling	Hydrocarbons, PAH, pesticides, PCB, metals, asbestos	Dermal contact Soil Ingestion Dust inhalation Direct Uptake Aesthetics Management Limits	Residents Intrusive Workers Terrestrial Ecosystems	Field and analytical results for soil below Tier 1 screening criteria. Further assessment, management or remediation not warranted.
AEC30	Items of waste including piled-up wooden planks (~50m^2 and depth of ~0.5m)	Uncontrolled filling and stockpiling	Hydrocarbons, PAH, PCB, metals, asbestos	Dermal contact Soil Ingestion Dust inhalation Direct Uptake Aesthetics Management Limits	Residents Intrusive Workers Terrestrial Ecosystems	Field and analytical results for soil below Tier 1 screening criteria. Further assessment, management or remediation not warranted.

ID	AEC	Source	COPC	Exposure Pathway	Receptor	Outcome
AEC31	Footprint of entire site (~1.6 hectares and depth of ~0.5m)	Former market garden use Uncontrolled filling	Hydrocarbons, PAH, pesticides, PCB, metals, asbestos	Dermal contact Soil Ingestion Dust inhalation Direct Uptake Aesthetics Management Limits	Residents Intrusive Workers Terrestrial Ecosystems	Field and analytical results for soil below Tier 1 screening criteria. Further assessment, management or remediation not warranted.
AEC32	Septic tank 2 (~10m^2)	Septic waste	Hydrocarbons, pathogens, metals, asbestos	Dermal contact Soil Ingestion Dust inhalation Direct uptake Aesthetics Management Limits	Residents Intrusive Workers Terrestrial Ecosystems	Not assessed, to be assessed following septic tank removal.

15. Duty to Report Contamination

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

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

> Anyone whose activities have contaminated land; or

> An owner of land that has been contaminated.

CS understands the client is the owner and/or occupier of the land that the site is located on. The scope of work CS was engaged to undertake for this investigation, did not include an assessment of site data against relevant duty to report notification triggers in NSW EPA (2015). CS advises that if:

> The client has undertaken activities on the site that may have contaminated the land; or

> The client is the owner of the land that may have been contaminated;

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

16. Conclusions and Recommendations

Based on CS' assessment of desktop review information, fieldwork observations and laboratory analytical data, CS makes the following conclusions:

- There was a potential for contamination to be present at the site, arising from past land use activities, specifically:
  - The presence of bonded asbestos within AEC06, AEC08, AEC20, AEC24, AEC25 and AEC28;
  - The presence of friable asbestos within AEC13 and AEC24; and
  - Elevated concentrations of microbes in AEC24.
- The presence of large amount of construction and demolition waste as well as the presence of disused cars presents an aesthetics impact;
- There are data gaps associated with the contamination status of soils underneath the buildings and driveways onsite as well as the presence of septic tanks onsite; and
- The site is not yet considered to be suitable for land use scenario comprising residential with minimal opportunities for soil access including dwellings with fully and permanently paved yard space such as high rise buildings and flats.

Specific assumptions applicable to that land use scenario are presented in Section 8 of this report.

CS recommends that:

- A remedial action plan (RAP) be prepared by a suitably experienced environmental consultant to address the identified contamination risks onsite and to address the identified data gaps onsite;
- The RAP should:
  - Include a methodology to remediate/manage identified contamination onsite;
  - Include a methodology for undertaking a supplementary contamination assessment (SCA) to assess the contamination risks associated with the identified data gaps onsite; and
  - Include conceptual remedial strategies to address and remediate identified contamination onsite associated with the data gap.
- A site remediation and validation report should be prepared at the completion of all management and remedial works as outlined in the RAP and the SCA, confirming that the site has been made suitable for the proposed land use scenario.

This report must be read in conjunction with the ***Information About This Report*** page at the front of this report.

17. References

AS 4482.1-2005 'Guide to the investigation and sampling of sites with potentially contaminated soil, Part 1: Non-volatile and semi-volatile compounds' dated November 2005.

Berkman D A 1989, 'Field Geologist's Manual, Third Edition' published by The Australasian Institute of Mining and Metallurgy.

CCME 2008a, 'Canada-wide standard for petroleum hydrocarbons (PHC) in soil: Scientific Rationale Supporting Technical Document', ref: PN 1399, dated January 2008.

CCME 2008b, 'Canada-wide standard for petroleum hydrocarbons (PHC) in soil, technical supplement' dated January 2008.

CRC CARE 2017, 'Risk based management and remediation guidance for benzo(a)pyrene', CRC CARE Technical Report No. 39, dated March 2017.

DUAP 2021, 'Managing Land Contamination Planning Guidelines – Resilience and Hazards', dated June 2021, ref: 98/66.

Friebel, E & Nadebaum, P 2011, 'Health screening levels for petroleum hydrocarbons in soil and groundwater. Part 2: Application document', CRC CARE Technical Report No. 10.

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

McNally 2009, 'Soil and groundwater salinity in the shales of western Sydney', IAH NSW Groundwater in the Sydney Basin Symposium, Sydney, NSW, 4-5 August 2009.

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

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

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

National Environment Protection Council (NEPC) 2013e, 'Schedule B(7) Guideline on Derivation of Health-Based Investigation Levels', National Environment Protection (Assessment of Site Contamination) Measure (NEPM) as amended in May 2013.

NSW DEC 2005, 'Contaminated Sites: Guidelines for Assessing Former Orchards and Market Gardens', dated June 2005, ref: DEC 2005/195.

NSW DECCW 2010, 'Vapour Intrusion: Technical Practice Note', dated September 2010, ref: DECCW 2010/774.

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

NSW EPA 1997, 'Polychlorinated Biphenyl Chemical Control Order' dated 20 June 1997.

NSW EPA 2000, 'Environmental Guidelines: Use and Disposal of Biosolids Products' dated December 2000.

NSW EPA 2004, 'Chemical Control Order in Relation to Scheduled Chemical Wastes'.

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

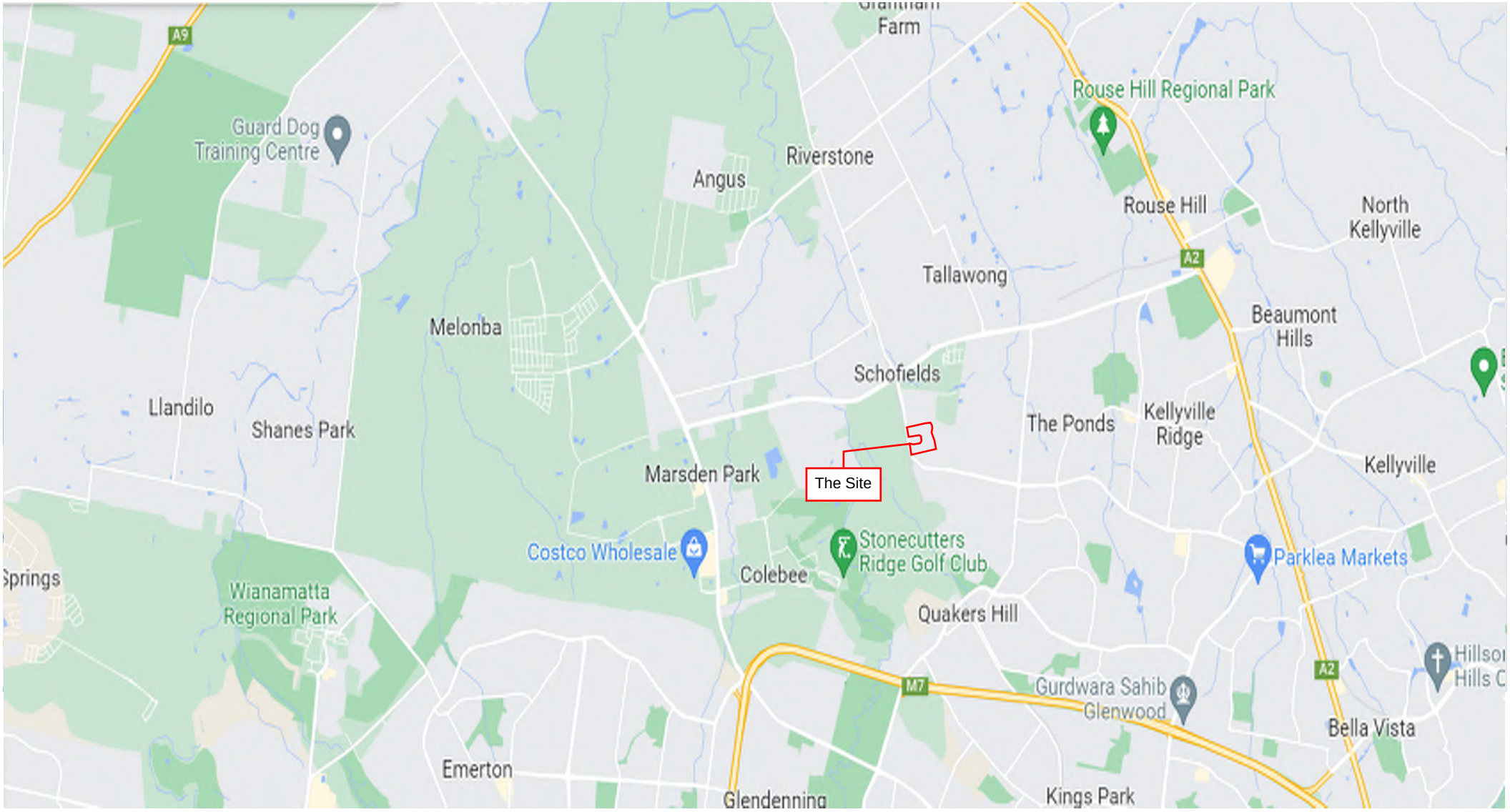
NSW EPA 2017, 'Contaminated Land Management, Guidelines for the NSW Site Auditor Scheme (3rd edition)', dated October 2017, ref: EPA 2017P0269.

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

VIC EPA 2009 'Industrial Waste Resource Guidelines' dated June 2009, ref: IWRG702.

WA DOH 2009, 'Guidelines for the Assessment, Remediation and Management of Asbestos Contaminated Sites in Western Australia', dated May 2009.

FIGURES



LEGEND:

Approximate Site Boundary

N

Construction Sciences

2/4 Kellogg Road
ROOTY HILL NSW 2766
Tel: (02) 8646 2000
Fax: (02) 8646 2025
Web: www.constructionsciences.net

Scale: 0m 50m 100m	Client: Provincial Investments Pty Ltd
Date: 3 July 2022	Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Drawn By: JN	Location: 249-271 Railway Terrace, Schofields NSW 2762
Drawing No: Figure 1	Sheet: 1 of 1 — Site Locality

LEGEND:

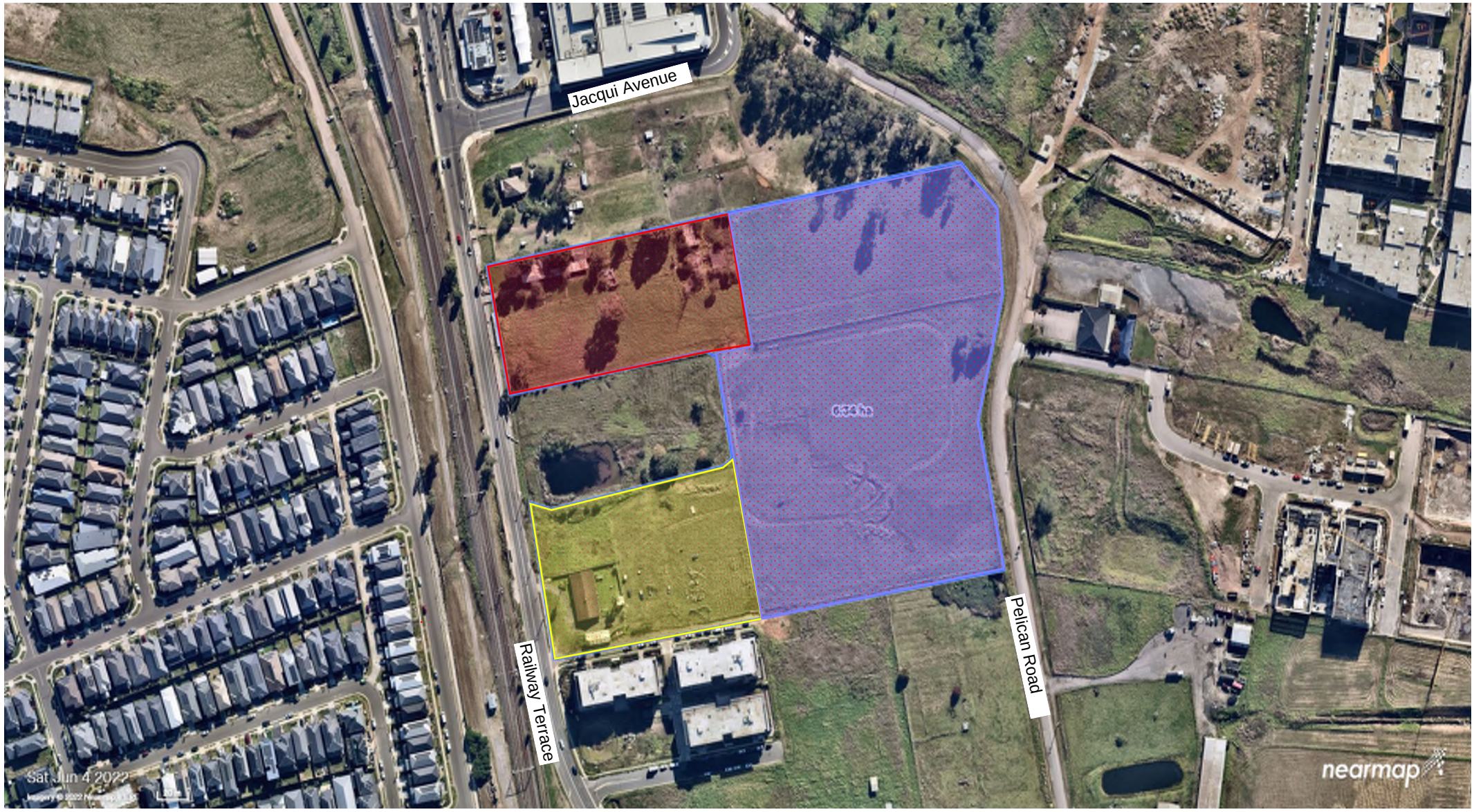
- Approximate Site Boundary
- Site Access Gates
- Onsite Buildings
- Onsite Driveways
- Dam

Construction Sciences

2/4 Kellogg Road
ROOTY HILL NSW 2766
Tel: (02) 8646 2000
Fax: (02) 8646 2025
Web: www.constructionsciences.net

Scale: 0m 50m 100m	Client: Provincial Investments Pty Ltd
Date: 15 July 2022	Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Drawn By: JN	Location: 249-271 Railway Terrace, Schofields NSW 2762
Drawing No: Figure 2	Sheet: 1 of 1

Site Layout Plan



LEGEND:

- Area 1 (Figure 4a)
- Area 2 (Figure 4b)
- Area 3 (Figure 4c)

N

Construction Sciences

2/4 Kellogg Road
ROOTY HILL NSW 2766
Tel: (02) 8646 2000
Fax: (02) 8646 2025
Web: www.constructionsciences.net

Scale: 0m 50m 100m	Client: Provincial Investments Pty Ltd
Date: 15 July 2022	Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Drawn By: JN	Location: 249-271 Railway Terrace, Schofields NSW 2762
Drawing No: Figure 3	Sheet: 1 of 1

Sub-divided Areas Plan

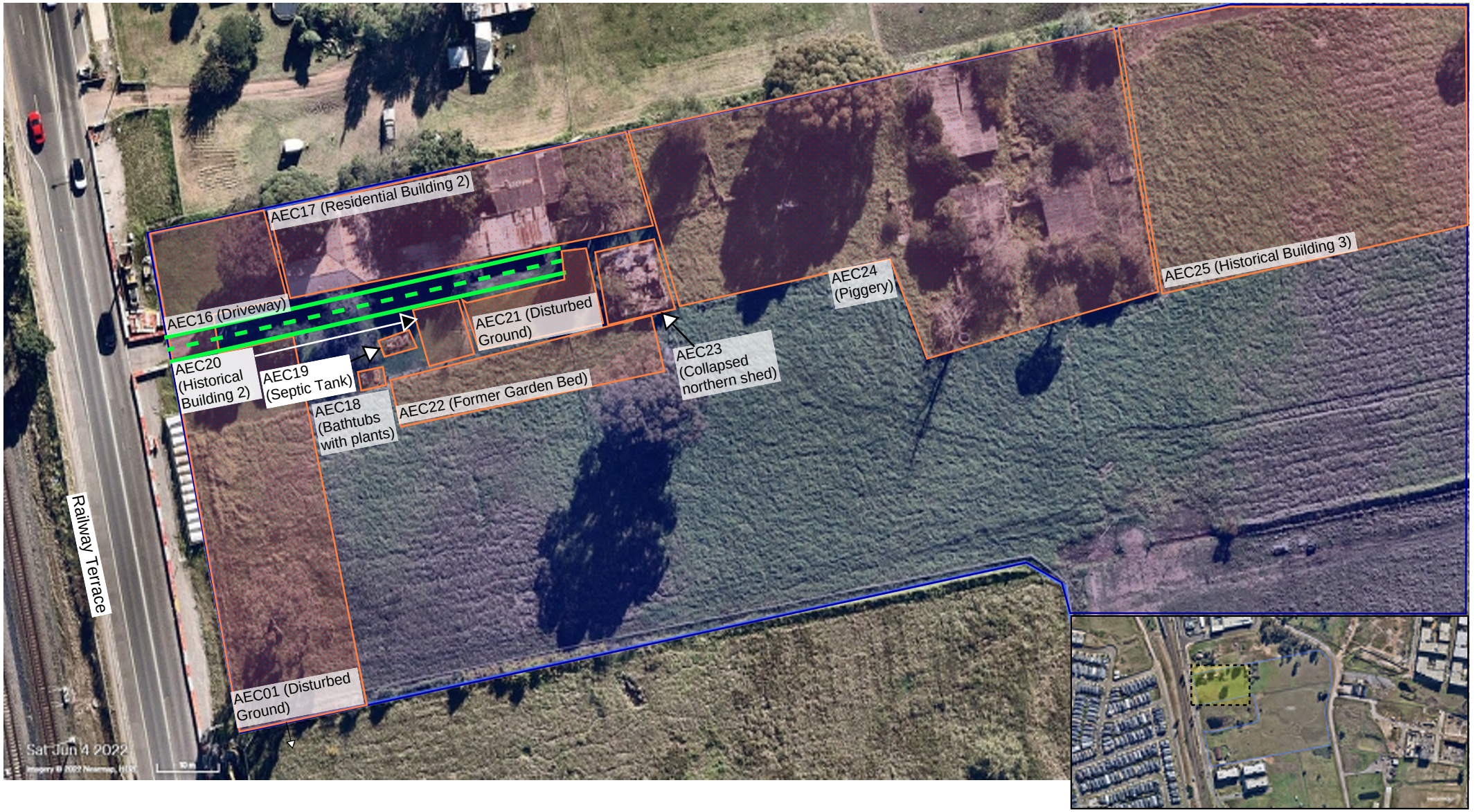
LEGEND:

- Approximate Site Boundary
- Areas of Environmental Concern (AEC)
- Driveway (AEC)
- AEC30 (whole paddock)

Construction Sciences

2/4 Kellogg Road
ROOTY HILL NSW 2766
Tel: (02) 8646 2000
Fax: (02) 8646 2025
Web: www.constructionsciences.net

Scale: 0m 10m 20m	Client: Provincial Investments Pty Ltd
Date: 15 July 2022	Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Drawn By: JN	Location: 249-271 Railway Terrace, Schofields NSW 2762
Drawing No: Figure 4a	Sheet: 1 of 1 — Southwest Paddock



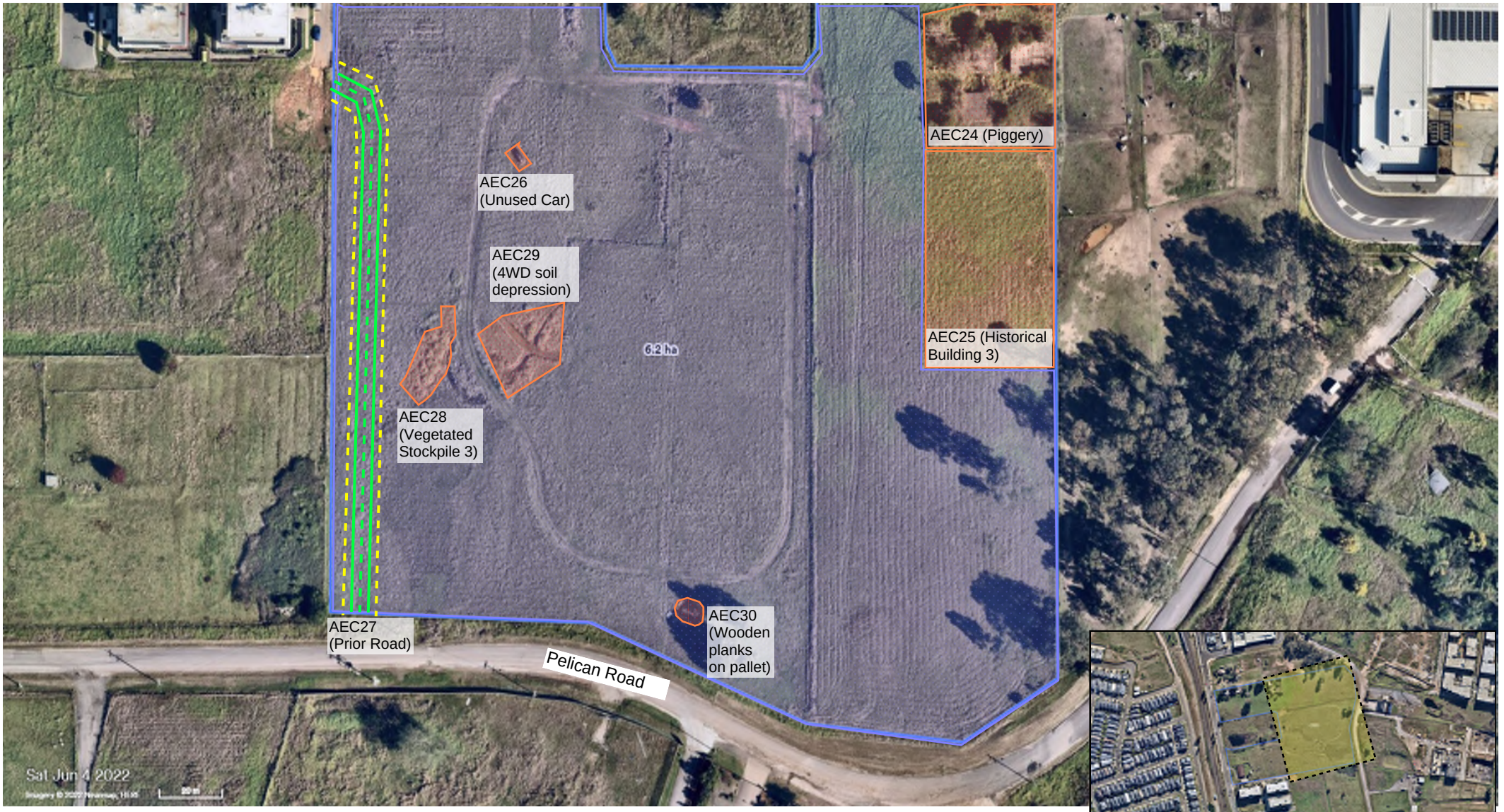
LEGEND:

- Approximate Site Boundary
- Areas of Environmental Concern (AEC)
- Driveway (AEC)
- AEC31 (whole paddock)

Construction Sciences

2/4 Kellogg Road
ROOTY HILL NSW 2766
Tel: (02) 8646 2000
Fax: (02) 8646 2025
Web: www.constructionsciences.net

Scale: 0m 10m 20m	Client: Provincial Investments Pty Ltd
Date: 15 July 2022	Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Drawn By: JN	Location: 249-271 Railway Terrace, Schofields NSW 2762
Drawing No: Figure 4b	Sheet: 1 of 1 — Northwest Paddock

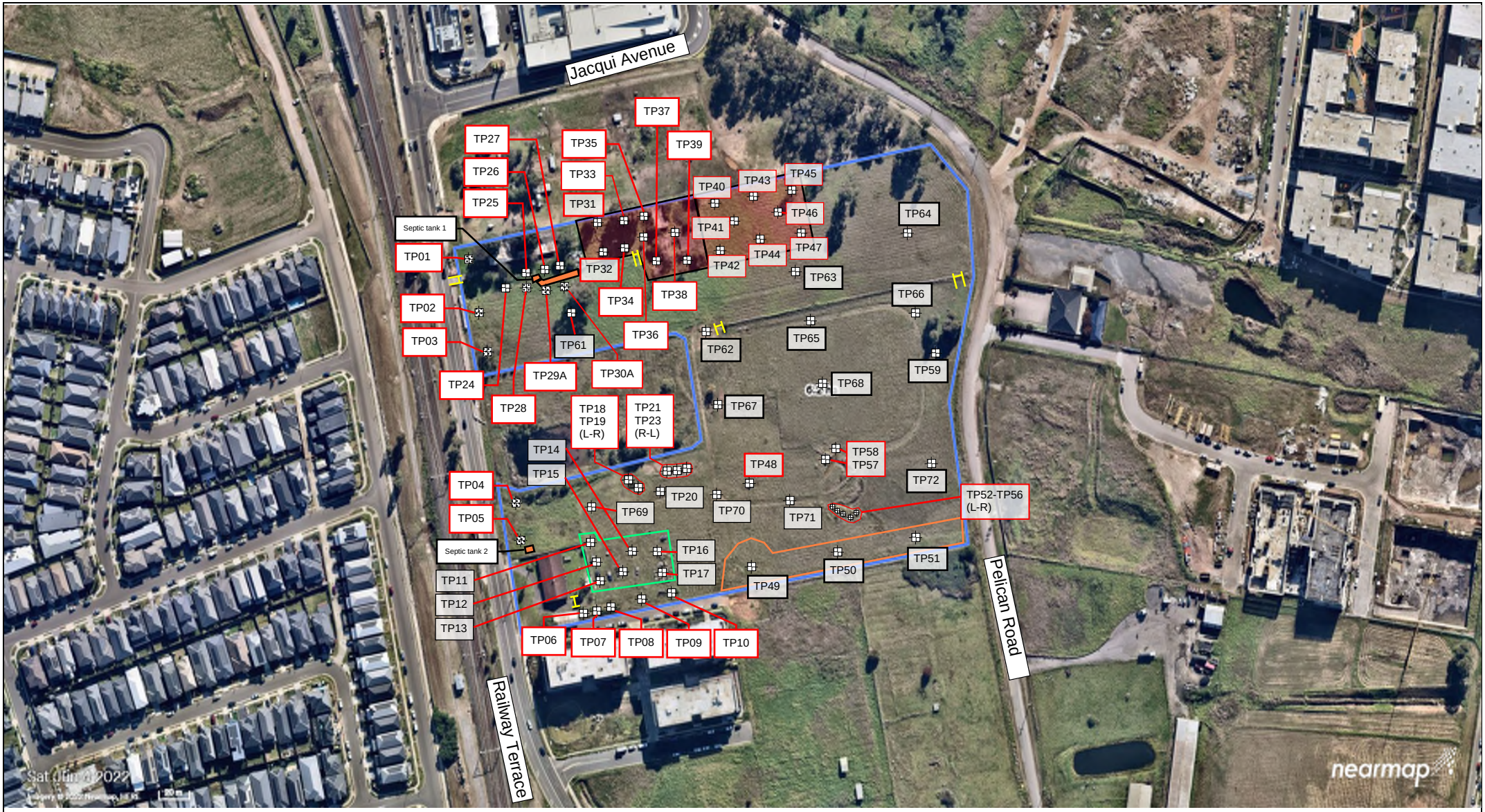


LEGEND:

- Approximate Site Boundary
- Areas of Environmental Concern (AEC)
- AEC31 (whole paddock)
- Driveway (AEC)

Construction Sciences
2/4 Kellogg Road
ROOTY HILL NSW 2766
Tel: (02) 8646 2000
Fax: (02) 8646 2025
Web: www.constructionsciences.net

Scale: 0m 20m 40m	Client: Provincial Investments Pty Ltd
Date: 15 July 2022	Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Drawn By: JN	Location: 249-271 Railway Terrace, Schofields NSW 2762
Drawing No: Figure 4c	Sheet: 1 of 1 — Eastern Paddock



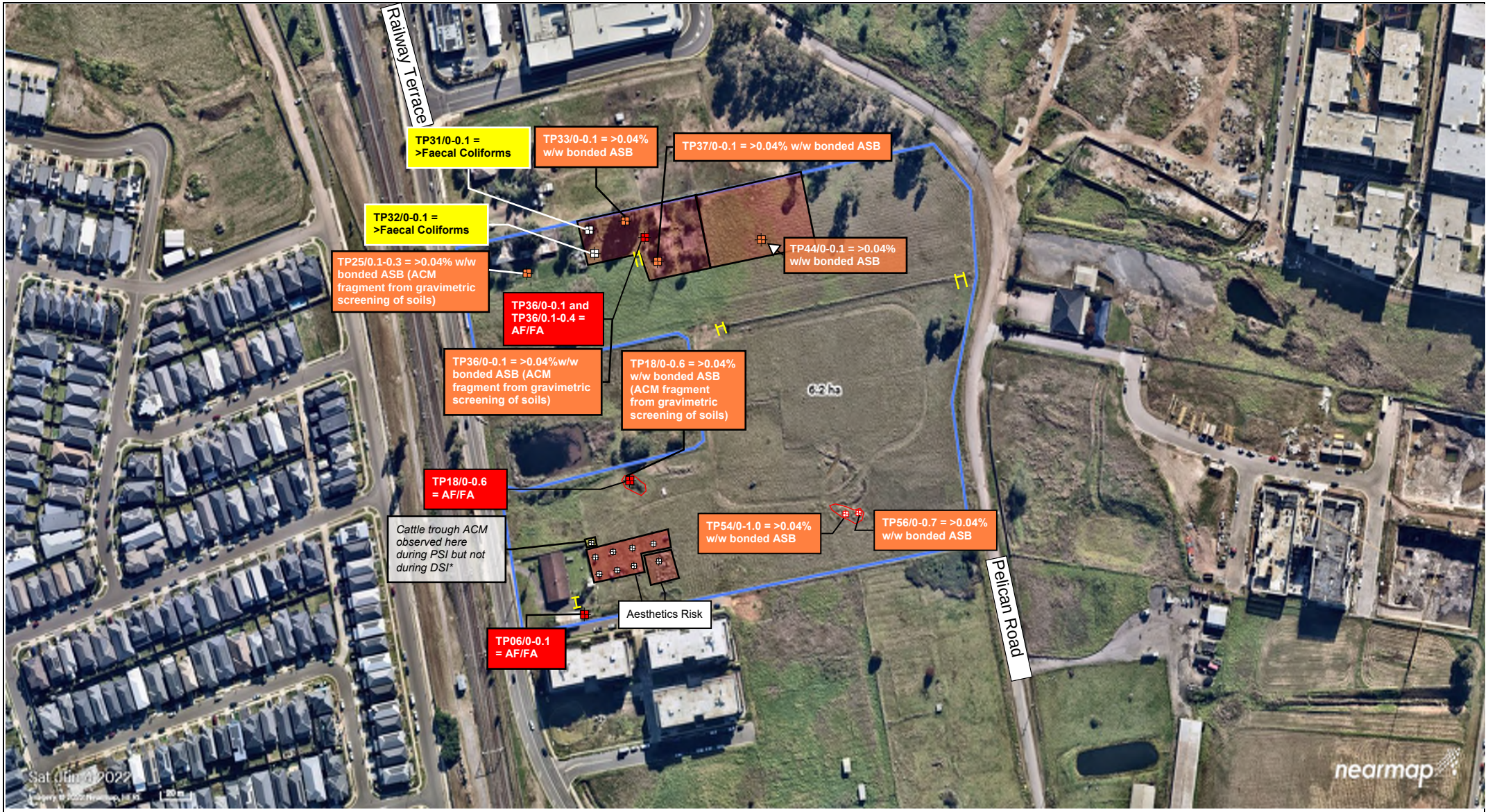
LEGEND:

- Approximate Site Boundary
- Test Pit (0.5m)
- Test Pit (down to 1.0m)

Construction Sciences

2/4 Kellogg Road
ROOTY HILL NSW 2766
Tel: (02) 8646 2000
Fax: (02) 8646 2025
Web: www.constructionsciences.net

Scale: 0m 50m 100m	Client: Provincial Investments Pty Ltd
Date: 10 August 2022	Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Drawn By: JN	Location: 249-271 Railway Terrace, Schofields NSW 2762
Drawing No: Figure 5	Sheet: 1 of 1 — Site Sampling Plan



LEGEND:

- Approximate Site Boundary
- TP AF / FA asbestos exceedances
- TP nominated pathogen exceedances
- TP bonded asbestos exceedances
- TP where PACM was collected

Construction Sciences

2/4 Kellogg Road
ROOTY HILL NSW 2766
Tel: (02) 8646 2000
Fax: (02) 8646 2025
Web: www.constructionsciences.net

Scale: 0m 50m 100m	Client: Provincial Investments Pty Ltd
Date: 5 October 2022	Project: Site Walkover and Fieldwork Stage
Drawn By: JN	Location: 249-271 Railway Terrace, Schofields NSW 2762
Drawing No: Figure 6	Sheet: 1 of 1 — Impacted Sampling Locations Plan

TABLES

LR01 - Soil Results + QA/QC

Lab Report #	Field ID	AEC ID	Date	Matrix	Asbestos: Asbestos (<2mm AF/FA)	Asbestos (<7mm AF/FA)	Asbestos (>2mm <7mm AF/FA)	Asbestos (ACM >7mm) Estimation	Asbestos fibres	Asbestos fibres (PACM)	Mass: Mass ACM	Mass asbestos in AF	Mass Asbestos in FA & AF	weight of sample	Particle Size: +75µm	Clay in soils <2um	Passing 75µm	Microbes: Escherichia coli	Faecal Coliforms
					%w/w	%	%w/w	%w/w	Detect	No unit	g	g	g	g	%	%	%	CFU/100mL	CFU/100mL
EQL					0.001	0.001	0.001	0.01	0	0	0.001	0.00001	0.00001	1	1	0.1	1	1	1
10791.EV.P.323 Site-Specific EIL																			
NSW EPA 2000 Table 3 Stabilisation Grade A																		100	1000
CRC Care HSL-C Recreational / Open Space																			
NEPM 2013 Table 1A(1) HILs Res B Soil																			
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Clay																			
NEPM 2013 Table 1B(5) Generic EIL - Urban Res & Public Open Space																			
NEPM 2013 Table 1B(6) ESLs for Areas of Ecological Significance, Fine Soil																			
NEPM 2013 Table 1B(6) ESLs for Urban Res, Fine Soil																			
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Fine Soil																			
NEPM 2013 Table 7 Res B HSL for Asbestos in Soil					0.001	0.001	0.001		Detected	Detected									
SE235945	TP01/0-0.1		18/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	567	-	-	-	-	-
SE235945	TP01/0.1-0.3		18/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	845	-	-	-	-	-
SE235945	TP02/0-0.1		18/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	683	-	-	-	-	-
SE235945	TP02/0.1-0.3		18/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP02/0.1-0.3 bag		18/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	655	-	-	-	-	-
SE235945	TP03/0-0.0.1		18/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	612	-	-	-	-	-
SE235945	TP03/0.1-0.3		18/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	771	-	-	-	-	-
SE235945	TP04/0-0.1		22/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	720	-	-	-	-	-
SE235945	TP04/0-0.2		22/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP05/0-0.1		22/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	710	-	-	-	-	-
SE235945	TP05/0-0.2		22/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP05/0.1-0.3	AEC01	22/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	690	-	-	-	-	-
SE235945	TP06/0-0.1		22/08/2022	Soil	<0.001	0.011	0.011	0.13	Detected	-	5.94	<0.00001	0.0768	691	-	-	-	-	-
SE235945	TP06/0.1-0.3		22/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP06/0.1-0.4	AEC06	22/08/2022	Soil	<0.001	0.001	0.001	<0.01	0	-	<0.001	<0.00001	0.0071	658	-	-	-	-	-
SE235945	TP07/0.1-0.3		22/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	648	-	-	-	-	-
SE235945	TP08/0-0.1		22/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	665	-	-	-	-	-
SE235945	TP08/0.1-0.3	AEC07	22/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP09/0-0.1		22/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	570	-	-	-	-	-
SE235945	TP09/0-0.2	AEC11	22/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP10/0.0-0.1		22/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	679	-	-	-	-	-
SE235945	TP10/0.0-0.2	AEC12	22/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP11/0-0.1		22/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	559	-	-	-	-	-
SE235945	TP11/0-0.2		22/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP11/0.3-0.5	AEC08	22/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	22	32	78	-	-
SE235945	TP12/0-0.1		22/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	575	-	-	-	-	-
SE235945	TP12/0-0.2		22/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP13/0-0.1		22/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	713	-	-	-	-	-
SE235945	TP13/0-0.2		22/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP14/0-0.1		22/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	570	-	-	-	-	-
SE235945	TP14/0-0.2		22/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP15/0-0.1		22/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	550	-	-	-	-	-
SE235945	TP15/0-0.2		22/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP16/0-0.1		22/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	586	-	-	-	-	-
SE235945	TP16/0-0.2		22/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP17/0-0.1	AEC09 /	22/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	604	-	-	-	-	-
SE235945	TP17/0.1-0.25	AEC10	22/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP18/0-0.6		23/08/2022	Soil	<0.001	0.015	0.015	<0.01	Detected	-	<0.001	<0.00001	0.0778	502	-	-	-	-	-
SE235945	TP18/0.4-0.6		23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP19/0.4-0.6	AEC13	23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP20/0-0.1		22/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	591	-	-	-	-	-
SE235945	TP20/0.1-0.3	AEC14	22/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP21/0-0.9		23/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	427	-	-	-	-	-
SE235945	TP21/0.7-0.9		23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP22/0-0.7		23/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	422	-	-	-	-	-
SE235945	TP22/0.6-0.7		23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP23/0.3-0.5	AEC15	23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP24/0-0.1		18/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	703	-	-	-	-	-
SE235945	TP24/0.15-0.35		18/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP24/0.1-0.35	AEC18	18/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	831	-	-	-	-	-
SE235945	TP25/0-0.1		22/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	586	-	-	-	-	-
SE235945	TP25/0-0.2		22/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP25/0.1-0.3	AEC20	22/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	697	-	-	-	-	-
SE235945	TP26/0-0.1		22/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	632	-	-	-	-	-
SE235945	TP26/0-0.2		22/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP26/0.1-0.3		22/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	688	-	-	-	-	-
SE235945	TP27/0-0.1		18/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	633	-	-	-	-	-
SE235945	TP27/0-0.2	AEC21	18/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP28/0-0.1		18/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	563	-	-	-	-	-
SE235945	TP28/0.1-0.3		18/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP29A/0.0-0.1		19/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	871	-	-	-	-	-
SE235945	TP29A/0.1-0.3		19/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	734	-	-	-	-	-
SE235945	TP30A/0-0.1		19/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	745	-	-	-	-	-
SE235945	TP30A/0.1-0.3		19/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP30A/0.1-0.5	AEC22	19/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	949	-	-	-	-	-
SE235945	TP31/0-0.1		18/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	671	-	-	-	-	-
SE235945	TP31/0.1-0.3		18/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	600	-	-	-	<1	2000
SE235945	TP32/0-0.1		18/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	619	-	-	-	-	-
SE235945	TP32/0.1-0.3		18/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	612	-	-	-	<1	1000
SE235945	TP33/0-0.1		18/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	868	-	-	-	-	-
SE235945	TP33/0.1-0.3		18/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	778	-	-	-	<10	<10
SE235945	TP34/0-0.1		18/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	703	-	-	-	-	-
SE235945	TP34/0.1-0.3		18/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	741	-	-	-	<10	<10
SE235945	TP35/0-0.1		18/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	687	-	-	-	-	-
SE235945	TP35/0.1-0.3		18/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	<10	20
SE235945	TP35/0.1-0.4		18/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	934	-	-	-	-	-
SE235945	TP36/0-0.1		18/08/2022	Soil	<0.001	0.074	0.074	<0.01	Detected	-	<0.001	<0.00001	0.617	836	-	-	-	-	-
SE235945	TP36/0-0.2		18/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	<10	<10
SE235945	TP36/0.1-0.4		18/08/2022	Soil	<0.001	0.027	0.027	0.01	Detected	-	0.704	<0.00001	0.208	778	-	-	-	-	-
SE235945	TP37 0-0.1		19/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	902	-	-	-	-	-
SE235945	TP37/0.1-0.3		19/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	<10	<10
SE235945	TP37/0.1-0.45		19/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	977	-	-	-	-	-
SE235945	TP38/0-0.1		19/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	990	-	-	-	<1	80
SE235945	TP38/0-0.2		19/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP38/0.1-0.4		19/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	1,141	-	-	-	-	-
SE235946	TP39/0-0.2		19/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	<10	<10
SE235945	TP39/0-0.1		19/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	728	-	-	-	-	-
SE235946	TP39/0.1-0.5	AEC24	19/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	681	-	-	-	-	-
SE235946	TP40/0-0.1		19/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	978	-	-	-	-	-
SE235946	TP40/0-0.2		19/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP41/0-0.1		19/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	855	-	-	-	-	-
SE235946	TP41/0-0.2		19/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP41/0.3-0.5		19/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP42/0-0.1		19/08/2022	Soil	<0.001	<0.001	<0.001	0.09	Detected	-	4.85	<0.00001	<0.00001	828	-	-	-	-	-
SE235946	TP42/0-0.2		19/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP43/0-0.1		19/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	772	-	-	-	-	-
SE235946	TP43/0-0.2		19/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP44/0-0.1		19/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	688	-	-	-	-	-
SE235946	TP44/0-0.2		19/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP44/0.1-0.4		19/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	29	12	71	-	-
SE235946	TP45/0-0.1		19/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	896	-	-	-	-	-
SE235946	TP45/0-0.2		19/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP46/0-0.1		19/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	742	-	-	-	-	-
SE235946	TP46/0-0.2		19/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP47/0-0.1	AEC25	19/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	591	-	-	-	-	-
SE235946	TP48/0-0.1		23/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	613	-	-	-	-	-
SE235946	TP48/0.1-0.3	AEC26	23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP49/0-0.1		23/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	570	-	-	-	-	-
SE235946	TP49/0.1-0.3		23/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	562	-	-	-	-	-
SE235946	TP50/0-0.1		23/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	525	-	-	-	-	-
SE235946	TP50/0-0.2		23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP50/0.2-0.4		23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	13	22	87	-	-
SE235946	TP51/0-0.1		23/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	330	-	-	-	-	-
SE235946	TP51/0-0.2	AEC27	23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP52/0-0.5		23/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	630	-	-	-	-	-
SE235946	TP52/0.3-0.5		23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP53/0.5-0.7		23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP54/0-0.1		23/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	567	-	-	-	-	-
SE235946	TP54/0.8-1.0		23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP55/0.7-0.9		23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP56/0-0.7		23/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	500	-	-	-	-	-
SE235946	TP56/0.5-0.7	AEC28	23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP57/0-0.1		23/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	429	-	-	-	-	-
SE235946	TP57/0.1-0.3		23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP58/0-0.1		23/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	544	-	-	-	-	-
SE235946	TP58/0-0.2	AEC29	23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP59/0-0.1		23/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	574	-	-	-	-	-
SE235946	TP59/0.1-0.3	AEC30	23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP61/0-0.1		23/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	762	-	-	-	-	-
SE235946	TP61/0-0.2		23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP61/0.1-0.2		23/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	892	-	-	-	-	-
SE235946	TP62/0-0.1		23/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	749	-	-	-	-	-
SE235946	TP62/0-0.2		23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP63/0-0.1		23/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	719	-	-	-	-	-
SE235946	TP63/0-0.2		23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP64/0-0.1		23/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	743	-	-	-	-	-
SE235946	TP64/0.1-0.3		23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP65/0-0.1		23/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	586	-	-	-	-	-
SE235946	TP65/0-0.2		23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP66/0-0.1		23/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	639	-	-	-	-	-
SE235946	TP66/0-0.2		23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP67/0-0.1		23/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	609	-	-	-	-	-
SE235946	TP67/0.1-0.3		23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP68/0-0.1		23/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	649	-	-	-	-	-
SE235946	TP68/0-0.2		23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP69/0-0.1		23/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	586	-	-	-	-	-
SE235946	TP69/0.1-0.3		23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP70/0-0.1		23/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	636	-	-	-	-	-
SE235946	TP70/0.1-0.3		23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP71/0-0.1		23/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	747	-	-	-	-	-
SE235946	TP71/0-0.2		23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP72/0-0.1		23/08/2022	Soil	<0.001	<0.001	<0.001	<0.01	0	-	<0.001	<0.00001	<0.00001	482	-	-	-	-	-
SE235946	TP72/0-0.2	AEC31	23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP36/0-0.1/PACM02	AEC24	18/08/2022	Other	-	-	-	-	-	Non-Detect	-	-	-	-	-	-	-	-	-
SE235946	TP33/0-0.1/PACM04	AEC24	18/08/2022	Other	-	-	-	-	-	Detected	-	-	-	-	-	-	-	-	-
SE235946	TP25/0.1-0.3/PACM13	AEC20	22/08/2022	Other	-	-	-	-	-	Detected	-	-	-	-	-	-	-	-	-
SE235946	TP18/0-0.6/PACM14	AEC13	23/08/2022	Other	-	-	-	-	-	Detected	-	-	-	-	-	-	-	-	-
SE235946	DUP01	AEC01	18/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2230603	DUP01A	AEC01	18/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	DUP02	AEC24	18/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2230603	DUP02A	AEC24	18/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	DUP03	AEC25	19/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2230603	DUP03A	AEC25	19/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2230603	DUP06A	AEC26	20/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	DUP07	AEC15	23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2230603	DUP07A	AEC15	23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	Trip Blank	-	18/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	Trip Blank	-	19/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	Trip Blank	-	22/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	Trip Blank	-	23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	Trip Spike	-	18/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	Trip Spike	-	19/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	Trip Spike	-	22/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	Trip Spike	-	23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																			
Number of Results					88	88	88	88	88	4	88	88	88	88	3	3	3	9	9
Number of Detects					0	5	5	3	88	4	3	0	5	88	3	3	3	0	3
Minimum Detect					ND	0.001	0.001	0.01	0	0	0.704	ND	0.0071	330	13	12	71	0	0
Maximum Detect					ND	0.074	0.074	0.13	1	1	5.94	ND	0.617	1,141	29	32	87	0	2000
Average Concentration *					0.0005	0.0019	0.0019	0.0074	0.057	0.75	0.13	0.000005	0.011	683	21	22	79	0	775
Median Concentration *					0.0005	0.0005	0.0005	0.005	0	1	0.0005	0.000005	0.000005	675	22	22	78	0	540
Standard Deviation *					0	0.0085	0.0085	0.016	0.23	0.5	0.82	0	0.07	142	8	10	8	0	932
95% UCL (Student's-t) *					0.0005	0.00343	0.00343	0.0103	0.0981	1.338	0.276	0.000005	0.0236	708.4	34.86	38.86	92.19	0	0.000005
% of Detects					0	6	6	3	100	100	3	0	6	100	100	100	100	0	3
% of Non-Detects					100	94	94	97	0	0	97	100	94	0	0	0	0	100	70

Field ID	Date	BTEX: Naphthalene (VOC)	Benzene	Toluene	Ethylbenzene	Xylene (m & p)	Xylene (o)	Xylene Total	Total BTEX	TRH: C6-C10 Fraction (F1)	C6-C10 (F1 minus BTEX)	>C10-C16 Fraction (F2)	>C10-C16 Fraction (F2 minus Naphthalene)	>C16-C34 Fraction (F3)	>C34-C40 Fraction (F4)	>C10-C40 Fraction (Sum)	Halogenated Benzenes: Hexachlorobenzene
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL		0.1	0.1	0.1	0.1	0.2	0.1	0.3	0.6	25	25	25	25	90	120	210	0.1
10791.EV.P.323 Site-Specific EIL		170															
NSW EPA 2000 Table 3 Stabilisation Grade A																	
CRC Care HSL-C Recreational / Open Space		1,900	120	18,000	5,300			15,000		5,100		3,800		5,300	7,400		
NEPM 2013 Table 1A(1) HILs Res B Soil																	15
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Clay		5	0.7 | 1 | 2 | 3	480				110 | 310			50 | 90 | 150 | 290		280				
NEPM 2013 Table 1B(5) Generic EIL - Urban Res & Public Open Space		170															
NEPM 2013 Table 1B(6) ESLs for Areas of Ecological Significance, Fine Soil			10	65	40			1.6			125	25	25				
NEPM 2013 Table 1B(6) ESLs for Urban Res, Fine Soil			65	105	125			45			120	120	120	1,300	5,600		
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Fine Soil										800		1,000		3,500	10,000		
NEPM 2013 Table 7 Res B HSL for Asbestos in Soil																	
TP01/0-0.1	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP01/0.1-0.3	18/08/2022	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.6	<25	<25	<25	<25	<90	<120	<210	<0.1
TP02/0-0.1	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02/0.1-0.3	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02/0.1-0.3 bag	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03/0-0.0.1	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03/0.1-0.3	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04/0-0.1	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04/0-0.2	22/08/2022	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.6	<25	<25	<25	<25	<90	<120	<210	-
TP05/0-0.1	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05/0-0.2	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05/0.1-0.3	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06/0-0.1	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06/0.1-0.3	22/08/2022	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.6	<25	<25	<25	<25	<90	<120	<210	<0.1
TP06/0.1-0.4	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP07/0.1-0.3	22/08/2022	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.6	<25	<25	<25	<25	<90	<120	<210	<0.1
TP08/0-0.1	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP08/0.1-0.3	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP09/0-0.1	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP09/0-0.2	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1
TP10/0.0-0.1	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP10/0.0-0.2	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1
TP11/0-0.1	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP11/0-0.2	22/08/2022	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.6	<25	<25	<25	<25	<90	<120	<210	<0.1
TP11/0.3-0.5	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP12/0-0.1	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP12/0-0.2	22/08/2022	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.6	<25	<25	<25	<25	<90	<120	<210	-
TP13/0-0.1	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP13/0-0.2	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP14/0-0.1	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP14/0-0.2	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP15/0-0.1	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP15/0-0.2	22/08/2022	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.6	<25	<25	<25	<25	<90	<120	<210	-
TP16/0-0.1	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP16/0-0.2	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP17/0-0.1	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP17/0.1-0.25	22/08/2022	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.6	<25	<25	<25	<25	<90	<120	<210	<0.1
TP18/0-0.6	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP18/0.4-0.6	23/08/2022	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.6	<25	<25	<25	<25	<90	<120	<210	<0.1
TP19/0.4-0.6	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP20/0-0.1	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP20/0.1-0.3	22/08/2022	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.6	<25	<25	<25	<25	<90	<120	<210	<0.1
TP21/0-0.9	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP21/0.7-0.9	23/08/2022	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.6	<25	<25	<25	<25	<90	<120	<210	<0.1
TP22/0-0.7	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP22/0.6-0.7	23/08/2022	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.6	<25	<25	<25	<25	<90	<120	<210	-
TP23/0.3-0.5	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP24/0-0.1	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP24/0.15-0.35	18/08/2022	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.6	<25	<25	<25	<25	<90	<120	<210	<0.1
TP24/0.1-0.35	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP25/0-0.1	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP25/0-0.2	22/08/2022	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.6	<25	<25	<25	<25	<90	<120	<210	<0.1
TP25/0.1-0.3	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP26/0-0.1	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP26/0-0.2	22/08/2022	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.6	<25	<25	<25	<25	<90	<120	<210	<0.1
TP26/0.1-0.3	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP27/0-0.1	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP27/0-0.2	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP28/0-0.1	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP28/0.1-0.3	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP29A/0.0-0.1	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP29A/0.1-0.3	19/08/2022	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.6	<25	<25	<25	<25	<90	<120	<210	<0.1
TP30A/0-0.1	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP30A/0.1-0.3	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP30A/0.1-0.5	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP31/0-0.1	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP31/0.1-0.3	18/08/2022	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.6	<25	<25	<25	<25	<90	<120	<210	<0.1
TP32/0-0.1	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP32/0.1-0.3	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP33/0-0.1	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP33/0.1-0.3	18/08/2022	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.6	<25	<25	<25	<25	<90	<120	<210	<0.1
TP34/0-0.1	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP34/0.1-0.3	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP35/0-0.1	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP35/0.1-0.3	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1
TP35/0.1-0.4	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP36/0-0.1	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP36/0-0.2	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP36/0.1-0.4	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP37 0-0.1	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP37/0.1-0.3	19/08/2022	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.6	<25	<25	<25	<25	<90	<120	<210	<0.1
TP37/0.1-0.45	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP38/0-0.1	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP38/0-0.2	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1
TP38/0.1-0.4	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP39/0-0.2	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1
TP39/0-0.1	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP39/0.1-0.5	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP40/0-0.1	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP40/0-0.2	19/08/2022	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.6	<25	<25	<25	<25	<90	<120	<210	<0.1
TP41/0-0.1	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP41/0-0.2	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP41/0.3-0.5	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP42/0-0.1	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP42/0-0.2	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP43/0-0.1	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP43/0-0.2	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP44/0-0.1	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP44/0-0.2	19/08/2022	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.6	<25	<25	<25	<25	<90	<120	<210	<0.1
TP44/0.1-0.4	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP45/0-0.1	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP45/0-0.2	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP46/0-0.1	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP46/0-0.2	19/08/2022	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.6	<25	<25	<25	<25	<90	<120	<210	<0.1
TP47/0-0.1	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP48/0-0.1	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP48/0.1-0.3	23/08/2022	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.6	<25	<25	<25	<25	<90	<120	<210	<0.1
TP49/0-0.1	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP49/0.1-0.3	23/08/2022	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.6	<25	<25	<25	<25	<90	<120	<210	<0.1
TP50/0-0.1	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP50/0-0.2	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP50/0.2-0.4	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP51/0-0.1	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP51/0-0.2	23/08/2022	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.6	<25	<25	<25	<25	<90	<120	<210	<0.1
TP52/0-0.5	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP52/0.3-0.5	23/08/2022	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.6	<25	<25	<25	<25	<90	<120	<210	<0.1
TP53/0.5-0.7	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP54/0-0.1	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP54/0.8-1.0	23/08/2022	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.6	<25	<25	<25	<25	<90	<120	<210	<0.1
TP55/0.7-0.9	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP56/0-0.7	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP56/0.5-0.7	23/08/2022	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.6	<25	<25	<25	<25	<90	<120	<210	<0.1
TP57/0-0.1	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP57/0.1-0.3	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP58/0-0.1	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP58/0-0.2	23/08/2022	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.6	<25	<25	<25	<25	<90	<120	<210	<0.1
TP59/0-0.1	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP59/0.1-0.3	23/08/2022	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.6	<25	<25	<25	<25	<90	<120	<210	<0.1
TP61/0-0.1	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP61/0-0.2	23/08/2022	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.6	<25	<25	<25	<25	<90	<120	<210	<0.1
TP61/0.1-0.2	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP62/0-0.1	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP62/0-0.2	23/08/2022	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.6	<25	<25	<25	<25	<90	<120	<210	<0.1
TP63/0-0.1	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP63/0-0.2	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP64/0-0.1	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP64/0.1-0.3	23/08/2022	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.6	<25	<25	<25	<25	<90	<120	<210	<0.1
TP65/0-0.1	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP65/0-0.2	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1
TP66/0-0.1	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP66/0-0.2	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1
TP67/0-0.1	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP67/0.1-0.3	23/08/2022	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.6	<25	<25	<25	<25	<90	<120	<210	<0.1
TP68/0-0.1	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP68/0-0.2	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1
TP69/0-0.1	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP69/0.1-0.3	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP70/0-0.1	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP70/0.1-0.3	23/08/2022	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.6	<25	<25	<25	<25	<90	<120	<210	<0.1
TP71/0-0.1	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP71/0-0.2	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1
TP72/0-0.1	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP72/0-0.2	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1
TP36/0-0.1/PACM02	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP33/0-0.1/PACM04	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP25/0.1-0.3/PACM13	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP18/0-0.6/PACM14	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DUP01	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DUP01A	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DUP02	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DUP02A	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DUP03	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DUP03A	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DUP06A	20/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DUP07	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DUP07A	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trip Blank	18/08/2022	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.6	-	-	-	-	-	-	-	-
Trip Blank	19/08/2022	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.6	-	-	-	-	-	-	-	-
Trip Blank	22/08/2022	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.6	-	-	-	-	-	-	-	-
Trip Blank	23/08/2022	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.6	-	-	-	-	-	-	-	-
Trip Spike	18/08/2022	-	[101%]	[103%]	[104%]	[104%]	[104%]	-	-	-	-	-	-	-	-	-	-
Trip Spike	19/08/2022	-	[87%]	[97%]	[96%]	[96%]	[97%]	-	-	-	-	-	-	-	-	-	-
Trip Spike	22/08/2022	-	[128%]	[124%]	[121%]	[128%]	[125%]	-	-	-	-	-	-	-	-	-	-
Trip Spike	23/08/2022	-	[85%]	[91%]	[92%]	[92%]	[93%]	-	-	-	-	-	-	-	-	-	-
Number of Results		39	39	39	39	39	39	39	39	35	35	35	35	35	35	35	41
Number of Detects		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minimum Detect		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Detect		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration *		0.05	0.05	0.05	0.05	0.1	0.05	0.15	0.3	12	12	12	12	45	60	105	0.05
Median Concentration *		0.05	0.05	0.05	0.05	0.1	0.05	0.15	0.3	12.5	12.5	12.5	12.5	45	60	105	0.05
Standard Deviation *		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95% UCL (Student's-t) *		0.05	0.05	0.05	0.05	0.1	0.05	0.15	0.3	12.5	12.5	12.5	12.5	45	60	105	0.05
% of Detects		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Non-Detects		100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Field ID	Date	Inorganics: Exchangeable Calcium Percent (filtered)	Exchangeable Magnesium Percent (filtered)	Exchangeable Potassium Percent (filtered)	Exchangeable Sodium Percent (filtered)	% Moisture	Exchangeable Calcium (filtered)	Exchangeable Magnesium (filtered)	Exchangeable Potassium (filtered)	Exchangeable Sodium (filtered)	Cation Exchange Capacity (filtered)	pH (Lab)	Sodium (filtered)	Metals: Arsenic	Cadmium	Calcium (filtered)	Chromium (III+VI)	Copper	Lead	Magnesium (filtered)	Mercury	Nickel	Potassium (filtered)	Zinc
		%	%	%	%	%	meq/100g	meq/100g	meq/100g	meq/100g	meq/100g	-	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL		0.1	0.1	0.1	0.1	1	0.01	0.02	0.01	0.01	0.02	0.1	2	1	0.3	2	0.5	0.5	1	2	0.05	0.5	2	2
10791.EV.P.323 Site-Specific EIL														100			410	200	1110			270		430
NSW EPA 2000 Table 3 Stabilisation Grade A																								
CRC Care HSL-C Recreational / Open Space																								
NEPM 2013 Table 1A(1) HILs Res B Soil														500	150			30,000	1,200		120	1,200		60,000
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Clay																								
NEPM 2013 Table 1B(5) Generic EIL - Urban Res & Public Open Space														100										
NEPM 2013 Table 1B(6) ESLs for Areas of Ecological Significance, Fine Soil																								
NEPM 2013 Table 1B(6) ESLs for Urban Res, Fine Soil																								
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Fine Soil																								
NEPM 2013 Table 7 Res B HSL for Asbestos in Soil																								
TP01/0-0.1	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP01/0.1-0.3	18/08/2022	-	-	-	-	13.7	-	-	-	-	-	-	-	8	<0.3	-	14	17	21	-	0.06	4.4	-	43
TP02/0-0.1	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02/0.1-0.3	18/08/2022	-	-	-	-	18.7	-	-	-	-	-	-	-	7	<0.3	-	14	5.6	23	-	<0.05	3.9	-	30
TP02/0.1-0.3 bag	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03/0-0.0.1	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03/0.1-0.3	18/08/2022	-	-	-	-	19.7	-	-	-	-	-	-	-	9	<0.3	-	22	7.2	23	-	<0.05	4.9	-	31
TP04/0-0.1	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04/0-0.2	22/08/2022	-	-	-	-	27.9	-	-	-	-	-	-	-	11	<0.3	-	16	17	22	-	<0.05	9.8	-	43
TP05/0-0.1	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05/0-0.2	22/08/2022	-	-	-	-	16.7	-	-	-	-	-	-	-	11	<0.3	-	15	17	24	-	<0.05	6.6	-	41
TP05/0.1-0.3	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06/0-0.1	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06/0.1-0.3	22/08/2022	-	-	-	-	22.1	-	-	-	-	-	-	-	16	0.5	-	15	40	35	-	<0.05	13	-	170
TP06/0.1-0.4	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP07/0.1-0.3	22/08/2022	-	-	-	-	22.5	-	-	-	-	-	-	-	8	<0.3	-	12	22	18	-	<0.05	4.7	-	110
TP08/0-0.1	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP08/0.1-0.3	22/08/2022	-	-	-	-	17.7	-	-	-	-	-	-	-	8	<0.3	-	19	15	26	-	<0.05	9.9	-	90
TP09/0-0.1	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP09/0-0.2	22/08/2022	-	-	-	-	17.5	-	-	-	-	-	-	-	9	<0.3	-	20	18	39	-	<0.05	5.2	-	97
TP10/0.0-0.1	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP10/0.0-0.2	22/08/2022	-	-	-	-	14.8	-	-	-	-	-	-	-	10	<0.3	-	21	13	27	-	<0.05	10	-	77
TP11/0-0.1	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP11/0-0.2	22/08/2022	-	-	-	-	19	-	-	-	-	-	-	-	7	<0.3	-	11	15	17	-	<0.05	5.3	-	61
TP11/0.3-0.5	22/08/2022	52.5	40.8	2.4	4.2	17.9	8.4	6.5	0.39	0.68	16	5.8	160	9	<0.3	1,700	17	11	15	790	<0.05	3.9	150	20
TP12/0-0.1	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP12/0-0.2	22/08/2022	-	-	-	-	22.2	-	-	-	-	-	-	-	16	<0.3	-	16	15	32	-	0.07	6.3	-	92
TP13/0-0.1	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP13/0-0.2	22/08/2022	-	-	-	-	14	-	-	-	-	-	-	-	23	<0.3	-	18	18	38	-	<0.05	8.6	-	170
TP14/0-0.1	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP14/0-0.2	22/08/2022	-	-	-	-	14.8	-	-	-	-	-	-	-	11	<0.3	-	19	19	23	-	<0.05	6.3	-	32
TP15/0-0.1	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP15/0-0.2	22/08/2022	-	-	-	-	21.7	-	-	-	-	-	-	-	12	<0.3	-	14	17	25	-	<0.05	5.8	-	100
TP16/0-0.1	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP16/0-0.2	22/08/2022	-	-	-	-	22.6	-	-	-	-	-	-	-	11	<0.3	-	23	17	20	-	<0.05	7.7	-	47
TP17/0-0.1	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP17/0.1-0.25	22/08/2022	-	-	-	-	18	-	-	-	-	-	-	-	10	<0.3	-	15	15	19	-	<0.05	6.2	-	35
TP18/0-0.6	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP18/0.4-0.6	23/08/2022	-	-	-	-	23.2	-	-	-	-	-	-	-	9	0.5	-	13	31	250	-	0.1	9.5	-	160
TP19/0.4-0.6	23/08/2022	-	-	-	-	17.7	-	-	-	-	-	-	-	8	0.5	-	15	27	57	-	0.12	4.5	-	130
TP20/0-0.1	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP20/0.1-0.3	22/08/2022	-	-	-	-	18.4	-	-	-	-	-	-	-	11	<0.3	-	12	12	17	-	<0.05	4.8	-	17
TP21/0-0.9	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP21/0.7-0.9	23/08/2022	-	-	-	-	14.1	-	-	-	-	-	-	-	10	<0.3	-	15	11	21	-	<0.05	5.5	-	32
TP22/0-0.7	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP22/0.6-0.7	23/08/2022	-	-	-	-	13.1	-	-	-	-	-	-	-	9	<0.3	-	16	8.5	19	-	<0.05	5.4	-	33
TP23/0.3-0.5	23/08/2022	-	-	-	-	16.1	-	-	-	-	-	-	-	16	<0.3	-	16	11	20	-	<0.05	4	-	
TP24/0-0.1	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP24/0.15-0.35	18/08/2022	-	-	-	-	17.3	-	-	-	-	-	-	-	7	<0.3	-	13	3.4	14	-	<0.05	2.3	-	11
TP24/0.1-0.35	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP25/0-0.1	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP25/0-0.2	22/08/2022	-	-	-	-	22.8	-	-	-	-	-	-	-	7	<0.3	-	11	11	41	-	<0.05	4.9	-	100
TP25/0.1-0.3	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP26/0-0.1	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP26/0-0.2	22/08/2022	-	-	-	-	18.3	-	-	-	-	-	-	-	7	<0.3	-	15	14	33	-	<0.05	66	-	54
TP26/0.1-0.3	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP27/0-0.1	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP27/0-0.2	18/08/2022	-	-	-	-	16.1	-	-	-	-	-	-	-	9	<0.3	-	17	9.2	54	-	<0.05	4.5	-	98
TP28/0-0.1	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP28/0.1-0.3	18/08/2022	-	-	-	-	22.2	-	-	-	-	-	-	-	9	<0.3	-	17	6	22	-	<0.05	3.1	-	24
TP29A/0.0-0.1	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP29A/0.1-0.3	19/08/2022	-	-	-	-	16.3	-	-	-	-	-	-	-	7	<0.3	-	13	4.5	15	-	<0.05	2.6	-	14
TP30A/0-0.1	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP30A/0.1-0.3	19/08/2022	-	-	-	-	18.7	-	-	-	-	-	-	-	9	<0.3	-	12	6.5	12	-	<0.05	2.3	-	16
TP30A/0.1-0.5	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP31/0-0.1	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP31/0.1-0.3	18/08/2022	-	-	-	-	18.6	-	-	-	-	-	-	-	8	0.5	-	18	40	99	-	0.05	5.9	-	180
TP32/0-0.1	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP32/0.1-0.3	18/08/2022	-	-	-	-	22	-	-	-	-	-	-	-	8	<0.3	-	18	14	35	-	<0.05	5.8	-	91
TP33/0-0.1	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP33/0.1-0.3	18/08/2022	-	-	-	-	14	-	-	-	-	-	-	-	6	<0.3	-	10	34	55	-	<0.05	3.5	-	130
TP34/0-0.1	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP34/0.1-0.3	18/08/2022	-	-	-	-	23.4	-	-	-	-	-	-	-	7	<0.3	-	13	26	50	-	<0.05	3.7	-	66
TP35/0-0.1	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP35/0.1-0.3	18/08/2022	-	-	-	-	20.4	-	-	-	-	-	-	-	4	0.4	-	14	20	94	-	<0.05	12	-	490
TP35/0.1-0.4	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP36/0-0.1	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP36/0-0.2	18/08/2022	-	-	-	-	8.6	-	-	-	-	-	-	-	3	<0.3	-	7.6	10	35	-	<0.05	8.4	-	170
TP36/0.1-0.4	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP37 0-0.1	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP37/0.1-0.3	19/08/2022	-	-	-	-	23.1	-	-	-	-	-	-	-	11	0.6	-	18	50	77	-	<0.05	7.7	-	420
TP37/0.1-0.45	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP38/0-0.1	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP38/0-0.2	19/08/2022	-	-	-	-	31.1	-	-	-	-	-	-	-	8	2.1	-	15	32	160	-	0.16	10	-	490
TP38/0.1-0.4	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP39/0-0.2	19/08/2022	-	-	-	-	29	-	-	-	-	-	-	-	8	0.4	-	15	94	110	-	0.37	7.9	-	410
TP39/0-0.1	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP39/0.1-0.5	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP40/0-0.1	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP40/0-0.2	19/08/2022	-	-	-	-	18.8	-	-	-	-	-	-	-	8	<0.3	-	14	26	130	-	<0.05	6.5	-	440
TP41/0-0.1	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP41/0-0.2	19/08/2022	-	-	-	-	19.2	-	-	-	-	-	-	-	8	<0.3	-	15	21	28	-	<0.05	5.8	-	75
TP41/0.3-0.5	19/08/2022	61.8	31.1	3.3	3.8	19.7	6.5	3.3	0.34	0.39	10	5.7	91	7	<0.3	1,300	11	17	14	400	<0.05	4.7	130	43
TP42/0-0.1	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP42/0-0.2	19/08/2022	-	-	-	-	24.5	-	-	-	-	-	-	-	7	<0.3	-	15	31	32	-	0.05	7.6	-	140
TP43/0-0.1	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP43/0-0.2	19/08/2022	-	-	-	-	25.4	-	-	-	-	-	-	-	17	<0.3	-	17	33	26	-	<0.05	5.5	-	72
TP44/0-0.1	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP44/0-0.2	19/08/2022	-	-	-	-	24.6	-	-	-	-	-	-	-	8	<0.3	-	16	41	38	-	<0.05	9.1	-	120
TP44/0.1-0.4	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP45/0-0.1	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP45/0-0.2	19/08/2022	-	-	-	-	14.4	-	-	-	-	-	-	-	7	<0.3	-	17	8.5	22	-	<0.05	6	-	40
TP46/0-0.1	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP46/0-0.2	19/08/2022	-	-	-	-	27	-	-	-	-	-	-	-	8	<0.3	-	8.2	14	24	-	<0.05	4.8	-	65
TP47/0-0.1	19/08/2022	-	-	-	-	24.2	-	-	-	-	-	-	-	10	<0.3	-	14	12	26	-	<0.05	5.9	-	44
TP48/0-0.1	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP48/0.1-0.3	23/08/2022	-	-	-	-	20.8	-	-	-	-	-	-	-	13	<0.3	-	13	14	26	-	<0.05	5.6	-	50
TP49/0-0.1	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP49/0.1-0.3	23/08/2022	-	-	-	-	10.4	-	-	-	-	-	-	-	6	<0.3	-	6.7	24	14	-	<0.05	15	-	61
TP50/0-0.1	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP50/0-0.2	23/08/2022	-	-	-	-	18.8	-	-	-	-	-	-	-	7	<0.3	-	17	8.3	15	-	<0.05	5.1	-	25
TP50/0.2-0.4	23/08/2022	26.9	61.8	2.5	8.8	19.7	3	6.8	0.28	0.97	11	5.8	220	7	<0.3	590	10	11	10	830	<0.05	1.8	110	16
TP51/0-0.1	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP51/0-0.2	23/08/2022	-	-	-	-	28.2	-	-	-	-	-	-	-	7	<0.3	-	12	20	18	-	<0.05	5.5	-	52
TP52/0-0.5	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP52/0.3-0.5	23/08/2022	-	-	-	-	19.7	-	-	-	-	-	-	-	7	<0.3	-	11	12	17	-	<0.05	3.9	-	26
TP53/0.5-0.7	23/08/2022	-	-	-	-	20	-	-	-	-	-	-	-	12	<0.3	-	17	16	51	-	<0.05	11	-	89
TP54/0-0.1	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP54/0.8-1.0	23/08/2022	-	-	-	-	24.2	-	-	-	-	-	-	-	6	<0.3	-	15	9.5	34	-	<0.05	4.8	-	31
TP55/0.7-0.9	23/08/2022	-	-	-	-	21.8	-	-	-	-	-	-	-	9	<0.3	-	15	16	17	-	<0.05	3.3	-	24
TP56/0-0.7	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP56/0.5-0.7	23/08/2022	-	-	-	-	22.4	-	-	-	-	-	-	-	9	<0.3	-	11	16	15	-	<0.05	4	-	25
TP57/0-0.1	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP57/0.1-0.3	23/08/2022	-	-	-	-	27.3	-	-	-	-	-	-	-	9	<0.3	-	8.9	16	30	-	<0.05	7.9	-	38
TP58/0-0.1	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP58/0-0.2	23/08/2022	-	-	-	-	20.8	-	-	-	-	-	-	-	16	<0.3	-	22	16	23	-	<0.05	11	-	52
TP59/0-0.1	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP59/0.1-0.3	23/08/2022	-	-	-	-	16.5	-	-	-	-	-	-	-	33	0.3	-	14	18	21	-	<0.05	6.9	-	40
TP61/0-0.1	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP61/0-0.2	23/08/2022	-	-	-	-	20.3	-	-	-	-	-	-	-	7	<0.3	-	14	8	22	-	<0.05	3.2	-	46
TP61/0.1-0.2	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP62/0-0.1	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP62/0-0.2	23/08/2022	-	-	-	-	16.9	-	-	-	-	-	-	-	10	<0.3	-	14	23	36	-	<0.05	8.4	-	140
TP63/0-0.1	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP63/0-0.2	23/08/2022	-	-	-	-	26.7	-	-	-	-	-	-	-	9	<0.3	-	11	27	27	-	0.05	8.7	-	63
TP64/0-0.1	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP64/0.1-0.3	23/08/2022	-	-	-	-	19.4	-	-	-	-	-	-	-	11	<0.3	-	18	11	23	-	<0.05	9.1	-	33
TP65/0-0.1	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP65/0-0.2	23/08/2022	-	-	-	-	16.6	-	-	-	-	-	-	-	10	<0.3	-	14	13	22	-	<0.05	7.1	-	46
TP66/0-0.1	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP66/0-0.2	23/08/2022	-	-	-	-	15.5	-	-	-	-	-	-	-	8	<0.3	-	5.9	13	8	-	<0.05	3.2	-	20
TP67/0-0.1	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP67/0.1-0.3	23/08/2022	-	-	-	-	20	-	-	-	-	-	-	-	13	<0.3	-	16	11	29	-	<0.05	7.8	-	21
TP68/0-0.1	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP68/0-0.2	23/08/2022	-	-	-	-	15.9	-	-	-	-	-	-	-	15	<0.3	-	16	16	26	-	<0.05	9.2	-	60
TP69/0-0.1	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP69/0.1-0.3	23/08/2022	-	-	-	-	18.6	-	-	-	-	-	-	-	7	<0.3	-	13	22	43	-	0.07	4.2	-	95
TP70/0-0.1	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP70/0.1-0.3	23/08/2022	-	-	-	-	12.3	-	-	-	-	-	-	-	12	<0.3	-	11	16	16	-	<0.05	4.7	-	20
TP71/0-0.1	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP71/0-0.2	23/08/2022	-	-	-	-	10.5	-	-	-	-	-	-	-	9	<0.3	-	14	10	22	-	<0.05	6.4	-	22
TP72/0-0.1	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP72/0-0.2	23/08/2022	-	-	-	-	21.6	-	-	-	-	-	-	-	14	<0.3	-	12	18	28	-	<0.05	7.6	-	44
TP36/0-0.1/PACM02	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP33/0-0.1/PACM04	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP25/0.1-0.3/PACM13	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP18/0-0.6/PACM14	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DUP01	18/08/2022	-	-	-	-	14.6	-	-	-	-	-	-	-	8	<0.3	-	17	4.7	22	-	<0.05	3.5	-	25
DUP01A	18/08/2022	-	-	-	-	16	-	-	-	-	-	-	-	17	1	-	29	8	26	-	<0.1	7	-	34
DUP02	18/08/2022	-	-	-	-	19.1	-	-	-	-	-	-	-	12	<0.3	-	12	11	11	-	<0.05	1.5	-	16
DUP02A	18/08/2022	-	-	-	-	21.3	-	-	-	-	-	-	-	14	<1	-	19	18	12	-	<0.1	4	-	23
DUP03	19/08/2022	-	-	-	-	27.1	-	-	-	-	-	-	-	10	<0.3	-	11	15	26	-	<0.05	6	-	67
DUP03A	19/08/2022	-	-	-	-	25.7	-	-	-	-	-	-	-	11	<1	-	14	20	27	-	<0.1	9	-	84
DUP06A	20/08/2022	-	-	-	-	16.2	-	-	-	-	-	-	-	12	<1	-	18	20	22	-	<0.1	15	-	59
DUP07	23/08/2022	-	-	-	-	23.9	-	-	-	-	-	-	-	8	<0.3	-	9.8	14	18	-	<0.05	3.6	-	990
DUP07A	23/08/2022	-	-	-	-	27.4	-	-	-	-	-	-	-	8	<1	-	10	17	16	-	<0.1	6	-	433
Trip Blank	18/08/2022	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trip Blank	19/08/2022	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trip Blank	22/08/2022	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trip Blank	23/08/2022	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trip Spike	18/08/2022	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trip Spike	19/08/2022	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trip Spike	22/08/2022	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trip Spike	23/08/2022	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Number of Results		3	3	3	3	82	3	3	3	3	3	3	3	83	83	3	83	83	83	3	83	83	3	83
Number of Detects		3	3	3	3	78	3	3	3	3	3	3	3	83	10	3	83	83	83	3	10	83	3	83
Minimum Detect		26.9	31.1	2.4	3.8	8.6	3	3.3	0.28	0.39	10	5.7	91	3	0.3	590	5.9	3.4	8	400	0.05	1.5	110	11
Maximum Detect		61.8	61.8	3.3	8.8	31.1	8.4	6.8	0.39	0.97	16	5.8	220	33	2.1	1,700	23	94	250	830	0.37	66	150	990
Average Concentration *		47	45	2.7	5.6	19	6	5.5	0.34	0.68	12	5.8	157	9.9	0.21	1,197	14.6	18.0	34.3	673	0.036	7.0	130	100.7
Median Concentration *		52.5	40.8	2.5	4.2	19.05	6.5	6.5	0.34	0.68	11	5.8	160	9	0.15	1,300	15	16	24	790	0.025	5.8	130	52
Standard Deviation *		18	16	0.49	2.8	6.1	2.7	1.9	0.055	0.29	3.2	0.058	65	5.7	0.24	562	7.8	12.3	29.7	238	0.044	6.0	20	113.2
95% UCL (Student's-t) *		77.54	71.02	3.565	10.28	19.84	10.58	8.804	0.43	1.169	17.75	5.864	265.8	4.4	0.252	2,144	4.5	6.3	10.4	1,074	0.0442	5.6	163.7	22.5
% of Detects		100	100	100	100	95	100	100	100	100	100	100	100	100	12	100	100	100	100	100	13	100	100	100
% of Non-Detects		0	0	0	0	5	0	0	0	0	0	0	0	0	88	0	0	0	0	0	87	0	0	0

Field ID	Date	Organochlorine Pesticides: Organochlorine pesticides EPAVic	2,4-DDT	4,4-DDE	a-BHC	Aldrin	b-BHC	Chlordane (cis)	Chlordane (technical)	d-BHC	DDD	DDT	Dieldrin
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL		1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
10791.EV.P.323 Site-Specific EIL												180	
NSW EPA 2000 Table 3 Stabilisation Grade A													
CRC Care HSL-C Recreational / Open Space													
NEPM 2013 Table 1A(1) HILs Res B Soil													
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Clay													
NEPM 2013 Table 1B(5) Generic EIL - Urban Res & Public Open Space												180	
NEPM 2013 Table 1B(6) ESLs for Areas of Ecological Significance, Fine Soil													
NEPM 2013 Table 1B(6) ESLs for Urban Res, Fine Soil													
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Fine Soil													
NEPM 2013 Table 7 Res B HSL for Asbestos in Soil													
TP01/0-0.1	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP01/0.1-0.3	18/08/2022	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2
TP02/0-0.1	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP02/0.1-0.3	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP02/0.1-0.3 bag	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP03/0-0.0.1	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP03/0.1-0.3	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP04/0-0.1	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP04/0-0.2	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP05/0-0.1	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP05/0-0.2	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP05/0.1-0.3	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP06/0-0.1	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP06/0.1-0.3	22/08/2022	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2
TP06/0.1-0.4	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP07/0.1-0.3	22/08/2022	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2
TP08/0-0.1	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP08/0.1-0.3	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP09/0-0.1	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP09/0-0.2	22/08/2022	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2
TP10/0.0-0.1	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP10/0.0-0.2	22/08/2022	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2
TP11/0-0.1	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP11/0-0.2	22/08/2022	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2
TP11/0.3-0.5	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP12/0-0.1	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP12/0-0.2	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP13/0-0.1	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP13/0-0.2	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP14/0-0.1	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP14/0-0.2	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP15/0-0.1	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP15/0-0.2	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP16/0-0.1	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP16/0-0.2	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP17/0-0.1	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP17/0.1-0.25	22/08/2022	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2
TP18/0-0.6	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP18/0.4-0.6	23/08/2022	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2
TP19/0.4-0.6	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP20/0-0.1	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP20/0.1-0.3	22/08/2022	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2
TP21/0-0.9	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP21/0.7-0.9	23/08/2022	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2
TP22/0-0.7	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP22/0.6-0.7	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP23/0.3-0.5	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP24/0-0.1	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP24/0.15-0.35	18/08/2022	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2
TP24/0.1-0.35	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP25/0-0.1	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP25/0-0.2	22/08/2022	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2
TP25/0.1-0.3	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP26/0-0.1	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP26/0-0.2	22/08/2022	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2
TP26/0.1-0.3	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP27/0-0.1	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP27/0-0.2	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP28/0-0.1	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP28/0.1-0.3	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP29A/0.0-0.1	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP29A/0.1-0.3	19/08/2022	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2
TP30A/0-0.1	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP30A/0.1-0.3	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP30A/0.1-0.5	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP31/0-0.1	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP31/0.1-0.3	18/08/2022	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2
TP32/0-0.1	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP32/0.1-0.3	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP33/0-0.1	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP33/0.1-0.3	18/08/2022	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2
TP34/0-0.1	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP34/0.1-0.3	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP35/0-0.1	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP35/0.1-0.3	18/08/2022	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2
TP35/0.1-0.4	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP36/0-0.1	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP36/0-0.2	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP36/0.1-0.4	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP37 0-0.1	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP37/0.1-0.3	19/08/2022	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2
TP37/0.1-0.45	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP38/0-0.1	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP38/0-0.2	19/08/2022	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2
TP38/0.1-0.4	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP39/0-0.2	19/08/2022	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2
TP39/0-0.1	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP39/0.1-0.5	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP40/0-0.1	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP40/0-0.2	19/08/2022	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2
TP41/0-0.1	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP41/0-0.2	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP41/0.3-0.5	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP42/0-0.1	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP42/0-0.2	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP43/0-0.1	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP43/0-0.2	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP44/0-0.1	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP44/0-0.2	19/08/2022	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2
TP44/0.1-0.4	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP45/0-0.1	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP45/0-0.2	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP46/0-0.1	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP46/0-0.2	19/08/2022	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2
TP47/0-0.1	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP48/0-0.1	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP48/0.1-0.3	23/08/2022	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2
TP49/0-0.1	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP49/0.1-0.3	23/08/2022	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2
TP50/0-0.1	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP50/0-0.2	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP50/0.2-0.4	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP51/0-0.1	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP51/0-0.2	23/08/2022	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2
TP52/0-0.5	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP52/0.3-0.5	23/08/2022	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2
TP53/0.5-0.7	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP54/0-0.1	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP54/0.8-1.0	23/08/2022	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2
TP55/0.7-0.9	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP56/0-0.7	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP56/0.5-0.7	23/08/2022	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2
TP57/0-0.1	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP57/0.1-0.3	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP58/0-0.1	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP58/0-0.2	23/08/2022	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2
TP59/0-0.1	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP59/0.1-0.3	23/08/2022	<1	<0.1	0.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2
TP61/0-0.1	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP61/0-0.2	23/08/2022	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2
TP61/0.1-0.2	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP62/0-0.1	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP62/0-0.2	23/08/2022	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2
TP63/0-0.1	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP63/0-0.2	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP64/0-0.1	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP64/0.1-0.3	23/08/2022	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2
TP65/0-0.1	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP65/0-0.2	23/08/2022	<1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2
TP66/0-0.1	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP66/0-0.2	23/08/2022	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2
TP67/0-0.1	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP67/0.1-0.3	23/08/2022	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2
TP68/0-0.1	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP68/0-0.2	23/08/2022	<1	<0.1	0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.2
TP69/0-0.1	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP69/0.1-0.3	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP70/0-0.1	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP70/0.1-0.3	23/08/2022	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2
TP71/0-0.1	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP71/0-0.2	23/08/2022	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2
TP72/0-0.1	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP72/0-0.2	23/08/2022	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2
TP36/0-0.1/PACM02	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP33/0-0.1/PACM04	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP25/0.1-0.3/PACM13	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
TP18/0-0.6/PACM14	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
DUP01	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
DUP01A	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
DUP02	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
DUP02A	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
DUP03	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
DUP03A	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
DUP06A	20/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
DUP07	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
DUP07A	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
Trip Blank	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
Trip Blank	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
Trip Blank	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
Trip Blank	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
Trip Spike	18/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
Trip Spike	19/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
Trip Spike	22/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
Trip Spike	23/08/2022	-	-	-	-	-	-	-	-	-	-	-	-
Number of Results		41	41	41	41	41	41	41	41	41	41	41	41
Number of Detects		0	0	3	0	0	0	0	0	0	0	1	0
Minimum Detect		ND	ND	0.1	ND	ND	ND	ND	ND	ND	ND	0.1	ND
Maximum Detect		ND	ND	0.5	ND	ND	ND	ND	ND	ND	ND	0.1	ND
Average Concentration *		0.5	0.05	0.068	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.051	0.1
Median Concentration *		0.5	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.1
Standard Deviation *		0	0	0.08	0	0	0	0	0	0	0	0.0078	0
95% UCL (Student's-t) *		0.5	0.05	0.0892	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.0533	0.1
% of Detects		0	0	7	0	0	0	0	0	0	0	2	0
% of Non-Detects		100	100	93	100	100	100	100	100	100	100	98	100

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

CRC Care, 2011, CRC Care HSL-C Recreational / Open Space
2013, NEPM 2013 Table 1A(1) HILs Res B Soil
2013, NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Clay
2013, NEPM 2013 Table 1B(6) ESLs for Areas of Ecological Significance, Fine Soil
2013, NEPM 2013 Table 1B(6) ESLs for Urban Res, Fine Soil
2013, NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Fine Soil
2013, NEPM 2013 Table 7 Res B HSL for Asbestos in Soil
2000, NSW EPA 2000 Table 3 Stabilisation Grade A

10791EV.P.323
249-271 Railway Terrace, Schofields, NSW 2762
Stage 1 Preliminary and Stage 2 Detailed Site Investigation

LR01 - Soil Results + QA/QC

Lab Report #	Field ID	AEC ID	Date	Matrix	Organochlorine Pesticides													Organophosphorous Pesticides									
					Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	Endrin ketone	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Methoxychlor	o,p-DDD	o,p'-DDE	trans-Nonachlor	Azinophos methyl	Bromophos-ethyl	Chlorpyrifos	Diazinon	Dichlorvos	Dimethoate	Ethion	Fenitrothion	Malathion	Methidathion
					mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL					0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.5	0.5	0.5	0.2	0.2	0.2	0.5
10791.EV.P.323 Site-Specific EIL																											
NSW EPA 2000 Table 3 Stabilisation Grade A																											
CRC Care HSL-C Recreational / Open Space																											
NEPM 2013 Table 1A(1) HILs Res B Soil								20				10		500						340							
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Clay																											
NEPM 2013 Table 1B(5) Generic EIL - Urban Res & Public Open Space																											
NEPM 2013 Table 1B(6) ESLs for Areas of Ecological Significance, Fine																											
NEPM 2013 Table 1B(6) ESLs for Urban Res, Fine Soil																											
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Fine S																											
NEPM 2013 Table 7 Res B HSL for Asbestos in Soil																											
SE235945	TP01/0-0.1		18/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP01/0.1-0.3		18/08/2022	Soil	<0.2	<0.2	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5
SE235945	TP02/0-0.1		18/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP02/0.1-0.3		18/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP02/0.1-0.3 bag		18/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP03/0-0.0.1		18/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP03/0.1-0.3		18/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP04/0-0.1		22/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP04/0-0.2		22/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP05/0-0.1		22/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP05/0-0.2		22/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP05/0.1-0.3	AEC01	22/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP06/0-0.1		22/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP06/0.1-0.3		22/08/2022	Soil	<0.2	<0.2	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5
SE235945	TP06/0.1-0.4	AEC06	22/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP07/0.1-0.3		22/08/2022	Soil	<0.2	<0.2	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5
SE235945	TP08/0-0.1		22/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP08/0.1-0.3	AEC07	22/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP09/0-0.1		22/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP09/0-0.2	AEC11	22/08/2022	Soil	<0.2	<0.2	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5
SE235945	TP10/0.0-0.1		22/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP10/0.0-0.2	AEC12	22/08/2022	Soil	<0.2	<0.2	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5
SE235945	TP11/0-0.1		22/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP11/0-0.2		22/08/2022	Soil	<0.2	<0.2	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5
SE235945	TP11/0.3-0.5	AEC08	22/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP12/0-0.1		22/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP12/0-0.2		22/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP13/0-0.1		22/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP13/0-0.2		22/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP14/0-0.1		22/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP14/0-0.2		22/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP15/0-0.1		22/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP15/0-0.2		22/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP16/0-0.1		22/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP16/0-0.2		22/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP17/0-0.1	AEC09 /	22/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP17/0.1-0.25	AEC10	22/08/2022	Soil	<0.2	<0.2	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5
SE235945	TP18/0-0.6		23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP18/0.4-0.6		23/08/2022	Soil	<0.2	<0.2	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5
SE235945	TP19/0.4-0.6	AEC13	23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP20/0-0.1		22/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP20/0.1-0.3	AEC14	22/08/2022	Soil	<0.2	<0.2	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5
SE235945	TP21/0-0.9		23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP21/0.7-0.9		23/08/2022	Soil	<0.2	<0.2	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5
SE235945	TP22/0-0.7		23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP22/0.6-0.7		23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP23/0.3-0.5	AEC15	23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP24/0-0.1		18/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP24/0.15-0.35		18/08/2022	Soil	<0.2	<0.2	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5
SE235945	TP24/0.1-0.35	AEC18	18/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP25/0-0.1		22/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP25/0-0.2		22/08/2022	Soil	<0.2	<0.2	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5
SE235945	TP25/0.1-0.3	AEC20	22/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP26/0-0.1		22/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP26/0-0.2		22/08/2022	Soil	<0.2	<0.2	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5
SE235945	TP26/0.1-0.3		22/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP27/0-0.1		18/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP27/0-0.2	AEC21	18/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP28/0-0.1		18/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP28/0.1-0.3		18/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP29A/0.0-0.1		19/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP29A/0.1-0.3		19/08/2022	Soil	<0.2	<0.2	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5
SE235945	TP30A/0-0.1		19/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP30A/0.1-0.3		19/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP30A/0.1-0.5	AEC22	19/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP31/0-0.1		18/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP31/0.1-0.3		18/08/2022	Soil	<0.2	<0.2	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5
SE235945	TP32/0-0.1		18/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP32/0.1-0.3		18/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP33/0-0.1		18/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP33/0.1-0.3		18/08/2022	Soil	<0.2	<0.2	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5
SE235945	TP34/0-0.1		18/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP34/0.1-0.3		18/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP35/0-0.1		18/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP35/0.1-0.3		18/08/2022	Soil	<0.2	<0.2	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5
SE235945	TP35/0.1-0.4		18/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP36/0-0.1		18/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP36/0-0.2		18/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP36/0.1-0.4		18/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP37 0-0.1		19/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP37/0.1-0.3		19/08/2022	Soil	<0.2	<0.2	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5
SE235945	TP37/0.1-0.45		19/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP38/0-0.1		19/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235945	TP38/0-0.2		19/08/2022	Soil	<0.2	<0.2	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5
SE235945	TP38/0.1-0.4		19/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP39/0-0.2		19/08/2022	Soil	<0.2	<0.2	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5
SE235945	TP39/0-0.1		19/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP39/0.1-0.5	AEC24	19/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP40/0-0.1		19/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP40/0-0.2		19/08/2022	Soil	<0.2	<0.2	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5
SE235946	TP41/0-0.1		19/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP41/0-0.2		19/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP41/0.3-0.5		19/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP42/0-0.1		19/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP42/0-0.2		19/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP43/0-0.1		19/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP43/0-0.2		19/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP44/0-0.1		19/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP44/0-0.2		19/08/2022	Soil	<0.2	<0.2	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5
SE235946	TP44/0.1-0.4		19/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP45/0-0.1		19/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP45/0-0.2		19/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP46/0-0.1		19/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP46/0-0.2		19/08/2022	Soil	<0.2	<0.2	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5
SE235946	TP47/0-0.1	AEC25	19/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP48/0-0.1		23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP48/0.1-0.3	AEC26	23/08/2022	Soil	<0.2	<0.2	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5
SE235946	TP49/0-0.1		23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP49/0.1-0.3		23/08/2022	Soil	<0.2	<0.2	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5
SE235946	TP50/0-0.1		23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP50/0-0.2		23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP50/0.2-0.4		23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP51/0-0.1		23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP51/0-0.2	AEC27	23/08/2022	Soil	<0.2	<0.2	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5
SE235946	TP52/0-0.5		23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP52/0.3-0.5		23/08/2022	Soil	<0.2	<0.2	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5
SE235946	TP53/0.5-0.7		23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP54/0-0.1		23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP54/0.8-1.0		23/08/2022	Soil	<0.2	<0.2	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5
SE235946	TP55/0.7-0.9		23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP56/0-0.7		23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP56/0.5-0.7	AEC28	23/08/2022	Soil	<0.2	<0.2	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5
SE235946	TP57/0-0.1		23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP57/0.1-0.3		23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP58/0-0.1		23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP58/0-0.2	AEC29	23/08/2022	Soil	<0.2	<0.2	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5
SE235946	TP59/0-0.1		23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP59/0.1-0.3	AEC30	23/08/2022	Soil	<0.2	<0.2	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5
SE235946	TP61/0-0.1		23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP61/0-0.2		23/08/2022	Soil	<0.2	<0.2	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5
SE235946	TP61/0.1-0.2		23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP62/0-0.1		23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP62/0-0.2		23/08/2022	Soil	<0.2	<0.2	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5
SE235946	TP63/0-0.1		23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP63/0-0.2		23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP64/0-0.1		23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP64/0.1-0.3		23/08/2022	Soil	<0.2	<0.2	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5
SE235946	TP65/0-0.1		23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP65/0-0.2		23/08/2022	Soil	<0.2	<0.2	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5
SE235946	TP66/0-0.1		23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP66/0-0.2		23/08/2022	Soil	<0.2	<0.2	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5
SE235946	TP67/0-0.1		23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP67/0.1-0.3		23/08/2022	Soil	<0.2	<0.2	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5
SE235946	TP68/0-0.1		23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP68/0-0.2		23/08/2022	Soil	<0.2	<0.2	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5
SE235946	TP69/0-0.1		23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP69/0.1-0.3		23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP70/0-0.1		23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP70/0.1-0.3		23/08/2022	Soil	<0.2	<0.2	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5
SE235946	TP71/0-0.1		23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP71/0-0.2		23/08/2022	Soil	<0.2	<0.2	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5
SE235946	TP72/0-0.1		23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP72/0-0.2	AEC31	23/08/2022	Soil	<0.2	<0.2	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5
SE235946	TP36/0-0.1/PACM02	AEC24	18/08/2022	Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP33/0-0.1/PACM04	AEC24	18/08/2022	Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP25/0.1-0.3/PACM13	AEC20	22/08/2022	Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	TP18/0-0.6/PACM14	AEC13	23/08/2022	Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	DUP01	AEC01	18/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2230603	DUP01A	AEC01	18/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	DUP02	AEC24	18/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2230603	DUP02A	AEC24	18/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	DUP03	AEC25	19/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2230603	DUP03A	AEC25	19/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2230603	DUP06A	AEC26	20/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	DUP07	AEC15	23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2230603	DUP07A	AEC15	23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	Trip Blank	-	18/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	Trip Blank	-	19/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	Trip Blank	-	22/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	Trip Blank	-	23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	Trip Spike	-	18/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	Trip Spike	-	19/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	Trip Spike	-	22/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE235946	Trip Spike	-	23/08/2022	Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																											
Number of Results					41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41
Number of Detects					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minimum Detect					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Detect					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration *					0.1	0.1	0.05	0.1	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.1	0.1	0.1	0.25	0.25	0.25	0.1	0.1	0.1	0.25
Median Concentration *					0.1	0.1	0.05	0.1	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.1	0.1	0.1	0.25	0.25	0.25	0.1	0.1	0.1	0.25
Standard Deviation *					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95% UCL (Student's-t) *					0.1	0.1	0.05	0.1	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.1	0.1	0.1	0.25	0.25	0.25	0.1	0.1	0.1	0.25
% of Detects					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Non-Detects					100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Field ID	PAH																			
	1-Methylnaphthalene	2-methylnaphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a) pyrene	Benzo(b+j)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	PAHs (Sum of total)	PAHs (Sum of positives)
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	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	0.1	0.1	0.1	0.1	0.8	0.8
10791.EV.P.323 Site-Specific EIL																170				
NSW EPA 2000 Table 3 Stabilisation Grade A																				
CRC Care HSL-C Recreational / Open Space																1,900				
NEPM 2013 Table 1A(1) HILs Res B Soil																			400	
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Clay																5				
NEPM 2013 Table 1B(5) Generic EIL - Urban Res & Public Open Space																170				
NEPM 2013 Table 1B(6) ESLs for Areas of Ecological Significance, Fine							0.7													
NEPM 2013 Table 1B(6) ESLs for Urban Res, Fine Soil							0.7													
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Fine S																				
NEPM 2013 Table 7 Res B HSL for Asbestos in Soil																				
TP01/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP01/0.1-0.3	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
TP02/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02/0.1-0.3	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
TP02/0.1-0.3 bag	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03/0-0.0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03/0.1-0.3	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
TP04/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04/0-0.2	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
TP05/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05/0-0.2	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
TP05/0.1-0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06/0.1-0.3	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
TP06/0.1-0.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP07/0.1-0.3	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
TP08/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP08/0.1-0.3	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
TP09/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP09/0-0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP10/0.0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP10/0.0-0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP11/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP11/0-0.2	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
TP11/0.3-0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP12/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP12/0-0.2	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
TP13/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP13/0-0.2	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
TP14/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP14/0-0.2	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
TP15/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP15/0-0.2	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
TP16/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP16/0-0.2	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
TP17/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP17/0.1-0.25	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
TP18/0-0.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP18/0.4-0.6	<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	<0.1	<0.1	0.1	0.1	<0.8	<0.8
TP19/0.4-0.6	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
TP20/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP20/0.1-0.3	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
TP21/0-0.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP21/0.7-0.9	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
TP22/0-0.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP22/0.6-0.7	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
TP23/0.3-0.5	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
TP24/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP24/0.15-0.35	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
TP24/0.1-0.35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP25/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP25/0-0.2	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
TP25/0.1-0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP26/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP26/0-0.2	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
TP26/0.1-0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP27/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP27/0-0.2	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
TP28/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP28/0.1-0.3	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
TP29A/0.0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP29A/0.1-0.3	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
TP30A/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP30A/0.1-0.3	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
TP30A/0.1-0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP31/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP31/0.1-0.3	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
TP32/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP32/0.1-0.3	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
TP33/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP33/0.1-0.3	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
TP34/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP34/0.1-0.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.2	<0.1	<0.1	<0.1	0.1	0.2	<0.8	<0.8
TP35/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP35/0.1-0.3	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
TP35/0.1-0.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP36/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP36/0-0.2	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
TP36/0.1-0.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP37 0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP37/0.1-0.3	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
TP37/0.1-0.45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP38/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP38/0-0.2	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
TP38/0.1-0.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP39/0-0.2	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
TP39/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP39/0.1-0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP40/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP40/0-0.2	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
TP41/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP41/0-0.2	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
TP41/0.3-0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP42/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP42/0-0.2	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
TP43/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP43/0-0.2	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
TP44/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP44/0-0.2	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
TP44/0.1-0.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP45/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP45/0-0.2	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
TP46/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP46/0-0.2	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
TP47/0-0.1	<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	<0.1	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
TP48/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP48/0.1-0.3	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
TP49/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP49/0.1-0.3	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
TP50/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP50/0-0.2	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
TP50/0.2-0.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP51/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP51/0-0.2	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
TP52/0-0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP52/0.3-0.5	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
TP53/0.5-0.7	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
TP54/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP54/0.8-1.0	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
TP55/0.7-0.9	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
TP56/0-0.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP56/0.5-0.7	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
TP57/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP57/0.1-0.3	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
TP58/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP58/0-0.2	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
TP59/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP59/0.1-0.3	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
TP61/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP61/0-0.2	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
TP61/0.1-0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP62/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP62/0-0.2	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
TP63/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP63/0-0.2	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
TP64/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP64/0.1-0.3	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
TP65/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP65/0-0.2	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
TP66/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP66/0-0.2	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
TP67/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP67/0.1-0.3	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
TP68/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP68/0-0.2	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
TP69/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP69/0.1-0.3	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
TP70/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP70/0.1-0.3	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
TP71/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP71/0-0.2	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
TP72/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP72/0-0.2	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
TP36/0-0.1/PACM02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP33/0-0.1/PACM04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP25/0.1-0.3/PACM13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP18/0-0.6/PACM14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DUP01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DUP01A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DUP02	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
DUP02A	<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	<0.5	<0.5	<0.5	<0.5	<0.5
DUP03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DUP03A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DUP06A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DUP07	<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	<0.1	<0.1	<0.1	<0.1	<0.8	<0.8
DUP07A	<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	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trip Blank	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trip Blank	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trip Blank	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trip Spike	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trip Spike	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trip Spike	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trip Spike	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Number of Results	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71
Number of Detects	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	2	0	0
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1	ND	ND	ND	0.1	0.1	ND	ND
Maximum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2	ND	ND	ND	0.1	0.2	ND	ND
Average Concentration *	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.053	0.05	0.05	0.05	0.051	0.053	0.4	0.4
Median Concentration *	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	0.05	0.05	0.05	0.4	0.4
Standard Deviation *	0	0	0	0	0	0	0	0	0	0	0	0	0.019	0	0	0	0.0083	0.019	0	0
95% UCL (Student's-t) *	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.0565	0.05	0.05	0.05	0.0531	0.0565	0.4	0.4
% of Detects	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	3	0	0
% of Non-Detects	100	100	100	100	100	100	100	100	100	100	100	100	97	100	100	100	97	97	100	100

Field ID	PCBs										Pesticides			TPH					
	Arochlor 1016	Arochlor 1221	Arochlor 1232	Arochlor 1242	Arochlor 1248	Arochlor 1254	Arochlor 1260	Arochlor 1268	Arochlor 1262	PCBs (Sum of total)	Isodrin	Mirex	Parathion	C37-C40 Fraction	C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	C10-C36 Fraction (Sum)
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	µg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	1	0.1	0.1	0.2	100,000	20	20	45	45	110
10791.EV.P.323 Site-Specific EIL																			
NSW EPA 2000 Table 3 Stabilisation Grade A																			
CRC Care HSL-C Recreational / Open Space																			
NEPM 2013 Table 1A(1) HILs Res B Soil										1		20							
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Clay																			
NEPM 2013 Table 1B(5) Generic EIL - Urban Res & Public Open Space																			
NEPM 2013 Table 1B(6) ESLs for Areas of Ecological Significance, Fine																			
NEPM 2013 Table 1B(6) ESLs for Urban Res, Fine Soil																			
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Fine S																			
NEPM 2013 Table 7 Res B HSL for Asbestos in Soil																			
TP01/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP01/0.1-0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<0.1	<0.1	<0.2	<100,000	<20	<20	<45	<45	<110
TP02/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02/0.1-0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02/0.1-0.3 bag	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03/0-0.0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03/0.1-0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04/0-0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	<100,000	<20	<20	<45	<45	<110
TP05/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05/0-0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05/0.1-0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06/0.1-0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<0.1	<0.1	<0.2	<100,000	<20	<20	<45	<45	<110
TP06/0.1-0.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP07/0.1-0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<0.1	<0.1	<0.2	<100,000	<20	<20	<45	<45	<110
TP08/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP08/0.1-0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP09/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP09/0-0.2	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.2	-	-	-	-	-	-
TP10/0.0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP10/0.0-0.2	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.2	-	-	-	-	-	-
TP11/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP11/0-0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<0.1	<0.1	<0.2	<100,000	<20	<20	<45	<45	<110
TP11/0.3-0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP12/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP12/0-0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	<100,000	<20	<20	<45	<45	<110
TP13/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP13/0-0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP14/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP14/0-0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP15/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP15/0-0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	<100,000	<20	<20	<45	<45	<110
TP16/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP16/0-0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP17/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP17/0.1-0.25	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<0.1	<0.1	<0.2	<100,000	<20	<20	<45	<45	<110
TP18/0-0.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP18/0.4-0.6	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<0.1	<0.1	<0.2	<100,000	<20	<20	<45	<45	<110
TP19/0.4-0.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP20/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP20/0.1-0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<0.1	<0.1	<0.2	<100,000	<20	<20	<45	<45	<110
TP21/0-0.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP21/0.7-0.9	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<0.1	<0.1	<0.2	<100,000	<20	<20	<45	<45	<110
TP22/0-0.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP22/0.6-0.7	-	-	-	-	-	-	-	-	-	-	-	-	-	<100,000	<20	<20	<45	<45	<110
TP23/0.3-0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP24/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP24/0.15-0.35	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<0.1	<0.1	<0.2	<100,000	<20	<20	<45	<45	<110
TP24/0.1-0.35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP25/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP25/0-0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<0.1	<0.1	<0.2	<100,000	<20	<20	<45	<45	<110
TP25/0.1-0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP26/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP26/0-0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<0.1	<0.1	<0.2	<100,000	<20	<20	<45	<45	<110
TP26/0.1-0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP27/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP27/0-0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP28/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP28/0.1-0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP29A/0.0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP29A/0.1-0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<0.1	<0.1	<0.2	<100,000	<20	<20	<45	<45	<110
TP30A/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP30A/0.1-0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP30A/0.1-0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP31/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP31/0.1-0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<0.1	<0.1	<0.2	<100,000	<20	<20	<45	<45	<110
TP32/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP32/0.1-0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP33/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP33/0.1-0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<0.1	<0.1	<0.2	<100,000	<20	<20	<45	<45	<110
TP34/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP34/0.1-0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP35/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP35/0.1-0.3	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.2	-	-	-	-	-	-
TP35/0.1-0.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP36/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP36/0-0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP36/0.1-0.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP37 0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP37/0.1-0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<0.1	<0.1	<0.2	<100,000	<20	<20	<45	<45	<110
TP37/0.1-0.45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP38/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP38/0-0.2	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.2	-	-	-	-	-	-
TP38/0.1-0.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP39/0-0.2	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.2	-	-	-	-	-	-
TP39/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP39/0.1-0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP40/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP40/0-0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<0.1	<0.1	<0.2	<100,000	<20	<20	<45	<45	<110
TP41/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP41/0-0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP41/0.3-0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP42/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP42/0-0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP43/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP43/0-0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP44/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP44/0-0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<0.1	<0.1	<0.2	<100,000	<20	<20	<45	<45	<110
TP44/0.1-0.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP45/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP45/0-0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP46/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP46/0-0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<0.1	<0.1	<0.2	<100,000	<20	<20	<45	<45	<110
TP47/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP48/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP48/0.1-0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<0.1	<0.1	<0.2	<100,000	<20	<20	<45	<45	<110
TP49/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP49/0.1-0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<0.1	<0.1	<0.2	<100,000	<20	<20	<45	<45	<110
TP50/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP50/0-0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP50/0.2-0.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP51/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP51/0-0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<0.1	<0.1	<0.2	<100,000	<20	<20	<45	<45	<110
TP52/0-0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP52/0.3-0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<0.1	<0.1	<0.2	<100,000	<20	<20	<45	65	<110
TP53/0.5-0.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP54/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP54/0.8-1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<0.1	<0.1	<0.2	<100,000	<20	<20	<45	<45	<110
TP55/0.7-0.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP56/0-0.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP56/0.5-0.7	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<0.1	<0.1	<0.2	<100,000	<20	<20	<45	<45	<110
TP57/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP57/0.1-0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP58/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP58/0-0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<0.1	<0.1	<0.2	<100,000	<20	<20	<45	<45	<110
TP59/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP59/0.1-0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<0.1	<0.1	<0.2	<100,000	<20	<20	<45	<45	<110
TP61/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP61/0-0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<0.1	<0.1	<0.2	<100,000	<20	<20	<45	<45	<110
TP61/0.1-0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP62/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP62/0-0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<0.1	<0.1	<0.2	<100,000	<20	<20	<45	<45	<110
TP63/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP63/0-0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP64/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP64/0.1-0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<0.1	<0.1	<0.2	<100,000	<20	<20	<45	<45	<110
TP65/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP65/0-0.2	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.2	-	-	-	-	-	-
TP66/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP66/0-0.2	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.2	-	-	-	-	-	-
TP67/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP67/0.1-0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<0.1	<0.1	<0.2	<100,000	<20	<20	<45	<45	<110
TP68/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP68/0-0.2	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.2	-	-	-	-	-	-
TP69/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP69/0.1-0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP70/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP70/0.1-0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<0.1	<0.1	<0.2	<100,000	<20	<20	<45	<45	<110
TP71/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP71/0-0.2	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.2	-	-	-	-	-	-
TP72/0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP72/0-0.2	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.2	-	-	-	-	-	-
TP36/0-0.1/PACM02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP33/0-0.1/PACM04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP25/0.1-0.3/PACM13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP18/0-0.6/PACM14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DUP01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DUP01A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DUP02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DUP02A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DUP03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DUP03A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DUP06A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DUP07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DUP07A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trip Blank	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trip Blank	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trip Blank	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trip Blank	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trip Spike	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trip Spike	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trip Spike	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trip Spike	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Number of Results	31	31	31	31	31	31	31	31	31	31	41	41	41	35	35	35	35	35	35
Number of Detects	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	65	ND
Maximum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	65	ND
Average Concentration *	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.5	0.05	0.05	0.1	50,000	10	10	22	24	55
Median Concentration *	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.5	0.05	0.05	0.1	50,000	10	10	22.5	22.5	55
Standard Deviation *	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7.2	0
95% UCL (Student's-t) *	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.5	0.05	0.05	0.1	50,000	10	10	22.5	25.77	55
% of Detects	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
% of Non-Detects	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	97	100

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

CRC Care, 2011, CRC Care HSL-C Recreational / Open Space
2013, NEPM 2013 Table 1A(1) HILs Res B Soil
2013, NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Cl
2013, NEPM 2013 Table 1B(6) ESLs for Areas of Ecological Significance,
2013, NEPM 2013 Table 1B(6) ESLs for Urban Res, Fine Soil
2013, NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Fir
2013, NEPM 2013 Table 7 Res B HSL for Asbestos in Soil
2000, NSW EPA 2000 Table 3 Stabilisation Grade A

10791EV.P.323
249-271 Railway Terrace, Schofields, NSW 2762
Stage 1 Preliminary and Stage 2 Detailed Site Investigation

LR02 - RPD Table

Construction Sciences

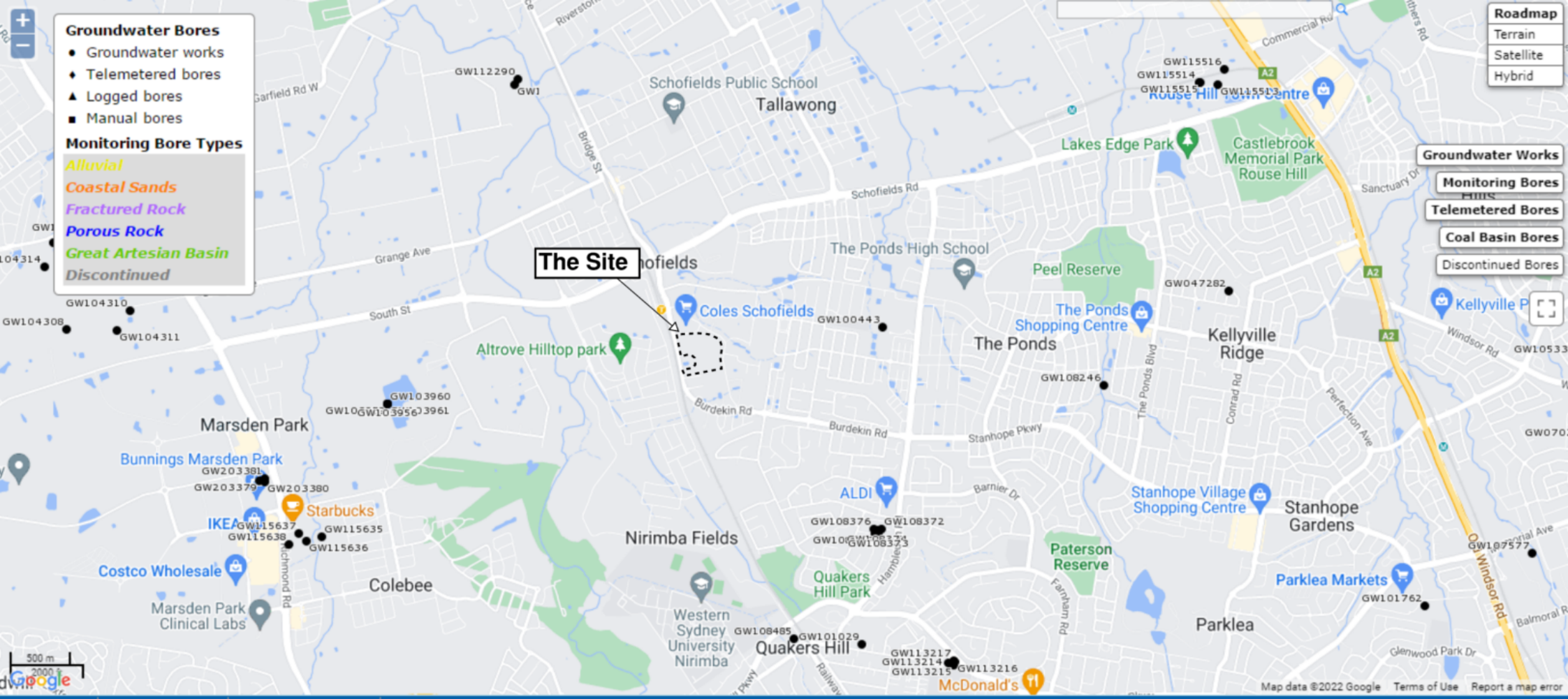
				Metals							
				Arsenic	Cadmium	Chromium (III+VI)	Copper	Lead	Mercury	Nickel	Zinc
Field or Interlab Duplicates				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL				1	0.3	0.5	0.5	1	0.05	0.5	2
Lab Report #	Field ID	Matrix	Date								
SE235945	TP02/0.1-0.3	Soil	18 Aug 2022	7	<0.3	14	5.6	23	<0.05	3.9	30
SE235946	DUP01	Soil	18 Aug 2022	8	<0.3	17	4.7	22	<0.05	3.5	25
RPD				13	0	19	17	4	0	11	18
SE235945	TP02/0.1-0.3	Soil	18 Aug 2022	7	<0.3	14	5.6	23	<0.05	3.9	30
ES2230603	DUP01A	Soil	18 Aug 2022	17	1	29	8	26	<0.1	7	34
RPD				83	108	70	35	12	0	57	12
SE235945	TP35/0.1-0.3	Soil	18 Aug 2022	4	0.4	14	20	94	<0.05	12	490
SE235946	DUP02	Soil	18 Aug 2022	12	<0.3	12	11	11	<0.05	1.5	16
RPD				100	29	15	58	158	0	156	187
SE235945	TP35/0.1-0.3	Soil	18 Aug 2022	4	0.4	14	20	94	<0.05	12	490
ES2230603	DUP02A	Soil	18 Aug 2022	14	<1	19	18	12	<0.1	4	23
RPD				111	0	30	11	155	0	100	182
SE235946	TP46/0-0.2	Soil	19 Aug 2022	8	<0.3	8.2	14	24	<0.05	4.8	65
SE235946	DUP03	Soil	19 Aug 2022	10	<0.3	11	15	26	<0.05	6	67
RPD				22	0	29	7	8	0	22	3
SE235946	TP46/0-0.2	Soil	19 Aug 2022	8	<0.3	8.2	14	24	<0.05	4.8	65
ES2230603	DUP03A	Soil	19 Aug 2022	11	<1	14	20	27	<0.1	9	84
RPD				32	0	52	35	12	0	61	26
SE235946	TP65/0-0.2	Soil	23 Aug 2022	10	<0.3	14	13	22	<0.05	7.1	46
ES2230603	DUP06A	Soil	23 Aug 2022	12	<1	18	20	22	<0.1	15	59
RPD				18	0	25	42	0	0	71	25
SE235945	TP23/0.3-0.5	Soil	23 Aug 2022	16	<0.3	16	11	20	<0.05	4	26
SE235946	DUP07	Soil	23 Aug 2022	8	<0.3	9.8	14	18	<0.05	3.6	990
RPD				67	0	48	24	11	0	11	190
SE235945	TP23/0.3-0.5	Soil	23 Aug 2022	16	<0.3	16	11	20	<0.05	4	26
ES2230603	DUP07A	Soil	23 Aug 2022	8	<1	10	17	16	<0.1	6	433
RPD				67	0	46	43	22	0	40	177

***RPDs have only been considered where a concentration is greater than 1 times the EQL.**

****Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each EQL multiplier range are: 1000 (1 - 10 x EQL); 50 (10 - 20 x EQL); 30 (> 20 x EQL))**

*****Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row header relate to those used in the primary laboratory**

Appendix A
GW SEARCH RECORD



Scale = 1 : 27K | 299566, 6267454, 56

Appendix B
EPA + POEO SEARCHES

Search results

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

Suburb - Schofields

returned 72 results

Export to excel

1 of 4 Pages

Search Again

Number	Name	Location	Type	Status	Issued date
1614638		75 TOWNSON ROAD, SCHOFIELDS, NSW 2762	s.58 Licence Variation	Issued	17 Jun 2022
3173523899	CIVIL 1 PTY LTD	Kerry Rd, SCHOFIELDS, NSW 2762	Penalty Notice	Court Elected	
13189	CPB CONTRACTORS PTY LIMITED	Veron Road, SCHOFIELDS, NSW 2762	POEO licence	Surrendered	20 Nov 2009
1109936	CPB CONTRACTORS PTY LIMITED	Veron Road, SCHOFIELDS, NSW 2762	s.58 Licence Variation	Issued	15 Dec 2009
1111665	CPB CONTRACTORS PTY LIMITED	Veron Road, SCHOFIELDS, NSW 2762	s.58 Licence Variation	Issued	25 Feb 2010
1112501	CPB CONTRACTORS PTY LIMITED	Veron Road, SCHOFIELDS, NSW 2762	s.58 Licence Variation	Issued	29 Mar 2010
1114351	CPB CONTRACTORS PTY LIMITED	Veron Road, SCHOFIELDS, NSW 2762	s.58 Licence Variation	Issued	21 May 2010
1115926	CPB CONTRACTORS PTY LIMITED	Veron Road, SCHOFIELDS, NSW 2762	s.58 Licence Variation	Issued	25 Jun 2010
1117189	CPB CONTRACTORS PTY LIMITED	Veron Road, SCHOFIELDS, NSW 2762	s.58 Licence Variation	Issued	23 Jul 2010
1118044	CPB CONTRACTORS PTY LIMITED	Veron Road, SCHOFIELDS, NSW 2762	s.58 Licence Variation	Issued	06 Aug 2010
1119331	CPB CONTRACTORS PTY LIMITED	Veron Road, SCHOFIELDS, NSW 2762	s.58 Licence Variation	Issued	10 Sep 2010
1119420	CPB CONTRACTORS PTY LIMITED	Veron Road, SCHOFIELDS, NSW 2762	s.58 Licence Variation	Issued	24 Sep 2010
1120663	CPB CONTRACTORS PTY LIMITED	Veron Road, SCHOFIELDS, NSW 2762	s.58 Licence Variation	Issued	30 Dec 2010
1125652	CPB CONTRACTORS PTY LIMITED	Veron Road, SCHOFIELDS, NSW 2762	s.58 Licence Variation	Issued	04 Mar 2011
1126438	CPB CONTRACTORS PTY	Veron Road,	s.58 Licence	Issued	25 Mar 2011

For

	LIMITED	SCHOFIELDS, NSW 2762	Variation	
1129524	CPB CONTRACTORS PTY LIMITED	Veron Road, SCHOFIELDS, NSW 2762	s.58 Licence Variation Issued	17 Jun 2011
1129835	CPB CONTRACTORS PTY LIMITED	Veron Road, SCHOFIELDS, NSW 2762	s.58 Licence Variation Issued	28 Jun 2011
1500430	CPB CONTRACTORS PTY LIMITED	Veron Road, SCHOFIELDS, NSW 2762	s.58 Licence Variation Issued	22 Jul 2011
1501506	CPB CONTRACTORS PTY LIMITED	Veron Road, SCHOFIELDS, NSW 2762	s.58 Licence Variation Issued	20 Sep 2011
1501867	CPB CONTRACTORS PTY LIMITED	Veron Road, SCHOFIELDS, NSW 2762	s.58 Licence Variation Issued	29 Sep 2011

business and industry

For local government

Contact us

131 555 (tel:131555)

Online (https://yoursay.epa.nsw.gov.au/epa-website-feedback)

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

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

Search results

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

Suburb - Schofields

returned 72 results

Export to excel

2 of 4 Pages

Search Again

Number	Name	Location	Type	Status	Issued date
1503598	CPB CONTRACTORS PTY LIMITED	Veron Road, SCHOFIELDS, NSW 2762	s.58 Licence Variation	Issued	13 Jan 2012
1504060	CPB CONTRACTORS PTY LIMITED	Veron Road, SCHOFIELDS, NSW 2762	s.58 Licence Variation	Issued	06 Feb 2012
1505806	CPB CONTRACTORS PTY LIMITED	Veron Road, SCHOFIELDS, NSW 2762	s.58 Licence Variation	Issued	01 May 2012
1506892	CPB CONTRACTORS PTY LIMITED	Veron Road, SCHOFIELDS, NSW 2762	s.80 Surrender of a Licence	Issued	26 Jun 2012
1072482	CSR BUILDING PRODUCTS LIMITED	75 TOWNSON ROAD, SCHOFIELDS, NSW 2762	s.58 Licence Variation	Issued	22 Jun 2007
1075567	CSR BUILDING PRODUCTS LIMITED	75 TOWNSON ROAD, SCHOFIELDS, NSW 2762	s.58 Licence Variation	Issued	31 Aug 2007
1079899	CSR BUILDING PRODUCTS LIMITED	75 TOWNSON ROAD, SCHOFIELDS, NSW 2762	s.58 Licence Variation	Issued	15 Nov 2007
1107116	CSR BUILDING PRODUCTS LIMITED	75 TOWNSON ROAD, SCHOFIELDS, NSW 2762	s.58 Licence Variation	Issued	26 Mar 2010
1504791	CSR BUILDING PRODUCTS LIMITED	75 TOWNSON ROAD, SCHOFIELDS, NSW 2762	s.58 Licence Variation	Issued	12 Mar 2012
3085766860	CSR BUILDING PRODUCTS LIMITED	75 TOWNSON ROAD, SCHOFIELDS, NSW 2762	Penalty Notice	Issued	26 Nov 2012
1509962	CSR BUILDING PRODUCTS LIMITED	75 TOWNSON ROAD, SCHOFIELDS, NSW 2762	s.58 Licence Variation	Issued	30 Apr 2013
1515968	CSR BUILDING PRODUCTS LIMITED	75 TOWNSON ROAD, SCHOFIELDS, NSW 2762	s.58 Licence Variation	Issued	26 Aug 2013
3085775523	CSR BUILDING PRODUCTS LIMITED	75 TOWNSON ROAD, SCHOFIELDS, NSW 2762	Penalty Notice	Issued	24 Nov 2014
1007503	CSR LIMITED	75 TOWNSON ROAD, SCHOFIELDS, NSW 2762	s.58 Licence Variation	Issued	27 Jun 2002
1020181	DRAGA HLEBAR	NORTH STREET,	s.58 Licence	Issued	08 Oct 2002

For

		SCHOFIELDS, NSW 2762	Variation		
1027880	DRAGA HLEBAR	NORTH STREET, SCHOFIELDS, NSW 2762	s.58 Licence Variation	Issued	03 Jun 2003
1054185	DRAGA HLEBAR	NORTH STREET, SCHOFIELDS, NSW 2762	s.58 Licence Variation	Issued	16 Jan 2006
1095234	DRAGA HLEBAR	NORTH STREET, SCHOFIELDS, NSW 2762	s.58 Licence Variation	Issued	15 Jun 2009
1109839	DRAGA HLEBAR	NORTH STREET, SCHOFIELDS, NSW 2762	s.58 Licence Variation	Issued	11 Feb 2010
1115441	DRAGA HLEBAR	NORTH STREET, SCHOFIELDS, NSW 2762	s.58 Licence Variation	Issued	18 Aug 2010

Search results

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

Suburb - Schofields

returned 72 results

Export to excel 3 of 4 Pages Search Again

Number	Name	Location	Type	Status	Issued date
1125213	DRAGA HLEBAR	NORTH STREET, SCHOFIELDS, NSW 2762	s.58 Licence Variation	Issued	17 Jun 2011
1501544	DRAGA HLEBAR	NORTH STREET, SCHOFIELDS, NSW 2762	s.58 Licence Variation	Issued	09 Nov 2011
1506051	DRAGA HLEBAR	NORTH STREET, SCHOFIELDS, NSW 2762	s.58 Licence Variation	Issued	31 Oct 2012
1512613	DRAGA HLEBAR	NORTH STREET, SCHOFIELDS, NSW 2762	s.58 Licence Variation	Issued	23 Apr 2013
1514601	DRAGA HLEBAR	NORTH STREET, SCHOFIELDS, NSW 2762	s.58 Licence Variation	Issued	02 Aug 2013
4261	JIMMY BUTTIGIEG	101 HAMBLEDON ROAD, SCHOFIELDS, NSW 2762	POEO licence	Surrendered	03 Nov 1999
1020603	JIMMY BUTTIGIEG	101 HAMBLEDON ROAD, SCHOFIELDS, NSW 2762	s.80 Surrender of a Licence	Issued	16 Sep 2002
2014	PGH BRICKS & PAVERS PTY LIMITED	75 TOWNSON ROAD, SCHOFIELDS, NSW 2762	POEO licence	Issued	13 May 2000
3085778071	PGH BRICKS & PAVERS PTY LIMITED	75 TOWNSON ROAD, SCHOFIELDS, NSW 2762	Penalty Notice	Issued	04 Dec 2015
1538197	PGH BRICKS & PAVERS PTY LIMITED	75 TOWNSON ROAD, SCHOFIELDS, NSW 2762	s.58 Licence Variation	Issued	19 Feb 2016
1542863	PGH BRICKS & PAVERS PTY LIMITED	75 TOWNSON ROAD, SCHOFIELDS, NSW 2762	s.58 Licence Variation	Issued	25 Jul 2016
13078	REED CONSTRUCTIONS AUSTRALIA PTY LIMITED	VARIOUS STREETS IN KELLYVILLE AND,	POEO licence	Surrendered	23 Jun 2009

For

		SCHOFIELDS, NSW 2762			
1129215	REED CONSTRUCTIONS AUSTRALIA PTY LIMITED	VARIOUS STREETS IN KELLYVILLE AND, SCHOFIELDS, NSW 2762	s.80 Surrender of a Licence	Issued	07 Jun 2011
4594	RIVERSTONE EARTHMOVING PTY. LTD.	127 BURFITT ROAD, SCHOFIELDS, NSW 2762	POEO licence	Suspended	25 Jun 2001
1052803	RIVERSTONE EARTHMOVING PTY. LTD.	127 BURFITT ROAD, SCHOFIELDS, NSW 2762	s.58 Licence Variation	Issued	10 Jan 2006
1058461	RIVERSTONE EARTHMOVING PTY. LTD.	127 BURFITT ROAD, SCHOFIELDS, NSW 2762	s.79 Suspension of a Licence	Issued	20 Apr 2006
1097924	RIVERSTONE EARTHMOVING PTY. LTD.	127 BURFITT ROAD, SCHOFIELDS, NSW 2762	s.96 Prevention Notice	Issued	21 May 2009
1106745	RIVERSTONE EARTHMOVING PTY. LTD.	127 BURFITT ROAD, SCHOFIELDS, NSW 2762	s.110 Variation of Prevention Notice	Issued	29 Sep 2009
1112495	RIVERSTONE EARTHMOVING PTY. LTD.	127 BURFITT ROAD, SCHOFIELDS, NSW 2762	s.110 Variation of Prevention Notice	Issued	24 Mar 2010
1005690	RIVERSTONE WASTE DISPOSAL PTY LTD	127 BURFITT ROAD, SCHOFIELDS, NSW 2762	s.91 Clean Up Notice	Issued	30 Mar 2001

business and industry

For local government

Contact us

131 555 (tel:131555)

Online (https://yoursay.epa.nsw.gov.au/epa-website-feedback)

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

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

Find us on


(https://au.linkedin.com/company/nsw-environment-protection-authority-epa)


(https://twitter.com/NSWEPA)


(https://www.youtube.com/channel/UCS

Search results

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

Suburb - Schofields

returned 72 results

Export to excel

4 of 4 Pages

Search Again

Number	Name	Location	Type	Status	Issued date
3173523980	ROBERT ZEAIT	Kerry Rd, SCHOFIELDS, NSW 2762	Penalty Notice	Issued	23 Nov 2017
1549686	Universal Property Group Pty Ltd	104 Burdekin Road, SCHOFIELDS, NSW 2762	s.91 Clean Up Notice	Issued	23 Feb 2017
1014225	VEOLIA ENVIRONMENTAL SERVICES (AUSTRALIA) PTY LTD	127 BURFITT ROAD, SCHOFIELDS, NSW 2762	s.58 Licence Variation	Issued	07 Feb 2002
1015644	VEOLIA ENVIRONMENTAL SERVICES (AUSTRALIA) PTY LTD	127 BURFITT ROAD, SCHOFIELDS, NSW 2762	s.58 Licence Variation	Issued	14 Mar 2002
1018447	VEOLIA ENVIRONMENTAL SERVICES (AUSTRALIA) PTY LTD	127 BURFITT ROAD, SCHOFIELDS, NSW 2762	s.58 Licence Variation	Issued	25 Jun 2002
1033314	VEOLIA ENVIRONMENTAL SERVICES (AUSTRALIA) PTY LTD	127 BURFITT ROAD, SCHOFIELDS, NSW 2762	s.58 Licence Variation	Issued	23 Dec 2003
1040958	VEOLIA ENVIRONMENTAL SERVICES (AUSTRALIA) PTY LTD	127 BURFITT ROAD, SCHOFIELDS, NSW 2762	s.58 Licence Variation	Issued	21 Oct 2004
1042481	VEOLIA ENVIRONMENTAL SERVICES (AUSTRALIA) PTY LTD	127 BURFITT ROAD, SCHOFIELDS, NSW 2762	s.58 Licence Variation	Issued	23 Nov 2004
1045664	VEOLIA ENVIRONMENTAL SERVICES (AUSTRALIA) PTY LTD	127 BURFITT ROAD, SCHOFIELDS, NSW 2762	s.58 Licence Variation	Issued	11 Apr 2005
1048914	VEOLIA ENVIRONMENTAL SERVICES (AUSTRALIA) PTY LTD	127 BURFITT ROAD, SCHOFIELDS, NSW 2762	s.58 Licence Variation	Issued	19 Jul 2005
4578	VINKO HLEBAR	NORTH STREET, SCHOFIELDS, NSW 2762	POEO licence	Suspended	28 Jun 2000
1596057	VINKO HLEBAR	NORTH STREET, SCHOFIELDS, NSW 2762	s.79 Suspension of a Licence	Issued	30 Oct 2020

For

business and industry

For local government

Contact us

131 555 (tel:131555)

Online (https://yoursay.epa.nsw.gov.au/epa-website-feedback)

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

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

Find us on

in (https://au.linkedin.com/company/nsw-environment-protection-authority-epa)

(https://twitter.com/NSWEPA)

(https://www.youtube.com/channel/UCS

Search results

Your search for: Suburb: SCHOFIELDS
Date from: 01 Feb 1970
Date to: 11 Jul 2022

Search Again
Refine Search

did not find any records in our database.

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

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

Search TIP

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

... more search tips

More information about particular sites may be available from:

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

See What's in the record and What's not in the record.

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

7 September 2022

For

For local government

Contact us

131 555 (tel:131555)

Online (https://yoursay.epa.nsw.gov.au/epa-website-feedback)

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

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

Find us on

in (https://au.linkedin.com/company/nsw-environment-protection-authority-epa)

(https://twitter.com/NSWEPA)

(https://www.youtube.com/channel/UCS

Background

A strategy to systematically prioritise, assess and respond to notifications under Section 60 of the ***Contaminated Land Management Act 1997*** (CLM Act) has been developed by the EPA. This strategy acknowledges the EPA's obligations to make information available to the public under ***Government Information (Public Access) Act 2009***.

When a site is notified to the EPA, it may be accompanied by detailed site reports where the owner has been proactive in addressing the contamination and its source. However, often there is minimal information on the nature or extent of the contamination.

After receiving a report, the first step is to confirm that the report does not relate to a pollution incident. The Protection of the Environment Operations Act 1997 (POEO Act) deals with pollution incidents, waste stockpiling or dumping. The EPA also has an incident management process to manage significant incidents (https://www.epa.nsw.gov.au/reporting-and-incidents/incident-management).

In many cases, the information indicates the contamination is securely immobilised within the site, such as under a building or carpark, and is not currently causing any significant risks for the community or environment. Such sites may still need to be cleaned up, but this can be done in conjunction with any subsequent building or redevelopment of the land. These sites do not require intervention under the CLM Act, and are dealt with through the planning and development consent process. In these cases, the EPA informs the local council or other planning authority, so that the information can be recorded and considered at the appropriate time (https://www.epa.nsw.gov.au/your-environment/contaminated-land/managing-contaminated-land/role-of-planning-authorities).

Where indications are that the contamination could cause actual harm to the environment or an unacceptable offsite impact (i.e. the land is 'significantly contaminated'), the EPA would apply the regulatory provisions of the CLM Act to have the responsible polluter and/or landowner investigate and remediate the site. If the reported contamination could present an immediate or long-term threat to human health NSW Health will be consulted. SafeWork NSW and Water NSW can also be consulted if there appear to be occupational health and safety risks or an impact on groundwater quality.

As such, the sites notified to the EPA and presented in the list of contaminated sites notified to the EPA are at various stages of the assessment and remediation process. Understanding the nature of the underlying contamination, its implications and implementing a remediation program where required, can take a considerable period of time. The list provides an indication, in relation to each nominated site, as to the management status of that particular site. Further detailed information may be available from the EPA or the person who notified the site.

The following questions and answers may assist those interested in this issue.

Frequently asked questions

Why does my land appear on the list of notified sites?

Your land may appear on the list because:

- the site owner and/or the polluter has notified the EPA under section 60 of the CLM Act
- the EPA has been notified via other means and is satisfied that the site is or was contaminated.

If a site is on the list, it does not necessarily mean the contamination is significant enough to regulate under the CLM Act.

Does the list contain all contaminated sites in NSW?

No. The list only contains contaminated sites that EPA is aware of. If a site is not on the list, it does not necessarily mean the site is not contaminated.

The EPA relies on responsible parties and the public to notify contaminated sites.

How are notified contaminated sites managed by the EPA?

There are different ways the EPA can manage notified contaminated sites. Options include:

• regulation under the CLM Act, POEO Act, or both
• notifying the relevant planning authority for management under the planning and development process
• managing the site under the Protection of the Environment Operation (Underground Petroleum Storage Systems) Regulation 2014.

There are specific cases where contamination is managed under a tailored program operated by another agency (for example, the Resources & Geoscience's Legacy Mines Program).

What should I do if I am a potential buyer of a site that appears on the list?

You should seek advice from the seller to understand the contamination issue. You may need to seek independent contamination or legal advice.

The information provided in the list is indicative only and a starting point for your own assessment. Land contamination from past site uses is common, mainly in urban environments. If the site is properly remediated or managed, it may not affect the intended future use of the site.

Who can I contact if I need more information about a site?

You can contact the Environment Line at any time by calling 131 555 or by emailing info@environment.nsw.gov.au.

List of NSW Contaminated Sites Notified to the EPA

Disclaimer

The EPA has taken all reasonable care to ensure that the information in the list of contaminated sites notified to the EPA (the list) is complete and correct. The EPA does not, however, warrant or represent that the list is free from errors or omissions or that it is exhaustive.

The EPA may, without notice, change any or all of the information in the list at any time.

You should obtain independent advice before you make any decision based on the information in the list.

The list is made available on the understanding that the EPA, its servants and agents, to the extent permitted by law, accept no responsibility for any damage, cost, loss or expense incurred by you as a result of:

1. any information in the list; or
2. any error, omission or misrepresentation in the list; or
3. any malfunction or failure to function of the list;
4. without limiting (2) or (3) above, any delay, failure or error in recording, displaying or updating information.

Site Status	Explanation
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*.
Under Preliminary Investigation Order	The EPA has issued a Preliminary Investigation Order under s10 of the *Contaminated Land Management Act 1997*, to obtain additional information needed to complete the assessment.
Regulation under 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.

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.
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.
Contamination currently regulated under POEO Act	Contamination is currently regulated under the Protection of the Environment Operations Act 1997 (POEO Act). The EPA as the appropriate regulatory authority reasonably suspects that a pollution incident is occurring/ has occurred and that it requires regulation under the POEO Act. The EPA may use environment protection notices, such as clean up notices, to require clean up action to be taken. Such regulatory notices are available on the POEO public register.
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 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.

Suburb	SiteName	Address	ContaminationActivityType	ManagementClass	Latitude	Longitude
RYDE	Caltex Service Station	110 Lane Cove ROAD	Service Station	Regulation under CLM Act not required	-33.80142973	151.1137925
RYDE	7-Eleven (former Mobil) Service Station	326-328 Blaxland ROAD	Service Station	Regulation under CLM Act not required	-33.80242183	151.1004278
RYDE	Ryde Bus Depot	51 - 75 Buffalo ROAD	Other Petroleum	Regulation under CLM Act not required	-33.81679771	151.1225255
SANCTUARY POINT	United Service Station, Sanctuary Point	147 Larmer AVENUE	Service Station	Regulation under CLM Act not required	-35.09918861	150.6329537
SANDGATE	Caltex Service Station Sandgate	162 Maitland ROAD	Service Station	Regulation under CLM Act not required	-32.86501596	151.706161
SANDGATE	North Limited Storage Handling facility	Maitland ROAD	Other Industry	Contamination formerly regulated under the CLM Act	-32.86598453	151.7012866
SANS SOUCI	7-Eleven (Former Mobil) Service Station	474 Rocky Point ROAD	Service Station	Regulation under CLM Act not required	-33.99088939	151.1333779
SANS SOUCI	BP Sans Souci	520 Rocky Point ROAD	Service Station	Contamination currently regulated under CLM Act	-33.99245122	151.1323571
SANS SOUCI	Kendall Street Reserve	Lawson Street and Kendall STREET	Landfill	Regulation under CLM Act not required	-33.99966431	151.13005
SANS SOUCI	Former Service Station	542-544 Rocky Point ROAD	Service Station	Contamination was addressed via the planning process (EP&A Act)	-33.99376148	151.1316131
SANS SOUCI	Former 7-Eleven Ramsgate	368 Rocky Point ROAD	Service Station	Contamination formerly regulated under the CLM Act	-33.98615125	151.1359961
SCHOFIELDS	Reserve 478, Grange Avenue, Schofields	Reserve 478, Grange AVENUE	Landfill	Regulation under CLM Act not required	-33.70228736	150.8518591
SCONE	Shell Coles Express Service Station	91- 93 Kelly STREET	Service Station	Contamination currently regulated under CLM Act	-32.04715941	150.8676346
SCONE	Scone Works Depot	220 Susan STREET	Other Petroleum	Regulation under CLM Act not required	-32.04444892	150.879152
SCONE	Mobil Scone Airport Elt	8 Walter Pye AVENUE	Other Petroleum	Regulation under CLM Act not required	-32.03596733	150.8323698

Appendix C
SECTION 10.7(2) CERTIFICATES

Applicant Details

Your reference 10791EV/P/323

CONSTRUCTION SCIENCES PTY LTD
2/4 KELLOGG RD
ROOTY HILL NSW 2766

Certificate Details

Certificate no. PL2022/09553 **Fee: $53.00**

Date issued 01 July 2022 **Urgency fee: N/A**

Receipt no. ePay Ref 225254

Property information

Property ID 396282 **Land ID** 394732

Legal description LOT 3 DP 1268701

Address 259 RAILWAY TERRACE SCHOFIELDS NSW 2762

County CUMBERLAND **Parish** GIDLEY

PLANNING CERTIFICATE (Section 10.7(2))

Blacktown City Council prepared this Planning Certificate under Section 10.7 of the *Environmental Planning and Assessment Act 1979*. The form and content of the Certificate is consistent with Schedule 4 of the *Environmental Planning and Assessment Regulation 2000*.

Disclaimer

Blacktown City Council gives notice and points out to all users of the information supplied herein, that the information herein has been compiled by Council from sources outside of Council's control. While the information herein is provided with all due care and in good faith, it is provided on the basis that Council will not accept any responsibility for and will not be liable for its contents or for any consequence arising from its use, and every user of such information is advised to make all necessary enquiries from the appropriate organisations, institutions and the like.

Blacktown City Council also gives notice to all users of the information supplied herein, wherever any particular enquiry herein remains unanswered or has not been elaborated upon, such silence should not be interpreted as meaning or inferring either a negative or a positive response as the case may be.

Section 10.7(2)

The following information is provided under Section 10.7(2) of the *Environmental Planning and Assessment Act 1979*. The information relates to the subject land at the date of this Certificate.

This Note only applies to land affected by one or more of the previous State Environmental Planning Policies (SEPPs), where applicable:

- State Environmental Planning Policy (Sydney Region Growth Centres) 2006
- State Environmental Planning Policy (State Significant Precincts) 2005
- Sydney Regional Environmental Plan No 30—St Marys
- State Environmental Planning Policy (Western Sydney Parklands) 2009
- State Environmental Planning Policy (Western Sydney Employment Area) 2009
- State Environmental Planning Policy (Western Sydney Aerotropolis) 2020.

Please note that the above SEPPS were repealed on 1 March 2022. From the 1 March 2022, the following State Environmental Planning Policies apply as follows:

State Environmental Planning Policy (Precincts – Central River City) 2021 applies where:

- Appendix 3, 4, 6, 7 or 12 of repealed State Environmental Planning Policy (Sydney Region Growth Centres) 2006 applied.
- Appendix 7 or 10 of repealed State Environmental Planning Policy (State Significant Precincts) 2005 applied.

State Environmental Planning Policy (Precincts – Western Parklands City) 2021 applies where:

- Appendix 5 of repealed State Environmental Planning Policy (Sydney Region Growth Centres) 2006 applied.
- Sydney Regional Environmental Plan No 30—St Marys applied.
- State Environmental Planning Policy (Western Sydney Parklands) 2009 applied.
- State Environmental Planning Policy (Western Sydney Employment Area) 2009 applied.
- State Environmental Planning Policy (Western Sydney Aerotropolis) 2020 applied.

Any reference to repealed SEPPs numbered 1-6 above in this Certificate means either of the SEPPs identified above.

Note that the content of the SEPP has not changed.

---

1. Names of relevant planning instruments and development control plans

1.1 Environmental Planning Instrument

As at the date of this certificate the abovementioned land is not affected by Blacktown Local Environmental Plan 2015.

The land is affected by the *State Environmental Planning Policy (Sydney Region Growth Centres) 2006.*

1.2 Proposed Local Environmental Plans

On 1 December 2022, Business and Industrial zones will be replaced by the new Employment zones under the Standard Instrument (Local Environmental Plans) Order 2006. The Department of Planning and Environment has placed on exhibition from 31 May 2022 details of how each Local Environmental Plan that includes a current Business or Industrial zone will be amended to use the new Employment zones. The Explanation of Intended Effect (EIE) and a searchable web tool that displays the current and proposed zone for land covered in this public exhibition is available on the Planning Portal.

1.3 Other Applicable State Environmental Planning Policies

Attachment 1 contains a list of State Environmental Planning Policies that may apply to the carrying out of development on the subject land.

1.4 Proposed State Environmental Planning Policies

The following draft State Environmental Planning Policies (SEPPs) or Explanation of Intended Effects (EIE) are currently on exhibition or have been exhibited. For further information refer to https://www.planningportal.nsw.gov.au/draftplans

- The NSW Department of Planning, Industry and Environment exhibited an Explanation of Intended Effect from 29 October 2021 to 30 November 2021 to amend State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 (Fun SEPP).

  The amendment proposes to support hospitality, events and arts industries through the use of exempt and complying development. For more information visit https://www.planningportal.nsw.gov.au/the-fun-SEPP

- The NSW Department of Planning, Industry and Environment exhibited an Explanation of Intended Effect between 31 March and 12 May 2021 to review Clause 4.6 of the Standard Instrument Local Environmental Plan

- The NSW Department of Planning, Industry and Environment exhibited an Explanation of Intended Effect from 2 March to 16 March 2020 to amend State Environmental Planning Policy (State and Regional Development) 2011 to facilitate the efficient delivery of upgrades to existing water treatment facilities in NSW

- The NSW Department of Planning, Industry and Environment exhibited and Explanation of Intended Effect from 20 November to 17 December 2020 to amend the Infrastructure SEPP related to health services facilities.
- The NSW Department of Planning, Industry and Environment exhibited and Explanation of Intended Effect from 26 August to 2 November 2020 to recommend the creation of a new State Environmental Planning Policy for strategic conservation planning
- The NSW Department of Planning, Industry and Environment exhibited an Explanation of Intended Effect from 7 September to 28 September 2018 to amend State Environmental Planning Policy (Sydney Region Growth Centres) 2006
- The NSW Department of Planning, Industry and Environment exhibited an Explanation of Intended Effect between 31 October 2017 and 31 January 2018 for the proposed Environment SEPP.

1.5 Development control plans

As at the date of this certificate the abovementioned land is affected by the NSW Government's *Blacktown City Council Growth Centre Precincts Development Control Plan 2018*.

Blacktown Development Control Plan 2015 generally does not apply to land that a Precinct Plan applies to, except where specifically referred to in the *State Environmental Planning Policy (Sydney Region Growth Centres) 2006* or the *Growth Centre Precincts Development Control Plan 2018*.

2. Zoning and land use under relevant environmental planning instruments

The following information will assist in determining how the subject land may be developed. It is recommended that you read this section in conjunction with a full copy of any relevant environmental planning instrument as there may be additional provisions that affect how the land may be developed.

2.1 Zoning

Attachment 2 applies if the site is or has been the subject of public consultation in relation to a proposed rezoning under an applicable Environmental Planning Instrument (including a Local Environmental Plan or State Environmental Planning Policy).

Under *State Environmental Planning Policy (Sydney Region Growth Centres) 2006,* the land is zoned:

Zone R3 Medium Density Residential

Below is an extract from the principal Environmental Planning Instrument, outlining the types of development that may or may not be carried out in the above zone.

2 Permitted without consent

Home occupations

3 Permitted with consent

Attached dwellings; Bed and breakfast accommodation; Boarding houses; Child care centres; Community facilities; Dual occupancies; Dwelling houses; Group homes; Manor homes; Multi dwelling housing; Neighbourhood shops; Places of public worship; Residential flat buildings; Roads; Secondary dwellings; Semi-detached dwellings; Seniors housing; Shop top housing; Studio dwellings; Any other development not specified in item 2 or 4

4 Prohibited

Agriculture; Air transport facilities; Airstrips; Amusement centres; Boat repair facilities; Boat sheds; Business premises; Caravan parks; Cemeteries; Charter and tourism boating facilities; Correctional centres; Crematoria; Depots; Electricity generating works; Entertainment facilities; Extractive industries; Freight transport facilities; Function centres; Helipads; Highway service centres; Home occupations (sex services); Industrial retail outlets; Industries; Information and education facilities; Marinas; Mortuaries; Office premises; Passenger transport facilities; Port facilities; Public administration buildings; Recreation facilities (indoor); Recreation facilities (major); Recreation facilities (outdoor); Registered clubs; Restriction facilities; Retail premises; Rural supplies; Rural workers' dwellings; Service stations; Sex services premises; Signage; Storage premises; Tourist and visitor accommodation; Transport depots; Truck depots; Vehicle body repair workshops; Vehicle repair stations; Vehicle sales or hire premises; Waste management facilities; Waste or resource management facilities; Wholesale supplies.

Zone SP2 Infrastructure

Below is an extract from the principal Environmental Planning Instrument, outlining the types of development that may or may not be carried out in the above zone.

2 Permitted without consent

Nil

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; Drainage; Earthworks; Environmental protection works; Flood mitigation works; Roads; Water recycling facilities; Waterbodies (artificial)

4 Prohibited
Any other development not specified in item 2 or 3.

The SP2 Infrastructure zone applicable to this site is for the purposes of:
SP2 - Infrastructure-Drainage

2.2 Minimum land dimensions for the erection of a dwelling house

Not applicable

2.3 Critical habitat

The land does not include or comprise a critical habitat.

Note: Critical habitat registers are kept by the National Parks and Wildlife Service under the *Threatened Species Conservation Act 1995* and the Department of Fisheries under the *Fisheries Management Act 1994*.

2.4 Conservation areas

The land is not within a conservation area.

2.5 Environmental Heritage

The land does not contain an item of environmental heritage under the protection of State Environmental Planning Policy (Sydney Region Growth Centres) 2006

3. Complying development

Complying development may or may not be carried out on the subject land under an Environmental Planning Policy. Council does not have sufficient information to determine the extent to which specific complying development may or may not be carried out.

4. Coastal protection

The subject land is not affected by the operation of Sections 38 or 39 of the *Coastal Protection Act, 1979*.

5. Mine subsidence

The subject land has not been proclaimed to be a mine subsidence district within the meaning of Section 15 of the *Mine Subsidence Compensation Act 1961*.

6. Road widening and road realignment

The subject land is not affected by road widening or road realignment under an environmental planning instrument.

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

7.1 Contaminated Lands Policy and Asbestos Policy (Schedule 6)

Council has adopted a Contaminated Lands Policy and an Asbestos Policy which may restrict development on the subject land.

The Land Contamination Policy applies when zoning or land use changes are proposed on land which has previously been used for certain purposes or has the potential to be affected by such purposes undertaken on nearby lands. The Asbestos Policy applies where land contains, or is likely to have contained in the past, buildings or structures that were erected prior to the banning of asbestos. Both policies should be considered in the context of relevant State legislation and guidelines.

Council's records may not be sufficient to determine all previous uses on the land, or determine activities that may have taken place on this land.

7.2 Other policies on hazard risk restrictions

Council has not adopted any other policies to restrict the development of the subject land by reason of the likelihood of landslip, bushfire, tidal inundation, subsidence or the occurrence of acid sulphate soils.

Note: Although Council has not adopted a specific policy to restrict development bushfire prone land, it is bound by state-wide bushfire legislation that may restrict development on the subject land. Additional information relating to bushfire prone land is provided at point 11 below.

7a. Flood related development controls information

The Flood Inundation maps prepared by Council are based on results of Engineering flood studies commissioned by Government authorities or Council. The information provided in this section is general advice based on Council's current adopted flood mapping. For more detailed flood information, please contact Council's Flooding Section and/or email Floodadvice@blacktown.nsw.gov.au

8. Land reserved for acquisition

State Environmental Planning Policy (Sydney Region Growth Centres) 2006 makes provision for land included on the Land Reservation Acquisition Map to be acquired by a public authority. The subject land is affected by the Land Reservation Acquisition Map.

9. Contributions plans

Council currently levies contributions under Section 7.11 of the *Environmental Planning & Assessment Act 1979* for facilities and services. The further development of the subject land may incur such contributions.

Contributions Plan No. 20 - Riverstone and Alex Avenue Precincts applies to the subject land.

9a. Biodiversity certified land

The land is biodiversity certified land as defined by Part 7AA of the *Threatened Species Conservation Act 1995*.

10. Biobanking agreements

The land is not subject to any biobanking agreement under Part 7A of the *Threatened Species Conservation Act 1995*.

11. Bushfire prone land

The Rural Fires and Environmental Assessment Legislation Amendment Act 2002, which came into force on 1 August 2002, introduced development provisions for bush fire prone land as shown on a Bush Fire Prone Land Map. "Bush fire prone land" is land that has been designated by the Commissioner of the NSW Rural Fire Service as being bush fire prone due to characteristics of vegetation and topography. The land the subject of this certificate has been identified on Council's Bush Fire Prone Land Map as being:

Clear of any bush fire prone land

On land that is bush fire prone, certain development may require further consideration under Section 4.14 or Section 4.46 of the *Environmental Planning & Assessment Act 1979* and under Section 100B of the *Rural Fires Act 1997*.

12. Property vegetation plans

The subject land is not affected by a property vegetation plan under the *Native Vegetation Act 2003*. The Blacktown local government area is excluded from the operation of the *Native Vegetation Act 2003* (refer Schedule 1 Part 3 of that Act).

13. Orders under *Trees (Disputes Between Neighbours) Act 2006*

No. Council has not been notified of any order made under the *Trees (Disputes Between Neighbours) Act 2006* in relation to the subject land.

14. Site compatibility certificates and conditions for seniors housing

Land to which this Certificate applies is not subject to the above.

15. Site compatibility certificates for infrastructure

Land to which this Certificate applies is not subject to the above.

16. Site compatibility certificates and conditions for affordable rental housing

Land to which this Certificate applies is not subject to the above.

17. Paper subdivision information

Not applicable

18. Site verification certificates

Council is not aware of any site verification certificate applying to the subject land.

Under the *Contaminated Land Management Act 1997* and *Contaminated Land Management Amendment Act 2008*

(a) The land to which this certificate relates has not been declared to be significantly contaminated land at the date when the certificate was issued

(b) The land to which the certificate relates is not subject to a management order at the date when the certificate was issued

(c) The land to which this certificate relates is not the subject of an approved voluntary management proposal at the date when the certificate was issued

(d) The land to which this certificate relates is not subject to an ongoing maintenance order as at the date when the certificate was issued

(e) The land to which this certificate relates is not the subject of a site audit statement provided to the Council.

19. Affected building notices and building product rectification orders

19.1 Affected building notices

Council is not aware of any affected building notice in force for the subject land.

19.2 Building product rectification orders

(a) Council is not aware of any building product rectification order in force for the subject land.

(b) Council is not aware of any notice of intention to make a building product rectification order being given for the subject land.

Attachment 1 – State Environmental Planning Policies

In addition to the principal environmental planning instrument identified in section 2.1 of this Certificate, the following State Environmental Planning Policies may also affect the development on the subject land:

State Environmental Planning Policy (Housing) 2021

The principles of this policy include to enable development of diverse housing types, including purpose-built rental housing, encourage the development of housing that will meet the needs of housing that will meet the needs of low income, vulnerable and seniors and people with a disability, and ensure housing developments with reasonable level of amenity.

This policy is the consolidation of repealed policies including the Affordable Rental Housing SEPP (2009), Housing for Seniors SEPP (2004), SEPP No 21 Caravan Parks, SEPP 70 Affordable Housing.

Note that General savings provisions apply for the repealed instruments in accordance with Schedule 7 Savings and transitional provisions of Housing SEPP 2021.

State Environmental Planning Policy (Building Sustainability Index (BASIX) 2004

This policy aims to ensure consistency in the implementation of the BASIX scheme throughout the State by overriding provisions of other environmental planning instruments and development control plans that would otherwise add to, subtract from or modify any obligations arising under the BASIX scheme.

This policy is proposed to be repealed and consolidated into the draft Design and Place SEPP 2021 which is on exhibition until 28 February 2022.

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

This policy is also known as the Codes SEPP and includes a number of Codes that allow for certain types of development to be undertaken without the need for council approval as either Exempt Development or approved under a fast track system known as Complying Development, if the relevant standards are met.

State Environmental Planning Policy No 65 - Design Quality of Apartments

This policy aims to improve the design quality of residential apartment development through the application of 9 design quality principles. The policy also provides requirements for a constituted design review panel to provide independent expert advice to council on the merit of residential flat

developments. A design review panel is not mandatory.

This policy is proposed to be repealed and consolidated into the draft Design and Place SEPP 2021 which is on exhibition until 28 February 2022.

State Environmental Planning Policy (Biodiversity and Conservation) 2021

The SEPP contains:
- planning rules and controls for the clearing of native vegetation in NSW on land zoned for urban and environmental purposes that is not linked to a development application.
- the land use planning and assessment framework for koala habitat.
- provisions which establish a consistent and co-ordinated approach to environmental planning and assessment along the River Murray.
- provisions seeking to protect and preserve bushland within public open space zones and reservations.
- provisions which aim to prohibit canal estate development.
- provisions to support the water quality objectives for the Sydney drinking water catchment.
- provisions to protect the environment of the Hawkesbury-Nepean River system.
- provisions to manage and improve environmental outcomes for Sydney Harbour and its tributaries.
- provisions to manage and promote integrated catchment management policies along the Georges River and its tributaries.
- provisions which seek to protect, conserve and manage the World Heritage listed Willandra Lakes property.

State Environmental Planning Policy (Industry and Employment) 2021

This SEPP contains planning provisions:

- applying to employment land in western Sydney.
- for advertising and signage in NSW.

State Environmental Planning Policy (Planning Systems) 2021

The Planning Systems SEPP:
- identifies State or regionally significant development, State significant Infrastructure, and critical State significant infrastructure.
- provides for consideration of development delivery plans by local Aboriginal land councils in planning assessment.
- allows the Planning Secretary to elect to be the concurrence authority for certain development that

requires concurrence under nominated State environmental planning policies.

State Environmental Planning Policy (Primary Production) 2021

This SEPP contains planning provisions:

- to manage primary production and rural development including supporting sustainable agriculture.
- for the protection of prime agricultural land of state and regional significance as well as regionally significant mining and extractive resources.

State Environmental Planning Policy (Precincts - Central River City) 2021

This SEPP contains planning provisions for precinct planning, which is a form of strategic planning applied to a specified geographic area.

The precincts in this SEPP are located in the Central River City.

This city is based the strategic planning vision of the 'three cities' regions identified in the Greater Sydney Region Plan – A Metropolis of Three Cities.

State Environmental Planning Policy (Precincts - Western Parkland City) 2021

This SEPP contains planning provisions for precinct planning, which is a form of strategic planning applied to a specified geographic area.

The precincts in this SEPP are located in the Western Parkland City.

This city is based the strategic planning vision of the 'three cities' regions identified in the Greater Sydney Region Plan – A Metropolis of Three Cities.

State Environmental Planning Policy (Resilience and Hazards) 2021

This SEPP contains planning provisions:

- for land use planning within the coastal zone, in a manner consistent with the objects of the Coastal Management Act 2016.
- to manage hazardous and offensive development.
- which provides a state-wide planning framework for the remediation of contaminated land and to minimise the risk of harm.

State Environmental Planning Policy (Resources and Energy) 2021

This SEPP contains planning provisions:

- for the assessment and development of mining, petroleum production and extractive material resource proposals in NSW.
- which aim to facilitate the development of extractive resources in proximity to the population of the Sydney Metropolitan Area by identifying land which contains extractive material of regional significance.

State Environmental Planning Policy (Transport and Infrastructure) 2021

This SEPP contains planning provisions:

- for infrastructure in NSW, such as hospitals, roads, railways, emergency services, water supply and electricity delivery.
- for child-care centres, schools, TAFEs and Universities.
planning controls and reserves land for the protection of three corridors (North South Rail Line, South West Rail Link extension and Western Sydney Freight Line).
- the land use planning and assessment framework for appropriate development at Port Kembla, Port Botany and Port of Newcastle.

Attachment 2 – Proposed rezoning

There are no proposed zonings for this land

End of Certificate

Applicant Details

Your reference 10791EV/P/323

CONSTRUCTION SCIENCES PTY LTD
2/4 KELLOGG RD
ROOTY HILL NSW 2766

Certificate Details

Certificate no. PL2022/09554 **Fee: $53.00**

Date issued 30 June 2022 **Urgency fee: N/A**

Receipt no. ePay Ref 225254

Property information

Property ID 396283 **Land ID** 394733

Legal description LOT 4 DP 1268701

Address 249 RAILWAY TERRACE SCHOFIELDS NSW 2762

County CUMBERLAND **Parish** GIDLEY

PLANNING CERTIFICATE (Section 10.7(2))

Blacktown City Council prepared this Planning Certificate under Section 10.7 of the *Environmental Planning and Assessment Act 1979*. The form and content of the Certificate is consistent with Schedule 4 of the *Environmental Planning and Assessment Regulation 2000*.

Disclaimer

Blacktown City Council gives notice and points out to all users of the information supplied herein, that the information herein has been compiled by Council from sources outside of Council's control. While the information herein is provided with all due care and in good faith, it is provided on the basis that Council will not accept any responsibility for and will not be liable for its contents or for any consequence arising from its use, and every user of such information is advised to make all necessary enquiries from the appropriate organisations, institutions and the like.

Blacktown City Council also gives notice to all users of the information supplied herein, wherever any particular enquiry herein remains unanswered or has not been elaborated upon, such silence should not be interpreted as meaning or inferring either a negative or a positive response as the case may be.

Section 10.7(2)

The following information is provided under Section 10.7(2) of the *Environmental Planning and Assessment Act 1979*. The information relates to the subject land at the date of this Certificate.

This Note only applies to land affected by one or more of the previous State Environmental Planning Policies (SEPPs), where applicable:

- State Environmental Planning Policy (Sydney Region Growth Centres) 2006
- State Environmental Planning Policy (State Significant Precincts) 2005
- Sydney Regional Environmental Plan No 30—St Marys
- State Environmental Planning Policy (Western Sydney Parklands) 2009
- State Environmental Planning Policy (Western Sydney Employment Area) 2009
- State Environmental Planning Policy (Western Sydney Aerotropolis) 2020.

Please note that the above SEPPS were repealed on 1 March 2022. From the 1 March 2022, the following State Environmental Planning Policies apply as follows:

State Environmental Planning Policy (Precincts – Central River City) 2021 applies where:

- Appendix 3, 4, 6, 7 or 12 of repealed State Environmental Planning Policy (Sydney Region Growth Centres) 2006 applied.
- Appendix 7 or 10 of repealed State Environmental Planning Policy (State Significant Precincts) 2005 applied.

State Environmental Planning Policy (Precincts – Western Parklands City) 2021 applies where:

- Appendix 5 of repealed State Environmental Planning Policy (Sydney Region Growth Centres) 2006 applied.
- Sydney Regional Environmental Plan No 30—St Marys applied.
- State Environmental Planning Policy (Western Sydney Parklands) 2009 applied.
- State Environmental Planning Policy (Western Sydney Employment Area) 2009 applied.
- State Environmental Planning Policy (Western Sydney Aerotropolis) 2020 applied.

Any reference to repealed SEPPs numbered 1-6 above in this Certificate means either of the SEPPs identified above.

Note that the content of the SEPP has not changed.

1. Names of relevant planning instruments and development control plans

1.1 Environmental Planning Instrument

As at the date of this certificate the abovementioned land is not affected by Blacktown Local Environmental Plan 2015.

The land is affected by the *State Environmental Planning Policy (Sydney Region Growth Centres) 2006.*

1.2 Proposed Local Environmental Plans

On 1 December 2022, Business and Industrial zones will be replaced by the new Employment zones under the Standard Instrument (Local Environmental Plans) Order 2006. The Department of Planning and Environment has placed on exhibition from 31 May 2022 details of how each Local Environmental Plan that includes a current Business or Industrial zone will be amended to use the new Employment zones. The Explanation of Intended Effect (EIE) and a searchable web tool that displays the current and proposed zone for land covered in this public exhibition is available on the Planning Portal.

1.3 Other Applicable State Environmental Planning Policies

Attachment 1 contains a list of State Environmental Planning Policies that may apply to the carrying out of development on the subject land.

1.4 Proposed State Environmental Planning Policies

The following draft State Environmental Planning Policies (SEPPs) or Explanation of Intended Effects (EIE) are currently on exhibition or have been exhibited. For further information refer to https://www.planningportal.nsw.gov.au/draftplans

- The NSW Department of Planning, Industry and Environment exhibited an Explanation of Intended Effect from 29 October 2021 to 30 November 2021 to amend State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 (Fun SEPP).

  The amendment proposes to support hospitality, events and arts industries through the use of exempt and complying development. For more information visit https://www.planningportal.nsw.gov.au/the-fun-SEPP

- The NSW Department of Planning, Industry and Environment exhibited an Explanation of Intended Effect between 31 March and 12 May 2021 to review Clause 4.6 of the Standard Instrument Local Environmental Plan

- The NSW Department of Planning, Industry and Environment exhibited an Explanation of Intended Effect from 2 March to 16 March 2020 to amend State Environmental Planning Policy (State and Regional Development) 2011 to facilitate the efficient delivery of upgrades to existing water treatment facilities in NSW

- The NSW Department of Planning, Industry and Environment exhibited and Explanation of Intended Effect from 20 November to 17 December 2020 to amend the Infrastructure SEPP related to health services facilities.
- The NSW Department of Planning, Industry and Environment exhibited and Explanation of Intended Effect from 26 August to 2 November 2020 to recommend the creation of a new State Environmental Planning Policy for strategic conservation planning
- The NSW Department of Planning, Industry and Environment exhibited an Explanation of Intended Effect from 7 September to 28 September 2018 to amend State Environmental Planning Policy (Sydney Region Growth Centres) 2006
- The NSW Department of Planning, Industry and Environment exhibited an Explanation of Intended Effect between 31 October 2017 and 31 January 2018 for the proposed Environment SEPP.

1.5 Development control plans

As at the date of this certificate the abovementioned land is affected by the NSW Government's *Blacktown City Council Growth Centre Precincts Development Control Plan 2018*.

Blacktown Development Control Plan 2015 generally does not apply to land that a Precinct Plan applies to, except where specifically referred to in the *State Environmental Planning Policy (Sydney Region Growth Centres) 2006* or the *Growth Centre Precincts Development Control Plan 2018*.

2. Zoning and land use under relevant environmental planning instruments

The following information will assist in determining how the subject land may be developed. It is recommended that you read this section in conjunction with a full copy of any relevant environmental planning instrument as there may be additional provisions that affect how the land may be developed.

2.1 Zoning

Attachment 2 applies if the site is or has been the subject of public consultation in relation to a proposed rezoning under an applicable Environmental Planning Instrument (including a Local Environmental Plan or State Environmental Planning Policy).

Under *State Environmental Planning Policy (Sydney Region Growth Centres) 2006,* the land is zoned:

Zone R3 Medium Density Residential

Below is an extract from the principal Environmental Planning Instrument, outlining the types of development that may or may not be carried out in the above zone.

2 Permitted without consent

Home occupations

3 Permitted with consent

Attached dwellings; Bed and breakfast accommodation; Boarding houses; Child care centres; Community facilities; Dual occupancies; Dwelling houses; Group homes; Manor homes; Multi dwelling housing; Neighbourhood shops; Places of public worship; Residential flat buildings; Roads; Secondary dwellings; Semi-detached dwellings; Seniors housing; Shop top housing; Studio dwellings; Any other development not specified in item 2 or 4

4 Prohibited

Agriculture; Air transport facilities; Airstrips; Amusement centres; Boat repair facilities; Boat sheds; Business premises; Caravan parks; Cemeteries; Charter and tourism boating facilities; Correctional centres; Crematoria; Depots; Electricity generating works; Entertainment facilities; Extractive industries; Freight transport facilities; Function centres; Helipads; Highway service centres; Home occupations (sex services); Industrial retail outlets; Industries; Information and education facilities; Marinas; Mortuaries; Office premises; Passenger transport facilities; Port facilities; Public administration buildings; Recreation facilities (indoor); Recreation facilities (major); Recreation facilities (outdoor); Registered clubs; Restriction facilities; Retail premises; Rural supplies; Rural workers' dwellings; Service stations; Sex services premises; Signage; Storage premises; Tourist and visitor accommodation; Transport depots; Truck depots; Vehicle body repair workshops; Vehicle repair stations; Vehicle sales or hire premises; Waste management facilities; Waste or resource management facilities; Wholesale supplies.

Zone SP2 Infrastructure

Below is an extract from the principal Environmental Planning Instrument, outlining the types of development that may or may not be carried out in the above zone.

2 Permitted without consent

Nil

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; Drainage; Earthworks; Environmental protection works; Flood mitigation works; Roads; Water recycling facilities; Waterbodies (artificial)

4 Prohibited
Any other development not specified in item 2 or 3.

The SP2 Infrastructure zone applicable to this site is for the purposes of:
SP2 - Infrastructure-Drainage

2.2 Minimum land dimensions for the erection of a dwelling house

Not applicable

2.3 Critical habitat

The land does not include or comprise a critical habitat.

Note: Critical habitat registers are kept by the National Parks and Wildlife Service under the *Threatened Species Conservation Act 1995* and the Department of Fisheries under the *Fisheries Management Act 1994*.

2.4 Conservation areas

The land is not within a conservation area.

2.5 Environmental Heritage

The land does not contain an item of environmental heritage under the protection of State Environmental Planning Policy (Sydney Region Growth Centres) 2006

3. Complying development

Complying development may or may not be carried out on the subject land under an Environmental Planning Policy. Council does not have sufficient information to determine the extent to which specific complying development may or may not be carried out.

4. Coastal protection

The subject land is not affected by the operation of Sections 38 or 39 of the *Coastal Protection Act, 1979*.

5. Mine subsidence

The subject land has not been proclaimed to be a mine subsidence district within the meaning of Section 15 of the *Mine Subsidence Compensation Act 1961*.

6. Road widening and road realignment

The subject land is not affected by road widening or road realignment under an environmental planning instrument.

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

7.1 Contaminated Lands Policy and Asbestos Policy (Schedule 6)

Council has adopted a Contaminated Lands Policy and an Asbestos Policy which may restrict development on the subject land.

The Land Contamination Policy applies when zoning or land use changes are proposed on land which has previously been used for certain purposes or has the potential to be affected

by such purposes undertaken on nearby lands. The Asbestos Policy applies where land contains, or is likely to have contained in the past, buildings or structures that were erected prior to the banning of asbestos. Both policies should be considered in the context of relevant State legislation and guidelines.

Council's records may not be sufficient to determine all previous uses on the land, or determine activities that may have taken place on this land.

7.2 Other policies on hazard risk restrictions

Council has not adopted any other policies to restrict the development of the subject land by reason of the likelihood of landslip, bushfire, tidal inundation, subsidence or the occurrence of acid sulphate soils.

Note: Although Council has not adopted a specific policy to restrict development bushfire prone land, it is bound by state-wide bushfire legislation that may restrict development on the subject land. Additional information relating to bushfire prone land is provided at point 11 below.

7a. Flood related development controls information

The Flood Inundation maps prepared by Council are based on results of Engineering flood studies commissioned by Government authorities or Council. The information provided in this section is general advice based on Council's current adopted flood mapping. For more detailed flood information, please contact Council's Flooding Section and/or email Floodadvice@blacktown.nsw.gov.au

8. Land reserved for acquisition

State Environmental Planning Policy (Sydney Region Growth Centres) 2006 makes provision for land included on the Land Reservation Acquisition Map to be acquired by a public authority.

9. Contributions plans

Council currently levies contributions under Section 7.11 of the *Environmental Planning & Assessment Act 1979* for facilities and services. The further development of the subject land may incur such contributions.

Contributions Plan No. 20 - Riverstone and Alex Avenue Precincts applies to the subject land.

9a. Biodiversity certified land

The land is biodiversity certified land as defined by Part 7AA of the *Threatened Species Conservation Act 1995*.

10. Biobanking agreements

The land is not subject to any biobanking agreement under Part 7A of the *Threatened Species Conservation Act 1995*.

11. Bushfire prone land

The Rural Fires and Environmental Assessment Legislation Amendment Act 2002, which came into force on 1 August 2002, introduced development provisions for bush fire prone land as shown on a Bush Fire Prone Land Map. "Bush fire prone land" is land that has been designated by the Commissioner of the NSW Rural Fire Service as being bush fire prone due to characteristics of vegetation and topography. The land the subject of this certificate has been identified on Council's Bush Fire Prone Land Map as being:

Clear of any bush fire prone land

On land that is bush fire prone, certain development may require further consideration under Section 4.14 or Section 4.46 of the *Environmental Planning & Assessment Act 1979* and under Section 100B of the *Rural Fires Act 1997*.

12. Property vegetation plans

The subject land is not affected by a property vegetation plan under the *Native Vegetation Act 2003*. The Blacktown local government area is excluded from the operation of the *Native Vegetation Act 2003* (refer Schedule 1 Part 3 of that Act).

13. Orders under *Trees (Disputes Between Neighbours) Act 2006*

No. Council has not been notified of any order made under the *Trees (Disputes Between Neighbours) Act 2006* in relation to the subject land.

14. Site compatibility certificates and conditions for seniors housing

Land to which this Certificate applies is not subject to the above.

15. Site compatibility certificates for infrastructure

Land to which this Certificate applies is not subject to the above.

16. Site compatibility certificates and conditions for affordable rental housing

Land to which this Certificate applies is not subject to the above.

17. Paper subdivision information

Not applicable

18. Site verification certificates

Council is not aware of any site verification certificate applying to the subject land.

Under the *Contaminated Land Management Act 1997* and *Contaminated Land Management Amendment Act 2008*

(a) The land to which this certificate relates has not been declared to be significantly contaminated land at the date when the certificate was issued

(b) The land to which the certificate relates is not subject to a management order at the date when the certificate was issued

(c) The land to which this certificate relates is not the subject of an approved voluntary management proposal at the date when the certificate was issued

(d) The land to which this certificate relates is not subject to an ongoing maintenance order as at the date when the certificate was issued

(e) The land to which this certificate relates is not the subject of a site audit statement provided to the Council.

19. Affected building notices and building product rectification orders

19.1 Affected building notices

Council is not aware of any affected building notice in force for the subject land.

19.2 Building product rectification orders

(a) Council is not aware of any building product rectification order in force for the subject land.

(b) Council is not aware of any notice of intention to make a building product rectification order being given for the subject land.

Attachment 1 – State Environmental Planning Policies

In addition to the principal environmental planning instrument identified in section 2.1 of this Certificate, the following State Environmental Planning Policies may also affect the development on the subject land:

State Environmental Planning Policy (Housing) 2021

The principles of this policy include to enable development of diverse housing types, including purpose-built rental housing, encourage the development of housing that will meet the needs of housing that will meet the needs of low income, vulnerable and seniors and people with a disability, and ensure housing developments with reasonable level of amenity.

This policy is the consolidation of repealed policies including the Affordable Rental Housing SEPP (2009), Housing for Seniors SEPP (2004), SEPP No 21 Caravan Parks, SEPP 70 Affordable Housing.

Note that General savings provisions apply for the repealed instruments in accordance with Schedule 7 Savings and transitional provisions of Housing SEPP 2021.

State Environmental Planning Policy (Building Sustainability Index (BASIX) 2004

This policy aims to ensure consistency in the implementation of the BASIX scheme throughout the State by overriding provisions of other environmental planning instruments and development control plans that would otherwise add to, subtract from or modify any obligations arising under the BASIX scheme.

This policy is proposed to be repealed and consolidated into the draft Design and Place SEPP 2021 which is on exhibition until 28 February 2022.

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

This policy is also known as the Codes SEPP and includes a number of Codes that allow for certain types of development to be undertaken without the need for council approval as either Exempt Development or approved under a fast track system known as Complying Development, if the relevant standards are met.

State Environmental Planning Policy No 65 - Design Quality of Apartments

This policy aims to improve the design quality of residential apartment development through the application of 9 design quality principles. The policy also provides requirements for a constituted design review panel to provide independent expert advice to council on the merit of residential flat

developments. A design review panel is not mandatory.

This policy is proposed to be repealed and consolidated into the draft Design and Place SEPP 2021 which is on exhibition until 28 February 2022.

State Environmental Planning Policy (Biodiversity and Conservation) 2021

The SEPP contains:
- planning rules and controls for the clearing of native vegetation in NSW on land zoned for urban and environmental purposes that is not linked to a development application.
- the land use planning and assessment framework for koala habitat.
- provisions which establish a consistent and co-ordinated approach to environmental planning and assessment along the River Murray.
- provisions seeking to protect and preserve bushland within public open space zones and reservations.
- provisions which aim to prohibit canal estate development.
- provisions to support the water quality objectives for the Sydney drinking water catchment.
- provisions to protect the environment of the Hawkesbury-Nepean River system.
- provisions to manage and improve environmental outcomes for Sydney Harbour and its tributaries.
- provisions to manage and promote integrated catchment management policies along the Georges River and its tributaries.
- provisions which seek to protect, conserve and manage the World Heritage listed Willandra Lakes property.

State Environmental Planning Policy (Industry and Employment) 2021

This SEPP contains planning provisions:
- applying to employment land in western Sydney.
- for advertising and signage in NSW.

State Environmental Planning Policy (Planning Systems) 2021

The Planning Systems SEPP:
- identifies State or regionally significant development, State significant Infrastructure, and critical State significant infrastructure.
- provides for consideration of development delivery plans by local Aboriginal land councils in planning assessment.
- allows the Planning Secretary to elect to be the concurrence authority for certain development that requires concurrence under nominated State environmental planning policies.

State Environmental Planning Policy (Primary Production) 2021

This SEPP contains planning provisions:
- to manage primary production and rural development including supporting sustainable agriculture.
- for the protection of prime agricultural land of state and regional significance as well as regionally significant mining and extractive resources.

State Environmental Planning Policy (Precincts - Central River City) 2021
This SEPP contains planning provisions for precinct planning, which is a form of strategic planning applied to a specified geographic area.

The precincts in this SEPP are located in the Central River City.

This city is based the strategic planning vision of the 'three cities' regions identified in the Greater Sydney Region Plan – A Metropolis of Three Cities.

State Environmental Planning Policy (Precincts - Western Parkland City) 2021

This SEPP contains planning provisions for precinct planning, which is a form of strategic planning applied to a specified geographic area.

The precincts in this SEPP are located in the Western Parkland City.

This city is based the strategic planning vision of the 'three cities' regions identified in the Greater Sydney Region Plan – A Metropolis of Three Cities.

State Environmental Planning Policy (Resilience and Hazards) 2021

This SEPP contains planning provisions:
- for land use planning within the coastal zone, in a manner consistent with the objects of the Coastal Management Act 2016.
- to manage hazardous and offensive development.
- which provides a state-wide planning framework for the remediation of contaminated land and to minimise the risk of harm.

State Environmental Planning Policy (Resources and Energy) 2021

This SEPP contains planning provisions:
- for the assessment and development of mining, petroleum production and extractive material resource proposals in NSW.

- which aim to facilitate the development of extractive resources in proximity to the population of the Sydney Metropolitan Area by identifying land which contains extractive material of regional significance.

State Environmental Planning Policy (Transport and Infrastructure) 2021

This SEPP contains planning provisions:
- for infrastructure in NSW, such as hospitals, roads, railways, emergency services, water supply and electricity delivery.
- for child-care centres, schools, TAFEs and Universities.
planning controls and reserves land for the protection of three corridors (North South Rail Line, South West Rail Link extension and Western Sydney Freight Line).
- the land use planning and assessment framework for appropriate development at Port Kembla, Port Botany and Port of Newcastle.

Attachment 2 – Proposed rezoning

There are no proposed zonings for this land

End of Certificate

Applicant Details

Your reference 10791EV/P/323

CONSTRUCTION SCIENCES PTY LTD
2/4 KELLOGG RD
ROOTY HILL NSW 2766

Certificate Details

Certificate no. PL2022/09555 **Fee: $53.00**

Date issued 01 July 2022 **Urgency fee: N/A**

Receipt no. ePay Ref 225254

Property information

Property ID 111725 **Land ID** 111725

Legal description LOT 5 DP 26987

Address 271 RAILWAY TERRACE SCHOFIELDS NSW 2762

County CUMBERLAND **Parish** GIDLEY

PLANNING CERTIFICATE (Section 10.7(2))

Blacktown City Council prepared this Planning Certificate under Section 10.7 of the *Environmental Planning and Assessment Act 1979*. The form and content of the Certificate is consistent with Schedule 4 of the *Environmental Planning and Assessment Regulation 2000*.

Disclaimer

Blacktown City Council gives notice and points out to all users of the information supplied herein, that the information herein has been compiled by Council from sources outside of Council's control. While the information herein is provided with all due care and in good faith, it is provided on the basis that Council will not accept any responsibility for and will not be liable for its contents or for any consequence arising from its use, and every user of such information is advised to make all necessary enquiries from the appropriate organisations, institutions and the like.

Blacktown City Council also gives notice to all users of the information supplied herein, wherever any particular enquiry herein remains unanswered or has not been elaborated upon, such silence should not be interpreted as meaning or inferring either a negative or a positive response as the case may be.

Section 10.7(2)

The following information is provided under Section 10.7(2) of the *Environmental Planning and Assessment Act 1979*. The information relates to the subject land at the date of this Certificate.

This Note only applies to land affected by one or more of the previous State Environmental Planning Policies (SEPPs), where applicable:

- State Environmental Planning Policy (Sydney Region Growth Centres) 2006
- State Environmental Planning Policy (State Significant Precincts) 2005
- Sydney Regional Environmental Plan No 30—St Marys
- State Environmental Planning Policy (Western Sydney Parklands) 2009
- State Environmental Planning Policy (Western Sydney Employment Area) 2009
- State Environmental Planning Policy (Western Sydney Aerotropolis) 2020.

Please note that the above SEPPS were repealed on 1 March 2022. From the 1 March 2022, the following State Environmental Planning Policies apply as follows:

State Environmental Planning Policy (Precincts – Central River City) 2021 applies where:

- Appendix 3, 4, 6, 7 or 12 of repealed State Environmental Planning Policy (Sydney Region Growth Centres) 2006 applied.
- Appendix 7 or 10 of repealed State Environmental Planning Policy (State Significant Precincts) 2005 applied.

State Environmental Planning Policy (Precincts – Western Parklands City) 2021 applies where:

- Appendix 5 of repealed State Environmental Planning Policy (Sydney Region Growth Centres) 2006 applied.
- Sydney Regional Environmental Plan No 30—St Marys applied.
- State Environmental Planning Policy (Western Sydney Parklands) 2009 applied.
- State Environmental Planning Policy (Western Sydney Employment Area) 2009 applied.
- State Environmental Planning Policy (Western Sydney Aerotropolis) 2020 applied.

Any reference to repealed SEPPs numbered 1-6 above in this Certificate means either of the SEPPs identified above.

Note that the content of the SEPP has not changed.

---

1. Names of relevant planning instruments and development control plans

1.1 Environmental Planning Instrument

As at the date of this certificate the abovementioned land is not affected by Blacktown Local Environmental Plan 2015.

The land is affected by the *State Environmental Planning Policy (Sydney Region Growth Centres) 2006.*

1.2 Proposed Local Environmental Plans

On 1 December 2022, Business and Industrial zones will be replaced by the new Employment zones under the Standard Instrument (Local Environmental Plans) Order 2006. The Department of Planning and Environment has placed on exhibition from 31 May 2022 details of how each Local Environmental Plan that includes a current Business or Industrial zone will be amended to use the new Employment zones. The Explanation of Intended Effect (EIE) and a searchable web tool that displays the current and proposed zone for land covered in this public exhibition is available on the Planning Portal.

1.3 Other Applicable State Environmental Planning Policies

Attachment 1 contains a list of State Environmental Planning Policies that may apply to the carrying out of development on the subject land.

1.4 Proposed State Environmental Planning Policies

The following draft State Environmental Planning Policies (SEPPs) or Explanation of Intended Effects (EIE) are currently on exhibition or have been exhibited. For further information refer to https://www.planningportal.nsw.gov.au/draftplans

- The NSW Department of Planning, Industry and Environment exhibited an Explanation of Intended Effect from 29 October 2021 to 30 November 2021 to amend State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 (Fun SEPP).

  The amendment proposes to support hospitality, events and arts industries through the use of exempt and complying development. For more information visit https://www.planningportal.nsw.gov.au/the-fun-SEPP

- The NSW Department of Planning, Industry and Environment exhibited an Explanation of Intended Effect between 31 March and 12 May 2021 to review Clause 4.6 of the Standard Instrument Local Environmental Plan

- The NSW Department of Planning, Industry and Environment exhibited an Explanation of Intended Effect from 2 March to 16 March 2020 to amend State Environmental Planning Policy (State and Regional Development) 2011 to facilitate the efficient delivery of upgrades to existing water treatment facilities in NSW

- The NSW Department of Planning, Industry and Environment exhibited and Explanation of Intended Effect from 20 November to 17 December 2020 to amend the Infrastructure SEPP related to health services facilities.
- The NSW Department of Planning, Industry and Environment exhibited and Explanation of Intended Effect from 26 August to 2 November 2020 to recommend the creation of a new State Environmental Planning Policy for strategic conservation planning
- The NSW Department of Planning, Industry and Environment exhibited an Explanation of Intended Effect from 7 September to 28 September 2018 to amend State Environmental Planning Policy (Sydney Region Growth Centres) 2006
- The NSW Department of Planning, Industry and Environment exhibited an Explanation of Intended Effect between 31 October 2017 and 31 January 2018 for the proposed Environment SEPP.
- Draft amendments to *State Environmental Planning Policy (Sydney Region Growth Centres) 2006* to implement actions from the North West Priority Growth Area Land Use and Infrastructure Implementation Plan applies to the land.

1.5 Development control plans

As at the date of this certificate the abovementioned land is affected by the NSW Government's *Blacktown City Council Growth Centre Precincts Development Control Plan 2018*.

Blacktown Development Control Plan 2015 generally does not apply to land that a Precinct Plan applies to, except where specifically referred to in the *State Environmental Planning Policy (Sydney Region Growth Centres) 2006* or the *Growth Centre Precincts Development Control Plan 2018*.

2. Zoning and land use under relevant environmental planning instruments

The following information will assist in determining how the subject land may be developed. It is recommended that you read this section in conjunction with a full copy of any relevant environmental planning instrument as there may be additional provisions that affect how the land may be developed.

2.1 Zoning

Attachment 2 applies if the site is or has been the subject of public consultation in relation to a proposed rezoning under an applicable Environmental Planning Instrument (including a Local Environmental Plan or State Environmental Planning Policy).

Under *State Environmental Planning Policy (Sydney Region Growth Centres) 2006,* the land is zoned:

Zone R3 Medium Density Residential

Below is an extract from the principal Environmental Planning Instrument, outlining the types of development that may or may not be carried out in the above zone.

2 Permitted without consent

Home occupations

3 Permitted with consent

Attached dwellings; Bed and breakfast accommodation; Boarding houses; Child care centres; Community facilities; Dual occupancies; Dwelling houses; Group homes; Manor homes; Multi dwelling housing; Neighbourhood shops; Places of public worship; Residential flat buildings; Roads; Secondary dwellings; Semi-detached dwellings; Seniors housing; Shop top housing; Studio dwellings; Any other development not specified in item 2 or 4

4 Prohibited

Agriculture; Air transport facilities; Airstrips; Amusement centres; Boat repair facilities; Boat sheds; Business premises; Caravan parks; Cemeteries; Charter and tourism boating facilities; Correctional centres; Crematoria; Depots; Electricity generating works; Entertainment facilities; Extractive industries; Freight transport facilities; Function centres; Helipads; Highway service centres; Home occupations (sex services); Industrial retail outlets; Industries; Information and education facilities; Marinas; Mortuaries; Office premises; Passenger transport facilities; Port facilities; Public administration buildings; Recreation facilities (indoor); Recreation facilities (major); Recreation facilities (outdoor); Registered clubs; Restriction facilities; Retail premises; Rural supplies; Rural workers' dwellings; Service stations; Sex services premises; Signage; Storage premises; Tourist and visitor accommodation; Transport depots; Truck depots; Vehicle body repair workshops; Vehicle repair stations; Vehicle sales or hire premises; Waste management facilities; Waste or resource management facilities; Wholesale supplies.

2.2 Minimum land dimensions for the erection of a dwelling house

Not applicable

2.3 Critical habitat

The land does not include or comprise a critical habitat.

Note: Critical habitat registers are kept by the National Parks and Wildlife Service under the *Threatened Species Conservation Act 1995* and the Department of Fisheries under the *Fisheries Management Act 1994*.

2.4 Conservation areas

The land is not within a conservation area.

2.5 Environmental Heritage

The land does not contain an item of environmental heritage under the protection of State Environmental Planning Policy (Sydney Region Growth Centres) 2006

3. Complying development

Complying development may or may not be carried out on the subject land under an Environmental Planning Policy. Council does not have sufficient information to determine the extent to which specific complying development may or may not be carried out.

4. Coastal protection

The subject land is not affected by the operation of Sections 38 or 39 of the *Coastal Protection Act, 1979*.

5. Mine subsidence

The subject land has not been proclaimed to be a mine subsidence district within the meaning of Section 15 of the *Mine Subsidence Compensation Act 1961*.

6. Road widening and road realignment

The subject land is not affected by road widening or road realignment under an environmental planning instrument.

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

7.1 Contaminated Lands Policy and Asbestos Policy (Schedule 6)

Council has adopted a Contaminated Lands Policy and an Asbestos Policy which may restrict development on the subject land.

The Land Contamination Policy applies when zoning or land use changes are proposed on land which has previously been used for certain purposes or has the potential to be affected by such purposes undertaken on nearby lands. The Asbestos Policy applies where land contains, or is likely to have contained in the past, buildings or structures that were erected prior to the banning of asbestos. Both policies should be considered in the context of relevant State legislation and guidelines.

Council's records may not be sufficient to determine all previous uses on the land, or determine activities that may have taken place on this land.

7.2 Other policies on hazard risk restrictions

Council has not adopted any other policies to restrict the development of the subject land by reason of the likelihood of landslip, bushfire, tidal inundation, subsidence or the occurrence of acid sulphate soils.

Note: Although Council has not adopted a specific policy to restrict development bushfire prone land, it is bound by state-wide bushfire legislation that may restrict development on the subject land. Additional information relating to bushfire prone land is provided at point 11 below.

7a. Flood related development controls information

The Flood Inundation maps prepared by Council are based on results of Engineering flood studies commissioned by Government authorities or Council. The information provided in this section is general advice based on Council's current adopted flood mapping. For more detailed flood information, please contact Council's Flooding Section and/or email Floodadvice@blacktown.nsw.gov.au

8. Land reserved for acquisition

State Environmental Planning Policy (Sydney Region Growth Centres) 2006 makes provision for land included on the Land Reservation Acquisition Map to be acquired by a public authority.

9. Contributions plans

Council currently levies contributions under Section 7.11 of the *Environmental Planning & Assessment Act 1979* for facilities and services. The further development of the subject land may incur such contributions.

Contributions Plan No. 20 - Riverstone and Alex Avenue Precincts applies to the subject land.

9a. Biodiversity certified land

The land is biodiversity certified land as defined by Part 7AA of the *Threatened Species Conservation Act 1995*.

10. Biobanking agreements

The land is not subject to any biobanking agreement under Part 7A of the *Threatened Species Conservation Act 1995*.

11. Bushfire prone land

The Rural Fires and Environmental Assessment Legislation Amendment Act 2002, which came into force on 1 August 2002, introduced development provisions for bush fire prone land as shown on a Bush Fire Prone Land Map. "Bush fire prone land" is land that has been designated by the Commissioner of the NSW Rural Fire Service as being bush fire prone due to characteristics of vegetation and topography. The land the subject of this certificate has been identified on Council's Bush Fire Prone Land Map as being:

Clear of any bush fire prone land

On land that is bush fire prone, certain development may require further consideration under Section 4.14 or Section 4.46 of the *Environmental Planning & Assessment Act 1979* and under Section 100B of the *Rural Fires Act 1997*.

12. Property vegetation plans

The subject land is not affected by a property vegetation plan under the *Native Vegetation Act 2003*. The Blacktown local government area is excluded from the operation of the *Native Vegetation Act 2003* (refer Schedule 1 Part 3 of that Act).

13. Orders under *Trees (Disputes Between Neighbours) Act 2006*

No. Council has not been notified of any order made under the *Trees (Disputes Between Neighbours) Act 2006* in relation to the subject land.

14. Site compatibility certificates and conditions for seniors housing

Land to which this Certificate applies is not subject to the above.

15. Site compatibility certificates for infrastructure

Land to which this Certificate applies is not subject to the above.

16. Site compatibility certificates and conditions for affordable rental housing

Land to which this Certificate applies is not subject to the above.

17. Paper subdivision information

Not applicable

18. Site verification certificates

Council is not aware of any site verification certificate applying to the subject land.

Under the *Contaminated Land Management Act 1997* and *Contaminated Land Management Amendment Act 2008*

(a) The land to which this certificate relates has not been declared to be significantly contaminated land at the date when the certificate was issued

(b) The land to which the certificate relates is not subject to a management order at the date when the certificate was issued

(c) The land to which this certificate relates is not the subject of an approved voluntary management proposal at the date when the certificate was issued

(d) The land to which this certificate relates is not subject to an ongoing maintenance order as at the date when the certificate was issued

(e) The land to which this certificate relates is not the subject of a site audit statement provided to the Council.

19. Affected building notices and building product rectification orders

19.1 Affected building notices

Council is not aware of any affected building notice in force for the subject land.

19.2 Building product rectification orders

(a) Council is not aware of any building product rectification order in force for the subject land.

(b) Council is not aware of any notice of intention to make a building product rectification order being given for the subject land.

Attachment 1 – State Environmental Planning Policies

In addition to the principal environmental planning instrument identified in section 2.1 of this Certificate, the following State Environmental Planning Policies may also affect the development on the subject land:

State Environmental Planning Policy (Housing) 2021

The principles of this policy include to enable development of diverse housing types, including purpose-built rental housing, encourage the development of housing that will meet the needs of housing that will meet the needs of low income, vulnerable and seniors and people with a disability, and ensure housing developments with reasonable level of amenity.

This policy is the consolidation of repealed policies including the Affordable Rental Housing SEPP (2009), Housing for Seniors SEPP (2004), SEPP No 21 Caravan Parks, SEPP 70 Affordable Housing.

Note that General savings provisions apply for the repealed instruments in accordance with Schedule 7 Savings and transitional provisions of Housing SEPP 2021.

State Environmental Planning Policy (Building Sustainability Index (BASIX) 2004

This policy aims to ensure consistency in the implementation of the BASIX scheme throughout the State by overriding provisions of other environmental planning instruments and development control plans that would otherwise add to, subtract from or modify any obligations arising under the BASIX scheme.

This policy is proposed to be repealed and consolidated into the draft Design and Place SEPP 2021 which is on exhibition until 28 February 2022.

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

This policy is also known as the Codes SEPP and includes a number of Codes that allow for certain types of development to be undertaken without the need for council approval as either Exempt Development or approved under a fast track system known as Complying Development, if the relevant standards are met.

State Environmental Planning Policy No 65 - Design Quality of Apartments

This policy aims to improve the design quality of residential apartment development through the application of 9 design quality principles. The policy also provides requirements for a constituted design review panel to provide independent expert advice to council on the merit of residential flat

developments. A design review panel is not mandatory.

This policy is proposed to be repealed and consolidated into the draft Design and Place SEPP 2021 which is on exhibition until 28 February 2022.

State Environmental Planning Policy (Biodiversity and Conservation) 2021

The SEPP contains:
- planning rules and controls for the clearing of native vegetation in NSW on land zoned for urban and environmental purposes that is not linked to a development application.
- the land use planning and assessment framework for koala habitat.
- provisions which establish a consistent and co-ordinated approach to environmental planning and assessment along the River Murray.
- provisions seeking to protect and preserve bushland within public open space zones and reservations.
- provisions which aim to prohibit canal estate development.
- provisions to support the water quality objectives for the Sydney drinking water catchment.
- provisions to protect the environment of the Hawkesbury-Nepean River system.
- provisions to manage and improve environmental outcomes for Sydney Harbour and its tributaries.
- provisions to manage and promote integrated catchment management policies along the Georges River and its tributaries.
- provisions which seek to protect, conserve and manage the World Heritage listed Willandra Lakes property.

State Environmental Planning Policy (Industry and Employment) 2021

This SEPP contains planning provisions:

- applying to employment land in western Sydney.
- for advertising and signage in NSW.

State Environmental Planning Policy (Planning Systems) 2021

The Planning Systems SEPP:
- identifies State or regionally significant development, State significant Infrastructure, and critical State significant infrastructure.
- provides for consideration of development delivery plans by local Aboriginal land councils in planning assessment.
- allows the Planning Secretary to elect to be the concurrence authority for certain development that

requires concurrence under nominated State environmental planning policies.

State Environmental Planning Policy (Primary Production) 2021

This SEPP contains planning provisions:

- to manage primary production and rural development including supporting sustainable agriculture.
- for the protection of prime agricultural land of state and regional significance as well as regionally significant mining and extractive resources.

State Environmental Planning Policy (Precincts - Central River City) 2021

This SEPP contains planning provisions for precinct planning, which is a form of strategic planning applied to a specified geographic area.

The precincts in this SEPP are located in the Central River City.

This city is based the strategic planning vision of the 'three cities' regions identified in the Greater Sydney Region Plan – A Metropolis of Three Cities.

State Environmental Planning Policy (Precincts - Western Parkland City) 2021

This SEPP contains planning provisions for precinct planning, which is a form of strategic planning applied to a specified geographic area.

The precincts in this SEPP are located in the Western Parkland City.

This city is based the strategic planning vision of the 'three cities' regions identified in the Greater Sydney Region Plan – A Metropolis of Three Cities.

State Environmental Planning Policy (Resilience and Hazards) 2021

This SEPP contains planning provisions:

- for land use planning within the coastal zone, in a manner consistent with the objects of the Coastal Management Act 2016.
- to manage hazardous and offensive development.
- which provides a state-wide planning framework for the remediation of contaminated land and to minimise the risk of harm.

State Environmental Planning Policy (Resources and Energy) 2021

This SEPP contains planning provisions:

- for the assessment and development of mining, petroleum production and extractive material resource proposals in NSW.
- which aim to facilitate the development of extractive resources in proximity to the population of the Sydney Metropolitan Area by identifying land which contains extractive material of regional significance.

State Environmental Planning Policy (Transport and Infrastructure) 2021

This SEPP contains planning provisions:

- for infrastructure in NSW, such as hospitals, roads, railways, emergency services, water supply and electricity delivery.
- for child-care centres, schools, TAFEs and Universities.
planning controls and reserves land for the protection of three corridors (North South Rail Line, South West Rail Link extension and Western Sydney Freight Line).
- the land use planning and assessment framework for appropriate development at Port Kembla, Port Botany and Port of Newcastle.

Attachment 2 – Proposed rezoning

There are no proposed zonings for this land

End of Certificate

Appendix D
SCHEDULE 11 SEARCH

Joshua Nito

From: Licensing <licensing@safework.nsw.gov.au>
Sent: Thursday, 21 July 2022 1:17 PM
To: Kim Mcmanus
Subject: SafeWork NSW: 00721436 –Site Search application – Result not found - 249 Railway Terrace Schofields NSW 2762 [ref:_00D281hl6J._5004a8ilS2:ref]

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

Dear Kim

Re: Site Search for Schedule 11 Hazardous Chemicals on premises Application – Result not found

I refer to your application for a Site Search for Schedule 11 Hazardous Chemicals on premises for the following site: 249 Railway Terrace Schofields NSW 2762.

A search of the records held by SafeWork NSW has not located any records pertaining to the above-mentioned premises.

If you have any further information or if you have any questions, please use one of the following options, quoting the SafeWork NSW enquiry reference number: 00721436

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

Kind regards

Gabriela Draper
Licensing Representative
SafeWork NSW | Better Regulation Division
Department of Customer Service
p- 13 10 50
e- licensing@safework.nsw.gov.au | www.customerservice.nsw.gov.au
Level 3, 32 Mann Street, Gosford, NSW 2250

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

ref:_00D281hl6J._5004a8ilS2:ref

Joshua Nito

From: Licensing <licensing@safework.nsw.gov.au>
Sent: Thursday, 21 July 2022 1:18 PM
To: Kim Mcmanus
Subject: SafeWork NSW: 00721436 –Site Search application – Result not found - 271 Railway Terrace Schofields NSW 2762 [ref:_00D281hl6J._5004a8ilS2:ref]

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

Dear Kim

Re: Site Search for Schedule 11 Hazardous Chemicals on premises Application – Result not found

I refer to your application for a Site Search for Schedule 11 Hazardous Chemicals on premises for the following site: 271 Railway Terrace Schofields NSW 2762.

A search of the records held by SafeWork NSW has not located any records pertaining to the above-mentioned premises.

If you have any further information or if you have any questions, please use one of the following options, quoting the SafeWork NSW enquiry reference number: 00721436

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

Kind regards

Gabriela Draper
Licensing Representative
SafeWork NSW | Better Regulation Division
Department of Customer Service
p- 13 10 50
e- licensing@safework.nsw.gov.au | www.customerservice.nsw.gov.au
Level 3, 32 Mann Street, Gosford, NSW 2250

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

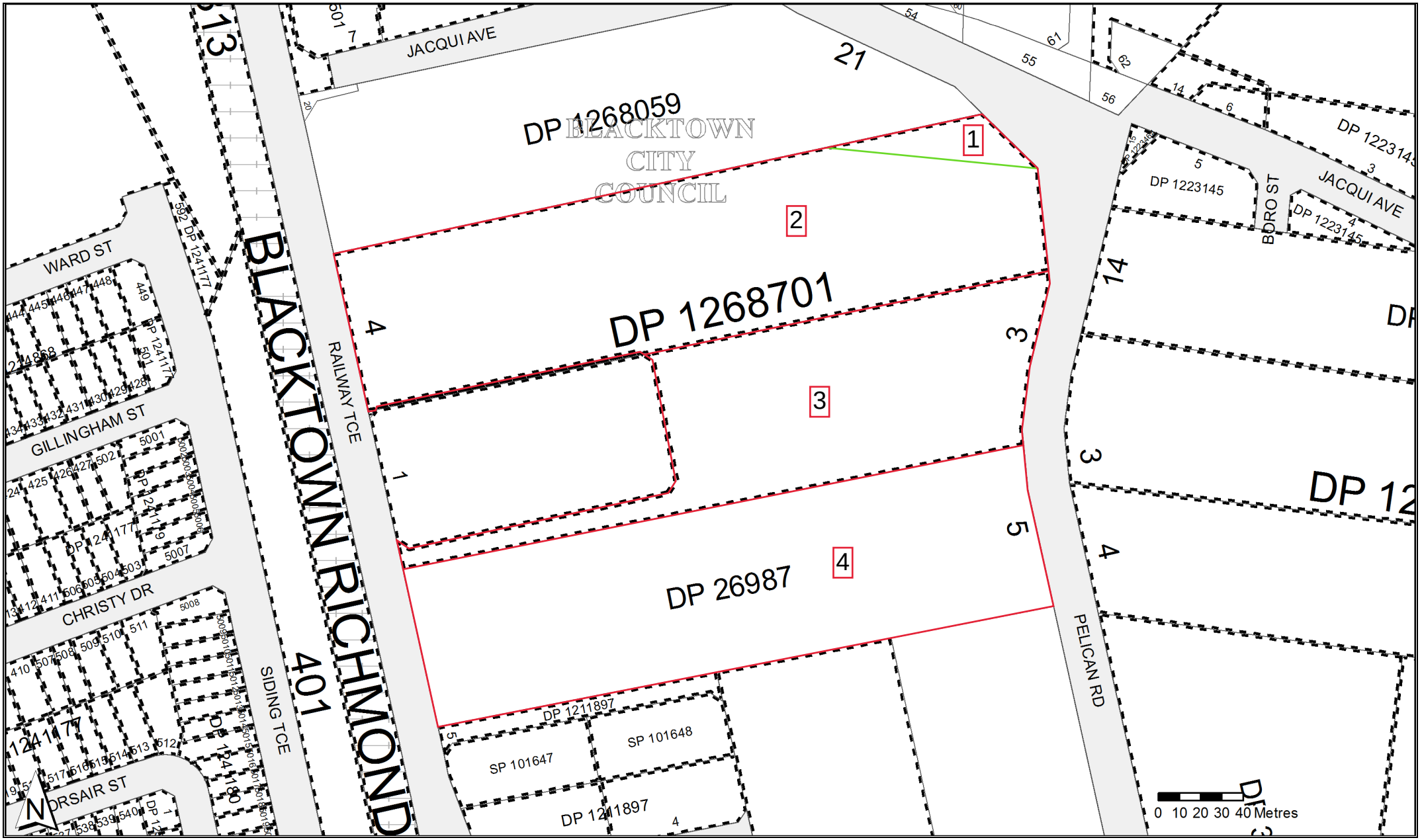
ref:_00D281hl6J._5004a8ilS2:ref

Appendix E
LAND TITLE SEARCHES

Cadastral Records Enquiry Report : Lot 3 DP 1268701

Ref : 249-271 Railway Terrace, Schofields

Locality : SCHOFIELDS
Parish : GIDLEY
LGA : BLACKTOWN
County : CUMBERLAND



This information is provided as a searching aid only.Whilst every endeavour is made to ensure that current map, plan and titling information is accurately reflected, the Registrar General cannot guarantee the information provided. For ALL ACTIVITY PRIOR TO SEPTEMBER 2002 you must refer to the RGs Charting and Reference Maps

	Status	Surv/Comp	Purpose
DP1243995			
Lot(s): 1			
DP26987	HISTORICAL	SURVEY	UNRESEARCHED
DP1189236	HISTORICAL	SURVEY	SUBDIVISION
DP1272678	PRE-ALLOCATED	UNAVAILABLE	SUBDIVISION
DP1272679	PRE-ALLOCATED	UNAVAILABLE	SUBDIVISION
DP1272714	PRE-ALLOCATED	UNAVAILABLE	SUBDIVISION
DP1272715	PRE-ALLOCATED	UNAVAILABLE	SUBDIVISION
DP1272716	PRE-ALLOCATED	UNAVAILABLE	SUBDIVISION
DP1258191			
Lot(s): 1, 2			
DP853847	HISTORICAL	SURVEY	SUBDIVISION
DP1140960	HISTORICAL	SURVEY	SUBDIVISION
DP1171596	HISTORICAL	SURVEY	REDEFINITION
DP1191977	HISTORICAL	SURVEY	ROADS ACT, 1993
DP1214866	HISTORICAL	SURVEY	SUBDIVISION
DP1214867	HISTORICAL	SURVEY	SUBDIVISION
DP1214868	HISTORICAL	SURVEY	SUBDIVISION
DP1218925	HISTORICAL	SURVEY	SUBDIVISION
DP1222902	HISTORICAL	SURVEY	SUBDIVISION
DP1232920	HISTORICAL	SURVEY	SUBDIVISION
DP1233283	HISTORICAL	SURVEY	SUBDIVISION
DP1241177	HISTORICAL	SURVEY	SUBDIVISION
DP1250393	HISTORICAL	SURVEY	SUBDIVISION
DP1263501			
Lot(s): 7			
DP26987	HISTORICAL	SURVEY	UNRESEARCHED
DP1191922	HISTORICAL	SURVEY	RESUMPTION OR ACQUISITION
DP1272066	HISTORICAL	SURVEY	SUBDIVISION
DP1279198	REGISTERED	SURVEY	SUBDIVISION
DP1268701			
Lot(s): 1, 2, 3, 4			
DP26987	HISTORICAL	SURVEY	UNRESEARCHED
DP1272066			
Lot(s): 10			
DP26987	HISTORICAL	SURVEY	UNRESEARCHED
DP1191922	HISTORICAL	SURVEY	RESUMPTION OR ACQUISITION
DP1272263			
Lot(s): 120			
DP1191977	HISTORICAL	SURVEY	ROADS ACT, 1993
DP1214866	HISTORICAL	SURVEY	SUBDIVISION
DP1214867	HISTORICAL	SURVEY	SUBDIVISION
DP1214868	HISTORICAL	SURVEY	SUBDIVISION
DP1218925	HISTORICAL	SURVEY	SUBDIVISION
DP1222902	HISTORICAL	SURVEY	SUBDIVISION
DP1227035	HISTORICAL	SURVEY	SUBDIVISION
DP1233283	HISTORICAL	SURVEY	SUBDIVISION
DP1250393	HISTORICAL	SURVEY	SUBDIVISION
DP1256003	HISTORICAL	SURVEY	SUBDIVISION
DP1260334	PRE-ALLOCATED	UNAVAILABLE	SUBDIVISION

NEW SOUTH WALES LAND REGISTRY SERVICES - HISTORICAL SEARCH

SEARCH DATE
22/7/2022 10:26AM

FOLIO: 3/26987

First Title(s): SEE PRIOR TITLE(S)
Prior Title(s): VOL 7833 FOL 154

Recorded	Number	Type of Instrument	C.T. Issue
27/11/1988		TITLE AUTOMATION PROJECT	LOT RECORDED FOLIO NOT CREATED
9/5/1989		CONVERTED TO COMPUTER FOLIO	FOLIO CREATED CT NOT ISSUED
24/9/2002	8978000	MORTGAGE	EDITION 1
6/3/2007	AC977722	CAVEAT	
24/3/2011	AG117254	WITHDRAWAL OF CAVEAT	
24/3/2011	AG33412	DISCHARGE OF MORTGAGE	
24/3/2011	AG33413	TRANSFER	EDITION 2
25/11/2020	DP1268701	DEPOSITED PLAN	
~~12/5/2021~~	~~AQ952786~~	~~TRANSFER~~	FOLIO CANCELLED

*** END OF SEARCH ***

Received: 22/07/2022 10:26:00

Form: 01T
Licence: 01-05-025
Licensee: LEAP Legal Software Pty Limited
Firm name: Peter Dawson & Associates

TRANSFER

New South Wales
Real Property Act 1900

AG33413L

PRIVACY NOTE: Section 31B of the Real Property Act 1900 (RP Act) authorises the Registrar General to collect the information required by this form for the establishment and maintenance of the Real Property Act Register. Section 96B RP Act requires that 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

Office of State Revenue
NSW Treasury
Client No: 4033645 509
Duty: $10.00 Trans No: 6033872
Asst details:

(A) **TORRENS TITLE** If appropriate, specify the part transferred
3/26987

(B) **LODGED BY**

Document Collection Box	Name, Address or DX, Telephone, and LLPN if any
IW	LLPN: Peter Dawson & Associates Shop 5, 500 Old Northern Road, Round Corner NSW 2158 Tel: 02-9653-9666 Reference (optional): .12002

CODES T JT TJ TW

(C) **TRANSFEROR** Dallas Bruce MEARNS and Kathleen Mary MEARNS

(D) **CONSIDERATION** The transferor acknowledges receipt of the consideration of $3,500,000.00 and as regards
(E) **ESTATE** the land specified above transfers to the transferee an estate in fee simple.
(F) **SHARE TRANSFERRED**

(G) Encumbrances (if applicable):

(H) **TRANSFEREE** Provincial Investments (NSW) Pty Limited ACN 066 568 116

(I) **TENANCY:**

DATE 01 / 02 / 2010
dd mm yyyy

(J) I certify that the person(s) signing opposite, with whom I am personally acquainted or as to whose identity I am otherwise satisfied, signed this instrument in my presence.

Signature of witness: M. Murray
Name of witness: Michael Anthony Murray
Address of witness: 249 Railway Terrace Schofields

Certified correct for the purposes of the Real Property Act 1900 by the transferor.

Signature of transferor: DB means K. Means

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

Signature:
Signatory's name: Rachael Crick
Signatory's capacity: Licensed Conveyancer for the Transferee

(K) The transferee certifies that the eNOS data relevant to this dealing has been submitted and stored under eNOS ID No. [ ] Full name: _____ Signature: _____

LAND REGISTRY SERVICES Historical Search

NEW SOUTH WALES LAND REGISTRY SERVICES - HISTORICAL SEARCH

SEARCH DATE
22/7/2022 10:25AM

FOLIO: 4/1268701

First Title(s): OLD SYSTEM
Prior Title(s): 3/26987

Recorded	Number	Type of Instrument	C.T. Issue
25/11/2020	DP1268701	DEPOSITED PLAN	LOT RECORDED FOLIO NOT CREATED
~~12/5/2021~~	~~AQ952786~~	~~TRANSFER~~	FOLIO CREATED EDITION 1

*** END OF SEARCH ***

249-271 Railway Terrace, Schofields PRINTED ON 22/7/2022

NEW SOUTH WALES LAND REGISTRY SERVICES - TITLE SEARCH

FOLIO: 4/1268701

SEARCH DATE	TIME	EDITION NO	DATE
22/7/2022	10:24 AM	1	12/5/2021

LAND

LOT 4 IN DEPOSITED PLAN 1268701

AT SCHOFIELDS

LOCAL GOVERNMENT AREA BLACKTOWN

PARISH OF GIDLEY COUNTY OF CUMBERLAND

TITLE DIAGRAM DP1268701

FIRST SCHEDULE

PROVINCIAL INVESTMENTS (NSW) PTY LIMITED

SECOND SCHEDULE (2 NOTIFICATIONS)

---

1 RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)

2 H235012 COVENANT

NOTATIONS

UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***

NEW SOUTH WALES LAND REGISTRY SERVICES - HISTORICAL SEARCH

SEARCH DATE
22/7/2022 10:25AM

FOLIO: 4/26987

First Title(s): SEE PRIOR TITLE(S)
Prior Title(s): VOL 8021 FOL 28

Recorded	Number	Type of Instrument	C.T. Issue
29/11/1988		TITLE AUTOMATION PROJECT	LOT RECORDED FOLIO NOT CREATED
20/2/1989		CONVERTED TO COMPUTER FOLIO	FOLIO CREATED CT NOT ISSUED
3/12/1997	3614453	REQUEST	
3/12/1997	3614454	TRANSMISSION APPLICATION	EDITION 1
12/7/2004	AA792825	TRANSFER	EDITION 2
25/11/2020	DP1268701	DEPOSITED PLAN	
~~12/5/2021~~	~~AQ952786~~	~~TRANSFER~~	FOLIO CANCELLED

*** END OF SEARCH ***

Received: 22/07/2022 10:25:49

Licence: AUS/0628/96

TRANSMISSION APPLICATION

New South Wales
Section 93 Real Property Act 19

3614454 H

Instructions for filling out this form are available from the Land Titles Office

Office of State Revenue use only

(A) **LAND**

FOLIO IDENTIFIER 4/26987

(B) **REGISTERED DEALING**
If applicable.

(C) **LODGED BY**

LTO Box	Name, Address or DX and Telephone
6115	SHADDICK BAKER & PAULL SOLICITORS BOX 611 S Reference (15 character maximum): Pio Vella.

(D) **DECEASED REGISTERED PROPRIETOR** JOSEPH VELLA

(E) **APPLICANT**

TA PIO VELLA

(F) I, the Applicant, being entitled as Administrator of the ~~XXX~~/estate of the deceased registered proprietor (who died on 30 May 19 96) pursuant to ~~XXXXXXX~~Letters of Administration No. 106953/97 granted on 10 September 19 97 to PIO VELLA, apply to be registered ~~as proprietor~~ of the estate or interest of the deceased registered proprietor in the land/~~XXXXXXXXXXXXXX~~registered dealing specified above.

Certified correct for the purposes of the Real Property Act 1900. DATE 30 OCTOBER 1997

(G) Signed in my presence by the Applicant who is personally known to me.

Signature of Witness

RODNEY PAULL
Name of Witness (BLOCK LETTERS)

155 MARCH ST. RICHMOND
Address of Witness

Pio Vella
Signature of Applicant

Evidence sighted & returned (LTO use) J Vella

Checked by (LTO use)

Form: 01T
Licence: 01-05-025
Licensee: Peter Dawson & Associates

TRANSFER

New South Wales
Real Property Act 1900

AA792825Y

PRIVACY NOTE: this information is legally required and will become part of the public record.

STAMP DUTY

Office of State Revenue use only

Office of State Revenue
NSW Treasury
Client No: 4163896 635
VENDOR DUTY
ENDORSED
Trans No: NOT LIABLE.

NEW SOUTH WALES DUTY
09-07-2004 0002056602-001
SECTION 18(2)
DUTY $ **********2.00

(A) **TORRENS TITLE**

If appropriate, specify the part transferred
4/26987

(B) **LODGED BY**

Delivery Box	Name, Address or DX and Telephone	CODES
1W	Peter Dawson & Associates 695 Old Northern Rd, Dural 2158 Reference (optional): Provincial	T TW (Sheriff)

(C) **TRANSFEROR**

PIO VELLA

(D) **CONSIDERATION** The transferor acknowledges receipt of the consideration of $3,570,000.00 and as regards

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

(F) **SHARE TRANSFERRED**

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

(H) **TRANSFEREE**

PROVINCIAL INVESTMENTS (NSW) PTY LIMITED ACN 066 568 116

(I) ~~TENANCY~~:

DATE

(J) I certify that the transferor, with whom I am personally acquainted or as to whose identity I am otherwise satisfied, signed this instrument in my presence.

Signature of witness: J Bailey

Name of witness: SUZANNE BAILEY

Address of witness: 135 MARCH STREET RICHMOND 2753

Certified correct for the purposes of the Real Property Act 1900 by the transferor.

Signature of transferor: Pio Vella

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

Signature:

Signatory's name: Peter Dawson
Signatory's capacity: Solicitor for Transferee

ALL HANDWRITING MUST BE IN BLOCK CAPITALS

NEW SOUTH WALES LAND REGISTRY SERVICES - HISTORICAL SEARCH

SEARCH DATE
22/7/2022 10:25AM

FOLIO: 3/1268701

First Title(s): OLD SYSTEM
Prior Title(s): 4/26987

Recorded	Number	Type of Instrument	C.T. Issue
25/11/2020	DP1268701	DEPOSITED PLAN	LOT RECORDED FOLIO NOT CREATED
~~12/5/2021~~	~~AQ952786~~	~~TRANSFER~~	FOLIO CREATED EDITION 1

*** END OF SEARCH ***

249-271 Railway Terrace, Schofields PRINTED ON 22/7/2022

NEW SOUTH WALES LAND REGISTRY SERVICES - TITLE SEARCH

FOLIO: 3/1268701

SEARCH DATE	TIME	EDITION NO	DATE
22/7/2022	10:24 AM	1	12/5/2021

LAND

LOT 3 IN DEPOSITED PLAN 1268701

AT SCHOFIELDS

LOCAL GOVERNMENT AREA BLACKTOWN

PARISH OF GIDLEY COUNTY OF CUMBERLAND

TITLE DIAGRAM DP1268701

FIRST SCHEDULE

PROVINCIAL INVESTMENTS (NSW) PTY LIMITED

SECOND SCHEDULE (2 NOTIFICATIONS)

---

1 RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)

2 H527489 COVENANT

NOTATIONS

UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***

10761038

[redacted]RTIFICATE OF TITLE

[redacted]OPERTY ACT, 1900, as amended.

NEW SOUTH WALES

Vol. 10761 Fol. 38

Appln. No.7381

Prior Title Vol.7857 Fol.200

Edition issued 21-3-1968

AS K919773

(Page 1) Vol. 10761 Fol. 38

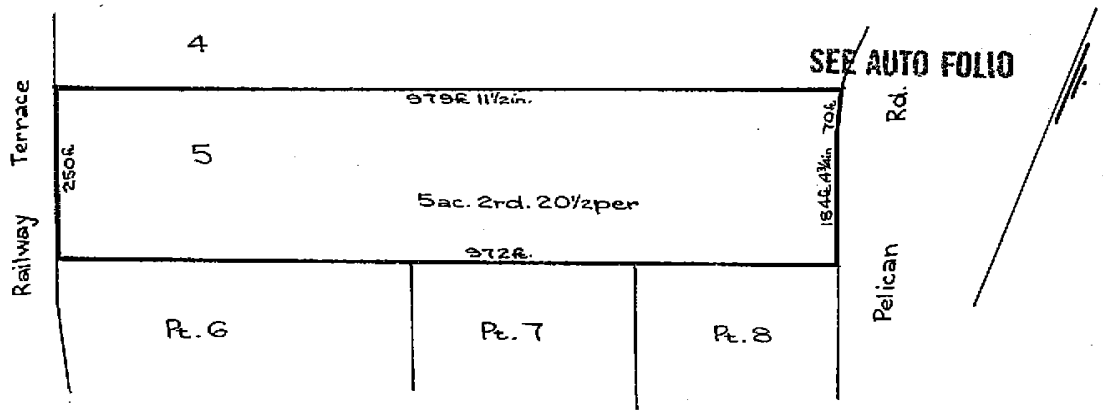
I certify that the person described in the First Schedule is the registered proprietor of the undermentioned estate in the land within described subject nevertheless to such exceptions encumbrances and interests as are shown in the Second Schedule.

Witness

Registrar General

CANCELLED

PLAN SHOWING LOCATION OF LAND



K919773 W.A.

Scale: 200 feet to one inch.

ESTATE AND LAND REFERRED TO

Estate in Fee Simple in Lot 5 in Deposited Plan 26987 in the Municipality of Blacktown Parish of Gidley and County of Cumberland being part of Portion 44 granted to James Chisholm on 10-6-1815.

FIRST SCHEDULE (continued overleaf)

~~CRIST ATTARD of Wen[illegible]nville, Iron Worker.~~

SECOND SCHEDULE (continued overleaf)

1. Reservations and conditions, if any, contained in the Crown Grant above referred to.
2. Covenant created by Transfer No.H362618.

Registrar General

17 V.C.N. Blight, Government Printer

Vol. 10761 Fol 38

FIRST SCHEDULE (continued)

REGISTERED PROPRIETOR	INSTRUMENT NATURE	INSTRUMENT NUMBER	INSTRUMENT DATE	ENTERED	Signature of Registrar-General
~~Laurie Bigeni, Factory Worker, and Rose Zammit, Clerk, both of Pennant Hills as joint tenants~~ Laurie Bigeni and Rose Mary Bigeni as joint tenants. See V423620. Registered 12.11.1984.	~~Transfer~~	~~X291462~~	~~12-11-1968~~	~~13-1-1969~~	

CANCELLED

SEE AUTO FOLIO

SECOND SCHEDULE (continued)

INSTRUMENT NATURE	INSTRUMENT NUMBER	INSTRUMENT DATE	PARTICULARS	ENTERED	Signature of Registrar-General	CANCELLATION		
~~Mortgage~~	~~X291462~~	~~12.11.1968~~	~~to Bank of New South Wales~~	~~13.1.1969~~		Discharged	V423619	
~~Mortgage~~	~~L314681~~	~~20-12-1968~~	~~to Emanuel Teuma, Poultry Farmer and Grace Teuma, married woman, both of Blacktown~~	~~6.2.1969~~		~~discharged~~	~~M117323~~	

MC V423620 Mortgage to Commonwealth Savings Bank of Australia. Registered 12.11.1984.

(Page 2 of 2 pages)

NOTE: ENTRIES RULED THROUGH AND AUTHENTICATED BY THE SEAL OF THE REGISTRAR-GENERAL ARE CANCELLED

NEW SOUTH WALES LAND REGISTRY SERVICES - HISTORICAL SEARCH

SEARCH DATE

22/7/2022 10:25AM

FOLIO: 5/26987

First Title(s): SEE PRIOR TITLE(S)
Prior Title(s): VOL 10761 FOL 38

Recorded	Number	Type of Instrument	C.T. Issue
21/8/1988		TITLE AUTOMATION PROJECT	LOT RECORDED FOLIO NOT CREATED
25/10/1988		CONVERTED TO COMPUTER FOLIO	FOLIO CREATED CT NOT ISSUED
18/7/2007	AD251154	CAVEAT	
18/4/2008	AD883581	DISCHARGE OF MORTGAGE	
18/4/2008	AD883582	TRANSFER	EDITION 1

*** END OF SEARCH ***

NEW SOUTH WALES LAND REGISTRY SERVICES - TITLE SEARCH

FOLIO: 5/26987

SEARCH DATE	TIME	EDITION NO	DATE
22/7/2022	10:24 AM	1	18/4/2008

LAND

LOT 5 IN DEPOSITED PLAN 26987

LOCAL GOVERNMENT AREA BLACKTOWN

PARISH OF GIDLEY COUNTY OF CUMBERLAND

TITLE DIAGRAM DP26987

FIRST SCHEDULE

PROVINCIAL INVESTMENTS (NSW) PTY LIMITED (T AD883582)

SECOND SCHEDULE (2 NOTIFICATIONS)

---

1 RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)

2 H362618 COVENANT

NOTATIONS

UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***

Appendix F
BOM ANNUAL DATA

Australian Government
Bureau of Meteorology

Climate statistics for Australian locations

Monthly climate statistics

All years of record

Site information

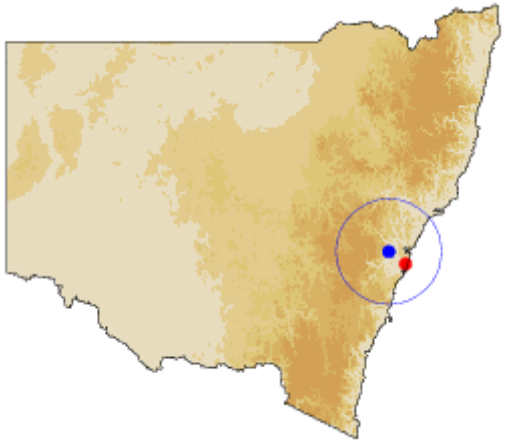
Site name: RICHMOND RAAF
Site number: 067105
Latitude: 33.60 °S **Longitude:** 150.78 °E
Elevation: 19 m
Commenced: 1993 **Status:** Open
Latest available data: 14 Jul 2022

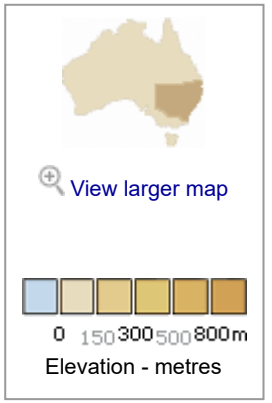
Additional information

Additional site information

Nearest alternative sites

1. 067033 RICHMOND RAAF (0.4km)
2. 067021 RICHMOND - UWS HAWKESBURY (3.2km)
3. 067113 PENRITH LAKES AWS (16.0km)





View: Main statistics / All available | Period: 30 year period not available | Text size: Normal / Large

Statistics	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Years	
Temperature															
Mean maximum temperature (°C)	30.4	29.2	27.0	24.2	20.9	18.0	17.8	19.8	22.9	25.4	27.1	29.0	24.3	29	1993 2022
Mean minimum temperature (°C)	17.9	17.8	15.9	11.8	7.6	5.2	3.6	4.4	7.9	11.2	14.2	16.2	11.1	28	1993 2022
Rainfall															
Mean rainfall (mm)	81.9	116.4	108.9	54.7	43.6	51.9	29.5	32.4	42.8	51.0	81.0	69.6	741.1	25	1994 2022
Decile 5 (median) rainfall (mm)	65.7	102.2	78.6	34.7	34.0	40.4	21.8	18.0	26.0	34.8	71.0	63.1	694.0	28	1994 2022

Statistics	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Years	
Mean number of days of rain ≥ 1 mm	8.1	8.5	8.9	5.9	5.1	5.7	4.4	3.5	4.5	5.7	7.4	7.1	74.8	28	1994 2022
Other daily elements															
Mean daily sunshine (hours)															
Mean number of clear days														9	1994 2010
Mean number of cloudy days														9	1994 2010
9 am conditions															
Mean 9am temperature (°C)	22.1	21.3	19.1	17.0	13.1	10.0	8.9	11.4	15.4	18.3	19.2	20.9	16.4	17	1993 2010
Mean 9am relative humidity (%)	72	78	80	76	82	83	80	69	63	58	68	68	73	16	1993 2010
Mean 9am wind speed (km/h)	9.1	8.1	6.6	6.9	5.7	6.3	5.9	8.1	9.9	10.3	9.9	8.9	8.0	16	1993 2010
3 pm conditions															
Mean 3pm temperature (°C)	28.5	27.4	25.8	23.0	19.7	17.0	16.5	18.7	21.5	23.5	25.2	27.5	22.9	17	1993 2010
Mean 3pm relative humidity (%)	47	52	52	49	53	53	48	39	39	40	46	44	47	16	1993 2010
Mean 3pm wind speed (km/h)	16.6	15.6	14.7	14.4	12.6	13.5	14.3	17.7	19.4	19.1	19.0	17.7	16.2	16	1993 2010

red = highest value blue = lowest value

Product IDCJCM0028 Prepared at Thu 14 Jul 2022 02:51:06 AM EST

Monthly statistics are only included if there are more than 10 years of data. The number of years (provided in the 2nd last column of the table) may differ between elements if the observing program at the site changed. More detailed data for individual sites can be obtained by contacting the Bureau.

Related Links

- This page URL: http://www.bom.gov.au/climate/averages/tables/cw_067105.shtml
- About climate averages: http://www.bom.gov.au/climate/cdo/about/about-stats.shtml
- Bureau of Meteorology website: http://www.bom.gov.au

Page created: Thu 14 Jul 2022 02:51:06 AM EST

This page was created at **on**

Appendix G
GINT LOGS

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP01

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 18/8/22 **Logged By:** JN **Checked By:** AN

Excavation				Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability	Water	Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 0.10 m PID = 0.1ppm BULK 0.00 - 0.10 m				TOPSOIL: Silty CLAY: low plasticity, dark brown, roots, no odour, no staining, no PACM	D	L	TOPSOIL 0.00 m: Grass on top
				ASB 0.10 - 0.30 m PID = <0.1ppm BULK 0.10 - 0.30 m ES 0.10 - 0.30 m			CI-MH	FILL: Silty Sandy CLAY: fine, low plasticity, dark brown, roots and bark, no odour, no staining, no PACM	M	L	FILL
				ES 0.30 - 0.50 m	0.5			Sandy CLAY: low to medium plasticity, red brown, with sandstone gravel, no odour, no staining, no PACM	M	F	NATURAL
								TERMINATED AT 0.60 m Target depth			

0.10m
0.30m
0.60m

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP02

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 18/8/22 **Logged By:** JN **Checked By:** AN

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 0.10 m PID = 0.1ppm BULK 0.00 - 0.10 m				TOPSOIL: Silty CLAY: dark grey, vegetated on top, with roots, no odour, no staining, no PACM	D	L	TOPSOIL 0.00 m: Tall grass
				ASB 0.10 - 0.30 m PID = 0.3ppm BULK 0.10 - 0.30 m DUP01 0.10 - 0.30 m DUP01A 0.10 - 0.30 m ES 0.10 - 0.30 m	0.10m		CI-MH	FILL: Silty Sandy CLAY: fine, low plasticity, dark brown, with roots and bark, no odour, no staining, no PACM	M	L to S	FILL
				ES 0.30 - 0.50 m	0.30m		CL-CI	CLAY: low to medium plasticity, red brown, trace shales gravel, no odour, no staining, no PACM	M	F	NATURAL
					0.5			TERMINATED AT 0.60 m Target depth			
					0.60m						

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP03

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 18/8/22 **Logged By:** JN **Checked By:** AN

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 0.10 m BULK 0.00 - 0.10 m PID = 0.1ppm				TOPSOIL: Silty CLAY: low plasticity, dark grey, with roots, no odour, no staining, no PACM	D	L	TOPSOIL 0.00 m: Tall grass, next to tree
				ASB 0.10 - 0.30 m BULK 0.10 - 0.30 m PID = 0.2ppm ES 0.10 - 0.30 m	0.10m		CI-MH	FILL: Silty Sandy CLAY: fine, low plasticity, dark grey, with roots, no odour, no staining, no PACM	M	L to S	FILL
				ES 0.30 - 0.50 m	0.30m 0.5			CLAY: low to medium plasticity, red brown, with sandstone gravel, no odour, no staining, no PACM	M	F	NATURAL
					0.60m			TERMINATED AT 0.60 m Target depth			

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP04

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 22/8/22 **Logged By:** JN **Checked By:** AN

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 0.10 m PID = 0.8ppm BULK 0.00 - 0.10 m ES 0.00 - 0.20 m				FILL: Silty CLAY: low plasticity, dark grey, with roots and shale gravels, no staining no PACM	W	VS	FILL 0.00 m: Slight water infilling, septic odour, loose plastics, soggy ground
				ASB 0.10 - 0.20 m PID = 1.0ppm BULK 0.10 - 0.20 m				0.20m			
				ASB 0.20 - 0.50 m PID = 0.9ppm BULK 0.20 - 0.50 m ES 0.20 - 0.40 m				CLAY: low to medium plasticity, brown, turning red at 0.5, no odour, no staining, no PACM			NATURAL
				ES 0.50 - 0.70 m	0.5		CL-CI		M	F	
								0.80m			
								TERMINATED AT 0.80 m Target depth			

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP05

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 22/8/22 **Logged By:** JN **Checked By:** AN

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 0.10 m PID = 0.5ppm BULK 0.00 - 0.10 m ES 0.00 - 0.20 m			CI-MH	FILL: Silty Sandy CLAY: fine, low plasticity, dark grey, with sandstones gravel, no odour, no staining, no PACM	D	S	FILL 0.00 m: Metal beer can on top, soggy ground
				ASB 0.10 - 0.30 m PID = 0.3ppm BULK 0.10 - 0.30 m							
				ES 0.30 - 0.50 m	0.5			0.30m CLAY: fine, medium plasticity, red brown, with sand, no odour, no staining, no PACM	D	F	NATURAL
								0.60m TERMINATED AT 0.60 m Target depth			

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP06

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 22/8/22 **Logged By:** JN **Checked By:** AN

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 0.10 m PID = 0.4ppm BULK 0.00 - 0.10 m				FILL: Silty Sandy CLAY: fine, low plasticity, dark grey turning brown at 0.3, with sandstone and shales gravel, no odour, no staining			FILL 0.00 m: Littered with plastic rubbish and metal scrap debris on top
				ASB 0.10 - 0.40 m PID = 1.4ppm BULK 0.10 - 0.40 m ES 0.10 - 0.30 m			CI-MH		M	S	
				ES 0.40 - 0.60 m	0.5		CL-CI	CLAY: low to medium plasticity, brown red, with sand, no odour, no staining	D	F	NATURAL
								TERMINATED AT 0.70 m Target depth			

0.40m

0.70m

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP07

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 22/8/22 **Logged By:** JN **Checked By:** AN

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 0.10 m PID = 0.3ppm BULK 0.00 - 0.10 m				TOPSOIL: Silty CLAY: low plasticity, dark grey, with roots			TOPSOIL 0.00 m: Glass, cow droppings and garden shrubs on top, mulch topsoil and geofab
				ASB 0.10 - 0.30 m PID = 0.3ppm BULK 0.10 - 0.30 m ES 0.10 - 0.30 m					M	S to L	
				ASB 0.30 - 0.50 m PID = 0.3ppm ES 0.30 - 0.50 m				0.30m Silty CLAY: low plasticity, dark grey, turning brown at 0.4, with roots	D	S	RESIDUAL SOIL
				ASB 0.50 - 0.70 m PID = 0.7ppm ES 0.50 - 0.70 m	0.5		Cl	0.50m CLAY: medium plasticity, red to light brown, with fine-grained sands and sandstone	D	F	NATURAL
								0.80m TERMINATED AT 0.80 m Target depth			

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP08

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 22/8/22 **Logged By:** JN **Checked By:** AN

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 0.10 m PID = 1.5ppm BULK 0.00 - 0.10 m				TOPSOIL: Silty CLAY: low plasticity, dark grey			TOPSOIL 0.00 m: Geofabric and glass, cow droppings and shrubs on top, mulch topsoil
				ASB 0.10 - 0.30 m PID = 0.6ppm BULK 0.10 - 0.30 m ES 0.10 - 0.30 m					M	S to L	
				ASB 0.30 - 0.50 m PID = 0.7ppm BULK 0.30 - 0.50 m ES 0.30 - 0.50 m	0.30m		CI-MH	Silty Sandy CLAY: fine, low plasticity, dark grey turning brown at 0.4, with roots, no odour, no staining, no PACM	D	F	RESIDUAL SOIL
				ASB 0.50 - 0.70 m PID = 1.3ppm ES 0.50 - 0.70 m	0.50m		CI	CLAY: fine, medium plasticity, red to light brown, with sand, no odour, no staining, no PACM	D	F	NATURAL
					0.80m			TERMINATED AT 0.80 m Target depth			

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP09

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 22/8/22 **Logged By:** JN **Checked By:** AN

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 0.10 m PID = 1.0ppm BULK 0.00 - 0.10 m DUP04 0.00 - 0.20 m DUP04A 0.00 - 0.20 m ES 0.00 - 0.20 m				Silty Sandy CLAY: medium grey, with roots, no odour, no staining , no PACM			NATURAL 0.00 m: Fabric wrap, concrete bricks, glass, PVC pipe fragment on top
				ASB 0.10 - 0.40 m PID = 0.8ppm BULK 0.10 - 0.40 m			CI-MH		D	L	
				ASB 0.40 - 0.60 m PID = 0.9ppm ES 0.40 - 0.60 m	0.5		CI	0.40m CLAY: medium plasticity, red-brown, no odour, no staining, no PACM	D	F	
								0.70m TERMINATED AT 0.70 m Target depth			

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP10

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 22/8/22 **Logged By:** JN **Checked By:** AN

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 0.10 m PID = 0.8ppm BULK 0.00 - 0.10 m ES 0.00 - 0.20 m			CI-MH	Silty Sandy CLAY: fine, low plasticity, dark grey, with roots, no odour, no staining, no PACM	D	L to S	NATURAL 0.00 m: Cow droppings and plastic litter on top
				ASB 0.10 - 0.30 m PID = 0.8ppm BULK 0.10 - 0.30 m				0.30m			
				ES 0.30 - 0.50 m	0.5		CL-CI	CLAY: low to medium plasticity, red-grey, no odour, no staining, no PACM	D	F	
								0.70m			
								TERMINATED AT 0.70 m Target depth			

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP11

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 22/8/22 **Logged By:** JN **Checked By:** AN

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 0.10 m PID = 0.3ppm BULK 0.00 - 0.10 m ES 0.00 - 0.20 m			CI-MH	Silty Sandy CLAY: fine, low plasticity, dark grey, with roots, no odour, no staining, no PACM	D	L to S	NATURAL 0.00 m: Next to cattle drinking trough
				ASB 0.10 - 0.30 m PID = 0.6ppm BULK 0.10 - 0.30 m				0.30m			
				ASB 0.30 - 0.50 m PID = 0.7ppm ES 0.30 - 0.50 m	0.5		CL-CI	CLAY: low to medium plasticity, red brown, no odour, no staining, no PACM	D	F	
								0.60m TERMINATED AT 0.60 m Target depth			

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP12

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 22/8/22 **Logged By:** JN **Checked By:** AN

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 0.10 m PID = 0.4ppm BULK 0.00 - 0.10 m ES 0.00 - 0.20 m			CI-MH	Silty Sandy CLAY: fine, low plasticity, dark grey, no odour, no staining, no PACM	D	L to S	NATURAL
				ASB 0.10 - 0.30 m PID = 0.5ppm BULK 0.10 - 0.30 m							
				ES 0.30 - 0.50 m	0.5		CI	CLAY: medium plasticity, red brown, no odour, no staining, no PACM	D	F	
								TERMINATED AT 0.70 m Target depth			

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP13

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 22/8/22 **Logged By:** JN **Checked By:** AN

Excavation			Water	Sampling & Testing	Depth (m)	Graphic Log	Classification	Material Description			
Method	Resistance	Stability		Sample or Field Test				SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 0.10 m PID = 0.6ppm BULK 0.00 - 0.10 m ES 0.00 - 0.20 m			CI-MH	Silty Sandy CLAY: fine, low plasticity, dark grey, with roots, no odour, no staining, no PACM	D	L to S	NATURAL 0.00 m: Glass concrete and bricks on surface, one piece of china fragment and beer cans
				ASB 0.10 - 0.30 m PID = 0.5ppm BULK 0.10 - 0.30 m				0.30m			
				ES 0.30 - 0.50 m	0.5		CL-CI	CLAY: low to medium plasticity, reddish-grey, no odour, no staining, no PACM	D	F	
								0.70m TERMINATED AT 0.70 m Target depth			

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP14

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 22/8/22 **Logged By:** JN **Checked By:** AN

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 0.10 m PID = 0.6ppm BULK 0.00 - 0.10 m DUP05 0.00 - 0.20 m DUP05A 0.00 - 0.20 m ES 0.00 - 0.20 m			CI-MH	Silty Sandy CLAY: fine, low plasticity, dark grey, with roots, no odour, no staining, no PACM	D	L	NATURAL 0.00 m: Next to unused red car
				ASB 0.10 - 0.20 m PID = 0.7ppm BULK 0.10 - 0.20 m				0.20m			
				ES 0.20 - 0.40 m			CI	CLAY: medium plasticity, red-brown, trace sand, no odour, no staining, no PACM	D	F	
					0.5			0.50m TERMINATED AT 0.50 m Target depth			

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP15

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 22/8/22 **Logged By:** JN **Checked By:** AN

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 0.10 m PID = 1.2ppm BULK 0.00 - 0.10 m ES 0.00 - 0.20 m			CI-MH	Silty Sandy CLAY: fine, low plasticity, dark grey, with roots, no odour, no staining, no PACM	M	S	NATURAL 0.00 m: Cow droppings and wooden planks on top, excavated at former location of waste pallets and stacked car rims, hoses and overgrown weeds
				ASB 0.10 - 0.30 m PID = 0.5ppm BULK 0.10 - 0.30 m				0.30m			
				ASB 0.30 - 0.50 m PID = 0.4ppm ES 0.30 - 0.50 m	0.5		CI	CLAY: medium plasticity, red brown, turning yellow to light brown at 0.7 line, no odour, no staining, no PACM	D	F	
								0.70m TERMINATED AT 0.70 m Target depth			

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP16

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 22/8/22 **Logged By:** JN **Checked By:** AN

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 0.10 m PID = 0.7ppm BULK 0.00 - 0.10 m ES 0.00 - 0.20 m			CI-MH	Silty CLAY: fine, low plasticity, dark grey, with sand, with roots, no odour, no staining, no PACM	D	F	NATURAL 0.00 m: Wooden pallet on top, excavated next to chopped logs and wooden/metal debris, broken power unit, loose plastics and wood chips
				ASB 0.10 - 0.40 m PID = 0.6ppm BULK 0.10 - 0.40 m							
				ASB 0.40 - 0.60 m PID = 0.6ppm ES 0.40 - 0.60 m	0.5		CI	CLAY: red, no odour, no staining, no PACM	D	F	
								TERMINATED AT 0.70 m Target depth			

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP17

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 22/8/22 **Logged By:** JN **Checked By:** AN

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 0.10 m PID = 0.6ppm BULK 0.00 - 0.10 m				Silty CLAY: fine, medium plasticity, dark grey, with roots, no odour, no staining, no PACM	D	L to F	NATURAL 0.00 m: Woody debris and blue bricks on top, bathtub and wooden pallets 2m away from test pit
				ASB 0.10 - 0.25 m PID = 0.8ppm BULK 0.10 - 0.25 m ES 0.10 - 0.25 m				0.25m			
				ES 0.25 - 0.45 m	0.5		CI	CLAY: medium plasticity, red, no odour, no staining, no PACM	D	F	
								0.70m			
								TERMINATED AT 0.70 m Target depth			

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP18

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 23/8/22 **Logged By:** JN **Checked By:** AN

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 0.60 m PID = 0.4ppm BULK 0.00 - 0.60 m Cement sheet fragment as PACM10 (field-labelled as PACM14) (70g) ES 0.40 - 0.60 m	0.5		CI-MH	FILL: Silty Sandy CLAY: fine, low to medium plasticity, dark grey, with shales and roots gravel, no odour, no staining	D	L to S	FILL 0.00 m: Material heavily littered with discarded rubbish (metal, glass, plastics, unused shoes and furniture) throughout stockpile
								0.60m TERMINATED AT 0.60 m Target depth Stockpile 1			

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP19

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 23/8/22 **Logged By:** JN **Checked By:** AN

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 0.60 m PID = 0.1ppm BULK 0.00 - 0.60 m ES 0.40 - 0.60 m	0.5		CI-MH	FILL: Silty Sandy CLAY: fine, low to medium plasticity, dark grey, with shales, roots and weeds gravel, no odour, no staining, no PACM 0.60m	D	L to S	FILL 0.00 m: Significantly less rubbish, but more overgrown weed presence through stockpile profile
								TERMINATED AT 0.60 m Target depth Stockpile 1			

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP20

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 22/8/22 **Logged By:** JN **Checked By:** AN

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 0.10 m PID = 0.4ppm BULK 0.00 - 0.10 m				Silty Sandy CLAY: fine, low to medium plasticity, medium grey, with shales gravel, no odour, no staining, no anthropogenic materials, no PACM			NATURAL 0.00 m: Excavated at location of large wooden slab
				ASB 0.10 - 0.30 m PID = 0.2ppm BULK 0.10 - 0.30 m ES 0.10 - 0.30 m			CI-MH		D	F	
				ES 0.30 - 0.50 m	0.30m 0.5		CI	CLAY: medium plasticity, red to grey, turning yellow at 0.6, no odour, no staining, no PACM	D	F	
					0.70m			TERMINATED AT 0.70 m Target depth			

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP21

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 23/8/22 **Logged By:** JN **Checked By:** AN

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 0.90 m PID = 0.1ppm BULK 0.00 - 0.90 m			CI	FILL: CLAY: medium plasticity, red, turning grey at 0.7, with shales and roots gravel, trace sand, no odour, no staining	D	F	FILL 0.00 m: Waste tyres, metal sheets and plastic on top of stockpile
				ES 0.70 - 0.90 m	0.5						
								0.90m TERMINATED AT 0.90 m Target depth Stockpile 2			

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP22

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 23/8/22 **Logged By:** JN **Checked By:** AN

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 0.70 m PID = 0.3ppm BULK 0.00 - 0.70 m ES 0.60 - 0.70 m	0.5		CI	FILL: CLAY: medium plasticity, red, turning grey at 0.6, with shales and roots gravel, trace sand, no odour, no staining, no PACM	D	F	FILL 0.00 m: Scattered wooden planks
								0.70m TERMINATED AT 0.70 m Target depth Stockpile 2			

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP23

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 23/8/22 **Logged By:** JN **Checked By:** AN

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 0.50 m PID = 0.5ppm BULK 0.00 - 0.50 m DUP07 0.30 - 0.50 m DUP07A 0.30 - 0.50 m ES 0.30 - 0.50 m	0.5		CI	CLAY: medium plasticity, uniformly red, with shales, roots and weeds gravel, trace sand, no odour, no staining, no PACM 0.50m	D	F	NATURAL
								TERMINATED AT 0.70 m Target depth Stockpile 2			

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP24

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 18/8/22 **Logged By:** JN **Checked By:** AN

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 0.10 m PID = 0.2ppm BULK 0.00 - 0.10 m				TOPSOIL: CLAY: fine, low plasticity, dark grey, vegetated on top	M	L	TOPSOIL 0.00 m: Tall grass at top
				ASB 0.10 - 0.35 m PID = 0.2ppm BULK 0.10 - 0.35 m ES 0.15 - 0.35 m			CI-MH	0.15m FILL: CLAY: fine, low plasticity, dark grey, trace sandstones gravel, roots and bark, no odour, no staining, no PACM	M	L to S	FILL
				ES 0.35 - 0.55 m	0.5		CI	0.35m CLAY: fine, medium plasticity, reddish brown, with rootlets , trace sandstones gravel, no odour, no staining, no PACM	M	F	NATURAL
								0.70m TERMINATED AT 0.70 m Target depth			

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP25

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 19/8/22 **Logged By:** JN **Checked By:** AN

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 0.10 m PID = 0.5ppm BULK 0.00 - 0.10 m Cement tile as PACM08 (field-labelled as PACM12) (50g) ES 0.00 - 0.20 m				FILL: CLAY: low plasticity, dark grey, with shales and roots gravel, no odour, no staining, no PACM			FILL 0.00 m: Manicured lawn on top
				ASB 0.10 - 0.30 m PID = 0.4ppm BULK 0.10 - 0.30 m Cement tile as PACM09 (field-labelled as PACM13) (50g)					D	L	
				ES 0.30 - 0.50 m			Cl	0.30m CLAY: medium plasticity, reddish brown, trace roots, no odour, no staining, no PACM sand	D	F	NATURAL
					0.5			0.50m TERMINATED AT 0.50 m Target depth			

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP26

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 19/8/22 **Logged By:** JN **Checked By:** AN

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 0.10 m PID = 0.4ppm BULK 0.00 - 0.10 m ES 0.00 - 0.20 m				FILL: CLAY: low plasticity, dark grey, with shales and roots gravel, no odour, no staining			FILL 0.00 m: Large tree branch on top
				ASB 0.10 - 0.30 m PID = 0.4ppm BULK 0.10 - 0.30 m			CL		D	L	
				ES 0.30 - 0.50 m	0.30m		CI	CLAY: medium plasticity, red, no odour, no staining	D	F	NATURAL
					0.5			TERMINATED AT 0.50 m Target depth	0.50m		

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP27

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 18/8/22 **Logged By:** JN **Checked By:** AN

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 0.10 m PID = 0.2ppm BULK 0.00 - 0.10 m ES 0.00 - 0.20 m				FILL: CLAY: low plasticity, dark grey, with shales and roots gravel, no odour, no staining, no PACM	M	L	FILL 0.00 m: Manicured lawn cover on top
				ASB 0.10 - 0.35 m PID = 0.1ppm BULK 0.10 - 0.35 m							
				ES 0.20 - 0.35 m				0.35m			
				ES 0.35 - 0.55 m	0.5		Cl	CLAY: medium plasticity, red to brown, trace sand, no odour, no staining, no PACM	M	F	NATURAL
								0.60m			
								TERMINATED AT 0.60 m Target depth			

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP28

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 18/8/22 **Logged By:** JN **Checked By:** AN

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 0.10 m PID = 0.2ppm BULK 0.00 - 0.10 m				TOPSOIL: CLAY: low plasticity, dark brown with roots	D	L	TOPSOIL 0.00 m: Tall grass on top
								0.10m			
				ASB 0.10 - 0.40 m PID = 0.2ppm BULK 0.10 - 0.40 m ES 0.10 - 0.30 m			CI-MH	FILL: Silty Sandy CLAY: fine, low to medium plasticity, grey, with roots and bark, no odour, no staining, no PACM	D	S	FILL
								0.40m			
				ES 0.40 - 0.60 m	0.5		CI	CLAY: medium plasticity, reddish brown, trace sand, no odours, no staining, no PACM	D	F	NATURAL
								0.70m			
								TERMINATED AT 0.70 m Target depth			

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP29

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 18/8/22 **Logged By:** JN **Checked By:** AN

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX								TOPSOIL: Silty Sandy CLAY: low plasticity, dark grey, roots, no odour, no staining, no PACM	W	L	TOPSOIL 0.00 m: Discontinued due to encountering septic pipe
								0.10m TERMINATED AT 0.10 m Flooding Discontinued			

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP29A

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 19/8/22 **Logged By:** JN **Checked By:** AN

Excavation				Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability	Water	Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 0.10 m PID = 0.1ppm BULK 0.00 - 0.10 m			CI-MH	TOPSOIL: Silty Sandy CLAY: fine, low plasticity, dark grey, with roots, no odour, no staining, no PACM	W	L to S	TOPSOIL 0.00 m: Tall grass, original TP29 infilled and terminated early due to impact with septic (absorption trench) pipe at 0.1m
					0.10m						
				ASB 0.10 - 0.30 m PID = 0.3ppm BULK 0.10 - 0.30 m ES 0.10 - 0.30 m			CI-MH	FILL: Silty Sandy CLAY: fine, low plasticity, dark grey, trace shales gravel, no odour, no staining, no PACM	W	L to S	FILL
					0.30m						
				ES 0.30 - 0.50 m	0.5		CI	CLAY: medium plasticity, red, no odour, no staining, no PACM	D	F	NATURAL
					0.60m						
								TERMINATED AT 0.60 m Target depth			

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP30

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 18/8/22 **Logged By:** JN **Checked By:** AN

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX								TOPSOIL: Silty Sandy CLAY: low plasticity, dark grey, roots, no odour, no staining, no PACM	W	L	TOPSOIL 0.00 m: Discontinued due to encountering septic pipe
					0.10m			TERMINATED AT 0.10 m Flooding Discontinued			

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP30A

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 19/8/22 **Logged By:** JN **Checked By:** AN

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 0.10 m PID = 0.2ppm BULK 0.00 - 0.10 m			CI-MH	TOPSOIL: Silty Sandy CLAY: fine, low plasticity, dark grey, with roots, no odour, no staining, no PACM	W	L to S	TOPSOIL 0.00 m: Tall grass, original TP30 infilled and terminated early due to septic (absorption trench) piping impact at 0.1m
					0.10m						
				ASB 0.10 - 0.50 m PID = 0.4ppm BULK 0.10 - 0.50 m ES 0.10 - 0.30 m			CI-MH	FILL: Silty Sandy CLAY: fine, low plasticity, dark grey, trace shales gravel, no odour, no staining, no PACM	M	S	FILL
				ES 0.30 - 0.50 m							
					0.50m						
				ES 0.50 - 0.60 m	0.5		CI	CLAY: medium plasticity, red, no odour, no staining, no PACM	M	F	NATURAL
					0.60m						
								TERMINATED AT 0.60 m Target depth			

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP31

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 18/8/22 **Logged By:** JN **Checked By:** AN

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	BULK 0.00 - 0.10 m				FILL: Silty CLAY: low to medium plasticity, dark grey, with rootlets and trace fine-grained sands, no odour, no staining, no PACM	M to D	S	FILL 0.00 m: Anthropogenic materials on surface, including exercise ball, bricks, plastic wrappings, wood planks, tree debris, metal/glass fragments and a disused faucet pipe and spigot 1m away from the TP
				ASB 0.10 - 0.30 m PID = 1.2ppm BULK 0.10 - 0.30 m ES 0.10 - 0.30 m JAR 0.10 - 0.30 m MICROBES						
				ES 0.30 - 0.50 m	0.30m			CLAY: medium plasticity, red brown, with grey shale gravel, no odour, no staining, no PACM	D	F	NATURAL
					0.5		Cl				
					0.70m			TERMINATED AT 0.70 m Target depth			

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP32

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 18/8/22 **Logged By:** JN **Checked By:** AN

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 0.10 m PID = 0.8ppm BULK 0.00 - 0.10 m				TOPSOIL: Silty CLAY: fine, low plasticity, dark grey, no odour, no staining, no PACM	D	L	TOPSOIL 0.00 m: Tall grass at surface
				ASB 0.10 - 0.30 m PID = 0.8ppm BULK 0.10 - 0.30 m ES 0.10 - 0.30 m JAR 0.10 - 0.30 m MICROBES			CI-MH	FILL: Silty Sandy CLAY: fine, low to medium plasticity, dark grey, turning brown at 0.3, trace shales gravel, no odour, no staining, no PACM	D	S	FILL
				ES 0.30 - 0.50 m	0.5		CI	CLAY: medium plasticity, red brown, trace shales gravel, no odour, no staining, no PACM	D	F	NATURAL
								TERMINATED AT 0.60 m Target depth			

0.10m
0.30m
0.60m

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP33

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 18/8/22 **Logged By:** JN **Checked By:** AN

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 0.10 m PID = 0.1ppm BULK 0.00 - 0.10 m Cement fragment as PACM03 (field-labelled as PACM04) (25g)				TOPSOIL: Silty CLAY: low plasticity, dark grey, with roots, no odour, no staining silt	D	L	TOPSOIL 0.00 m: Bricks and glass on top
								0.10m			
				ASB 0.10 - 0.30 m PID = 0.3ppm BULK 0.10 - 0.30 m ES 0.10 - 0.30 m JAR 0.10 - 0.30 m MICROBES			CI-MH	FILL: Silty Sandy CLAY: fine, low plasticity, dark grey, with shales and roots, no odours, no staining gravel	D	S	FILL
								0.30m			
				ES 0.30 - 0.50 m	0.5		CI	CLAY: medium plasticity, red brown, with shales, no odours, no staining gravel	D	F	NATURAL
								0.60m			
								TERMINATED AT 0.60 m Target depth			

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP34

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 18/8/22 **Logged By:** JN **Checked By:** AN

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 0.10 m PID = <0.1ppm BULK 0.00 - 0.10 m				TOPSOIL: Silty CLAY: dark grey, with roots, no odour, no staining, no PACM	M	L	TOPSOIL 0.00 m: Dead chicken carcass 5m from test pit at surface, tall grass
				ASB 0.10 - 0.30 m PID = 0.3ppm BULK 0.10 - 0.30 m ES 0.10 - 0.30 m JAR 0.10 - 0.30 m MICROBES	0.10m		CI-MH	FILL: Silty Sandy CLAY: fine, low to medium plasticity, dark brown, trace sandstones and roots, no odour, no staining, no PACM gravel	D	S	FILL
				ES 0.30 - 0.50 m	0.30m		CI	CLAY: medium plasticity, red brown, large sandstone gravel at 0.5 , no odour, no staining, no PACM	D	S	NATURAL
					0.5 0.50m			TERMINATED AT 0.50 m Target depth			

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP35

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 18/8/22 **Logged By:** JN **Checked By:** AN

Excavation: Method	Excavation: Resistance	Excavation: Stability	Water	Sampling & Testing: Sample or Field Test	Depth (m)	Material Description: Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 0.10 m PID = 0.1ppm BULK 0.00 - 0.10 m				TOPSOIL: Silty CLAY: low plasticity, dark grey, with roots, no odour, no staining, no PACM silt	D	L	TOPSOIL 0.00 m: Bricks, plastic, glass and fabric on top
								0.10m			
				ASB 0.10 - 0.40 m PID = 0.1ppm BULK 0.10 - 0.40 m ES 0.10 - 0.30 m JAR 0.10 - 0.20 m MICROBES			CI-MH	FILL: Silty Sandy CLAY: fine, low to medium plasticity, dark grey, with shales and roots, no odour, no staining, no PACM gravel	D	L	FILL
								0.40m			
				DUP02 0.40 - 0.60 m DUP02A 0.40 - 0.60 m ES 0.40 - 0.60 m	0.5		CI	CLAY: fine, medium plasticity, red-brown, turning yellow at 0.7, trace white sands, no odour, no staining, no PACM	D	F	NATURAL
								0.80m			
								TERMINATED AT 0.80 m Target depth			

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP36

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 18/8/22 **Logged By:** JN **Checked By:** AN

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 0.10 m PID = 0.1ppm BULK 0.00 - 0.10 m Cement fragment 1 as PACM01 (10g), cement fragment 2 as PACM02 (100g) ES 0.00 - 0.20 m JAR 0.00 - 0.20 m MICROBES			FILL: Silty Sandy CLAY: fine, low plasticity, dark grey, with shales and roots gravel, no odour, no staining			FILL 0.00 m: Two concrete brick slabs, plastic bottle, glass and tree debris on top, glass and brick fragments observed in fill profile down to 0.2m
				ASB 0.10 - 0.40 m PID = 0.3ppm BULK 0.10 - 0.40 m			CI-MH		D	S to L	
				ES 0.20 - 0.40 m				0.40m			
				ES 0.40 - 0.60 m	0.5		CI	CLAY: medium plasticity, red brown, no odour, no staining	D	F	NATURAL
								0.70m			
								TERMINATED AT 0.70 m Target depth			

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP37

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 19/8/22 **Logged By:** JN **Checked By:** AN

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 0.10 m PID = 0.4ppm BULK 0.00 - 0.10 m Cement sheeting fragments as PACM04 (30g)				TOPSOIL: Silty CLAY: fine, low plasticity, dark grey, roots, no odour, no staining	M	L	TOPSOIL 0.00 m: Tall grass, bricks, fabric, paper fragments, plastic wrappings and a rusted chisel at the surface
								0.10m			
				ASB 0.10 - 0.45 m PID = 0.2ppm BULK 0.10 - 0.45 m ES 0.10 - 0.30 m JAR 0.10 - 0.30 m MICROBES				FILL: Silty CLAY: fine, low plasticity, dark grey, turning light brown at 0.4, trace sandstone gravel, roots, no odour, no staining	M	S	FILL
								0.45m			
				ES 0.45 - 0.65 m	0.5		Cl	CLAY: medium plasticity, red brown, no odour, no staining	D	F	NATURAL
								0.70m			
								TERMINATED AT 0.70 m Target depth			

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP38

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 19/8/22 **Logged By:** JN **Checked By:** AN

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 0.10 m PID = <0.1ppm BULK 0.00 - 0.10 m ES 0.00 - 0.20 m JAR 0.00 - 0.20 m MICROBES				FILL: Sandy Silty CLAY: low plasticity, dark grey, with roots, bark and trace red clays, no odour, no staining, no PACM			FILL 0.00 m: Shorter grass on top compared to TP37, paper fragments
				ASB 0.10 - 0.40 m PID = 0.1ppm BULK 0.10 - 0.40 m			CI-MH		M	S	
				ES 0.40 - 0.60 m	0.5		CI	0.40m CLAY: medium plasticity, red brown, no odour, no staining, no PACM	M	F	NATURAL
								0.60m TERMINATED AT 0.60 m Target depth			

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP39

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 19/8/22 **Logged By:** JN **Checked By:** AN

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 0.10 m PID = 0.1ppm BULK 0.00 - 0.10 m ES 0.00 - 0.20 m JAR 0.00 - 0.20 m MICROBES				FILL: Silty CLAY: fine, low plasticity, dark grey, trace sand, no odour, no staining, no PACM	M	S to L	FILL 0.00 m: Metal container lid, bricks, glass (down to 0.1m)
				ASB 0.10 - 0.50 m PID = 0.1ppm BULK 0.10 - 0.50 m				0.50m			
				ES 0.50 - 0.70 m	0.5		Cl	CLAY: medium plasticity, red, no odour, no staining, no PACM	D	F	NATURAL
								0.80m			
								TERMINATED AT 0.80 m Target depth			

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP40

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 19/8/22 **Logged By:** JN **Checked By:** AN

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 0.10 m PID = 0.1ppm BULK 0.00 - 0.10 m ES 0.00 - 0.20 m				Silty CLAY: low plasticity, dark grey, roots, no odour, no staining, no PACM	W	L to S	NATURAL
				ASB 0.10 - 0.50 m PID = 0.1ppm BULK 0.10 - 0.50 m				0.50m			
				ES 0.50 - 0.70 m	0.5			CLAY: low to medium plasticity, red, trace sand, no odour, no staining, no PACM	D	F	0.60 m: Cow bones (femur) observed at 0.6m in test pit
								0.80m			
								TERMINATED AT 0.80 m Target depth			

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP41

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 19/8/22 **Logged By:** JN **Checked By:** AN

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 0.10 m PID = <0.1ppm BULK 0.00 - 0.10 m ES 0.00 - 0.20 m				Silty CLAY: low plasticity, dark grey, roots, no odour, no staining, no PACM	D	S	NATURAL 0.00 m: Paper and plastic wrap on top
				ASB 0.10 - 0.30 m PID = 0.2ppm BULK 0.10 - 0.30 m				0.30m			
				ES 0.30 - 0.50 m			Cl	CLAY: medium plasticity, red, no odour, no staining, no PACM	D	F	
					0.5			0.50m TERMINATED AT 0.50 m Target depth			

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP42

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 19/8/22 **Logged By:** JN **Checked By:** AN

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 0.10 m PID = 0.1ppm BULK 0.00 - 0.10 m ES 0.00 - 0.20 m				Silty CLAY: low plasticity, dark grey, with roots, no odour, no staining, no PACM	D	L to S	NATURAL 0.00 m: Grass and paper fragments on top
				ASB 0.10 - 0.30 m PID = 0.2ppm BULK 0.10 - 0.30 m				0.30m			
				ES 0.30 - 0.50 m	0.5			CLAY: medium plasticity, red, no odour, no staining, no PACM	D	F	
								0.60m			
								TERMINATED AT 0.60 m Target depth			

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP43

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 19/8/22 **Logged By:** JN **Checked By:** AN

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 0.10 m PID = <0.1ppm BULK 0.00 - 0.10 m ES 0.00 - 0.20 m				Silty CLAY: low plasticity, dark grey, trace sandstone gravels, no odour, no staining, no PACM	D	L	NATURAL 0.00 m: Grass, plastics, glass and fabric fragments scattered on surface
				ASB 0.10 - 0.30 m PID = <0.1ppm BULK 0.10 - 0.30 m							
				ES 0.30 - 0.50 m			Cl	CLAY: medium plasticity, medium grey, turning red at 0.35, no odour, no staining, no PACM	D	F	
					0.5			TERMINATED AT 0.50 m Target depth			

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP44

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 19/8/22 **Logged By:** JN **Checked By:** AN

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 0.10 m PID = <0.1ppm BULK 0.00 - 0.10 m Crushed cement sheetings collected as three separate BULK samples. PACM05 (220g), PACM06 (100g) and PACM07 (120g) ES 0.00 - 0.20 m			CI-MH	Silty Sandy CLAY: fine, low plasticity, dark grey, with roots, no odour, no staining	D	S	NATURAL 0.00 m: Brick PACM fragments observed at surface, with plastic bottle litter and wrappings
				ASB 0.10 - 0.40 m PID = 0.1ppm BULK 0.10 - 0.40 m							
								0.40m			
				ES 0.40 - 0.60 m	0.5		CI	CLAY: medium plasticity, red, no odour, no staining	D	F	
								0.70m			
								TERMINATED AT 0.70 m Target depth			

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP45

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 19/8/22 **Logged By:** JN **Checked By:** AN

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 0.10 m PID = 0.2ppm BULK 0.00 - 0.10 m ES 0.00 - 0.20 m			CI-MH	Silty Sandy CLAY: fine, low plasticity, dark grey, no odour, no staining, no PACM	D	L	NATURAL 0.00 m: Grass on top
				ASB 0.10 - 0.30 m PID = 0.1ppm BULK 0.10 - 0.30 m	0.30m						
				ES 0.30 - 0.50 m			CL-CI	CLAY: medium plasticity, red, no odour, no staining, no PACM	D	F	
					0.50m						
					0.5			TERMINATED AT 0.50 m Target depth			

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP46

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 19/8/22 **Logged By:** JN **Checked By:** AN

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 0.10 m PID = 0.1ppm BULK 0.00 - 0.10 m DUP03 0.00 - 0.20 m DUP03A 0.00 - 0.20 m ES 0.00 - 0.20 m				Silty Sandy CLAY: fine, low plasticity, dark grey, no odour, no staining, no PACM			NATURAL 0.00 m: Low grass on top
				ASB 0.10 - 0.30 m PID = 0.2ppm BULK 0.10 - 0.30 m			CI-MH		D	S	
				ES 0.30 - 0.50 m		0.30m	CI	CLAY: medium plasticity, red, no odour, no staining, no PACM	D	F	
					0.5	0.50m		TERMINATED AT 0.50 m Target depth			

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP47

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 19/8/22 **Logged By:** JN **Checked By:** AN

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 0.10 m PID = 0.1ppm BULK 0.00 - 0.10 m ES 0.00 - 0.10 m			CI-MH	Silty Sandy CLAY: fine, low to medium plasticity, grey, trace sandstones, no odour, no staining, no PACM	D	S to F	NATURAL 0.00 m: Tall grass on top
				ASB 0.10 - 0.20 m PID = 0.1ppm BULK 0.10 - 0.20 m				0.20m			
				ES 0.20 - 0.40 m			CI	CLAY: medium plasticity, red, no odour, no staining, no PACM	D	F	
					0.5			0.50m TERMINATED AT 0.50 m Target depth			

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP48

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 23/8/22 **Logged By:** JN **Checked By:** AN

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 0.10 m PID = 0.2ppm BULK 0.00 - 0.10 m				CLAY: medium plasticity, medium grey, with roots and trace sandstones , no odour, no staining, no anthropogenic material, no PACM			NATURAL 0.00 m: Cow droppings and grass on top
				ASB 0.10 - 0.30 m PID = 0.3ppm BULK 0.10 - 0.30 m ES 0.10 - 0.30 m			CI-MH		D	F	
				ASB 0.30 - 0.50 m ES 0.30 - 0.50 m	0.5	0.30m	CI-ML	CLAY: medium plasticity, red brown, trace sand	D	F	
						0.60m		TERMINATED AT 0.60 m Target depth			

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP49

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 23/8/22 **Logged By:** JN **Checked By:** AN

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 0.10 m PID = 0.2ppm BULK 0.00 - 0.10 m				FILL: Gravelly CLAY: coarse, sub-angular, low plasticity, grey, with shale gravels, no odour or staining in soil			FILL 0.00 m: Bricks, glass and metal can on surface
				ASB 0.10 - 0.30 m PID = 0.2ppm BULK 0.10 - 0.30 m ES 0.10 - 0.30 m			GC		D	L to S	0.20 m: Dead snake encountered during excavation
				ES 0.30 - 0.50 m	0.5		Cl	CLAY: medium plasticity, yellow brown, no odour, no staining, no PACM	D	F	NATURAL
								TERMINATED AT 0.60 m Target depth			

0.30m

0.60m

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP50

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 23/8/22 **Logged By:** JN **Checked By:** AN

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 0.10 m PID = 0.2ppm BULK 0.00 - 0.10 m ES 0.00 - 0.20 m			CI-MH	Silty Sandy CLAY: medium plasticity, dark grey, no odour, no staining, no PACM	D	S	NATURAL
				ASB 0.10 - 0.20 m PID = 0.3ppm BULK 0.10 - 0.20 m				0.20m			
				ASB 0.20 - 0.40 m PID = 0.2ppm ES 0.20 - 0.40 m			CI	CLAY: medium plasticity, red brown, no odour, no staining, no PACM	D	F	
					0.5			0.50m TERMINATED AT 0.50 m Target depth			

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP51

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 23/8/22 **Logged By:** JN **Checked By:** AN

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX				ASB 0.00 - 0.10 m PID = 0.1ppm BULK 0.00 - 0.10 m ES 0.00 - 0.20 m				Silty Sandy CLAY: medium plasticity, dark grey, no odour, no staining, no PACM			NATURAL
				ASB 0.10 - 0.30 m PID = <0.1ppm BULK 0.10 - 0.30 m			CI-MH		M	S	
				ES 0.30 - 0.50 m	0.30m			CLAY: medium plasticity, yellow brown, no odour, no staining, no PACM			
			23/08/22		0.5		CI		D	F	0.60 m: Water infil recorded at 0.6-0.7m at bottom of test pit
					0.70m			TERMINATED AT 0.70 m Target depth			

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP52

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**

Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket

Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd

Date Excavated: 23/8/22 **Logged By:** JN **Checked By:** AN

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 0.50 m PID = <0.1ppm BULK 0.00 - 0.50 m ES 0.30 - 0.50 m			CI	FILL: CLAY: medium plasticity, red brown, with roots and weeds, no odour, no staining, no PACM	M	F	FILL 0.00 m: Bricks, paper, various loose items of rubbish and spray cans on top
					0.5			0.50m TERMINATED AT 0.50 m Target depth Stockpile 3			

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP53

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 23/8/22 **Logged By:** JN **Checked By:** AN

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 0.70 m PID = <0.1ppm BULK 0.00 - 0.70 m ES 0.50 - 0.70 m	0.5		CI	FILL: CLAY: medium plasticity, red brown, with roots and weeds, no odour, no staining	M	F	FILL 0.00 m: Observed with similar levels of rubbish material as TP52
								0.70m TERMINATED AT 0.70 m Target depth Stockpile 3			

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP54

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 23/8/22 **Logged By:** JN **Checked By:** AN

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 1.00 m PID = <0.1ppm BULK 0.00 - 1.00 m Crushed cement fragments collected as two BULK samples. PACM12 (50g) and PACM13 (10g)	0.5		CI	FILL: CLAY: fine, medium plasticity, red, with roots and weeds, no odour, no staining			FILL 0.00 m: Extremely littered with loose rubbish, discarded electronics, furniture scraps
				ES 0.80 - 0.10 m	1.0			1.00m TERMINATED AT 1.00 m Target depth Stockpile 3			
					1.5						

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP55

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 23/8/22 **Logged By:** JN **Checked By:** AN

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 0.90 m PID = <0.1ppm BULK 0.00 - 0.90 m			CI	FILL: CLAY: fine, medium plasticity, red, with sand, no odour, no staining, no PACM	M	S	FILL 0.00 m: Smaller levels of rubbish material encountered compared to TP52-TP54
					0.5						
				ES 0.70 - 0.90 m							
								0.90m			
								TERMINATED AT 0.90 m Target depth Stockpile 3			

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP56

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 23/8/22 **Logged By:** JN **Checked By:** AN

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 0.70 m PID = <0.1ppm BULK 0.00 - 0.70 m Cement tile as PACM11 (20g) ES 0.50 - 0.70 m	0.5		CI	FILL: CLAY: fine, medium plasticity, red, with sand, with roots and weeds, no odour, no staining	M	F	FILL 0.00 m: Loose bricks, concrete and plastic PVC fragments on top
								0.70m TERMINATED AT 0.70 m Target depth Stockpile 3			

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP57

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 23/8/22 **Logged By:** JN **Checked By:** AN

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 0.10 m PID = 0.2ppm BULK 0.00 - 0.10 m				Silty Sandy CLAY: fine, low plasticity, dark grey, trace shale gravels, thick roots, no odour, no staining, no PACM			NATURAL
				ASB 0.10 - 0.30 m PID = 0.2ppm BULK 0.10 - 0.30 m ES 0.10 - 0.30 m			CI-CH		M	S	
				ES 0.30 - 0.50 m	0.30m			CLAY: medium plasticity, yellow brown, no odour, no staining, no PACM			
					0.5		CI		M	F	
					0.70m			TERMINATED AT 0.70 m Target depth			

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP58

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 23/8/22 **Logged By:** JN **Checked By:** AN

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 0.10 m PID = 0.1ppm BULK 0.00 - 0.10 m ES 0.00 - 0.20 m			CI-MH	Silty Sandy CLAY: fine, low plasticity, dark grey, with thick roots and trace shale gravels, no odour, no staining, no PACM	M	S	NATURAL 0.00 m: Deepest part of 4WD trench
				ASB 0.10 - 0.20 m PID = 0.1ppm BULK 0.10 - 0.20 m				0.20m			
				ES 0.20 - 0.40 m			CI	CLAY: medium plasticity, red, no odour, no staining, no PACM	D	F	
					0.5			0.50m TERMINATED AT 0.50 m Target depth			

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP59

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 23/8/22 **Logged By:** JN **Checked By:** AN

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 0.10 m PID = 0.2ppm BULK 0.00 - 0.10 m				Silty CLAY: low to medium plasticity, brown, with roots , trace sand, no odour, no staining, no PACM	D	L to S	NATURAL 0.00 m: Cow droppings, wooden planks scattered around, a metal bathtub and waste tyre on surface
				ASB 0.10 - 0.50 m PID = 0.3ppm BULK 0.10 - 0.50 m ES 0.10 - 0.30 m							
				ES 0.50 - 0.70 m	0.5		Cl	0.50m CLAY: medium plasticity, yellow brown, no odour, no staining, no PACM	D	F	
								0.80m TERMINATED AT 0.80 m Target depth			

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP61

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 23/8/22 **Logged By:** JN **Checked By:** AN

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 0.10 m PID = <0.1ppm BULK 0.00 - 0.10 m ES 0.00 - 0.20 m			CI-MH	Silty Sandy CLAY: fine, low plasticity, medium brown, with roots and shale gravels, no odour, no staining, no PACM	D	L to S	NATURAL 0.00 m: Tall grass
				ASB 0.10 - 0.20 m PID = <0.1ppm BULK 0.10 - 0.20 m							
				ES 0.40 - 0.60 m	0.5		CI	CLAY: medium plasticity, red brown, no odour, no staining, no PACM	D	F	
								TERMINATED AT 0.70 m Target depth			

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP62

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 23/8/22 **Logged By:** JN **Checked By:** AN

Excavation				Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability	Water	Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 0.10 m PID = 0.1ppm BULK 0.00 - 0.10 m ES 0.00 - 0.20 m				Sandy CLAY: fine, low plasticity, dark grey, trace sandstone/shale gravels and roots, no odour, no staining, no PACM	D	L	NATURAL 0.00 m: Very short grass
				ASB 0.10 - 0.50 m PID = 0.1ppm BULK 0.10 - 0.50 m							
				ES 0.50 - 0.70 m	0.5		CI	0.50m CLAY: medium plasticity, red, trace yellow sands, no odour, no staining, no PACM	D	F	
								0.80m TERMINATED AT 0.80 m Target depth			

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP63

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 23/8/22 **Logged By:** JN **Checked By:** AN

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 0.10 m PID = 0.1ppm BULK 0.00 - 0.10 m ES 0.00 - 0.20 m				Silty CLAY: low plasticity, dark grey, with roots, no odour, no staining, no PACM	D	L to S	NATURAL 0.00 m: Spiky weeds and tall grass
				ASB 0.10 - 0.30 m PID = 0.1ppm BULK 0.10 - 0.30 m							
				ES 0.30 - 0.50 m		0.30m	Cl	CLAY: medium plasticity, red, no odour, no staining, no PACM	D	F	
			23/08/22		0.5	0.50m		TERMINATED AT 0.50 m Target depth			

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP64

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**

Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket

Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd

Date Excavated: 23/8/22 **Logged By:** JN **Checked By:** AN

Excavation				Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability	Water	Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 0.10 m PID = <0.1ppm BULK 0.00 - 0.10 m				Silty Sandy CLAY: fine, low plasticity, grey, gradually turning brown-red at 0.3, no odour, no staining, no PACM			NATURAL 0.00 m: Tall grass and loose plastic litter on top
				ASB 0.10 - 0.40 m PID = <0.1ppm BULK 0.10 - 0.40 m ES 0.10 - 0.30 m			CI-MH		D	S to L	
				ES 0.40 - 0.60 m	0.5		CI	0.40m CLAY: medium plasticity, red, no odour, no staining, no PACM	D	F	
								0.60m TERMINATED AT 0.60 m Target depth			

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP65

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 23/8/22 **Logged By:** JN **Checked By:** AN

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 0.10 m PID = 0.4ppm BULK 0.00 - 0.10 m DUP06 0.00 - 0.20 m DUP06A 0.00 - 0.20 m ES 0.00 - 0.20 m			CI-MH	Silty Sandy CLAY: low to medium plasticity, medium grey, with small, sub-rounded gravels, no odour, no staining, no PACM	D	L to S	NATURAL
				ASB 0.10 - 0.40 m PID = 0.2ppm BULK 0.10 - 0.40 m							
				ES 0.40 - 0.60 m	0.5		CI	0.40m CLAY: medium plasticity, yellow to red, trace sand, no odour, no staining, no PACM	D	F	
								0.70m TERMINATED AT 0.70 m Target depth			

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP66

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 23/8/22 **Logged By:** JN **Checked By:** AN

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 0.10 m PID = 0.3ppm BULK 0.00 - 0.10 m ES 0.00 - 0.20 m			CI-MH	Silty Sandy CLAY: fine, low to medium plasticity, medium grey, with small sub-rounded gravels and roots, no odour, no staining, no PACM	D	L to S	NATURAL
				ASB 0.10 - 0.40 m PID = 0.2ppm BULK 0.10 - 0.40 m							
				ES 0.40 - 0.60 m	0.5		CI	0.40m CLAY: medium plasticity, red brown, trace sand, no odour, no staining, no PACM	D	F	
								0.70m TERMINATED AT 0.70 m Target depth			

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP67

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 23/8/22 **Logged By:** JN **Checked By:** AN

Excavation				Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability	Water	Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX				ASB 0.00 - 0.10 m PID = 0.3ppm BULK 0.00 - 0.10 m				Silty Sandy CLAY: fine, low to medium plasticity, medium grey, with small sub-rounded gravels and roots, no odour, no staining, no PACM			NATURAL
				ASB 0.10 - 0.30 m PID = 0.2ppm BULK 0.10 - 0.30 m ES 0.10 - 0.30 m			CI-MH		D	L	
				ES 0.30 - 0.50 m	0.30m 0.5		CI	CLAY: medium plasticity, yellow, trace sand, no odour, no staining, no PACM	D	F	
					0.60m			TERMINATED AT 0.60 m Target depth			0.50 m: Water infil from 0.5-0.6m at bottom of test pit

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP68

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 23/8/22 **Logged By:** JN **Checked By:** AN

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 0.10 m PID = 0.1ppm BULK 0.00 - 0.10 m ES 0.00 - 0.20 m			CI-MH	Silty Sandy CLAY: fine, low to medium plasticity, medium grey, with small sub-rounded gravels and roots, no odour, no staining, no PACM	D	L to S	NATURAL 0.00 m: Cow droppings on surface
				ASB 0.10 - 0.40 m PID = 0.3ppm BULK 0.10 - 0.40 m							
				ES 0.40 - 0.60 m	0.5		CI	0.40m CLAY: medium plasticity, yellow to red, trace sand	D	F	
								0.60m TERMINATED AT 0.60 m Target depth			

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP69

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**

Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket

Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd

Date Excavated: 23/8/22 **Logged By:** JN **Checked By:** AN

Excavation				Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability	Water	Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 0.10 m PID = 0.5ppm BULK 0.00 - 0.10 m				Silty Sandy CLAY: fine, low plasticity, dark grey, with roots, no odour, no staining, no PACM			NATURAL
				ASB 0.10 - 0.40 m PID = 0.5ppm BULK 0.10 - 0.40 m ES 0.10 - 0.30 m			CI-MH		D	L to S	
				ES 0.40 - 0.60 m	0.5		CI	0.40m CLAY: medium plasticity, red brown, no odour, no staining, no PACM	D	F	
								0.60m TERMINATED AT 0.60 m Target depth			

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP70

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 23/8/22 **Logged By:** JN **Checked By:** AN

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 0.10 m PID = 0.4ppm BULK 0.00 - 0.10 m				Sandy CLAY: fine, medium plasticity, medium grey, with roots and sandstone gravels , no odour, no staining, no PACM			NATURAL 0.00 m: Little-to-no grass cover, located next to vehicle tracks
				ASB 0.10 - 0.30 m PID = 0.5ppm BULK 0.10 - 0.30 m ES 0.10 - 0.30 m					D	F	
				ES 0.30 - 0.50 m	0.30m 0.5		CI	CLAY: medium plasticity, yellow brown, no odour, no staining, no PACM	D	F to H	
					0.70m			TERMINATED AT 0.70 m Target depth			

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP71

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 23/8/22 **Logged By:** JN **Checked By:** AN

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 0.10 m PID = 0.2ppm BULK 0.00 - 0.10 m ES 0.00 - 0.20 m				Sandy CLAY: fine, medium plasticity, medium grey, with roots and sandstone gravels , no odour, no staining, no PACM	D	L	NATURAL 0.00 m: Excavated on top of vehicle tracks
				ASB 0.10 - 0.20 m PID = 0.2ppm BULK 0.10 - 0.20 m				0.20m			
				ES 0.20 - 0.40 m			CI	CLAY: medium plasticity, red, no odour, no staining, no PACM	D	F	
					0.5			0.50m TERMINATED AT 0.50 m Target depth			

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Construction Sciences

TEST PIT LOG SHEET

Client: Provincial Investments (NSW) Pty Ltd
Project: Stage 1 Preliminary and Stage 2 Detailed Site Investigation
Location: 249-271 Railway Terrace, Schofields NSW 2762

Hole No: TP72

Job No: 10791.EV.P.323 **Sheet:** 1 of 1

Position: **Angle from Horizontal:** 90° **Surface Elevation:**
Machine Type: 5 tonne Excavator **Excavation Method:** Excavator Bucket
Excavation Dimensions: **Contractor:** Platinum Excavations Pty Ltd
Date Excavated: 23/8/22 **Logged By:** JN **Checked By:** AN

Excavation			Water	Sampling & Testing	Depth (m)	Material Description					
Method	Resistance	Stability		Sample or Field Test		Graphic Log	Classification	SOIL TYPE, plasticity or particle characteristic, colour, secondary and minor components ROCK TYPE, grain size and type, colour, fabric & texture, strength, weathering, defects and structure	Moisture Condition	Consistency Relative Density	STRUCTURE & Other Observations
EX			Dry	ASB 0.00 - 0.10 m PID = 0.1ppm BULK 0.00 - 0.10 m ES 0.00 - 0.20 m				Silty CLAY: fine, low plasticity, dark grey, with roots and fine-grained sands , no odour, no staining, no PACM	D	L	NATURAL
				ASB 0.10 - 0.30 m PID = 0.2ppm BULK 0.10 - 0.30 m							
				ES 0.30 - 0.50 m	0.5		Cl	CLAY: medium plasticity, red to grey, no odour, no staining, no PACM	D	F	
								TERMINATED AT 0.60 m Target depth			

0.30m

0.60m

METHOD
EX Excavator bucket
R Ripper
HA Hand auger
PT Push tube
SON Sonic drilling
AH Air hammer
PS Percussion sampler
AS Short spiral auger
AD/V Solid flight auger: V-Bit
AD/T Solid flight auger: TC-Bit
HFA Hollow flight auger
WB Washbore drilling
RR Rock roller

PENETRATION
VE Very Easy (No Resistance)
E Easy
F Firm
H Hard
VH Very Hard (Refusal)

WATER
Water Level on Date shown
water inflow
water outflow

FIELD TESTS
SPT - Standard Penetration Test
PP - Hand/Pocket Penetrometer
DCP - Dynamic Cone Penetrometer
PSP - Perth Sand Penetrometer
MC - Moisture Content
PBT - Plate Bearing Test
IMP - Borehole Impression Test
PID - Photoionisation Detector
VS - Vane Shear; P=Peak, R=Residual (uncorrected kPa)

SAMPLES
B - Bulk disturbed sample
D - Disturbed sample
ES - Environmental sample
U - Thin wall tube 'undisturbed'

MOISTURE
D - Dry
M - Moist
W - Wet
PL - Plastic limit
LL - Liquid limit
w - Moisture content

SOIL CONSISTENCY
VS - Very Soft
S - Soft
F - Firm
St - Stiff
VSt - Very Stiff
H - Hard

RELATIVE DENSITY
VL - Very Loose
L - Loose
MD - Medium Dense
D - Dense
VD - Very Dense

Refer to explanatory notes for details of abbreviations and basis of descriptions

CONSTRUCTION SCIENCES PTY LTD

Appendix H
FIELD SHEETS

Construction Sciences	Daily Activity Log	Document No. CS-ENG-005	Issue Date: 26/03/18
		Created: 26/03/18	Authorised by: M. King
		Version: 1.0	Page 1 of 1

Client: Provincial Investments Pty Ltd — **Job No:** 10791.EV.P.323

Project: Stage 1 PSI + Stage 2 DSI — **Activity:** Soil Sampling

Location: 249-271 Railway Terrace, Schofields NSW 2762 — **Date:** 18/08/2022

Weather: Overcast — **By:** JN

Recent Weather: Sunny

Time	Activity/Observation/Comment
AM 8:00	JN arrives onsite, liases with Platinum Excavations operator, SWMs and pre-start signed, mobilised to first TP location and informed land owner of commencement of works
8:20	JN starts excavating and sampling scope
10:55	Excavator encounters septic pipe leakage at 0.1m bgl, informs AN and landowner. ~~Is cleared to proceed for TP's 5m away from original position~~. TP25 and TP26 to be discontinued due to inferred presence of Septic UST for the time being
17:20	JN wraps up for the day. PID values on back of D.A.L for reference
17:40	JN departs site, new DAL for tomorrow's works

Check list:

Start and finish times for day	☐	Standby times	☐
Induction times and parties inducted	☐	Equipment breakdowns	☐
Communication with client/contractors	☐	Inclement weather delays	☐
Incidents/injuries	☐	Progression of site work	☐

Construction Sciences	Daily Activity Log	Document No. CS-ENG-005	Issue Date: 26/03/18
		Created: 26/03/18	Authorised by: M. King
		Version: 1.0	Page 1 of 1

Client: Provincial Investments Pty Ltd — **Job No:** 10791.EV.P.323

Project: Stage 1 PSI + Stage 2 DSI — **Activity:** Soil Sampling

Location: 249-271 Railway Terrace, Schofields NSW 2762 — **Date:** ~~18~~ 19/08/2022

Weather: Overcast — **By:** JN

Recent Weather: Overcast

Time AM	Activity/Observation/Comment
7:45	JN arrives onsite. Operator arrived at 7:15 AM
8:00	JN recommences TP scope (TP38)
PM 4:05	JN finishes TP sampling for northern end of site JN to PID all samples then departs site for sample drop-off to the lab. PID for all samples at back of D.A.L.

Check list:

*PACM 9-11 are most likely for ACM (Bonded)

Start and finish times for day	❑	Standby times	❑
Induction times and parties inducted	❑	Equipment breakdowns	❑
Communication with client/contractors	❑	Inclement weather delays	❑
Incidents/injuries	❑	Progression of site work	❑

Construction Sciences	Daily Activity Log	Document No. CS-ENG-005	Issue Date: 26/03/18
		Created: 26/03/18	Authorised by: M. King
		Version: 1.0	Page 1 of 1

Client: Provincial Investments Pty Ltd — **Job No:** 10791.EV.P.323

Project: Stage 1 PSI + Stage 2 DSI — **Activity:** Soil Sampling

Location: 249-271 Railway Terrace, Schofields NSW 2762 — **Date:** ~~18~~ 22/08/2022

Weather: Sunny — **By:** JN

Recent Weather: Sunny

Time AM	Activity/Observation/Comment
7:15	JN and operator both arrive onsite
7:30	JN recommences TP excavations
16:30	JN finishes excavation for the day. TP's left ~~TP's done today. PID analysis at back of F.D.A.~~ 20 ↳ PID analysis on field sheets
17:30	JN leaves site

Check list:

Start and finish times for day	☐	Standby times	☐
Induction times and parties inducted	☐	Equipment breakdowns	☐
Communication with client/contractors	☐	Inclement weather delays	☐
Incidents/injuries	☐	Progression of site work	☐

Construction Sciences	Daily Activity Log	Document No. CS-ENG-005	Issue Date: 26/03/18
		Created: 26/03/18	Authorised by: M. King
		Version: 1.0	Page 1 of 1

Client: Provincial Investments Pty Ltd **Job No:** 10791.EV.P.323

Project: Stage 1 PSI + Stage 2 DSI **Activity:** Soil Sampling

Location: 249-271 Railway Terrace, Schofields NSW 2762 **Date:** ~~18~~ 23/08/2022

Weather: Sunny/Rainy **By:** JN

Recent Weather: Sunny

Time AM	Activity/Observation/Comment
7:30	JN arrives onsite, excavator operator arrives at 11 am due to schedule conflicts
7:45	JN restarts sampling onsite
PM 3:45	JN wraps up all sampling scope for P.323 PP for today samples back of DAL
4:00	JN and operator departs site

Check list:

Start and finish times for day	☐	Standby times	☐
Induction times and parties inducted	☐	Equipment breakdowns	☐
Communication with client/contractors	☐	Inclement weather delays	☐
Incidents/injuries	☐	Progression of site work	☐

Appendix I
CALIBRATION

Expert Testing Services
ABN: 74 619 717 350
Contact: 02 9730 2019
Email: sales@experttesting.com.au
9/171 Power Street, Glendenning NSW 2761

Calibration and Service Report

Company:	ETS Rentals Department	**Manufacturer:**	Honeywell	**Serial #:**	592-902528
Contact:	Aachal Chand	**Instrument:**	MiniRAE 3000	**Asset #:**	-
Address:	9/171 Power Street, GLENDENNING NSW 2761	**Model:**	PGM7320	**Part #:**	-
		Configuration:	VOC	**Sold:**	-
Phone:	02 9730 2019	**Wireless:**	-	**Last Cal:**	15.08.2022
Fax:		**Network ID:**	-	**Job #:**	
Email:	rentals@experttesting.com.au	**Unit ID:**	-	**Cal Spec:**	Std
				Order #:	

Item	Test	Pass/Fail	Comments	Part Code	S/W
Battery	NiCd, NiMH, Dry cell, Li Ion	✓			
Charger	Charger, Power supply	✓			
	Cradle	✓			
Pump	Flow	✓	>500ml/min		
Filter	Filter, fitting, etc	✓			
Alarms	Audible, visual, vibration	✓			
Display	Operation	✓			
Switches	Operation	✓			
PCB	Operation	✓			
Connectors	Condition	✓			
Firmware	Version	✓	Version: 2.22		
Datalogger	Operation	✓			
Monitor Housing	Condition	✓			
Case	Condition/Type	✓			
Sensors					
PID	Lamp	✓			
PID	Sensor	✓			
THP	Sensor	✓			

Engineer's Report

Checked unit settings and configuration – okay
Unit allowed to stabilize and zero calibration performed as per manufacturers specifications
Calibration procedure written and performed to manufacturers specification using traceable gases.

Calibration Certificate

Sensor	Type	Serial No:	Span Gas	Concentration	Traceability Lot #	CF	Reading	
							Zero	Span
PID	10.6eV	-	Isobutylene	100ppm	WO205484-13	1	0	100ppm

Calibrated/Repaired by: **Milenko Sisic** Date: **15.08.2022** Next Due: **15.02.2023**

GLOBAL COMPLIANCE CERTIFICATION GCC ISO 9001 Certified
GLOBAL COMPLIANCE CERTIFICATION GCC ISO 14001 Certified
JAS-ANZ WWW.JAS-ANZ.ORG/REGISTER

Appendix J
LABORATORY

E-MAILED
25/8 @ 2.17pm

CHAIN OF CUSTODY - SGS

SGS EHS Sydney COC

SE235945

Client: Construction Sciences Pty Ltd	Client Project Name / Number / Site etc (ie report title): 10791.EV.P.323 - 249-271 Railway Terrace, Schofields
Contact person: Joshua Nito, Abanish Nepal	PO No.: Const-IE-Nov21-309331V2
Project Mgr: Abanish Nepal	
Sampler: Joshua Nito	Date results required: standard
Address: 2/4 KELLOGG ROAD, ROOTY HILL NSW	Or choose: standard / same day / 1 day / 2 day / 3 day
	Note: Inform lab in advance if urgent turnaround is required - surcharge applies
Phone: 439516172 436620611	Lab comments:
Fax:	
Email: joshua.nito@constructionsciences.net; abanish.nepal@constructionsciences.net;	

Sample information					Tests Required															Comments
Client Sample ID	Date Sampled	Lab Sample ID	Type of Sample	No of Containers	CS17 (Asbestos WA w/w%)	CS10 (CL17)	CS7 (CL10)	CS12 (OC/OP)	CS21 (Clay Content %)	CS16 (Asbestos ID in Building Mat)	CS19 (E Coli)	CS20 (T Coli)	PAH	Metals (8)	pH/CEC	BTEX	HOLD			
TP01/0-0.1	18/08/2022	1	Soil	1 Bag	X															
TP01/0.1-0.3	18/08/2022	2	Soil	1 Bag, 1 Jar	X	X														
TP01/0.3-0.5	18/08/2022		Soil	1 Jar													X			
TP02/0-0.1	18/08/2022	3	Soil	1 Bag	X															
TP02/0.1-0.3	18/08/2022	4	Soil	1 Jar									X	X						
TP02/0.1-0.3	18/08/2022	5	Soil	1 Bag	X															
TP02/0.3-0.5	18/08/2022		Soil	1 Jar													X			
TP03/0-0.01	18/08/2022	6	Soil	1 Bag	X															
TP03/0.1-0.3	18/08/2022	7	Soil	1 Bag, 1 Jar	X								X	X						PAH and Metals for jar, CS17 for bag
TP03/0.3-0.5	18/08/2022		Soil	1 Jar													X			
TP04/0-0.1	22/08/2022	8	Soil	1 Bag	X															
TP04/0-0.2	22/08/2022	9	Soil	1 Jar			X													
TP04/0.1-0.2	22/08/2022		Soil	1 Bag													X			
TP04/0.2-0.4	22/08/2022		Soil	1 Jar													X			
TP04/0.2-0.5	22/08/2022		Soil	1 Bag													X			
TP04/0.5-0.7	22/08/2022		Soil	1 Jar													X			
TP05/0-0.1	22/08/2022	10	Soil	1 Bag	X															
TP05/0-0.2	22/08/2022	11	Soil	1 Jar									X	X						
TP05/0.1-0.3	22/08/2022	12	Soil	1 Bag	X															
TP05/0.3-0.5	22/08/2022		Soil	1 Jar													X			
TP06/0-0.1	22/08/2022	13	Soil	1 Bag	X															
TP06/0.1-0.3	22/08/2022	14	Soil	1 Jar		X														
TP06/0.1-0.4	22/08/2022	15	Soil	1 Bag	X															
TP06/0.4-0.6	22/08/2022		Soil	1 Jar													X			
TP07/0-0.1	22/08/2022		Soil	1 Bag													X			
TP07/0.1-0.3	22/08/2022	16	Soil	1 Bag, 1 Jar	X	X														
TP07/0.3-0.5	22/08/2022		Soil	1 Bag, 1 Jar													X			
TP07/0.5-0.7	22/08/2022		Soil	1 Bag, 1 Jar													X			
TP08/0-0.1	22/08/2022	17	Soil	1 Bag	X															
TP08/0.1-0.3	22/08/2022	18	Soil	1 Bag, 1 Jar									X	X			X			Please put bag sample on HOLD, jar sample for PAH and metals analysis
TP08/0.3-0.5	22/08/2022		Soil	1 Bag, 1 Jar													X			
TP08/0.5-0.7	22/08/2022		Soil	1 Bag, 1 Jar													X			
TP09/0-0.1	22/08/2022	19	Soil	1 Bag	X															
TP09/0-0.2	22/08/2022	20	Soil	1 Jar					X					X						
TP09/0.1-0.4	22/08/2022		Soil	1 Bag													X			
TP09/0.4-0.6	22/08/2022		Soil	1 Jar / 1 BAG													X			
TP10/0-0.1	22/08/2022	21	Soil	1 Bag	X															
TP10/0-0.2	22/08/2022	22	Soil	1 Jar				X						X						
TP10/0.1-0.3	22/08/2022		Soil	1 Bag													X			
TP10/0.3-0.5	22/08/2022		Soil	1 Jar													X			
TP11/0-0.1	22/08/2022	23	Soil	1 Bag	X															
TP11/0-0.2	22/08/2022	24	Soil	1 Jar		X														
TP11/0.1-0.3	22/08/2022		Soil	1 Bag													X			
TP11/0.3-0.5	22/08/2022	25	Soil	1 Bag, 1 Jar					X					X	X					CS21 for bag, Metals + ph/CEC for jar
TP12/0-0.1	22/08/2022	26	Soil	1 Bag	X															
TP12/0-0.2	22/08/2022	27	Soil	1 Jar			X													

CHAIN OF CUSTODY - SGS

Client: Construction Sciences Pty Ltd	**Client Project Name / Number / Site etc (ie report title):**
Contact person: Joshua Nito, Abanish Nepal	10791.EV.P.323 - 249-271 Railway Terrace, Schofields
Project Mgr: Abanish Nepal	**PO No.:** Const-IE-Nov21-309331V2
Sampler: Joshua Nito	
Address: 2/4 KELLOGG ROAD, ROOTY HILL NSW	**Date results required:** standard
	Or choose: standard / same day / 1 day / 2 day / 3 day
Phone: 439516172 436620611	*Note: Inform lab in advance if urgent turnaround is required - surcharge applies*
Fax:	**Lab comments:**
Email: joshua.nito@constructionsciences.net; abanish.nepal@constructionsciences.net;	

Sample information					Tests Required															Comments
Client Sample ID	Date Sampled	Lab Sample ID	Type of Sample	No of Containers	CS17 (Asbestos WA w/w%)	CS10 (CL17)	CS7 (CL10)	CS12 (OC/OP)	CS21 (Clay Content %)	CS16 (Asbestos ID in Building Mat)	CS19 (E Coli)	CS20 (T Coli)	PAH	Metals (8)	pH/CEC	BTEX	HOLD			
TP12/0.1-0.3	22/08/2022		Soil	1 Bag													X			
TP12/0.3-0.5	22/08/2022		Soil	1 Jar													X			
TP13/0-0.1	22/08/2022	28	Soil	1 Bag	X															
TP13/0-0.2	22/08/2022	29	Soil	1 Jar									X	X						
TP13/0.1-0.3	22/08/2022		Soil	1 Bag													X			
TP13/0.3-0.5	22/08/2022		Soil	1 Jar													X			
TP14/0-0.1	22/08/2022	30	Soil	1 Bag	X															
TP14/0-0.2	22/08/2022	31	Soil	1 Jar									X	X						
TP14/0.1-0.2	22/08/2022		Soil	1 Bag													X			
TP14/0.2-0.4	22/08/2022		Soil	1 Jar													X			
TP15/0-0.1	22/08/2022	32	Soil	1 Bag	X															
TP15/0-0.2	22/08/2022	33	Soil	1 Jar			X													
TP15/0.1-0.3	22/08/2022		Soil	1 Bag													X			
TP15/0.3-0.5	22/08/2022		Soil	1 Bag, 1 Jar													X			
TP16/0-0.1	22/08/2022	34	Soil	1 Bag	X															
TP16/0-0.2	22/08/2022	35	Soil	1 Jar									X	X						
TP16/0.1-0.4	22/08/2022		Soil	1 Bag													X			
TP16/0.4-0.6	22/08/2022		Soil	1 Bag, 1 Jar													X			
TP17/0-0.1	22/08/2022	36	Soil	1 Bag	X															
TP17/0.1-0.25	22/08/2022	37	Soil	1 Bag, 1 Jar		X														
TP17/0.25-0.45	22/08/2022		Soil	1 Jar													X			
TP18/0-0.6	23/08/2022	38	Soil	1 Bag	X															
TP18/0.4-0.6	23/08/2022	39	Soil	1 Jar		X														
TP19/0-0.6	23/08/2022		Soil	1 Bag													X			
TP19/0.4-0.6	23/08/2022	40	Soil	1 Jar									X	X						
TP20/0-0.1	22/08/202	41	Soil	1 Bag	X															
TP20/0.1-0.3	22/08/2022	42	Soil	1 Bag, 1 Jar		X											X			Please put bag sample on HOLD, jar sample for CS10 analysis
TP20/0.3-0.5	22/08/2022		Soil	1 Jar													X			
TP21/0-0.9	23/08/2022	43	Soil	1 Bag	X															
TP21/0.7-0.9	23/08/2022	44	Soil	1 Jar		X														
TP22/0-0.7	23/08/2022	45	Soil	1 Bag	X															
TP22/0.6-0.7	23/08/2022	46	Soil	1 Jar			X													
TP23/0-0.5	23/08/2022		Soil	1 Bag													X			
TP23/0.3-0.5	23/08/2022	47	Soil	1 Jar									X	X						
TP24/0-0.1	18/08/2022	48	Soil	1 Bag	X															
TP24/0.15-0.35	18/08/2022	49	Soil	1 Jar		X														
TP24/0.1-0.35	18/08/2022	50	Soil	1 Bag	X															
TP24/0.35-0.55	18/08/2022		Soil	1 Jar													X			
TP25/0-0.1	22/08/2022	51	Soil	1 Bag	X															
TP25/0-0.2	22/08/2022	52	Soil	1 Jar		X														
TP25/0.1-0.3	22/08/2022	53	Soil	1 Bag	X															
TP25/0.3-0.5	22/08/2022		Soil	1 Jar													X			
TP26/0-0.1	22/08/2022	54	Soil	1 Bag	X															
TP26/0-0.2	22/08/2022	55	Soil	1 Jar		X														
TP26/0.1-0.3	22/08/2022	56	Soil	1 Bag	X															
TP26/0.3-0.5	22/08/2022		Soil	1 Jar													X			

CHAIN OF CUSTODY - SGS

Client: Construction Sciences Pty Ltd	**Client Project Name / Number / Site etc (ie report title):**
Contact person: Joshua Nito, Abanish Nepal	10791.EV.P.323 - 249-271 Railway Terrace, Schofields
Project Mgr: Abanish Nepal	**PO No.:** Const-IE-Nov21-309331V2
Sampler: Joshua Nito	
Address: 2/4 KELLOGG ROAD, ROOTY HILL NSW	**Date results required:** standard
	Or choose: standard / same day / 1 day / 2 day / 3 day
	Note: Inform lab in advance if urgent turnaround is required - surcharge applies
Phone: 439516172 436620611	**Lab comments:**
Fax:	
Email: joshua.nito@constructionsciences.net; abanish.nepal@constructionsciences.net;	

Sample information					Tests Required															Comments
Client Sample ID	Date Sampled	Lab Sample ID	Type of Sample	No of Containers	CS17 (Asbestos WA w/w%)	CS10 (CL17)	CS7 (CL10)	CS12 (OC/OP)	CS21 (Clay Content %)	CS16 (Asbestos ID in Building Mat)	CS19 (E Coli)	CS20 (T Coli)	PAH	Metals (8)	pH/CEC	BTEX	HOLD			
TP27/0-0.1	18/08/2022	57	Soil	1 Bag	x															
TP27/0-0.2	18/08/2022	58	Soil	1 Jar									x	x						
TP27/0.1-0.35	18/08/2022		Soil	1 Bag													x			
TP27/0.2-0.35	18/08/2022		Soil	1 Jar													x			
TP27/0.35-0.55	18/08/2022		Soil	1 Jar													x			
TP28/0-0.1	18/08/2022	59	Soil	1 Bag	x															
TP28/0.1-0.3	18/08/2022	60	Soil	1 Jar									x	x						
TP28/0.1-0.4	18/08/2022	61	Soil	1 Bag	x															
TP28/0.4-0.6	18/08/2022		Soil	1 Jar													x			
TP29A/0-0.1	19/08/2022	62	Soil	1 Bag	x															
TP29A/0.1-0.3	19/08/2022	63	Soil	1 Bag, 1 Jar	x	x														
TP29A/0.3-0.5	19/08/2022		Soil	1 Jar													x			
TP30A/0-0.1	19/08/2022	64	Soil	1 Bag	x															
TP30A/0.1-0.3	19/08/2022	65	Soil	1 Jar									x	x						
TP30A/0.1-0.5	19/08/2022	66	Soil	1 Bag	x															
TP30A/0.3-0.5	19/08/2022		Soil	1 Jar													x			
TP30A/0.5-0.6	19/08/2022		Soil	1 Jar													x			
TP31/0-0.1	18/08/2022	67	Soil	1 Bag	x															
TP31/0.1-0.3	18/08/2022	68	Soil	1 Bag, 2 Jars	x	x					x	x								
TP31/0.3-0.5	18/08/2022		Soil	1 Jar													x			
TP32/0-0.1	18/08/2022	69	Soil	1 Bag	x															
TP32/0.1-0.3	18/08/2022	70	Soil	1 Bag, 2 Jars	x						x	x	x	x						
TP32/0.3-0.5	18/08/2022		Soil	1 Jar													x			
TP33/0-0.1	18/08/2022	71	Soil	1 Bag	x															
TP33/0.1-0.3	18/08/2022	72	Soil	1 Bag, 2 Jars	x	x					x	x								
TP33/0.3-0.5	18/08/2022		Soil	1 Jar													x			
TP34/0-0.1	18/08/2022	73	Soil	1 Bag	x															
TP34/0.1-0.3	18/08/2022	74	Soil	1 Bag, 2 Jars	x						x	x	x	x						
TP34/0.3-0.5	18/08/2022		Soil	1 Jar													x			
TP35/0-0.1	18/08/2022	75	Soil	1 Bag	x															
TP35/0.1-0.3	18/08/2022	76	Soil	2 Jars				x			x	x	x	x						
TP35/0.1-0.4	18/08/2022	77	Soil	1 Bag	x															
TP35/0.4-0.6	18/08/2022		Soil	1 Jar													x			
TP36/0-0.1	18/08/2022	78	Soil	1 Bag	x															
TP36/0-0.2	18/08/2022	79	Soil	2 Jars							x	x	x	x						
TP36/0.1-0.4	18/08/2022	80	Soil	1 Bag	x															
TP36/0.2-0.4	18/08/2022		Soil	1 Jar													x			
TP36/0.4-0.6	18/08/2022		Soil	1 Jar													x			
TP37/0-0.1	19/08/2022	81	Soil	1 Bag	x															
TP37/0.1-0.3	19/08/2022	82	Soil	2 Jars		x					x	x								
TP37/0.1-0.45	19/08/2022	83	Soil	1 Bag	x															
TP37/0.45-0.65	19/08/2022		Soil	1 Jar													x			
TP38/0-0.1	19/08/2022	84	Soil	1 Bag	x															
TP38/0-0.2	19/08/2022	85	Soil	2 Jars				x			x	x	x	x						
TP38/0.1-0.4	19/08/2022	86	Soil	1 Bag	x															
TP38/0.4-0.6	19/08/2022		Soil	1 Jar													x			
TP39/0.-0.1	19/08/2022	87	Soil	1 Bag	x															

SAMPLE RECEIPT ADVICE

SE235945

CLIENT DETAILS

Contact	Abanish Nepal
Client	CONSTRUCTION SCIENCES PTY LTD
Address	2/4 KELLOGG RD ROOTY HILL NSW 2766
Telephone	0436 620 611
Facsimile	02 8438 0310
Email	Abanish.Nepal@constructionsciences.net
Project	**10791.EV.P.323 249-271Railway Terrace**
Order Number	**10791.EV.P.323**
Samples	87

LABORATORY DETAILS

Manager	Huong Crawford
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Tue 23/8/2022
Report Due	Mon 5/9/2022
SGS Reference	**SE235945**

SUBMISSION DETAILS

This is to confirm that 87 samples were received on Tuesday 23/8/2022. Results are expected to be ready by COB Monday 5/9/2022. Please quote SGS reference SE235945 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice Bricks
Samples received in correct containers	Yes	Sample counts by matrix	86 Soil
Date documentation received	25/8/2022@2:17pm	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	10°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

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

COMMENTS

Micro subcontracted to Symbio Laboratories, 2 Sirius Road, Lane Cove West NSW 2066, NATA Accreditation Number 2455.
Clay Content subcontracted to SGS Cairns, 2/58 Comport St, Portsmith QLD 4870, NATA Accreditation Number: 2562, Site Number: 3146.
52 samples have been placed on hold as no tests have been assigned for them by the client. These samples will not be processed.
TP28/0.1-0.4 not received.

SAMPLE RECEIPT ADVICE

SE235945

CLIENT DETAILS

Client CONSTRUCTION SCIENCES PTY LTD

Project 10791.EV.P.323 249-271Railway Terrace

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
002	TP01/0.1-0.3	30	14	26	11	10	11	7
004	TP02/0.1-0.3	-	-	26	-	-	-	-
007	TP03/0.1-0.3	-	-	26	-	-	-	-
009	TP04/0-0.2	-	-	26	-	10	11	7
011	TP05/0-0.2	-	-	26	-	-	-	-
014	TP06/0.1-0.3	30	14	26	11	10	11	7
016	TP07/0.1-0.3	30	14	26	11	10	11	7
018	TP08/0.1-0.3	-	-	26	-	-	-	-
020	TP09/0-0.2	30	14	-	-	-	-	-
022	TP10/0.0-0.2	30	14	-	-	-	-	-
024	TP11/0-0.2	30	14	26	11	10	11	7

CONTINUED OVERLEAF

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

SAMPLE RECEIPT ADVICE

SE235945

CLIENT DETAILS

Client CONSTRUCTION SCIENCES PTY LTD

Project 10791.EV.P.323 249-271Railway Terrace

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	pH in soil (1:5)	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
025	TP11/0.3-0.5	-	-	-	-	1	-	-	-
027	TP12/0-0.2	-	-	26	-	-	10	11	7
029	TP13/0-0.2	-	-	26	-	-	-	-	-
031	TP14/0-0.2	-	-	26	-	-	-	-	-
033	TP15/0-0.2	-	-	26	-	-	10	11	7
035	TP16/0-0.2	-	-	26	-	-	-	-	-
037	TP17/0.1-0.25	30	14	26	11	-	10	11	7
039	TP18/0.4-0.6	30	14	26	11	-	10	11	7
040	TP19/0.4-0.6	-	-	26	-	-	-	-	-
042	TP20/0.1-0.3	30	14	26	11	-	10	11	7
044	TP21/0.7-0.9	30	14	26	11	-	10	11	7
046	TP22/0.6-0.7	-	-	26	-	-	10	11	7
047	TP23/0.3-0.5	-	-	26	-	-	-	-	-

CONTINUED OVERLEAF

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

SAMPLE RECEIPT ADVICE

SE235945

CLIENT DETAILS

Client CONSTRUCTION SCIENCES PTY LTD

Project 10791.EV.P.323 249-271Railway Terrace

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
049	TP24/0.15-0.35	30	14	26	11	10	11	7
052	TP25/0-0.2	30	14	26	11	10	11	7
055	TP26/0-0.2	30	14	26	11	10	11	7
058	TP27/0-0.2	-	-	26	-	-	-	-
060	TP28/0.1-0.3	-	-	26	-	-	-	-
063	TP29A/0.1-0.3	30	14	26	11	10	11	7
065	TP30A/0.1-0.3	-	-	26	-	-	-	-
068	TP31/0.1-0.3	30	14	26	11	10	11	7
070	TP32/0.1-0.3	-	-	26	-	-	-	-
072	TP33/0.1-0.3	30	14	26	11	10	11	7

CONTINUED OVERLEAF

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

SAMPLE RECEIPT ADVICE

SE235945

CLIENT DETAILS

Client CONSTRUCTION SCIENCES PTY LTD

Project 10791.EV.P.323 249-271Railway Terrace

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
074	TP34/0.1-0.3	-	-	26	-	-	-	-
076	TP35/0.1-0.3	30	14	26	-	-	-	-
079	TP36/0-0.2	-	-	26	-	-	-	-
082	TP37/0.1-0.3	30	14	26	11	10	11	7
085	TP38/0-0.2	30	14	26	-	-	-	-

CONTINUED OVERLEAF

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

SAMPLE RECEIPT ADVICE

SE235945

CLIENT DETAILS

Client CONSTRUCTION SCIENCES PTY LTD

Project 10791.EV.P.323 249-271Railway Terrace

SUMMARY OF ANALYSIS

No.	Sample ID	Fibre Identification in soil	Gravimetric Determination of Asbestos in Soil	Mercury in Soil	Moisture Content	Total Recoverable Elements in Soil/Waste
001	TP01/0-0.1	2	9	-	-	-
002	TP01/0.1-0.3	2	9	1	1	7
003	TP02/0-0.1	2	9	-	-	-
004	TP02/0.1-0.3	-	-	1	1	7
005	TP02/0.1-0.3_bag	2	9	-	-	-
006	TP03/0-0.0.1	2	9	-	-	-
007	TP03/0.1-0.3	2	9	1	1	7
008	TP04/0-0.1	2	9	-	-	-
009	TP04/0-0.2	-	-	1	1	7
010	TP05/0-0.1	2	9	-	-	-
011	TP05/0-0.2	-	-	1	1	7
012	TP05/0.1-0.3	2	9	-	-	-
013	TP06/0-0.1	2	9	-	-	-
014	TP06/0.1-0.3	-	-	1	1	7
015	TP06/0.1-0.4	2	9	-	-	-
016	TP07/0.1-0.3	2	9	1	1	7
017	TP08/0-0.1	2	9	-	-	-
018	TP08/0.1-0.3	-	-	1	1	7
019	TP09/0-0.1	2	9	-	-	-
020	TP09/0-0.2	-	-	1	1	7
021	TP10/0.0-0.1	2	9	-	-	-
022	TP10/0.0-0.2	-	-	1	1	7
023	TP11/0-0.1	2	9	-	-	-
024	TP11/0-0.2	-	-	1	1	7

CONTINUED OVERLEAF

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

SAMPLE RECEIPT ADVICE

SE235945

CLIENT DETAILS

Client CONSTRUCTION SCIENCES PTY LTD

Project 10791.EV.P.323 249-271Railway Terrace

SUMMARY OF ANALYSIS

No.	Sample ID	Exchangeable Cations and Cation Exchange Capacity	Fibre Identification in soil	Gravimetric Determination of Asbestos in Soil	Mercury in Soil	Moisture Content	Total Recoverable Elements in Soil/Waste
025	TP11/0.3-0.5	13	-	-	1	1	7
026	TP12/0-0.1	-	2	9	-	-	-
027	TP12/0-0.2	-	-	-	1	1	7
028	TP13/0-0.1	-	2	9	-	-	-
029	TP13/0-0.2	-	-	-	1	1	7
030	TP14/0-0.1	-	2	9	-	-	-
031	TP14/0-0.2	-	-	-	1	1	7
032	TP15/0-0.1	-	2	9	-	-	-
033	TP15/0-0.2	-	-	-	1	1	7
034	TP16/0-0.1	-	2	9	-	-	-
035	TP16/0-0.2	-	-	-	1	1	7
036	TP17/0-0.1	-	2	9	-	-	-
037	TP17/0.1-0.25	-	-	-	1	1	7
038	TP18/0-0.6	-	2	9	-	-	-
039	TP18/0.4-0.6	-	-	-	1	1	7
040	TP19/0.4-0.6	-	-	-	1	1	7
041	TP20/0-0.1	-	2	9	-	-	-
042	TP20/0.1-0.3	-	-	-	1	1	7
043	TP21/0-0.9	-	2	9	-	-	-
044	TP21/0.7-0.9	-	-	-	1	1	7
045	TP22/0-0.7	-	2	9	-	-	-
046	TP22/0.6-0.7	-	-	-	1	1	7
047	TP23/0.3-0.5	-	-	-	1	1	7
048	TP24/0-0.1	-	2	9	-	-	-

CONTINUED OVERLEAF

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

SAMPLE RECEIPT ADVICE

SE235945

CLIENT DETAILS

Client CONSTRUCTION SCIENCES PTY LTD

Project 10791.EV.P.323 249-271Railway Terrace

SUMMARY OF ANALYSIS

No.	Sample ID	Fibre Identification in soil	Gravimetric Determination of Asbestos in Soil	Mercury in Soil	Moisture Content	Total Recoverable Elements in Soil/Waste
049	TP24/0.15-0.35	-	-	1	1	7
050	TP24/0.1-0.35	2	9	-	-	-
051	TP25/0-0.1	2	9	-	-	-
052	TP25/0-0.2	-	-	1	1	7
053	TP25/0.1-0.3	2	9	-	-	-
054	TP26/0-0.1	2	9	-	-	-
055	TP26/0-0.2	-	-	1	1	7
056	TP26/0.1-0.3	2	9	-	-	-
057	TP27/0-0.1	2	9	-	-	-
058	TP27/0-0.2	-	-	1	1	7
059	TP28/0-0.1	2	9	-	-	-
060	TP28/0.1-0.3	-	-	1	1	7
062	TP29A/0.0-0.1	2	9	-	-	-
063	TP29A/0.1-0.3	2	9	1	1	7
064	TP30A/0-0.1	2	9	-	-	-
065	TP30A/0.1-0.3	-	-	1	1	7
066	TP30A/0.1-0.5	2	9	-	-	-
067	TP31/0-0.1	2	9	-	-	-
068	TP31/0.1-0.3	2	9	1	1	7
069	TP32/0-0.1	2	9	-	-	-
070	TP32/0.1-0.3	2	9	1	1	7
071	TP33/0-0.1	2	9	-	-	-
072	TP33/0.1-0.3	2	9	1	1	7

CONTINUED OVERLEAF

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

SAMPLE RECEIPT ADVICE

SE235945

CLIENT DETAILS

Client CONSTRUCTION SCIENCES PTY LTD

Project 10791.EV.P.323 249-271Railway Terrace

SUMMARY OF ANALYSIS

No.	Sample ID	Fibre Identification in soil	Gravimetric Determination of Asbestos in Soil	Mercury in Soil	Moisture Content	Total Recoverable Elements in Soil/Waste
073	TP34/0-0.1	2	9	-	-	-
074	TP34/0.1-0.3	2	9	1	1	7
075	TP35/0-0.1	2	9	-	-	-
076	TP35/0.1-0.3	-	-	1	1	7
077	TP35/0.1-0.4	2	9	-	-	-
078	TP36/0-0.1	2	9	-	-	-
079	TP36/0-0.2	-	-	1	1	7
080	TP36/0.1-0.4	2	9	-	-	-
081	TP37 0-0.1	2	9	-	-	-
082	TP37/0.1-0.3	-	-	1	1	7
083	TP37/0.1-0.45	2	9	-	-	-
084	TP38/0-0.1	2	9	-	-	-
085	TP38/0-0.2	-	-	1	1	7
086	TP38/0.1-0.4	2	9	-	-	-
087	TP39/0-0.1	2	9	-	-	-

CONTINUED OVERLEAF

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

SAMPLE RECEIPT ADVICE

SE235945

CLIENT DETAILS

Client CONSTRUCTION SCIENCES PTY LTD

Project 10791.EV.P.323 249-271Railway Terrace

SUMMARY OF ANALYSIS

No.	Sample ID	Particle sizing of soils <75µm by hydrometer	Particle sizing of soils by sieving
025	TP11/0.3-0.5	1	2

CONTINUED OVERLEAF

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

SAMPLE RECEIPT ADVICE

SE235945

CLIENT DETAILS

Client CONSTRUCTION SCIENCES PTY LTD

Project 10791.EV.P.323 249-271Railway Terrace

SUMMARY OF ANALYSIS

No.	Sample ID	Sample Subcontracted
068	TP31/0.1-0.3	1
070	TP32/0.1-0.3	1
072	TP33/0.1-0.3	1

CONTINUED OVERLEAF

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

SAMPLE RECEIPT ADVICE

SE235945

CLIENT DETAILS

Client CONSTRUCTION SCIENCES PTY LTD

Project 10791.EV.P.323 249-271Railway Terrace

SUMMARY OF ANALYSIS

No.	Sample ID	Sample Subcontracted
074	TP34/0.1-0.3	1
076	TP35/0.1-0.3	1
079	TP36/0-0.2	1
082	TP37/0.1-0.3	1
085	TP38/0-0.2	1

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

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	Abanish Nepal
Client	CONSTRUCTION SCIENCES PTY LTD
Address	2/4 KELLOGG RD ROOTY HILL NSW 2766
Telephone	0436 620 611
Facsimile	02 8438 0310
Email	Abanish.Nepal@constructionsciences.net
Project	**10791.EV.P.323 249-271Railway Terrace**
Order Number	**10791.EV.P.323**
Samples	87

LABORATORY DETAILS

Manager	Huong Crawford
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE235945 R0**
Date Received	23/8/2022
Date Reported	8/9/2022

COMMENTS

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

Micro subcontracted to Symbio Laboratories, 2 Sirius Road, Lane Cove West NSW 2066, NATA Accreditation Number 2455. Report No. S1191410.
Clay Content subcontracted to SGS Cairns, 2/58 Comport St, Portsmith QLD 4870, NATA Accreditation Number: 2562, Site Number: 3146. Report No: CE161506

No respirable fibres detected in all soil samples using trace analysis technique.
Sample # 13 : Asbestos found in approx 50x25x4mm cement sheet fragments x2 and found as approx 15x5x3mm cement sheet fragments x4.
Sample # 15 : Asbestos found in approx 3x2x2mm cement sheet fragment.
Sample # 38 : Asbestos found in approx 6x4x2mm cement sheet fragments x2.
Sample # 78 : Asbestos found in approx 15x7x3mm cement sheet fragments x4.
Sample # 80 : Asbestos found in approx 20x8x3mm cement sheet fragments x4.
Asbestos analysed by Approved Identifiers Ravee Sivasubramaniam and Yusuf Kuthpudin .

SIGNATORIES

Akheeqar BENIAMEEN
Chemist

Dong LIANG
Metals/Inorganics Team Leader

Huong CRAWFORD
Production Manager

Kamrul AHSAN
Senior Chemist

Ly Kim HA
Organic Section Head

Ravee SIVASUBRAMANIAM
Hygiene Team Leader

VOC's in Soil [AN433] Tested: 31/8/2022

PARAMETER	UOM	LOR	TP01/0.1-0.3 SOIL - 18/8/2022 SE235945.002	TP04/0-0.2 SOIL - 22/8/2022 SE235945.009	TP06/0.1-0.3 SOIL - 22/8/2022 SE235945.014	TP07/0.1-0.3 SOIL - 22/8/2022 SE235945.016	TP11/0-0.2 SOIL - 22/8/2022 SE235945.024
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Naphthalene (VOC)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1

PARAMETER	UOM	LOR	TP12/0-0.2 SOIL - 22/8/2022 SE235945.027	TP15/0-0.2 SOIL - 22/8/2022 SE235945.033	TP17/0.1-0.25 SOIL - 22/8/2022 SE235945.037	TP18/0.4-0.6 SOIL - 23/8/2022 SE235945.039	TP20/0.1-0.3 SOIL - 22/8/2022 SE235945.042
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Naphthalene (VOC)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1

PARAMETER	UOM	LOR	TP21/0.7-0.9 SOIL - 23/8/2022 SE235945.044	TP22/0.6-0.7 SOIL - 23/8/2022 SE235945.046	TP24/0.15-0.35 SOIL - 18/8/2022 SE235945.049	TP25/0-0.2 SOIL - 22/8/2022 SE235945.052	TP26/0-0.2 SOIL - 22/8/2022 SE235945.055
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Naphthalene (VOC)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1

PARAMETER	UOM	LOR	TP29A/0.1-0.3 SOIL - 19/8/2022 SE235945.063	TP31/0.1-0.3 SOIL - 18/8/2022 SE235945.068	TP33/0.1-0.3 SOIL - 18/8/2022 SE235945.072	TP37/0.1-0.3 SOIL - 19/8/2022 SE235945.082
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6
Naphthalene (VOC)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 31/8/2022

PARAMETER	UOM	LOR	TP01/0.1-0.3 SOIL - 18/8/2022 SE235945.002	TP04/0-0.2 SOIL - 22/8/2022 SE235945.009	TP06/0.1-0.3 SOIL - 22/8/2022 SE235945.014	TP07/0.1-0.3 SOIL - 22/8/2022 SE235945.016	TP11/0-0.2 SOIL - 22/8/2022 SE235945.024
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	TP12/0-0.2 SOIL - 22/8/2022 SE235945.027	TP15/0-0.2 SOIL - 22/8/2022 SE235945.033	TP17/0.1-0.25 SOIL - 22/8/2022 SE235945.037	TP18/0.4-0.6 SOIL - 23/8/2022 SE235945.039	TP20/0.1-0.3 SOIL - 22/8/2022 SE235945.042
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	TP21/0.7-0.9 SOIL - 23/8/2022 SE235945.044	TP22/0.6-0.7 SOIL - 23/8/2022 SE235945.046	TP24/0.15-0.35 SOIL - 18/8/2022 SE235945.049	TP25/0-0.2 SOIL - 22/8/2022 SE235945.052	TP26/0-0.2 SOIL - 22/8/2022 SE235945.055
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	TP29A/0.1-0.3 SOIL - 19/8/2022 SE235945.063	TP31/0.1-0.3 SOIL - 18/8/2022 SE235945.068	TP33/0.1-0.3 SOIL - 18/8/2022 SE235945.072	TP37/0.1-0.3 SOIL - 19/8/2022 SE235945.082
TRH C6-C9	mg/kg	20	<20	<20	<20	<20
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C10	mg/kg	25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 31/8/2022

PARAMETER	UOM	LOR	TP01/0.1-0.3 SOIL - 18/8/2022 SE235945.002	TP04/0-0.2 SOIL - 22/8/2022 SE235945.009	TP06/0.1-0.3 SOIL - 22/8/2022 SE235945.014	TP07/0.1-0.3 SOIL - 22/8/2022 SE235945.016	TP11/0-0.2 SOIL - 22/8/2022 SE235945.024
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	TP12/0-0.2 SOIL - 22/8/2022 SE235945.027	TP15/0-0.2 SOIL - 22/8/2022 SE235945.033	TP17/0.1-0.25 SOIL - 22/8/2022 SE235945.037	TP18/0.4-0.6 SOIL - 23/8/2022 SE235945.039	TP20/0.1-0.3 SOIL - 22/8/2022 SE235945.042
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	TP21/0.7-0.9 SOIL - 23/8/2022 SE235945.044	TP22/0.6-0.7 SOIL - 23/8/2022 SE235945.046	TP24/0.15-0.35 SOIL - 18/8/2022 SE235945.049	TP25/0-0.2 SOIL - 22/8/2022 SE235945.052	TP26/0-0.2 SOIL - 22/8/2022 SE235945.055
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 31/8/2022 (continued)

PARAMETER	UOM	LOR	TP29A/0.1-0.3 SOIL - 19/8/2022 SE235945.063	TP31/0.1-0.3 SOIL - 18/8/2022 SE235945.068	TP33/0.1-0.3 SOIL - 18/8/2022 SE235945.072	TP37/0.1-0.3 SOIL - 19/8/2022 SE235945.082
TRH C10-C14	mg/kg	20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 31/8/2022

PARAMETER	UOM	LOR	TP01/0.1-0.3 SOIL - 18/8/2022 SE235945.002	TP02/0.1-0.3 SOIL - 18/8/2022 SE235945.004	TP03/0.1-0.3 SOIL - 18/8/2022 SE235945.007	TP04/0-0.2 SOIL - 22/8/2022 SE235945.009	TP05/0-0.2 SOIL - 22/8/2022 SE235945.011
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PARAMETER	UOM	LOR	TP06/0.1-0.3 SOIL - 22/8/2022 SE235945.014	TP07/0.1-0.3 SOIL - 22/8/2022 SE235945.016	TP08/0.1-0.3 SOIL - 22/8/2022 SE235945.018	TP11/0-0.2 SOIL - 22/8/2022 SE235945.024	TP12/0-0.2 SOIL - 22/8/2022 SE235945.027
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 31/8/2022 (continued)

PARAMETER	UOM	LOR	TP13/0-0.2 SOIL - 22/8/2022 SE235945.029	TP14/0-0.2 SOIL - 22/8/2022 SE235945.031	TP15/0-0.2 SOIL - 22/8/2022 SE235945.033	TP16/0-0.2 SOIL - 22/8/2022 SE235945.035	TP17/0.1-0.25 SOIL - 22/8/2022 SE235945.037
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PARAMETER	UOM	LOR	TP18/0.4-0.6 SOIL - 23/8/2022 SE235945.039	TP19/0.4-0.6 SOIL - 23/8/2022 SE235945.040	TP20/0.1-0.3 SOIL - 22/8/2022 SE235945.042	TP21/0.7-0.9 SOIL - 23/8/2022 SE235945.044	TP22/0.6-0.7 SOIL - 23/8/2022 SE235945.046
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	**0.1**	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	**0.1**	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	**0.1**	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 31/8/2022 (continued)

PARAMETER	UOM	LOR	TP23/0.3-0.5 SOIL - 23/8/2022 SE235945.047	TP24/0.15-0.35 SOIL - 18/8/2022 SE235945.049	TP25/0-0.2 SOIL - 22/8/2022 SE235945.052	TP26/0-0.2 SOIL - 22/8/2022 SE235945.055	TP27/0-0.2 SOIL - 18/8/2022 SE235945.058
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PARAMETER	UOM	LOR	TP28/0.1-0.3 SOIL - 18/8/2022 SE235945.060	TP29A/0.1-0.3 SOIL - 19/8/2022 SE235945.063	TP30A/0.1-0.3 SOIL - 19/8/2022 SE235945.065	TP31/0.1-0.3 SOIL - 18/8/2022 SE235945.068	TP32/0.1-0.3 SOIL - 18/8/2022 SE235945.070
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 31/8/2022 (continued)

PARAMETER	UOM	LOR	TP33/0.1-0.3 SOIL - 18/8/2022 SE235945.072	TP34/0.1-0.3 SOIL - 18/8/2022 SE235945.074	TP35/0.1-0.3 SOIL - 18/8/2022 SE235945.076	TP36/0-0.2 SOIL - 18/8/2022 SE235945.079	TP37/0.1-0.3 SOIL - 19/8/2022 SE235945.082
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	**0.1**	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	**0.2**	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	**0.2**	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PARAMETER	UOM	LOR	TP38/0-0.2 SOIL - 19/8/2022 SE235945.085
Naphthalene	mg/kg	0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1
Fluorene	mg/kg	0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1
Anthracene	mg/kg	0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1
Pyrene	mg/kg	0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1
Chrysene	mg/kg	0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8

OC Pesticides in Soil [AN420] Tested: 31/8/2022

PARAMETER	UOM	LOR	TP01/0.1-0.3 SOIL - 18/8/2022 SE235945.002	TP06/0.1-0.3 SOIL - 22/8/2022 SE235945.014	TP07/0.1-0.3 SOIL - 22/8/2022 SE235945.016	TP09/0-0.2 SOIL - 22/8/2022 SE235945.020	TP10/0.0-0.2 SOIL - 22/8/2022 SE235945.022
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1
Total OC VIC EPA	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 31/8/2022 (continued)

PARAMETER	UOM	LOR	TP11/0-0.2 SOIL - 22/8/2022 SE235945.024	TP17/0.1-0.25 SOIL - 22/8/2022 SE235945.037	TP18/0.4-0.6 SOIL - 23/8/2022 SE235945.039	TP20/0.1-0.3 SOIL - 22/8/2022 SE235945.042	TP21/0.7-0.9 SOIL - 23/8/2022 SE235945.044
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1
Total OC VIC EPA	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 31/8/2022 (continued)

PARAMETER	UOM	LOR	TP24/0.15-0.35 SOIL - 18/8/2022 SE235945.049	TP25/0-0.2 SOIL - 22/8/2022 SE235945.052	TP26/0-0.2 SOIL - 22/8/2022 SE235945.055	TP29A/0.1-0.3 SOIL - 19/8/2022 SE235945.063	TP31/0.1-0.3 SOIL - 18/8/2022 SE235945.068
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1
Total OC VIC EPA	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 31/8/2022 (continued)

PARAMETER	UOM	LOR	TP33/0.1-0.3 SOIL - 18/8/2022 SE235945.072	TP35/0.1-0.3 SOIL - 18/8/2022 SE235945.076	TP37/0.1-0.3 SOIL - 19/8/2022 SE235945.082	TP38/0-0.2 SOIL - 19/8/2022 SE235945.085
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1
Total OC VIC EPA	mg/kg	1	<1	<1	<1	<1

OP Pesticides in Soil [AN420] Tested: 31/8/2022

PARAMETER	UOM	LOR	TP01/0.1-0.3 SOIL - 18/8/2022 SE235945.002	TP06/0.1-0.3 SOIL - 22/8/2022 SE235945.014	TP07/0.1-0.3 SOIL - 22/8/2022 SE235945.016	TP09/0-0.2 SOIL - 22/8/2022 SE235945.020	TP10/0.0-0.2 SOIL - 22/8/2022 SE235945.022
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	TP11/0-0.2 SOIL - 22/8/2022 SE235945.024	TP17/0.1-0.25 SOIL - 22/8/2022 SE235945.037	TP18/0.4-0.6 SOIL - 23/8/2022 SE235945.039	TP20/0.1-0.3 SOIL - 22/8/2022 SE235945.042	TP21/0.7-0.9 SOIL - 23/8/2022 SE235945.044
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	TP24/0.15-0.35 SOIL - 18/8/2022 SE235945.049	TP25/0-0.2 SOIL - 22/8/2022 SE235945.052	TP26/0-0.2 SOIL - 22/8/2022 SE235945.055	TP29A/0.1-0.3 SOIL - 19/8/2022 SE235945.063	TP31/0.1-0.3 SOIL - 18/8/2022 SE235945.068
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

OP Pesticides in Soil [AN420] Tested: 31/8/2022 (continued)

PARAMETER	UOM	LOR	TP33/0.1-0.3 SOIL - 18/8/2022 SE235945.072	TP35/0.1-0.3 SOIL - 18/8/2022 SE235945.076	TP37/0.1-0.3 SOIL - 19/8/2022 SE235945.082	TP38/0-0.2 SOIL - 19/8/2022 SE235945.085
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7

PCBs in Soil [AN420] Tested: 31/8/2022

PARAMETER	UOM	LOR	TP01/0.1-0.3 SOIL - 18/8/2022 SE235945.002	TP06/0.1-0.3 SOIL - 22/8/2022 SE235945.014	TP07/0.1-0.3 SOIL - 22/8/2022 SE235945.016	TP11/0-0.2 SOIL - 22/8/2022 SE235945.024	TP17/0.1-0.25 SOIL - 22/8/2022 SE235945.037
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	TP18/0.4-0.6 SOIL - 23/8/2022 SE235945.039	TP20/0.1-0.3 SOIL - 22/8/2022 SE235945.042	TP21/0.7-0.9 SOIL - 23/8/2022 SE235945.044	TP24/0.15-0.35 SOIL - 18/8/2022 SE235945.049	TP25/0-0.2 SOIL - 22/8/2022 SE235945.052
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	TP26/0-0.2 SOIL - 22/8/2022 SE235945.055	TP29A/0.1-0.3 SOIL - 19/8/2022 SE235945.063	TP31/0.1-0.3 SOIL - 18/8/2022 SE235945.068	TP33/0.1-0.3 SOIL - 18/8/2022 SE235945.072	TP37/0.1-0.3 SOIL - 19/8/2022 SE235945.082
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

pH in soil (1:5) [AN101] Tested: 2/9/2022

PARAMETER	UOM	LOR	TP11/0.3-0.5 SOIL - 22/8/2022 SE235945.025
pH	pH Units	0.1	**5.8**

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR) [AN122] Tested: 5/9/2022

PARAMETER	UOM	LOR	TP11/0.3-0.5 SOIL - 22/8/2022 SE235945.025
Exchangeable Calcium, Ca	mg/kg	2	**1700**
Exchangeable Calcium, Ca	meq/100g	0.01	**8.4**
Exchangeable Calcium Percentage*	%	0.1	**52.5**
Exchangeable Potassium, K	mg/kg	2	**150**
Exchangeable Potassium, K	meq/100g	0.01	**0.39**
Exchangeable Potassium Percentage*	%	0.1	**2.4**
Exchangeable Magnesium, Mg	mg/kg	2	**790**
Exchangeable Magnesium, Mg	meq/100g	0.02	**6.5**
Exchangeable Magnesium Percentage*	%	0.1	**40.8**
Exchangeable Sodium, Na	mg/kg	2	**160**
Exchangeable Sodium, Na	meq/100g	0.01	**0.68**
Exchangeable Sodium Percentage*	%	0.1	**4.2**
Cation Exchange Capacity	meq/100g	0.02	**16**

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 31/8/2022

PARAMETER	UOM	LOR	TP01/0.1-0.3 SOIL - 18/8/2022 SE235945.002	TP02/0.1-0.3 SOIL - 18/8/2022 SE235945.004	TP03/0.1-0.3 SOIL - 18/8/2022 SE235945.007	TP04/0-0.2 SOIL - 22/8/2022 SE235945.009	TP05/0-0.2 SOIL - 22/8/2022 SE235945.011
Arsenic, As	mg/kg	1	8	7	9	11	11
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	14	14	22	16	15
Copper, Cu	mg/kg	0.5	17	5.6	7.2	17	17
Lead, Pb	mg/kg	1	21	23	23	22	24
Nickel, Ni	mg/kg	0.5	4.4	3.9	4.9	9.8	6.6
Zinc, Zn	mg/kg	2	43	30	31	43	41

PARAMETER	UOM	LOR	TP06/0.1-0.3 SOIL - 22/8/2022 SE235945.014	TP07/0.1-0.3 SOIL - 22/8/2022 SE235945.016	TP08/0.1-0.3 SOIL - 22/8/2022 SE235945.018	TP09/0-0.2 SOIL - 22/8/2022 SE235945.020	TP10/0.0-0.2 SOIL - 22/8/2022 SE235945.022
Arsenic, As	mg/kg	1	16	8	8	9	10
Cadmium, Cd	mg/kg	0.3	0.5	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	15	12	19	20	21
Copper, Cu	mg/kg	0.5	40	22	15	18	13
Lead, Pb	mg/kg	1	35	18	26	39	27
Nickel, Ni	mg/kg	0.5	13	4.7	9.9	5.2	10
Zinc, Zn	mg/kg	2	170	110	90	97	77

PARAMETER	UOM	LOR	TP11/0-0.2 SOIL - 22/8/2022 SE235945.024	TP11/0.3-0.5 SOIL - 22/8/2022 SE235945.025	TP12/0-0.2 SOIL - 22/8/2022 SE235945.027	TP13/0-0.2 SOIL - 22/8/2022 SE235945.029	TP14/0-0.2 SOIL - 22/8/2022 SE235945.031
Arsenic, As	mg/kg	1	7	9	16	23	11
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	11	17	16	18	19
Copper, Cu	mg/kg	0.5	15	11	15	18	19
Lead, Pb	mg/kg	1	17	15	32	38	23
Nickel, Ni	mg/kg	0.5	5.3	3.9	6.3	8.6	6.3
Zinc, Zn	mg/kg	2	61	20	92	170	32

PARAMETER	UOM	LOR	TP15/0-0.2 SOIL - 22/8/2022 SE235945.033	TP16/0-0.2 SOIL - 22/8/2022 SE235945.035	TP17/0.1-0.25 SOIL - 22/8/2022 SE235945.037	TP18/0.4-0.6 SOIL - 23/8/2022 SE235945.039	TP19/0.4-0.6 SOIL - 23/8/2022 SE235945.040
Arsenic, As	mg/kg	1	12	11	10	9	8
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	0.5	0.5
Chromium, Cr	mg/kg	0.5	14	23	15	13	15
Copper, Cu	mg/kg	0.5	17	17	15	31	27
Lead, Pb	mg/kg	1	25	20	19	250	57
Nickel, Ni	mg/kg	0.5	5.8	7.7	6.2	9.5	4.5
Zinc, Zn	mg/kg	2	100	47	35	160	130

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 31/8/2022

(continued)

PARAMETER	UOM	LOR	TP20/0.1-0.3 SOIL - 22/8/2022 SE235945.042	TP21/0.7-0.9 SOIL - 23/8/2022 SE235945.044	TP22/0.6-0.7 SOIL - 23/8/2022 SE235945.046	TP23/0.3-0.5 SOIL - 23/8/2022 SE235945.047	TP24/0.15-0.35 SOIL - 18/8/2022 SE235945.049
Arsenic, As	mg/kg	1	11	10	9	16	7
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	12	15	16	16	13
Copper, Cu	mg/kg	0.5	12	11	8.5	11	3.4
Lead, Pb	mg/kg	1	17	21	19	20	14
Nickel, Ni	mg/kg	0.5	4.8	5.5	5.4	4.0	2.3
Zinc, Zn	mg/kg	2	17	32	33	26	11

PARAMETER	UOM	LOR	TP25/0-0.2 SOIL - 22/8/2022 SE235945.052	TP26/0-0.2 SOIL - 22/8/2022 SE235945.055	TP27/0-0.2 SOIL - 18/8/2022 SE235945.058	TP28/0.1-0.3 SOIL - 18/8/2022 SE235945.060	TP29A/0.1-0.3 SOIL - 19/8/2022 SE235945.063
Arsenic, As	mg/kg	1	7	7	9	9	7
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	11	15	17	17	13
Copper, Cu	mg/kg	0.5	11	14	9.2	6.0	4.5
Lead, Pb	mg/kg	1	41	33	54	22	15
Nickel, Ni	mg/kg	0.5	4.9	66	4.5	3.1	2.6
Zinc, Zn	mg/kg	2	100	54	98	24	14

PARAMETER	UOM	LOR	TP30A/0.1-0.3 SOIL - 19/8/2022 SE235945.065	TP31/0.1-0.3 SOIL - 18/8/2022 SE235945.068	TP32/0.1-0.3 SOIL - 18/8/2022 SE235945.070	TP33/0.1-0.3 SOIL - 18/8/2022 SE235945.072	TP34/0.1-0.3 SOIL - 18/8/2022 SE235945.074
Arsenic, As	mg/kg	1	9	8	8	6	7
Cadmium, Cd	mg/kg	0.3	<0.3	0.5	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	12	18	18	10	13
Copper, Cu	mg/kg	0.5	6.5	40	14	34	26
Lead, Pb	mg/kg	1	12	99	35	55	50
Nickel, Ni	mg/kg	0.5	2.3	5.9	5.8	3.5	3.7
Zinc, Zn	mg/kg	2	16	180	91	130	66

PARAMETER	UOM	LOR	TP35/0.1-0.3 SOIL - 18/8/2022 SE235945.076	TP36/0-0.2 SOIL - 18/8/2022 SE235945.079	TP37/0.1-0.3 SOIL - 19/8/2022 SE235945.082	TP38/0-0.2 SOIL - 19/8/2022 SE235945.085
Arsenic, As	mg/kg	1	4	3	11	8
Cadmium, Cd	mg/kg	0.3	0.4	<0.3	0.6	2.1
Chromium, Cr	mg/kg	0.5	14	7.6	18	15
Copper, Cu	mg/kg	0.5	20	10	50	32
Lead, Pb	mg/kg	1	94	35	77	160
Nickel, Ni	mg/kg	0.5	12	8.4	7.7	10
Zinc, Zn	mg/kg	2	490	170	420	490

Mercury in Soil [AN312] Tested: 31/8/2022

PARAMETER	UOM	LOR	TP01/0.1-0.3 SOIL - 18/8/2022 SE235945.002	TP02/0.1-0.3 SOIL - 18/8/2022 SE235945.004	TP03/0.1-0.3 SOIL - 18/8/2022 SE235945.007	TP04/0-0.2 SOIL - 22/8/2022 SE235945.009	TP05/0-0.2 SOIL - 22/8/2022 SE235945.011
Mercury	mg/kg	0.05	**0.06**	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	TP06/0.1-0.3 SOIL - 22/8/2022 SE235945.014	TP07/0.1-0.3 SOIL - 22/8/2022 SE235945.016	TP08/0.1-0.3 SOIL - 22/8/2022 SE235945.018	TP09/0-0.2 SOIL - 22/8/2022 SE235945.020	TP10/0.0-0.2 SOIL - 22/8/2022 SE235945.022
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	TP11/0-0.2 SOIL - 22/8/2022 SE235945.024	TP11/0.3-0.5 SOIL - 22/8/2022 SE235945.025	TP12/0-0.2 SOIL - 22/8/2022 SE235945.027	TP13/0-0.2 SOIL - 22/8/2022 SE235945.029	TP14/0-0.2 SOIL - 22/8/2022 SE235945.031
Mercury	mg/kg	0.05	<0.05	<0.05	**0.07**	<0.05	<0.05

PARAMETER	UOM	LOR	TP15/0-0.2 SOIL - 22/8/2022 SE235945.033	TP16/0-0.2 SOIL - 22/8/2022 SE235945.035	TP17/0.1-0.25 SOIL - 22/8/2022 SE235945.037	TP18/0.4-0.6 SOIL - 23/8/2022 SE235945.039	TP19/0.4-0.6 SOIL - 23/8/2022 SE235945.040
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	**0.10**	**0.12**

PARAMETER	UOM	LOR	TP20/0.1-0.3 SOIL - 22/8/2022 SE235945.042	TP21/0.7-0.9 SOIL - 23/8/2022 SE235945.044	TP22/0.6-0.7 SOIL - 23/8/2022 SE235945.046	TP23/0.3-0.5 SOIL - 23/8/2022 SE235945.047	TP24/0.15-0.35 SOIL - 18/8/2022 SE235945.049
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	TP25/0-0.2 SOIL - 22/8/2022 SE235945.052	TP26/0-0.2 SOIL - 22/8/2022 SE235945.055	TP27/0-0.2 SOIL - 18/8/2022 SE235945.058	TP28/0.1-0.3 SOIL - 18/8/2022 SE235945.060	TP29A/0.1-0.3 SOIL - 19/8/2022 SE235945.063
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	TP30A/0.1-0.3 SOIL - 19/8/2022 SE235945.065	TP31/0.1-0.3 SOIL - 18/8/2022 SE235945.068	TP32/0.1-0.3 SOIL - 18/8/2022 SE235945.070	TP33/0.1-0.3 SOIL - 18/8/2022 SE235945.072	TP34/0.1-0.3 SOIL - 18/8/2022 SE235945.074
Mercury	mg/kg	0.05	<0.05	**0.05**	<0.05	<0.05	<0.05

Mercury in Soil [AN312] Tested: 31/8/2022 (continued)

PARAMETER	UOM	LOR	TP35/0.1-0.3 SOIL - 18/8/2022 SE235945.076	TP36/0-0.2 SOIL - 18/8/2022 SE235945.079	TP37/0.1-0.3 SOIL - 19/8/2022 SE235945.082	TP38/0-0.2 SOIL - 19/8/2022 SE235945.085
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	**0.16**

Moisture Content [AN002] Tested: 31/8/2022

PARAMETER	UOM	LOR	TP01/0.1-0.3 SOIL - 18/8/2022 SE235945.002	TP02/0.1-0.3 SOIL - 18/8/2022 SE235945.004	TP03/0.1-0.3 SOIL - 18/8/2022 SE235945.007	TP04/0-0.2 SOIL - 22/8/2022 SE235945.009	TP05/0-0.2 SOIL - 22/8/2022 SE235945.011
% Moisture	%w/w	1	13.7	18.7	19.7	27.9	16.7

PARAMETER	UOM	LOR	TP06/0.1-0.3 SOIL - 22/8/2022 SE235945.014	TP07/0.1-0.3 SOIL - 22/8/2022 SE235945.016	TP08/0.1-0.3 SOIL - 22/8/2022 SE235945.018	TP09/0-0.2 SOIL - 22/8/2022 SE235945.020	TP10/0.0-0.2 SOIL - 22/8/2022 SE235945.022
% Moisture	%w/w	1	22.1	22.5	17.7	17.5	14.8

PARAMETER	UOM	LOR	TP11/0-0.2 SOIL - 22/8/2022 SE235945.024	TP11/0.3-0.5 SOIL - 22/8/2022 SE235945.025	TP12/0-0.2 SOIL - 22/8/2022 SE235945.027	TP13/0-0.2 SOIL - 22/8/2022 SE235945.029	TP14/0-0.2 SOIL - 22/8/2022 SE235945.031
% Moisture	%w/w	1	19.0	17.9	22.2	14.0	14.8

PARAMETER	UOM	LOR	TP15/0-0.2 SOIL - 22/8/2022 SE235945.033	TP16/0-0.2 SOIL - 22/8/2022 SE235945.035	TP17/0.1-0.25 SOIL - 22/8/2022 SE235945.037	TP18/0.4-0.6 SOIL - 23/8/2022 SE235945.039	TP19/0.4-0.6 SOIL - 23/8/2022 SE235945.040
% Moisture	%w/w	1	21.7	22.6	18.0	23.2	17.7

PARAMETER	UOM	LOR	TP20/0.1-0.3 SOIL - 22/8/2022 SE235945.042	TP21/0.7-0.9 SOIL - 23/8/2022 SE235945.044	TP22/0.6-0.7 SOIL - 23/8/2022 SE235945.046	TP23/0.3-0.5 SOIL - 23/8/2022 SE235945.047	TP24/0.15-0.35 SOIL - 18/8/2022 SE235945.049
% Moisture	%w/w	1	18.4	14.1	13.1	16.1	17.3

PARAMETER	UOM	LOR	TP25/0-0.2 SOIL - 22/8/2022 SE235945.052	TP26/0-0.2 SOIL - 22/8/2022 SE235945.055	TP27/0-0.2 SOIL - 18/8/2022 SE235945.058	TP28/0.1-0.3 SOIL - 18/8/2022 SE235945.060	TP29A/0.1-0.3 SOIL - 19/8/2022 SE235945.063
% Moisture	%w/w	1	22.8	18.3	16.1	22.2	16.3

PARAMETER	UOM	LOR	TP30A/0.1-0.3 SOIL - 19/8/2022 SE235945.065	TP31/0.1-0.3 SOIL - 18/8/2022 SE235945.068	TP32/0.1-0.3 SOIL - 18/8/2022 SE235945.070	TP33/0.1-0.3 SOIL - 18/8/2022 SE235945.072	TP34/0.1-0.3 SOIL - 18/8/2022 SE235945.074
% Moisture	%w/w	1	18.7	18.6	22.0	14.0	23.4

Moisture Content [AN002] Tested: 31/8/2022 (continued)

PARAMETER	UOM	LOR	TP35/0.1-0.3 SOIL - 18/8/2022 SE235945.076	TP36/0-0.2 SOIL - 18/8/2022 SE235945.079	TP37/0.1-0.3 SOIL - 19/8/2022 SE235945.082	TP38/0-0.2 SOIL - 19/8/2022 SE235945.085
% Moisture	%w/w	1	**20.4**	**8.6**	**23.1**	**31.1**

Fibre Identification in soil [AN602] Tested: 2/9/2022

PARAMETER	UOM	LOR	TP01/0-0.1 SOIL - 18/8/2022 SE235945.001	TP01/0.1-0.3 SOIL - 18/8/2022 SE235945.002	TP02/0-0.1 SOIL - 18/8/2022 SE235945.003	TP02/0.1-0.3_bag SOIL - 18/8/2022 SE235945.005	TP03/0-0.0.1 SOIL - 18/8/2022 SE235945.006
Asbestos Detected	No unit	-	No	No	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

PARAMETER	UOM	LOR	TP03/0.1-0.3 SOIL - 18/8/2022 SE235945.007	TP04/0-0.1 SOIL - 22/8/2022 SE235945.008	TP05/0-0.1 SOIL - 22/8/2022 SE235945.010	TP05/0.1-0.3 SOIL - 22/8/2022 SE235945.012	TP06/0-0.1 SOIL - 22/8/2022 SE235945.013
Asbestos Detected	No unit	-	No	No	No	No	Yes
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	**>0.01**

PARAMETER	UOM	LOR	TP06/0.1-0.4 SOIL - 22/8/2022 SE235945.015	TP07/0.1-0.3 SOIL - 22/8/2022 SE235945.016	TP08/0-0.1 SOIL - 22/8/2022 SE235945.017	TP09/0-0.1 SOIL - 22/8/2022 SE235945.019	TP10/0.0-0.1 SOIL - 22/8/2022 SE235945.021
Asbestos Detected	No unit	-	No	No	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

PARAMETER	UOM	LOR	TP11/0-0.1 SOIL - 22/8/2022 SE235945.023	TP12/0-0.1 SOIL - 22/8/2022 SE235945.026	TP13/0-0.1 SOIL - 22/8/2022 SE235945.028	TP14/0-0.1 SOIL - 22/8/2022 SE235945.030	TP15/0-0.1 SOIL - 22/8/2022 SE235945.032
Asbestos Detected	No unit	-	No	No	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

PARAMETER	UOM	LOR	TP16/0-0.1 SOIL - 22/8/2022 SE235945.034	TP17/0-0.1 SOIL - 22/8/2022 SE235945.036	TP18/0-0.6 SOIL - 23/8/2022 SE235945.038	TP20/0-0.1 SOIL - 22/8/2022 SE235945.041	TP21/0-0.9 SOIL - 23/8/2022 SE235945.043
Asbestos Detected	No unit	-	No	No	Yes	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	**>0.01**	<0.01	<0.01

PARAMETER	UOM	LOR	TP22/0-0.7 SOIL - 23/8/2022 SE235945.045	TP24/0-0.1 SOIL - 18/8/2022 SE235945.048	TP24/0.1-0.35 SOIL - 18/8/2022 SE235945.050	TP25/0-0.1 SOIL - 22/8/2022 SE235945.051	TP25/0.1-0.3 SOIL - 22/8/2022 SE235945.053
Asbestos Detected	No unit	-	No	No	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

PARAMETER	UOM	LOR	TP26/0-0.1 SOIL - 22/8/2022 SE235945.054	TP26/0.1-0.3 SOIL - 22/8/2022 SE235945.056	TP27/0-0.1 SOIL - 18/8/2022 SE235945.057	TP28/0-0.1 SOIL - 18/8/2022 SE235945.059	TP28/0.1-0.4 SOIL - 18/8/2022 SE235945.061
Asbestos Detected	No unit	-	No	No	No	No	IS
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	IS

Fibre Identification in soil [AN602] Tested: 2/9/2022 (continued)

PARAMETER	UOM	LOR	TP29A/0.0-0.1 SOIL - 19/8/2022 SE235945.062	TP29A/0.1-0.3 SOIL - 19/8/2022 SE235945.063	TP30A/0-0.1 SOIL - 19/8/2022 SE235945.064	TP30A/0.1-0.5 SOIL - 19/8/2022 SE235945.066	TP31/0-0.1 SOIL - 18/8/2022 SE235945.067
Asbestos Detected	No unit	-	No	No	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

PARAMETER	UOM	LOR	TP31/0.1-0.3 SOIL - 18/8/2022 SE235945.068	TP32/0-0.1 SOIL - 18/8/2022 SE235945.069	TP32/0.1-0.3 SOIL - 18/8/2022 SE235945.070	TP33/0-0.1 SOIL - 18/8/2022 SE235945.071	TP33/0.1-0.3 SOIL - 18/8/2022 SE235945.072
Asbestos Detected	No unit	-	No	No	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

PARAMETER	UOM	LOR	TP34/0-0.1 SOIL - 18/8/2022 SE235945.073	TP34/0.1-0.3 SOIL - 18/8/2022 SE235945.074	TP35/0-0.1 SOIL - 18/8/2022 SE235945.075	TP35/0.1-0.4 SOIL - 18/8/2022 SE235945.077	TP36/0-0.1 SOIL - 18/8/2022 SE235945.078
Asbestos Detected	No unit	-	No	No	No	No	Yes
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	**>0.01**

PARAMETER	UOM	LOR	TP36/0.1-0.4 SOIL - 18/8/2022 SE235945.080	TP37 0-0.1 SOIL - 19/8/2022 SE235945.081	TP37/0.1-0.45 SOIL - 19/8/2022 SE235945.083	TP38/0-0.1 SOIL - 19/8/2022 SE235945.084	TP38/0.1-0.4 SOIL - 19/8/2022 SE235945.086
Asbestos Detected	No unit	-	Yes	No	No	No	No
Estimated Fibres*	%w/w	0.01	**>0.01**	<0.01	<0.01	<0.01	<0.01

PARAMETER	UOM	LOR	TP39/0-0.1 SOIL - 19/8/2022 SE235945.087
Asbestos Detected	No unit	-	No
Estimated Fibres*	%w/w	0.01	<0.01

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 2/9/2022

PARAMETER	UOM	LOR	TP01/0-0.1 SOIL - 18/8/2022 SE235945.001	TP01/0.1-0.3 SOIL - 18/8/2022 SE235945.002	TP02/0-0.1 SOIL - 18/8/2022 SE235945.003	TP02/0.1-0.3_bag SOIL - 18/8/2022 SE235945.005	TP03/0-0.0.1 SOIL - 18/8/2022 SE235945.006
Total Sample Weight*	g	1	567	845	683	655	612
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	NAD	NAD	NAD	NAD	NAD

PARAMETER	UOM	LOR	TP03/0.1-0.3 SOIL - 18/8/2022 SE235945.007	TP04/0-0.1 SOIL - 22/8/2022 SE235945.008	TP05/0-0.1 SOIL - 22/8/2022 SE235945.010	TP05/0.1-0.3 SOIL - 22/8/2022 SE235945.012	TP06/0-0.1 SOIL - 22/8/2022 SE235945.013
Total Sample Weight*	g	1	771	720	710	690	691
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	5.94
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	0.0768
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	0.13
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	0.011
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	0.011
Fibre Type*	No unit	-	NAD	NAD	NAD	NAD	Chrysotile

PARAMETER	UOM	LOR	TP06/0.1-0.4 SOIL - 22/8/2022 SE235945.015	TP07/0.1-0.3 SOIL - 22/8/2022 SE235945.016	TP08/0-0.1 SOIL - 22/8/2022 SE235945.017	TP09/0-0.1 SOIL - 22/8/2022 SE235945.019	TP10/0.0-0.1 SOIL - 22/8/2022 SE235945.021
Total Sample Weight*	g	1	658	648	665	570	679
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	0.00710	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	Chrysotile	NAD	NAD	NAD	NAD

PARAMETER	UOM	LOR	TP11/0-0.1 SOIL - 22/8/2022 SE235945.023	TP12/0-0.1 SOIL - 22/8/2022 SE235945.026	TP13/0-0.1 SOIL - 22/8/2022 SE235945.028	TP14/0-0.1 SOIL - 22/8/2022 SE235945.030	TP15/0-0.1 SOIL - 22/8/2022 SE235945.032
Total Sample Weight*	g	1	559	575	713	570	550
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	NAD	NAD	NAD	NAD	NAD

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 2/9/2022 (continued)

PARAMETER	UOM	LOR	TP16/0-0.1 SOIL - 22/8/2022 SE235945.034	TP17/0-0.1 SOIL - 22/8/2022 SE235945.036	TP18/0-0.6 SOIL - 23/8/2022 SE235945.038	TP20/0-0.1 SOIL - 22/8/2022 SE235945.041	TP21/0-0.9 SOIL - 23/8/2022 SE235945.043
Total Sample Weight*	g	1	586	604	502	591	427
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	0.0778	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	0.015	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	0.015	<0.001	<0.001
Fibre Type*	No unit	-	NAD	NAD	Chrysotile	NAD	NAD

PARAMETER	UOM	LOR	TP22/0-0.7 SOIL - 23/8/2022 SE235945.045	TP24/0-0.1 SOIL - 18/8/2022 SE235945.048	TP24/0.1-0.35 SOIL - 18/8/2022 SE235945.050	TP25/0-0.1 SOIL - 22/8/2022 SE235945.051	TP25/0.1-0.3 SOIL - 22/8/2022 SE235945.053
Total Sample Weight*	g	1	422	703	831	586	697
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	NAD	NAD	NAD	NAD	NAD

PARAMETER	UOM	LOR	TP26/0-0.1 SOIL - 22/8/2022 SE235945.054	TP26/0.1-0.3 SOIL - 22/8/2022 SE235945.056	TP27/0-0.1 SOIL - 18/8/2022 SE235945.057	TP28/0-0.1 SOIL - 18/8/2022 SE235945.059	TP28/0.1-0.4 SOIL - 18/8/2022 SE235945.061
Total Sample Weight*	g	1	632	688	633	563	IS
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	IS
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	IS
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	IS
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	IS
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	IS
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	IS
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	IS
Fibre Type*	No unit	-	NAD	NAD	NAD	NAD	IS

PARAMETER	UOM	LOR	TP29A/0.0-0.1 SOIL - 19/8/2022 SE235945.062	TP29A/0.1-0.3 SOIL - 19/8/2022 SE235945.063	TP30A/0-0.1 SOIL - 19/8/2022 SE235945.064	TP30A/0.1-0.5 SOIL - 19/8/2022 SE235945.066	TP31/0-0.1 SOIL - 18/8/2022 SE235945.067
Total Sample Weight*	g	1	871	734	745	949	671
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	NAD	NAD	NAD	NAD	NAD

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 2/9/2022 (continued)

PARAMETER	UOM	LOR	TP31/0.1-0.3 SOIL - 18/8/2022 SE235945.068	TP32/0-0.1 SOIL - 18/8/2022 SE235945.069	TP32/0.1-0.3 SOIL - 18/8/2022 SE235945.070	TP33/0-0.1 SOIL - 18/8/2022 SE235945.071	TP33/0.1-0.3 SOIL - 18/8/2022 SE235945.072
Total Sample Weight*	g	1	600	619	612	868	778
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	NAD	NAD	NAD	NAD	NAD

PARAMETER	UOM	LOR	TP34/0-0.1 SOIL - 18/8/2022 SE235945.073	TP34/0.1-0.3 SOIL - 18/8/2022 SE235945.074	TP35/0-0.1 SOIL - 18/8/2022 SE235945.075	TP35/0.1-0.4 SOIL - 18/8/2022 SE235945.077	TP36/0-0.1 SOIL - 18/8/2022 SE235945.078
Total Sample Weight*	g	1	703	741	687	934	836
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	0.617
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	0.074
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	0.074
Fibre Type*	No unit	-	NAD	NAD	NAD	NAD	Chrysotile

PARAMETER	UOM	LOR	TP36/0.1-0.4 SOIL - 18/8/2022 SE235945.080	TP37 0-0.1 SOIL - 19/8/2022 SE235945.081	TP37/0.1-0.45 SOIL - 19/8/2022 SE235945.083	TP38/0-0.1 SOIL - 19/8/2022 SE235945.084	TP38/0.1-0.4 SOIL - 19/8/2022 SE235945.086
Total Sample Weight*	g	1	778	902	977	990	1141
Bonded ACM in >7mm Sample*	g	0.001	0.704	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	0.208	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	0.027	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	0.027	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	Chrysotile	NAD	NAD	NAD	NAD

PARAMETER	UOM	LOR	TP39/0-0.1 SOIL - 19/8/2022 SE235945.087
Total Sample Weight*	g	1	728
Bonded ACM in >7mm Sample*	g	0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001
Fibre Type*	No unit	-	NAD

Particle sizing of soils by sieving [AN005] Tested: 8/9/2022

PARAMETER	UOM	LOR	TP11/0.3-0.5 SOIL - 22/8/2022 SE235945.025
Passing 75µm*	%w/w	1	**78**
Retained 75µm*	%w/w	1	**22**

Particle sizing of soils <75µm by hydrometer [AN005] Tested: 8/9/2022

PARAMETER	UOM	LOR	TP11/0.3-0.5 SOIL - 22/8/2022 SE235945.025
Clay (<0.002mm)*	%w/w	0.1	**32**

Sample Subcontracted [] Tested: 2/9/2022

PARAMETER	UOM	LOR	TP31/0.1-0.3 SOIL - 18/8/2022 SE235945.068	TP32/0.1-0.3 SOIL - 18/8/2022 SE235945.070	TP33/0.1-0.3 SOIL - 18/8/2022 SE235945.072	TP34/0.1-0.3 SOIL - 18/8/2022 SE235945.074	TP35/0.1-0.3 SOIL - 18/8/2022 SE235945.076
Sample Subcontracted*	No unit	-	Symbio	Symbio	Symbio	Symbio	Symbio

PARAMETER	UOM	LOR	TP36/0-0.2 SOIL - 18/8/2022 SE235945.079	TP37/0.1-0.3 SOIL - 19/8/2022 SE235945.082	TP38/0-0.2 SOIL - 19/8/2022 SE235945.085
Sample Subcontracted*	No unit	-	Symbio	Symbio	Symbio

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN005	The particle size distribution of a soil is determined by wet sieving, using a maximum of 900 mL of deionised water to sieve all fractions down to 75 µm. Referenced to AS1289.3.6.1 and AS1141.11.
AN005	Following wet sieving of the sample,(particles smaller than 75 µm) a dispersing solution is added and a hydrometer is used to measure sedimentation. Soil density is determined and the percentage of each size fraction calculated. Referenced to AS1289.3.6.3.
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by ASS or ICP as per USEPA Method 200.8.
AN101	pH in Soil Sludge Sediment and Water: pH is measured electrometrically using a combination electrode and is calibrated against 3 buffers purchased commercially. For soils, sediments and sludges, an extract with water (or 0.01M CaCl2) is made at a ratio of 1:5 and the pH determined and reported on the extract. Reference APHA 4500-H+.
AN122	Exchangeable Cations, CEC and ESP: Soil sample is extracted in 1M Ammonium Acetate at pH=7 (or 1M Ammonium Chloride at pH=7) with cations (Na, K, Ca & Mg) then determined by ICP OES/ICP MS and reported as Exchangeable Cations. For saline soils, these results can be corrected for water soluble cations and reported as Exchangeable cations in meq/100g or soil can be pre-treated (aqueous ethanol/aqueous glycerol) prior to extraction. Cation Exchange Capacity (CEC) is the sum of the exchangeable cations in meq/100g.
AN122	The Exchangeable Sodium Percentage (ESP) is calculated as the exchangeable sodium divided by the CEC (all in meq/100g) times 100. ESP can be used to categorise the sodicity of the soil as below: ESP < 6% non-sodic ESP 6-15% sodic ESP >15% strongly sodic Method is referenced to Rayment and Lyons, 2011, sections 15D3 and 15N1.-
AN312	Mercury by Cold Vapour AAS in Soils: After digestion with nitric acid, hydrogen peroxide and hydrochloric acid, mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). F2 is reported directly and also corrected by subtracting Naphthalene (from VOC method AN433) where available.
AN403	Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Recoverable Hydrocarbons - Silica (TRH-Si) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents.
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D). Total PAH calculated from individual analyte detections at or above the limit of reporting.
AN420	SVOC Compounds: Semi-Volatile Organic Compounds (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC`s are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.

AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples, Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection/reporting limit (RL) of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602	The sample can be reported “no asbestos found at the reporting limit (RL) of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.
AN605	This technique gravimetrically determines the mass of Bonded Asbestos Containing Material retained on a 7mm Sieve and assumes that 15% of this ACM is asbestos. This calculated asbestos weight is then calculated as a percentage of the total sample weight. Any fibrous asbestos (FA) found in this fraction will be added to the 2-7mm fraction and its mass recorded there.
AN605	This technique also gravimetrically determines the mass of Fibrous Asbestos (FA) and Asbestos Fines (AF) Containing Material retained on and passing a 2mm sieve post 7mm sieving. Assumes that FA and AF are 100% asbestos containing. This calculated asbestos weight is then calculated as a percentage of the total sample weight. This does not include free/respirable fibres which are only observed by standard trace analysis as per AN602.
AN605	Bonded asbestos containing material (Bonded ACM) comprises asbestos-containing-material which is sound in condition. Fibrous asbestos (FA) comprises friable asbestos material and includes severely weathered cement sheet, insulation products and woven asbestos material. Asbestos fines (AF) includes free fibres, small fibre bundles and also small fragments of bonded ACM that passes through a 7mm sieve - which implies that the bonded ACM fragments have a substantial degree of damage which increases the potential for fibre release.
AN-605	Insofar as is technically feasible, this report is consistent with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment Remediation and Management of Asbestos - Contaminated Sites in Western Australia - May 2009 and NEPM 1999 (2013) schedule B1 section 4..

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
**	Indicative data, theoretical holding time exceeded.	NVL	Not validated.	LOR	Limit of Reporting.
***	Indicates that both * and ** apply.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

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

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

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client only. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law .

This report must not be reproduced, except in full.

STATEMENT OF QA/QC PERFORMANCE

SE235945 R0

CLIENT DETAILS

Contact	Abanish Nepal
Client	CONSTRUCTION SCIENCES PTY LTD
Address	2/4 KELLOGG RD ROOTY HILL NSW 2766
Telephone	0436 620 611
Facsimile	02 8438 0310
Email	Abanish.Nepal@constructionsciences.net
Project	**10791.EV.P.323 249-271Railway Terrace**
Order Number	**10791.EV.P.323**
Samples	87

LABORATORY DETAILS

Manager	Huong Crawford
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE235945 R0**
Date Received	23 Aug 2022
Date Reported	08 Sep 2022

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Extraction Date	pH in soil (1:5)	1 item
Analysis Date	VOC's in Soil	7 items
	Volatile Petroleum Hydrocarbons in Soil	11 items
Duplicate	Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES	3 items
Matrix Spike	Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES	1 item
	Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES	2 items
	TRH (Total Recoverable Hydrocarbons) in Soil	3 items

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice Bricks
Samples received in correct containers	Yes	Sample counts by matrix	86 Soil
Date documentation received	25/8/2022@2:17pm	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	10°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

SE235945 R0

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

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

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

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR) — Method: ME-(AU)-[ENV]AN122

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP11/0.3-0.5	SE235945.025	LB257428	22 Aug 2022	23 Aug 2022	19 Sep 2022	05 Sep 2022	19 Sep 2022	05 Sep 2022

Fibre Identification in soil — Method: ME-(AU)-[ENV]AN602

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP01/0-0.1	SE235945.001	LB257352	18 Aug 2022	23 Aug 2022	18 Aug 2023	02 Sep 2022	18 Aug 2023	05 Sep 2022
TP01/0.1-0.3	SE235945.002	LB257352	18 Aug 2022	23 Aug 2022	18 Aug 2023	02 Sep 2022	18 Aug 2023	05 Sep 2022
TP02/0-0.1	SE235945.003	LB257352	18 Aug 2022	23 Aug 2022	18 Aug 2023	02 Sep 2022	18 Aug 2023	05 Sep 2022
TP02/0.1-0.3_bag	SE235945.005	LB257352	18 Aug 2022	23 Aug 2022	18 Aug 2023	02 Sep 2022	18 Aug 2023	05 Sep 2022
TP03/0-0.0.1	SE235945.006	LB257352	18 Aug 2022	23 Aug 2022	18 Aug 2023	02 Sep 2022	18 Aug 2023	05 Sep 2022
TP03/0.1-0.3	SE235945.007	LB257352	18 Aug 2022	23 Aug 2022	18 Aug 2023	02 Sep 2022	18 Aug 2023	05 Sep 2022
TP04/0-0.1	SE235945.008	LB257352	22 Aug 2022	23 Aug 2022	22 Aug 2023	02 Sep 2022	22 Aug 2023	05 Sep 2022
TP05/0-0.1	SE235945.010	LB257352	22 Aug 2022	23 Aug 2022	22 Aug 2023	02 Sep 2022	22 Aug 2023	05 Sep 2022
TP05/0.1-0.3	SE235945.012	LB257352	22 Aug 2022	23 Aug 2022	22 Aug 2023	02 Sep 2022	22 Aug 2023	05 Sep 2022
TP06/0-0.1	SE235945.013	LB257352	22 Aug 2022	23 Aug 2022	22 Aug 2023	02 Sep 2022	22 Aug 2023	05 Sep 2022
TP06/0.1-0.4	SE235945.015	LB257352	22 Aug 2022	23 Aug 2022	22 Aug 2023	02 Sep 2022	22 Aug 2023	05 Sep 2022
TP07/0.1-0.3	SE235945.016	LB257352	22 Aug 2022	23 Aug 2022	22 Aug 2023	02 Sep 2022	22 Aug 2023	05 Sep 2022
TP08/0-0.1	SE235945.017	LB257352	22 Aug 2022	23 Aug 2022	22 Aug 2023	02 Sep 2022	22 Aug 2023	05 Sep 2022
TP09/0-0.1	SE235945.019	LB257352	22 Aug 2022	23 Aug 2022	22 Aug 2023	02 Sep 2022	22 Aug 2023	05 Sep 2022
TP10/0.0-0.1	SE235945.021	LB257352	22 Aug 2022	23 Aug 2022	22 Aug 2023	02 Sep 2022	22 Aug 2023	05 Sep 2022
TP11/0-0.1	SE235945.023	LB257352	22 Aug 2022	23 Aug 2022	22 Aug 2023	02 Sep 2022	22 Aug 2023	05 Sep 2022
TP12/0-0.1	SE235945.026	LB257352	22 Aug 2022	23 Aug 2022	22 Aug 2023	02 Sep 2022	22 Aug 2023	05 Sep 2022
TP13/0-0.1	SE235945.028	LB257352	22 Aug 2022	23 Aug 2022	22 Aug 2023	02 Sep 2022	22 Aug 2023	05 Sep 2022
TP14/0-0.1	SE235945.030	LB257352	22 Aug 2022	23 Aug 2022	22 Aug 2023	02 Sep 2022	22 Aug 2023	05 Sep 2022
TP15/0-0.1	SE235945.032	LB257352	22 Aug 2022	23 Aug 2022	22 Aug 2023	02 Sep 2022	22 Aug 2023	05 Sep 2022
TP16/0-0.1	SE235945.034	LB257352	22 Aug 2022	23 Aug 2022	22 Aug 2023	02 Sep 2022	22 Aug 2023	05 Sep 2022
TP17/0-0.1	SE235945.036	LB257352	22 Aug 2022	23 Aug 2022	22 Aug 2023	02 Sep 2022	22 Aug 2023	05 Sep 2022
TP18/0-0.6	SE235945.038	LB257352	23 Aug 2022	23 Aug 2022	23 Aug 2023	02 Sep 2022	23 Aug 2023	05 Sep 2022
TP20/0-0.1	SE235945.041	LB257352	22 Aug 2022	23 Aug 2022	22 Aug 2023	02 Sep 2022	22 Aug 2023	05 Sep 2022
TP21/0-0.9	SE235945.043	LB257352	23 Aug 2022	23 Aug 2022	23 Aug 2023	02 Sep 2022	23 Aug 2023	05 Sep 2022
TP22/0-0.7	SE235945.045	LB257352	23 Aug 2022	23 Aug 2022	23 Aug 2023	02 Sep 2022	23 Aug 2023	05 Sep 2022
TP24/0-0.1	SE235945.048	LB257352	18 Aug 2022	23 Aug 2022	18 Aug 2023	02 Sep 2022	18 Aug 2023	05 Sep 2022
TP24/0.1-0.35	SE235945.050	LB257352	18 Aug 2022	23 Aug 2022	18 Aug 2023	02 Sep 2022	18 Aug 2023	05 Sep 2022
TP25/0-0.1	SE235945.051	LB257352	22 Aug 2022	23 Aug 2022	22 Aug 2023	02 Sep 2022	22 Aug 2023	05 Sep 2022
TP25/0.1-0.3	SE235945.053	LB257352	22 Aug 2022	23 Aug 2022	22 Aug 2023	02 Sep 2022	22 Aug 2023	05 Sep 2022
TP26/0-0.1	SE235945.054	LB257352	22 Aug 2022	23 Aug 2022	22 Aug 2023	02 Sep 2022	22 Aug 2023	05 Sep 2022
TP26/0.1-0.3	SE235945.056	LB257352	22 Aug 2022	23 Aug 2022	22 Aug 2023	02 Sep 2022	22 Aug 2023	05 Sep 2022
TP27/0-0.1	SE235945.057	LB257352	18 Aug 2022	23 Aug 2022	18 Aug 2023	02 Sep 2022	18 Aug 2023	05 Sep 2022
TP28/0-0.1	SE235945.059	LB257352	18 Aug 2022	23 Aug 2022	18 Aug 2023	02 Sep 2022	18 Aug 2023	05 Sep 2022
TP29A/0.0-0.1	SE235945.062	LB257352	19 Aug 2022	23 Aug 2022	19 Aug 2023	02 Sep 2022	19 Aug 2023	05 Sep 2022
TP29A/0.1-0.3	SE235945.063	LB257352	19 Aug 2022	23 Aug 2022	19 Aug 2023	02 Sep 2022	19 Aug 2023	05 Sep 2022
TP30A/0-0.1	SE235945.064	LB257352	19 Aug 2022	23 Aug 2022	19 Aug 2023	02 Sep 2022	19 Aug 2023	05 Sep 2022
TP30A/0.1-0.5	SE235945.066	LB257352	19 Aug 2022	23 Aug 2022	19 Aug 2023	02 Sep 2022	19 Aug 2023	05 Sep 2022
TP31/0-0.1	SE235945.067	LB257352	18 Aug 2022	23 Aug 2022	18 Aug 2023	02 Sep 2022	18 Aug 2023	05 Sep 2022
TP31/0.1-0.3	SE235945.068	LB257352	18 Aug 2022	23 Aug 2022	18 Aug 2023	02 Sep 2022	18 Aug 2023	05 Sep 2022
TP32/0-0.1	SE235945.069	LB257352	18 Aug 2022	23 Aug 2022	18 Aug 2023	02 Sep 2022	18 Aug 2023	05 Sep 2022
TP32/0.1-0.3	SE235945.070	LB257352	18 Aug 2022	23 Aug 2022	18 Aug 2023	02 Sep 2022	18 Aug 2023	05 Sep 2022
TP33/0-0.1	SE235945.071	LB257352	18 Aug 2022	23 Aug 2022	18 Aug 2023	02 Sep 2022	18 Aug 2023	05 Sep 2022
TP33/0.1-0.3	SE235945.072	LB257352	18 Aug 2022	23 Aug 2022	18 Aug 2023	02 Sep 2022	18 Aug 2023	05 Sep 2022
TP34/0-0.1	SE235945.073	LB257352	18 Aug 2022	23 Aug 2022	18 Aug 2023	02 Sep 2022	18 Aug 2023	05 Sep 2022
TP34/0.1-0.3	SE235945.074	LB257352	18 Aug 2022	23 Aug 2022	18 Aug 2023	02 Sep 2022	18 Aug 2023	05 Sep 2022
TP35/0-0.1	SE235945.075	LB257352	18 Aug 2022	23 Aug 2022	18 Aug 2023	02 Sep 2022	18 Aug 2023	05 Sep 2022
TP35/0.1-0.4	SE235945.077	LB257352	18 Aug 2022	23 Aug 2022	18 Aug 2023	02 Sep 2022	18 Aug 2023	05 Sep 2022
TP36/0-0.1	SE235945.078	LB257352	18 Aug 2022	23 Aug 2022	18 Aug 2023	02 Sep 2022	18 Aug 2023	05 Sep 2022
TP36/0.1-0.4	SE235945.080	LB257352	18 Aug 2022	23 Aug 2022	18 Aug 2023	02 Sep 2022	18 Aug 2023	05 Sep 2022
TP37 0-0.1	SE235945.081	LB257352	19 Aug 2022	23 Aug 2022	19 Aug 2023	02 Sep 2022	19 Aug 2023	05 Sep 2022
TP37/0.1-0.45	SE235945.083	LB257352	19 Aug 2022	23 Aug 2022	19 Aug 2023	02 Sep 2022	19 Aug 2023	05 Sep 2022
TP38/0-0.1	SE235945.084	LB257352	19 Aug 2022	23 Aug 2022	19 Aug 2023	02 Sep 2022	19 Aug 2023	05 Sep 2022
TP38/0.1-0.4	SE235945.086	LB257352	19 Aug 2022	23 Aug 2022	19 Aug 2023	02 Sep 2022	19 Aug 2023	05 Sep 2022
TP39/0-0.1	SE235945.087	LB257352	19 Aug 2022	23 Aug 2022	19 Aug 2023	02 Sep 2022	19 Aug 2023	05 Sep 2022

HOLDING TIME SUMMARY

SE235945 R0

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

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

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

Gravimetric Determination of Asbestos in Soil

Method: ME-(AU)-[ENV]AN605

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP01/0-0.1	SE235945.001	LB257352	18 Aug 2022	23 Aug 2022	14 Feb 2023	02 Sep 2022	14 Feb 2023	05 Sep 2022
TP01/0.1-0.3	SE235945.002	LB257352	18 Aug 2022	23 Aug 2022	14 Feb 2023	02 Sep 2022	14 Feb 2023	05 Sep 2022
TP02/0-0.1	SE235945.003	LB257352	18 Aug 2022	23 Aug 2022	14 Feb 2023	02 Sep 2022	14 Feb 2023	05 Sep 2022
TP02/0.1-0.3_bag	SE235945.005	LB257352	18 Aug 2022	23 Aug 2022	14 Feb 2023	02 Sep 2022	14 Feb 2023	05 Sep 2022
TP03/0-0.0.1	SE235945.006	LB257352	18 Aug 2022	23 Aug 2022	14 Feb 2023	02 Sep 2022	14 Feb 2023	05 Sep 2022
TP03/0.1-0.3	SE235945.007	LB257352	18 Aug 2022	23 Aug 2022	14 Feb 2023	02 Sep 2022	14 Feb 2023	05 Sep 2022
TP04/0-0.1	SE235945.008	LB257352	22 Aug 2022	23 Aug 2022	18 Feb 2023	02 Sep 2022	18 Feb 2023	05 Sep 2022
TP05/0-0.1	SE235945.010	LB257352	22 Aug 2022	23 Aug 2022	18 Feb 2023	02 Sep 2022	18 Feb 2023	05 Sep 2022
TP05/0.1-0.3	SE235945.012	LB257352	22 Aug 2022	23 Aug 2022	18 Feb 2023	02 Sep 2022	18 Feb 2023	05 Sep 2022
TP06/0-0.1	SE235945.013	LB257352	22 Aug 2022	23 Aug 2022	18 Feb 2023	02 Sep 2022	18 Feb 2023	05 Sep 2022
TP06/0.1-0.4	SE235945.015	LB257352	22 Aug 2022	23 Aug 2022	18 Feb 2023	02 Sep 2022	18 Feb 2023	05 Sep 2022
TP07/0.1-0.3	SE235945.016	LB257352	22 Aug 2022	23 Aug 2022	18 Feb 2023	02 Sep 2022	18 Feb 2023	05 Sep 2022
TP08/0-0.1	SE235945.017	LB257352	22 Aug 2022	23 Aug 2022	18 Feb 2023	02 Sep 2022	18 Feb 2023	05 Sep 2022
TP09/0-0.1	SE235945.019	LB257352	22 Aug 2022	23 Aug 2022	18 Feb 2023	02 Sep 2022	18 Feb 2023	05 Sep 2022
TP10/0.0-0.1	SE235945.021	LB257352	22 Aug 2022	23 Aug 2022	18 Feb 2023	02 Sep 2022	18 Feb 2023	05 Sep 2022
TP11/0-0.1	SE235945.023	LB257352	22 Aug 2022	23 Aug 2022	18 Feb 2023	02 Sep 2022	18 Feb 2023	05 Sep 2022
TP12/0-0.1	SE235945.026	LB257352	22 Aug 2022	23 Aug 2022	18 Feb 2023	02 Sep 2022	18 Feb 2023	05 Sep 2022
TP13/0-0.1	SE235945.028	LB257352	22 Aug 2022	23 Aug 2022	18 Feb 2023	02 Sep 2022	18 Feb 2023	05 Sep 2022
TP14/0-0.1	SE235945.030	LB257352	22 Aug 2022	23 Aug 2022	18 Feb 2023	02 Sep 2022	18 Feb 2023	05 Sep 2022
TP15/0-0.1	SE235945.032	LB257352	22 Aug 2022	23 Aug 2022	18 Feb 2023	02 Sep 2022	18 Feb 2023	05 Sep 2022
TP16/0-0.1	SE235945.034	LB257352	22 Aug 2022	23 Aug 2022	18 Feb 2023	02 Sep 2022	18 Feb 2023	05 Sep 2022
TP17/0-0.1	SE235945.036	LB257352	22 Aug 2022	23 Aug 2022	18 Feb 2023	02 Sep 2022	18 Feb 2023	05 Sep 2022
TP18/0-0.6	SE235945.038	LB257352	23 Aug 2022	23 Aug 2022	19 Feb 2023	02 Sep 2022	19 Feb 2023	05 Sep 2022
TP20/0-0.1	SE235945.041	LB257352	22 Aug 2022	23 Aug 2022	18 Feb 2023	02 Sep 2022	18 Feb 2023	05 Sep 2022
TP21/0-0.9	SE235945.043	LB257352	23 Aug 2022	23 Aug 2022	19 Feb 2023	02 Sep 2022	19 Feb 2023	05 Sep 2022
TP22/0-0.7	SE235945.045	LB257352	23 Aug 2022	23 Aug 2022	19 Feb 2023	02 Sep 2022	19 Feb 2023	05 Sep 2022
TP24/0-0.1	SE235945.048	LB257352	18 Aug 2022	23 Aug 2022	14 Feb 2023	02 Sep 2022	14 Feb 2023	05 Sep 2022
TP24/0.1-0.35	SE235945.050	LB257352	18 Aug 2022	23 Aug 2022	14 Feb 2023	02 Sep 2022	14 Feb 2023	05 Sep 2022
TP25/0-0.1	SE235945.051	LB257352	22 Aug 2022	23 Aug 2022	18 Feb 2023	02 Sep 2022	18 Feb 2023	05 Sep 2022
TP25/0.1-0.3	SE235945.053	LB257352	22 Aug 2022	23 Aug 2022	18 Feb 2023	02 Sep 2022	18 Feb 2023	05 Sep 2022
TP26/0-0.1	SE235945.054	LB257352	22 Aug 2022	23 Aug 2022	18 Feb 2023	02 Sep 2022	18 Feb 2023	05 Sep 2022
TP26/0.1-0.3	SE235945.056	LB257352	22 Aug 2022	23 Aug 2022	18 Feb 2023	02 Sep 2022	18 Feb 2023	05 Sep 2022
TP27/0-0.1	SE235945.057	LB257352	18 Aug 2022	23 Aug 2022	14 Feb 2023	02 Sep 2022	14 Feb 2023	05 Sep 2022
TP28/0-0.1	SE235945.059	LB257352	18 Aug 2022	23 Aug 2022	14 Feb 2023	02 Sep 2022	14 Feb 2023	05 Sep 2022
TP29A/0.0-0.1	SE235945.062	LB257352	19 Aug 2022	23 Aug 2022	15 Feb 2023	02 Sep 2022	15 Feb 2023	05 Sep 2022
TP29A/0.1-0.3	SE235945.063	LB257352	19 Aug 2022	23 Aug 2022	15 Feb 2023	02 Sep 2022	15 Feb 2023	05 Sep 2022
TP30A/0-0.1	SE235945.064	LB257352	19 Aug 2022	23 Aug 2022	15 Feb 2023	02 Sep 2022	15 Feb 2023	05 Sep 2022
TP30A/0.1-0.5	SE235945.066	LB257352	19 Aug 2022	23 Aug 2022	15 Feb 2023	02 Sep 2022	15 Feb 2023	05 Sep 2022
TP31/0-0.1	SE235945.067	LB257352	18 Aug 2022	23 Aug 2022	14 Feb 2023	02 Sep 2022	14 Feb 2023	05 Sep 2022
TP31/0.1-0.3	SE235945.068	LB257352	18 Aug 2022	23 Aug 2022	14 Feb 2023	02 Sep 2022	14 Feb 2023	05 Sep 2022
TP32/0-0.1	SE235945.069	LB257352	18 Aug 2022	23 Aug 2022	14 Feb 2023	02 Sep 2022	14 Feb 2023	05 Sep 2022
TP32/0.1-0.3	SE235945.070	LB257352	18 Aug 2022	23 Aug 2022	14 Feb 2023	02 Sep 2022	14 Feb 2023	05 Sep 2022
TP33/0-0.1	SE235945.071	LB257352	18 Aug 2022	23 Aug 2022	14 Feb 2023	02 Sep 2022	14 Feb 2023	05 Sep 2022
TP33/0.1-0.3	SE235945.072	LB257352	18 Aug 2022	23 Aug 2022	14 Feb 2023	02 Sep 2022	14 Feb 2023	05 Sep 2022
TP34/0-0.1	SE235945.073	LB257352	18 Aug 2022	23 Aug 2022	14 Feb 2023	02 Sep 2022	14 Feb 2023	05 Sep 2022
TP34/0.1-0.3	SE235945.074	LB257352	18 Aug 2022	23 Aug 2022	14 Feb 2023	02 Sep 2022	14 Feb 2023	05 Sep 2022
TP35/0-0.1	SE235945.075	LB257352	18 Aug 2022	23 Aug 2022	14 Feb 2023	02 Sep 2022	14 Feb 2023	05 Sep 2022
TP35/0.1-0.4	SE235945.077	LB257352	18 Aug 2022	23 Aug 2022	14 Feb 2023	02 Sep 2022	14 Feb 2023	05 Sep 2022
TP36/0-0.1	SE235945.078	LB257352	18 Aug 2022	23 Aug 2022	14 Feb 2023	02 Sep 2022	14 Feb 2023	05 Sep 2022
TP36/0.1-0.4	SE235945.080	LB257352	18 Aug 2022	23 Aug 2022	14 Feb 2023	02 Sep 2022	14 Feb 2023	05 Sep 2022
TP37 0-0.1	SE235945.081	LB257352	19 Aug 2022	23 Aug 2022	15 Feb 2023	02 Sep 2022	15 Feb 2023	05 Sep 2022
TP37/0.1-0.45	SE235945.083	LB257352	19 Aug 2022	23 Aug 2022	15 Feb 2023	02 Sep 2022	15 Feb 2023	05 Sep 2022
TP38/0-0.1	SE235945.084	LB257352	19 Aug 2022	23 Aug 2022	15 Feb 2023	02 Sep 2022	15 Feb 2023	05 Sep 2022
TP38/0.1-0.4	SE235945.086	LB257352	19 Aug 2022	23 Aug 2022	15 Feb 2023	02 Sep 2022	15 Feb 2023	05 Sep 2022
TP39/0-0.1	SE235945.087	LB257352	19 Aug 2022	23 Aug 2022	15 Feb 2023	02 Sep 2022	15 Feb 2023	05 Sep 2022

Mercury in Soil

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

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP01/0.1-0.3	SE235945.002	LB257152	18 Aug 2022	23 Aug 2022	15 Sep 2022	31 Aug 2022	15 Sep 2022	02 Sep 2022
TP02/0.1-0.3	SE235945.004	LB257152	18 Aug 2022	23 Aug 2022	15 Sep 2022	31 Aug 2022	15 Sep 2022	02 Sep 2022

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

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

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

Mercury in Soil (continued) — **Method: ME-(AU)-[ENV]AN312**

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP03/0.1-0.3	SE235945.007	LB257152	18 Aug 2022	23 Aug 2022	15 Sep 2022	31 Aug 2022	15 Sep 2022	02 Sep 2022
TP04/0-0.2	SE235945.009	LB257152	22 Aug 2022	23 Aug 2022	19 Sep 2022	31 Aug 2022	19 Sep 2022	02 Sep 2022
TP05/0-0.2	SE235945.011	LB257152	22 Aug 2022	23 Aug 2022	19 Sep 2022	31 Aug 2022	19 Sep 2022	02 Sep 2022
TP06/0.1-0.3	SE235945.014	LB257152	22 Aug 2022	23 Aug 2022	19 Sep 2022	31 Aug 2022	19 Sep 2022	02 Sep 2022
TP07/0.1-0.3	SE235945.016	LB257152	22 Aug 2022	23 Aug 2022	19 Sep 2022	31 Aug 2022	19 Sep 2022	02 Sep 2022
TP08/0.1-0.3	SE235945.018	LB257152	22 Aug 2022	23 Aug 2022	19 Sep 2022	31 Aug 2022	19 Sep 2022	02 Sep 2022
TP09/0-0.2	SE235945.020	LB257152	22 Aug 2022	23 Aug 2022	19 Sep 2022	31 Aug 2022	19 Sep 2022	02 Sep 2022
TP10/0.0-0.2	SE235945.022	LB257152	22 Aug 2022	23 Aug 2022	19 Sep 2022	31 Aug 2022	19 Sep 2022	02 Sep 2022
TP11/0-0.2	SE235945.024	LB257152	22 Aug 2022	23 Aug 2022	19 Sep 2022	31 Aug 2022	19 Sep 2022	02 Sep 2022
TP11/0.3-0.5	SE235945.025	LB257152	22 Aug 2022	23 Aug 2022	19 Sep 2022	31 Aug 2022	19 Sep 2022	02 Sep 2022
TP12/0-0.2	SE235945.027	LB257152	22 Aug 2022	23 Aug 2022	19 Sep 2022	31 Aug 2022	19 Sep 2022	02 Sep 2022
TP13/0-0.2	SE235945.029	LB257152	22 Aug 2022	23 Aug 2022	19 Sep 2022	31 Aug 2022	19 Sep 2022	02 Sep 2022
TP14/0-0.2	SE235945.031	LB257152	22 Aug 2022	23 Aug 2022	19 Sep 2022	31 Aug 2022	19 Sep 2022	02 Sep 2022
TP15/0-0.2	SE235945.033	LB257152	22 Aug 2022	23 Aug 2022	19 Sep 2022	31 Aug 2022	19 Sep 2022	02 Sep 2022
TP16/0-0.2	SE235945.035	LB257152	22 Aug 2022	23 Aug 2022	19 Sep 2022	31 Aug 2022	19 Sep 2022	02 Sep 2022
TP17/0.1-0.25	SE235945.037	LB257152	22 Aug 2022	23 Aug 2022	19 Sep 2022	31 Aug 2022	19 Sep 2022	02 Sep 2022
TP18/0.4-0.6	SE235945.039	LB257152	23 Aug 2022	23 Aug 2022	20 Sep 2022	31 Aug 2022	20 Sep 2022	02 Sep 2022
TP19/0.4-0.6	SE235945.040	LB257153	23 Aug 2022	23 Aug 2022	20 Sep 2022	31 Aug 2022	20 Sep 2022	05 Sep 2022
TP20/0.1-0.3	SE235945.042	LB257153	22 Aug 2022	23 Aug 2022	19 Sep 2022	31 Aug 2022	19 Sep 2022	05 Sep 2022
TP21/0.7-0.9	SE235945.044	LB257153	23 Aug 2022	23 Aug 2022	20 Sep 2022	31 Aug 2022	20 Sep 2022	05 Sep 2022
TP22/0.6-0.7	SE235945.046	LB257153	23 Aug 2022	23 Aug 2022	20 Sep 2022	31 Aug 2022	20 Sep 2022	05 Sep 2022
TP23/0.3-0.5	SE235945.047	LB257153	23 Aug 2022	23 Aug 2022	20 Sep 2022	31 Aug 2022	20 Sep 2022	05 Sep 2022
TP24/0.15-0.35	SE235945.049	LB257153	18 Aug 2022	23 Aug 2022	15 Sep 2022	31 Aug 2022	15 Sep 2022	05 Sep 2022
TP25/0-0.2	SE235945.052	LB257153	22 Aug 2022	23 Aug 2022	19 Sep 2022	31 Aug 2022	19 Sep 2022	05 Sep 2022
TP26/0-0.2	SE235945.055	LB257153	22 Aug 2022	23 Aug 2022	19 Sep 2022	31 Aug 2022	19 Sep 2022	05 Sep 2022
TP27/0-0.2	SE235945.058	LB257153	18 Aug 2022	23 Aug 2022	15 Sep 2022	31 Aug 2022	15 Sep 2022	05 Sep 2022
TP28/0.1-0.3	SE235945.060	LB257153	18 Aug 2022	23 Aug 2022	15 Sep 2022	31 Aug 2022	15 Sep 2022	05 Sep 2022
TP29A/0.1-0.3	SE235945.063	LB257153	19 Aug 2022	23 Aug 2022	16 Sep 2022	31 Aug 2022	16 Sep 2022	05 Sep 2022
TP30A/0.1-0.3	SE235945.065	LB257153	19 Aug 2022	23 Aug 2022	16 Sep 2022	31 Aug 2022	16 Sep 2022	05 Sep 2022
TP31/0.1-0.3	SE235945.068	LB257153	18 Aug 2022	23 Aug 2022	15 Sep 2022	31 Aug 2022	15 Sep 2022	05 Sep 2022
TP32/0.1-0.3	SE235945.070	LB257153	18 Aug 2022	23 Aug 2022	15 Sep 2022	31 Aug 2022	15 Sep 2022	05 Sep 2022
TP33/0.1-0.3	SE235945.072	LB257153	18 Aug 2022	23 Aug 2022	15 Sep 2022	31 Aug 2022	15 Sep 2022	05 Sep 2022
TP34/0.1-0.3	SE235945.074	LB257153	18 Aug 2022	23 Aug 2022	15 Sep 2022	31 Aug 2022	15 Sep 2022	05 Sep 2022
TP35/0.1-0.3	SE235945.076	LB257153	18 Aug 2022	23 Aug 2022	15 Sep 2022	31 Aug 2022	15 Sep 2022	05 Sep 2022
TP36/0-0.2	SE235945.079	LB257153	18 Aug 2022	23 Aug 2022	15 Sep 2022	31 Aug 2022	15 Sep 2022	05 Sep 2022
TP37/0.1-0.3	SE235945.082	LB257153	19 Aug 2022	23 Aug 2022	16 Sep 2022	31 Aug 2022	16 Sep 2022	05 Sep 2022
TP38/0-0.2	SE235945.085	LB257153	19 Aug 2022	23 Aug 2022	16 Sep 2022	31 Aug 2022	16 Sep 2022	05 Sep 2022

Moisture Content — **Method: ME-(AU)-[ENV]AN002**

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP01/0.1-0.3	SE235945.002	LB257110	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP02/0.1-0.3	SE235945.004	LB257110	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP03/0.1-0.3	SE235945.007	LB257110	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP04/0-0.2	SE235945.009	LB257110	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP05/0-0.2	SE235945.011	LB257110	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP06/0.1-0.3	SE235945.014	LB257110	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP07/0.1-0.3	SE235945.016	LB257110	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP08/0.1-0.3	SE235945.018	LB257110	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP09/0-0.2	SE235945.020	LB257110	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP10/0.0-0.2	SE235945.022	LB257110	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP11/0-0.2	SE235945.024	LB257110	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP11/0.3-0.5	SE235945.025	LB257110	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP12/0-0.2	SE235945.027	LB257110	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP13/0-0.2	SE235945.029	LB257110	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP14/0-0.2	SE235945.031	LB257110	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP15/0-0.2	SE235945.033	LB257110	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP16/0-0.2	SE235945.035	LB257110	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP17/0.1-0.25	SE235945.037	LB257110	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP18/0.4-0.6	SE235945.039	LB257110	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP19/0.4-0.6	SE235945.040	LB257110	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022

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

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

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

Moisture Content (continued) — **Method: ME-(AU)-[ENV]AN002**

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP20/0.1-0.3	SE235945.042	LB257110	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP21/0.7-0.9	SE235945.044	LB257111	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP22/0.6-0.7	SE235945.046	LB257111	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP23/0.3-0.5	SE235945.047	LB257111	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP24/0.15-0.35	SE235945.049	LB257111	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP25/0-0.2	SE235945.052	LB257111	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP26/0-0.2	SE235945.055	LB257111	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP27/0-0.2	SE235945.058	LB257111	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP28/0.1-0.3	SE235945.060	LB257111	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP29A/0.1-0.3	SE235945.063	LB257111	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP30A/0.1-0.3	SE235945.065	LB257111	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP31/0.1-0.3	SE235945.068	LB257111	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP32/0.1-0.3	SE235945.070	LB257111	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP33/0.1-0.3	SE235945.072	LB257111	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP34/0.1-0.3	SE235945.074	LB257111	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP35/0.1-0.3	SE235945.076	LB257111	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP36/0-0.2	SE235945.079	LB257111	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP37/0.1-0.3	SE235945.082	LB257111	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP38/0-0.2	SE235945.085	LB257111	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022

OC Pesticides in Soil — **Method: ME-(AU)-[ENV]AN420**

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP01/0.1-0.3	SE235945.002	LB257102	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP02/0.1-0.3	SE235945.004	LB257102	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP03/0.1-0.3	SE235945.007	LB257102	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP04/0-0.2	SE235945.009	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP05/0-0.2	SE235945.011	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP06/0.1-0.3	SE235945.014	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP07/0.1-0.3	SE235945.016	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP08/0.1-0.3	SE235945.018	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP09/0-0.2	SE235945.020	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP10/0.0-0.2	SE235945.022	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP11/0-0.2	SE235945.024	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP12/0-0.2	SE235945.027	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP13/0-0.2	SE235945.029	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP14/0-0.2	SE235945.031	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP15/0-0.2	SE235945.033	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP16/0-0.2	SE235945.035	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP17/0.1-0.25	SE235945.037	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP18/0.4-0.6	SE235945.039	LB257102	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP19/0.4-0.6	SE235945.040	LB257102	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP20/0.1-0.3	SE235945.042	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP21/0.7-0.9	SE235945.044	LB257103	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP22/0.6-0.7	SE235945.046	LB257103	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP23/0.3-0.5	SE235945.047	LB257103	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP24/0.15-0.35	SE235945.049	LB257103	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP25/0-0.2	SE235945.052	LB257103	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP26/0-0.2	SE235945.055	LB257103	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP27/0-0.2	SE235945.058	LB257103	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP28/0.1-0.3	SE235945.060	LB257103	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP29A/0.1-0.3	SE235945.063	LB257103	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP30A/0.1-0.3	SE235945.065	LB257103	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP31/0.1-0.3	SE235945.068	LB257103	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP32/0.1-0.3	SE235945.070	LB257103	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP33/0.1-0.3	SE235945.072	LB257103	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP34/0.1-0.3	SE235945.074	LB257103	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP35/0.1-0.3	SE235945.076	LB257103	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP36/0-0.2	SE235945.079	LB257103	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP37/0.1-0.3	SE235945.082	LB257103	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP38/0-0.2	SE235945.085	LB257103	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022

HOLDING TIME SUMMARY

SE235945 R0

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

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

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

OP Pesticides in Soil

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

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP01/0.1-0.3	SE235945.002	LB257102	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP02/0.1-0.3	SE235945.004	LB257102	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	10 Oct 2022	05 Sep 2022
TP03/0.1-0.3	SE235945.007	LB257102	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	10 Oct 2022	05 Sep 2022
TP04/0-0.2	SE235945.009	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	05 Sep 2022
TP05/0-0.2	SE235945.011	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	05 Sep 2022
TP06/0.1-0.3	SE235945.014	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP07/0.1-0.3	SE235945.016	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP08/0.1-0.3	SE235945.018	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	05 Sep 2022
TP09/0-0.2	SE235945.020	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP10/0.0-0.2	SE235945.022	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP11/0-0.2	SE235945.024	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP12/0-0.2	SE235945.027	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	05 Sep 2022
TP13/0-0.2	SE235945.029	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	05 Sep 2022
TP14/0-0.2	SE235945.031	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	05 Sep 2022
TP15/0-0.2	SE235945.033	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	05 Sep 2022
TP16/0-0.2	SE235945.035	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	05 Sep 2022
TP17/0.1-0.25	SE235945.037	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP18/0.4-0.6	SE235945.039	LB257102	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP19/0.4-0.6	SE235945.040	LB257102	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	05 Sep 2022
TP20/0.1-0.3	SE235945.042	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP21/0.7-0.9	SE235945.044	LB257103	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP22/0.6-0.7	SE235945.046	LB257103	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	05 Sep 2022
TP23/0.3-0.5	SE235945.047	LB257103	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	05 Sep 2022
TP24/0.15-0.35	SE235945.049	LB257103	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP25/0-0.2	SE235945.052	LB257103	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP26/0-0.2	SE235945.055	LB257103	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP27/0-0.2	SE235945.058	LB257103	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	10 Oct 2022	05 Sep 2022
TP28/0.1-0.3	SE235945.060	LB257103	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	10 Oct 2022	05 Sep 2022
TP29A/0.1-0.3	SE235945.063	LB257103	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	10 Oct 2022	05 Sep 2022
TP30A/0.1-0.3	SE235945.065	LB257103	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	10 Oct 2022	05 Sep 2022
TP31/0.1-0.3	SE235945.068	LB257103	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP32/0.1-0.3	SE235945.070	LB257103	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	10 Oct 2022	05 Sep 2022
TP33/0.1-0.3	SE235945.072	LB257103	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP34/0.1-0.3	SE235945.074	LB257103	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	10 Oct 2022	05 Sep 2022
TP35/0.1-0.3	SE235945.076	LB257103	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP36/0-0.2	SE235945.079	LB257103	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	10 Oct 2022	05 Sep 2022
TP37/0.1-0.3	SE235945.082	LB257103	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP38/0-0.2	SE235945.085	LB257103	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

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

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP01/0.1-0.3	SE235945.002	LB257102	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP02/0.1-0.3	SE235945.004	LB257102	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP03/0.1-0.3	SE235945.007	LB257102	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP04/0-0.2	SE235945.009	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP05/0-0.2	SE235945.011	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP06/0.1-0.3	SE235945.014	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP07/0.1-0.3	SE235945.016	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP08/0.1-0.3	SE235945.018	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP09/0-0.2	SE235945.020	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	05 Sep 2022
TP10/0.0-0.2	SE235945.022	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	05 Sep 2022
TP11/0-0.2	SE235945.024	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP12/0-0.2	SE235945.027	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP13/0-0.2	SE235945.029	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP14/0-0.2	SE235945.031	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP15/0-0.2	SE235945.033	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP16/0-0.2	SE235945.035	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP17/0.1-0.25	SE235945.037	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP18/0.4-0.6	SE235945.039	LB257102	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP19/0.4-0.6	SE235945.040	LB257102	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022

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

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

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

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued) — **Method: ME-(AU)-[ENV]AN420**

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP20/0.1-0.3	SE235945.042	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP21/0.7-0.9	SE235945.044	LB257103	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP22/0.6-0.7	SE235945.046	LB257103	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP23/0.3-0.5	SE235945.047	LB257103	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP24/0.15-0.35	SE235945.049	LB257103	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP25/0-0.2	SE235945.052	LB257103	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP26/0-0.2	SE235945.055	LB257103	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP27/0-0.2	SE235945.058	LB257103	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP28/0.1-0.3	SE235945.060	LB257103	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP29A/0.1-0.3	SE235945.063	LB257103	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP30A/0.1-0.3	SE235945.065	LB257103	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP31/0.1-0.3	SE235945.068	LB257103	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP32/0.1-0.3	SE235945.070	LB257103	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP33/0.1-0.3	SE235945.072	LB257103	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP34/0.1-0.3	SE235945.074	LB257103	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP35/0.1-0.3	SE235945.076	LB257103	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP36/0-0.2	SE235945.079	LB257103	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP37/0.1-0.3	SE235945.082	LB257103	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP38/0-0.2	SE235945.085	LB257103	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022

PCBs in Soil — **Method: ME-(AU)-[ENV]AN420**

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP01/0.1-0.3	SE235945.002	LB257102	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP02/0.1-0.3	SE235945.004	LB257102	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP03/0.1-0.3	SE235945.007	LB257102	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP04/0-0.2	SE235945.009	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP05/0-0.2	SE235945.011	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP06/0.1-0.3	SE235945.014	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP07/0.1-0.3	SE235945.016	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP08/0.1-0.3	SE235945.018	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP09/0-0.2	SE235945.020	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP10/0.0-0.2	SE235945.022	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP11/0-0.2	SE235945.024	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP12/0-0.2	SE235945.027	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP13/0-0.2	SE235945.029	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP14/0-0.2	SE235945.031	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP15/0-0.2	SE235945.033	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP16/0-0.2	SE235945.035	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP17/0.1-0.25	SE235945.037	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP18/0.4-0.6	SE235945.039	LB257102	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP19/0.4-0.6	SE235945.040	LB257102	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP20/0.1-0.3	SE235945.042	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP21/0.7-0.9	SE235945.044	LB257103	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP22/0.6-0.7	SE235945.046	LB257103	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP23/0.3-0.5	SE235945.047	LB257103	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP24/0.15-0.35	SE235945.049	LB257103	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP25/0-0.2	SE235945.052	LB257103	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP26/0-0.2	SE235945.055	LB257103	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP27/0-0.2	SE235945.058	LB257103	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP28/0.1-0.3	SE235945.060	LB257103	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP29A/0.1-0.3	SE235945.063	LB257103	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP30A/0.1-0.3	SE235945.065	LB257103	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP31/0.1-0.3	SE235945.068	LB257103	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP32/0.1-0.3	SE235945.070	LB257103	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP33/0.1-0.3	SE235945.072	LB257103	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP34/0.1-0.3	SE235945.074	LB257103	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP35/0.1-0.3	SE235945.076	LB257103	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP36/0-0.2	SE235945.079	LB257103	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP37/0.1-0.3	SE235945.082	LB257103	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP38/0-0.2	SE235945.085	LB257103	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022

HOLDING TIME SUMMARY

SE235945 R0

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

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

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

pH in soil (1:5) — Method: ME-(AU)-[ENV]AN101

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP11/0.3-0.5	SE235945.025	LB257319	22 Aug 2022	23 Aug 2022	29 Aug 2022	02 Sep 2022†	03 Sep 2022	02 Sep 2022

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES — Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP01/0.1-0.3	SE235945.002	LB257142	18 Aug 2022	23 Aug 2022	14 Feb 2023	31 Aug 2022	14 Feb 2023	02 Sep 2022
TP02/0.1-0.3	SE235945.004	LB257142	18 Aug 2022	23 Aug 2022	14 Feb 2023	31 Aug 2022	14 Feb 2023	02 Sep 2022
TP03/0.1-0.3	SE235945.007	LB257142	18 Aug 2022	23 Aug 2022	14 Feb 2023	31 Aug 2022	14 Feb 2023	02 Sep 2022
TP04/0-0.2	SE235945.009	LB257142	22 Aug 2022	23 Aug 2022	18 Feb 2023	31 Aug 2022	18 Feb 2023	02 Sep 2022
TP05/0-0.2	SE235945.011	LB257142	22 Aug 2022	23 Aug 2022	18 Feb 2023	31 Aug 2022	18 Feb 2023	02 Sep 2022
TP06/0.1-0.3	SE235945.014	LB257142	22 Aug 2022	23 Aug 2022	18 Feb 2023	31 Aug 2022	18 Feb 2023	02 Sep 2022
TP07/0.1-0.3	SE235945.016	LB257142	22 Aug 2022	23 Aug 2022	18 Feb 2023	31 Aug 2022	18 Feb 2023	02 Sep 2022
TP08/0.1-0.3	SE235945.018	LB257142	22 Aug 2022	23 Aug 2022	18 Feb 2023	31 Aug 2022	18 Feb 2023	02 Sep 2022
TP09/0-0.2	SE235945.020	LB257142	22 Aug 2022	23 Aug 2022	18 Feb 2023	31 Aug 2022	18 Feb 2023	02 Sep 2022
TP10/0.0-0.2	SE235945.022	LB257142	22 Aug 2022	23 Aug 2022	18 Feb 2023	31 Aug 2022	18 Feb 2023	02 Sep 2022
TP11/0-0.2	SE235945.024	LB257142	22 Aug 2022	23 Aug 2022	18 Feb 2023	31 Aug 2022	18 Feb 2023	02 Sep 2022
TP11/0.3-0.5	SE235945.025	LB257142	22 Aug 2022	23 Aug 2022	18 Feb 2023	31 Aug 2022	18 Feb 2023	02 Sep 2022
TP12/0-0.2	SE235945.027	LB257142	22 Aug 2022	23 Aug 2022	18 Feb 2023	31 Aug 2022	18 Feb 2023	02 Sep 2022
TP13/0-0.2	SE235945.029	LB257142	22 Aug 2022	23 Aug 2022	18 Feb 2023	31 Aug 2022	18 Feb 2023	02 Sep 2022
TP14/0-0.2	SE235945.031	LB257142	22 Aug 2022	23 Aug 2022	18 Feb 2023	31 Aug 2022	18 Feb 2023	02 Sep 2022
TP15/0-0.2	SE235945.033	LB257142	22 Aug 2022	23 Aug 2022	18 Feb 2023	31 Aug 2022	18 Feb 2023	02 Sep 2022
TP16/0-0.2	SE235945.035	LB257142	22 Aug 2022	23 Aug 2022	18 Feb 2023	31 Aug 2022	18 Feb 2023	02 Sep 2022
TP17/0.1-0.25	SE235945.037	LB257142	22 Aug 2022	23 Aug 2022	18 Feb 2023	31 Aug 2022	18 Feb 2023	02 Sep 2022
TP18/0.4-0.6	SE235945.039	LB257142	23 Aug 2022	23 Aug 2022	19 Feb 2023	31 Aug 2022	19 Feb 2023	02 Sep 2022
TP19/0.4-0.6	SE235945.040	LB257143	23 Aug 2022	23 Aug 2022	19 Feb 2023	31 Aug 2022	19 Feb 2023	05 Sep 2022
TP20/0.1-0.3	SE235945.042	LB257143	22 Aug 2022	23 Aug 2022	18 Feb 2023	31 Aug 2022	18 Feb 2023	05 Sep 2022
TP21/0.7-0.9	SE235945.044	LB257143	23 Aug 2022	23 Aug 2022	19 Feb 2023	31 Aug 2022	19 Feb 2023	05 Sep 2022
TP22/0.6-0.7	SE235945.046	LB257143	23 Aug 2022	23 Aug 2022	19 Feb 2023	31 Aug 2022	19 Feb 2023	05 Sep 2022
TP23/0.3-0.5	SE235945.047	LB257143	23 Aug 2022	23 Aug 2022	19 Feb 2023	31 Aug 2022	19 Feb 2023	05 Sep 2022
TP24/0.15-0.35	SE235945.049	LB257143	18 Aug 2022	23 Aug 2022	14 Feb 2023	31 Aug 2022	14 Feb 2023	05 Sep 2022
TP25/0-0.2	SE235945.052	LB257143	22 Aug 2022	23 Aug 2022	18 Feb 2023	31 Aug 2022	18 Feb 2023	05 Sep 2022
TP26/0-0.2	SE235945.055	LB257143	22 Aug 2022	23 Aug 2022	18 Feb 2023	31 Aug 2022	18 Feb 2023	05 Sep 2022
TP27/0-0.2	SE235945.058	LB257143	18 Aug 2022	23 Aug 2022	14 Feb 2023	31 Aug 2022	14 Feb 2023	05 Sep 2022
TP28/0.1-0.3	SE235945.060	LB257143	18 Aug 2022	23 Aug 2022	14 Feb 2023	31 Aug 2022	14 Feb 2023	05 Sep 2022
TP29A/0.1-0.3	SE235945.063	LB257143	19 Aug 2022	23 Aug 2022	15 Feb 2023	31 Aug 2022	15 Feb 2023	05 Sep 2022
TP30A/0.1-0.3	SE235945.065	LB257143	19 Aug 2022	23 Aug 2022	15 Feb 2023	31 Aug 2022	15 Feb 2023	05 Sep 2022
TP31/0.1-0.3	SE235945.068	LB257143	18 Aug 2022	23 Aug 2022	14 Feb 2023	31 Aug 2022	14 Feb 2023	05 Sep 2022
TP32/0.1-0.3	SE235945.070	LB257143	18 Aug 2022	23 Aug 2022	14 Feb 2023	31 Aug 2022	14 Feb 2023	05 Sep 2022
TP33/0.1-0.3	SE235945.072	LB257143	18 Aug 2022	23 Aug 2022	14 Feb 2023	31 Aug 2022	14 Feb 2023	05 Sep 2022
TP34/0.1-0.3	SE235945.074	LB257143	18 Aug 2022	23 Aug 2022	14 Feb 2023	31 Aug 2022	14 Feb 2023	05 Sep 2022
TP35/0.1-0.3	SE235945.076	LB257143	18 Aug 2022	23 Aug 2022	14 Feb 2023	31 Aug 2022	14 Feb 2023	05 Sep 2022
TP36/0-0.2	SE235945.079	LB257143	18 Aug 2022	23 Aug 2022	14 Feb 2023	31 Aug 2022	14 Feb 2023	05 Sep 2022
TP37/0.1-0.3	SE235945.082	LB257143	19 Aug 2022	23 Aug 2022	15 Feb 2023	31 Aug 2022	15 Feb 2023	05 Sep 2022
TP38/0-0.2	SE235945.085	LB257143	19 Aug 2022	23 Aug 2022	15 Feb 2023	31 Aug 2022	15 Feb 2023	05 Sep 2022

TRH (Total Recoverable Hydrocarbons) in Soil — Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP01/0.1-0.3	SE235945.002	LB257102	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP02/0.1-0.3	SE235945.004	LB257102	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP03/0.1-0.3	SE235945.007	LB257102	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP04/0-0.2	SE235945.009	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP05/0-0.2	SE235945.011	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP06/0.1-0.3	SE235945.014	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP07/0.1-0.3	SE235945.016	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP08/0.1-0.3	SE235945.018	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP09/0-0.2	SE235945.020	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP10/0.0-0.2	SE235945.022	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP11/0-0.2	SE235945.024	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP12/0-0.2	SE235945.027	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP13/0-0.2	SE235945.029	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP14/0-0.2	SE235945.031	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022

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

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

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

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

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

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP15/0-0.2	SE235945.033	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP16/0-0.2	SE235945.035	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP17/0.1-0.25	SE235945.037	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP18/0.4-0.6	SE235945.039	LB257102	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP19/0.4-0.6	SE235945.040	LB257102	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP20/0.1-0.3	SE235945.042	LB257102	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP21/0.7-0.9	SE235945.044	LB257103	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP22/0.6-0.7	SE235945.046	LB257103	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP23/0.3-0.5	SE235945.047	LB257103	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP24/0.15-0.35	SE235945.049	LB257103	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP25/0-0.2	SE235945.052	LB257103	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP26/0-0.2	SE235945.055	LB257103	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP27/0-0.2	SE235945.058	LB257103	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP28/0.1-0.3	SE235945.060	LB257103	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP29A/0.1-0.3	SE235945.063	LB257103	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP30A/0.1-0.3	SE235945.065	LB257103	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP31/0.1-0.3	SE235945.068	LB257103	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP32/0.1-0.3	SE235945.070	LB257103	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP33/0.1-0.3	SE235945.072	LB257103	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP34/0.1-0.3	SE235945.074	LB257103	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP35/0.1-0.3	SE235945.076	LB257103	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP36/0-0.2	SE235945.079	LB257103	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP37/0.1-0.3	SE235945.082	LB257103	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP38/0-0.2	SE235945.085	LB257103	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022

VOC's in Soil

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

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP01/0.1-0.3	SE235945.002	LB257106	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	01 Sep 2022	02 Sep 2022†
TP04/0-0.2	SE235945.009	LB257106	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP06/0.1-0.3	SE235945.014	LB257106	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP07/0.1-0.3	SE235945.016	LB257106	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP11/0-0.2	SE235945.024	LB257106	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP12/0-0.2	SE235945.027	LB257106	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP15/0-0.2	SE235945.033	LB257106	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP17/0.1-0.25	SE235945.037	LB257106	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP18/0.4-0.6	SE235945.039	LB257106	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	06 Sep 2022	02 Sep 2022
TP20/0.1-0.3	SE235945.042	LB257106	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP21/0.7-0.9	SE235945.044	LB257106	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	06 Sep 2022	02 Sep 2022
TP22/0.6-0.7	SE235945.046	LB257106	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	06 Sep 2022	02 Sep 2022
TP24/0.15-0.35	SE235945.049	LB257106	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	01 Sep 2022	02 Sep 2022†
TP25/0-0.2	SE235945.052	LB257106	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP26/0-0.2	SE235945.055	LB257106	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP29A/0.1-0.3	SE235945.063	LB257106	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	02 Sep 2022	02 Sep 2022
TP31/0.1-0.3	SE235945.068	LB257106	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	01 Sep 2022	02 Sep 2022†
TP33/0.1-0.3	SE235945.072	LB257106	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	01 Sep 2022	02 Sep 2022†
TP37/0.1-0.3	SE235945.082	LB257106	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	02 Sep 2022	02 Sep 2022

Volatile Petroleum Hydrocarbons in Soil

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

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP01/0.1-0.3	SE235945.002	LB257106	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	01 Sep 2022	02 Sep 2022†
TP04/0-0.2	SE235945.009	LB257106	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP06/0.1-0.3	SE235945.014	LB257106	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP07/0.1-0.3	SE235945.016	LB257106	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP11/0-0.2	SE235945.024	LB257106	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP12/0-0.2	SE235945.027	LB257106	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP15/0-0.2	SE235945.033	LB257106	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP17/0.1-0.25	SE235945.037	LB257106	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP18/0.4-0.6	SE235945.039	LB257106	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	06 Sep 2022	02 Sep 2022
TP20/0.1-0.3	SE235945.042	LB257106	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP21/0.7-0.9	SE235945.044	LB257106	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	06 Sep 2022	02 Sep 2022
TP22/0.6-0.7	SE235945.046	LB257106	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	06 Sep 2022	02 Sep 2022

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

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

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

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

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP24/0.15-0.35	SE235945.049	LB257106	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	01 Sep 2022	02 Sep 2022†
TP25/0-0.2	SE235945.052	LB257106	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP26/0-0.2	SE235945.055	LB257106	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP29A/0.1-0.3	SE235945.063	LB257106	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	02 Sep 2022	02 Sep 2022
TP31/0.1-0.3	SE235945.068	LB257106	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	01 Sep 2022	02 Sep 2022†
TP33/0.1-0.3	SE235945.072	LB257106	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	01 Sep 2022	02 Sep 2022†
TP37/0.1-0.3	SE235945.082	LB257106	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	02 Sep 2022	02 Sep 2022

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

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

OC Pesticides in Soil — Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	TP01/0.1-0.3	SE235945.002	%	60 - 130%	96
	TP06/0.1-0.3	SE235945.014	%	60 - 130%	103
	TP07/0.1-0.3	SE235945.016	%	60 - 130%	100
	TP09/0-0.2	SE235945.020	%	60 - 130%	102
	TP10/0.0-0.2	SE235945.022	%	60 - 130%	100
	TP11/0-0.2	SE235945.024	%	60 - 130%	98
	TP17/0.1-0.25	SE235945.037	%	60 - 130%	101
	TP18/0.4-0.6	SE235945.039	%	60 - 130%	99
	TP20/0.1-0.3	SE235945.042	%	60 - 130%	100
	TP21/0.7-0.9	SE235945.044	%	60 - 130%	94
	TP24/0.15-0.35	SE235945.049	%	60 - 130%	92
	TP25/0-0.2	SE235945.052	%	60 - 130%	98
	TP26/0-0.2	SE235945.055	%	60 - 130%	94
	TP29A/0.1-0.3	SE235945.063	%	60 - 130%	91
	TP31/0.1-0.3	SE235945.068	%	60 - 130%	97
	TP33/0.1-0.3	SE235945.072	%	60 - 130%	94
	TP35/0.1-0.3	SE235945.076	%	60 - 130%	95
	TP37/0.1-0.3	SE235945.082	%	60 - 130%	96
	TP38/0-0.2	SE235945.085	%	60 - 130%	95

OP Pesticides in Soil — Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	TP01/0.1-0.3	SE235945.002	%	60 - 130%	94
	TP06/0.1-0.3	SE235945.014	%	60 - 130%	94
	TP07/0.1-0.3	SE235945.016	%	60 - 130%	94
	TP09/0-0.2	SE235945.020	%	60 - 130%	91
	TP10/0.0-0.2	SE235945.022	%	60 - 130%	93
	TP11/0-0.2	SE235945.024	%	60 - 130%	92
	TP17/0.1-0.25	SE235945.037	%	60 - 130%	92
	TP18/0.4-0.6	SE235945.039	%	60 - 130%	93
	TP20/0.1-0.3	SE235945.042	%	60 - 130%	93
	TP21/0.7-0.9	SE235945.044	%	60 - 130%	91
	TP24/0.15-0.35	SE235945.049	%	60 - 130%	91
	TP25/0-0.2	SE235945.052	%	60 - 130%	92
	TP26/0-0.2	SE235945.055	%	60 - 130%	89
	TP29A/0.1-0.3	SE235945.063	%	60 - 130%	91
	TP31/0.1-0.3	SE235945.068	%	60 - 130%	96
	TP33/0.1-0.3	SE235945.072	%	60 - 130%	90
	TP35/0.1-0.3	SE235945.076	%	60 - 130%	95
	TP37/0.1-0.3	SE235945.082	%	60 - 130%	87
	TP38/0-0.2	SE235945.085	%	60 - 130%	92
d14-p-terphenyl (Surrogate)	TP01/0.1-0.3	SE235945.002	%	60 - 130%	98
	TP06/0.1-0.3	SE235945.014	%	60 - 130%	98
	TP07/0.1-0.3	SE235945.016	%	60 - 130%	98
	TP09/0-0.2	SE235945.020	%	60 - 130%	95
	TP10/0.0-0.2	SE235945.022	%	60 - 130%	97
	TP11/0-0.2	SE235945.024	%	60 - 130%	96
	TP17/0.1-0.25	SE235945.037	%	60 - 130%	97
	TP18/0.4-0.6	SE235945.039	%	60 - 130%	97
	TP20/0.1-0.3	SE235945.042	%	60 - 130%	97
	TP21/0.7-0.9	SE235945.044	%	60 - 130%	91
	TP24/0.15-0.35	SE235945.049	%	60 - 130%	91
	TP25/0-0.2	SE235945.052	%	60 - 130%	93
	TP26/0-0.2	SE235945.055	%	60 - 130%	93
	TP29A/0.1-0.3	SE235945.063	%	60 - 130%	93
	TP31/0.1-0.3	SE235945.068	%	60 - 130%	98
	TP33/0.1-0.3	SE235945.072	%	60 - 130%	90
	TP35/0.1-0.3	SE235945.076	%	60 - 130%	93
	TP37/0.1-0.3	SE235945.082	%	60 - 130%	91
	TP38/0-0.2	SE235945.085	%	60 - 130%	96

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

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

PAH (Polynuclear Aromatic Hydrocarbons) in Soil — **Method: ME-(AU)-[ENV]AN420**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	TP01/0.1-0.3	SE235945.002	%	70 - 130%	94
	TP02/0.1-0.3	SE235945.004	%	70 - 130%	93
	TP03/0.1-0.3	SE235945.007	%	70 - 130%	94
	TP04/0-0.2	SE235945.009	%	70 - 130%	93
	TP05/0-0.2	SE235945.011	%	70 - 130%	92
	TP06/0.1-0.3	SE235945.014	%	70 - 130%	94
	TP07/0.1-0.3	SE235945.016	%	70 - 130%	94
	TP08/0.1-0.3	SE235945.018	%	70 - 130%	94
	TP11/0-0.2	SE235945.024	%	70 - 130%	92
	TP12/0-0.2	SE235945.027	%	70 - 130%	92
	TP13/0-0.2	SE235945.029	%	70 - 130%	91
	TP14/0-0.2	SE235945.031	%	70 - 130%	94
	TP15/0-0.2	SE235945.033	%	70 - 130%	93
	TP16/0-0.2	SE235945.035	%	70 - 130%	87
	TP17/0.1-0.25	SE235945.037	%	70 - 130%	92
	TP18/0.4-0.6	SE235945.039	%	70 - 130%	93
	TP19/0.4-0.6	SE235945.040	%	70 - 130%	92
	TP20/0.1-0.3	SE235945.042	%	70 - 130%	93
	TP21/0.7-0.9	SE235945.044	%	70 - 130%	91
	TP22/0.6-0.7	SE235945.046	%	70 - 130%	96
	TP23/0.3-0.5	SE235945.047	%	70 - 130%	93
	TP24/0.15-0.35	SE235945.049	%	70 - 130%	91
	TP25/0-0.2	SE235945.052	%	70 - 130%	92
	TP26/0-0.2	SE235945.055	%	70 - 130%	89
	TP27/0-0.2	SE235945.058	%	70 - 130%	95
	TP28/0.1-0.3	SE235945.060	%	70 - 130%	91
	TP29A/0.1-0.3	SE235945.063	%	70 - 130%	91
	TP30A/0.1-0.3	SE235945.065	%	70 - 130%	94
	TP31/0.1-0.3	SE235945.068	%	70 - 130%	96
	TP32/0.1-0.3	SE235945.070	%	70 - 130%	93
	TP33/0.1-0.3	SE235945.072	%	70 - 130%	90
	TP34/0.1-0.3	SE235945.074	%	70 - 130%	96
	TP35/0.1-0.3	SE235945.076	%	70 - 130%	95
	TP36/0-0.2	SE235945.079	%	70 - 130%	93
	TP37/0.1-0.3	SE235945.082	%	70 - 130%	87
	TP38/0-0.2	SE235945.085	%	70 - 130%	92
d14-p-terphenyl (Surrogate)	TP01/0.1-0.3	SE235945.002	%	70 - 130%	98
	TP02/0.1-0.3	SE235945.004	%	70 - 130%	97
	TP03/0.1-0.3	SE235945.007	%	70 - 130%	99
	TP04/0-0.2	SE235945.009	%	70 - 130%	97
	TP05/0-0.2	SE235945.011	%	70 - 130%	97
	TP06/0.1-0.3	SE235945.014	%	70 - 130%	98
	TP07/0.1-0.3	SE235945.016	%	70 - 130%	98
	TP08/0.1-0.3	SE235945.018	%	70 - 130%	98
	TP11/0-0.2	SE235945.024	%	70 - 130%	96
	TP12/0-0.2	SE235945.027	%	70 - 130%	97
	TP13/0-0.2	SE235945.029	%	70 - 130%	95
	TP14/0-0.2	SE235945.031	%	70 - 130%	99
	TP15/0-0.2	SE235945.033	%	70 - 130%	97
	TP16/0-0.2	SE235945.035	%	70 - 130%	93
	TP17/0.1-0.25	SE235945.037	%	70 - 130%	97
	TP18/0.4-0.6	SE235945.039	%	70 - 130%	97
	TP19/0.4-0.6	SE235945.040	%	70 - 130%	97
	TP20/0.1-0.3	SE235945.042	%	70 - 130%	97
	TP21/0.7-0.9	SE235945.044	%	70 - 130%	91
	TP22/0.6-0.7	SE235945.046	%	70 - 130%	97
	TP23/0.3-0.5	SE235945.047	%	70 - 130%	94
	TP24/0.15-0.35	SE235945.049	%	70 - 130%	91
	TP25/0-0.2	SE235945.052	%	70 - 130%	93
	TP26/0-0.2	SE235945.055	%	70 - 130%	93
	TP27/0-0.2	SE235945.058	%	70 - 130%	95

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

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

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued) — Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d14-p-terphenyl (Surrogate)	TP28/0.1-0.3	SE235945.060	%	70 - 130%	93
	TP29A/0.1-0.3	SE235945.063	%	70 - 130%	93
	TP30A/0.1-0.3	SE235945.065	%	70 - 130%	97
	TP31/0.1-0.3	SE235945.068	%	70 - 130%	98
	TP32/0.1-0.3	SE235945.070	%	70 - 130%	94
	TP33/0.1-0.3	SE235945.072	%	70 - 130%	90
	TP34/0.1-0.3	SE235945.074	%	70 - 130%	96
	TP35/0.1-0.3	SE235945.076	%	70 - 130%	93
	TP36/0-0.2	SE235945.079	%	70 - 130%	94
	TP37/0.1-0.3	SE235945.082	%	70 - 130%	91
	TP38/0-0.2	SE235945.085	%	70 - 130%	96
d5-nitrobenzene (Surrogate)	TP01/0.1-0.3	SE235945.002	%	70 - 130%	111
	TP02/0.1-0.3	SE235945.004	%	70 - 130%	112
	TP03/0.1-0.3	SE235945.007	%	70 - 130%	114
	TP04/0-0.2	SE235945.009	%	70 - 130%	111
	TP05/0-0.2	SE235945.011	%	70 - 130%	110
	TP06/0.1-0.3	SE235945.014	%	70 - 130%	112
	TP07/0.1-0.3	SE235945.016	%	70 - 130%	111
	TP08/0.1-0.3	SE235945.018	%	70 - 130%	112
	TP11/0-0.2	SE235945.024	%	70 - 130%	111
	TP12/0-0.2	SE235945.027	%	70 - 130%	110
	TP13/0-0.2	SE235945.029	%	70 - 130%	109
	TP14/0-0.2	SE235945.031	%	70 - 130%	113
	TP15/0-0.2	SE235945.033	%	70 - 130%	110
	TP16/0-0.2	SE235945.035	%	70 - 130%	101
	TP17/0.1-0.25	SE235945.037	%	70 - 130%	109
	TP18/0.4-0.6	SE235945.039	%	70 - 130%	110
	TP19/0.4-0.6	SE235945.040	%	70 - 130%	110
	TP20/0.1-0.3	SE235945.042	%	70 - 130%	110
	TP21/0.7-0.9	SE235945.044	%	70 - 130%	110
	TP22/0.6-0.7	SE235945.046	%	70 - 130%	115
	TP23/0.3-0.5	SE235945.047	%	70 - 130%	113
	TP24/0.15-0.35	SE235945.049	%	70 - 130%	108
	TP25/0-0.2	SE235945.052	%	70 - 130%	110
	TP26/0-0.2	SE235945.055	%	70 - 130%	109
	TP27/0-0.2	SE235945.058	%	70 - 130%	113
	TP28/0.1-0.3	SE235945.060	%	70 - 130%	107
	TP29A/0.1-0.3	SE235945.063	%	70 - 130%	106
	TP30A/0.1-0.3	SE235945.065	%	70 - 130%	111
	TP31/0.1-0.3	SE235945.068	%	70 - 130%	113
	TP32/0.1-0.3	SE235945.070	%	70 - 130%	110
	TP33/0.1-0.3	SE235945.072	%	70 - 130%	103
	TP34/0.1-0.3	SE235945.074	%	70 - 130%	111
	TP35/0.1-0.3	SE235945.076	%	70 - 130%	109
	TP36/0-0.2	SE235945.079	%	70 - 130%	109
	TP37/0.1-0.3	SE235945.082	%	70 - 130%	107
	TP38/0-0.2	SE235945.085	%	70 - 130%	110

PCBs in Soil — Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	TP01/0.1-0.3	SE235945.002	%	60 - 130%	96
	TP06/0.1-0.3	SE235945.014	%	60 - 130%	103
	TP07/0.1-0.3	SE235945.016	%	60 - 130%	100
	TP11/0-0.2	SE235945.024	%	60 - 130%	98
	TP17/0.1-0.25	SE235945.037	%	60 - 130%	101
	TP18/0.4-0.6	SE235945.039	%	60 - 130%	99
	TP20/0.1-0.3	SE235945.042	%	60 - 130%	100
	TP21/0.7-0.9	SE235945.044	%	60 - 130%	94
	TP24/0.15-0.35	SE235945.049	%	60 - 130%	92
	TP25/0-0.2	SE235945.052	%	60 - 130%	98
	TP26/0-0.2	SE235945.055	%	60 - 130%	94

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

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

PCBs in Soil (continued) — Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	TP29A/0.1-0.3	SE235945.063	%	60 - 130%	91
	TP31/0.1-0.3	SE235945.068	%	60 - 130%	97
	TP33/0.1-0.3	SE235945.072	%	60 - 130%	94
	TP37/0.1-0.3	SE235945.082	%	60 - 130%	96

VOC's in Soil — Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	TP01/0.1-0.3	SE235945.002	%	60 - 130%	79
	TP04/0-0.2	SE235945.009	%	60 - 130%	78
	TP06/0.1-0.3	SE235945.014	%	60 - 130%	80
	TP07/0.1-0.3	SE235945.016	%	60 - 130%	82
	TP11/0-0.2	SE235945.024	%	60 - 130%	79
	TP12/0-0.2	SE235945.027	%	60 - 130%	78
	TP15/0-0.2	SE235945.033	%	60 - 130%	82
	TP17/0.1-0.25	SE235945.037	%	60 - 130%	84
	TP18/0.4-0.6	SE235945.039	%	60 - 130%	76
	TP20/0.1-0.3	SE235945.042	%	60 - 130%	84
	TP21/0.7-0.9	SE235945.044	%	60 - 130%	84
	TP22/0.6-0.7	SE235945.046	%	60 - 130%	83
	TP24/0.15-0.35	SE235945.049	%	60 - 130%	80
	TP25/0-0.2	SE235945.052	%	60 - 130%	78
	TP26/0-0.2	SE235945.055	%	60 - 130%	80
	TP29A/0.1-0.3	SE235945.063	%	60 - 130%	78
	TP31/0.1-0.3	SE235945.068	%	60 - 130%	77
	TP33/0.1-0.3	SE235945.072	%	60 - 130%	79
	TP37/0.1-0.3	SE235945.082	%	60 - 130%	75
d4-1,2-dichloroethane (Surrogate)	TP01/0.1-0.3	SE235945.002	%	60 - 130%	77
	TP04/0-0.2	SE235945.009	%	60 - 130%	76
	TP06/0.1-0.3	SE235945.014	%	60 - 130%	81
	TP07/0.1-0.3	SE235945.016	%	60 - 130%	80
	TP11/0-0.2	SE235945.024	%	60 - 130%	77
	TP12/0-0.2	SE235945.027	%	60 - 130%	79
	TP15/0-0.2	SE235945.033	%	60 - 130%	83
	TP17/0.1-0.25	SE235945.037	%	60 - 130%	83
	TP18/0.4-0.6	SE235945.039	%	60 - 130%	76
	TP20/0.1-0.3	SE235945.042	%	60 - 130%	82
	TP21/0.7-0.9	SE235945.044	%	60 - 130%	84
	TP22/0.6-0.7	SE235945.046	%	60 - 130%	84
	TP24/0.15-0.35	SE235945.049	%	60 - 130%	81
	TP25/0-0.2	SE235945.052	%	60 - 130%	79
	TP26/0-0.2	SE235945.055	%	60 - 130%	83
	TP29A/0.1-0.3	SE235945.063	%	60 - 130%	79
	TP31/0.1-0.3	SE235945.068	%	60 - 130%	78
	TP33/0.1-0.3	SE235945.072	%	60 - 130%	81
	TP37/0.1-0.3	SE235945.082	%	60 - 130%	77
d8-toluene (Surrogate)	TP01/0.1-0.3	SE235945.002	%	60 - 130%	78
	TP04/0-0.2	SE235945.009	%	60 - 130%	77
	TP06/0.1-0.3	SE235945.014	%	60 - 130%	82
	TP07/0.1-0.3	SE235945.016	%	60 - 130%	80
	TP11/0-0.2	SE235945.024	%	60 - 130%	78
	TP12/0-0.2	SE235945.027	%	60 - 130%	79
	TP15/0-0.2	SE235945.033	%	60 - 130%	83
	TP17/0.1-0.25	SE235945.037	%	60 - 130%	83
	TP18/0.4-0.6	SE235945.039	%	60 - 130%	75
	TP20/0.1-0.3	SE235945.042	%	60 - 130%	82
	TP21/0.7-0.9	SE235945.044	%	60 - 130%	84
	TP22/0.6-0.7	SE235945.046	%	60 - 130%	84
	TP24/0.15-0.35	SE235945.049	%	60 - 130%	80
	TP25/0-0.2	SE235945.052	%	60 - 130%	78
	TP26/0-0.2	SE235945.055	%	60 - 130%	81
	TP29A/0.1-0.3	SE235945.063	%	60 - 130%	79

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

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

VOC's in Soil (continued) — Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d8-toluene (Surrogate)	TP31/0.1-0.3	SE235945.068	%	60 - 130%	77
	TP33/0.1-0.3	SE235945.072	%	60 - 130%	80
	TP37/0.1-0.3	SE235945.082	%	60 - 130%	76

Volatile Petroleum Hydrocarbons in Soil — Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	TP01/0.1-0.3	SE235945.002	%	60 - 130%	79
	TP04/0-0.2	SE235945.009	%	60 - 130%	78
	TP06/0.1-0.3	SE235945.014	%	60 - 130%	80
	TP07/0.1-0.3	SE235945.016	%	60 - 130%	82
	TP11/0-0.2	SE235945.024	%	60 - 130%	79
	TP12/0-0.2	SE235945.027	%	60 - 130%	78
	TP15/0-0.2	SE235945.033	%	60 - 130%	82
	TP17/0.1-0.25	SE235945.037	%	60 - 130%	84
	TP18/0.4-0.6	SE235945.039	%	60 - 130%	76
	TP20/0.1-0.3	SE235945.042	%	60 - 130%	84
	TP21/0.7-0.9	SE235945.044	%	60 - 130%	84
	TP22/0.6-0.7	SE235945.046	%	60 - 130%	83
	TP24/0.15-0.35	SE235945.049	%	60 - 130%	80
	TP25/0-0.2	SE235945.052	%	60 - 130%	78
	TP26/0-0.2	SE235945.055	%	60 - 130%	80
	TP29A/0.1-0.3	SE235945.063	%	60 - 130%	78
	TP31/0.1-0.3	SE235945.068	%	60 - 130%	77
	TP33/0.1-0.3	SE235945.072	%	60 - 130%	79
	TP37/0.1-0.3	SE235945.082	%	60 - 130%	75
d4-1,2-dichloroethane (Surrogate)	TP01/0.1-0.3	SE235945.002	%	60 - 130%	77
	TP04/0-0.2	SE235945.009	%	60 - 130%	76
	TP06/0.1-0.3	SE235945.014	%	60 - 130%	81
	TP07/0.1-0.3	SE235945.016	%	60 - 130%	80
	TP11/0-0.2	SE235945.024	%	60 - 130%	77
	TP12/0-0.2	SE235945.027	%	60 - 130%	79
	TP15/0-0.2	SE235945.033	%	60 - 130%	83
	TP17/0.1-0.25	SE235945.037	%	60 - 130%	83
	TP18/0.4-0.6	SE235945.039	%	60 - 130%	76
	TP20/0.1-0.3	SE235945.042	%	60 - 130%	82
	TP21/0.7-0.9	SE235945.044	%	60 - 130%	84
	TP22/0.6-0.7	SE235945.046	%	60 - 130%	84
	TP24/0.15-0.35	SE235945.049	%	60 - 130%	81
	TP25/0-0.2	SE235945.052	%	60 - 130%	79
	TP26/0-0.2	SE235945.055	%	60 - 130%	83
	TP29A/0.1-0.3	SE235945.063	%	60 - 130%	79
	TP31/0.1-0.3	SE235945.068	%	60 - 130%	78
	TP33/0.1-0.3	SE235945.072	%	60 - 130%	81
	TP37/0.1-0.3	SE235945.082	%	60 - 130%	77
d8-toluene (Surrogate)	TP01/0.1-0.3	SE235945.002	%	60 - 130%	78
	TP04/0-0.2	SE235945.009	%	60 - 130%	77
	TP06/0.1-0.3	SE235945.014	%	60 - 130%	82
	TP07/0.1-0.3	SE235945.016	%	60 - 130%	80
	TP11/0-0.2	SE235945.024	%	60 - 130%	78
	TP12/0-0.2	SE235945.027	%	60 - 130%	79
	TP15/0-0.2	SE235945.033	%	60 - 130%	83
	TP17/0.1-0.25	SE235945.037	%	60 - 130%	83
	TP18/0.4-0.6	SE235945.039	%	60 - 130%	75
	TP20/0.1-0.3	SE235945.042	%	60 - 130%	82
	TP21/0.7-0.9	SE235945.044	%	60 - 130%	84
	TP22/0.6-0.7	SE235945.046	%	60 - 130%	84
	TP24/0.15-0.35	SE235945.049	%	60 - 130%	80
	TP25/0-0.2	SE235945.052	%	60 - 130%	78
	TP26/0-0.2	SE235945.055	%	60 - 130%	81
	TP29A/0.1-0.3	SE235945.063	%	60 - 130%	79
	TP31/0.1-0.3	SE235945.068	%	60 - 130%	77

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

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

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

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d8-toluene (Surrogate)	TP33/0.1-0.3	SE235945.072	%	60 - 130%	80
	TP37/0.1-0.3	SE235945.082	%	60 - 130%	76

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

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

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)

Method: ME-(AU)-[ENV]AN122

Sample Number	Parameter	Units	LOR	Result
LB257428.001	Exchangeable Sodium, Na	mg/kg	2	1.2419
	Exchangeable Potassium, K	mg/kg	2	0.4941
	Exchangeable Calcium, Ca	mg/kg	2	0.7423
	Exchangeable Magnesium, Mg	mg/kg	2	0.2015

Mercury in Soil

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

Sample Number	Parameter	Units	LOR	Result
LB257152.001	Mercury	mg/kg	0.05	<0.05
LB257153.001	Mercury	mg/kg	0.05	<0.05

OC Pesticides in Soil

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

Sample Number		Parameter	Units	LOR	Result
LB257102.001		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Alpha BHC	mg/kg	0.1	<0.1
		Lindane	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.2	<0.2
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Endrin	mg/kg	0.2	<0.2
		Beta Endosulfan	mg/kg	0.2	<0.2
		p,p'-DDD	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		Endrin Aldehyde	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Endrin Ketone	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	77
LB257103.001		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Alpha BHC	mg/kg	0.1	<0.1
		Lindane	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.2	<0.2
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Endrin	mg/kg	0.2	<0.2
		Beta Endosulfan	mg/kg	0.2	<0.2
		p,p'-DDD	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		Endrin Aldehyde	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Endrin Ketone	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	86

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

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

OP Pesticides in Soil

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

Sample Number		Parameter	Units	LOR	Result
LB257102.001		Dichlorvos	mg/kg	0.5	<0.5
		Dimethoate	mg/kg	0.5	<0.5
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5
		Fenitrothion	mg/kg	0.2	<0.2
		Malathion	mg/kg	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	75
		d14-p-terphenyl (Surrogate)	%	-	81
LB257103.001		Dichlorvos	mg/kg	0.5	<0.5
		Dimethoate	mg/kg	0.5	<0.5
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5
		Fenitrothion	mg/kg	0.2	<0.2
		Malathion	mg/kg	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	88
		d14-p-terphenyl (Surrogate)	%	-	89

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

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

Sample Number		Parameter	Units	LOR	Result
LB257102.001		Naphthalene	mg/kg	0.1	<0.1
		2-methylnaphthalene	mg/kg	0.1	<0.1
		1-methylnaphthalene	mg/kg	0.1	<0.1
		Acenaphthylene	mg/kg	0.1	<0.1
		Acenaphthene	mg/kg	0.1	<0.1
		Fluorene	mg/kg	0.1	<0.1
		Phenanthrene	mg/kg	0.1	<0.1
		Anthracene	mg/kg	0.1	<0.1
		Fluoranthene	mg/kg	0.1	<0.1
		Pyrene	mg/kg	0.1	<0.1
		Benzo(a)anthracene	mg/kg	0.1	<0.1
		Chrysene	mg/kg	0.1	<0.1
		Benzo(a)pyrene	mg/kg	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	91
		2-fluorobiphenyl (Surrogate)	%	-	75
		d14-p-terphenyl (Surrogate)	%	-	81
LB257103.001		Naphthalene	mg/kg	0.1	<0.1
		2-methylnaphthalene	mg/kg	0.1	<0.1
		1-methylnaphthalene	mg/kg	0.1	<0.1
		Acenaphthylene	mg/kg	0.1	<0.1
		Acenaphthene	mg/kg	0.1	<0.1
		Fluorene	mg/kg	0.1	<0.1
		Phenanthrene	mg/kg	0.1	<0.1
		Anthracene	mg/kg	0.1	<0.1
		Fluoranthene	mg/kg	0.1	<0.1
		Pyrene	mg/kg	0.1	<0.1
		Benzo(a)anthracene	mg/kg	0.1	<0.1
		Chrysene	mg/kg	0.1	<0.1

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

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

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

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

Sample Number		Parameter	Units	LOR	Result
LB257103.001		Benzo(a)pyrene	mg/kg	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	108
		2-fluorobiphenyl (Surrogate)	%	-	88
		d14-p-terphenyl (Surrogate)	%	-	89

PCBs in Soil

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

Sample Number		Parameter	Units	LOR	Result
LB257102.001		Arochlor 1016	mg/kg	0.2	<0.2
		Arochlor 1221	mg/kg	0.2	<0.2
		Arochlor 1232	mg/kg	0.2	<0.2
		Arochlor 1242	mg/kg	0.2	<0.2
		Arochlor 1248	mg/kg	0.2	<0.2
		Arochlor 1254	mg/kg	0.2	<0.2
		Arochlor 1260	mg/kg	0.2	<0.2
		Arochlor 1262	mg/kg	0.2	<0.2
		Arochlor 1268	mg/kg	0.2	<0.2
		Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	77
LB257103.001		Arochlor 1016	mg/kg	0.2	<0.2
		Arochlor 1221	mg/kg	0.2	<0.2
		Arochlor 1232	mg/kg	0.2	<0.2
		Arochlor 1242	mg/kg	0.2	<0.2
		Arochlor 1248	mg/kg	0.2	<0.2
		Arochlor 1254	mg/kg	0.2	<0.2
		Arochlor 1260	mg/kg	0.2	<0.2
		Arochlor 1262	mg/kg	0.2	<0.2
		Arochlor 1268	mg/kg	0.2	<0.2
		Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	86

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

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

Sample Number	Parameter	Units	LOR	Result
LB257142.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0
LB257143.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0

TRH (Total Recoverable Hydrocarbons) in Soil

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

Sample Number	Parameter	Units	LOR	Result
LB257102.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110
LB257103.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100

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

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

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

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

Sample Number		Parameter	Units	LOR	Result
LB257103.001		TRH C10-C36 Total	mg/kg	110	<110

VOC's in Soil

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

Sample Number		Parameter	Units	LOR	Result
LB257106.001	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
	Polycyclic VOCs	Naphthalene (VOC)	mg/kg	0.1	<0.1
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	97
		d8-toluene (Surrogate)	%	-	99
		Bromofluorobenzene (Surrogate)	%	-	98
	Totals	Total BTEX	mg/kg	0.6	<0.6

Volatile Petroleum Hydrocarbons in Soil

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

Sample Number		Parameter	Units	LOR	Result
LB257106.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	97

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

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

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

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

Mercury in Soil

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

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE235945.022	LB257152.014	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE235945.039	LB257152.024	Mercury	mg/kg	0.05	0.10	0.10	79	1
SE235945.060	LB257153.014	Mercury	mg/kg	0.05	<0.05	<0.05	177	0

Moisture Content

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

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE235945.022	LB257110.011	% Moisture	%w/w	1	14.8	14.9	37	0
SE235945.040	LB257110.022	% Moisture	%w/w	1	17.7	17.6	36	1
SE235945.042	LB257110.024	% Moisture	%w/w	1	18.4	17.6	36	5
SE235945.065	LB257111.011	% Moisture	%w/w	1	18.7	16.8	36	10
SE235945.085	LB257111.020	% Moisture	%w/w	1	31.1	32.1	33	3

OC Pesticides in Soil

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

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE235945.016	LB257102.027		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
			Total OC VIC EPA	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.15	30	0
SE235945.042	LB257102.025		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

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

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

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

OC Pesticides in Soil (continued)

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

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE235945.042	LB257102.025		o,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
			Total OC VIC EPA	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.15	30	1
SE235945.082	LB257103.025		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
			Total OC VIC EPA	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.14	0.15	30	6

OP Pesticides in Soil

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

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE235945.016	LB257102.027		Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	2
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	1
SE235945.042	LB257102.025		Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

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

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

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

OP Pesticides in Soil (continued) — Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE235945.042	LB257102.025		Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	3
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	2
SE235945.082	LB257103.025		Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	30	11
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	7

PAH (Polynuclear Aromatic Hydrocarbons) in Soil — Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE235945.016	LB257102.027		Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
			Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
			Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	<0.3	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	<0.2	175	0
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.6	0.6	30	1
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	2
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	1
SE235945.042	LB257102.025		Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluorene	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

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

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

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

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

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

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE235945.042	LB257102.025		Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
			Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	<0.3	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	<0.2	175	0
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.6	0.6	30	2
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	3
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	2
SE235945.082	LB257103.025		Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
			Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
			Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	<0.3	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	<0.2	175	0
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.6	30	7
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	30	11
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	7

PCBs in Soil

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

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE235945.016	LB257102.027		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	30	0
SE235945.042	LB257102.025		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

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

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

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

PCBs in Soil (continued)

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

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE235945.042	LB257102.025		Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	30	1
SE235945.082	LB257103.025		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	30	6

pH in soil (1:5)

Method: ME-(AU)-[ENV]AN101

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE235945.025	LB257319.005	pH	pH Units	0.1	5.8	5.8	32	1

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

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

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE235945.022	LB257142.014	Arsenic, As	mg/kg	1	10	11	39	6
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	21	18	33	12
		Copper, Cu	mg/kg	0.5	13	14	34	8
		Nickel, Ni	mg/kg	0.5	10	7.3	36	33
		Lead, Pb	mg/kg	1	27	26	34	2
		Zinc, Zn	mg/kg	2	77	68	33	12
SE235945.039	LB257142.024	Arsenic, As	mg/kg	1	9	11	40	26
		Cadmium, Cd	mg/kg	0.3	0.5	1.0	70	77 ②
		Chromium, Cr	mg/kg	0.5	13	17	33	28
		Copper, Cu	mg/kg	0.5	31	32	32	2
		Nickel, Ni	mg/kg	0.5	9.5	9.0	35	5
		Lead, Pb	mg/kg	1	250	390	30	45 ②
		Zinc, Zn	mg/kg	2	160	220	31	31 ②
SE235945.060	LB257143.014	Arsenic, As	mg/kg	1	9	7	42	28
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	17	16	33	7
		Copper, Cu	mg/kg	0.5	6.0	5.9	38	1
		Nickel, Ni	mg/kg	0.5	3.1	2.9	46	7
		Lead, Pb	mg/kg	1	22	16	35	31
		Zinc, Zn	mg/kg	2	24	20	39	20

TRH (Total Recoverable Hydrocarbons) in Soil

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

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE235945.016	LB257102.027		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

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

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

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

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

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

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE235945.042	LB257102.025		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE235945.082	LB257103.025		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0

VOC's in Soil

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

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE235945.042	LB257106.014	Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
		Hydrocarbons	Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
		Polycyclic	Naphthalene (VOC)	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.2	8.5	50	3
			d8-toluene (Surrogate)	mg/kg	-	8.2	8.5	50	3
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.4	8.4	50	1
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
SE235945.082	LB257106.024	Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
		Hydrocarbons	Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
		Polycyclic	Naphthalene (VOC)	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	7.7	7.4	50	3
			d8-toluene (Surrogate)	mg/kg	-	7.6	7.3	50	3
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.5	7.3	50	2
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0

Volatile Petroleum Hydrocarbons in Soil

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

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE235945.042	LB257106.014		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.2	8.5	30	3
			d8-toluene (Surrogate)	mg/kg	-	8.2	8.5	30	3
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.4	8.4	30	1
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE235945.082	LB257106.024		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	7.7	7.4	30	3
			d8-toluene (Surrogate)	mg/kg	-	7.6	7.3	30	3
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.5	7.3	30	2
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

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

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)

Method: ME-(AU)-[ENV]AN122

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB257428.002	Exchangeable Sodium, Na	meq/100g	0.01	0.21	0.194	80 - 120	110
	Exchangeable Potassium, K	meq/100g	0.01	0.60	0.63	80 - 120	95
	Exchangeable Calcium, Ca	meq/100g	0.01	6.0	6.3	80 - 120	95
	Exchangeable Magnesium, Mg	meq/100g	0.02	1.1	1.11	80 - 120	95

Mercury in Soil

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

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB257152.002	Mercury	mg/kg	0.05	0.18	0.2	70 - 130	90
LB257153.002	Mercury	mg/kg	0.05	0.22	0.2	70 - 130	112

OC Pesticides in Soil

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

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB257102.002		Heptachlor	mg/kg	0.1	0.2	0.2	60 - 140	104
		Aldrin	mg/kg	0.1	0.2	0.2	60 - 140	99
		Delta BHC	mg/kg	0.1	0.2	0.2	60 - 140	100
		Dieldrin	mg/kg	0.2	<0.2	0.2	60 - 140	98
		Endrin	mg/kg	0.2	0.2	0.2	60 - 140	113
		p,p'-DDT	mg/kg	0.1	0.2	0.2	60 - 140	102
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.14	0.15	40 - 130	92
LB257103.002		Heptachlor	mg/kg	0.1	0.2	0.2	60 - 140	105
		Aldrin	mg/kg	0.1	0.2	0.2	60 - 140	103
		Delta BHC	mg/kg	0.1	0.2	0.2	60 - 140	101
		Dieldrin	mg/kg	0.2	0.2	0.2	60 - 140	107
		Endrin	mg/kg	0.2	0.2	0.2	60 - 140	117
		p,p'-DDT	mg/kg	0.1	0.2	0.2	60 - 140	114
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.13	0.15	40 - 130	86

OP Pesticides in Soil

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

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB257102.002		Dichlorvos	mg/kg	0.5	1.8	2	60 - 140	88
		Diazinon (Dimpylate)	mg/kg	0.5	1.9	2	60 - 140	93
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	1.7	2	60 - 140	86
		Ethion	mg/kg	0.2	1.7	2	60 - 140	85
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	95
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	95
LB257103.002		Dichlorvos	mg/kg	0.5	1.3	2	60 - 140	65
		Diazinon (Dimpylate)	mg/kg	0.5	2.0	2	60 - 140	99
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	1.8	2	60 - 140	92
		Ethion	mg/kg	0.2	1.6	2	60 - 140	81
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	92
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	93

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

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

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB257102.002		Naphthalene	mg/kg	0.1	4.9	4	60 - 140	121
		Acenaphthylene	mg/kg	0.1	4.6	4	60 - 140	116
		Acenaphthene	mg/kg	0.1	4.3	4	60 - 140	108
		Phenanthrene	mg/kg	0.1	4.5	4	60 - 140	112
		Anthracene	mg/kg	0.1	4.3	4	60 - 140	106
		Fluoranthene	mg/kg	0.1	4.1	4	60 - 140	102
		Pyrene	mg/kg	0.1	4.8	4	60 - 140	120
		Benzo(a)pyrene	mg/kg	0.1	4.3	4	60 - 140	109
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	107
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	95
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	95
LB257103.002		Naphthalene	mg/kg	0.1	4.7	4	60 - 140	117
		Acenaphthylene	mg/kg	0.1	4.4	4	60 - 140	111
		Acenaphthene	mg/kg	0.1	4.7	4	60 - 140	118
		Phenanthrene	mg/kg	0.1	4.7	4	60 - 140	117
		Anthracene	mg/kg	0.1	4.6	4	60 - 140	116
		Fluoranthene	mg/kg	0.1	4.6	4	60 - 140	115
		Pyrene	mg/kg	0.1	4.5	4	60 - 140	114

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

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

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

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

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB257103.002		Benzo(a)pyrene	mg/kg	0.1	4.2	4	60 - 140	105
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	107
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	92
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	93

PCBs in Soil

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

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB257102.002	Arochlor 1260	mg/kg	0.2	0.5	0.4	60 - 140	113
LB257103.002	Arochlor 1260	mg/kg	0.2	0.5	0.4	60 - 140	130

pH in soil (1:5)

Method: ME-(AU)-[ENV]AN101

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB257319.003	pH	pH Units	0.1	7.4	7.415	98 - 102	99

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

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

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB257142.002	Arsenic, As	mg/kg	1	330	318.22	80 - 120	105
	Cadmium, Cd	mg/kg	0.3	4.4	4.81	70 - 130	91
	Chromium, Cr	mg/kg	0.5	38	38.31	80 - 120	100
	Copper, Cu	mg/kg	0.5	310	290	80 - 120	107
	Nickel, Ni	mg/kg	0.5	190	187	80 - 120	102
	Lead, Pb	mg/kg	1	95	89.9	80 - 120	105
	Zinc, Zn	mg/kg	2	280	273	80 - 120	101
LB257143.002	Arsenic, As	mg/kg	1	310	318.22	80 - 120	98
	Cadmium, Cd	mg/kg	0.3	4.3	4.81	70 - 130	90
	Chromium, Cr	mg/kg	0.5	32	38.31	80 - 120	82
	Copper, Cu	mg/kg	0.5	290	290	80 - 120	99
	Nickel, Ni	mg/kg	0.5	170	187	80 - 120	89
	Lead, Pb	mg/kg	1	87	89.9	80 - 120	97
	Zinc, Zn	mg/kg	2	250	273	80 - 120	93

TRH (Total Recoverable Hydrocarbons) in Soil

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

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB257102.002		TRH C10-C14	mg/kg	20	52	40	60 - 140	130
		TRH C15-C28	mg/kg	45	46	40	60 - 140	115
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	90
	TRH F Bands	TRH >C10-C16	mg/kg	25	50	40	60 - 140	125
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	103
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	90
LB257103.002		TRH C10-C14	mg/kg	20	50	40	60 - 140	125
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	108
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	83
	TRH F Bands	TRH >C10-C16	mg/kg	25	47	40	60 - 140	118
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	95
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	85

VOC's in Soil

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

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB257106.002	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	4.6	5	60 - 140	93
		Toluene	mg/kg	0.1	4.5	5	60 - 140	89
		Ethylbenzene	mg/kg	0.1	4.4	5	60 - 140	88
		m/p-xylene	mg/kg	0.2	8.6	10	60 - 140	86
		o-xylene	mg/kg	0.1	4.5	5	60 - 140	91
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.5	10	70 - 130	85
		d8-toluene (Surrogate)	mg/kg	-	8.6	10	70 - 130	86
		Bromofluorobenzene (Surrogate)	mg/kg	-	8.2	10	70 - 130	82

Volatile Petroleum Hydrocarbons in Soil

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

Sample Number	Parameter	Units	LOR

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

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

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

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB257106.002		TRH C6-C10	mg/kg	25	70	92.5	60 - 140	76
		TRH C6-C9	mg/kg	20	63	80	60 - 140	79
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.5	10	70 - 130	85
		Bromofluorobenzene (Surrogate)	mg/kg	-	8.2	10	70 - 130	82
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	44	62.5	60 - 140	70

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

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

Mercury in Soil

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

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE235945.002	LB257152.004	Mercury	mg/kg	0.05	0.25	0.06	0.2	93
SE235945.040	LB257153.004	Mercury	mg/kg	0.05	0.30	0.12	0.2	93

OC Pesticides in Soil

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

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE235945.002	LB257102.004		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	-	-
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	-	-
			Lindane	mg/kg	0.1	<0.1	<0.1	-	-
			Heptachlor	mg/kg	0.1	0.2	<0.1	0.2	117
			Aldrin	mg/kg	0.1	0.2	<0.1	0.2	110
			Beta BHC	mg/kg	0.1	<0.1	<0.1	-	-
			Delta BHC	mg/kg	0.1	0.2	<0.1	0.2	115
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	-	-
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	-	-
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	-	-
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	-	-
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	-	-
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	-	-
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	-	-
			Dieldrin	mg/kg	0.2	0.2	<0.2	0.2	111
			Endrin	mg/kg	0.2	0.3	<0.2	0.2	126
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	-	-
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	-	-
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	-	-
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	-	-
			p,p'-DDT	mg/kg	0.1	0.2	<0.1	0.2	118
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	-	-
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	-	-
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	-	-
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	-	-
			Isodrin	mg/kg	0.1	<0.1	<0.1	-	-
			Mirex	mg/kg	0.1	<0.1	<0.1	-	-
			Total CLP OC Pesticides	mg/kg	1	1	<1	-	-
			Total OC VIC EPA	mg/kg	1	1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.14	-	98
SE235945.044	LB257103.004		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	-	-
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	-	-
			Lindane	mg/kg	0.1	<0.1	<0.1	-	-
			Heptachlor	mg/kg	0.1	0.2	<0.1	0.2	115
			Aldrin	mg/kg	0.1	0.2	<0.1	0.2	113
			Beta BHC	mg/kg	0.1	<0.1	<0.1	-	-
			Delta BHC	mg/kg	0.1	0.2	<0.1	0.2	111
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	-	-
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	-	-
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	-	-
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	-	-
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	-	-
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	-	-
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	-	-
			Dieldrin	mg/kg	0.2	0.2	<0.2	0.2	117
			Endrin	mg/kg	0.2	0.3	<0.2	0.2	128
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	-	-
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	-	-
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	-	-
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	-	-
			p,p'-DDT	mg/kg	0.1	0.3	<0.1	0.2	123
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	-	-
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	-	-
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	-	-
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

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

OC Pesticides in Soil (continued)

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

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE235945.044	LB257103.004		Isodrin	mg/kg	0.1	<0.1	<0.1	-	-
			Mirex	mg/kg	0.1	<0.1	<0.1	-	-
			Total CLP OC Pesticides	mg/kg	1	1	<1	-	-
			Total OC VIC EPA	mg/kg	1	1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.14	0.14	-	93

OP Pesticides in Soil

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

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE235945.002	LB257102.004		Dichlorvos	mg/kg	0.5	1.8	<0.5	2	90
			Dimethoate	mg/kg	0.5	<0.5	<0.5	-	-
			Diazinon (Dimpylate)	mg/kg	0.5	2.0	<0.5	2	98
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	-	-
			Malathion	mg/kg	0.2	<0.2	<0.2	-	-
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	1.9	<0.2	2	93
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	-	-
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	-	-
			Methidathion	mg/kg	0.5	<0.5	<0.5	-	-
			Ethion	mg/kg	0.2	1.9	<0.2	2	94
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	-	-
			Total OP Pesticides*	mg/kg	1.7	7.5	<1.7	-	-
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	-	97
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	-	95
SE235945.044	LB257103.004		Dichlorvos	mg/kg	0.5	1.4	<0.5	2	68
			Dimethoate	mg/kg	0.5	<0.5	<0.5	-	-
			Diazinon (Dimpylate)	mg/kg	0.5	2.0	<0.5	2	100
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	-	-
			Malathion	mg/kg	0.2	<0.2	<0.2	-	-
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	1.9	<0.2	2	94
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	-	-
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	-	-
			Methidathion	mg/kg	0.5	<0.5	<0.5	-	-
			Ethion	mg/kg	0.2	1.6	<0.2	2	82
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	-	-
			Total OP Pesticides*	mg/kg	1.7	6.9	<1.7	-	-
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	-	97
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	-	97

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

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

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE235945.002	LB257102.004		Naphthalene	mg/kg	0.1	4.7	<0.1	4	117
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
			Acenaphthylene	mg/kg	0.1	4.5	<0.1	4	113
			Acenaphthene	mg/kg	0.1	4.5	<0.1	4	112
			Fluorene	mg/kg	0.1	<0.1	<0.1	-	-
			Phenanthrene	mg/kg	0.1	4.5	<0.1	4	112
			Anthracene	mg/kg	0.1	4.3	<0.1	4	108
			Fluoranthene	mg/kg	0.1	4.3	<0.1	4	106
			Pyrene	mg/kg	0.1	4.5	<0.1	4	112
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
			Chrysene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(a)pyrene	mg/kg	0.1	4.2	<0.1	4	104
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	4.2	<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	4.3	<0.3	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	4.2	<0.2	-	-
			Total PAH (18)	mg/kg	0.8	35	<0.8	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.6	0.6	-	113

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

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

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

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

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE235945.002	LB257102.004	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	-	97
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	-	95
SE235945.044	LB257103.004		Naphthalene	mg/kg	0.1	5.0	<0.1	4	126
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
			Acenaphthylene	mg/kg	0.1	4.7	<0.1	4	118
			Acenaphthene	mg/kg	0.1	5.0	<0.1	4	125
			Fluorene	mg/kg	0.1	<0.1	<0.1	-	-
			Phenanthrene	mg/kg	0.1	5.0	<0.1	4	125
			Anthracene	mg/kg	0.1	4.8	<0.1	4	121
			Fluoranthene	mg/kg	0.1	4.9	<0.1	4	123
			Pyrene	mg/kg	0.1	4.8	<0.1	4	119
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
			Chrysene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(a)pyrene	mg/kg	0.1	4.5	<0.1	4	111
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	4.5	<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	4.6	<0.3	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	4.5	<0.2	-	-
			Total PAH (18)	mg/kg	0.8	39	<0.8	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.6	0.6	-	113
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	-	97
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	-	97

PCBs in Soil

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

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE235945.002	LB257102.004		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1260	mg/kg	0.2	0.5	<0.2	0.4	125
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	-	-
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	-	98
SE235945.044	LB257103.004		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1260	mg/kg	0.2	0.6	<0.2	0.4	139
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	-	-
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	-	93

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

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

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE235945.002	LB257142.004	Arsenic, As	mg/kg	1	53	8	50	90
		Cadmium, Cd	mg/kg	0.3	42	<0.3	50	84
		Chromium, Cr	mg/kg	0.5	58	14	50	89
		Copper, Cu	mg/kg	0.5	63	17	50	94
		Nickel, Ni	mg/kg	0.5	50	4.4	50	90
		Lead, Pb	mg/kg	1	90	21	50	137 ⑧
		Zinc, Zn	mg/kg	2	90	43	50	95

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

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

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

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

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE235945.040	LB257143.004	Arsenic, As	mg/kg	1	53	8	50	90
		Cadmium, Cd	mg/kg	0.3	43	0.5	50	86
		Chromium, Cr	mg/kg	0.5	58	15	50	87
		Copper, Cu	mg/kg	0.5	68	27	50	82
		Nickel, Ni	mg/kg	0.5	50	4.5	50	91
		Lead, Pb	mg/kg	1	91	57	50	69 ⑨
		Zinc, Zn	mg/kg	2	160	130	50	55 ⑨

TRH (Total Recoverable Hydrocarbons) in Soil

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

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE235945.002	LB257102.004		TRH C10-C14	mg/kg	20	71	<20	40	170 ⑨
			TRH C15-C28	mg/kg	45	66	<45	40	120
			TRH C29-C36	mg/kg	45	57	<45	40	58 ⑨
			TRH C37-C40	mg/kg	100	<100	<100	-	-
			TRH C10-C36 Total	mg/kg	110	190	<110	-	-
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	-	-
		TRH F Bands	TRH >C10-C16	mg/kg	25	66	<25	40	158 ⑨
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	66	<25	-	-
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	40	60
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	-	-
SE235945.044	LB257103.004		TRH C10-C14	mg/kg	20	48	<20	40	120
			TRH C15-C28	mg/kg	45	<45	<45	40	105
			TRH C29-C36	mg/kg	45	<45	<45	40	80
			TRH C37-C40	mg/kg	100	<100	<100	-	-
			TRH C10-C36 Total	mg/kg	110	<110	<110	-	-
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	-	-
		TRH F Bands	TRH >C10-C16	mg/kg	25	46	<25	40	115
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	46	<25	-	-
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	40	93
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	-	-

VOC's in Soil

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

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE235945.002	LB257106.004	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	4.5	<0.1	5	90
			Toluene	mg/kg	0.1	4.4	<0.1	5	89
			Ethylbenzene	mg/kg	0.1	4.5	<0.1	5	89
			m/p-xylene	mg/kg	0.2	8.6	<0.2	10	86
			o-xylene	mg/kg	0.1	4.6	<0.1	5	92
		Polycyclic	Naphthalene (VOC)	mg/kg	0.1	<0.1	<0.1	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.4	7.7	10	84
			d8-toluene (Surrogate)	mg/kg	-	8.5	7.8	10	85
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.0	7.9	10	80
		Totals	Total Xylenes	mg/kg	0.3	13	<0.3	-	-
			Total BTEX	mg/kg	0.6	27	<0.6	-	-

Volatile Petroleum Hydrocarbons in Soil

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

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE235945.002	LB257106.004		TRH C6-C10	mg/kg	25	72	<25	92.5	78
			TRH C6-C9	mg/kg	20	64	<20	80	80
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.4	7.7	10	84
			d8-toluene (Surrogate)	mg/kg	-	8.5	7.8	10	85
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.0	7.9	-	80
		VPH F Bands	Benzene (F0)	mg/kg	0.1	4.5	<0.1	-	-
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	46	<25	62.5	73

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

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

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
***	Indicates that both * and ** apply.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.
①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	Abanish Nepal
Client	CONSTRUCTION SCIENCES PTY LTD
Address	2/4 KELLOGG RD ROOTY HILL NSW 2766
Telephone	0436 620 611
Facsimile	02 8438 0310
Email	Abanish.Nepal@constructionsciences.net
Project	**10791.EV.P.323 249-271Railway Terrace**
Order Number	**10791.EV.P.323**
Samples	55

LABORATORY DETAILS

Manager	Huong Crawford
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE235945 R0**
Date Received	23 Aug 2022
Date Reported	08 Sep 2022

COMMENTS

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

Micro subcontracted to Symbio Laboratories, 2 Sirius Road, Lane Cove West NSW 2066, NATA Accreditation Number 2455. Report No. S1191410.
Clay Content subcontracted to SGS Cairns, 2/58 Comport St, Portsmith QLD 4870, NATA Accreditation Number: 2562, Site Number: 3146. Report No: CE161506

No respirable fibres detected in all soil samples using trace analysis technique.
Sample # 13 : Asbestos found in approx 50x25x4mm cement sheet fragments x2 and found as approx 15x5x3mm cement sheet fragments x4.
Sample # 15 : Asbestos found in approx 3x2x2mm cement sheet fragment.
Sample # 38 : Asbestos found in approx 6x4x2mm cement sheet fragments x2.
Sample # 78 : Asbestos found in approx 15x7x3mm cement sheet fragments x4.
Sample # 80 : Asbestos found in approx 20x8x3mm cement sheet fragments x4.
Asbestos analysed by Approved Identifiers Ravee Sivasubramaniam and Yusuf Kuthpudin .

SIGNATORIES

Ravee SIVASUBRAMANIAM
Hygiene Team Leader

RESULTS

Fibre Identification in soil — Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE235945.001	TP01/0-0.1	Soil	567g Clay,Sand,Soil, Rocks	18 Aug 2022	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE235945.002	TP01/0.1-0.3	Soil	845g Clay,Sand,Soil, Rocks	18 Aug 2022	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE235945.003	TP02/0-0.1	Soil	683g Clay,Sand,Soil, Rocks	18 Aug 2022	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE235945.005	TP02/0.1-0.3_bag	Soil	655g Clay,Sand,Rocks	18 Aug 2022	No Asbestos Found at RL of 0.1g/kg	<0.01
SE235945.006	TP03/0-0.0.1	Soil	612g Clay,Sand,Soil, Rocks	18 Aug 2022	No Asbestos Found at RL of 0.1g/kg	<0.01
SE235945.007	TP03/0.1-0.3	Soil	771g Clay,Sand,Soil, Rocks	18 Aug 2022	No Asbestos Found at RL of 0.1g/kg	<0.01
SE235945.008	TP04/0-0.1	Soil	720g Clay,Sand,Rocks	22 Aug 2022	No Asbestos Found at RL of 0.1g/kg	<0.01
SE235945.010	TP05/0-0.1	Soil	710g Clay,Sand,Soil, Rocks	22 Aug 2022	No Asbestos Found at RL of 0.1g/kg	<0.01
SE235945.012	TP05/0.1-0.3	Soil	690g Clay,Sand,Soil, Rocks	22 Aug 2022	No Asbestos Found at RL of 0.1g/kg	<0.01
SE235945.013	TP06/0-0.1	Soil	691g Clay,Sand,Soil, Rocks	22 Aug 2022	Chrysotile Asbestos Found at RL of 0.1g/kg	>0.01
SE235945.015	TP06/0.1-0.4	Soil	658g Clay,Sand,Soil, Rocks	22 Aug 2022	No Asbestos Found at RL of 0.1g/kg	<0.01
SE235945.016	TP07/0.1-0.3	Soil	648g Clay,Sand,Soil, Rocks	22 Aug 2022	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE235945.017	TP08/0-0.1	Soil	665g Clay,Sand,Soil, Rocks	22 Aug 2022	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE235945.019	TP09/0-0.1	Soil	570g Clay,Sand,Soil, Rocks	22 Aug 2022	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE235945.021	TP10/0.0-0.1	Soil	679g Clay,Sand,Soil, Rocks	22 Aug 2022	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE235945.023	TP11/0-0.1	Soil	559g Clay,Sand,Soil, Rocks	22 Aug 2022	No Asbestos Found at RL of 0.1g/kg	<0.01
SE235945.026	TP12/0-0.1	Soil	575g Clay,Sand,Soil, Rocks	22 Aug 2022	No Asbestos Found at RL of 0.1g/kg	<0.01
SE235945.028	TP13/0-0.1	Soil	713g Clay,Sand,Soil, Rocks	22 Aug 2022	No Asbestos Found at RL of 0.1g/kg	<0.01
SE235945.030	TP14/0-0.1	Soil	570g Clay,Sand,Soil, Rocks	22 Aug 2022	No Asbestos Found at RL of 0.1g/kg	<0.01

RESULTS

Fibre Identification in soil

Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE235945.032	TP15/0-0.1	Soil	550g Clay,Sand,Soil, Rocks	22 Aug 2022	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE235945.034	TP16/0-0.1	Soil	586g Clay,Sand,Soil, Rocks	22 Aug 2022	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE235945.036	TP17/0-0.1	Soil	604g Clay,Sand,Soil, Rocks	22 Aug 2022	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE235945.038	TP18/0-0.6	Soil	502g Clay,Sand,Soil, Rocks	23 Aug 2022	Chrysotile Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	>0.01
SE235945.041	TP20/0-0.1	Soil	591g Clay,Soil,Rocks	22 Aug 2022	No Asbestos Found at RL of 0.1g/kg	<0.01
SE235945.043	TP21/0-0.9	Soil	427g Clay,Sand,Rock s	23 Aug 2022	No Asbestos Found at RL of 0.1g/kg	<0.01
SE235945.045	TP22/0-0.7	Soil	422g Clay,Sand,Rock s	23 Aug 2022	No Asbestos Found at RL of 0.1g/kg	<0.01
SE235945.048	TP24/0-0.1	Soil	703g Clay,Sand,Rock s	18 Aug 2022	No Asbestos Found at RL of 0.1g/kg	<0.01
SE235945.050	TP24/0.1-0.35	Soil	831g Clay,Sand,Rock s	18 Aug 2022	No Asbestos Found at RL of 0.1g/kg	<0.01
SE235945.051	TP25/0-0.1	Soil	586g Clay,Sand,Soil, Rocks	22 Aug 2022	No Asbestos Found at RL of 0.1g/kg	<0.01
SE235945.053	TP25/0.1-0.3	Soil	697g Clay,Sand,Soil, Rocks	22 Aug 2022	No Asbestos Found at RL of 0.1g/kg	<0.01
SE235945.054	TP26/0-0.1	Soil	632g Clay,Sand,Soil, Rocks	22 Aug 2022	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE235945.056	TP26/0.1-0.3	Soil	688g Clay,Sand,Soil, Rocks	22 Aug 2022	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE235945.057	TP27/0-0.1	Soil	633g Clay,Sand,Soil, Rocks	18 Aug 2022	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE235945.059	TP28/0-0.1	Soil	563g Clay,Sand,Rock s	18 Aug 2022	No Asbestos Found at RL of 0.1g/kg	<0.01
SE235945.062	TP29A/0.0-0.1	Soil	871g Clay,Rocks	19 Aug 2022	No Asbestos Found at RL of 0.1g/kg	<0.01
SE235945.063	TP29A/0.1-0.3	Soil	734g Clay,Rocks	19 Aug 2022	No Asbestos Found at RL of 0.1g/kg	<0.01
SE235945.064	TP30A/0-0.1	Soil	745g Clay,Sand,Rock s	19 Aug 2022	No Asbestos Found at RL of 0.1g/kg	<0.01
SE235945.066	TP30A/0.1-0.5	Soil	949g Clay,Sand,Rock s	19 Aug 2022	No Asbestos Found at RL of 0.1g/kg	<0.01
SE235945.067	TP31/0-0.1	Soil	671g Clay,Sand,Soil, Rocks	18 Aug 2022	No Asbestos Found at RL of 0.1g/kg	<0.01

RESULTS

Fibre Identification in soil — Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE235945.068	TP31/0.1-0.3	Soil	600g Clay,Sand,Soil, Rocks	18 Aug 2022	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE235945.069	TP32/0-0.1	Soil	619g Clay,Sand,Soil, Rocks	18 Aug 2022	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE235945.070	TP32/0.1-0.3	Soil	612g Clay,Sand,Soil, Rocks	18 Aug 2022	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE235945.071	TP33/0-0.1	Soil	868g Clay,Sand,Soil, Rocks	18 Aug 2022	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE235945.072	TP33/0.1-0.3	Soil	778g Sand,Soil,Rocks	18 Aug 2022	No Asbestos Found at RL of 0.1g/kg	<0.01
SE235945.073	TP34/0-0.1	Soil	703g Clay,Sand,Soil, Rocks	18 Aug 2022	No Asbestos Found at RL of 0.1g/kg	<0.01
SE235945.074	TP34/0.1-0.3	Soil	741g Clay,Sand,Soil, Rocks	18 Aug 2022	No Asbestos Found at RL of 0.1g/kg	<0.01
SE235945.075	TP35/0-0.1	Soil	687g Sand,Soil,Rocks	18 Aug 2022	No Asbestos Found at RL of 0.1g/kg	<0.01
SE235945.077	TP35/0.1-0.4	Soil	934g Clay,Sand,Soil, Rocks	18 Aug 2022	No Asbestos Found at RL of 0.1g/kg	<0.01
SE235945.078	TP36/0-0.1	Soil	836g Clay,Sand,Soil, Rocks	18 Aug 2022	Chrysotile Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	>0.01
SE235945.080	TP36/0.1-0.4	Soil	778g Clay,Sand,Soil, Rocks	18 Aug 2022	Chrysotile Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	>0.01
SE235945.081	TP37 0-0.1	Soil	902g Clay,Sand,Soil, Rocks	19 Aug 2022	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE235945.083	TP37/0.1-0.45	Soil	977g Clay,Sand,Soil, Rocks	19 Aug 2022	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE235945.084	TP38/0-0.1	Soil	990g Clay,Sand,Soil, Rocks	19 Aug 2022	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE235945.086	TP38/0.1-0.4	Soil	1141g Clay,Rocks	19 Aug 2022	No Asbestos Found at RL of 0.1g/kg	<0.01
SE235945.087	TP39/0-0.1	Soil	728g Clay,Sand,Soil, Rocks	19 Aug 2022	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 2/9/2022

PARAMETER	UOM	LOR	TP01/0-0.1 SOIL - 18/8/2022 SE235945.001	TP01/0.1-0.3 SOIL - 18/8/2022 SE235945.002	TP02/0-0.1 SOIL - 18/8/2022 SE235945.003	TP02/0.1-0.3_bag SOIL - 18/8/2022 SE235945.005	TP03/0-0.0.1 SOIL - 18/8/2022 SE235945.006
Total Sample Weight*	g	1	**567**	**845**	**683**	**655**	**612**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	NAD	NAD	NAD	NAD	NAD

PARAMETER	UOM	LOR	TP03/0.1-0.3 SOIL - 18/8/2022 SE235945.007	TP04/0-0.1 SOIL - 22/8/2022 SE235945.008	TP05/0-0.1 SOIL - 22/8/2022 SE235945.010	TP05/0.1-0.3 SOIL - 22/8/2022 SE235945.012	TP06/0-0.1 SOIL - 22/8/2022 SE235945.013
Total Sample Weight*	g	1	**771**	**720**	**710**	**690**	**691**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	**5.94**
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	**0.0768**
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	**0.13**
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	**0.011**
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	**0.011**
Fibre Type*	No unit	-	NAD	NAD	NAD	NAD	Chrysotile

PARAMETER	UOM	LOR	TP06/0.1-0.4 SOIL - 22/8/2022 SE235945.015	TP07/0.1-0.3 SOIL - 22/8/2022 SE235945.016	TP08/0-0.1 SOIL - 22/8/2022 SE235945.017	TP09/0-0.1 SOIL - 22/8/2022 SE235945.019	TP10/0.0-0.1 SOIL - 22/8/2022 SE235945.021
Total Sample Weight*	g	1	**658**	**648**	**665**	**570**	**679**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	**0.00710**	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	**0.001**	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	**0.001**	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	Chrysotile	NAD	NAD	NAD	NAD

PARAMETER	UOM	LOR	TP11/0-0.1 SOIL - 22/8/2022 SE235945.023	TP12/0-0.1 SOIL - 22/8/2022 SE235945.026	TP13/0-0.1 SOIL - 22/8/2022 SE235945.028	TP14/0-0.1 SOIL - 22/8/2022 SE235945.030	TP15/0-0.1 SOIL - 22/8/2022 SE235945.032
Total Sample Weight*	g	1	**559**	**575**	**713**	**570**	**550**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	NAD	NAD	NAD	NAD	NAD

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 2/9/2022 (continued)

PARAMETER	UOM	LOR	TP16/0-0.1 SOIL - 22/8/2022 SE235945.034	TP17/0-0.1 SOIL - 22/8/2022 SE235945.036	TP18/0-0.6 SOIL - 23/8/2022 SE235945.038	TP20/0-0.1 SOIL - 22/8/2022 SE235945.041	TP21/0-0.9 SOIL - 23/8/2022 SE235945.043
Total Sample Weight*	g	1	**586**	**604**	**502**	**591**	**427**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	**0.0778**	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	**0.015**	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	**0.015**	<0.001	<0.001
Fibre Type*	No unit	-	NAD	NAD	Chrysotile	NAD	NAD

PARAMETER	UOM	LOR	TP22/0-0.7 SOIL - 23/8/2022 SE235945.045	TP24/0-0.1 SOIL - 18/8/2022 SE235945.048	TP24/0.1-0.35 SOIL - 18/8/2022 SE235945.050	TP25/0-0.1 SOIL - 22/8/2022 SE235945.051	TP25/0.1-0.3 SOIL - 22/8/2022 SE235945.053
Total Sample Weight*	g	1	**422**	**703**	**831**	**586**	**697**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	NAD	NAD	NAD	NAD	NAD

PARAMETER	UOM	LOR	TP26/0-0.1 SOIL - 22/8/2022 SE235945.054	TP26/0.1-0.3 SOIL - 22/8/2022 SE235945.056	TP27/0-0.1 SOIL - 18/8/2022 SE235945.057	TP28/0-0.1 SOIL - 18/8/2022 SE235945.059	TP28/0.1-0.4 SOIL - 18/8/2022 SE235945.061
Total Sample Weight*	g	1	**632**	**688**	**633**	**563**	IS
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	IS
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	IS
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	IS
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	IS
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	IS
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	IS
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	IS
Fibre Type*	No unit	-	NAD	NAD	NAD	NAD	IS

PARAMETER	UOM	LOR	TP29A/0.0-0.1 SOIL - 19/8/2022 SE235945.062	TP29A/0.1-0.3 SOIL - 19/8/2022 SE235945.063	TP30A/0-0.1 SOIL - 19/8/2022 SE235945.064	TP30A/0.1-0.5 SOIL - 19/8/2022 SE235945.066	TP31/0-0.1 SOIL - 18/8/2022 SE235945.067
Total Sample Weight*	g	1	**871**	**734**	**745**	**949**	**671**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	NAD	NAD	NAD	NAD	NAD

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 2/9/2022 (continued)

PARAMETER	UOM	LOR	TP31/0.1-0.3 SOIL - 18/8/2022 SE235945.068	TP32/0-0.1 SOIL - 18/8/2022 SE235945.069	TP32/0.1-0.3 SOIL - 18/8/2022 SE235945.070	TP33/0-0.1 SOIL - 18/8/2022 SE235945.071	TP33/0.1-0.3 SOIL - 18/8/2022 SE235945.072
Total Sample Weight*	g	1	**600**	**619**	**612**	**868**	**778**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	NAD	NAD	NAD	NAD	NAD

PARAMETER	UOM	LOR	TP34/0-0.1 SOIL - 18/8/2022 SE235945.073	TP34/0.1-0.3 SOIL - 18/8/2022 SE235945.074	TP35/0-0.1 SOIL - 18/8/2022 SE235945.075	TP35/0.1-0.4 SOIL - 18/8/2022 SE235945.077	TP36/0-0.1 SOIL - 18/8/2022 SE235945.078
Total Sample Weight*	g	1	**703**	**741**	**687**	**934**	**836**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	**0.617**
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	**0.074**
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	**0.074**
Fibre Type*	No unit	-	NAD	NAD	NAD	NAD	Chrysotile

PARAMETER	UOM	LOR	TP36/0.1-0.4 SOIL - 18/8/2022 SE235945.080	TP37 0-0.1 SOIL - 19/8/2022 SE235945.081	TP37/0.1-0.45 SOIL - 19/8/2022 SE235945.083	TP38/0-0.1 SOIL - 19/8/2022 SE235945.084	TP38/0.1-0.4 SOIL - 19/8/2022 SE235945.086
Total Sample Weight*	g	1	**778**	**902**	**977**	**990**	**1141**
Bonded ACM in >7mm Sample*	g	0.001	**0.704**	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	**0.208**	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	**0.01**	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	**0.027**	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	**0.027**	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	Chrysotile	NAD	NAD	NAD	NAD

PARAMETER	UOM	LOR	TP39/0-0.1 SOIL - 19/8/2022 SE235945.087
Total Sample Weight*	g	1	**728**
Bonded ACM in >7mm Sample*	g	0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001
Fibre Type*	No unit	-	NAD

METHOD	METHODOLOGY SUMMARY
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples , Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection/reporting limit (RL) of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602	The sample can be reported “no asbestos found at the reporting limit (RL) of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable ’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.
AN605	This technique gravimetrically determines the mass of Bonded Asbestos Containing Material retained on a 7mm Sieve and assumes that 15% of this ACM is asbestos. This calculated asbestos weight is then calculated as a percentage of the total sample weight. Any fibrous asbestos (FA) found in this fraction will be added to the 2-7mm fraction and its mass recorded there.
AN605	This technique also gravimetrically determines the mass of Fibrous Asbestos (FA) and Asbestos Fines (AF) Containing Material retained on and passing a 2mm sieve post 7mm sieving. Assumes that FA and AF are 100% asbestos containing. This calculated asbestos weight is then calculated as a percentage of the total sample weight. This does not include free/respirable fibres which are only observed by standard trace analysis as per AN602.
AN605	Bonded asbestos containing material (Bonded ACM) comprises asbestos-containing-material which is sound in condition. Fibrous asbestos (FA) comprises friable asbestos material and includes severely weathered cement sheet, insulation products and woven asbestos material. Asbestos fines (AF) includes free fibres, small fibre bundles and also small fragments of bonded ACM that passes through a 7mm sieve - which implies that the bonded ACM fragments have a substantial degree of damage which increases the potential for fibre release.
AN-605	Insofar as is technically feasible, this report is consistent with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment Remediation and Management of Asbestos - Contaminated Sites in Western Australia - May 2009 and NEPM 1999 (2013) schedule B1 section 4..

FOOTNOTES

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

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

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

Where reported: 'Asbestos Detected': Asbestos detected by polarised light microscopy, including dispersion staining.
Where reported: 'No Asbestos Found': No Asbestos Found by polarised light microscopy, including dispersion staining.
Where reported: 'UMF Detected': Mineral fibres of unknown type detected by polarised light microscopy, including dispersion staining. Confirmation by another independent analytical technique may be necessary.

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

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

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	Admin
Client	SGS I&E SYDNEY
Address	5058 201 I&E HSE SYDNEY (EX 5258) UNIT 16 33 MADDOX STREET ALEXANDRIA NSW 2015
Telephone	0285940400
Facsimile	0285940499
Email	au.environmental.sydney@sgs.com
Project	**10791.EV.P.323 249-271Railway Terrace**
Order Number	**SE235945**
Samples	87

LABORATORY DETAILS

Manager	Anthony Nilsson
Laboratory	SGS Cairns Environmental
Address	Unit 2, 58 Comport St Portsmith QLD 4870
Telephone	+61 07 4035 5111
Facsimile	+61 07 4035 5122
Email	AU.Environmental.Cairns@sgs.com
SGS Reference	**CE161506 R0**
Date Received	02 Sep 2022
Date Reported	08 Sep 2022

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(3146/19038)

SIGNATORIES

Anthony NILSSON
Operations Manager

Jon DICKER
Manager Northern QLD

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name CE161506.001 Soil 18 Aug 2022 SE235945.001	CE161506.002 Soil 18 Aug 2022 SE235945.002	CE161506.003 Soil 18 Aug 2022 SE235945.003	CE161506.004 Soil 18 Aug 2022 SE235945.004
Moisture Content Method: AN002 Tested: 5/9/2022						
% Moisture	%w/w	1	-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 8/9/2022						
Passing 75µm	%w/w	1	-	-	-	-
Retained 75µm	%w/w	1	-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 8/9/2022						
Clay (<0.002mm)	%w/w	0.1	-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name CE161506.005 Soil 18 Aug 2022 SE235945.005	CE161506.006 Soil 18 Aug 2022 SE235945.006	CE161506.007 Soil 18 Aug 2022 SE235945.007	CE161506.008 Soil 22 Aug 2022 SE235945.008
Moisture Content Method: AN002 Tested: 5/9/2022						
% Moisture	%w/w	1	-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 8/9/2022						
Passing 75µm	%w/w	1	-	-	-	-
Retained 75µm	%w/w	1	-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 8/9/2022						
Clay (<0.002mm)	%w/w	0.1	-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name CE161506.009 Soil 22 Aug 2022 SE235945.009	CE161506.010 Soil 22 Aug 2022 SE235945.010	CE161506.011 Soil 22 Aug 2022 SE235945.011	CE161506.012 Soil 22 Aug 2022 SE235945.012
Moisture Content Method: AN002 Tested: 5/9/2022						
% Moisture	%w/w	1	-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 8/9/2022						
Passing 75µm	%w/w	1	-	-	-	-
Retained 75µm	%w/w	1	-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 8/9/2022						
Clay (<0.002mm)	%w/w	0.1	-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name CE161506.013 Soil 22 Aug 2022 SE235945.013	CE161506.014 Soil 22 Aug 2022 SE235945.014	CE161506.015 Soil 22 Aug 2022 SE235945.015	CE161506.016 Soil 22 Aug 2022 SE235945.016
Moisture Content Method: AN002 Tested: 5/9/2022						
% Moisture	%w/w	1	-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 8/9/2022						
Passing 75µm	%w/w	1	-	-	-	-
Retained 75µm	%w/w	1	-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 8/9/2022						
Clay (<0.002mm)	%w/w	0.1	-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name CE161506.017 Soil 22 Aug 2022 SE235945.017	CE161506.018 Soil 22 Aug 2022 SE235945.018	CE161506.019 Soil 22 Aug 2022 SE235945.019	CE161506.020 Soil 22 Aug 2022 SE235945.020
Moisture Content Method: AN002 Tested: 5/9/2022						
% Moisture	%w/w	1	-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 8/9/2022						
Passing 75µm	%w/w	1	-	-	-	-
Retained 75µm	%w/w	1	-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 8/9/2022						
Clay (<0.002mm)	%w/w	0.1	-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name CE161506.021 Soil 22 Aug 2022 SE235945.021	CE161506.022 Soil 22 Aug 2022 SE235945.022	CE161506.023 Soil 22 Aug 2022 SE235945.023	CE161506.024 Soil 22 Aug 2022 SE235945.024
Moisture Content Method: AN002 Tested: 5/9/2022						
% Moisture	%w/w	1	-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 8/9/2022						
Passing 75µm	%w/w	1	-	-	-	-
Retained 75µm	%w/w	1	-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 8/9/2022						
Clay (<0.002mm)	%w/w	0.1	-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name CE161506.025 Soil 22 Aug 2022 SE235945.025	CE161506.026 Soil 22 Aug 2022 SE235945.026	CE161506.027 Soil 22 Aug 2022 SE235945.027	CE161506.028 Soil 22 Aug 2022 SE235945.028
Moisture Content Method: AN002 Tested: 2/9/2022						
% Moisture	%w/w	1	**15**	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 8/9/2022						
Passing 75µm	%w/w	1	**78**	-	-	-
Retained 75µm	%w/w	1	**22**	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 2/9/2022						
Clay (<0.002mm)	%w/w	0.1	**32**	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name CE161506.029 Soil 22 Aug 2022 SE235945.029	CE161506.030 Soil 22 Aug 2022 SE235945.030	CE161506.031 Soil 22 Aug 2022 SE235945.031	CE161506.032 Soil 22 Aug 2022 SE235945.032
Moisture Content Method: AN002 Tested: 5/9/2022						
% Moisture	%w/w	1	-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 8/9/2022						
Passing 75µm	%w/w	1	-	-	-	-
Retained 75µm	%w/w	1	-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 8/9/2022						
Clay (<0.002mm)	%w/w	0.1	-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name CE161506.033 Soil 22 Aug 2022 SE235945.033	CE161506.034 Soil 22 Aug 2022 SE235945.034	CE161506.035 Soil 22 Aug 2022 SE235945.035	CE161506.036 Soil 22 Aug 2022 SE235945.036
Moisture Content Method: AN002 Tested: 5/9/2022						
% Moisture	%w/w	1	-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 8/9/2022						
Passing 75µm	%w/w	1	-	-	-	-
Retained 75µm	%w/w	1	-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 8/9/2022						
Clay (<0.002mm)	%w/w	0.1	-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name CE161506.037 Soil 22 Aug 2022 SE235945.037	CE161506.038 Soil 23 Aug 2022 SE235945.038	CE161506.039 Soil 23 Aug 2022 SE235945.039	CE161506.040 Soil 23 Aug 2022 SE235945.040
Moisture Content Method: AN002 Tested: 5/9/2022						
% Moisture	%w/w	1	-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 8/9/2022						
Passing 75µm	%w/w	1	-	-	-	-
Retained 75µm	%w/w	1	-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 8/9/2022						
Clay (<0.002mm)	%w/w	0.1	-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name CE161506.041 Soil 22 Aug 2022 SE235945.041	CE161506.042 Soil 22 Aug 2022 SE235945.042	CE161506.043 Soil 23 Aug 2022 SE235945.043	CE161506.044 Soil 23 Aug 2022 SE235945.044
Moisture Content Method: AN002 Tested: 5/9/2022						
% Moisture	%w/w	1	-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 8/9/2022						
Passing 75µm	%w/w	1	-	-	-	-
Retained 75µm	%w/w	1	-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 8/9/2022						
Clay (<0.002mm)	%w/w	0.1	-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE161506.045 Soil 23 Aug 2022 SE235945.045	CE161506.046 Soil 23 Aug 2022 SE235945.046	CE161506.047 Soil 23 Aug 2022 SE235945.047	CE161506.048 Soil 22 Aug 2022 SE235945.048
Moisture Content Method: AN002 Tested: 5/9/2022							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 8/9/2022							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 8/9/2022							
Clay (<0.002mm)	%w/w	0.1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE161506.049 Soil 18 Aug 2022 SE235945.049	CE161506.050 Soil 18 Aug 2022 SE235945.050	CE161506.051 Soil 18 Aug 2022 SE235945.051	CE161506.052 Soil 22 Aug 2022 SE235945.052
Moisture Content Method: AN002 Tested: 5/9/2022							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 8/9/2022							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 8/9/2022							
Clay (<0.002mm)	%w/w	0.1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name CE161506.053 Soil 22 Aug 2022 SE235945.053	CE161506.054 Soil 22 Aug 2022 SE235945.054	CE161506.055 Soil 22 Aug 2022 SE235945.055	CE161506.056 Soil 22 Aug 2022 SE235945.056
Moisture Content Method: AN002 Tested: 5/9/2022						
% Moisture	%w/w	1	-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 8/9/2022						
Passing 75µm	%w/w	1	-	-	-	-
Retained 75µm	%w/w	1	-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 8/9/2022						
Clay (<0.002mm)	%w/w	0.1	-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE161506.057 Soil 18 Aug 2022 SE235945.057	CE161506.058 Soil 18 Aug 2022 SE235945.058	CE161506.059 Soil 18 Aug 2022 SE235945.059	CE161506.060 Soil 18 Aug 2022 SE235945.060
Moisture Content Method: AN002 Tested: 5/9/2022							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 8/9/2022							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 8/9/2022							
Clay (<0.002mm)	%w/w	0.1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name CE161506.061 Soil 18 Aug 2022 SE235945.061	CE161506.062 Soil 19 Aug 2022 SE235945.062	CE161506.063 Soil 19 Aug 2022 SE235945.063	CE161506.064 Soil 19 Aug 2022 SE235945.064
Moisture Content Method: AN002 Tested: 5/9/2022						
% Moisture	%w/w	1	-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 8/9/2022						
Passing 75µm	%w/w	1	-	-	-	-
Retained 75µm	%w/w	1	-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 8/9/2022						
Clay (<0.002mm)	%w/w	0.1	-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE161506.065 Soil 19 Aug 2022 SE235945.065	CE161506.066 Soil 19 Aug 2022 SE235945.066	CE161506.067 Soil 18 Aug 2022 SE235945.067	CE161506.068 Soil 18 Aug 2022 SE235945.068
Moisture Content Method: AN002 Tested: 5/9/2022							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 8/9/2022							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 8/9/2022							
Clay (<0.002mm)	%w/w	0.1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name CE161506.069 Soil 18 Aug 2022 SE235945.069	CE161506.070 Soil 18 Aug 2022 SE235945.070	CE161506.071 Soil 18 Aug 2022 SE235945.071	CE161506.072 Soil 18 Aug 2022 SE235945.072
Moisture Content Method: AN002 Tested: 5/9/2022						
% Moisture	%w/w	1	-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 8/9/2022						
Passing 75µm	%w/w	1	-	-	-	-
Retained 75µm	%w/w	1	-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 8/9/2022						
Clay (<0.002mm)	%w/w	0.1	-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name CE161506.073 Soil 18 Aug 2022 SE235945.073	CE161506.074 Soil 18 Aug 2022 SE235945.074	CE161506.075 Soil 18 Aug 2022 SE235945.075	CE161506.076 Soil 18 Aug 2022 SE235945.076
Moisture Content Method: AN002 Tested: 5/9/2022						
% Moisture	%w/w	1	-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 8/9/2022						
Passing 75µm	%w/w	1	-	-	-	-
Retained 75µm	%w/w	1	-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 8/9/2022						
Clay (<0.002mm)	%w/w	0.1	-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE161506.077 Soil 18 Aug 2022 SE235945.077	CE161506.078 Soil 18 Aug 2022 SE235945.078	CE161506.079 Soil 18 Aug 2022 SE235945.079	CE161506.080 Soil 18 Aug 2022 SE235945.080
Moisture Content Method: AN002 Tested: 5/9/2022							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 8/9/2022							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 8/9/2022							
Clay (<0.002mm)	%w/w	0.1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name CE161506.081 Soil 19 Aug 2022 SE235945.081	CE161506.082 Soil 19 Aug 2022 SE235945.082	CE161506.083 Soil 19 Aug 2022 SE235945.083	CE161506.084 Soil 19 Aug 2022 SE235945.084
Moisture Content Method: AN002 Tested: 5/9/2022						
% Moisture	%w/w	1	-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 8/9/2022						
Passing 75µm	%w/w	1	-	-	-	-
Retained 75µm	%w/w	1	-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 8/9/2022						
Clay (<0.002mm)	%w/w	0.1	-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name CE161506.085 Soil 19 Aug 2022 SE235945.085	CE161506.086 Soil 19 Aug 2022 SE235945.086	CE161506.087 Soil 19 Aug 2022 SE235945.087
Moisture Content Method: AN002 Tested: 5/9/2022					
% Moisture	%w/w	1	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 8/9/2022					
Passing 75µm	%w/w	1	-	-	-
Retained 75µm	%w/w	1	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 8/9/2022					
Clay (<0.002mm)	%w/w	0.1	-	-	-

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage.* Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

No QC samples were reported for this job.

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN005	The particle size distribution of a soil is determined by wet sieving, using a maximum of 900 mL of deionised water to sieve all fractions down to 75 µm. Referenced to AS1289.3.6.1 and AS1141.11.
AN005	Following wet sieving of the sample,(particles smaller than 75 µm) a dispersing solution is added and a hydrometer is used to measure sedimentation. Soil density is determined and the percentage of each size fraction calculated. Referenced to AS1289.3.6.3.

FOOTNOTES

IS	Insufficient sample for analysis.	LOR	Limit of Reporting
LNR	Sample listed, but not received.	↑↓	Raised or Lowered Limit of Reporting
*	NATA accreditation does not cover the performance of this service.	QFH	QC result is above the upper tolerance
		QFL	QC result is below the lower tolerance
**	Indicative data, theoretical holding time exceeded.	-	The sample was not analysed for this analyte
***	Indicates that both * and ** apply.	NVL	Not Validated

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calcuated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

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

Symbio LABORATORIES

CERTIFICATE OF ANALYSIS

Certificate Number	S1191410 [R00]	**Page**	1/3
Client	SGS Environmental Services - Sydney	**Registering Laboratory**	Sydney
Contact	Nick Caltubiano	**Contact**	Customer Service Team
Address	16/33 Maddox St Alexandria NSW 2015	**Address**	2 Sirius Rd, Lane Cove West, NSW 2066
		Email	admin@symbiolabs.com.au
Telephone	02 8594 0400	**Telephone**	1300 703 166
Order Number	---	**Date Samples Received**	29/08/2022
Project ID	SE235945 - Soil	**Date Analysis Commenced**	29/08/2022
Sampler	Customer	**Issue Date**	02/09/2022
Client Job Reference	SE235945	**Receipt Temperature (°C)**	8.0
No. of Samples Registered	8 | Sampler: Customer	**Storage Temperature (°C)**	4.0
Priority	Normal	**Quote Number**	---

Symbio LABORATORIES Proudly AUSTRALIAN

ABN: 82 079 645 015

NATA

Accreditation No: 2455
Accredited for compliance with ISO/IEC 17025 - Testing

This report supersedes any previous revision with this reference. This document must not be reproduced, except in full. If samples were provided by the customer, results apply only to the samples 'as received' and responsibility for representative sampling rests with the customer. Water results are reported on an 'as is' basis. Soil and sediment results are reported on a 'dry weight' basis. For other matrices the basis of reporting will be confirmed in the 'Report Comments' section. Measurement Uncertainty is available upon request. If the laboratory was authorised to conduct testing on samples received outside of the specified conditions, all test results may be impacted. Details of samples received outside of the specified conditions are mentioned in the sample description section of this test report.

Definitions

| <: Less Than | >: Greater Than | RP: Result Pending | MPN: Most Probable Number | CFU: Colony Forming Units | ---: Not Received/Not Requested | NA: Not Applicable | ND: Not Detected | LOR: Limit of Reporting | [NT]: Not Tested |

| ~: Estimated | ^ Subcontracted Analysis | TBA: To Be Advised | ** Potential Holding Time Concern | * Test not covered by NATA scope of accreditation | # Result derived from a calculation and includes results equal to or greater than the LOR

Authorised By

Name	Position	Accreditation Category
Melissa Gan	Laboratory Manager – Microbiology	Environmental and Food Microbiology

Sample Information - *Client/Sampler Supplied*

Sample ID	S1191410/1	S1191410/2	S1191410/3	S1191410/4	S1191410/5
Sample Description	SE235945.068 TP31.01-0.3	SE235945.070 TP32/0.1-0.3	SE235945.072 TP33/0.1-0.3	SE235945.074 TP34/0.1-0.3	SE235945.076 TP35/0.1-0.3
Sample Date/Time	2022-08-18 00:00	2022-08-18 00:00	2022-08-18 00:00	2022-08-18 00:00	2022-08-18 00:00

Sample ID	S1191410/6	S1191410/7	S1191410/8
Sample Description	SE235945.079 TP36/0-0.2	SE235945.082 TP37/0.1-0.3	SE235945.085 TP38/0-0.2
Sample Date/Time	2022-08-18 00:00	2022-08-19 00:00	2022-08-19 00:00

Client	SGS Environmental Services - Sydney	**Project ID**	SE235945 - Soil
Certificate Number	S1191410 [R00]	**Sampler**	Customer
Page	2/3	**Order Number**	---

Analytical Results

Compound/Analyte	LOR	Units	SE235945.068 TP31.01-0.3	SE235945.070 TP32/0.1-0.3	SE235945.072 TP33/0.1-0.3	SE235945.074 TP34/0.1-0.3	SE235945.076 TP35/0.1-0.3
Client Sample Description							
Client Sampling date/time			18/08/2022 00:00	18/08/2022 00:00	18/08/2022 00:00	18/08/2022 00:00	18/08/2022 00:00
			S1191410/1	S1191410/2	S1191410/3	S1191410/4	S1191410/5
			Results	Results	Results	Results	Results
Micro General							
M8.5 - AS/NZS 4276.7							
Escherichia coli	1	CFU/100mL	<1	<1	<10	<10	<10
M8.5.1 - AS/NZS 4276.5							
Coliforms	1	CFU/100mL	2000	1000	<10	<10	20

Client	SGS Environmental Services - Sydney	**Project ID**	SE235945 - Soil
Certificate Number	S1191410 [R00]	**Sampler**	Customer
Page	3/3	**Order Number**	---

Analytical Results

Compound/Analyte	LOR	Units	SE235945.079 TP36/0-0.2	SE235945.082 TP37/0.1-0.3	SE235945.085 TP38/0-0.2
Client Sample Description					
Client Sampling date/time			18/08/2022 00:00	19/08/2022 00:00	19/08/2022 00:00
			S1191410/6	S1191410/7	S1191410/8
			Results	Results	Results
Micro General					
M8.5 - AS/NZS 4276.7					
Escherichia coli	1	CFU/100mL	<10	<10	<1
M8.5.1 - AS/NZS 4276.5					
Coliforms	1	CFU/100mL	<10	<10	80

Analysis Location

All in-house analysis was completed by Symbio Laboratories - Sydney.

E-MAILED 25/8 @ 2:17pm

CHAIN OF CUSTODY - SGS

SGS EHS Sydney COC

SE235946

Client: Construction Sciences Pty Ltd	Client Project Name / Number / Site etc (ie report title): 10791.EV.P.323 - 249-271 Railway Terrace, Schofields
Contact person: Joshua Nito, Abanish Nepal	PO No.: Const-IE-Nov21-309331V2
Project Mgr: Abanish Nepal	
Sampler: Joshua Nito	Date results required: standard
Address: 2/4 KELLOGG ROAD, ROOTY HILL NSW	Or choose: standard / same day / 1 day / 2 day / 3 day
	Note: Inform lab in advance if urgent turnaround is required - surcharge applies
Phone: 439516172 436620611	Lab comments:
Fax:	
Email: joshua.nito@constructionsciences.net; abanish.nepal@constructionsciences.net;	

Sample information					Tests Required															Comments
Client Sample ID	Date Sampled	Lab Sample ID	Type of Sample	No of Containers	CS17 (Asbestos WA w/w%)	CS10 (CL17)	CS7 (CL10)	CS12 (OC/OP)	CS21 (Clay Content %)	CS16 (Asbestos ID in Building Mat)	CS19 (E Coli)	CS20 (T Coli)	PAH	Metals (8)	pH/CEC	BTEX	HOLD			
TP51/0.1-0.3	23/08/2022		Soil	1 Bag													X			
TP51/0.3-0.5	23/08/2022		Soil	1 Jar													X			
TP52/0-0.5	23/08/2022	1	Soil	1 Bag	X															
TP52/0.3-0.05	23/08/2022	2	Soil	1 Jar		X														
TP53/0-0.7	23/08/2022		Soil	1 Bag													X			
TP53/0.5-0.7	23/08/2022	3	Soil	1 Jar									X	X						
TP54/0-1.0	23/08/2022	4	Soil	1 Bag	X															
TP54/0.8-1.0	23/08/2022	5	Soil	1 Jar		X														
TP55/0-0.9	23/08/2022		Soil	1 Bag													X			
TP55/0.7-0.9	23/08/2022	6	Soil	1 Jar									X	X						
TP56/0-0.7	23/08/2022	7	Soil	1 Bag	X															
TP56/0.5-0.7	23/08/2022	8	Soil	1 Jar		X														
TP57/0-0.1	23/08/2022	9	Soil	1 Bag	X															
TP57/0.1-0.3	23/08/2022	10	Soil	1 Bag, 1 Jar									X	X			X			Please put bag sample on HOLD, jar sample for PAH and Metals analysis
TP57/0.3-0.5	23/08/2022	[illegible]	Soil	1 Jar													X			
TP58/0-0.1	23/08/2022	[illegible]11	Soil	1 Bag	X															
TP58/0-0.2	23/08/2022	[illegible]12	Soil	1 Jar		X														
TP58/0.1-0.2	23/08/2022	[illegible]	Soil	1 Bag													X			
TP58/0.2-0.4	23/08/2022		Soil	1 Jar													X			
TP59/0-0.1	23/08/2022	13	Soil	1 Bag	X															
TP59/0.1-0.3	23/08/2022	14	Soil	1 Jar		X														
TP59/0.1-0.5	23/08/2022		Soil	1 Bag													X			
TP59/0.5-0.7	23/08/2022		Soil	1 Jar													X			
TP61/0-0.1	23/08/2022	15	Soil	1 Bag	X															
TP61/0-0.2	23/08/2022	16	Soil	1 Jar		X														
TP61/0.1-0.2	23/08/2022	17	Soil	1 Bag	X															
TP61/0.4-0.6	23/08/2022		Soil	1 Jar													X			
TP62/0-0.1	23/08/2022	18	Soil	1 Bag	X															
TP62/0-0.2	23/08/2022	19	Soil	1 Jar		X														
TP62/0.1-0.5	23/08/2022		Soil	1 Bag													X			
TP62/0.5-0.7	23/08/2022		Soil	1 Jar													X			
TP63/0-0.1	23/08/2022	20	Soil	1 Bag	X															
TP63/0-0.2	23/08/2022	21	Soil	1 Jar									X	X						
TP63/0.1-0.3	23/08/2022		Soil	1 Bag													X			
TP63/0.3-0.5	23/08/2022		Soil	1 Jar													X			
TP64/0-0.1	23/08/2022	22	Soil	1 Bag	X															
TP64/0.1-0.3	23/08/2022	23	Soil	1 Jar		X														
TP64/0.1-0.4	23/08/2022		Soil	1 Bag													X			
TP64/0.4-0.6	23/08/2022		Soil	1 Jar													X			
TP65/0-0.1	23/08/2022	24	Soil	1 Bag	X															
TP65/0-0.2	23/08/2022	25	Soil	1 Jar				X					X	X						
TP65/0.1-0.4	23/08/2022		Soil	1 Bag													X			
TP65/0.4-0.6	23/08/2022		Soil	1 Jar													X			
TP66/0-0.1	23/08/2022	26	Soil	1 Bag	X															
TP66/0-0.2	23/08/2022	27	Soil	1 Jar				X					X	X						
TP66/0.1-0.4	23/08/2022		Soil	1 Bag													X			

CHAIN OF CUSTODY - SGS

Client: Construction Sciences Pty Ltd	**Client Project Name / Number / Site etc (ie report title):** 10791.EV.P.323 - 249-271 Railway Terrace, Schofields
Contact person: Joshua Nito, Abanish Nepal	**PO No.:** Const-IE-Nov21-309331V2
Project Mgr: Abanish Nepal	
Sampler: Joshua Nito	**Date results required:** standard
Address: 2/4 KELLOGG ROAD, ROOTY HILL NSW	**Or choose:** standard / same day / 1 day / 2 day / 3 day *Note: Inform lab in advance if urgent turnaround is required - surcharge applies*
Phone: 439516172 436620611	**Lab comments:**
Fax:	
Email: joshua.nito@constructionsciences.net; abanish.nepal@constructionsciences.net;	

Sample information					Tests Required															Comments
Client Sample ID	Date Sampled	Lab Sample ID	Type of Sample	No of Containers	CS17 (Asbestos WA w/w%)	CS10 (CL17)	CS7 (CL10)	CS12 (OC/OP)	CS21 (Clay Content %)	CS16 (Asbestos ID in Building Mat)	CS19 (E Coll)	CS20 (T Coll)	PAH	Metals (8)	pH/CEC	BTEX	HOLD			
TP66/0.4-0.6	23/08/2022		Soil	1 Jar													X			
TP67/0-0.1	23/08/2022	28	Soil	1 Bag	X															
TP67/0.1-0.3	23/08/2022	29	Soil	1 Bag, 1 Jar		X														
TP67/0.3-0.6	23/08/2022		Soil	1 Jar													X			
TP68/0-0.1	23/08/2022	30	Soil	1 Bag	X															
TP68/0-0.2	23/08/2022	31	Soil	1 Jar				X					X	X						
TP68/0.1-0.4	23/08/2022		Soil	1 Bag													X			
TP68/0.4-0.6	23/08/2022		Soil	1 Jar, 1BAG													X			
TP69/0-0.1	23/08/2022	32	Soil	1 Bag	X															
TP69/0.1-0.3	23/08/2022	33	Soil	1 Jar									X	X						
TP69/0.1-0.4	23/08/2022		Soil	1 Bag													X			
TP69/0.4-0.6	23/08/2022		Soil	1 Jar													X			
TP70/0-0.1	23/08/2022	34	Soil	1 Bag	X															
TP70/0.1-0.3	23/08/2022	35	Soil	1 Bag, 1 Jar		X											X			Please put bag sample on HOLD, jar sample for CS10 analysis
TP70/0.3-0.5	23/08/2022		Soil	1 Jar, 1BAG													X			
TP71/0-0.1	23/08/2022	36	Soil	1 Bag	X															
TP71/0-0.2	23/08/2022	37	Soil	1 Jar				X					X	X						
TP71/0.1-0.2	23/08/2022		Soil	1 Bag													X			
TP71/0.2-0.4	23/08/2022		Soil	1 Jar, 1BAG													X			
TP72/0-0.1	23/08/2022	38	Soil	1 Bag	X															
TP72/0-0.2	23/08/2022	39	Soil	1 Jar				X					X	X						
TP72/0.1-0.3	23/08/2022		Soil	1 Bag													X			
TP72/0.3-0.5	23/08/2022		Soil	1 Jar, 1BAG													X			
TP36/0-0.1/PACM01	18/08/2022		Soil	1													X			
TP36/0-0.1/PACM02	18/08/2022	40	Soil	1						X										
TP33/0-0.1/PACM04	18/08/2022	41	Soil	1						X										
TP38/0-0.1/PACM05	19/08/2022		Soil	1													X			
TP37/0-0.1/PACM06	19/08/2022		Soil	1													X			
TP39/0-0.1/PACM07	19/08/2022		Soil	1													X			
TP44/0-0.1/PACM09	19/08/2022		Soil	1													X			
TP44/0-0.1/PACM10	19/08/2022		Soil	1													X			
TP44/0-0.1/PACM11	19/08/2022		Soil	1													X			
TP25/0-0.1/PACM12	22/08/2022	42	Soil	1						X										
~~TP25/0-0.1/PACM13~~	22/08/2022	42	Soil	1													X			
TP18/0-0.6/PACM14	23/08/2022	43	Soil	1						X										
TP56/0-0.7/PACM16	23/08/2022		Soil	1													X			
TP54/0-1.0/PACM17	23/08/2022		Soil	1													X			
TP54/0-1.0/PACM18	23/08/2022		Soil	1													X			
DUP01	18/08/2022	44	Soil	1 Jar										X						
DUP01A	18/08/2022		Soil	1 Jar										X						Please send to ALS
DUP02	18/08/2022	45	Soil	1 Jar									X	X						
DUP02A	18/08/2022		Soil	1 Jar									X	X						Please send to ALS
DUP03	19/08/2022	46	Soil	1 Jar										X						
DUP03A	19/08/2022		Soil	1 Jar										X						Please send to ALS
DUP05	22/08/2022	47	Soil	1 Jar													X			
DUP05A	22/08/2022		Soil	1 Jar													X			Please send to ALS

CHAIN OF CUSTODY - SGS

Client: Construction Sciences Pty Ltd	**Client Project Name / Number / Site etc (ie report title):** 10791.EV.P.323 - 249-271 Railway Terrace, Schofields
Contact person: Joshua Nito, Abanish Nepal	**PO No.:** Const-IE-Nov21-309331V2
Project Mgr: Abanish Nepal	
Sampler: Joshua Nito	**Date results required:** standard
Address: 2/4 KELLOGG ROAD, ROOTY HILL NSW	**Or choose:** standard / same day / 1 day / 2 day / 3 day *Note: Inform lab in advance if urgent turnaround is required - surcharge applies*
Phone: 439516172 436620611	**Lab comments:**
Fax:	
Email: joshua.nito@constructionsciences.net; abanish.nepal@constructionsciences.net;	

Sample information					Tests Required															Comments
Client Sample ID	Date Sampled	Lab Sample ID	Type of Sample	No of Containers	CS17 (Asbestos WA w/w%)	CS10 (CL17)	CS7 (CL10)	CS12 (OC/OP)	CS21 (Clay Content %)	CS16 (Asbestos ID in Building Mat)	CS19 (E Coli)	CS20 (T Coli)	PAH	Metals (8)	pH/CEC	BTEX	HOLD			
DUP06	23/08/2022		Soil	1 Jar													X			
DUP06A	23/08/2022		Soil	1 Jar													X			Please send to ALS
DUP07	23/08/2022	47	Soil	1 Jar									X	X						
DUP07A	23/08/2022		Soil	1 Jar									X	X						Please send to ALS
Trip Blank	18/08/2022	48	Soil	1 Vial												X				
Trip Blank	19/08/2022	49	Soil	1 Vial												X				
Trip Blank	22/08/2022	50	Soil	1 Vial												X				
Trip Blank	23/08/2022	51	Soil	1 Vial												X				
Trip Spike	18/08/2022	52	Soil	1 Vial												X				
Trip Spike	19/08/2022	53	Soil	1 Vial												X				
Trip Spike	22/08/2022	54	Soil	1 Vial												X				
Trip Spike	23/08/2022	55	Soil	1 Vial												X				

Relinquished by (company):	Construction Sciences Pty Ltd	**Received by (company):**	Silva
Print Name:	Joshua Nito	**Print Name:**	
Date & Time:	25/08/2022 (for all samples dropped 18/08/2022 - 23/08/2022)	**Date & Time:**	22/08/22 @ 6.10
Signature:	JN	**Signature:**	

Lab use only:
Samples Received: Cool or Ambient (circle one)
Temperature Received at: 10°C (if applicable)
Transported by: Hand delivered / courier

White - Lab copy / Blue - Client copy / Pink - Retain in Book Page No:

CHAIN OF CUSTODY - SGS

Client: Construction Sciences Pty Ltd	**Client Project Name / Number / Site etc (ie report title):** 10791.EV.P.323 - 249-271 Railway Terrace, Schofields
Contact person: Joshua Nito, Abanish Nepal	**PO No.:** Const-IE-Nov21-309331V2
Project Mgr: Abanish Nepal	
Sampler: Joshua Nito	**Date results required:** standard
Address: 2/4 KELLOGG ROAD, ROOTY HILL NSW	**Or choose:** standard / same day / 1 day / 2 day / 3 day
	Note: Inform lab in advance if urgent turnaround is required - surcharge applies
Phone: 439516172 436620611	**Lab comments:**
Fax:	
Email: joshua.nito@constructionsciences.net; abanish.nepal@constructionsciences.net;	

Sample information					Tests Required															Comments
Client Sample ID	Date Sampled	Lab Sample ID	Type of Sample	No of Containers	CS17 (Asbestos WA w/w%)	CS10 (CL17)	CS7 (CL10)	CS12 (OC/OP)	CS21 (Clay Content %)	CS16 (Asbestos ID in Building Mat)	CS19 (E Coli)	CS20 (T Coli)	PAH	Metals (8)	pH/CEC	BTEX	HOLD			
TP39/0-0.2	19/08/2022	56	Soil	2 Jars				x			x	x	x	x						
TP39/0.1-0.5	19/08/2022	57	Soil	1 Bag	x															
TP39/0.5-0.7	19/08/2022	~~58~~	Soil	1 Jar													x			
TP40/0-0.1	19/08/2022	58	Soil	1 Bag	x															
TP40/0-0.2	19/08/2022	59	Soil	1 Jar		x														
TP40/0.1-0.5	19/08/2022	a	Soil	1 Bag													x			
TP40/0.5-0.7	19/08/2022		Soil	1 Jar													x			
TP41/0-0.1	19/08/2022	60	Soil	1 Bag	x															
TP41/0-0.2	19/08/2022	61	Soil	1 Jar									x	x						
TP41/0.1-0.3	19/08/2022		Soil	1 Bag													x			
TP41/0.3-0.5	19/08/2022	62	Soil	1 Jar										x	x					
TP42/0-0.1	19/08/2022	63	Soil	1 Bag	x															
TP42/0-0.2	19/08/2022	64	Soil	1 Jar									x	x						
TP42/0.1-0.3	19/08/2022		Soil	1 Bag													x			
TP42/0.3-0.5	19/08/2022		Soil	1 Jar													x			
TP43/0-0.1	19/08/2022	65	Soil	1 Bag	x															
TP43/0-0.2	19/08/2022	66	Soil	1 Jar									x	x						
TP43/0.1-0.3	19/08/2022		Soil	1 Bag													x			
TP43/0.3-0.5	19/08/2022		Soil	1 Jar													x			
TP44/0-0.1	19/08/2022	67	Soil	1 Bag	x															
TP44/0-0.2	19/08/2022	68	Soil	1 Jar		x														
TP44/0.1-0.4	19/08/2022	69	Soil	1 Bag					x											
TP44/0.4-0.6	19/08/2022		Soil	1 Jar													x			
TP45/0-0.1	19/08/2022	70	Soil	1 Bag	x															
TP45/0-0.2	19/08/2022	71	Soil	1 Jar									x	x						
TP45/0.1-0.3	19/08/2022		Soil	1 Bag													x			
TP45/0.3-0.5	19/08/2022		Soil	1 Jar													x			
TP46/0-0.1	19/08/2022	72	Soil	1 Bag	x															
TP46/0-0.2	19/08/2022	73	Soil	1 Jar		x														
TP46/0.1-0.3	19/08/2022		Soil	1 Bag													x			
TP46/0.3-0.5	19/08/2022		Soil	1 Jar													x			
TP47/0-0.1	19/08/2022	74	Soil	1 Bag, 1 Jar	x								x	x						
TP470.1-0.2	19/08/2022		Soil	1 Bag													x			
TP47/0.2-0.4	19/08/2022		Soil	1 Jar													x			
TP48/0-0.1	23/08/2022	75	Soil	1 Bag	x															
TP48/0.1-0.3	23/08/2022	76	Soil	1 Bag, 1 Jar		x											x			Please put bag sample on HOLD, jar sample for CS10 analysis
TP48/0.3-0.5	23/08/2022		Soil	1 Bag, 1 Jar													x			
TP49/0-0.1	23/08/2022	77	Soil	1 Bag	x															
TP49/0.1-0.3	23/08/2022	78	Soil	1 Bag, 1 Jar	x	x														
TP49/0.3-0.5	23/08/2022		Soil	1 Jar													x			
TP50/0-0.1	23/08/2022	79	Soil	1 Bag	x															
TP50/0-0.2	23/08/2022	80	Soil	1 Jar									x	x						
TP50/0.1-0.2	23/08/2022		Soil	1 Bag													x			
TP50/0.2-0.4	23/08/2022	81	Soil	1 Jar					x					x	x					Metals and pH/CEC for jar, CS21 for bag
TP51/0-0.1	23/08/2022	82	Soil	1 Bag	x															
TP51/0-0.2	23/08/2022	83	Soil	1 Jar		x														

Yin, Emily (Sydney)

From: Joshua Nito <joshua.nito@constructionsciences.net>
Sent: Friday, 26 August 2022 3:28 PM
To: AU.Environmental.Sydney (Sydney)
Cc: AU.SampleReceipt.Sydney (Sydney)
Subject: RE: [EXTERNAL] COC - 10791.EV.P.323 - 249-271 Railway Terrace, Schofields

Hi Huong and SGS Sample Receipt,

I had just noticed a slight error on the COC issued to you guys for yesterday on our end. Could I please be able to amend the following analysis for this specific sample:

- TP25/0-0.1/PACM12 was selected for CS17 analysis. Could this be amended to put this on hold, and instead apply CS17 analysis for TP25/0.1-0.3/PACM13 please?

Let me know if I need to reissue the COC for this change, and if the above change could still be accommodated at this stage.

Kind Regards,

Joshua Nito
Graduate Environmental Engineer

Construction Sciences

Direct +61 439 516 172 **Head Office** +61 1300 165 769 **Mobile** +61 439 516 172
Address Unit 2, 4 Kellogg Road, Rooty Hill, NSW 2766
Email joshua.nito@constructionsciences.net **Web** www.constructionsciences.net

From: AU.Environmental.Sydney (Sydney) <AU.Environmental.Sydney@sgs.com>
Sent: Thursday, 25 August 2022 5:34 PM
To: Joshua Nito <joshua.nito@constructionsciences.net>
Cc: AU.SampleReceipt.Sydney (Sydney) <AU.SampleReceipt.Sydney@sgs.com>; AU.Environmental.Sydney (Sydney) <AU.Environmental.Sydney@sgs.com>; Abanish Nepal <abanish.nepal@constructionsciences.net>
Subject: FW: [EXTERNAL] COC - 10791.EV.P.323 - 249-271 Railway Terrace, Schofields

Hi Joshua,

As discussed, the attached job is quite large, there would be issue with reporting if we don't split the report into 2 separate jobs, please see below for our suggestion:

Page 1-4 as 1st report (end with TP51/0-0.2)

Page 5-7 as 2nd report (start with TP51/0.1-0.3)

SAMPLE RECEIPT ADVICE

SE235946

CLIENT DETAILS

Contact	Abanish Nepal
Client	CONSTRUCTION SCIENCES PTY LTD
Address	2/4 KELLOGG RD ROOTY HILL NSW 2766
Telephone	0436 620 611
Facsimile	02 8438 0310
Email	Abanish.Nepal@constructionsciences.net
Project	**10791.EV.P.323 249-271Railway Terrace**
Order Number	**10791.EV.P.323**
Samples	83

LABORATORY DETAILS

Manager	Huong Crawford
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Tue 23/8/2022
Report Due	Mon 5/9/2022
SGS Reference	**SE235946**

SUBMISSION DETAILS

This is to confirm that 83 samples were received on Tuesday 23/8/2022. Results are expected to be ready by COB Monday 5/9/2022. Please quote SGS reference SE235946 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice Bricks
Samples received in correct containers	Yes	Sample counts by matrix	79 Soil, 4 Material
Date documentation received	25/8/2022@2:17pm	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	10°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

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

COMMENTS

Micro subcontracted to Symbio Laboratories, 2 Sirius Road, Lane Cove West NSW 2066, NATA Accreditation Number 2455.
Clay Content subcontracted to SGS Cairns, 2/58 Comport St, Portsmith QLD 4870, NATA Accreditation Number: 2562, Site Number: 3146.
61 samples have been placed on hold as no tests have been assigned for them by the client. These samples will not be processed.
Extra sample TP35/0-0.1/PACM3 and TP41/0-0.1/PACM4.

SAMPLE RECEIPT ADVICE

SE235946

CLIENT DETAILS

Client CONSTRUCTION SCIENCES PTY LTD

Project 10791.EV.P.323 249-271Railway Terrace

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
002	TP52/0.3-0.5	30	14	26	11	10	11	7
003	TP53/0.5-0.7	-	-	26	-	-	-	-
005	TP54/0.8-1.0	30	14	26	11	10	11	7
006	TP55/0.7-0.9	-	-	26	-	-	-	-
008	TP56/0.5-0.7	30	14	26	11	10	11	7
010	TP57/0.1-0.3	-	-	26	-	-	-	-
012	TP58/0-0.2	30	14	26	11	10	11	7
014	TP59/0.1-0.3	30	14	26	11	10	11	7
016	TP61/0-0.2	30	14	26	11	10	11	7
019	TP62/0-0.2	30	14	26	11	10	11	7
021	TP63/0-0.2	-	-	26	-	-	-	-
023	TP64/0.1-0.3	30	14	26	11	10	11	7

CONTINUED OVERLEAF

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

SAMPLE RECEIPT ADVICE

SE235946

CLIENT DETAILS

Client CONSTRUCTION SCIENCES PTY LTD

Project 10791.EV.P.323 249-271Railway Terrace

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
025	TP65/0-0.2	30	14	26	-	-	-	-
027	TP66/0-0.2	30	14	26	-	-	-	-
029	TP67/0.1-0.3	30	14	26	11	10	11	7
031	TP68/0-0.2	30	14	26	-	-	-	-
033	TP69/0.1-0.3	-	-	26	-	-	-	-
035	TP70/0.1-0.3	30	14	26	11	10	11	7
037	TP71/0-0.2	30	14	26	-	-	-	-
039	TP72/0-0.2	30	14	26	-	-	-	-
045	DUP02	-	-	26	-	-	-	-
047	DUP07	-	-	26	-	-	-	-
048	Trip Blank	-	-	-	-	-	11	-

CONTINUED OVERLEAF

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

SAMPLE RECEIPT ADVICE

SE235946

CLIENT DETAILS

Client CONSTRUCTION SCIENCES PTY LTD

Project 10791.EV.P.323 249-271Railway Terrace

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	pH in soil (1:5)	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
049	Trip Blank	-	-	-	-	-	-	11	-
050	Trip Blank	-	-	-	-	-	-	11	-
051	Trip Blank	-	-	-	-	-	-	11	-
052	Trip Spike	-	-	-	-	-	-	11	-
053	Trip Spike	-	-	-	-	-	-	11	-
054	Trip Spike	-	-	-	-	-	-	11	-
055	Trip Spike	-	-	-	-	-	-	11	-
056	TP39/0-0.2	30	14	26	-	-	-	-	-
059	TP40/0.0-0.2	30	14	26	11	-	10	11	7
061	TP41/0-0.2	-	-	26	-	-	-	-	-
062	TP41/0.3-0.5	-	-	-	-	1	-	-	-
064	TP42/0-0.2	-	-	26	-	-	-	-	-
066	TP43/0-0.2	-	-	26	-	-	-	-	-
068	TP44/0-0.2	30	14	26	11	-	10	11	7
071	TP45/0-0.2	-	-	26	-	-	-	-	-

CONTINUED OVERLEAF

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

SAMPLE RECEIPT ADVICE

SE235946

CLIENT DETAILS

Client CONSTRUCTION SCIENCES PTY LTD

Project 10791.EV.P.323 249-271Railway Terrace

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	pH in soil (1:5)	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
073	TP46/0-0.2	30	14	26	11	-	10	11	7
074	TP47/0-0.1	-	-	26	-	-	-	-	-
076	TP48/0.1-0.3	30	14	26	11	-	10	11	7
078	TP49/0.1-0.3	30	14	26	11	-	10	11	7
080	TP50/0-0.2	-	-	26	-	-	-	-	-
081	TP50/0.2-0.4	-	-	-	-	1	-	-	-
083	TP51/0-0.2	30	14	26	11	-	10	11	7

CONTINUED OVERLEAF

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

SAMPLE RECEIPT ADVICE

SE235946

CLIENT DETAILS

Client CONSTRUCTION SCIENCES PTY LTD

Project 10791.EV.P.323 249-271Railway Terrace

SUMMARY OF ANALYSIS

No.	Sample ID	Fibre Identification in soil	Gravimetric Determination of Asbestos in Soil	Mercury in Soil	Moisture Content	Total Recoverable Elements in Soil/Waste
001	TP52/0-0.5	2	9	-	-	-
002	TP52/0.3-0.5	-	-	1	1	7
003	TP53/0.5-0.7	-	-	1	1	7
004	TP54/0-0.1	2	9	-	-	-
005	TP54/0.8-1.0	-	-	1	1	7
006	TP55/0.7-0.9	-	-	1	1	7
007	TP56/0-0.7	2	9	-	-	-
008	TP56/0.5-0.7	-	-	1	1	7
009	TP57/0-0.1	2	9	-	-	-
010	TP57/0.1-0.3	-	-	1	1	7
011	TP58/0-0.1	2	9	-	-	-
012	TP58/0-0.2	-	-	1	1	7
013	TP59/0-0.1	2	9	-	-	-
014	TP59/0.1-0.3	-	-	1	1	7
015	TP61/0-0.1	2	9	-	-	-
016	TP61/0-0.2	-	-	1	1	7
017	TP61/0.1-0.2	2	9	-	-	-
018	TP62/0-0.1	2	9	-	-	-
019	TP62/0-0.2	-	-	1	1	7
020	TP63/0-0.1	2	9	-	-	-
021	TP63/0-0.2	-	-	1	1	7
022	TP64/0-0.1	2	9	-	-	-
023	TP64/0.1-0.3	-	-	1	1	7
024	TP65/0-0.1	2	9	-	-	-

CONTINUED OVERLEAF

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

SAMPLE RECEIPT ADVICE

SE235946

CLIENT DETAILS

Client CONSTRUCTION SCIENCES PTY LTD

Project 10791.EV.P.323 249-271Railway Terrace

SUMMARY OF ANALYSIS

No.	Sample ID	Fibre ID in bulk materials	Fibre Identification in soil	Gravimetric Determination of Asbestos in Soil	Mercury in Soil	Moisture Content	Total Recoverable Elements in Soil/Waste
025	TP65/0-0.2	-	-	-	1	1	7
026	TP66/0-0.1	-	2	9	-	-	-
027	TP66/0-0.2	-	-	-	1	1	7
028	TP67/0-0.1	-	2	9	-	-	-
029	TP67/0.1-0.3	-	-	-	1	1	7
030	TP68/0-0.1	-	2	9	-	-	-
031	TP68/0-0.2	-	-	-	1	1	7
032	TP69/0-0.1	-	2	9	-	-	-
033	TP69/0.1-0.3	-	-	-	1	1	7
034	TP70/0-0.1	-	2	9	-	-	-
035	TP70/0.1-0.3	-	-	-	1	1	7
036	TP71/0-0.1	-	2	9	-	-	-
037	TP71/0-0.2	-	-	-	1	1	7
038	TP72/0-0.1	-	2	9	-	-	-
039	TP72/0-0.2	-	-	-	1	1	7
040	TP36/0-0.1/PACM02	1	-	-	-	-	-
041	TP33/0-0.1/PACM04	1	-	-	-	-	-
042	TP25/0.1-0.3/PACM13	1	-	-	-	-	-
043	TP18/0-0.6/PACM14	1	-	-	-	-	-
044	DUP01	-	-	-	1	1	7
045	DUP02	-	-	-	1	1	7
046	DUP03	-	-	-	1	1	7
047	DUP07	-	-	-	1	1	7
048	Trip Blank	-	-	-	-	1	-

CONTINUED OVERLEAF

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

SAMPLE RECEIPT ADVICE

SE235946

CLIENT DETAILS

Client CONSTRUCTION SCIENCES PTY LTD

Project 10791.EV.P.323 249-271Railway Terrace

SUMMARY OF ANALYSIS

No.	Sample ID	Exchangeable Cations and Cation Exchange Capacity	Fibre Identification in soil	Gravimetric Determination of Asbestos in Soil	Mercury in Soil	Moisture Content	Total Recoverable Elements in Soil/Waste
049	Trip Blank	-	-	-	-	1	-
050	Trip Blank	-	-	-	-	1	-
051	Trip Blank	-	-	-	-	1	-
056	TP39/0-0.2	-	-	-	1	1	7
057	TP39/0.1-0.5	-	2	9	-	-	-
058	TP40/0-0.1	-	2	9	-	-	-
059	TP40/0.0-0.2	-	-	-	1	1	7
060	TP41/0-0.1	-	2	9	-	-	-
061	TP41/0-0.2	-	-	-	1	1	7
062	TP41/0.3-0.5	13	-	-	1	1	7
063	TP42/0-0.1	-	2	9	-	-	-
064	TP42/0-0.2	-	-	-	1	1	7
065	TP43/0-0.1	-	2	9	-	-	-
066	TP43/0-0.2	-	-	-	1	1	7
067	TP44/0-0.1	-	2	9	-	-	-
068	TP44/0-0.2	-	-	-	1	1	7
070	TP45/0-0.1	-	2	9	-	-	-
071	TP45/0-0.2	-	-	-	1	1	7
072	TP46/0-0.1	-	2	9	-	-	-

CONTINUED OVERLEAF

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

SAMPLE RECEIPT ADVICE

SE235946

CLIENT DETAILS

Client CONSTRUCTION SCIENCES PTY LTD

Project 10791.EV.P.323 249-271Railway Terrace

SUMMARY OF ANALYSIS

No.	Sample ID	Exchangeable Cations and Cation Exchange Capacity	Fibre Identification in soil	Gravimetric Determination of Asbestos in Soil	Mercury in Soil	Moisture Content	Total Recoverable Elements in Soil/Waste
073	TP46/0-0.2	-	-	-	1	1	7
074	TP47/0-0.1	-	2	9	1	1	7
075	TP48/0-0.1	-	2	9	-	-	-
076	TP48/0.1-0.3	-	-	-	1	1	7
077	TP49/0-0.1	-	2	9	-	-	-
078	TP49/0.1-0.3	-	2	9	1	1	7
079	TP50/0-0.1	-	2	9	-	-	-
080	TP50/0-0.2	-	-	-	1	1	7
081	TP50/0.2-0.4	13	-	-	1	1	7
082	TP51/0-0.1	-	2	9	-	-	-
083	TP51/0-0.2	-	-	-	1	1	7

CONTINUED OVERLEAF

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

SAMPLE RECEIPT ADVICE

SE235946

CLIENT DETAILS

Client CONSTRUCTION SCIENCES PTY LTD

Project 10791.EV.P.323 249-271Railway Terrace

SUMMARY OF ANALYSIS

No.	Sample ID	Particle sizing of soils <75µm by hydrometer	Particle sizing of soils by sieving	Sample Subcontracted
056	TP39/0-0.2	-	-	1
069	TP44/0.1-0.4	1	2	-

CONTINUED OVERLEAF

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

SAMPLE RECEIPT ADVICE

SE235946

CLIENT DETAILS

Client CONSTRUCTION SCIENCES PTY LTD

Project 10791.EV.P.323 249-271Railway Terrace

SUMMARY OF ANALYSIS

No.	Sample ID	Particle sizing of soils <75µm by hydrometer	Particle sizing of soils by sieving
081	TP50/0.2-0.4	1	2

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

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	Abanish Nepal
Client	CONSTRUCTION SCIENCES PTY LTD
Address	2/4 KELLOGG RD ROOTY HILL NSW 2766
Telephone	0436 620 611
Facsimile	02 8438 0310
Email	Abanish.Nepal@constructionsciences.net
Project	**10791.EV.P.323 249-271Railway Terrace**
Order Number	**10791.EV.P.323**
Samples	83

LABORATORY DETAILS

Manager	Huong Crawford
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE235946 R0**
Date Received	23/8/2022
Date Reported	8/9/2022

COMMENTS

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

Micro subcontracted to Symbio Laboratories, 2 Sirius Road, Lane Cove West NSW 2066, NATA Accreditation Number 2455. Report No. S1191408.
Clay Content subcontracted to SGS Cairns, 2/58 Comport St, Portsmith QLD 4870, NATA Accreditation Number: 2562, Site Number: 3146. Report No. CE161505.

No respirable fibres detected in all soil samples using trace analysis technique.
Sample # 40 : No trace asbestos fibres detected using trace analysis technique.
Sample # 43 : Asbestos found in approx 75x35x3mm cement sheet fragments x2.
Sample # 63 : Asbestos found in approx 50x12x4mm cement sheet fragment.
Asbestos analysed by Approved Identifiers Ravee Sivasubramaniam and Yusuf Kuthpudin .

SIGNATORIES

Akheeqar BENIAMEEN
Chemist

Dong LIANG
Metals/Inorganics Team Leader

Huong CRAWFORD
Production Manager

Kamrul AHSAN
Senior Chemist

Ly Kim HA
Organic Section Head

Ravee SIVASUBRAMANIAM
Hygiene Team Leader

VOC's in Soil [AN433] Tested: 31/8/2022

PARAMETER	UOM	LOR	TP52/0.3-0.5 SOIL - 23/8/2022 SE235946.002	TP54/0.8-1.0 SOIL - 23/8/2022 SE235946.005	TP56/0.5-0.7 SOIL - 23/8/2022 SE235946.008	TP58/0-0.2 SOIL - 23/8/2022 SE235946.012	TP59/0.1-0.3 SOIL - 23/8/2022 SE235946.014
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Naphthalene (VOC)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1

PARAMETER	UOM	LOR	TP61/0-0.2 SOIL - 23/8/2022 SE235946.016	TP62/0-0.2 SOIL - 23/8/2022 SE235946.019	TP64/0.1-0.3 SOIL - 23/8/2022 SE235946.023	TP67/0.1-0.3 SOIL - 23/8/2022 SE235946.029	TP70/0.1-0.3 SOIL - 23/8/2022 SE235946.035
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Naphthalene (VOC)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1

PARAMETER	UOM	LOR	Trip Blank SOIL - 18/8/2022 SE235946.048	Trip Blank SOIL - 19/8/2022 SE235946.049	Trip Blank SOIL - 22/8/2022 SE235946.050	Trip Blank SOIL - 23/8/2022 SE235946.051	Trip Spike SOIL - 18/8/2022 SE235946.052
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	[101%]
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	[103%]
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	[104%]
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	[104%]
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	[104%]
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	-
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	-
Naphthalene (VOC)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-

PARAMETER	UOM	LOR	Trip Spike SOIL - 19/8/2022 SE235946.053	Trip Spike SOIL - 22/8/2022 SE235946.054	Trip Spike SOIL - 23/8/2022 SE235946.055	TP40/0.0-0.2 SOIL - 19/8/2022 SE235946.059	TP44/0-0.2 SOIL - 19/8/2022 SE235946.068
Benzene	mg/kg	0.1	[87%]	[128%]	[85%]	<0.1	<0.1
Toluene	mg/kg	0.1	[97%]	[124%]	[91%]	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	[96%]	[121%]	[92%]	<0.1	<0.1
m/p-xylene	mg/kg	0.2	[96%]	[128%]	[92%]	<0.2	<0.2
o-xylene	mg/kg	0.1	[97%]	[125%]	[93%]	<0.1	<0.1
Total Xylenes	mg/kg	0.3	-	-	-	<0.3	<0.3
Total BTEX	mg/kg	0.6	-	-	-	<0.6	<0.6
Naphthalene (VOC)	mg/kg	0.1	-	-	-	<0.1	<0.1

VOC's in Soil [AN433] Tested: 31/8/2022 (continued)

PARAMETER	UOM	LOR	TP46/0-0.2 SOIL - 19/8/2022 SE235946.073	TP48/0.1-0.3 SOIL - 23/8/2022 SE235946.076	TP49/0.1-0.3 SOIL - 23/8/2022 SE235946.078	TP51/0-0.2 SOIL - 23/8/2022 SE235946.083
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6
Naphthalene (VOC)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 31/8/2022

PARAMETER	UOM	LOR	TP52/0.3-0.5 SOIL - 23/8/2022 SE235946.002	TP54/0.8-1.0 SOIL - 23/8/2022 SE235946.005	TP56/0.5-0.7 SOIL - 23/8/2022 SE235946.008	TP58/0-0.2 SOIL - 23/8/2022 SE235946.012	TP59/0.1-0.3 SOIL - 23/8/2022 SE235946.014
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	TP61/0-0.2 SOIL - 23/8/2022 SE235946.016	TP62/0-0.2 SOIL - 23/8/2022 SE235946.019	TP64/0.1-0.3 SOIL - 23/8/2022 SE235946.023	TP67/0.1-0.3 SOIL - 23/8/2022 SE235946.029	TP70/0.1-0.3 SOIL - 23/8/2022 SE235946.035
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	TP40/0.0-0.2 SOIL - 19/8/2022 SE235946.059	TP44/0-0.2 SOIL - 19/8/2022 SE235946.068	TP46/0-0.2 SOIL - 19/8/2022 SE235946.073	TP48/0.1-0.3 SOIL - 23/8/2022 SE235946.076	TP49/0.1-0.3 SOIL - 23/8/2022 SE235946.078
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	TP51/0-0.2 SOIL - 23/8/2022 SE235946.083
TRH C6-C9	mg/kg	20	<20
Benzene (F0)	mg/kg	0.1	<0.1
TRH C6-C10	mg/kg	25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 31/8/2022

PARAMETER	UOM	LOR	TP52/0.3-0.5 SOIL - 23/8/2022 SE235946.002	TP54/0.8-1.0 SOIL - 23/8/2022 SE235946.005	TP56/0.5-0.7 SOIL - 23/8/2022 SE235946.008	TP58/0-0.2 SOIL - 23/8/2022 SE235946.012	TP59/0.1-0.3 SOIL - 23/8/2022 SE235946.014
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	65	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	TP61/0-0.2 SOIL - 23/8/2022 SE235946.016	TP62/0-0.2 SOIL - 23/8/2022 SE235946.019	TP64/0.1-0.3 SOIL - 23/8/2022 SE235946.023	TP67/0.1-0.3 SOIL - 23/8/2022 SE235946.029	TP70/0.1-0.3 SOIL - 23/8/2022 SE235946.035
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	TP40/0.0-0.2 SOIL - 19/8/2022 SE235946.059	TP44/0-0.2 SOIL - 19/8/2022 SE235946.068	TP46/0-0.2 SOIL - 19/8/2022 SE235946.073	TP48/0.1-0.3 SOIL - 23/8/2022 SE235946.076	TP49/0.1-0.3 SOIL - 23/8/2022 SE235946.078
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 31/8/2022 (continued)

PARAMETER	UOM	LOR	TP51/0-0.2 SOIL - 23/8/2022 SE235946.083
TRH C10-C14	mg/kg	20	<20
TRH C15-C28	mg/kg	45	<45
TRH C29-C36	mg/kg	45	<45
TRH C37-C40	mg/kg	100	<100
TRH >C10-C16	mg/kg	25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120
TRH C10-C36 Total	mg/kg	110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 31/8/2022

PARAMETER	UOM	LOR	TP52/0.3-0.5 SOIL - 23/8/2022 SE235946.002	TP53/0.5-0.7 SOIL - 23/8/2022 SE235946.003	TP54/0.8-1.0 SOIL - 23/8/2022 SE235946.005	TP55/0.7-0.9 SOIL - 23/8/2022 SE235946.006	TP56/0.5-0.7 SOIL - 23/8/2022 SE235946.008
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PARAMETER	UOM	LOR	TP57/0.1-0.3 SOIL - 23/8/2022 SE235946.010	TP58/0-0.2 SOIL - 23/8/2022 SE235946.012	TP59/0.1-0.3 SOIL - 23/8/2022 SE235946.014	TP61/0-0.2 SOIL - 23/8/2022 SE235946.016	TP62/0-0.2 SOIL - 23/8/2022 SE235946.019
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 31/8/2022 (continued)

PARAMETER	UOM	LOR	TP63/0-0.2 SOIL - 23/8/2022 SE235946.021	TP64/0.1-0.3 SOIL - 23/8/2022 SE235946.023	TP65/0-0.2 SOIL - 23/8/2022 SE235946.025	TP66/0-0.2 SOIL - 23/8/2022 SE235946.027	TP67/0.1-0.3 SOIL - 23/8/2022 SE235946.029
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PARAMETER	UOM	LOR	TP68/0-0.2 SOIL - 23/8/2022 SE235946.031	TP69/0.1-0.3 SOIL - 23/8/2022 SE235946.033	TP70/0.1-0.3 SOIL - 23/8/2022 SE235946.035	TP71/0-0.2 SOIL - 23/8/2022 SE235946.037	TP72/0-0.2 SOIL - 23/8/2022 SE235946.039
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 31/8/2022 (continued)

PARAMETER	UOM	LOR	DUP02 SOIL - 18/8/2022 SE235946.045	DUP07 SOIL - 23/8/2022 SE235946.047	TP39/0-0.2 SOIL - 19/8/2022 SE235946.056	TP40/0.0-0.2 SOIL - 19/8/2022 SE235946.059	TP41/0-0.2 SOIL - 19/8/2022 SE235946.061
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PARAMETER	UOM	LOR	TP42/0-0.2 SOIL - 19/8/2022 SE235946.064	TP43/0-0.2 SOIL - 19/8/2022 SE235946.066	TP44/0-0.2 SOIL - 19/8/2022 SE235946.068	TP45/0-0.2 SOIL - 19/8/2022 SE235946.071	TP46/0-0.2 SOIL - 19/8/2022 SE235946.073
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 31/8/2022 (continued)

PARAMETER	UOM	LOR	TP47/0-0.1 SOIL - 19/8/2022 SE235946.074	TP48/0.1-0.3 SOIL - 23/8/2022 SE235946.076	TP49/0.1-0.3 SOIL - 23/8/2022 SE235946.078	TP50/0-0.2 SOIL - 23/8/2022 SE235946.080	TP51/0-0.2 SOIL - 23/8/2022 SE235946.083
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

OC Pesticides in Soil [AN420] Tested: 31/8/2022

PARAMETER	UOM	LOR	TP52/0.3-0.5 SOIL - 23/8/2022 SE235946.002	TP54/0.8-1.0 SOIL - 23/8/2022 SE235946.005	TP56/0.5-0.7 SOIL - 23/8/2022 SE235946.008	TP58/0-0.2 SOIL - 23/8/2022 SE235946.012	TP59/0.1-0.3 SOIL - 23/8/2022 SE235946.014
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	**0.3**
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1
Total OC VIC EPA	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 31/8/2022 (continued)

PARAMETER	UOM	LOR	TP61/0-0.2 SOIL - 23/8/2022 SE235946.016	TP62/0-0.2 SOIL - 23/8/2022 SE235946.019	TP64/0.1-0.3 SOIL - 23/8/2022 SE235946.023	TP65/0-0.2 SOIL - 23/8/2022 SE235946.025	TP66/0-0.2 SOIL - 23/8/2022 SE235946.027
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	**0.1**	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1
Total OC VIC EPA	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 31/8/2022 (continued)

PARAMETER	UOM	LOR	TP67/0.1-0.3 SOIL - 23/8/2022 SE235946.029	TP68/0-0.2 SOIL - 23/8/2022 SE235946.031	TP70/0.1-0.3 SOIL - 23/8/2022 SE235946.035	TP71/0-0.2 SOIL - 23/8/2022 SE235946.037	TP72/0-0.2 SOIL - 23/8/2022 SE235946.039
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	**0.5**	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	**0.1**	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1
Total OC VIC EPA	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 31/8/2022 (continued)

PARAMETER	UOM	LOR	TP39/0-0.2 SOIL - 19/8/2022 SE235946.056	TP40/0.0-0.2 SOIL - 19/8/2022 SE235946.059	TP44/0-0.2 SOIL - 19/8/2022 SE235946.068	TP46/0-0.2 SOIL - 19/8/2022 SE235946.073	TP48/0.1-0.3 SOIL - 23/8/2022 SE235946.076
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1
Total OC VIC EPA	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 31/8/2022 (continued)

PARAMETER	UOM	LOR	TP49/0.1-0.3 SOIL - 23/8/2022 SE235946.078	TP51/0-0.2 SOIL - 23/8/2022 SE235946.083
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1
Total OC VIC EPA	mg/kg	1	<1	<1

OP Pesticides in Soil [AN420] Tested: 31/8/2022

PARAMETER	UOM	LOR	TP52/0.3-0.5 SOIL - 23/8/2022 SE235946.002	TP54/0.8-1.0 SOIL - 23/8/2022 SE235946.005	TP56/0.5-0.7 SOIL - 23/8/2022 SE235946.008	TP58/0-0.2 SOIL - 23/8/2022 SE235946.012	TP59/0.1-0.3 SOIL - 23/8/2022 SE235946.014
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	TP61/0-0.2 SOIL - 23/8/2022 SE235946.016	TP62/0-0.2 SOIL - 23/8/2022 SE235946.019	TP64/0.1-0.3 SOIL - 23/8/2022 SE235946.023	TP65/0-0.2 SOIL - 23/8/2022 SE235946.025	TP66/0-0.2 SOIL - 23/8/2022 SE235946.027
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	TP67/0.1-0.3 SOIL - 23/8/2022 SE235946.029	TP68/0-0.2 SOIL - 23/8/2022 SE235946.031	TP70/0.1-0.3 SOIL - 23/8/2022 SE235946.035	TP71/0-0.2 SOIL - 23/8/2022 SE235946.037	TP72/0-0.2 SOIL - 23/8/2022 SE235946.039
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

OP Pesticides in Soil [AN420] Tested: 31/8/2022 (continued)

PARAMETER	UOM	LOR	TP39/0-0.2 SOIL - 19/8/2022 SE235946.056	TP40/0.0-0.2 SOIL - 19/8/2022 SE235946.059	TP44/0-0.2 SOIL - 19/8/2022 SE235946.068	TP46/0-0.2 SOIL - 19/8/2022 SE235946.073	TP48/0.1-0.3 SOIL - 23/8/2022 SE235946.076
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	TP49/0.1-0.3 SOIL - 23/8/2022 SE235946.078	TP51/0-0.2 SOIL - 23/8/2022 SE235946.083
Dichlorvos	mg/kg	0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7

PCBs in Soil [AN420] Tested: 31/8/2022

PARAMETER	UOM	LOR	TP52/0.3-0.5 SOIL - 23/8/2022 SE235946.002	TP54/0.8-1.0 SOIL - 23/8/2022 SE235946.005	TP56/0.5-0.7 SOIL - 23/8/2022 SE235946.008	TP58/0-0.2 SOIL - 23/8/2022 SE235946.012	TP59/0.1-0.3 SOIL - 23/8/2022 SE235946.014
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	TP61/0-0.2 SOIL - 23/8/2022 SE235946.016	TP62/0-0.2 SOIL - 23/8/2022 SE235946.019	TP64/0.1-0.3 SOIL - 23/8/2022 SE235946.023	TP67/0.1-0.3 SOIL - 23/8/2022 SE235946.029	TP70/0.1-0.3 SOIL - 23/8/2022 SE235946.035
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	TP40/0.0-0.2 SOIL - 19/8/2022 SE235946.059	TP44/0-0.2 SOIL - 19/8/2022 SE235946.068	TP46/0-0.2 SOIL - 19/8/2022 SE235946.073	TP48/0.1-0.3 SOIL - 23/8/2022 SE235946.076	TP49/0.1-0.3 SOIL - 23/8/2022 SE235946.078
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PCBs in Soil [AN420] Tested: 31/8/2022 (continued)

PARAMETER	UOM	LOR	TP51/0-0.2 SOIL - 23/8/2022 SE235946.083
Arochlor 1016	mg/kg	0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1

pH in soil (1:5) [AN101] Tested: 5/9/2022

PARAMETER	UOM	LOR	TP41/0.3-0.5 SOIL - 19/8/2022 SE235946.062	TP50/0.2-0.4 SOIL - 23/8/2022 SE235946.081
pH	pH Units	0.1	**5.7**	**5.8**

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR) [AN122] Tested: 5/9/2022

PARAMETER	UOM	LOR	TP41/0.3-0.5 SOIL - 19/8/2022 SE235946.062	TP50/0.2-0.4 SOIL - 23/8/2022 SE235946.081
Exchangeable Calcium, Ca	mg/kg	2	1300	590
Exchangeable Calcium, Ca	meq/100g	0.01	6.5	3.0
Exchangeable Calcium Percentage*	%	0.1	61.8	26.9
Exchangeable Potassium, K	mg/kg	2	130	110
Exchangeable Potassium, K	meq/100g	0.01	0.34	0.28
Exchangeable Potassium Percentage*	%	0.1	3.3	2.5
Exchangeable Magnesium, Mg	mg/kg	2	400	830
Exchangeable Magnesium, Mg	meq/100g	0.02	3.3	6.8
Exchangeable Magnesium Percentage*	%	0.1	31.1	61.8
Exchangeable Sodium, Na	mg/kg	2	91	220
Exchangeable Sodium, Na	meq/100g	0.01	0.39	0.97
Exchangeable Sodium Percentage*	%	0.1	3.8	8.8
Cation Exchange Capacity	meq/100g	0.02	10	11

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 31/8/2022

PARAMETER	UOM	LOR	TP52/0.3-0.5 SOIL - 23/8/2022 SE235946.002	TP53/0.5-0.7 SOIL - 23/8/2022 SE235946.003	TP54/0.8-1.0 SOIL - 23/8/2022 SE235946.005	TP55/0.7-0.9 SOIL - 23/8/2022 SE235946.006	TP56/0.5-0.7 SOIL - 23/8/2022 SE235946.008
Arsenic, As	mg/kg	1	7	12	6	9	9
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	11	17	15	15	11
Copper, Cu	mg/kg	0.5	12	16	9.5	16	16
Lead, Pb	mg/kg	1	17	51	34	17	15
Nickel, Ni	mg/kg	0.5	3.9	11	4.8	3.3	4.0
Zinc, Zn	mg/kg	2	26	89	31	24	25

PARAMETER	UOM	LOR	TP57/0.1-0.3 SOIL - 23/8/2022 SE235946.010	TP58/0-0.2 SOIL - 23/8/2022 SE235946.012	TP59/0.1-0.3 SOIL - 23/8/2022 SE235946.014	TP61/0-0.2 SOIL - 23/8/2022 SE235946.016	TP62/0-0.2 SOIL - 23/8/2022 SE235946.019
Arsenic, As	mg/kg	1	9	16	33	7	10
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	8.9	22	14	14	14
Copper, Cu	mg/kg	0.5	16	16	18	8.0	23
Lead, Pb	mg/kg	1	30	23	21	22	36
Nickel, Ni	mg/kg	0.5	7.9	11	6.9	3.2	8.4
Zinc, Zn	mg/kg	2	38	52	40	46	140

PARAMETER	UOM	LOR	TP63/0-0.2 SOIL - 23/8/2022 SE235946.021	TP64/0.1-0.3 SOIL - 23/8/2022 SE235946.023	TP65/0-0.2 SOIL - 23/8/2022 SE235946.025	TP66/0-0.2 SOIL - 23/8/2022 SE235946.027	TP67/0.1-0.3 SOIL - 23/8/2022 SE235946.029
Arsenic, As	mg/kg	1	9	11	10	8	13
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	11	18	14	5.9	16
Copper, Cu	mg/kg	0.5	27	11	13	13	11
Lead, Pb	mg/kg	1	27	23	22	8	29
Nickel, Ni	mg/kg	0.5	8.7	9.1	7.1	3.2	7.8
Zinc, Zn	mg/kg	2	63	33	46	20	21

PARAMETER	UOM	LOR	TP68/0-0.2 SOIL - 23/8/2022 SE235946.031	TP69/0.1-0.3 SOIL - 23/8/2022 SE235946.033	TP70/0.1-0.3 SOIL - 23/8/2022 SE235946.035	TP71/0-0.2 SOIL - 23/8/2022 SE235946.037	TP72/0-0.2 SOIL - 23/8/2022 SE235946.039
Arsenic, As	mg/kg	1	15	7	12	9	14
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	16	13	11	14	12
Copper, Cu	mg/kg	0.5	16	22	16	10	18
Lead, Pb	mg/kg	1	26	43	16	22	28
Nickel, Ni	mg/kg	0.5	9.2	4.2	4.7	6.4	7.6
Zinc, Zn	mg/kg	2	60	95	20	22	44

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 31/8/2022

(continued)

PARAMETER	UOM	LOR	DUP01 SOIL - 18/8/2022 SE235946.044	DUP02 SOIL - 18/8/2022 SE235946.045	DUP03 SOIL - 19/8/2022 SE235946.046	DUP07 SOIL - 23/8/2022 SE235946.047	TP39/0-0.2 SOIL - 19/8/2022 SE235946.056
Arsenic, As	mg/kg	1	8	12	10	8	8
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	0.4
Chromium, Cr	mg/kg	0.5	17	12	11	9.8	15
Copper, Cu	mg/kg	0.5	4.7	11	15	14	94
Lead, Pb	mg/kg	1	22	11	26	18	110
Nickel, Ni	mg/kg	0.5	3.5	1.5	6.0	3.6	7.9
Zinc, Zn	mg/kg	2	25	16	67	990	410

PARAMETER	UOM	LOR	TP40/0.0-0.2 SOIL - 19/8/2022 SE235946.059	TP41/0-0.2 SOIL - 19/8/2022 SE235946.061	TP41/0.3-0.5 SOIL - 19/8/2022 SE235946.062	TP42/0-0.2 SOIL - 19/8/2022 SE235946.064	TP43/0-0.2 SOIL - 19/8/2022 SE235946.066
Arsenic, As	mg/kg	1	8	8	7	7	17
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	14	15	11	15	17
Copper, Cu	mg/kg	0.5	26	21	17	31	33
Lead, Pb	mg/kg	1	130	28	14	32	26
Nickel, Ni	mg/kg	0.5	6.5	5.8	4.7	7.6	5.5
Zinc, Zn	mg/kg	2	440	75	43	140	72

PARAMETER	UOM	LOR	TP44/0-0.2 SOIL - 19/8/2022 SE235946.068	TP45/0-0.2 SOIL - 19/8/2022 SE235946.071	TP46/0-0.2 SOIL - 19/8/2022 SE235946.073	TP47/0-0.1 SOIL - 19/8/2022 SE235946.074	TP48/0.1-0.3 SOIL - 23/8/2022 SE235946.076
Arsenic, As	mg/kg	1	8	7	8	10	13
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	16	17	8.2	14	13
Copper, Cu	mg/kg	0.5	41	8.5	14	12	14
Lead, Pb	mg/kg	1	38	22	24	26	26
Nickel, Ni	mg/kg	0.5	9.1	6.0	4.8	5.9	5.6
Zinc, Zn	mg/kg	2	120	40	65	44	50

PARAMETER	UOM	LOR	TP49/0.1-0.3 SOIL - 23/8/2022 SE235946.078	TP50/0-0.2 SOIL - 23/8/2022 SE235946.080	TP50/0.2-0.4 SOIL - 23/8/2022 SE235946.081	TP51/0-0.2 SOIL - 23/8/2022 SE235946.083
Arsenic, As	mg/kg	1	6	7	7	7
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	6.7	17	10	12
Copper, Cu	mg/kg	0.5	24	8.3	11	20
Lead, Pb	mg/kg	1	14	15	10	18
Nickel, Ni	mg/kg	0.5	15	5.1	1.8	5.5
Zinc, Zn	mg/kg	2	61	25	16	52

Mercury in Soil [AN312] Tested: 31/8/2022

PARAMETER	UOM	LOR	TP52/0.3-0.5 SOIL - 23/8/2022 SE235946.002	TP53/0.5-0.7 SOIL - 23/8/2022 SE235946.003	TP54/0.8-1.0 SOIL - 23/8/2022 SE235946.005	TP55/0.7-0.9 SOIL - 23/8/2022 SE235946.006	TP56/0.5-0.7 SOIL - 23/8/2022 SE235946.008
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	TP57/0.1-0.3 SOIL - 23/8/2022 SE235946.010	TP58/0-0.2 SOIL - 23/8/2022 SE235946.012	TP59/0.1-0.3 SOIL - 23/8/2022 SE235946.014	TP61/0-0.2 SOIL - 23/8/2022 SE235946.016	TP62/0-0.2 SOIL - 23/8/2022 SE235946.019
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	TP63/0-0.2 SOIL - 23/8/2022 SE235946.021	TP64/0.1-0.3 SOIL - 23/8/2022 SE235946.023	TP65/0-0.2 SOIL - 23/8/2022 SE235946.025	TP66/0-0.2 SOIL - 23/8/2022 SE235946.027	TP67/0.1-0.3 SOIL - 23/8/2022 SE235946.029
Mercury	mg/kg	0.05	**0.05**	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	TP68/0-0.2 SOIL - 23/8/2022 SE235946.031	TP69/0.1-0.3 SOIL - 23/8/2022 SE235946.033	TP70/0.1-0.3 SOIL - 23/8/2022 SE235946.035	TP71/0-0.2 SOIL - 23/8/2022 SE235946.037	TP72/0-0.2 SOIL - 23/8/2022 SE235946.039
Mercury	mg/kg	0.05	<0.05	**0.07**	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	DUP01 SOIL - 18/8/2022 SE235946.044	DUP02 SOIL - 18/8/2022 SE235946.045	DUP03 SOIL - 19/8/2022 SE235946.046	DUP07 SOIL - 23/8/2022 SE235946.047	TP39/0-0.2 SOIL - 19/8/2022 SE235946.056
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	**0.37**

PARAMETER	UOM	LOR	TP40/0.0-0.2 SOIL - 19/8/2022 SE235946.059	TP41/0-0.2 SOIL - 19/8/2022 SE235946.061	TP41/0.3-0.5 SOIL - 19/8/2022 SE235946.062	TP42/0-0.2 SOIL - 19/8/2022 SE235946.064	TP43/0-0.2 SOIL - 19/8/2022 SE235946.066
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	**0.05**	<0.05

PARAMETER	UOM	LOR	TP44/0-0.2 SOIL - 19/8/2022 SE235946.068	TP45/0-0.2 SOIL - 19/8/2022 SE235946.071	TP46/0-0.2 SOIL - 19/8/2022 SE235946.073	TP47/0-0.1 SOIL - 19/8/2022 SE235946.074	TP48/0.1-0.3 SOIL - 23/8/2022 SE235946.076
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

Mercury in Soil [AN312] Tested: 31/8/2022 (continued)

PARAMETER	UOM	LOR	TP49/0.1-0.3 SOIL - 23/8/2022 SE235946.078	TP50/0-0.2 SOIL - 23/8/2022 SE235946.080	TP50/0.2-0.4 SOIL - 23/8/2022 SE235946.081	TP51/0-0.2 SOIL - 23/8/2022 SE235946.083
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05

Moisture Content [AN002] Tested: 31/8/2022

PARAMETER	UOM	LOR	TP52/0.3-0.5 SOIL - 23/8/2022 SE235946.002	TP53/0.5-0.7 SOIL - 23/8/2022 SE235946.003	TP54/0.8-1.0 SOIL - 23/8/2022 SE235946.005	TP55/0.7-0.9 SOIL - 23/8/2022 SE235946.006	TP56/0.5-0.7 SOIL - 23/8/2022 SE235946.008
% Moisture	%w/w	1	19.7	20.0	24.2	21.8	22.4

PARAMETER	UOM	LOR	TP57/0.1-0.3 SOIL - 23/8/2022 SE235946.010	TP58/0-0.2 SOIL - 23/8/2022 SE235946.012	TP59/0.1-0.3 SOIL - 23/8/2022 SE235946.014	TP61/0-0.2 SOIL - 23/8/2022 SE235946.016	TP62/0-0.2 SOIL - 23/8/2022 SE235946.019
% Moisture	%w/w	1	27.3	20.8	16.5	20.3	16.9

PARAMETER	UOM	LOR	TP63/0-0.2 SOIL - 23/8/2022 SE235946.021	TP64/0.1-0.3 SOIL - 23/8/2022 SE235946.023	TP65/0-0.2 SOIL - 23/8/2022 SE235946.025	TP66/0-0.2 SOIL - 23/8/2022 SE235946.027	TP67/0.1-0.3 SOIL - 23/8/2022 SE235946.029
% Moisture	%w/w	1	26.7	19.4	16.6	15.5	20.0

PARAMETER	UOM	LOR	TP68/0-0.2 SOIL - 23/8/2022 SE235946.031	TP69/0.1-0.3 SOIL - 23/8/2022 SE235946.033	TP70/0.1-0.3 SOIL - 23/8/2022 SE235946.035	TP71/0-0.2 SOIL - 23/8/2022 SE235946.037	TP72/0-0.2 SOIL - 23/8/2022 SE235946.039
% Moisture	%w/w	1	15.9	18.6	12.3	10.5	21.6

PARAMETER	UOM	LOR	DUP01 SOIL - 18/8/2022 SE235946.044	DUP02 SOIL - 18/8/2022 SE235946.045	DUP03 SOIL - 19/8/2022 SE235946.046	DUP07 SOIL - 23/8/2022 SE235946.047	Trip Blank SOIL - 18/8/2022 SE235946.048
% Moisture	%w/w	1	14.6	19.1	27.1	23.9	<1.0

PARAMETER	UOM	LOR	Trip Blank SOIL - 19/8/2022 SE235946.049	Trip Blank SOIL - 22/8/2022 SE235946.050	Trip Blank SOIL - 23/8/2022 SE235946.051	TP39/0-0.2 SOIL - 19/8/2022 SE235946.056	TP40/0.0-0.2 SOIL - 19/8/2022 SE235946.059
% Moisture	%w/w	1	<1.0	<1.0	<1.0	29.0	18.8

PARAMETER	UOM	LOR	TP41/0-0.2 SOIL - 19/8/2022 SE235946.061	TP41/0.3-0.5 SOIL - 19/8/2022 SE235946.062	TP42/0-0.2 SOIL - 19/8/2022 SE235946.064	TP43/0-0.2 SOIL - 19/8/2022 SE235946.066	TP44/0-0.2 SOIL - 19/8/2022 SE235946.068
% Moisture	%w/w	1	19.2	19.7	24.5	25.4	24.6

Moisture Content [AN002] Tested: 31/8/2022 (continued)

PARAMETER	UOM	LOR	TP45/0-0.2 SOIL - 19/8/2022 SE235946.071	TP46/0-0.2 SOIL - 19/8/2022 SE235946.073	TP47/0-0.1 SOIL - 19/8/2022 SE235946.074	TP48/0.1-0.3 SOIL - 23/8/2022 SE235946.076	TP49/0.1-0.3 SOIL - 23/8/2022 SE235946.078
% Moisture	%w/w	1	14.4	27.0	24.2	20.8	10.4

PARAMETER	UOM	LOR	TP50/0-0.2 SOIL - 23/8/2022 SE235946.080	TP50/0.2-0.4 SOIL - 23/8/2022 SE235946.081	TP51/0-0.2 SOIL - 23/8/2022 SE235946.083
% Moisture	%w/w	1	18.8	19.7	28.2

Fibre Identification in soil [AN602] Tested: 5/9/2022

PARAMETER	UOM	LOR	TP52/0-0.5 SOIL - 23/8/2022 SE235946.001	TP54/0-0.1 SOIL - 23/8/2022 SE235946.004	TP56/0-0.7 SOIL - 23/8/2022 SE235946.007	TP57/0-0.1 SOIL - 23/8/2022 SE235946.009	TP58/0-0.1 SOIL - 23/8/2022 SE235946.011
Asbestos Detected	No unit	-	No	No	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

PARAMETER	UOM	LOR	TP59/0-0.1 SOIL - 23/8/2022 SE235946.013	TP61/0-0.1 SOIL - 23/8/2022 SE235946.015	TP61/0.1-0.2 SOIL - 23/8/2022 SE235946.017	TP62/0-0.1 SOIL - 23/8/2022 SE235946.018	TP63/0-0.1 SOIL - 23/8/2022 SE235946.020
Asbestos Detected	No unit	-	No	No	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

PARAMETER	UOM	LOR	TP64/0-0.1 SOIL - 23/8/2022 SE235946.022	TP65/0-0.1 SOIL - 23/8/2022 SE235946.024	TP66/0-0.1 SOIL - 23/8/2022 SE235946.026	TP67/0-0.1 SOIL - 23/8/2022 SE235946.028	TP68/0-0.1 SOIL - 23/8/2022 SE235946.030
Asbestos Detected	No unit	-	No	No	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

PARAMETER	UOM	LOR	TP69/0-0.1 SOIL - 23/8/2022 SE235946.032	TP70/0-0.1 SOIL - 23/8/2022 SE235946.034	TP71/0-0.1 SOIL - 23/8/2022 SE235946.036	TP72/0-0.1 SOIL - 23/8/2022 SE235946.038	TP39/0.1-0.5 SOIL - 19/8/2022 SE235946.057
Asbestos Detected	No unit	-	No	No	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

PARAMETER	UOM	LOR	TP40/0-0.1 SOIL - 19/8/2022 SE235946.058	TP41/0-0.1 SOIL - 19/8/2022 SE235946.060	TP42/0-0.1 SOIL - 19/8/2022 SE235946.063	TP43/0-0.1 SOIL - 19/8/2022 SE235946.065	TP44/0-0.1 SOIL - 19/8/2022 SE235946.067
Asbestos Detected	No unit	-	No	No	Yes	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	**>0.01**	<0.01	<0.01

PARAMETER	UOM	LOR	TP45/0-0.1 SOIL - 19/8/2022 SE235946.070	TP46/0-0.1 SOIL - 19/8/2022 SE235946.072	TP47/0-0.1 SOIL - 19/8/2022 SE235946.074	TP48/0-0.1 SOIL - 23/8/2022 SE235946.075	TP49/0-0.1 SOIL - 23/8/2022 SE235946.077
Asbestos Detected	No unit	-	No	No	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

PARAMETER	UOM	LOR	TP49/0.1-0.3 SOIL - 23/8/2022 SE235946.078	TP50/0-0.1 SOIL - 23/8/2022 SE235946.079	TP51/0-0.1 SOIL - 23/8/2022 SE235946.082
Asbestos Detected	No unit	-	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 5/9/2022

PARAMETER	UOM	LOR	TP52/0-0.5 SOIL - 23/8/2022 SE235946.001	TP54/0-0.1 SOIL - 23/8/2022 SE235946.004	TP56/0-0.7 SOIL - 23/8/2022 SE235946.007	TP57/0-0.1 SOIL - 23/8/2022 SE235946.009	TP58/0-0.1 SOIL - 23/8/2022 SE235946.011
Total Sample Weight*	g	1	**630**	**567**	**500**	**429**	**544**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	NAD	NAD	NAD	NAD	NAD

PARAMETER	UOM	LOR	TP59/0-0.1 SOIL - 23/8/2022 SE235946.013	TP61/0-0.1 SOIL - 23/8/2022 SE235946.015	TP61/0.1-0.2 SOIL - 23/8/2022 SE235946.017	TP62/0-0.1 SOIL - 23/8/2022 SE235946.018	TP63/0-0.1 SOIL - 23/8/2022 SE235946.020
Total Sample Weight*	g	1	**574**	**762**	**892**	**749**	**719**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	NAD	NAD	NAD	NAD	NAD

PARAMETER	UOM	LOR	TP64/0-0.1 SOIL - 23/8/2022 SE235946.022	TP65/0-0.1 SOIL - 23/8/2022 SE235946.024	TP66/0-0.1 SOIL - 23/8/2022 SE235946.026	TP67/0-0.1 SOIL - 23/8/2022 SE235946.028	TP68/0-0.1 SOIL - 23/8/2022 SE235946.030
Total Sample Weight*	g	1	**743**	**586**	**639**	**609**	**649**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	NAD	NAD	NAD	NAD	NAD

PARAMETER	UOM	LOR	TP69/0-0.1 SOIL - 23/8/2022 SE235946.032	TP70/0-0.1 SOIL - 23/8/2022 SE235946.034	TP71/0-0.1 SOIL - 23/8/2022 SE235946.036	TP72/0-0.1 SOIL - 23/8/2022 SE235946.038	TP39/0.1-0.5 SOIL - 19/8/2022 SE235946.057
Total Sample Weight*	g	1	**586**	**636**	**747**	**482**	**681**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	NAD	NAD	NAD	NAD	NAD

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 5/9/2022 (continued)

PARAMETER	UOM	LOR	TP40/0-0.1 SOIL - 19/8/2022 SE235946.058	TP41/0-0.1 SOIL - 19/8/2022 SE235946.060	TP42/0-0.1 SOIL - 19/8/2022 SE235946.063	TP43/0-0.1 SOIL - 19/8/2022 SE235946.065	TP44/0-0.1 SOIL - 19/8/2022 SE235946.067
Total Sample Weight*	g	1	**978**	**855**	**828**	**772**	**688**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	**4.85**	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	**0.09**	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	NAD	NAD	Chrysotile	NAD	NAD

PARAMETER	UOM	LOR	TP45/0-0.1 SOIL - 19/8/2022 SE235946.070	TP46/0-0.1 SOIL - 19/8/2022 SE235946.072	TP47/0-0.1 SOIL - 19/8/2022 SE235946.074	TP48/0-0.1 SOIL - 23/8/2022 SE235946.075	TP49/0-0.1 SOIL - 23/8/2022 SE235946.077
Total Sample Weight*	g	1	**896**	**742**	**591**	**613**	**570**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	NAD	NAD	NAD	NAD	NAD

PARAMETER	UOM	LOR	TP49/0.1-0.3 SOIL - 23/8/2022 SE235946.078	TP50/0-0.1 SOIL - 23/8/2022 SE235946.079	TP51/0-0.1 SOIL - 23/8/2022 SE235946.082
Total Sample Weight*	g	1	**562**	**525**	**330**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	NAD	NAD	NAD

Fibre ID in bulk materials [AN602] Tested: 5/9/2022

PARAMETER	UOM	LOR	TP36/0-0.1/PACM02 MATERIAL - 18/8/2022 SE235946.040	TP33/0-0.1/PACM04 MATERIAL - 18/8/2022 SE235946.041	TP25/0.1-0.3/PACM1 MATERIAL - 22/8/2022 SE235946.042	TP18/0-0.6/PACM14 MATERIAL - 23/8/2022 SE235946.043
Asbestos Detected	No unit	-	No	Yes	Yes	Yes

Particle sizing of soils by sieving [AN005] Tested: 8/9/2022

PARAMETER	UOM	LOR	TP44/0.1-0.4 SOIL - 19/8/2022 SE235946.069	TP50/0.2-0.4 SOIL - 23/8/2022 SE235946.081
Passing 75µm*	%w/w	1	**71**	**87**
Retained 75µm*	%w/w	1	**29**	**13**

Particle sizing of soils <75µm by hydrometer [AN005] Tested: 8/9/2022

PARAMETER	UOM	LOR	TP44/0.1-0.4 SOIL - 19/8/2022 SE235946.069	TP50/0.2-0.4 SOIL - 23/8/2022 SE235946.081
Clay (<0.002mm)*	%w/w	0.1	**12**	**22**

Sample Subcontracted [] Tested: 30/8/2022

PARAMETER	UOM	LOR	TP39/0-0.2 SOIL - 19/8/2022 SE235946.056
Sample Subcontracted*	No unit	-	Symbio

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN005	The particle size distribution of a soil is determined by wet sieving, using a maximum of 900 mL of deionised water to sieve all fractions down to 75 µm. Referenced to AS1289.3.6.1 and AS1141.11.
AN005	Following wet sieving of the sample,(particles smaller than 75 µm) a dispersing solution is added and a hydrometer is used to measure sedimentation. Soil density is determined and the percentage of each size fraction calculated. Referenced to AS1289.3.6.3.
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by ASS or ICP as per USEPA Method 200.8.
AN101	pH in Soil Sludge Sediment and Water: pH is measured electrometrically using a combination electrode and is calibrated against 3 buffers purchased commercially. For soils, sediments and sludges, an extract with water (or 0.01M CaCl2) is made at a ratio of 1:5 and the pH determined and reported on the extract. Reference APHA 4500-H+.
AN122	Exchangeable Cations, CEC and ESP: Soil sample is extracted in 1M Ammonium Acetate at pH=7 (or 1M Ammonium Chloride at pH=7) with cations (Na, K, Ca & Mg) then determined by ICP OES/ICP MS and reported as Exchangeable Cations. For saline soils, these results can be corrected for water soluble cations and reported as Exchangeable cations in meq/100g or soil can be pre-treated (aqueous ethanol/aqueous glycerol) prior to extraction. Cation Exchange Capacity (CEC) is the sum of the exchangeable cations in meq/100g.
AN122	The Exchangeable Sodium Percentage (ESP) is calculated as the exchangeable sodium divided by the CEC (all in meq/100g) times 100. ESP can be used to categorise the sodicity of the soil as below: ESP < 6% non-sodic ESP 6-15% sodic ESP >15% strongly sodic Method is referenced to Rayment and Lyons, 2011, sections 15D3 and 15N1.-
AN312	Mercury by Cold Vapour AAS in Soils: After digestion with nitric acid, hydrogen peroxide and hydrochloric acid, mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). F2 is reported directly and also corrected by subtracting Naphthalene (from VOC method AN433) where available.
AN403	Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Recoverable Hydrocarbons - Silica (TRH-Si) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents .
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D). Total PAH calculated from individual analyte detections at or above the limit of reporting .
AN420	SVOC Compounds: Semi-Volatile Organic Compounds (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC`s are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.

AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples, Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection/reporting limit (RL) of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602	The sample can be reported “no asbestos found at the reporting limit (RL) of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.
AN605	This technique gravimetrically determines the mass of Bonded Asbestos Containing Material retained on a 7mm Sieve and assumes that 15% of this ACM is asbestos. This calculated asbestos weight is then calculated as a percentage of the total sample weight. Any fibrous asbestos (FA) found in this fraction will be added to the 2-7mm fraction and its mass recorded there.
AN605	This technique also gravimetrically determines the mass of Fibrous Asbestos (FA) and Asbestos Fines (AF) Containing Material retained on and passing a 2mm sieve post 7mm sieving. Assumes that FA and AF are 100% asbestos containing. This calculated asbestos weight is then calculated as a percentage of the total sample weight. This does not include free/respirable fibres which are only observed by standard trace analysis as per AN602.
AN605	Bonded asbestos containing material (Bonded ACM) comprises asbestos-containing-material which is sound in condition. Fibrous asbestos (FA) comprises friable asbestos material and includes severely weathered cement sheet, insulation products and woven asbestos material. Asbestos fines (AF) includes free fibres, small fibre bundles and also small fragments of bonded ACM that passes through a 7mm sieve - which implies that the bonded ACM fragments have a substantial degree of damage which increases the potential for fibre release.
AN-605	Insofar as is technically feasible, this report is consistent with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment Remediation and Management of Asbestos - Contaminated Sites in Western Australia - May 2009 and NEPM 1999 (2013) schedule B1 section 4..

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		
***	Indicates that both * and ** apply.				

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

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

STATEMENT OF QA/QC PERFORMANCE

SE235946 R0

CLIENT DETAILS

Contact	Abanish Nepal
Client	CONSTRUCTION SCIENCES PTY LTD
Address	2/4 KELLOGG RD ROOTY HILL NSW 2766
Telephone	0436 620 611
Facsimile	02 8438 0310
Email	Abanish.Nepal@constructionsciences.net
Project	**10791.EV.P.323 249-271Railway Terrace**
Order Number	**10791.EV.P.323**
Samples	83

LABORATORY DETAILS

Manager	Huong Crawford
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE235946 R0**
Date Received	23 Aug 2022
Date Reported	08 Sep 2022

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Extraction Date	pH in soil (1:5)	2 items
Analysis Date	VOC's in Soil	2 items
Matrix Spike	TRH (Total Recoverable Hydrocarbons) in Soil	2 items

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice Bricks
Samples received in correct containers	Yes	Sample counts by matrix	79 Soil, 4 Material
Date documentation received	25/8/2022@2:17pm	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	10°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

SE235946 R0

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

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

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

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)

Method: ME-(AU)-[ENV]AN122

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP41/0.3-0.5	SE235946.062	LB257428	19 Aug 2022	23 Aug 2022	16 Sep 2022	05 Sep 2022	16 Sep 2022	05 Sep 2022
TP50/0.2-0.4	SE235946.081	LB257428	23 Aug 2022	23 Aug 2022	20 Sep 2022	05 Sep 2022	20 Sep 2022	05 Sep 2022

Fibre ID in bulk materials

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

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP36/0-0.1/PACM02	SE235946.040	LB257437	18 Aug 2022	23 Aug 2022	18 Aug 2023	05 Sep 2022	18 Aug 2023	06 Sep 2022
TP33/0-0.1/PACM04	SE235946.041	LB257437	18 Aug 2022	23 Aug 2022	18 Aug 2023	05 Sep 2022	18 Aug 2023	06 Sep 2022
TP25/0.1-0.3/PACM13	SE235946.042	LB257437	22 Aug 2022	23 Aug 2022	22 Aug 2023	05 Sep 2022	22 Aug 2023	06 Sep 2022
TP18/0-0.6/PACM14	SE235946.043	LB257437	23 Aug 2022	23 Aug 2022	23 Aug 2023	05 Sep 2022	23 Aug 2023	06 Sep 2022

Fibre Identification in soil

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

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP52/0-0.5	SE235946.001	LB257457	23 Aug 2022	23 Aug 2022	23 Aug 2023	05 Sep 2022	23 Aug 2023	06 Sep 2022
TP54/0-0.1	SE235946.004	LB257457	23 Aug 2022	23 Aug 2022	23 Aug 2023	05 Sep 2022	23 Aug 2023	06 Sep 2022
TP56/0-0.7	SE235946.007	LB257457	23 Aug 2022	23 Aug 2022	23 Aug 2023	05 Sep 2022	23 Aug 2023	06 Sep 2022
TP57/0-0.1	SE235946.009	LB257457	23 Aug 2022	23 Aug 2022	23 Aug 2023	05 Sep 2022	23 Aug 2023	06 Sep 2022
TP58/0-0.1	SE235946.011	LB257457	23 Aug 2022	23 Aug 2022	23 Aug 2023	05 Sep 2022	23 Aug 2023	06 Sep 2022
TP59/0-0.1	SE235946.013	LB257457	23 Aug 2022	23 Aug 2022	23 Aug 2023	05 Sep 2022	23 Aug 2023	06 Sep 2022
TP61/0-0.1	SE235946.015	LB257457	23 Aug 2022	23 Aug 2022	23 Aug 2023	05 Sep 2022	23 Aug 2023	06 Sep 2022
TP61/0.1-0.2	SE235946.017	LB257457	23 Aug 2022	23 Aug 2022	23 Aug 2023	05 Sep 2022	23 Aug 2023	06 Sep 2022
TP62/0-0.1	SE235946.018	LB257457	23 Aug 2022	23 Aug 2022	23 Aug 2023	05 Sep 2022	23 Aug 2023	06 Sep 2022
TP63/0-0.1	SE235946.020	LB257457	23 Aug 2022	23 Aug 2022	23 Aug 2023	05 Sep 2022	23 Aug 2023	06 Sep 2022
TP64/0-0.1	SE235946.022	LB257457	23 Aug 2022	23 Aug 2022	23 Aug 2023	05 Sep 2022	23 Aug 2023	06 Sep 2022
TP65/0-0.1	SE235946.024	LB257457	23 Aug 2022	23 Aug 2022	23 Aug 2023	05 Sep 2022	23 Aug 2023	06 Sep 2022
TP66/0-0.1	SE235946.026	LB257457	23 Aug 2022	23 Aug 2022	23 Aug 2023	05 Sep 2022	23 Aug 2023	06 Sep 2022
TP67/0-0.1	SE235946.028	LB257457	23 Aug 2022	23 Aug 2022	23 Aug 2023	05 Sep 2022	23 Aug 2023	06 Sep 2022
TP68/0-0.1	SE235946.030	LB257457	23 Aug 2022	23 Aug 2022	23 Aug 2023	05 Sep 2022	23 Aug 2023	06 Sep 2022
TP69/0-0.1	SE235946.032	LB257457	23 Aug 2022	23 Aug 2022	23 Aug 2023	05 Sep 2022	23 Aug 2023	06 Sep 2022
TP70/0-0.1	SE235946.034	LB257457	23 Aug 2022	23 Aug 2022	23 Aug 2023	05 Sep 2022	23 Aug 2023	06 Sep 2022
TP71/0-0.1	SE235946.036	LB257457	23 Aug 2022	23 Aug 2022	23 Aug 2023	05 Sep 2022	23 Aug 2023	06 Sep 2022
TP72/0-0.1	SE235946.038	LB257457	23 Aug 2022	23 Aug 2022	23 Aug 2023	05 Sep 2022	23 Aug 2023	06 Sep 2022
TP39/0.1-0.5	SE235946.057	LB257457	19 Aug 2022	23 Aug 2022	19 Aug 2023	05 Sep 2022	19 Aug 2023	06 Sep 2022
TP40/0-0.1	SE235946.058	LB257457	19 Aug 2022	23 Aug 2022	19 Aug 2023	05 Sep 2022	19 Aug 2023	06 Sep 2022
TP41/0-0.1	SE235946.060	LB257457	19 Aug 2022	23 Aug 2022	19 Aug 2023	05 Sep 2022	19 Aug 2023	06 Sep 2022
TP42/0-0.1	SE235946.063	LB257457	19 Aug 2022	23 Aug 2022	19 Aug 2023	05 Sep 2022	19 Aug 2023	06 Sep 2022
TP43/0-0.1	SE235946.065	LB257457	19 Aug 2022	23 Aug 2022	19 Aug 2023	05 Sep 2022	19 Aug 2023	06 Sep 2022
TP44/0-0.1	SE235946.067	LB257457	19 Aug 2022	23 Aug 2022	19 Aug 2023	05 Sep 2022	19 Aug 2023	06 Sep 2022
TP45/0-0.1	SE235946.070	LB257457	19 Aug 2022	23 Aug 2022	19 Aug 2023	05 Sep 2022	19 Aug 2023	06 Sep 2022
TP46/0-0.1	SE235946.072	LB257457	19 Aug 2022	23 Aug 2022	19 Aug 2023	05 Sep 2022	19 Aug 2023	06 Sep 2022
TP47/0-0.1	SE235946.074	LB257457	19 Aug 2022	23 Aug 2022	19 Aug 2023	05 Sep 2022	19 Aug 2023	06 Sep 2022
TP48/0-0.1	SE235946.075	LB257457	23 Aug 2022	23 Aug 2022	23 Aug 2023	05 Sep 2022	23 Aug 2023	06 Sep 2022
TP49/0-0.1	SE235946.077	LB257457	23 Aug 2022	23 Aug 2022	23 Aug 2023	05 Sep 2022	23 Aug 2023	06 Sep 2022
TP49/0.1-0.3	SE235946.078	LB257457	23 Aug 2022	23 Aug 2022	23 Aug 2023	05 Sep 2022	23 Aug 2023	06 Sep 2022
TP50/0-0.1	SE235946.079	LB257457	23 Aug 2022	23 Aug 2022	23 Aug 2023	05 Sep 2022	23 Aug 2023	06 Sep 2022
TP51/0-0.1	SE235946.082	LB257457	23 Aug 2022	23 Aug 2022	23 Aug 2023	05 Sep 2022	23 Aug 2023	06 Sep 2022

Gravimetric Determination of Asbestos in Soil

Method: ME-(AU)-[ENV]AN605

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP52/0-0.5	SE235946.001	LB257457	23 Aug 2022	23 Aug 2022	19 Feb 2023	05 Sep 2022	19 Feb 2023	06 Sep 2022
TP54/0-0.1	SE235946.004	LB257457	23 Aug 2022	23 Aug 2022	19 Feb 2023	05 Sep 2022	19 Feb 2023	06 Sep 2022
TP56/0-0.7	SE235946.007	LB257457	23 Aug 2022	23 Aug 2022	19 Feb 2023	05 Sep 2022	19 Feb 2023	06 Sep 2022
TP57/0-0.1	SE235946.009	LB257457	23 Aug 2022	23 Aug 2022	19 Feb 2023	05 Sep 2022	19 Feb 2023	06 Sep 2022
TP58/0-0.1	SE235946.011	LB257457	23 Aug 2022	23 Aug 2022	19 Feb 2023	05 Sep 2022	19 Feb 2023	06 Sep 2022
TP59/0-0.1	SE235946.013	LB257457	23 Aug 2022	23 Aug 2022	19 Feb 2023	05 Sep 2022	19 Feb 2023	06 Sep 2022
TP61/0-0.1	SE235946.015	LB257457	23 Aug 2022	23 Aug 2022	19 Feb 2023	05 Sep 2022	19 Feb 2023	06 Sep 2022
TP61/0.1-0.2	SE235946.017	LB257457	23 Aug 2022	23 Aug 2022	19 Feb 2023	05 Sep 2022	19 Feb 2023	06 Sep 2022
TP62/0-0.1	SE235946.018	LB257457	23 Aug 2022	23 Aug 2022	19 Feb 2023	05 Sep 2022	19 Feb 2023	06 Sep 2022
TP63/0-0.1	SE235946.020	LB257457	23 Aug 2022	23 Aug 2022	19 Feb 2023	05 Sep 2022	19 Feb 2023	06 Sep 2022
TP64/0-0.1	SE235946.022	LB257457	23 Aug 2022	23 Aug 2022	19 Feb 2023	05 Sep 2022	19 Feb 2023	06 Sep 2022
TP65/0-0.1	SE235946.024	LB257457	23 Aug 2022	23 Aug 2022	19 Feb 2023	05 Sep 2022	19 Feb 2023	06 Sep 2022
TP66/0-0.1	SE235946.026	LB257457	23 Aug 2022	23 Aug 2022	19 Feb 2023	05 Sep 2022	19 Feb 2023	06 Sep 2022

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

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

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

Gravimetric Determination of Asbestos in Soil (continued)

Method: ME-(AU)-[ENV]AN605

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP67/0-0.1	SE235946.028	LB257457	23 Aug 2022	23 Aug 2022	19 Feb 2023	05 Sep 2022	19 Feb 2023	06 Sep 2022
TP68/0-0.1	SE235946.030	LB257457	23 Aug 2022	23 Aug 2022	19 Feb 2023	05 Sep 2022	19 Feb 2023	06 Sep 2022
TP69/0-0.1	SE235946.032	LB257457	23 Aug 2022	23 Aug 2022	19 Feb 2023	05 Sep 2022	19 Feb 2023	06 Sep 2022
TP70/0-0.1	SE235946.034	LB257457	23 Aug 2022	23 Aug 2022	19 Feb 2023	05 Sep 2022	19 Feb 2023	06 Sep 2022
TP71/0-0.1	SE235946.036	LB257457	23 Aug 2022	23 Aug 2022	19 Feb 2023	05 Sep 2022	19 Feb 2023	06 Sep 2022
TP72/0-0.1	SE235946.038	LB257457	23 Aug 2022	23 Aug 2022	19 Feb 2023	05 Sep 2022	19 Feb 2023	06 Sep 2022
TP39/0.1-0.5	SE235946.057	LB257457	19 Aug 2022	23 Aug 2022	15 Feb 2023	05 Sep 2022	15 Feb 2023	06 Sep 2022
TP40/0-0.1	SE235946.058	LB257457	19 Aug 2022	23 Aug 2022	15 Feb 2023	05 Sep 2022	15 Feb 2023	06 Sep 2022
TP41/0-0.1	SE235946.060	LB257457	19 Aug 2022	23 Aug 2022	15 Feb 2023	05 Sep 2022	15 Feb 2023	06 Sep 2022
TP42/0-0.1	SE235946.063	LB257457	19 Aug 2022	23 Aug 2022	15 Feb 2023	05 Sep 2022	15 Feb 2023	06 Sep 2022
TP43/0-0.1	SE235946.065	LB257457	19 Aug 2022	23 Aug 2022	15 Feb 2023	05 Sep 2022	15 Feb 2023	06 Sep 2022
TP44/0-0.1	SE235946.067	LB257457	19 Aug 2022	23 Aug 2022	15 Feb 2023	05 Sep 2022	15 Feb 2023	06 Sep 2022
TP45/0-0.1	SE235946.070	LB257457	19 Aug 2022	23 Aug 2022	15 Feb 2023	05 Sep 2022	15 Feb 2023	06 Sep 2022
TP46/0-0.1	SE235946.072	LB257457	19 Aug 2022	23 Aug 2022	15 Feb 2023	05 Sep 2022	15 Feb 2023	06 Sep 2022
TP47/0-0.1	SE235946.074	LB257457	19 Aug 2022	23 Aug 2022	15 Feb 2023	05 Sep 2022	15 Feb 2023	06 Sep 2022
TP48/0-0.1	SE235946.075	LB257457	23 Aug 2022	23 Aug 2022	19 Feb 2023	05 Sep 2022	19 Feb 2023	06 Sep 2022
TP49/0-0.1	SE235946.077	LB257457	23 Aug 2022	23 Aug 2022	19 Feb 2023	05 Sep 2022	19 Feb 2023	06 Sep 2022
TP49/0.1-0.3	SE235946.078	LB257457	23 Aug 2022	23 Aug 2022	19 Feb 2023	05 Sep 2022	19 Feb 2023	06 Sep 2022
TP50/0-0.1	SE235946.079	LB257457	23 Aug 2022	23 Aug 2022	19 Feb 2023	05 Sep 2022	19 Feb 2023	06 Sep 2022
TP51/0-0.1	SE235946.082	LB257457	23 Aug 2022	23 Aug 2022	19 Feb 2023	05 Sep 2022	19 Feb 2023	06 Sep 2022

Mercury in Soil

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

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP52/0.3-0.5	SE235946.002	LB257154	23 Aug 2022	23 Aug 2022	20 Sep 2022	31 Aug 2022	20 Sep 2022	05 Sep 2022
TP53/0.5-0.7	SE235946.003	LB257154	23 Aug 2022	23 Aug 2022	20 Sep 2022	31 Aug 2022	20 Sep 2022	05 Sep 2022
TP54/0.8-1.0	SE235946.005	LB257154	23 Aug 2022	23 Aug 2022	20 Sep 2022	31 Aug 2022	20 Sep 2022	05 Sep 2022
TP55/0.7-0.9	SE235946.006	LB257154	23 Aug 2022	23 Aug 2022	20 Sep 2022	31 Aug 2022	20 Sep 2022	05 Sep 2022
TP56/0.5-0.7	SE235946.008	LB257154	23 Aug 2022	23 Aug 2022	20 Sep 2022	31 Aug 2022	20 Sep 2022	05 Sep 2022
TP57/0.1-0.3	SE235946.010	LB257154	23 Aug 2022	23 Aug 2022	20 Sep 2022	31 Aug 2022	20 Sep 2022	05 Sep 2022
TP58/0-0.2	SE235946.012	LB257154	23 Aug 2022	23 Aug 2022	20 Sep 2022	31 Aug 2022	20 Sep 2022	05 Sep 2022
TP59/0.1-0.3	SE235946.014	LB257154	23 Aug 2022	23 Aug 2022	20 Sep 2022	31 Aug 2022	20 Sep 2022	05 Sep 2022
TP61/0-0.2	SE235946.016	LB257154	23 Aug 2022	23 Aug 2022	20 Sep 2022	31 Aug 2022	20 Sep 2022	05 Sep 2022
TP62/0-0.2	SE235946.019	LB257154	23 Aug 2022	23 Aug 2022	20 Sep 2022	31 Aug 2022	20 Sep 2022	05 Sep 2022
TP63/0-0.2	SE235946.021	LB257154	23 Aug 2022	23 Aug 2022	20 Sep 2022	31 Aug 2022	20 Sep 2022	05 Sep 2022
TP64/0.1-0.3	SE235946.023	LB257154	23 Aug 2022	23 Aug 2022	20 Sep 2022	31 Aug 2022	20 Sep 2022	05 Sep 2022
TP65/0-0.2	SE235946.025	LB257154	23 Aug 2022	23 Aug 2022	20 Sep 2022	31 Aug 2022	20 Sep 2022	05 Sep 2022
TP66/0-0.2	SE235946.027	LB257154	23 Aug 2022	23 Aug 2022	20 Sep 2022	31 Aug 2022	20 Sep 2022	05 Sep 2022
TP67/0.1-0.3	SE235946.029	LB257154	23 Aug 2022	23 Aug 2022	20 Sep 2022	31 Aug 2022	20 Sep 2022	05 Sep 2022
TP68/0-0.2	SE235946.031	LB257154	23 Aug 2022	23 Aug 2022	20 Sep 2022	31 Aug 2022	20 Sep 2022	05 Sep 2022
TP69/0.1-0.3	SE235946.033	LB257154	23 Aug 2022	23 Aug 2022	20 Sep 2022	31 Aug 2022	20 Sep 2022	05 Sep 2022
TP70/0.1-0.3	SE235946.035	LB257154	23 Aug 2022	23 Aug 2022	20 Sep 2022	31 Aug 2022	20 Sep 2022	05 Sep 2022
TP71/0-0.2	SE235946.037	LB257154	23 Aug 2022	23 Aug 2022	20 Sep 2022	31 Aug 2022	20 Sep 2022	05 Sep 2022
TP72/0-0.2	SE235946.039	LB257155	23 Aug 2022	23 Aug 2022	20 Sep 2022	31 Aug 2022	20 Sep 2022	05 Sep 2022
DUP01	SE235946.044	LB257155	18 Aug 2022	23 Aug 2022	15 Sep 2022	31 Aug 2022	15 Sep 2022	05 Sep 2022
DUP02	SE235946.045	LB257155	18 Aug 2022	23 Aug 2022	15 Sep 2022	31 Aug 2022	15 Sep 2022	05 Sep 2022
DUP03	SE235946.046	LB257155	19 Aug 2022	23 Aug 2022	16 Sep 2022	31 Aug 2022	16 Sep 2022	05 Sep 2022
DUP07	SE235946.047	LB257155	23 Aug 2022	23 Aug 2022	20 Sep 2022	31 Aug 2022	20 Sep 2022	05 Sep 2022
TP39/0-0.2	SE235946.056	LB257155	19 Aug 2022	23 Aug 2022	16 Sep 2022	31 Aug 2022	16 Sep 2022	05 Sep 2022
TP40/0.0-0.2	SE235946.059	LB257155	19 Aug 2022	23 Aug 2022	16 Sep 2022	31 Aug 2022	16 Sep 2022	05 Sep 2022
TP41/0-0.2	SE235946.061	LB257155	19 Aug 2022	23 Aug 2022	16 Sep 2022	31 Aug 2022	16 Sep 2022	05 Sep 2022
TP41/0.3-0.5	SE235946.062	LB257155	19 Aug 2022	23 Aug 2022	16 Sep 2022	31 Aug 2022	16 Sep 2022	05 Sep 2022
TP42/0-0.2	SE235946.064	LB257155	19 Aug 2022	23 Aug 2022	16 Sep 2022	31 Aug 2022	16 Sep 2022	05 Sep 2022
TP43/0-0.2	SE235946.066	LB257155	19 Aug 2022	23 Aug 2022	16 Sep 2022	31 Aug 2022	16 Sep 2022	05 Sep 2022
TP44/0-0.2	SE235946.068	LB257155	19 Aug 2022	23 Aug 2022	16 Sep 2022	31 Aug 2022	16 Sep 2022	05 Sep 2022
TP45/0-0.2	SE235946.071	LB257155	19 Aug 2022	23 Aug 2022	16 Sep 2022	31 Aug 2022	16 Sep 2022	05 Sep 2022
TP46/0-0.2	SE235946.073	LB257155	19 Aug 2022	23 Aug 2022	16 Sep 2022	31 Aug 2022	16 Sep 2022	05 Sep 2022
TP47/0-0.1	SE235946.074	LB257155	19 Aug 2022	23 Aug 2022	16 Sep 2022	31 Aug 2022	16 Sep 2022	05 Sep 2022
TP48/0.1-0.3	SE235946.076	LB257155	23 Aug 2022	23 Aug 2022	20 Sep 2022	31 Aug 2022	20 Sep 2022	05 Sep 2022
TP49/0.1-0.3	SE235946.078	LB257155	23 Aug 2022	23 Aug 2022	20 Sep 2022	31 Aug 2022	20 Sep 2022	05 Sep 2022
TP50/0-0.2	SE235946.080	LB257155	23 Aug 2022	23 Aug 2022	20 Sep 2022	31 Aug 2022	20 Sep 2022	05 Sep 2022

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

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

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

Mercury in Soil (continued) — Method: ME-(AU)-[ENV]AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP50/0.2-0.4	SE235946.081	LB257155	23 Aug 2022	23 Aug 2022	20 Sep 2022	31 Aug 2022	20 Sep 2022	05 Sep 2022
TP51/0-0.2	SE235946.083	LB257155	23 Aug 2022	23 Aug 2022	20 Sep 2022	31 Aug 2022	20 Sep 2022	05 Sep 2022

Moisture Content — Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP52/0.3-0.5	SE235946.002	LB257112	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP53/0.5-0.7	SE235946.003	LB257112	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP54/0.8-1.0	SE235946.005	LB257112	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP55/0.7-0.9	SE235946.006	LB257112	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP56/0.5-0.7	SE235946.008	LB257112	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP57/0.1-0.3	SE235946.010	LB257112	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP58/0-0.2	SE235946.012	LB257112	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP59/0.1-0.3	SE235946.014	LB257112	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP61/0-0.2	SE235946.016	LB257112	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP62/0-0.2	SE235946.019	LB257112	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP63/0-0.2	SE235946.021	LB257112	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP64/0.1-0.3	SE235946.023	LB257112	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP65/0-0.2	SE235946.025	LB257112	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP66/0-0.2	SE235946.027	LB257112	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP67/0.1-0.3	SE235946.029	LB257112	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP68/0-0.2	SE235946.031	LB257112	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP69/0.1-0.3	SE235946.033	LB257112	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP70/0.1-0.3	SE235946.035	LB257112	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP71/0-0.2	SE235946.037	LB257113	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP72/0-0.2	SE235946.039	LB257113	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
DUP01	SE235946.044	LB257113	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
DUP02	SE235946.045	LB257113	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
DUP03	SE235946.046	LB257113	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
DUP07	SE235946.047	LB257113	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
Trip Blank	SE235946.048	LB257113	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
Trip Blank	SE235946.049	LB257113	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
Trip Blank	SE235946.050	LB257113	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
Trip Blank	SE235946.051	LB257113	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP39/0-0.2	SE235946.056	LB257113	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP40/0.0-0.2	SE235946.059	LB257113	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP41/0-0.2	SE235946.061	LB257113	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP41/0.3-0.5	SE235946.062	LB257113	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP42/0-0.2	SE235946.064	LB257113	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP43/0-0.2	SE235946.066	LB257113	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP44/0-0.2	SE235946.068	LB257113	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP45/0-0.2	SE235946.071	LB257113	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP46/0-0.2	SE235946.073	LB257113	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP47/0-0.1	SE235946.074	LB257113	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP48/0.1-0.3	SE235946.076	LB257113	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP49/0.1-0.3	SE235946.078	LB257113	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP50/0-0.2	SE235946.080	LB257113	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP50/0.2-0.4	SE235946.081	LB257113	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
TP51/0-0.2	SE235946.083	LB257113	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022

OC Pesticides in Soil — Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP52/0.3-0.5	SE235946.002	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP53/0.5-0.7	SE235946.003	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP54/0.8-1.0	SE235946.005	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP55/0.7-0.9	SE235946.006	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP56/0.5-0.7	SE235946.008	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP57/0.1-0.3	SE235946.010	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP58/0-0.2	SE235946.012	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP59/0.1-0.3	SE235946.014	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP61/0-0.2	SE235946.016	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP62/0-0.2	SE235946.019	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022

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

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

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

OC Pesticides in Soil (continued) — Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP63/0-0.2	SE235946.021	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP64/0.1-0.3	SE235946.023	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP65/0-0.2	SE235946.025	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP66/0-0.2	SE235946.027	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP67/0.1-0.3	SE235946.029	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP68/0-0.2	SE235946.031	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP69/0.1-0.3	SE235946.033	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP70/0.1-0.3	SE235946.035	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP71/0-0.2	SE235946.037	LB257105	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP72/0-0.2	SE235946.039	LB257105	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
DUP02	SE235946.045	LB257105	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
DUP07	SE235946.047	LB257105	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP39/0-0.2	SE235946.056	LB257105	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP40/0.0-0.2	SE235946.059	LB257105	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP41/0-0.2	SE235946.061	LB257105	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP42/0-0.2	SE235946.064	LB257105	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP43/0-0.2	SE235946.066	LB257105	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP44/0-0.2	SE235946.068	LB257105	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP45/0-0.2	SE235946.071	LB257105	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP46/0-0.2	SE235946.073	LB257105	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP47/0-0.1	SE235946.074	LB257105	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP48/0.1-0.3	SE235946.076	LB257105	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP49/0.1-0.3	SE235946.078	LB257105	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP50/0-0.2	SE235946.080	LB257105	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP51/0-0.2	SE235946.083	LB257105	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022

OP Pesticides in Soil — Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP52/0.3-0.5	SE235946.002	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP53/0.5-0.7	SE235946.003	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	05 Sep 2022
TP54/0.8-1.0	SE235946.005	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP55/0.7-0.9	SE235946.006	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	05 Sep 2022
TP56/0.5-0.7	SE235946.008	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP57/0.1-0.3	SE235946.010	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	05 Sep 2022
TP58/0-0.2	SE235946.012	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP59/0.1-0.3	SE235946.014	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP61/0-0.2	SE235946.016	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP62/0-0.2	SE235946.019	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP63/0-0.2	SE235946.021	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	05 Sep 2022
TP64/0.1-0.3	SE235946.023	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP65/0-0.2	SE235946.025	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP66/0-0.2	SE235946.027	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP67/0.1-0.3	SE235946.029	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP68/0-0.2	SE235946.031	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP69/0.1-0.3	SE235946.033	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	05 Sep 2022
TP70/0.1-0.3	SE235946.035	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP71/0-0.2	SE235946.037	LB257105	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP72/0-0.2	SE235946.039	LB257105	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
DUP02	SE235946.045	LB257105	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	10 Oct 2022	05 Sep 2022
DUP07	SE235946.047	LB257105	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	05 Sep 2022
TP39/0-0.2	SE235946.056	LB257105	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP40/0.0-0.2	SE235946.059	LB257105	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP41/0-0.2	SE235946.061	LB257105	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	10 Oct 2022	05 Sep 2022
TP42/0-0.2	SE235946.064	LB257105	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	10 Oct 2022	05 Sep 2022
TP43/0-0.2	SE235946.066	LB257105	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	10 Oct 2022	05 Sep 2022
TP44/0-0.2	SE235946.068	LB257105	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP45/0-0.2	SE235946.071	LB257105	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	10 Oct 2022	05 Sep 2022
TP46/0-0.2	SE235946.073	LB257105	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP47/0-0.1	SE235946.074	LB257105	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	10 Oct 2022	05 Sep 2022
TP48/0.1-0.3	SE235946.076	LB257105	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022

HOLDING TIME SUMMARY

SE235946 R0

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

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

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

OP Pesticides in Soil (continued)

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

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP49/0.1-0.3	SE235946.078	LB257105	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP50/0-0.2	SE235946.080	LB257105	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	05 Sep 2022
TP51/0-0.2	SE235946.083	LB257105	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

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

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP52/0.3-0.5	SE235946.002	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP53/0.5-0.7	SE235946.003	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP54/0.8-1.0	SE235946.005	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP55/0.7-0.9	SE235946.006	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP56/0.5-0.7	SE235946.008	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP57/0.1-0.3	SE235946.010	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP58/0-0.2	SE235946.012	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP59/0.1-0.3	SE235946.014	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP61/0-0.2	SE235946.016	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP62/0-0.2	SE235946.019	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP63/0-0.2	SE235946.021	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP64/0.1-0.3	SE235946.023	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP65/0-0.2	SE235946.025	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP66/0-0.2	SE235946.027	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP67/0.1-0.3	SE235946.029	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP68/0-0.2	SE235946.031	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP69/0.1-0.3	SE235946.033	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP70/0.1-0.3	SE235946.035	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP71/0-0.2	SE235946.037	LB257105	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP72/0-0.2	SE235946.039	LB257105	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
DUP02	SE235946.045	LB257105	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
DUP07	SE235946.047	LB257105	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP39/0-0.2	SE235946.056	LB257105	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP40/0.0-0.2	SE235946.059	LB257105	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP41/0-0.2	SE235946.061	LB257105	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP42/0-0.2	SE235946.064	LB257105	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP43/0-0.2	SE235946.066	LB257105	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP44/0-0.2	SE235946.068	LB257105	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP45/0-0.2	SE235946.071	LB257105	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP46/0-0.2	SE235946.073	LB257105	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP47/0-0.1	SE235946.074	LB257105	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP48/0.1-0.3	SE235946.076	LB257105	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP49/0.1-0.3	SE235946.078	LB257105	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP50/0-0.2	SE235946.080	LB257105	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP51/0-0.2	SE235946.083	LB257105	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022

PCBs in Soil

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

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP52/0.3-0.5	SE235946.002	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP53/0.5-0.7	SE235946.003	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP54/0.8-1.0	SE235946.005	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP55/0.7-0.9	SE235946.006	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP56/0.5-0.7	SE235946.008	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP57/0.1-0.3	SE235946.010	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP58/0-0.2	SE235946.012	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP59/0.1-0.3	SE235946.014	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP61/0-0.2	SE235946.016	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP62/0-0.2	SE235946.019	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP63/0-0.2	SE235946.021	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP64/0.1-0.3	SE235946.023	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP65/0-0.2	SE235946.025	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP66/0-0.2	SE235946.027	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP67/0.1-0.3	SE235946.029	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP68/0-0.2	SE235946.031	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP69/0.1-0.3	SE235946.033	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022

HOLDING TIME SUMMARY

SE235946 R0

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

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

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

PCBs in Soil (continued) — Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP70/0.1-0.3	SE235946.035	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP71/0-0.2	SE235946.037	LB257105	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP72/0-0.2	SE235946.039	LB257105	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
DUP02	SE235946.045	LB257105	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
DUP07	SE235946.047	LB257105	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP39/0-0.2	SE235946.056	LB257105	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP40/0.0-0.2	SE235946.059	LB257105	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP41/0-0.2	SE235946.061	LB257105	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP42/0-0.2	SE235946.064	LB257105	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP43/0-0.2	SE235946.066	LB257105	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP44/0-0.2	SE235946.068	LB257105	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP45/0-0.2	SE235946.071	LB257105	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP46/0-0.2	SE235946.073	LB257105	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP47/0-0.1	SE235946.074	LB257105	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP48/0.1-0.3	SE235946.076	LB257105	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP49/0.1-0.3	SE235946.078	LB257105	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP50/0-0.2	SE235946.080	LB257105	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP51/0-0.2	SE235946.083	LB257105	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022

pH in soil (1:5) — Method: ME-(AU)-[ENV]AN101

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP41/0.3-0.5	SE235946.062	LB257440	19 Aug 2022	23 Aug 2022	26 Aug 2022	05 Sep 2022†	06 Sep 2022	05 Sep 2022
TP50/0.2-0.4	SE235946.081	LB257440	23 Aug 2022	23 Aug 2022	30 Aug 2022	05 Sep 2022†	06 Sep 2022	05 Sep 2022

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES — Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP52/0.3-0.5	SE235946.002	LB257148	23 Aug 2022	23 Aug 2022	19 Feb 2023	31 Aug 2022	19 Feb 2023	05 Sep 2022
TP53/0.5-0.7	SE235946.003	LB257148	23 Aug 2022	23 Aug 2022	19 Feb 2023	31 Aug 2022	19 Feb 2023	05 Sep 2022
TP54/0.8-1.0	SE235946.005	LB257148	23 Aug 2022	23 Aug 2022	19 Feb 2023	31 Aug 2022	19 Feb 2023	05 Sep 2022
TP55/0.7-0.9	SE235946.006	LB257148	23 Aug 2022	23 Aug 2022	19 Feb 2023	31 Aug 2022	19 Feb 2023	05 Sep 2022
TP56/0.5-0.7	SE235946.008	LB257148	23 Aug 2022	23 Aug 2022	19 Feb 2023	31 Aug 2022	19 Feb 2023	05 Sep 2022
TP57/0.1-0.3	SE235946.010	LB257148	23 Aug 2022	23 Aug 2022	19 Feb 2023	31 Aug 2022	19 Feb 2023	05 Sep 2022
TP58/0-0.2	SE235946.012	LB257148	23 Aug 2022	23 Aug 2022	19 Feb 2023	31 Aug 2022	19 Feb 2023	05 Sep 2022
TP59/0.1-0.3	SE235946.014	LB257148	23 Aug 2022	23 Aug 2022	19 Feb 2023	31 Aug 2022	19 Feb 2023	05 Sep 2022
TP61/0-0.2	SE235946.016	LB257148	23 Aug 2022	23 Aug 2022	19 Feb 2023	31 Aug 2022	19 Feb 2023	05 Sep 2022
TP62/0-0.2	SE235946.019	LB257148	23 Aug 2022	23 Aug 2022	19 Feb 2023	31 Aug 2022	19 Feb 2023	05 Sep 2022
TP63/0-0.2	SE235946.021	LB257148	23 Aug 2022	23 Aug 2022	19 Feb 2023	31 Aug 2022	19 Feb 2023	05 Sep 2022
TP64/0.1-0.3	SE235946.023	LB257148	23 Aug 2022	23 Aug 2022	19 Feb 2023	31 Aug 2022	19 Feb 2023	05 Sep 2022
TP65/0-0.2	SE235946.025	LB257148	23 Aug 2022	23 Aug 2022	19 Feb 2023	31 Aug 2022	19 Feb 2023	05 Sep 2022
TP66/0-0.2	SE235946.027	LB257148	23 Aug 2022	23 Aug 2022	19 Feb 2023	31 Aug 2022	19 Feb 2023	05 Sep 2022
TP67/0.1-0.3	SE235946.029	LB257148	23 Aug 2022	23 Aug 2022	19 Feb 2023	31 Aug 2022	19 Feb 2023	05 Sep 2022
TP68/0-0.2	SE235946.031	LB257148	23 Aug 2022	23 Aug 2022	19 Feb 2023	31 Aug 2022	19 Feb 2023	05 Sep 2022
TP69/0.1-0.3	SE235946.033	LB257148	23 Aug 2022	23 Aug 2022	19 Feb 2023	31 Aug 2022	19 Feb 2023	05 Sep 2022
TP70/0.1-0.3	SE235946.035	LB257148	23 Aug 2022	23 Aug 2022	19 Feb 2023	31 Aug 2022	19 Feb 2023	05 Sep 2022
TP71/0-0.2	SE235946.037	LB257148	23 Aug 2022	23 Aug 2022	19 Feb 2023	31 Aug 2022	19 Feb 2023	05 Sep 2022
TP72/0-0.2	SE235946.039	LB257149	23 Aug 2022	23 Aug 2022	19 Feb 2023	31 Aug 2022	19 Feb 2023	05 Sep 2022
DUP01	SE235946.044	LB257149	18 Aug 2022	23 Aug 2022	14 Feb 2023	31 Aug 2022	14 Feb 2023	05 Sep 2022
DUP02	SE235946.045	LB257149	18 Aug 2022	23 Aug 2022	14 Feb 2023	31 Aug 2022	14 Feb 2023	05 Sep 2022
DUP03	SE235946.046	LB257149	19 Aug 2022	23 Aug 2022	15 Feb 2023	31 Aug 2022	15 Feb 2023	05 Sep 2022
DUP07	SE235946.047	LB257149	23 Aug 2022	23 Aug 2022	19 Feb 2023	31 Aug 2022	19 Feb 2023	05 Sep 2022
TP39/0-0.2	SE235946.056	LB257149	19 Aug 2022	23 Aug 2022	15 Feb 2023	31 Aug 2022	15 Feb 2023	05 Sep 2022
TP40/0.0-0.2	SE235946.059	LB257149	19 Aug 2022	23 Aug 2022	15 Feb 2023	31 Aug 2022	15 Feb 2023	05 Sep 2022
TP41/0-0.2	SE235946.061	LB257149	19 Aug 2022	23 Aug 2022	15 Feb 2023	31 Aug 2022	15 Feb 2023	05 Sep 2022
TP41/0.3-0.5	SE235946.062	LB257149	19 Aug 2022	23 Aug 2022	15 Feb 2023	31 Aug 2022	15 Feb 2023	05 Sep 2022
TP42/0-0.2	SE235946.064	LB257149	19 Aug 2022	23 Aug 2022	15 Feb 2023	31 Aug 2022	15 Feb 2023	05 Sep 2022
TP43/0-0.2	SE235946.066	LB257149	19 Aug 2022	23 Aug 2022	15 Feb 2023	31 Aug 2022	15 Feb 2023	05 Sep 2022
TP44/0-0.2	SE235946.068	LB257149	19 Aug 2022	23 Aug 2022	15 Feb 2023	31 Aug 2022	15 Feb 2023	05 Sep 2022
TP45/0-0.2	SE235946.071	LB257149	19 Aug 2022	23 Aug 2022	15 Feb 2023	31 Aug 2022	15 Feb 2023	05 Sep 2022
TP46/0-0.2	SE235946.073	LB257149	19 Aug 2022	23 Aug 2022	15 Feb 2023	31 Aug 2022	15 Feb 2023	05 Sep 2022
TP47/0-0.1	SE235946.074	LB257149	19 Aug 2022	23 Aug 2022	15 Feb 2023	31 Aug 2022	15 Feb 2023	05 Sep 2022
TP48/0.1-0.3	SE235946.076	LB257149	23 Aug 2022	23 Aug 2022	19 Feb 2023	31 Aug 2022	19 Feb 2023	05 Sep 2022

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

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

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

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued) — Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP49/0.1-0.3	SE235946.078	LB257149	23 Aug 2022	23 Aug 2022	19 Feb 2023	31 Aug 2022	19 Feb 2023	05 Sep 2022
TP50/0-0.2	SE235946.080	LB257149	23 Aug 2022	23 Aug 2022	19 Feb 2023	31 Aug 2022	19 Feb 2023	05 Sep 2022
TP50/0.2-0.4	SE235946.081	LB257149	23 Aug 2022	23 Aug 2022	19 Feb 2023	31 Aug 2022	19 Feb 2023	05 Sep 2022
TP51/0-0.2	SE235946.083	LB257149	23 Aug 2022	23 Aug 2022	19 Feb 2023	31 Aug 2022	19 Feb 2023	05 Sep 2022

TRH (Total Recoverable Hydrocarbons) in Soil — Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP52/0.3-0.5	SE235946.002	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP53/0.5-0.7	SE235946.003	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP54/0.8-1.0	SE235946.005	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP55/0.7-0.9	SE235946.006	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP56/0.5-0.7	SE235946.008	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP57/0.1-0.3	SE235946.010	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP58/0-0.2	SE235946.012	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP59/0.1-0.3	SE235946.014	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP61/0-0.2	SE235946.016	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP62/0-0.2	SE235946.019	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP63/0-0.2	SE235946.021	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP64/0.1-0.3	SE235946.023	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP65/0-0.2	SE235946.025	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP66/0-0.2	SE235946.027	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP67/0.1-0.3	SE235946.029	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP68/0-0.2	SE235946.031	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP69/0.1-0.3	SE235946.033	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP70/0.1-0.3	SE235946.035	LB257104	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP71/0-0.2	SE235946.037	LB257105	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP72/0-0.2	SE235946.039	LB257105	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
DUP02	SE235946.045	LB257105	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
DUP07	SE235946.047	LB257105	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP39/0-0.2	SE235946.056	LB257105	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP40/0.0-0.2	SE235946.059	LB257105	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP41/0-0.2	SE235946.061	LB257105	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP42/0-0.2	SE235946.064	LB257105	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP43/0-0.2	SE235946.066	LB257105	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP44/0-0.2	SE235946.068	LB257105	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP45/0-0.2	SE235946.071	LB257105	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP46/0-0.2	SE235946.073	LB257105	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP47/0-0.1	SE235946.074	LB257105	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP48/0.1-0.3	SE235946.076	LB257105	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP49/0.1-0.3	SE235946.078	LB257105	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP50/0-0.2	SE235946.080	LB257105	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022
TP51/0-0.2	SE235946.083	LB257105	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	10 Oct 2022	02 Sep 2022

VOC's in Soil — Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP52/0.3-0.5	SE235946.002	LB257107	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	06 Sep 2022	02 Sep 2022
TP54/0.8-1.0	SE235946.005	LB257107	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	06 Sep 2022	02 Sep 2022
TP56/0.5-0.7	SE235946.008	LB257107	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	06 Sep 2022	02 Sep 2022
TP58/0-0.2	SE235946.012	LB257107	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	06 Sep 2022	02 Sep 2022
TP59/0.1-0.3	SE235946.014	LB257107	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	06 Sep 2022	02 Sep 2022
TP61/0-0.2	SE235946.016	LB257107	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	06 Sep 2022	02 Sep 2022
TP62/0-0.2	SE235946.019	LB257107	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	06 Sep 2022	02 Sep 2022
TP64/0.1-0.3	SE235946.023	LB257107	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	06 Sep 2022	02 Sep 2022
TP67/0.1-0.3	SE235946.029	LB257107	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	06 Sep 2022	02 Sep 2022
TP70/0.1-0.3	SE235946.035	LB257107	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	06 Sep 2022	02 Sep 2022
Trip Blank	SE235946.048	LB257107	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	01 Sep 2022	02 Sep 2022†
Trip Blank	SE235946.049	LB257107	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	02 Sep 2022	02 Sep 2022
Trip Blank	SE235946.050	LB257107	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
Trip Blank	SE235946.051	LB257107	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	06 Sep 2022	02 Sep 2022
Trip Spike	SE235946.052	LB257107	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	01 Sep 2022	02 Sep 2022†
Trip Spike	SE235946.053	LB257107	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	02 Sep 2022	02 Sep 2022

HOLDING TIME SUMMARY

SE235946 R0

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

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

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

VOC's in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
Trip Spike	SE235946.054	LB257107	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	05 Sep 2022	02 Sep 2022
Trip Spike	SE235946.055	LB257107	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	06 Sep 2022	02 Sep 2022
TP40/0.0-0.2	SE235946.059	LB257107	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	02 Sep 2022	02 Sep 2022
TP44/0-0.2	SE235946.068	LB257107	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	02 Sep 2022	02 Sep 2022
TP46/0-0.2	SE235946.073	LB257107	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	02 Sep 2022	02 Sep 2022
TP48/0.1-0.3	SE235946.076	LB257107	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	06 Sep 2022	02 Sep 2022
TP49/0.1-0.3	SE235946.078	LB257107	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	06 Sep 2022	02 Sep 2022
TP51/0-0.2	SE235946.083	LB257107	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	06 Sep 2022	02 Sep 2022

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

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP52/0.3-0.5	SE235946.002	LB257107	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	06 Sep 2022	02 Sep 2022
TP54/0.8-1.0	SE235946.005	LB257107	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	06 Sep 2022	02 Sep 2022
TP56/0.5-0.7	SE235946.008	LB257107	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	06 Sep 2022	02 Sep 2022
TP58/0-0.2	SE235946.012	LB257107	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	06 Sep 2022	02 Sep 2022
TP59/0.1-0.3	SE235946.014	LB257107	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	06 Sep 2022	02 Sep 2022
TP61/0-0.2	SE235946.016	LB257107	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	06 Sep 2022	02 Sep 2022
TP62/0-0.2	SE235946.019	LB257107	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	06 Sep 2022	02 Sep 2022
TP64/0.1-0.3	SE235946.023	LB257107	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	06 Sep 2022	02 Sep 2022
TP67/0.1-0.3	SE235946.029	LB257107	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	06 Sep 2022	02 Sep 2022
TP70/0.1-0.3	SE235946.035	LB257107	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	06 Sep 2022	02 Sep 2022
Trip Blank	SE235946.048	LB257107	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	01 Sep 2022	05 Sep 2022†
Trip Blank	SE235946.049	LB257107	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	02 Sep 2022	05 Sep 2022†
Trip Blank	SE235946.050	LB257107	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	05 Sep 2022	05 Sep 2022
Trip Blank	SE235946.051	LB257107	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	06 Sep 2022	05 Sep 2022
Trip Spike	SE235946.052	LB257107	18 Aug 2022	23 Aug 2022	01 Sep 2022	31 Aug 2022	01 Sep 2022	05 Sep 2022†
Trip Spike	SE235946.053	LB257107	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	02 Sep 2022	05 Sep 2022†
Trip Spike	SE235946.054	LB257107	22 Aug 2022	23 Aug 2022	05 Sep 2022	31 Aug 2022	05 Sep 2022	05 Sep 2022
Trip Spike	SE235946.055	LB257107	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	06 Sep 2022	05 Sep 2022
TP40/0.0-0.2	SE235946.059	LB257107	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	02 Sep 2022	02 Sep 2022
TP44/0-0.2	SE235946.068	LB257107	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	02 Sep 2022	02 Sep 2022
TP46/0-0.2	SE235946.073	LB257107	19 Aug 2022	23 Aug 2022	02 Sep 2022	31 Aug 2022	02 Sep 2022	02 Sep 2022
TP48/0.1-0.3	SE235946.076	LB257107	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	06 Sep 2022	02 Sep 2022
TP49/0.1-0.3	SE235946.078	LB257107	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	06 Sep 2022	02 Sep 2022
TP51/0-0.2	SE235946.083	LB257107	23 Aug 2022	23 Aug 2022	06 Sep 2022	31 Aug 2022	06 Sep 2022	02 Sep 2022

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

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

OC Pesticides in Soil — Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	TP52/0.3-0.5	SE235946.002	%	60 - 130%	96
	TP54/0.8-1.0	SE235946.005	%	60 - 130%	95
	TP56/0.5-0.7	SE235946.008	%	60 - 130%	96
	TP58/0-0.2	SE235946.012	%	60 - 130%	103
	TP59/0.1-0.3	SE235946.014	%	60 - 130%	96
	TP61/0-0.2	SE235946.016	%	60 - 130%	100
	TP62/0-0.2	SE235946.019	%	60 - 130%	104
	TP64/0.1-0.3	SE235946.023	%	60 - 130%	100
	TP65/0-0.2	SE235946.025	%	60 - 130%	98
	TP66/0-0.2	SE235946.027	%	60 - 130%	96
	TP67/0.1-0.3	SE235946.029	%	60 - 130%	103
	TP68/0-0.2	SE235946.031	%	60 - 130%	100
	TP70/0.1-0.3	SE235946.035	%	60 - 130%	98
	TP71/0-0.2	SE235946.037	%	60 - 130%	95
	TP72/0-0.2	SE235946.039	%	60 - 130%	98
	TP39/0-0.2	SE235946.056	%	60 - 130%	101
	TP40/0.0-0.2	SE235946.059	%	60 - 130%	100
	TP44/0-0.2	SE235946.068	%	60 - 130%	102
	TP46/0-0.2	SE235946.073	%	60 - 130%	101
	TP48/0.1-0.3	SE235946.076	%	60 - 130%	100
	TP49/0.1-0.3	SE235946.078	%	60 - 130%	96
	TP51/0-0.2	SE235946.083	%	60 - 130%	98

OP Pesticides in Soil — Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	TP52/0.3-0.5	SE235946.002	%	60 - 130%	92
	TP54/0.8-1.0	SE235946.005	%	60 - 130%	94
	TP56/0.5-0.7	SE235946.008	%	60 - 130%	92
	TP58/0-0.2	SE235946.012	%	60 - 130%	91
	TP59/0.1-0.3	SE235946.014	%	60 - 130%	91
	TP61/0-0.2	SE235946.016	%	60 - 130%	96
	TP62/0-0.2	SE235946.019	%	60 - 130%	93
	TP64/0.1-0.3	SE235946.023	%	60 - 130%	93
	TP65/0-0.2	SE235946.025	%	60 - 130%	93
	TP66/0-0.2	SE235946.027	%	60 - 130%	94
	TP67/0.1-0.3	SE235946.029	%	60 - 130%	91
	TP68/0-0.2	SE235946.031	%	60 - 130%	94
	TP70/0.1-0.3	SE235946.035	%	60 - 130%	92
	TP71/0-0.2	SE235946.037	%	60 - 130%	93
	TP72/0-0.2	SE235946.039	%	60 - 130%	93
	TP39/0-0.2	SE235946.056	%	60 - 130%	96
	TP40/0.0-0.2	SE235946.059	%	60 - 130%	95
	TP44/0-0.2	SE235946.068	%	60 - 130%	95
	TP46/0-0.2	SE235946.073	%	60 - 130%	94
	TP48/0.1-0.3	SE235946.076	%	60 - 130%	94
	TP49/0.1-0.3	SE235946.078	%	60 - 130%	94
	TP51/0-0.2	SE235946.083	%	60 - 130%	95
d14-p-terphenyl (Surrogate)	TP52/0.3-0.5	SE235946.002	%	60 - 130%	94
	TP54/0.8-1.0	SE235946.005	%	60 - 130%	94
	TP56/0.5-0.7	SE235946.008	%	60 - 130%	93
	TP58/0-0.2	SE235946.012	%	60 - 130%	92
	TP59/0.1-0.3	SE235946.014	%	60 - 130%	93
	TP61/0-0.2	SE235946.016	%	60 - 130%	96
	TP62/0-0.2	SE235946.019	%	60 - 130%	93
	TP64/0.1-0.3	SE235946.023	%	60 - 130%	93
	TP65/0-0.2	SE235946.025	%	60 - 130%	94
	TP66/0-0.2	SE235946.027	%	60 - 130%	93
	TP67/0.1-0.3	SE235946.029	%	60 - 130%	92
	TP68/0-0.2	SE235946.031	%	60 - 130%	95
	TP70/0.1-0.3	SE235946.035	%	60 - 130%	92
	TP71/0-0.2	SE235946.037	%	60 - 130%	94

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

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

OP Pesticides in Soil (continued) — Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d14-p-terphenyl (Surrogate)	TP72/0-0.2	SE235946.039	%	60 - 130%	93
	TP39/0-0.2	SE235946.056	%	60 - 130%	95
	TP40/0.0-0.2	SE235946.059	%	60 - 130%	94
	TP44/0-0.2	SE235946.068	%	60 - 130%	94
	TP46/0-0.2	SE235946.073	%	60 - 130%	95
	TP48/0.1-0.3	SE235946.076	%	60 - 130%	94
	TP49/0.1-0.3	SE235946.078	%	60 - 130%	94
	TP51/0-0.2	SE235946.083	%	60 - 130%	94

PAH (Polynuclear Aromatic Hydrocarbons) in Soil — Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	TP52/0.3-0.5	SE235946.002	%	70 - 130%	92
	TP53/0.5-0.7	SE235946.003	%	70 - 130%	95
	TP54/0.8-1.0	SE235946.005	%	70 - 130%	94
	TP55/0.7-0.9	SE235946.006	%	70 - 130%	91
	TP56/0.5-0.7	SE235946.008	%	70 - 130%	92
	TP57/0.1-0.3	SE235946.010	%	70 - 130%	93
	TP58/0-0.2	SE235946.012	%	70 - 130%	91
	TP59/0.1-0.3	SE235946.014	%	70 - 130%	91
	TP61/0-0.2	SE235946.016	%	70 - 130%	96
	TP62/0-0.2	SE235946.019	%	70 - 130%	93
	TP63/0-0.2	SE235946.021	%	70 - 130%	92
	TP64/0.1-0.3	SE235946.023	%	70 - 130%	93
	TP65/0-0.2	SE235946.025	%	70 - 130%	93
	TP66/0-0.2	SE235946.027	%	70 - 130%	94
	TP67/0.1-0.3	SE235946.029	%	70 - 130%	91
	TP68/0-0.2	SE235946.031	%	70 - 130%	94
	TP69/0.1-0.3	SE235946.033	%	70 - 130%	94
	TP70/0.1-0.3	SE235946.035	%	70 - 130%	92
	TP71/0-0.2	SE235946.037	%	70 - 130%	93
	TP72/0-0.2	SE235946.039	%	70 - 130%	93
	DUP02	SE235946.045	%	70 - 130%	93
	DUP07	SE235946.047	%	70 - 130%	93
	TP39/0-0.2	SE235946.056	%	70 - 130%	96
	TP40/0.0-0.2	SE235946.059	%	70 - 130%	95
	TP41/0-0.2	SE235946.061	%	70 - 130%	94
	TP42/0-0.2	SE235946.064	%	70 - 130%	95
	TP43/0-0.2	SE235946.066	%	70 - 130%	94
	TP44/0-0.2	SE235946.068	%	70 - 130%	95
	TP45/0-0.2	SE235946.071	%	70 - 130%	94
	TP46/0-0.2	SE235946.073	%	70 - 130%	94
	TP47/0-0.1	SE235946.074	%	70 - 130%	94
	TP48/0.1-0.3	SE235946.076	%	70 - 130%	94
	TP49/0.1-0.3	SE235946.078	%	70 - 130%	94
	TP50/0-0.2	SE235946.080	%	70 - 130%	92
	TP51/0-0.2	SE235946.083	%	70 - 130%	95
d14-p-terphenyl (Surrogate)	TP52/0.3-0.5	SE235946.002	%	70 - 130%	94
	TP53/0.5-0.7	SE235946.003	%	70 - 130%	95
	TP54/0.8-1.0	SE235946.005	%	70 - 130%	94
	TP55/0.7-0.9	SE235946.006	%	70 - 130%	92
	TP56/0.5-0.7	SE235946.008	%	70 - 130%	93
	TP57/0.1-0.3	SE235946.010	%	70 - 130%	93
	TP58/0-0.2	SE235946.012	%	70 - 130%	92
	TP59/0.1-0.3	SE235946.014	%	70 - 130%	93
	TP61/0-0.2	SE235946.016	%	70 - 130%	96
	TP62/0-0.2	SE235946.019	%	70 - 130%	93
	TP63/0-0.2	SE235946.021	%	70 - 130%	93
	TP64/0.1-0.3	SE235946.023	%	70 - 130%	93
	TP65/0-0.2	SE235946.025	%	70 - 130%	94
	TP66/0-0.2	SE235946.027	%	70 - 130%	93
	TP67/0.1-0.3	SE235946.029	%	70 - 130%	92

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

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

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued) — Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d14-p-terphenyl (Surrogate)	TP68/0-0.2	SE235946.031	%	70 - 130%	95
	TP69/0.1-0.3	SE235946.033	%	70 - 130%	94
	TP70/0.1-0.3	SE235946.035	%	70 - 130%	92
	TP71/0-0.2	SE235946.037	%	70 - 130%	94
	TP72/0-0.2	SE235946.039	%	70 - 130%	93
	DUP02	SE235946.045	%	70 - 130%	94
	DUP07	SE235946.047	%	70 - 130%	94
	TP39/0-0.2	SE235946.056	%	70 - 130%	95
	TP40/0.0-0.2	SE235946.059	%	70 - 130%	94
	TP41/0-0.2	SE235946.061	%	70 - 130%	94
	TP42/0-0.2	SE235946.064	%	70 - 130%	95
	TP43/0-0.2	SE235946.066	%	70 - 130%	94
	TP44/0-0.2	SE235946.068	%	70 - 130%	94
	TP45/0-0.2	SE235946.071	%	70 - 130%	93
	TP46/0-0.2	SE235946.073	%	70 - 130%	95
	TP47/0-0.1	SE235946.074	%	70 - 130%	94
	TP48/0.1-0.3	SE235946.076	%	70 - 130%	94
	TP49/0.1-0.3	SE235946.078	%	70 - 130%	94
	TP50/0-0.2	SE235946.080	%	70 - 130%	92
	TP51/0-0.2	SE235946.083	%	70 - 130%	94
d5-nitrobenzene (Surrogate)	TP52/0.3-0.5	SE235946.002	%	70 - 130%	104
	TP53/0.5-0.7	SE235946.003	%	70 - 130%	108
	TP54/0.8-1.0	SE235946.005	%	70 - 130%	106
	TP55/0.7-0.9	SE235946.006	%	70 - 130%	102
	TP56/0.5-0.7	SE235946.008	%	70 - 130%	104
	TP57/0.1-0.3	SE235946.010	%	70 - 130%	105
	TP58/0-0.2	SE235946.012	%	70 - 130%	104
	TP59/0.1-0.3	SE235946.014	%	70 - 130%	104
	TP61/0-0.2	SE235946.016	%	70 - 130%	108
	TP62/0-0.2	SE235946.019	%	70 - 130%	106
	TP63/0-0.2	SE235946.021	%	70 - 130%	103
	TP64/0.1-0.3	SE235946.023	%	70 - 130%	105
	TP65/0-0.2	SE235946.025	%	70 - 130%	105
	TP66/0-0.2	SE235946.027	%	70 - 130%	105
	TP67/0.1-0.3	SE235946.029	%	70 - 130%	103
	TP68/0-0.2	SE235946.031	%	70 - 130%	105
	TP69/0.1-0.3	SE235946.033	%	70 - 130%	106
	TP70/0.1-0.3	SE235946.035	%	70 - 130%	105
	TP71/0-0.2	SE235946.037	%	70 - 130%	105
	TP72/0-0.2	SE235946.039	%	70 - 130%	105
	DUP02	SE235946.045	%	70 - 130%	105
	DUP07	SE235946.047	%	70 - 130%	105
	TP39/0-0.2	SE235946.056	%	70 - 130%	108
	TP40/0.0-0.2	SE235946.059	%	70 - 130%	108
	TP41/0-0.2	SE235946.061	%	70 - 130%	106
	TP42/0-0.2	SE235946.064	%	70 - 130%	106
	TP43/0-0.2	SE235946.066	%	70 - 130%	106
	TP44/0-0.2	SE235946.068	%	70 - 130%	106
	TP45/0-0.2	SE235946.071	%	70 - 130%	105
	TP46/0-0.2	SE235946.073	%	70 - 130%	105
	TP47/0-0.1	SE235946.074	%	70 - 130%	106
	TP48/0.1-0.3	SE235946.076	%	70 - 130%	106
	TP49/0.1-0.3	SE235946.078	%	70 - 130%	106
	TP50/0-0.2	SE235946.080	%	70 - 130%	102
	TP51/0-0.2	SE235946.083	%	70 - 130%	106

PCBs in Soil — Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	TP52/0.3-0.5	SE235946.002	%	60 - 130%	96
	TP54/0.8-1.0	SE235946.005	%	60 - 130%	95
	TP56/0.5-0.7	SE235946.008	%	60 - 130%	96

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

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

PCBs in Soil (continued) — Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	TP58/0-0.2	SE235946.012	%	60 - 130%	103
	TP59/0.1-0.3	SE235946.014	%	60 - 130%	96
	TP61/0-0.2	SE235946.016	%	60 - 130%	100
	TP62/0-0.2	SE235946.019	%	60 - 130%	104
	TP64/0.1-0.3	SE235946.023	%	60 - 130%	100
	TP67/0.1-0.3	SE235946.029	%	60 - 130%	103
	TP70/0.1-0.3	SE235946.035	%	60 - 130%	98
	TP40/0.0-0.2	SE235946.059	%	60 - 130%	100
	TP44/0-0.2	SE235946.068	%	60 - 130%	102
	TP46/0-0.2	SE235946.073	%	60 - 130%	101
	TP48/0.1-0.3	SE235946.076	%	60 - 130%	100
	TP49/0.1-0.3	SE235946.078	%	60 - 130%	96
	TP51/0-0.2	SE235946.083	%	60 - 130%	98

VOC's in Soil — Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	TP52/0.3-0.5	SE235946.002	%	60 - 130%	102
	TP54/0.8-1.0	SE235946.005	%	60 - 130%	90
	TP56/0.5-0.7	SE235946.008	%	60 - 130%	103
	TP58/0-0.2	SE235946.012	%	60 - 130%	106
	TP59/0.1-0.3	SE235946.014	%	60 - 130%	103
	TP61/0-0.2	SE235946.016	%	60 - 130%	102
	TP62/0-0.2	SE235946.019	%	60 - 130%	103
	TP64/0.1-0.3	SE235946.023	%	60 - 130%	97
	TP67/0.1-0.3	SE235946.029	%	60 - 130%	95
	TP70/0.1-0.3	SE235946.035	%	60 - 130%	97
	Trip Blank	SE235946.048	%	60 - 130%	102
	Trip Blank	SE235946.049	%	60 - 130%	101
	Trip Blank	SE235946.050	%	60 - 130%	97
	Trip Blank	SE235946.051	%	60 - 130%	91
	Trip Spike	SE235946.052	%	60 - 130%	94
	Trip Spike	SE235946.053	%	60 - 130%	97
	Trip Spike	SE235946.054	%	60 - 130%	97
	Trip Spike	SE235946.055	%	60 - 130%	94
	TP40/0.0-0.2	SE235946.059	%	60 - 130%	87
	TP44/0-0.2	SE235946.068	%	60 - 130%	84
	TP46/0-0.2	SE235946.073	%	60 - 130%	85
	TP48/0.1-0.3	SE235946.076	%	60 - 130%	91
	TP49/0.1-0.3	SE235946.078	%	60 - 130%	92
	TP51/0-0.2	SE235946.083	%	60 - 130%	89
d4-1,2-dichloroethane (Surrogate)	TP52/0.3-0.5	SE235946.002	%	60 - 130%	101
	TP54/0.8-1.0	SE235946.005	%	60 - 130%	90
	TP56/0.5-0.7	SE235946.008	%	60 - 130%	103
	TP58/0-0.2	SE235946.012	%	60 - 130%	107
	TP59/0.1-0.3	SE235946.014	%	60 - 130%	105
	TP61/0-0.2	SE235946.016	%	60 - 130%	106
	TP62/0-0.2	SE235946.019	%	60 - 130%	105
	TP64/0.1-0.3	SE235946.023	%	60 - 130%	101
	TP67/0.1-0.3	SE235946.029	%	60 - 130%	106
	TP70/0.1-0.3	SE235946.035	%	60 - 130%	100
	Trip Blank	SE235946.048	%	60 - 130%	106
	Trip Blank	SE235946.049	%	60 - 130%	108
	Trip Blank	SE235946.050	%	60 - 130%	107
	Trip Blank	SE235946.051	%	60 - 130%	100
	Trip Spike	SE235946.052	%	60 - 130%	99
	Trip Spike	SE235946.053	%	60 - 130%	103
	Trip Spike	SE235946.054	%	60 - 130%	100
	Trip Spike	SE235946.055	%	60 - 130%	101
	TP40/0.0-0.2	SE235946.059	%	60 - 130%	98
	TP44/0-0.2	SE235946.068	%	60 - 130%	95
	TP46/0-0.2	SE235946.073	%	60 - 130%	96

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

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

VOC's in Soil (continued) — Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d4-1,2-dichloroethane (Surrogate)	TP48/0.1-0.3	SE235946.076	%	60 - 130%	105
	TP49/0.1-0.3	SE235946.078	%	60 - 130%	102
	TP51/0-0.2	SE235946.083	%	60 - 130%	101
d8-toluene (Surrogate)	TP52/0.3-0.5	SE235946.002	%	60 - 130%	108
	TP54/0.8-1.0	SE235946.005	%	60 - 130%	96
	TP56/0.5-0.7	SE235946.008	%	60 - 130%	110
	TP58/0-0.2	SE235946.012	%	60 - 130%	114
	TP59/0.1-0.3	SE235946.014	%	60 - 130%	109
	TP61/0-0.2	SE235946.016	%	60 - 130%	112
	TP62/0-0.2	SE235946.019	%	60 - 130%	112
	TP64/0.1-0.3	SE235946.023	%	60 - 130%	105
	TP67/0.1-0.3	SE235946.029	%	60 - 130%	100
	TP70/0.1-0.3	SE235946.035	%	60 - 130%	100
	Trip Blank	SE235946.048	%	60 - 130%	111
	Trip Blank	SE235946.049	%	60 - 130%	112
	Trip Blank	SE235946.050	%	60 - 130%	109
	Trip Blank	SE235946.051	%	60 - 130%	103
	Trip Spike	SE235946.052	%	60 - 130%	102
	Trip Spike	SE235946.053	%	60 - 130%	105
	Trip Spike	SE235946.054	%	60 - 130%	100
	Trip Spike	SE235946.055	%	60 - 130%	99
	TP40/0.0-0.2	SE235946.059	%	60 - 130%	98
	TP44/0-0.2	SE235946.068	%	60 - 130%	94
	TP46/0-0.2	SE235946.073	%	60 - 130%	93
	TP48/0.1-0.3	SE235946.076	%	60 - 130%	102
	TP49/0.1-0.3	SE235946.078	%	60 - 130%	98
	TP51/0-0.2	SE235946.083	%	60 - 130%	100

Volatile Petroleum Hydrocarbons in Soil — Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	TP52/0.3-0.5	SE235946.002	%	60 - 130%	102
	TP54/0.8-1.0	SE235946.005	%	60 - 130%	90
	TP56/0.5-0.7	SE235946.008	%	60 - 130%	103
	TP58/0-0.2	SE235946.012	%	60 - 130%	106
	TP59/0.1-0.3	SE235946.014	%	60 - 130%	103
	TP61/0-0.2	SE235946.016	%	60 - 130%	102
	TP62/0-0.2	SE235946.019	%	60 - 130%	103
	TP64/0.1-0.3	SE235946.023	%	60 - 130%	97
	TP67/0.1-0.3	SE235946.029	%	60 - 130%	95
	TP70/0.1-0.3	SE235946.035	%	60 - 130%	97
	TP40/0.0-0.2	SE235946.059	%	60 - 130%	87
	TP44/0-0.2	SE235946.068	%	60 - 130%	84
	TP46/0-0.2	SE235946.073	%	60 - 130%	85
	TP48/0.1-0.3	SE235946.076	%	60 - 130%	91
	TP49/0.1-0.3	SE235946.078	%	60 - 130%	92
	TP51/0-0.2	SE235946.083	%	60 - 130%	89
d4-1,2-dichloroethane (Surrogate)	TP52/0.3-0.5	SE235946.002	%	60 - 130%	101
	TP54/0.8-1.0	SE235946.005	%	60 - 130%	90
	TP56/0.5-0.7	SE235946.008	%	60 - 130%	103
	TP58/0-0.2	SE235946.012	%	60 - 130%	107
	TP59/0.1-0.3	SE235946.014	%	60 - 130%	105
	TP61/0-0.2	SE235946.016	%	60 - 130%	106
	TP62/0-0.2	SE235946.019	%	60 - 130%	105
	TP64/0.1-0.3	SE235946.023	%	60 - 130%	101
	TP67/0.1-0.3	SE235946.029	%	60 - 130%	106
	TP70/0.1-0.3	SE235946.035	%	60 - 130%	100
	TP40/0.0-0.2	SE235946.059	%	60 - 130%	98
	TP44/0-0.2	SE235946.068	%	60 - 130%	95
	TP46/0-0.2	SE235946.073	%	60 - 130%	96
	TP48/0.1-0.3	SE235946.076	%	60 - 130%	105
	TP49/0.1-0.3	SE235946.078	%	60 - 130%	102

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

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

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

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d4-1,2-dichloroethane (Surrogate)	TP51/0-0.2	SE235946.083	%	60 - 130%	101
d8-toluene (Surrogate)	TP52/0.3-0.5	SE235946.002	%	60 - 130%	108
	TP54/0.8-1.0	SE235946.005	%	60 - 130%	96
	TP56/0.5-0.7	SE235946.008	%	60 - 130%	110
	TP58/0-0.2	SE235946.012	%	60 - 130%	114
	TP59/0.1-0.3	SE235946.014	%	60 - 130%	109
	TP61/0-0.2	SE235946.016	%	60 - 130%	112
	TP62/0-0.2	SE235946.019	%	60 - 130%	112
	TP64/0.1-0.3	SE235946.023	%	60 - 130%	105
	TP67/0.1-0.3	SE235946.029	%	60 - 130%	100
	TP70/0.1-0.3	SE235946.035	%	60 - 130%	100
	TP40/0.0-0.2	SE235946.059	%	60 - 130%	98
	TP44/0-0.2	SE235946.068	%	60 - 130%	94
	TP46/0-0.2	SE235946.073	%	60 - 130%	93
	TP48/0.1-0.3	SE235946.076	%	60 - 130%	102
	TP49/0.1-0.3	SE235946.078	%	60 - 130%	98
	TP51/0-0.2	SE235946.083	%	60 - 130%	100

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

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

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)

Method: ME-(AU)-[ENV]AN122

Sample Number	Parameter	Units	LOR	Result
LB257428.001	Exchangeable Sodium, Na	mg/kg	2	1.2419
	Exchangeable Potassium, K	mg/kg	2	0.4941
	Exchangeable Calcium, Ca	mg/kg	2	0.7423
	Exchangeable Magnesium, Mg	mg/kg	2	0.2015

Mercury in Soil

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

Sample Number	Parameter	Units	LOR	Result
LB257154.001	Mercury	mg/kg	0.05	<0.05
LB257155.001	Mercury	mg/kg	0.05	<0.05

OC Pesticides in Soil

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

Sample Number		Parameter	Units	LOR	Result
LB257104.001		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Alpha BHC	mg/kg	0.1	<0.1
		Lindane	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.2	<0.2
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Endrin	mg/kg	0.2	<0.2
		Beta Endosulfan	mg/kg	0.2	<0.2
		p,p'-DDD	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		Endrin Aldehyde	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Endrin Ketone	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	104
LB257105.001		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Alpha BHC	mg/kg	0.1	<0.1
		Lindane	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.2	<0.2
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Endrin	mg/kg	0.2	<0.2
		Beta Endosulfan	mg/kg	0.2	<0.2
		p,p'-DDD	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		Endrin Aldehyde	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Endrin Ketone	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	92

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

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

OP Pesticides in Soil

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

Sample Number		Parameter	Units	LOR	Result
LB257104.001		Dichlorvos	mg/kg	0.5	<0.5
		Dimethoate	mg/kg	0.5	<0.5
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5
		Fenitrothion	mg/kg	0.2	<0.2
		Malathion	mg/kg	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	94
		d14-p-terphenyl (Surrogate)	%	-	96
LB257105.001		Dichlorvos	mg/kg	0.5	<0.5
		Dimethoate	mg/kg	0.5	<0.5
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5
		Fenitrothion	mg/kg	0.2	<0.2
		Malathion	mg/kg	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	93
		d14-p-terphenyl (Surrogate)	%	-	93

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

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

Sample Number		Parameter	Units	LOR	Result
LB257104.001		Naphthalene	mg/kg	0.1	<0.1
		2-methylnaphthalene	mg/kg	0.1	<0.1
		1-methylnaphthalene	mg/kg	0.1	<0.1
		Acenaphthylene	mg/kg	0.1	<0.1
		Acenaphthene	mg/kg	0.1	<0.1
		Fluorene	mg/kg	0.1	<0.1
		Phenanthrene	mg/kg	0.1	<0.1
		Anthracene	mg/kg	0.1	<0.1
		Fluoranthene	mg/kg	0.1	<0.1
		Pyrene	mg/kg	0.1	<0.1
		Benzo(a)anthracene	mg/kg	0.1	<0.1
		Chrysene	mg/kg	0.1	<0.1
		Benzo(a)pyrene	mg/kg	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	107
		2-fluorobiphenyl (Surrogate)	%	-	94
		d14-p-terphenyl (Surrogate)	%	-	96
LB257105.001		Naphthalene	mg/kg	0.1	<0.1
		2-methylnaphthalene	mg/kg	0.1	<0.1
		1-methylnaphthalene	mg/kg	0.1	<0.1
		Acenaphthylene	mg/kg	0.1	<0.1
		Acenaphthene	mg/kg	0.1	<0.1
		Fluorene	mg/kg	0.1	<0.1
		Phenanthrene	mg/kg	0.1	<0.1
		Anthracene	mg/kg	0.1	<0.1
		Fluoranthene	mg/kg	0.1	<0.1
		Pyrene	mg/kg	0.1	<0.1
		Benzo(a)anthracene	mg/kg	0.1	<0.1
		Chrysene	mg/kg	0.1	<0.1

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

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

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

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

Sample Number		Parameter	Units	LOR	Result
LB257105.001		Benzo(a)pyrene	mg/kg	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	105
		2-fluorobiphenyl (Surrogate)	%	-	93
		d14-p-terphenyl (Surrogate)	%	-	93

PCBs in Soil

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

Sample Number		Parameter	Units	LOR	Result
LB257104.001		Arochlor 1016	mg/kg	0.2	<0.2
		Arochlor 1221	mg/kg	0.2	<0.2
		Arochlor 1232	mg/kg	0.2	<0.2
		Arochlor 1242	mg/kg	0.2	<0.2
		Arochlor 1248	mg/kg	0.2	<0.2
		Arochlor 1254	mg/kg	0.2	<0.2
		Arochlor 1260	mg/kg	0.2	<0.2
		Arochlor 1262	mg/kg	0.2	<0.2
		Arochlor 1268	mg/kg	0.2	<0.2
		Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	104
LB257105.001		Arochlor 1016	mg/kg	0.2	<0.2
		Arochlor 1221	mg/kg	0.2	<0.2
		Arochlor 1232	mg/kg	0.2	<0.2
		Arochlor 1242	mg/kg	0.2	<0.2
		Arochlor 1248	mg/kg	0.2	<0.2
		Arochlor 1254	mg/kg	0.2	<0.2
		Arochlor 1260	mg/kg	0.2	<0.2
		Arochlor 1262	mg/kg	0.2	<0.2
		Arochlor 1268	mg/kg	0.2	<0.2
		Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	92

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

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

Sample Number	Parameter	Units	LOR	Result
LB257148.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0
LB257149.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0

TRH (Total Recoverable Hydrocarbons) in Soil

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

Sample Number	Parameter	Units	LOR	Result
LB257104.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110
LB257105.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100

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

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

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

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

Sample Number		Parameter	Units	LOR	Result
LB257105.001		TRH C10-C36 Total	mg/kg	110	<110

VOC's in Soil

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

Sample Number		Parameter	Units	LOR	Result
LB257107.001	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
	Polycyclic VOCs	Naphthalene (VOC)	mg/kg	0.1	<0.1
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	98
		d8-toluene (Surrogate)	%	-	99
		Bromofluorobenzene (Surrogate)	%	-	100
	Totals	Total BTEX	mg/kg	0.6	<0.6

Volatile Petroleum Hydrocarbons in Soil

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

Sample Number		Parameter	Units	LOR	Result
LB257107.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	98

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

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

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

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

Mercury in Soil

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

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE235946.019	LB257154.014	Mercury	mg/kg	0.05	<0.05	<0.05	166	0
SE235946.064	LB257155.014	Mercury	mg/kg	0.05	0.05	<0.05	146	1

Moisture Content

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

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE235946.019	LB257112.011	% Moisture	%w/w	1	16.9	16.6	36	1
SE235946.035	LB257112.020	% Moisture	%w/w	1	12.3	11.4	38	7
SE235946.051	LB257113.011	% Moisture	%w/w	1	<1	<1	200	0
SE235946.074	LB257113.022	% Moisture	%w/w	1	24.2	24.7	34	2
SE235946.083	LB257113.028	% Moisture	%w/w	1	28.2	28.9	34	2

OC Pesticides in Soil

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

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE235946.019	LB257104.014		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
			Total OC VIC EPA	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.16	0.16	30	1
SE235946.035	LB257104.023		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

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

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

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

OC Pesticides in Soil (continued) — **Method: ME-(AU)-[ENV]AN420**

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE235946.035	LB257104.023		o,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
			Total OC VIC EPA	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.15	30	4
SE235946.068	LB257105.014		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
			Total OC VIC EPA	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.15	30	4
SE235946.083	LB257105.022		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

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

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

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

OC Pesticides in Soil (continued)

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

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE235946.083	LB257105.022		Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
			Total OC VIC EPA	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.15	30	1

OP Pesticides in Soil

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

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE235946.019	LB257104.014		Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	0
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	1
SE235946.035	LB257104.023		Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	2
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	2
SE235946.068	LB257105.014		Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	1
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	1
SE235946.083	LB257105.022		Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

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

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

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

OP Pesticides in Soil (continued) — Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE235946.083	LB257105.022		Malathion	mg/kg	0.2	<0.2	<0.2	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	1
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	0

PAH (Polynuclear Aromatic Hydrocarbons) in Soil — Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE235946.019	LB257104.014		Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
			Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
			Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	<0.3	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	<0.2	175	0
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	30	2
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	0
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	1
SE235946.035	LB257104.023		Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
			Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
			Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	<0.3	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	<0.2	175	0
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	30	2

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

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

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

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

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued) — Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE235946.035	LB257104.023	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	2
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	2
SE235946.068	LB257105.014		Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
			Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
			Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	<0.3	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	<0.2	175	0
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	30	0
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	1
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	1
SE235946.083	LB257105.022		Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
			Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
			Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	<0.3	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	<0.2	175	0
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	30	1
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	1
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	0

PCBs in Soil — Method: ME-(AU)-[ENV]AN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE235946.019	LB257104.014	Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

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

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

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

PCBs in Soil (continued)

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

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE235946.019	LB257104.014		Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	30	1
SE235946.035	LB257104.023		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	30	4
SE235946.068	LB257105.014		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	30	4
SE235946.083	LB257105.022		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	30	1

pH in soil (1:5)

Method: ME-(AU)-[ENV]AN101

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE235946.081	LB257440.017	pH	pH Units	0.1	5.8	5.8	32	1
SE236229.004	LB257440.016	pH	pH Units	0.1	6.7	7.0	31	5

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

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

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE235946.019	LB257148.014	Arsenic, As	mg/kg	1	10	11	40	7
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	190	0
		Chromium, Cr	mg/kg	0.5	14	15	33	8
		Copper, Cu	mg/kg	0.5	23	22	32	3
		Nickel, Ni	mg/kg	0.5	8.4	8.3	36	2
		Lead, Pb	mg/kg	1	36	37	33	4
		Zinc, Zn	mg/kg	2	140	130	32	5
SE235946.037	LB257148.024	Arsenic, As	mg/kg	1	9	7	43	15
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	14	14	33	1
		Copper, Cu	mg/kg	0.5	10	10	35	0
		Nickel, Ni	mg/kg	0.5	6.4	6.2	38	3
		Lead, Pb	mg/kg	1	22	20	35	10
		Zinc, Zn	mg/kg	2	22	24	39	6

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

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

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

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

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

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

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE235946.064	LB257149.014	Arsenic, As	mg/kg	1	7	9	43	29
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	188	0
		Chromium, Cr	mg/kg	0.5	15	18	33	20
		Copper, Cu	mg/kg	0.5	31	36	31	15
		Nickel, Ni	mg/kg	0.5	7.6	6.7	37	13
		Lead, Pb	mg/kg	1	32	32	33	2
		Zinc, Zn	mg/kg	2	140	150	31	7

TRH (Total Recoverable Hydrocarbons) in Soil

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

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE235946.019	LB257104.014		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE235946.035	LB257104.023		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE235946.068	LB257105.014		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE235946.083	LB257105.022		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0

VOC's in Soil

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

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE235946.035	LB257107.015	Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
		Hydrocarbons	Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
		Polycyclic	Naphthalene (VOC)	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.0	10.3	50	3
			d8-toluene (Surrogate)	mg/kg	-	10.0	11.3	50	11
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.7	10.3	50	5

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

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

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

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

VOC's in Soil (continued) — Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE235946.035	LB257107.015	Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
SE235946.083	LB257107.034	Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
		Hydrocarbons	Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
		Polycyclic	Naphthalene (VOC)	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.1	10.2	50	1
			d8-toluene (Surrogate)	mg/kg	-	10.0	9.7	50	3
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.9	9.1	50	2
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0

Volatile Petroleum Hydrocarbons in Soil — Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE235946.035	LB257107.015		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.0	10.3	30	3
			d8-toluene (Surrogate)	mg/kg	-	10.0	11.3	30	11
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.7	10.3	30	5
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE235946.083	LB257107.034		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.1	10.2	30	1
			d8-toluene (Surrogate)	mg/kg	-	10.0	9.7	30	3
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.9	9.1	30	2
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

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

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)

Method: ME-(AU)-[ENV]AN122

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB257428.002	Exchangeable Sodium, Na	meq/100g	0.01	0.21	0.194	80 - 120	110
	Exchangeable Potassium, K	meq/100g	0.01	0.60	0.63	80 - 120	95
	Exchangeable Calcium, Ca	meq/100g	0.01	6.0	6.3	80 - 120	95
	Exchangeable Magnesium, Mg	meq/100g	0.02	1.1	1.11	80 - 120	95

Mercury in Soil

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

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB257154.002	Mercury	mg/kg	0.05	0.22	0.2	70 - 130	112
LB257155.002	Mercury	mg/kg	0.05	0.20	0.2	70 - 130	100

OC Pesticides in Soil

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

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB257104.002		Heptachlor	mg/kg	0.1	0.2	0.2	60 - 140	106
		Aldrin	mg/kg	0.1	0.2	0.2	60 - 140	103
		Delta BHC	mg/kg	0.1	0.2	0.2	60 - 140	104
		Dieldrin	mg/kg	0.2	0.2	0.2	60 - 140	100
		Endrin	mg/kg	0.2	0.2	0.2	60 - 140	115
		p,p'-DDT	mg/kg	0.1	0.2	0.2	60 - 140	96
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.14	0.15	40 - 130	96
LB257105.002		Heptachlor	mg/kg	0.1	0.2	0.2	60 - 140	103
		Aldrin	mg/kg	0.1	0.2	0.2	60 - 140	98
		Delta BHC	mg/kg	0.1	0.2	0.2	60 - 140	100
		Dieldrin	mg/kg	0.2	<0.2	0.2	60 - 140	95
		Endrin	mg/kg	0.2	<0.2	0.2	60 - 140	99
		p,p'-DDT	mg/kg	0.1	0.2	0.2	60 - 140	84
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.14	0.15	40 - 130	93

OP Pesticides in Soil

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

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB257104.002		Dichlorvos	mg/kg	0.5	1.7	2	60 - 140	85
		Diazinon (Dimpylate)	mg/kg	0.5	2.0	2	60 - 140	100
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	1.9	2	60 - 140	95
		Ethion	mg/kg	0.2	1.5	2	60 - 140	76
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	94
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	87
LB257105.002		Dichlorvos	mg/kg	0.5	1.8	2	60 - 140	88
		Diazinon (Dimpylate)	mg/kg	0.5	2.0	2	60 - 140	102
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	1.9	2	60 - 140	97
		Ethion	mg/kg	0.2	1.7	2	60 - 140	83
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	92
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	84

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

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

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB257104.002		Naphthalene	mg/kg	0.1	4.7	4	60 - 140	117
		Acenaphthylene	mg/kg	0.1	4.5	4	60 - 140	112
		Acenaphthene	mg/kg	0.1	4.7	4	60 - 140	117
		Phenanthrene	mg/kg	0.1	4.8	4	60 - 140	119
		Anthracene	mg/kg	0.1	4.7	4	60 - 140	117
		Fluoranthene	mg/kg	0.1	4.7	4	60 - 140	119
		Pyrene	mg/kg	0.1	4.2	4	60 - 140	106
		Benzo(a)pyrene	mg/kg	0.1	4.5	4	60 - 140	111
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	103
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	94
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	87
LB257105.002		Naphthalene	mg/kg	0.1	4.9	4	60 - 140	121
		Acenaphthylene	mg/kg	0.1	4.7	4	60 - 140	117
		Acenaphthene	mg/kg	0.1	4.9	4	60 - 140	122
		Phenanthrene	mg/kg	0.1	4.9	4	60 - 140	124
		Anthracene	mg/kg	0.1	4.9	4	60 - 140	122
		Fluoranthene	mg/kg	0.1	5.0	4	60 - 140	125
		Pyrene	mg/kg	0.1	4.4	4	60 - 140	109

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

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

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

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

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB257105.002		Benzo(a)pyrene	mg/kg	0.1	4.6	4	60 - 140	116
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	100
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	92
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	84

PCBs in Soil

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

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB257104.002	Arochlor 1260	mg/kg	0.2	0.5	0.4	60 - 140	116
LB257105.002	Arochlor 1260	mg/kg	0.2	0.5	0.4	60 - 140	122

pH in soil (1:5)

Method: ME-(AU)-[ENV]AN101

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB257440.003	pH	pH Units	0.1	7.4	7.415	98 - 102	100

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

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

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB257148.002	Arsenic, As	mg/kg	1	350	318.22	80 - 120	109
	Cadmium, Cd	mg/kg	0.3	4.8	4.81	70 - 130	99
	Chromium, Cr	mg/kg	0.5	40	38.31	80 - 120	104
	Copper, Cu	mg/kg	0.5	320	290	80 - 120	111
	Nickel, Ni	mg/kg	0.5	190	187	80 - 120	103
	Lead, Pb	mg/kg	1	94	89.9	80 - 120	104
	Zinc, Zn	mg/kg	2	280	273	80 - 120	103
LB257149.002	Arsenic, As	mg/kg	1	340	318.22	80 - 120	106
	Cadmium, Cd	mg/kg	0.3	4.6	4.81	70 - 130	95
	Chromium, Cr	mg/kg	0.5	37	38.31	80 - 120	97
	Copper, Cu	mg/kg	0.5	310	290	80 - 120	107
	Nickel, Ni	mg/kg	0.5	190	187	80 - 120	100
	Lead, Pb	mg/kg	1	92	89.9	80 - 120	102
	Zinc, Zn	mg/kg	2	270	273	80 - 120	99

TRH (Total Recoverable Hydrocarbons) in Soil

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

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB257104.002		TRH C10-C14	mg/kg	20	47	40	60 - 140	118
		TRH C15-C28	mg/kg	45	47	40	60 - 140	118
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	80
	TRH F Bands	TRH >C10-C16	mg/kg	25	47	40	60 - 140	118
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	108
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	70
LB257105.002		TRH C10-C14	mg/kg	20	43	40	60 - 140	108
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	98
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	78
	TRH F Bands	TRH >C10-C16	mg/kg	25	42	40	60 - 140	105
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	80
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	85

VOC's in Soil

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

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB257107.002	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	4.7	5	60 - 140	94
		Toluene	mg/kg	0.1	4.5	5	60 - 140	90
		Ethylbenzene	mg/kg	0.1	4.7	5	60 - 140	95
		m/p-xylene	mg/kg	0.2	8.7	10	60 - 140	87
		o-xylene	mg/kg	0.1	4.8	5	60 - 140	96
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	11.1	10	70 - 130	111
		d8-toluene (Surrogate)	mg/kg	-	11.8	10	70 - 130	118
		Bromofluorobenzene (Surrogate)	mg/kg	-	10.9	10	70 - 130	109

Volatile Petroleum Hydrocarbons in Soil

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

Sample Number	Parameter	Units	LOR

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

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

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

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB257107.002		TRH C6-C10	mg/kg	25	97	92.5	60 - 140	105
		TRH C6-C9	mg/kg	20	86	80	60 - 140	108
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	11.1	10	70 - 130	111
		Bromofluorobenzene (Surrogate)	mg/kg	-	10.9	10	70 - 130	109
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	69	62.5	60 - 140	111

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

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

Mercury in Soil

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

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE235946.002	LB257154.004	Mercury	mg/kg	0.05	0.26	<0.05	0.2	117
SE235946.039	LB257155.004	Mercury	mg/kg	0.05	0.23	<0.05	0.2	99

OC Pesticides in Soil

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

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE235946.002	LB257104.004		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	-	-
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	-	-
			Lindane	mg/kg	0.1	<0.1	<0.1	-	-
			Heptachlor	mg/kg	0.1	0.2	<0.1	0.2	112
			Aldrin	mg/kg	0.1	0.2	<0.1	0.2	105
			Beta BHC	mg/kg	0.1	<0.1	<0.1	-	-
			Delta BHC	mg/kg	0.1	0.2	<0.1	0.2	111
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	-	-
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	-	-
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	-	-
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	-	-
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	-	-
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	-	-
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	-	-
			Dieldrin	mg/kg	0.2	0.2	<0.2	0.2	107
			Endrin	mg/kg	0.2	0.2	<0.2	0.2	122
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	-	-
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	-	-
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	-	-
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	-	-
			p,p'-DDT	mg/kg	0.1	0.2	<0.1	0.2	101
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	-	-
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	-	-
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	-	-
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	-	-
			Isodrin	mg/kg	0.1	<0.1	<0.1	-	-
			Mirex	mg/kg	0.1	<0.1	<0.1	-	-
			Total CLP OC Pesticides	mg/kg	1	1	<1	-	-
			Total OC VIC EPA	mg/kg	1	1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.14	-	101
SE235946.037	LB257105.004		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	-	-
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	-	-
			Lindane	mg/kg	0.1	<0.1	<0.1	-	-
			Heptachlor	mg/kg	0.1	0.2	<0.1	0.2	111
			Aldrin	mg/kg	0.1	0.2	<0.1	0.2	107
			Beta BHC	mg/kg	0.1	<0.1	<0.1	-	-
			Delta BHC	mg/kg	0.1	0.2	<0.1	0.2	109
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	-	-
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	-	-
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	-	-
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	-	-
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	-	-
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	-	-
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	-	-
			Dieldrin	mg/kg	0.2	0.2	<0.2	0.2	103
			Endrin	mg/kg	0.2	0.2	<0.2	0.2	107
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	-	-
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	-	-
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	-	-
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	-	-
			p,p'-DDT	mg/kg	0.1	0.2	<0.1	0.2	93
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	-	-
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	-	-
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	-	-
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

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

OC Pesticides in Soil (continued)

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

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE235946.037	LB257105.004		Isodrin	mg/kg	0.1	<0.1	<0.1	-	-
			Mirex	mg/kg	0.1	<0.1	<0.1	-	-
			Total CLP OC Pesticides	mg/kg	1	1	<1	-	-
			Total OC VIC EPA	mg/kg	1	1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.14	-	99

OP Pesticides in Soil

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

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE235946.002	LB257104.004		Dichlorvos	mg/kg	0.5	1.8	<0.5	2	89
			Dimethoate	mg/kg	0.5	<0.5	<0.5	-	-
			Diazinon (Dimpylate)	mg/kg	0.5	2.0	<0.5	2	102
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	-	-
			Malathion	mg/kg	0.2	<0.2	<0.2	-	-
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	2.0	<0.2	2	99
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	-	-
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	-	-
			Methidathion	mg/kg	0.5	<0.5	<0.5	-	-
			Ethion	mg/kg	0.2	1.6	<0.2	2	82
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	-	-
			Total OP Pesticides*	mg/kg	1.7	7.4	<1.7	-	-
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	-	96
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	-	88
SE235946.037	LB257105.004		Dichlorvos	mg/kg	0.5	1.8	<0.5	2	88
			Dimethoate	mg/kg	0.5	<0.5	<0.5	-	-
			Diazinon (Dimpylate)	mg/kg	0.5	2.0	<0.5	2	100
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	-	-
			Malathion	mg/kg	0.2	<0.2	<0.2	-	-
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	1.9	<0.2	2	96
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	-	-
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	-	-
			Methidathion	mg/kg	0.5	<0.5	<0.5	-	-
			Ethion	mg/kg	0.2	1.7	<0.2	2	84
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	-	-
			Total OP Pesticides*	mg/kg	1.7	7.4	<1.7	-	-
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	-	94
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	-	84

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

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

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE235946.002	LB257104.004		Naphthalene	mg/kg	0.1	4.8	<0.1	4	119
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
			Acenaphthylene	mg/kg	0.1	4.6	<0.1	4	114
			Acenaphthene	mg/kg	0.1	4.7	<0.1	4	119
			Fluorene	mg/kg	0.1	<0.1	<0.1	-	-
			Phenanthrene	mg/kg	0.1	4.8	<0.1	4	121
			Anthracene	mg/kg	0.1	4.8	<0.1	4	119
			Fluoranthene	mg/kg	0.1	4.9	<0.1	4	121
			Pyrene	mg/kg	0.1	4.3	<0.1	4	107
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
			Chrysene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(a)pyrene	mg/kg	0.1	4.5	<0.1	4	112
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	4.5	<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	4.6	<0.3	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	4.5	<0.2	-	-
			Total PAH (18)	mg/kg	0.8	37	<0.8	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	-	106

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

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

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

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

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE235946.002	LB257104.004	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	-	96
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	-	88
SE235946.037	LB257105.004		Naphthalene	mg/kg	0.1	4.8	<0.1	4	119
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
			Acenaphthylene	mg/kg	0.1	4.6	<0.1	4	114
			Acenaphthene	mg/kg	0.1	4.8	<0.1	4	119
			Fluorene	mg/kg	0.1	<0.1	<0.1	-	-
			Phenanthrene	mg/kg	0.1	4.8	<0.1	4	120
			Anthracene	mg/kg	0.1	4.8	<0.1	4	119
			Fluoranthene	mg/kg	0.1	4.9	<0.1	4	122
			Pyrene	mg/kg	0.1	4.2	<0.1	4	106
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
			Chrysene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(a)pyrene	mg/kg	0.1	4.5	<0.1	4	111
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	4.5	<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	4.6	<0.3	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	4.5	<0.2	-	-
			Total PAH (18)	mg/kg	0.8	37	<0.8	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	-	104
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	-	94
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	-	84

PCBs in Soil

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

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE235946.002	LB257104.004		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1260	mg/kg	0.2	0.5	<0.2	0.4	121
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	-	-
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	-	101

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

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

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE235946.002	LB257148.004	Arsenic, As	mg/kg	1	53	7	50	92
		Cadmium, Cd	mg/kg	0.3	42	<0.3	50	85
		Chromium, Cr	mg/kg	0.5	57	11	50	94
		Copper, Cu	mg/kg	0.5	58	12	50	92
		Nickel, Ni	mg/kg	0.5	49	3.9	50	90
		Lead, Pb	mg/kg	1	60	17	50	87
		Zinc, Zn	mg/kg	2	71	26	50	89
SE235946.039	LB257149.004	Arsenic, As	mg/kg	1	56	14	50	84
		Cadmium, Cd	mg/kg	0.3	40	<0.3	50	81
		Chromium, Cr	mg/kg	0.5	55	12	50	85
		Copper, Cu	mg/kg	0.5	59	18	50	83
		Nickel, Ni	mg/kg	0.5	50	7.6	50	85
		Lead, Pb	mg/kg	1	66	28	50	75
		Zinc, Zn	mg/kg	2	87	44	50	86

TRH (Total Recoverable Hydrocarbons) in Soil

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

QC Sample	Sample Number	Parameter	Units	LOR

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

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

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

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

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE235946.002	LB257104.004		TRH C10-C14	mg/kg	20	49	<20	40	123
			TRH C15-C28	mg/kg	45	68	<45	40	63
			TRH C29-C36	mg/kg	45	55	65	40	-25 ④
			TRH C37-C40	mg/kg	100	<100	<100	-	-
			TRH C10-C36 Total	mg/kg	110	170	<110	-	-
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	-	-
		TRH F Bands	TRH >C10-C16	mg/kg	25	49	<25	40	123
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	49	<25	-	-
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	40	-20 ④
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	-	-

VOC's in Soil

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

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE235946.002	LB257107.004	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	3.8	<0.1	5	76
			Toluene	mg/kg	0.1	3.7	<0.1	5	74
			Ethylbenzene	mg/kg	0.1	3.9	<0.1	5	79
			m/p-xylene	mg/kg	0.2	7.3	<0.2	10	73
			o-xylene	mg/kg	0.1	4.0	<0.1	5	81
		Polycyclic	Naphthalene (VOC)	mg/kg	0.1	<0.1	<0.1	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.3	10.1	10	93
			d8-toluene (Surrogate)	mg/kg	-	9.5	10.8	10	95
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.0	10.2	10	90
		Totals	Total Xylenes	mg/kg	0.3	11	<0.3	-	-
			Total BTEX	mg/kg	0.6	23	<0.6	-	-

Volatile Petroleum Hydrocarbons in Soil

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

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE235946.002	LB257107.005		TRH C6-C10	mg/kg	25	81	<25	92.5	87
			TRH C6-C9	mg/kg	20	63	<20	80	79
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.3	10.1	10	93
			d8-toluene (Surrogate)	mg/kg	-	9.5	10.8	10	95
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.0	10.2	-	90
		VPH F Bands	Benzene (F0)	mg/kg	0.1	3.8	<0.1	-	-
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	58	<25	62.5	93

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

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

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the

QC Sample	Sample Number	Parameter	Units	LOR

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
***	Indicates that both * and ** apply.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.
①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	Abanish Nepal
Client	CONSTRUCTION SCIENCES PTY LTD
Address	2/4 KELLOGG RD ROOTY HILL NSW 2766
Telephone	0436 620 611
Facsimile	02 8438 0310
Email	Abanish.Nepal@constructionsciences.net
Project	**10791.EV.P.323 249-271Railway Terrace**
Order Number	**10791.EV.P.323**
Samples	37

LABORATORY DETAILS

Manager	Huong Crawford
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE235946 R0**
Date Received	23 Aug 2022
Date Reported	08 Sep 2022

COMMENTS

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

Micro subcontracted to Symbio Laboratories, 2 Sirius Road, Lane Cove West NSW 2066, NATA Accreditation Number 2455. Report No. S1191408.
Clay Content subcontracted to SGS Cairns, 2/58 Comport St, Portsmith QLD 4870, NATA Accreditation Number: 2562, Site Number: 3146. Report No. CE161505.

No respirable fibres detected in all soil samples using trace analysis technique.
Sample # 40 : No trace asbestos fibres detected using trace analysis technique.
Sample # 43 : Asbestos found in approx 75x35x3mm cement sheet fragments x2.
Sample # 63 : Asbestos found in approx 50x12x4mm cement sheet fragment.
Asbestos analysed by Approved Identifiers Ravee Sivasubramaniam and Yusuf Kuthpudin .

SIGNATORIES

S. Ravee

Ravee SIVASUBRAMANIAM
Hygiene Team Leader

RESULTS

Fibre Identification in soil — Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE235946.001	TP52/0-0.5	Soil	630g Clay,Sand,Soil, Rocks	23 Aug 2022	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE235946.004	TP54/0-0.1	Soil	567g Clay,Sand,Soil, Rocks	23 Aug 2022	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE235946.007	TP56/0-0.7	Soil	500g Clay,Sand,Rock s	23 Aug 2022	No Asbestos Found at RL of 0.1g/kg	<0.01
SE235946.009	TP57/0-0.1	Soil	429g Clay,Rocks	23 Aug 2022	No Asbestos Found at RL of 0.1g/kg	<0.01
SE235946.011	TP58/0-0.1	Soil	544g Clay,Rocks	23 Aug 2022	No Asbestos Found at RL of 0.1g/kg	<0.01
SE235946.013	TP59/0-0.1	Soil	574g Clay,Rocks	23 Aug 2022	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE235946.015	TP61/0-0.1	Soil	762g Clay,Sand,Soil, Rocks	23 Aug 2022	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE235946.017	TP61/0.1-0.2	Soil	892g Clay,Sand,Soil, Rocks	23 Aug 2022	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE235946.018	TP62/0-0.1	Soil	749g Clay,Sand,Soil, Rocks	23 Aug 2022	No Asbestos Found at RL of 0.1g/kg	<0.01
SE235946.020	TP63/0-0.1	Soil	719g Clay,Sand,Soil, Rocks	23 Aug 2022	No Asbestos Found at RL of 0.1g/kg	<0.01
SE235946.022	TP64/0-0.1	Soil	743g Sand,Soil,Rocks	23 Aug 2022	No Asbestos Found at RL of 0.1g/kg	<0.01
SE235946.024	TP65/0-0.1	Soil	586g Clay,Sand,Soil, Rocks	23 Aug 2022	No Asbestos Found at RL of 0.1g/kg	<0.01
SE235946.026	TP66/0-0.1	Soil	639g Clay,Sand,Soil, Rocks	23 Aug 2022	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE235946.028	TP67/0-0.1	Soil	609g Clay,Rocks	23 Aug 2022	No Asbestos Found at RL of 0.1g/kg	<0.01
SE235946.030	TP68/0-0.1	Soil	649g Clay,Sand,Soil, Rocks	23 Aug 2022	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE235946.032	TP69/0-0.1	Soil	586g Clay,Sand,Soil, Rocks	23 Aug 2022	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE235946.034	TP70/0-0.1	Soil	636g Clay,Sand,Soil, Rocks	23 Aug 2022	No Asbestos Found at RL of 0.1g/kg	<0.01
SE235946.036	TP71/0-0.1	Soil	747g Clay,Sand,Soil, Rocks	23 Aug 2022	No Asbestos Found at RL of 0.1g/kg	<0.01
SE235946.038	TP72/0-0.1	Soil	482g Clay,Rocks	23 Aug 2022	No Asbestos Found at RL of 0.1g/kg	<0.01
SE235946.057	TP39/0.1-0.5	Soil	681g Clay,Rocks	19 Aug 2022	No Asbestos Found at RL of 0.1g/kg	<0.01
SE235946.058	TP40/0-0.1	Soil	978g Clay,Sand,Soil, Rocks	19 Aug 2022	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01

RESULTS

Fibre Identification in soil — Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE235946.060	TP41/0-0.1	Soil	855g Clay,Rocks	19 Aug 2022	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE235946.063	TP42/0-0.1	Soil	828g Clay,Sand,Soil, Rocks	19 Aug 2022	Chrysotile Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	>0.01
SE235946.065	TP43/0-0.1	Soil	772g Clay,Sand,Soil, Rocks	19 Aug 2022	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE235946.067	TP44/0-0.1	Soil	688g Clay,Sand,Soil, Rocks	19 Aug 2022	No Asbestos Found at RL of 0.1g/kg	<0.01
SE235946.070	TP45/0-0.1	Soil	896g Clay,Soil,Rocks	19 Aug 2022	No Asbestos Found at RL of 0.1g/kg	<0.01
SE235946.072	TP46/0-0.1	Soil	742g Clay,Soil,Rocks	19 Aug 2022	No Asbestos Found at RL of 0.1g/kg	<0.01
SE235946.074	TP47/0-0.1	Soil	591g Clay,Soil,Rocks	19 Aug 2022	No Asbestos Found at RL of 0.1g/kg	<0.01
SE235946.075	TP48/0-0.1	Soil	613g Clay,Sand,Soil, Rocks	23 Aug 2022	No Asbestos Found at RL of 0.1g/kg	<0.01
SE235946.077	TP49/0-0.1	Soil	570g Clay,Sand,Soil, Rocks	23 Aug 2022	No Asbestos Found at RL of 0.1g/kg	<0.01
SE235946.078	TP49/0.1-0.3	Soil	562g Clay,Sand,Soil, Rocks	23 Aug 2022	No Asbestos Found at RL of 0.1g/kg	<0.01
SE235946.079	TP50/0-0.1	Soil	525g Clay,Sand,Rock s	23 Aug 2022	No Asbestos Found at RL of 0.1g/kg	<0.01
SE235946.082	TP51/0-0.1	Soil	330g Clay,Rocks	23 Aug 2022	No Asbestos Found at RL of 0.1g/kg	<0.01

RESULTS

Fibre ID in bulk materials — Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE235946.040	TP36/0-0.1/PAC M02	Other	180x130x2mm Plastic Fragment	18 Aug 2022	No Asbestos Detected	
SE235946.041	TP33/0-0.1/PAC M04	Other	100x40x4mm Cement Sheet Fragments x2	18 Aug 2022	Amosite & Chrysotile Asbestos Detected	
SE235946.042	TP25/0.1-0.3/PA CM13	Other	75x40x3mm Cement Sheet Fragments	22 Aug 2022	Amosite & Chrysotile Asbestos Detected	
SE235946.043	TP18/0-0.6/PAC M14	Other	55x50x4mm Cement Sheet Fragments and 75x35x3mm Cement Sheet Fragments x2	23 Aug 2022	Chrysotile Asbestos Detected	

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 5/9/2022

PARAMETER	UOM	LOR	TP52/0-0.5 SOIL - 23/8/2022 SE235946.001	TP54/0-0.1 SOIL - 23/8/2022 SE235946.004	TP56/0-0.7 SOIL - 23/8/2022 SE235946.007	TP57/0-0.1 SOIL - 23/8/2022 SE235946.009	TP58/0-0.1 SOIL - 23/8/2022 SE235946.011
Total Sample Weight*	g	1	**630**	**567**	**500**	**429**	**544**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	NAD	NAD	NAD	NAD	NAD

PARAMETER	UOM	LOR	TP59/0-0.1 SOIL - 23/8/2022 SE235946.013	TP61/0-0.1 SOIL - 23/8/2022 SE235946.015	TP61/0.1-0.2 SOIL - 23/8/2022 SE235946.017	TP62/0-0.1 SOIL - 23/8/2022 SE235946.018	TP63/0-0.1 SOIL - 23/8/2022 SE235946.020
Total Sample Weight*	g	1	**574**	**762**	**892**	**749**	**719**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	NAD	NAD	NAD	NAD	NAD

PARAMETER	UOM	LOR	TP64/0-0.1 SOIL - 23/8/2022 SE235946.022	TP65/0-0.1 SOIL - 23/8/2022 SE235946.024	TP66/0-0.1 SOIL - 23/8/2022 SE235946.026	TP67/0-0.1 SOIL - 23/8/2022 SE235946.028	TP68/0-0.1 SOIL - 23/8/2022 SE235946.030
Total Sample Weight*	g	1	**743**	**586**	**639**	**609**	**649**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	NAD	NAD	NAD	NAD	NAD

PARAMETER	UOM	LOR	TP69/0-0.1 SOIL - 23/8/2022 SE235946.032	TP70/0-0.1 SOIL - 23/8/2022 SE235946.034	TP71/0-0.1 SOIL - 23/8/2022 SE235946.036	TP72/0-0.1 SOIL - 23/8/2022 SE235946.038	TP39/0.1-0.5 SOIL - 19/8/2022 SE235946.057
Total Sample Weight*	g	1	**586**	**636**	**747**	**482**	**681**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	NAD	NAD	NAD	NAD	NAD

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 5/9/2022 (continued)

PARAMETER	UOM	LOR	TP40/0-0.1 SOIL - 19/8/2022 SE235946.058	TP41/0-0.1 SOIL - 19/8/2022 SE235946.060	TP42/0-0.1 SOIL - 19/8/2022 SE235946.063	TP43/0-0.1 SOIL - 19/8/2022 SE235946.065	TP44/0-0.1 SOIL - 19/8/2022 SE235946.067
Total Sample Weight*	g	1	**978**	**855**	**828**	**772**	**688**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	**4.85**	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	**0.09**	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	NAD	NAD	Chrysotile	NAD	NAD

PARAMETER	UOM	LOR	TP45/0-0.1 SOIL - 19/8/2022 SE235946.070	TP46/0-0.1 SOIL - 19/8/2022 SE235946.072	TP47/0-0.1 SOIL - 19/8/2022 SE235946.074	TP48/0-0.1 SOIL - 23/8/2022 SE235946.075	TP49/0-0.1 SOIL - 23/8/2022 SE235946.077
Total Sample Weight*	g	1	**896**	**742**	**591**	**613**	**570**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	NAD	NAD	NAD	NAD	NAD

PARAMETER	UOM	LOR	TP49/0.1-0.3 SOIL - 23/8/2022 SE235946.078	TP50/0-0.1 SOIL - 23/8/2022 SE235946.079	TP51/0-0.1 SOIL - 23/8/2022 SE235946.082
Total Sample Weight*	g	1	**562**	**525**	**330**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	NAD	NAD	NAD

METHOD	METHODOLOGY SUMMARY
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples , Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection/reporting limit (RL) of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602	The sample can be reported “no asbestos found at the reporting limit (RL) of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable ’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.
AN605	This technique gravimetrically determines the mass of Bonded Asbestos Containing Material retained on a 7mm Sieve and assumes that 15% of this ACM is asbestos. This calculated asbestos weight is then calculated as a percentage of the total sample weight. Any fibrous asbestos (FA) found in this fraction will be added to the 2-7mm fraction and its mass recorded there.
AN605	This technique also gravimetrically determines the mass of Fibrous Asbestos (FA) and Asbestos Fines (AF) Containing Material retained on and passing a 2mm sieve post 7mm sieving. Assumes that FA and AF are 100% asbestos containing. This calculated asbestos weight is then calculated as a percentage of the total sample weight. This does not include free/respirable fibres which are only observed by standard trace analysis as per AN602.
AN605	Bonded asbestos containing material (Bonded ACM) comprises asbestos-containing-material which is sound in condition. Fibrous asbestos (FA) comprises friable asbestos material and includes severely weathered cement sheet, insulation products and woven asbestos material. Asbestos fines (AF) includes free fibres, small fibre bundles and also small fragments of bonded ACM that passes through a 7mm sieve - which implies that the bonded ACM fragments have a substantial degree of damage which increases the potential for fibre release.
AN-605	Insofar as is technically feasible, this report is consistent with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment Remediation and Management of Asbestos - Contaminated Sites in Western Australia - May 2009 and NEPM 1999 (2013) schedule B1 section 4..

FOOTNOTES

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

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

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

Where reported: 'Asbestos Detected': Asbestos detected by polarised light microscopy, including dispersion staining.
Where reported: 'No Asbestos Found': No Asbestos Found by polarised light microscopy, including dispersion staining.
Where reported: 'UMF Detected': Mineral fibres of unknown type detected by polarised light microscopy, including dispersion staining. Confirmation by another independent analytical technique may be necessary.

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

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

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	Admin
Client	SGS I&E SYDNEY
Address	5058 201 I&E HSE SYDNEY (EX 5258) UNIT 16 33 MADDOX STREET ALEXANDRIA NSW 2015
Telephone	0285940400
Facsimile	0285940499
Email	au.environmental.sydney@sgs.com
Project	**10791.EV.P.323 249-271Railway Terrace**
Order Number	**SE235946**
Samples	83

LABORATORY DETAILS

Manager	Anthony Nilsson
Laboratory	SGS Cairns Environmental
Address	Unit 2, 58 Comport St Portsmith QLD 4870
Telephone	+61 07 4035 5111
Facsimile	+61 07 4035 5122
Email	AU.Environmental.Cairns@sgs.com
SGS Reference	**CE161505 R0**
Date Received	02 Sep 2022
Date Reported	08 Sep 2022

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(3146/19038)

SIGNATORIES

Anthony NILSSON
Operations Manager

Jon DICKER
Manager Northern QLD

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name CE161505.001 Soil 23 Aug 2022 SE235946.001	CE161505.002 Soil 23 Aug 2022 SE235946.002	CE161505.003 Soil 23 Aug 2022 SE235946.003	CE161505.004 Soil 23 Aug 2022 SE235946.004
Moisture Content Method: AN002 Tested: 5/9/2022						
% Moisture	%w/w	1	-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 8/9/2022						
Passing 75µm	%w/w	1	-	-	-	-
Retained 75µm	%w/w	1	-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 8/9/2022						
Clay (<0.002mm)	%w/w	0.1	-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name CE161505.005 Soil 23 Aug 2022 SE235946.005	CE161505.006 Soil 23 Aug 2022 SE235946.006	CE161505.007 Soil 23 Aug 2022 SE235946.007	CE161505.008 Soil 23 Aug 2022 SE235946.008
Moisture Content Method: AN002 Tested: 5/9/2022						
% Moisture	%w/w	1	-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 8/9/2022						
Passing 75µm	%w/w	1	-	-	-	-
Retained 75µm	%w/w	1	-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 8/9/2022						
Clay (<0.002mm)	%w/w	0.1	-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name CE161505.009 Soil 23 Aug 2022 SE235946.009	CE161505.010 Soil 23 Aug 2022 SE235946.010	CE161505.011 Soil 23 Aug 2022 SE235946.011	CE161505.012 Soil 23 Aug 2022 SE235946.012
Moisture Content Method: AN002 Tested: 5/9/2022						
% Moisture	%w/w	1	-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 8/9/2022						
Passing 75µm	%w/w	1	-	-	-	-
Retained 75µm	%w/w	1	-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 8/9/2022						
Clay (<0.002mm)	%w/w	0.1	-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name CE161505.013 Soil 23 Aug 2022 SE235946.013	CE161505.014 Soil 23 Aug 2022 SE235946.014	CE161505.015 Soil 23 Aug 2022 SE235946.015	CE161505.016 Soil 23 Aug 2022 SE235946.016
Moisture Content Method: AN002 Tested: 5/9/2022						
% Moisture	%w/w	1	-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 8/9/2022						
Passing 75µm	%w/w	1	-	-	-	-
Retained 75µm	%w/w	1	-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 8/9/2022						
Clay (<0.002mm)	%w/w	0.1	-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name CE161505.017 Soil 23 Aug 2022 SE235946.017	CE161505.018 Soil 23 Aug 2022 SE235946.018	CE161505.019 Soil 23 Aug 2022 SE235946.019	CE161505.020 Soil 23 Aug 2022 SE235946.020
Moisture Content Method: AN002 Tested: 5/9/2022						
% Moisture	%w/w	1	-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 8/9/2022						
Passing 75µm	%w/w	1	-	-	-	-
Retained 75µm	%w/w	1	-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 8/9/2022						
Clay (<0.002mm)	%w/w	0.1	-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name CE161505.021 Soil 23 Aug 2022 SE235946.021	CE161505.022 Soil 23 Aug 2022 SE235946.022	CE161505.023 Soil 23 Aug 2022 SE235946.023	CE161505.024 Soil 23 Aug 2022 SE235946.024
Moisture Content Method: AN002 Tested: 5/9/2022						
% Moisture	%w/w	1	-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 8/9/2022						
Passing 75µm	%w/w	1	-	-	-	-
Retained 75µm	%w/w	1	-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 8/9/2022						
Clay (<0.002mm)	%w/w	0.1	-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name CE161505.025 Soil 23 Aug 2022 SE235946.025	CE161505.026 Soil 23 Aug 2022 SE235946.026	CE161505.027 Soil 23 Aug 2022 SE235946.027	CE161505.028 Soil 23 Aug 2022 SE235946.028
Moisture Content Method: AN002 Tested: 5/9/2022						
% Moisture	%w/w	1	-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 8/9/2022						
Passing 75µm	%w/w	1	-	-	-	-
Retained 75µm	%w/w	1	-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 8/9/2022						
Clay (<0.002mm)	%w/w	0.1	-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name CE161505.029 Soil 23 Aug 2022 SE235946.029	CE161505.030 Soil 23 Aug 2022 SE235946.030	CE161505.031 Soil 23 Aug 2022 SE235946.031	CE161505.032 Soil 23 Aug 2022 SE235946.032
Moisture Content Method: AN002 Tested: 5/9/2022						
% Moisture	%w/w	1	-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 8/9/2022						
Passing 75µm	%w/w	1	-	-	-	-
Retained 75µm	%w/w	1	-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 8/9/2022						
Clay (<0.002mm)	%w/w	0.1	-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name CE161505.033 Soil 23 Aug 2022 SE235946.033	CE161505.034 Soil 23 Aug 2022 SE235946.034	CE161505.035 Soil 23 Aug 2022 SE235946.035	CE161505.036 Soil 23 Aug 2022 SE235946.036
Moisture Content Method: AN002 Tested: 5/9/2022						
% Moisture	%w/w	1	-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 8/9/2022						
Passing 75µm	%w/w	1	-	-	-	-
Retained 75µm	%w/w	1	-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 8/9/2022						
Clay (<0.002mm)	%w/w	0.1	-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name CE161505.037 Soil 23 Aug 2022 SE235946.037	CE161505.038 Soil 23 Aug 2022 SE235946.038	CE161505.039 Soil 23 Aug 2022 SE235946.039	CE161505.040 Material 18 Aug 2022 SE235946.040
Moisture Content Method: AN002 Tested: 5/9/2022						
% Moisture	%w/w	1	-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 8/9/2022						
Passing 75µm	%w/w	1	-	-	-	-
Retained 75µm	%w/w	1	-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 8/9/2022						
Clay (<0.002mm)	%w/w	0.1	-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE161505.041 Material 18 Aug 2022 SE235946.041	CE161505.042 Material 22 Aug 2022 SE235946.042	CE161505.043 Material 23 Aug 2022 SE235946.043	CE161505.044 Soil 18 Aug 2022 SE235946.044
Moisture Content Method: AN002 Tested: 5/9/2022							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 8/9/2022							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 8/9/2022							
Clay (<0.002mm)	%w/w	0.1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE161505.045 Soil 18 Aug 2022 SE235946.045	CE161505.046 Soil 19 Aug 2022 SE235946.046	CE161505.047 Soil 23 Aug 2022 SE235946.047	CE161505.048 Soil 18 Aug 2022 SE235946.048
Moisture Content Method: AN002 Tested: 5/9/2022							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 8/9/2022							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 8/9/2022							
Clay (<0.002mm)	%w/w	0.1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE161505.049 Soil 19 Aug 2022 SE235946.049	CE161505.050 Soil 22 Aug 2022 SE235946.050	CE161505.051 Soil 23 Aug 2022 SE235946.051	CE161505.052 Soil 18 Aug 2022 SE235946.052
Moisture Content Method: AN002 Tested: 5/9/2022							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 8/9/2022							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 8/9/2022							
Clay (<0.002mm)	%w/w	0.1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name CE161505.053 Soil 19 Aug 2022 SE235946.053	CE161505.054 Soil 22 Aug 2022 SE235946.054	CE161505.055 Soil 23 Aug 2022 SE235946.055	CE161505.056 Soil 19 Aug 2022 SE235946.056
Moisture Content Method: AN002 Tested: 5/9/2022						
% Moisture	%w/w	1	-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 8/9/2022						
Passing 75µm	%w/w	1	-	-	-	-
Retained 75µm	%w/w	1	-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 8/9/2022						
Clay (<0.002mm)	%w/w	0.1	-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name CE161505.057 Soil 19 Aug 2022 SE235946.057	CE161505.058 Soil 19 Aug 2022 SE235946.058	CE161505.059 Soil 19 Aug 2022 SE235946.059	CE161505.060 Soil 19 Aug 2022 SE235946.060
Moisture Content Method: AN002 Tested: 5/9/2022						
% Moisture	%w/w	1	-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 8/9/2022						
Passing 75µm	%w/w	1	-	-	-	-
Retained 75µm	%w/w	1	-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 8/9/2022						
Clay (<0.002mm)	%w/w	0.1	-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name CE161505.061 Soil 19 Aug 2022 SE235946.061	CE161505.062 Soil 19 Aug 2022 SE235946.062	CE161505.063 Soil 19 Aug 2022 SE235946.063	CE161505.064 Soil 19 Aug 2022 SE235946.064
Moisture Content Method: AN002 Tested: 5/9/2022						
% Moisture	%w/w	1	-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 8/9/2022						
Passing 75µm	%w/w	1	-	-	-	-
Retained 75µm	%w/w	1	-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 8/9/2022						
Clay (<0.002mm)	%w/w	0.1	-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE161505.065 Soil 19 Aug 2022 SE235946.065	CE161505.066 Soil 19 Aug 2022 SE235946.066	CE161505.067 Soil 19 Aug 2022 SE235946.067	CE161505.068 Soil 19 Aug 2022 SE235946.068
Moisture Content Method: AN002 Tested: 5/9/2022							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 8/9/2022							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 8/9/2022							
Clay (<0.002mm)	%w/w	0.1		-	-	-	-

Parameter	Units	LOR	Sample Number: CE161505.069 Sample Matrix: Soil Sample Date: 19 Aug 2022 Sample Name: SE235946.069	CE161505.070 Soil 19 Aug 2022 SE235946.070	CE161505.071 Soil 19 Aug 2022 SE235946.071	CE161505.072 Soil 19 Aug 2022 SE235946.072
Moisture Content Method: AN002 Tested: 2/9/2022						
% Moisture	%w/w	1	**22**	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 8/9/2022						
Passing 75µm	%w/w	1	**71**	-	-	-
Retained 75µm	%w/w	1	**29**	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 2/9/2022						
Clay (<0.002mm)	%w/w	0.1	**12**	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE161505.073 Soil 19 Aug 2022 SE235946.073	CE161505.074 Soil 19 Aug 2022 SE235946.074	CE161505.075 Soil 23 Aug 2022 SE235946.075	CE161505.076 Soil 23 Aug 2022 SE235946.076
Moisture Content Method: AN002 Tested: 5/9/2022							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 8/9/2022							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 8/9/2022							
Clay (<0.002mm)	%w/w	0.1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name CE161505.077 Soil 23 Aug 2022 SE235946.077	CE161505.078 Soil 23 Aug 2022 SE235946.078	CE161505.079 Soil 23 Aug 2022 SE235946.079	CE161505.080 Soil 23 Aug 2022 SE235946.080
Moisture Content Method: AN002 Tested: 5/9/2022						
% Moisture	%w/w	1	-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 8/9/2022						
Passing 75µm	%w/w	1	-	-	-	-
Retained 75µm	%w/w	1	-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 8/9/2022						
Clay (<0.002mm)	%w/w	0.1	-	-	-	-

Parameter	Units	LOR	Sample Number: CE161505.081 Sample Matrix: Soil Sample Date: 23 Aug 2022 Sample Name: SE235946.081	CE161505.082 Soil 23 Aug 2022 SE235946.082	CE161505.083 Soil 23 Aug 2022 SE235946.083
Moisture Content Method: AN002 Tested: 5/9/2022					
% Moisture	%w/w	1	**18**	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 8/9/2022					
Passing 75µm	%w/w	1	**87**	-	-
Retained 75µm	%w/w	1	**13**	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 8/9/2022					
Clay (<0.002mm)	%w/w	0.1	**22**	-	-

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage.* Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

No QC samples were reported for this job.

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN005	The particle size distribution of a soil is determined by wet sieving, using a maximum of 900 mL of deionised water to sieve all fractions down to 75 µm. Referenced to AS1289.3.6.1 and AS1141.11.
AN005	Following wet sieving of the sample,(particles smaller than 75 µm) a dispersing solution is added and a hydrometer is used to measure sedimentation. Soil density is determined and the percentage of each size fraction calculated. Referenced to AS1289.3.6.3.

FOOTNOTES

IS	Insufficient sample for analysis.	LOR	Limit of Reporting
LNR	Sample listed, but not received.	↑↓	Raised or Lowered Limit of Reporting
*	NATA accreditation does not cover the performance of this service.	QFH	QC result is above the upper tolerance
		QFL	QC result is below the lower tolerance
**	Indicative data, theoretical holding time exceeded.	-	The sample was not analysed for this analyte
***	Indicates that both * and ** apply.	NVL	Not Validated

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calcuated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

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

Symbio LABORATORIES

CERTIFICATE OF ANALYSIS

Certificate Number	S1191408 [R00]	**Page**	1/2
Client	SGS Environmental Services - Sydney	**Registering Laboratory**	Sydney
Contact	Nick Caltubiano	**Contact**	Customer Service Team
Address	16/33 Maddox St Alexandria NSW 2015	**Address**	2 Sirius Rd, Lane Cove West, NSW 2066
		Email	admin@symbiolabs.com.au
Telephone	02 8594 0400	**Telephone**	1300 703 166
Order Number	---	**Date Samples Received**	29/08/2022
Project ID	SE235946 - Soil	**Date Analysis Commenced**	29/08/2022
Sampler	Customer	**Issue Date**	30/08/2022
Client Job Reference	SE235946	**Receipt Temperature (°C)**	8.0
No. of Samples Registered	1 | Sampler: Customer	**Storage Temperature (°C)**	4.0
Priority	Normal	**Quote Number**	---

Symbio LABORATORIES
Proudly AUSTRALIAN
ABN: 82 079 645 015

NATA
Accreditation No: 2455
Accredited for compliance with ISO/IEC 17025 - Testing

This report supersedes any previous revision with this reference. This document must not be reproduced, except in full. If samples were provided by the customer, results apply only to the samples 'as received' and responsibility for representative sampling rests with the customer. Water results are reported on an 'as is' basis. Soil and sediment results are reported on a 'dry weight' basis. For other matrices the basis of reporting will be confirmed in the 'Report Comments' section. Measurement Uncertainty is available upon request. If the laboratory was authorised to conduct testing on samples received outside of the specified conditions, all test results may be impacted. Details of samples received outside of the specified conditions are mentioned in the sample description section of this test report.

Definitions

| <: Less Than | >: Greater Than | RP: Result Pending | MPN: Most Probable Number | CFU: Colony Forming Units | ---: Not Received/Not Requested | NA: Not Applicable | ND: Not Detected | LOR: Limit of Reporting | [NT]: Not Tested |

| ~: Estimated | ^ Subcontracted Analysis | TBA: To Be Advised | ** Potential Holding Time Concern | * Test not covered by NATA scope of accreditation | # Result derived from a calculation and includes results equal to or greater than the LOR

Authorised By

Name	Position	Accreditation Category
Melissa Gan	Laboratory Manager – Microbiology	Environmental and Food Microbiology

Sample Information - *Client/Sampler Supplied*

Sample ID	S1191408/1
Sample Description	SE235946.056 TP39/0-0.2
Sample Date/Time	2022-08-19 00:00

Client	SGS Environmental Services - Sydney	**Project ID**	SE235946 - Soil
Certificate Number	S1191408 [R00]	**Sampler**	Customer
Page	2/2	**Order Number**	---

Analytical Results

			SE235946.056 TP39/0-0.2
		Client Sample Description	
		Client Sampling date/time	19/08/2022 00:00
Compound/Analyte	LOR	Units	S1191408/1
			Results
Micro General			
M8.5 - AS/NZS 4276.7			
Escherichia coli	1	CFU/100mL	<10
M8.5.1 - AS/NZS 4276.5			
Coliforms	1	CFU/100mL	<10

Analysis Location

All in-house analysis was completed by Symbio Laboratories - Sydney.

CHAIN OF CUSTODY - SGS

Environmental Division Sydney

Work Order Reference

ES2230603

Telephone : +61-2-8784 8555

Client: Construction Sciences Pty Ltd	Client Project Name / Number / Site etc (ie report title):
Contact person: Joshua Nito, Abanish Nepal	10791.EV.P.323 - 249-271 Railway Terrace, Schofields
Project Mgr: Abanish Nepal	PO No.: Const-IE-Nov21-309331V2
Sampler: Joshua Nito	
Address: 2/4 KELLOGG ROAD, ROOTY HILL NSW	Date results required: standard
	Or choose: standard / same day / 1 day / 2 day / 3 day
	Note: Inform lab in advance if urgent turnaround is required - surcharge applies
Phone: 439516172 436620611	Lab comments:
Fax:	
Email: joshua.nito@constructionsciences.net; abanish.nepal@constructionsciences.net;	

Sample information					Tests Required														Comments
Client Sample ID	Date Sampled	Lab Sample ID	Type of Sample	No of Containers	CS17 (Asbestos WA w/w%)	CS10 (CL17)	CS7 (CL10)	CS12 (OC/OP)	CS21 (Clay Content %)	CS15 (Asbestos ID in Building Mat)	CS19 (E Coli)	CS20 (T Coli)	PAH	Metals (8)	pH/CEC	BTEX	HOLD			
TP66/0.4-0.6	23/08/2022		Soil	1 Jar													X			
TP67/0-0.1	23/08/2022		Soil	1 Bag	X															
TP67/0.1-0.3	23/08/2022		Soil	1 Bag, 1 Jar		X														
TP67/0.3-0.6	23/08/2022		Soil	1 Jar													X			
TP68/0-0.1	23/08/2022		Soil	1 Bag	X															
TP68/0-0.2	23/08/2022		Soil	1 Jar				X					X	X						
TP68/0.1-0.4	23/08/2022		Soil	1 Bag													X			
TP68/0.4-0.6	23/08/2022		Soil	1 Jar													X			
TP69/0-0.1	23/08/2022		Soil	1 Bag	X															
TP69/0.1-0.3	23/08/2022		Soil	1 Jar									X	X						
TP69/0.1-0.4	23/08/2022		Soil	1 Bag													X			
TP69/0.4-0.6	23/08/2022		Soil	1 Jar													X			
TP70/0-0.1	23/08/2022		Soil	1 Bag	X															
TP70/0.1-0.3	23/08/2022		Soil	1 Bag, 1 Jar		X											X			Please put bag sample on HOLD, jar sample for CS10 analysis
TP70/0.3-0.5	23/08/2022		Soil	1 Jar													X			
TP71/0-0.1	23/08/2022		Soil	1 Bag	X															
TP71/0-0.2	23/08/2022		Soil	1 Jar				X					X	X						
TP71/0.1-0.2	23/08/2022		Soil	1 Bag													X			
TP71/0.2-0.4	23/08/2022		Soil	1 Jar													X			
TP72/0-0.1	23/08/2022		Soil	1 Bag	X															
TP72/0-0.2	23/08/2022		Soil	1 Jar				X					X	X						
TP72/0.1-0.3	23/08/2022		Soil	1 Bag													X			
TP72/0.3-0.5	23/08/2022		Soil	1 Jar													X			
TP36/0-0.1/PACM01	18/08/2022		Soil	1													X			
TP36/0-0.1/PACM02	18/08/2022		Soil	1						X										
TP33/0-0.1/PACM04	18/08/2022		Soil	1						X										
TP38/0-0.1/PACM05	19/08/2022		Soil	1													X			
TP37/0-0.1/PACM06	19/08/2022		Soil	1													X			
TP39/0-0.1/PACM07	19/08/2022		Soil	1													X			
TP44/0-0.1/PACM09	19/08/2022		Soil	1													X			
TP44/0-0.1/PACM10	19/08/2022		Soil	1													X			
TP44/0-0.1/PACM11	19/08/2022		Soil	1													X			
TP25/0-0.1/PACM12	22/08/2022		Soil	1						X										
TP25/0-0.1/PACM13	22/08/2022		Soil	1													X			
TP18/0-0.6/PACM14	23/08/2022		Soil	1						X										
TP56/0-0.7/PACM16	23/08/2022		Soil	1													X			
TP54/0-1.0/PACM17	23/08/2022		Soil	1													X			
TP54/0-1.0/PACM18	23/08/2022		Soil	1													X			
DUP01	18/08/2022		Soil	1 Jar										X						
1 DUP01A	18/08/2022		Soil	1 Jar										X						Please send to ALS
DUP02	18/08/2022		Soil	1 Jar									X	X						
2 DUP02A	18/08/2022		Soil	1 Jar									X	X						Please send to ALS
DUP03	19/08/2022		Soil	1 Jar										X						
3 DUP03A	19/08/2022		Soil	1 Jar										X						Please send to ALS
DUP05	22/08/2022		Soil	1 Jar													X			
4 DUP05A	22/08/2022		Soil	1 Jar													X			Please send to ALS

Rec: 2 Ors 26/08/22 1600

CHAIN OF CUSTODY - SGS

Client: Construction Sciences Pty Ltd	Client Project Name / Number / Site etc (ie report title):	
Contact person: Joshua Nito, Abanish Nepal	10791.EV.P.323 - 249-271 Railway Terrace, Schofields	
Project Mgr: Abanish Nepal	PO No.: Const-IE-Nov21-309331V2	
Sampler: Joshua Nito		
Address: 2/4 KELLOGG ROAD, ROOTY HILL NSW	Date results required: standard	
	Or choose: standard / same day / 1 day / 2 day / 3 day *Note: Inform lab in advance if urgent turnaround is required - surcharge applies*	
Phone: 439516172 435620611	Lab comments:	
Fax:		
Email: joshua.nito@constructionsciences.net; abanish.nepal@constructionsciences.net;		

Sample Information					Tests Required															Comments
Client Sample ID	Date Sampled	Lab Sample ID	Type of Sample	No of Containers	CS17 (Asbestos WA w/w%)	CS10 (CL17)	CS7 (CL10)	CS12 (OC/OP)	CS21 (Clay Content %)	CS16 (Asbestos ID in Building Mat)	CS19 (E Coli)	CS20 (T Coli)	PAH	Metals (8)	pH/CEC	BTEX	HOLD			
DUP06	23/08/2022		Soil	1 Jar													X			
5 DUP06A	23/08/2022		Soil	1 Jar													X			Please send to ALS
DUP07	23/08/2022		Soil	1 Jar									X	X						
6 DUP07A	23/08/2022		Soil	1 Jar									X	X						Please send to ALS
Trip Blank	18/08/2022		Soil	1 Vial												X				
Trip Blank	19/08/2022		Soil	1 Vial												X				
Trip Blank	22/08/2022		Soil	1 Vial												X				
Trip Blank	23/08/2022		Soil	1 Vial												X				
Trip Spike	18/08/2022		Soil	1 Vial												X				
Trip Spike	19/08/2022		Soil	1 Vial												X				
Trip Spike	22/08/2022		Soil	1 Vial												X				
Trip Spike	23/08/2022		Soil	1 Vial												X				

Relinquished by (company):	Construction Sciences Pty Ltd	Received by (company):	*Lab use only:*
Print Name:	Joshua Nito	Print Name:	Samples Received: Cool or Ambient (circle one)
Date & Time:	25/08/2022 (for all samples dropped 18/08/2022 - 23/08/2022)	Date & Time:	Temperature Received at: (if applicable)
Signature:	JN	Signature:	Transported by: Hand delivered / courier

White - Lab copy / Blue - Client copy / Pink - Retain in Book Page No:

Rec. by 26/08/22 16CC

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **ES2230603**	Page	: 1 of 5
Client	: **CONSTRUCTION SCIENCES PTY LTD**	Laboratory	: Environmental Division Sydney
Contact	: JOSHUA NITO	Contact	: Hannah White
Address	: 2/4 Kellogg Road ROOTY HILL 2766	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61-2-8784 8555
Project	: 10791.EV.P.323- 249-271 Railway Terrace, Schofields	Date Samples Received	: 26-Aug-2022 16:00
Order number	: Const-IE-Nov21-309331V2	Date Analysis Commenced	: 30-Aug-2022
C-O-C number	: ----	Issue Date	: 02-Sep-2022 17:50
Sampler	: JOSHUA NITO		
Site	: ----		
Quote number	: EN/121		
No. of samples received	: 6		
No. of samples analysed	: 5		

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
- 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*
Ankit Joshi	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW

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.

- 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.
- 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.

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	DUP01A	DUP02A	DUP03A	DUP06A	DUP07A
			Sampling date / time	18-Aug-2022 00:00	18-Aug-2022 00:00	19-Aug-2022 00:00	23-Aug-2022 00:00	23-Aug-2022 00:00
Compound	CAS Number	LOR	Unit	ES2230603-001	ES2230603-002	ES2230603-003	ES2230603-005	ES2230603-006
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	16.0	21.3	25.7	16.2	27.4
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	17	14	11	12	8
Cadmium	7440-43-9	1	mg/kg	1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	29	19	14	18	10
Copper	7440-50-8	5	mg/kg	8	18	20	20	17
Lead	7439-92-1	5	mg/kg	26	12	27	22	16
Nickel	7440-02-0	2	mg/kg	7	4	9	15	6
Zinc	7440-66-6	5	mg/kg	34	23	84	59	433
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	----	<0.5	----	----	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg	----	<0.5	----	----	<0.5
Acenaphthene	83-32-9	0.5	mg/kg	----	<0.5	----	----	<0.5
Fluorene	86-73-7	0.5	mg/kg	----	<0.5	----	----	<0.5
Phenanthrene	85-01-8	0.5	mg/kg	----	<0.5	----	----	<0.5
Anthracene	120-12-7	0.5	mg/kg	----	<0.5	----	----	<0.5
Fluoranthene	206-44-0	0.5	mg/kg	----	<0.5	----	----	<0.5
Pyrene	129-00-0	0.5	mg/kg	----	<0.5	----	----	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg	----	<0.5	----	----	<0.5
Chrysene	218-01-9	0.5	mg/kg	----	<0.5	----	----	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	----	<0.5	----	----	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	----	<0.5	----	----	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg	----	<0.5	----	----	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	----	<0.5	----	----	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	----	<0.5	----	----	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	----	<0.5	----	----	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	----	<0.5	----	----	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	----	<0.5	----	----	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg	----	0.6	----	----	0.6
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	----	1.2	----	----	1.2
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.5	%	----	69.3	----	----	70.8

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	DUP01A	DUP02A	DUP03A	DUP06A	DUP07A
				Sampling date / time	18-Aug-2022 00:00	18-Aug-2022 00:00	19-Aug-2022 00:00	23-Aug-2022 00:00	23-Aug-2022 00:00
Compound	CAS Number	LOR	Unit		ES2230603-001	ES2230603-002	ES2230603-003	ES2230603-005	ES2230603-006
					Result	Result	Result	Result	Result
EP075(SIM)S: Phenolic Compound Surrogates - Continued									
2-Chlorophenol-D4	93951-73-6	0.5	%		----	84.5	----	----	84.3
2.4.6-Tribromophenol	118-79-6	0.5	%		----	76.2	----	----	73.3
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		----	102	----	----	104
Anthracene-d10	1719-06-8	0.5	%		----	89.2	----	----	88.2
4-Terphenyl-d14	1718-51-0	0.5	%		----	90.2	----	----	91.5

Surrogate Control Limits

Sub-Matrix: **SOIL**

Compound	CAS Number	Recovery Limits (%) Low	High
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	63	123
2-Chlorophenol-D4	93951-73-6	66	122
2.4.6-Tribromophenol	118-79-6	40	138
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	70	122
Anthracene-d10	1719-06-8	66	128
4-Terphenyl-d14	1718-51-0	65	129

ALS Environmental

QUALITY CONTROL REPORT

Work Order	: **ES2230603**	Page	: 1 of 5
Client	: **CONSTRUCTION SCIENCES PTY LTD**	Laboratory	: Environmental Division Sydney
Contact	: JOSHUA NITO	Contact	: Hannah White
Address	: 2/4 Kellogg Road ROOTY HILL 2766	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61-2-8784 8555
Project	: 10791.EV.P.323- 249-271 Railway Terrace, Schofields	Date Samples Received	: 26-Aug-2022
Order number	: Const-IE-Nov21-309331V2	Date Analysis Commenced	: 30-Aug-2022
C-O-C number	: ----	Issue Date	: 02-Sep-2022
Sampler	: JOSHUA NITO		
Site	: ----		
Quote number	: EN/121		
No. of samples received	: 6		
No. of samples analysed	: 5		

ilac-MRA NATA
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*
Ankit Joshi	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW

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: **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: 4548944)									
ES2230380-062	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	5	4	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	<2	<2	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	<5	<5	0.0	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	<5	<5	0.0	No Limit
ES2230448-003	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	14	11	24.4	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	15	12	17.7	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	25	26	0.0	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	27	31	15.1	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	100	103	2.8	0% - 20%
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 4548952)									
ES2230380-064	Anonymous	EA055: Moisture Content	----	0.1	%	15.0	14.8	1.0	0% - 50%
ES2230494-003	Anonymous	EA055: Moisture Content	----	0.1	%	5.4	6.2	14.7	No Limit
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 4548945)									
ES2230380-062	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
ES2230448-003	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 4551467)									
ES2230605-001	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

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: 4551467) - continued									
ES2230605-001	Anonymous	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	205-99-2 205-82-3	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): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	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: 4548944)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	121.1 mg/kg	108	88.0	113
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	0.74 mg/kg	104	70.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	19.6 mg/kg	114	68.0	132
EG005T: Copper	7440-50-8	5	mg/kg	<5	52.9 mg/kg	110	89.0	111
EG005T: Lead	7439-92-1	5	mg/kg	<5	60.8 mg/kg	106	82.0	119
EG005T: Nickel	7440-02-0	2	mg/kg	<2	15.3 mg/kg	106	80.0	120
EG005T: Zinc	7440-66-6	5	mg/kg	<5	139.3 mg/kg	95.3	66.0	133
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4548945)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.087 mg/kg	102	70.0	125
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 4551467)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	6 mg/kg	96.4	77.0	125
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	6 mg/kg	118	72.0	124
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	6 mg/kg	105	73.0	127
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	6 mg/kg	113	72.0	126
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	6 mg/kg	102	75.0	127
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	6 mg/kg	100	77.0	127
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	6 mg/kg	108	73.0	127
EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	6 mg/kg	106	74.0	128
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	6 mg/kg	104	69.0	123
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	6 mg/kg	106	75.0	127
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	6 mg/kg	106	68.0	116
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	6 mg/kg	105	74.0	126
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	6 mg/kg	97.3	70.0	126
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	6 mg/kg	92.9	61.0	121
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	6 mg/kg	90.9	62.0	118
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	6 mg/kg	93.4	63.0	121

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**

Matrix Spike (MS) Report		
Spike	SpikeRecovery(%)	Acceptable Limits (%)

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: 4548944)							
ES2230380-062	Anonymous	EG005T: Arsenic	7440-38-2	50 mg/kg	102	70.0	130
		EG005T: Cadmium	7440-43-9	50 mg/kg	102	70.0	130
		EG005T: Chromium	7440-47-3	50 mg/kg	103	68.0	132
		EG005T: Copper	7440-50-8	250 mg/kg	101	70.0	130
		EG005T: Lead	7439-92-1	250 mg/kg	103	70.0	130
		EG005T: Nickel	7440-02-0	50 mg/kg	102	70.0	130
		EG005T: Zinc	7440-66-6	250 mg/kg	104	66.0	133
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4548945)							
ES2230380-062	Anonymous	EG035T: Mercury	7439-97-6	5 mg/kg	103	70.0	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 4551467)							
ES2230605-001	Anonymous	EP075(SIM): Acenaphthene	83-32-9	10 mg/kg	102	70.0	130
		EP075(SIM): Pyrene	129-00-0	10 mg/kg	106	70.0	130

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **ES2230603**	Page	: 1 of 4
Client	: **CONSTRUCTION SCIENCES PTY LTD**	Laboratory	: Environmental Division Sydney
Contact	: JOSHUA NITO	Telephone	: +61-2-8784 8555
Project	: 10791.EV.P.323- 249-271 Railway Terrace, Schofields	Date Samples Received	: 26-Aug-2022
Site	: ----	Issue Date	: 02-Sep-2022
Sampler	: JOSHUA NITO	No. of samples received	: 6
Order number	: Const-IE-Nov21-309331V2	No. of samples analysed	: 5

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
EA055: Moisture Content (Dried @ 105-110°C)							
Soil Glass Jar - Unpreserved (EA055) DUP01A, DUP02A	**18-Aug-2022**	**----**	----	----	**30-Aug-2022**	01-Sep-2022	✓
Soil Glass Jar - Unpreserved (EA055) DUP03A	**19-Aug-2022**	**----**	----	----	**30-Aug-2022**	02-Sep-2022	✓
Soil Glass Jar - Unpreserved (EA055) DUP06A, DUP07A	**23-Aug-2022**	**----**	----	----	**30-Aug-2022**	06-Sep-2022	✓
EG005(ED093)T: Total Metals by ICP-AES							
Soil Glass Jar - Unpreserved (EG005T) DUP01A, DUP02A	**18-Aug-2022**	**31-Aug-2022**	14-Feb-2023	✓	**01-Sep-2022**	14-Feb-2023	✓
Soil Glass Jar - Unpreserved (EG005T) DUP03A	**19-Aug-2022**	**31-Aug-2022**	15-Feb-2023	✓	**01-Sep-2022**	15-Feb-2023	✓
Soil Glass Jar - Unpreserved (EG005T) DUP06A, DUP07A	**23-Aug-2022**	**31-Aug-2022**	19-Feb-2023	✓	**01-Sep-2022**	19-Feb-2023	✓
EG035T: Total Recoverable Mercury by FIMS							
Soil Glass Jar - Unpreserved (EG035T) DUP01A, DUP02A	**18-Aug-2022**	**31-Aug-2022**	15-Sep-2022	✓	**02-Sep-2022**	15-Sep-2022	✓
Soil Glass Jar - Unpreserved (EG035T) DUP03A	**19-Aug-2022**	**31-Aug-2022**	16-Sep-2022	✓	**02-Sep-2022**	16-Sep-2022	✓
Soil Glass Jar - Unpreserved (EG035T) DUP06A, DUP07A	**23-Aug-2022**	**31-Aug-2022**	20-Sep-2022	✓	**02-Sep-2022**	20-Sep-2022	✓
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP075(SIM)) DUP02A	**18-Aug-2022**	**31-Aug-2022**	01-Sep-2022	✓	**01-Sep-2022**	10-Oct-2022	✓
Soil Glass Jar - Unpreserved (EP075(SIM)) DUP07A	**23-Aug-2022**	**31-Aug-2022**	06-Sep-2022	✓	**01-Sep-2022**	10-Oct-2022	✓

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)	1	3	**33.33**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
PAH/Phenols (SIM)	EP075(SIM)	1	3	**33.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
PAH/Phenols (SIM)	EP075(SIM)	1	3	**33.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
PAH/Phenols (SIM)	EP075(SIM)	1	3	**33.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	20	**5.00**	**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
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).
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)
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)

Preparation Methods	Method	Matrix	Method Descriptions
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).
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.

Appendix K
PROUCL

1	**UCL Statistics for Uncensored Full Data Sets**											
2												
3	User Selected Options											
4	Date/Time of Computation	ProUCL 5.121/10/2022 7:19:29 PM										
5	From File	WorkSheet_a.xls										
6	Full Precision	OFF										
7	Confidence Coefficient	95%										
8	Number of Bootstrap Operations	2000										
9												
10												
11	**C1**											
12												
13	**General Statistics**											
14	Total Number of Observations	69			Number of Distinct Observations	55						
15					Number of Missing Observations	0						
16	Minimum	14			Mean	111.5						
17	Maximum	990			Median	60						
18	SD	158.1			Std. Error of Mean	19.04						
19	Coefficient of Variation	1.418			Skewness	3.425						
20												
21	**Normal GOF Test**											
22	Shapiro Wilk Test Statistic	0.579			**Shapiro Wilk GOF Test**							
23	5% Shapiro Wilk P Value	0			Data Not Normal at 5% Significance Level							
24	Lilliefors Test Statistic	0.297			**Lilliefors GOF Test**							
25	5% Lilliefors Critical Value	0.107			Data Not Normal at 5% Significance Level							
26	**Data Not Normal at 5% Significance Level**											
27												
28	**Assuming Normal Distribution**											
29	**95% Normal UCL**				**95% UCLs (Adjusted for Skewness)**							
30	95% Student's-t UCL	143.3			95% Adjusted-CLT UCL (Chen-1995)	151.2						
31					95% Modified-t UCL (Johnson-1978)	144.6						
32												
33	**Gamma GOF Test**											
34	A-D Test Statistic	3.493			**Anderson-Darling Gamma GOF Test**							
35	5% A-D Critical Value	0.778			Data Not Gamma Distributed at 5% Significance Level							
36	K-S Test Statistic	0.184			**Kolmogorov-Smirnov Gamma GOF Test**							
37	5% K-S Critical Value	0.11			Data Not Gamma Distributed at 5% Significance Level							
38	**Data Not Gamma Distributed at 5% Significance Level**											
39												
40	**Gamma Statistics**											
41	k hat (MLE)	1.092			k star (bias corrected MLE)	1.054						
42	Theta hat (MLE)	102.1			Theta star (bias corrected MLE)	105.7						
43	nu hat (MLE)	150.7			nu star (bias corrected)	145.5						
44	MLE Mean (bias corrected)	111.5			MLE Sd (bias corrected)	108.6						
45					Approximate Chi Square Value (0.05)	118.6						
46	Adjusted Level of Significance	0.0465			Adjusted Chi Square Value	118.1						
47												
48	**Assuming Gamma Distribution**											
49	95% Approximate Gamma UCL (use when n>=50))	136.8			95% Adjusted Gamma UCL (use when n<50)	137.4						
50												
51	**Lognormal GOF Test**											
52	Shapiro Wilk Test Statistic	0.942			**Shapiro Wilk Lognormal GOF Test**							
53	5% Shapiro Wilk P Value	0.00518			Data Not Lognormal at 5% Significance Level							
54	Lilliefors Test Statistic	0.097			**Lilliefors Lognormal GOF Test**							
55	5% Lilliefors Critical Value	0.107			Data appear Lognormal at 5% Significance Level							
56	**Data appear Approximate Lognormal at 5% Significance Level**											
57												
58	**Lognormal Statistics**											

59					Minimum of Logged Data	2.639				Mean of logged Data		4.191
60					Maximum of Logged Data	6.898				SD of logged Data		0.935
61												
62					**Assuming Lognormal Distribution**							
63					95% H-UCL	131.6				90% Chebyshev (MVUE) UCL		141.4
64					95% Chebyshev (MVUE) UCL	159.5				97.5% Chebyshev (MVUE) UCL		184.6
65					99% Chebyshev (MVUE) UCL	234						
66												
67					**Nonparametric Distribution Free UCL Statistics**							
68					**Data appear to follow a Discernible Distribution at 5% Significance Level**							
69												
70					**Nonparametric Distribution Free UCLs**							
71					95% CLT UCL	142.8				95% Jackknife UCL		143.3
72					95% Standard Bootstrap UCL	143.7				95% Bootstrap-t UCL		158.7
73					95% Hall's Bootstrap UCL	164.5				95% Percentile Bootstrap UCL		146.4
74					95% BCA Bootstrap UCL	152.5						
75					90% Chebyshev(Mean, Sd) UCL	168.6				95% Chebyshev(Mean, Sd) UCL		194.5
76					97.5% Chebyshev(Mean, Sd) UCL	230.4				99% Chebyshev(Mean, Sd) UCL		300.9
77												
78					**Suggested UCL to Use**							
79					95% H-UCL	131.6						
80												
81	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.											
82	Recommendations are based upon data size, data distribution, and skewness.											
83	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).											
84	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.											
85												
86	**ProUCL computes and outputs H-statistic based UCLs for historical reasons only.**											
87	**H-statistic often results in unstable (both high and low) values of UCL95 as shown in examples in the Technical Guide.**											
88	**It is therefore recommended to avoid the use of H-statistic based 95% UCLs.**											
89	**Use of nonparametric methods are preferred to compute UCL95 for skewed data sets which do not follow a gamma distribution.**											
90												

Appendix M
DATA QUALITY INDICATORS

An assessment of performance against the data quality indicators (DQI) is set out in the tables below.

Completeness DQI

Field Considerations	Target	Actual	Pass / Fail / Comment
Experienced sampling team used	Yes	Yes	Pass
Sampling devices and equipment set out in sampling plan were used	Yes	Yes	Pass
Critical locations in sampling plan, sampled	Yes	No	Sampling points TP29 and TP30 were terminated early due to infilling by septic waste in test pits, occurring as a result of a burst underground septic pipe. Excavations and sampling were thus conducted in revised sampling points TP29A and TP30A (both 2m away from initial points), which were excavated down to target depth. Sampling point TP60 was discontinued, following a revision of area extent at AEC30 from two test pits down to one during fieldwork. Sampling locations criteria considered adequate in the context of this project.
Critical samples in sampling plan, collected	Yes	No	Sampling points TP29 and TP30 were terminated early due to infilling by septic waste in test pits, occurring as a result of a burst underground septic pipe. Excavations and sampling were thus conducted in revised sampling points TP29A and TP30A (both 2m away from initial points), where samples were collected from relevant depths and changes in soil profile. Sampling point TP60 was discontinued, following a revision of area extent at AEC30 from two test pits down to one during fieldwork. Sample collections criteria considered adequate in the context of this project.
Completed field logs attached	Yes	Yes	Pass
Completed calibration logs attached.	Yes	Yes	Pass
Completed sample COC attached	Yes	Yes	Pass
Laboratory Considerations	**Target**	**Actual**	**Pass / Fail / Comment**
Complete SRA and COA attached	Yes	Yes	Pass
Critical samples identified in sampling plan, analysed	Yes	No	Sampling points TP29 and TP30 were terminated early due to infilling by septic waste in test pits, occurring as a result of a

			burst underground septic pipe. Excavations and sampling were thus conducted in revised sampling points TP29A and TP30A (both 2m away from initial points), where samples were identified from relevant depths and changes in soil profile. Sampling point TP60 was discontinued, following a revision of area extent at AEC30 from two test pits down to one during the fieldwork. Sample identification considered adequate in the context of this project.
Analysis undertaken addresses COPC in sampling plan	Yes	Yes	Pass
Analytical methods reported in laboratory documentation and appropriate LOR used	Yes	Yes	Pass
Sample holding times met	Yes	No	The following exceedances against the holding times were reported: > pH in soil for samples TP11/0.3-0.5 and TP41/0.3-0.5 exceeded extraction holding time by one day; > VOC analysis for samples TP24/0.15-0.35, TP31/0.1-0.3 and TP33/0.1-0.3 breached analysis holding time by one day; > TRH analysis for samples TP01/0.1-0.3 , TP24/0.15-0.35, TP31/0.1-0.3 and TP33/0.1-0.3 breached analysis holding time by one day; and > Analysis date for VOC's in trip blank and trip spike received on August 18, 2022 breached analysis holding time by one day. Given that the initial reported concentration of pH, TRH, BTEX and volatiles were below the laboratory LOR, and samples kept chilled at the laboratory, it is considered that the reported concentrations of TRH, BTEX and other volatiles for samples that exceeded holding times are considered representative of the general site condition. In relation to pH, CS considers that the samples were kept chilled and inside lab

			prepared containers and delivered to the analytical laboratory immediately after collection. As such the reported pH values are considered representative of the general site condition. Despite lapse in holding time, CS considers the data to be complete and suitable for the purpose of this project.

The data is considered to be adequately complete.

Comparability DQI

Field Considerations	Target	Actual	Pass / Fail / Comment
Same sampling team used for all work.	Yes	Yes	Pass
Weather conditions suitable for sampling.	Yes	Yes	Weather during the days of sampling was sunny with the exception of the last day of sampling onsite when works were temporarily interrupted by rain.
Relevant samples stored in insulated containers and chilled.	Yes	Yes	Pass
Laboratory Considerations	**Target**	**Actual**	**Pass / Fail / Comment**
Same laboratory used for all analysis.	Yes	Yes	All primary and duplicate samples were analysed at SGS Australia Pty Ltd. All triplicate samples were analysed at ALS Pty Ltd.
Comparable methods if different laboratories used.	Yes	N/A	N/A
Comparable LORs if different laboratories used.	Yes	N/A	N/A
Comparable units of measure if different laboratories used.	Yes	N/A	N/A

The data is considered to be adequately comparable.

Representativeness DQI

Field Considerations	Target	Actual	Pass / Fail / Comment
Media identified in sampling plan, sampled.	Yes	No	Explanation provided for non-adherence items related to discontinued and non-excavated test pits in Completeness DQI. Performance against Representativeness DQI considered adequate for the purpose of this project.

Samples required by sampling plan, collected.	Yes	No	Explanation provided for non-adherence items related to discontinued and non-excavated test pits in Completeness DQI. Performance against Representativeness DQI considered adequate for the purpose of this project.
Laboratory Considerations	**Target**	**Actual**	**Pass / Fail / Comment**
Samples identified in sampling plan, analysed.	Yes	No	Explanation provided for non-adherence items related to discontinued and non-excavated test pits in Completeness DQI. Performance against Representativeness DQI considered adequate for the purpose of this project.

The data is considered to be adequately representative.

Precision DQI

Field Considerations **Based on Table 4 of AS 4482.1-2005**	**Target**	**Actual**	**Pass / Fail / Comment**
Minimum 5% duplicates collected and analysed.	Yes	Yes	Five (5) duplicates were collected and analysed as part of the Precision DQI considerations, with a total of 83 primary samples analysed. The duplicate to primary sample ratio was calculated at 6%, which passes the minimum 5% target set for collection and analysis of duplicate samples for the project.
Minimum 5% triplicates collected and analysed.	Yes	Yes	Five (5) triplicates were collected and analysed as part of the Precision DQI considerations, with a total of 83 primary samples analysed. The triplicate to primary sample ratio was calculated at 6%, which passes the minimum 5% target set for collection and analysis of triplicate samples for the project.
RPD unlimited where detected concentrations are <10 times the LOR.	Yes	Yes	Pass
RPD within 50% where detected concentrations are 10-20 times the LOR.	Yes	No	RPD were found in excess of 50% for results 10-20 times the LOR in samples: > DUP01A, to parent sample TP02/0.1-0.3 for chromium; > DUP02, to parent sample TP35/0.1-0.3 for arsenic, copper and nickel;

			> DUP02A, to parent sample TP35/0.1-0.3 for nickel; > DUP03A, to parent sample TP46/0-0.2 for chromium and copper; > DUP06A, to parent sample TP65/0-0.2 for copper and nickel; > DUP07, to parent sample TP23/0.3-0.5 for inorganics, arsenic and chromium; and > DUP07A, to parent sample TP23/0.3-0.5 for arsenic, chromium and copper; RPD exceedances were attributable to heterogeneity in each of the discrete soil samples. As a conservative measure, the samples reporting the higher detected concentration of relevant analytes should be used for assessment against relevant human health criteria as outlined in NEPC (2013a).
RPD within 30% where detected concentrations are >20 times the LOR.	Yes	No	RPD were found in excess of 30% for results >20 times the LOR in samples: > DUP02, to parent sample TP35/0.1-0.3 for lead and zinc; > DUP02A, to parent sample TP35/0.1-0.3 for lead and zinc; > DUP07, to parent sample TP23/0.3-0.5 for zinc; and > DUP07A, to parent sample TP23/0.3-0.5 for zinc; RPD exceedances were attributable to heterogeneity in each of the discrete soil samples. As a conservative measure, the samples reporting the higher detected concentration of relevant analytes should be used for assessment against relevant human health criteria as outlined in NEPC (2013a).
Laboratory Considerations	**Target**	**Actual**	**Pass / Fail / Comment**
All laboratory duplicate RPDs within laboratory acceptance criteria.	Yes	No	Three RPD exceedances were reported to be outside the laboratory acceptance criterion for TP18/0.4-0.6 for cadmium lead and zinc, due to sample

			heterogeneity. As a conservative measure, the samples reporting the higher detected concentration of relevant analytes should be used for assessment against relevant human health criteria as outlined in NEPC (2013a).

The data is considered to be adequately precise.

Accuracy (bias) DQI

Field Considerations	Target	Actual	Pass / Fail / Comment
Trip blank analyte results less than LOR.	Yes	Yes	Pass
Trip spike analyte results between 60% and 140%.	Yes	Yes	Pass
Rinsate blank analyte results less than LOR.	Yes	No	A rinsate blank was not used for this project. Re-usable sampling equipment was not used. The samples were collected either directly from the base/wall of the test pits, or from the centre of the soils in the excavator bucket, using a fresh pair of nitrile gloves for each sample. On that basis, the risk of cross contamination during sampling is considered negligible.
Field blank analyte results less than LOR (where PFAS is a COPC),	No	No	A field blank was not used for this project on the basis that PFAS is not considered a COPC within the context of the proposed site use.
Laboratory Considerations	**Target**	**Actual**	**Pass / Fail / Comment**
Laboratory method blank results within laboratory acceptance limits.	Yes	Yes	Pass
Laboratory control sample results within laboratory acceptance limits.	Yes	Yes	Pass
Laboratory spike sample results within laboratory acceptance limits.	Yes	No	Two samples (TP52/0.3-0.5 and TP19/0.4-0.6) exceeded the spike recovery % as set by laboratory acceptance limits due to matrix interference and sample heterogeneity in TRH and heavy metals. As a conservative measure, the samples reporting the higher detected concentration of relevant analytes should be used for assessment against relevant human health criteria as outlined in NEPC (2013a).

The data is considered to be adequately accurate.

Located across Australia and New Zealand

QLD
Airlie
Beenleigh
Brisbane (Acacia Ridge)
Brisbane (Beenleigh)
Brisbane (Brendale)
Brisbane (Petrie)
Cairns
Emerald
Gladstone
Gold Coast
Mackay
Moranbah
Rockhampton
Petrie
Sunshine Coast
Toowoomba
Townsville

NSW
Ballina
Coffs Harbour
Grafton
Lynwood
Newcastle
Sydney (Glendenning)
Sydney (St Peters)
Taree
Wollongong

VIC
Ararat
Bendigo
Echuca
Melbourne (Chadstone)
Melbourne (Keysborough)
Melbourne (Pakenham)
Melbourne (Oaklands Junction)
Melbourne (Sunshine West)
Traralgon

WA
Bunbury
Kalgoorlie
Newman
Perth
Port Hedland

SA
Adelaide
Port Augusta

NT
Darwin

ACT
Canberra

NZ
Wellington