STAGE 2 - DETAILED ENVIRONMENTAL SITE INVESTIGATION

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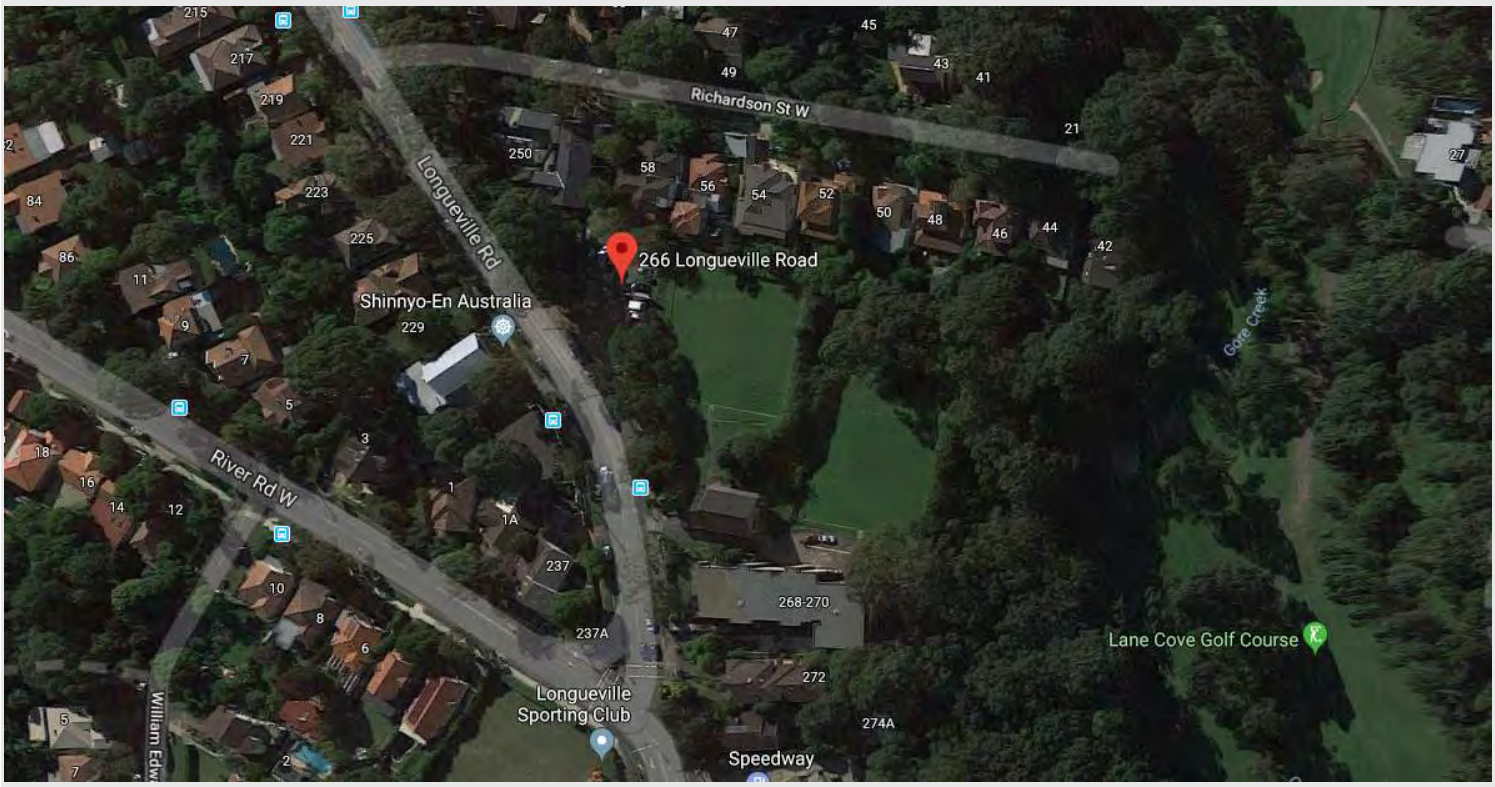
LRM GLOBAL PTY LTD

LIABILITY & RISK MANAGEMENT CONSULTING



FOR WORKS:

266 LONGUEVILLE ROAD, LANE COVE

FOR:

AUSTRALIAN UNITY LTD

AUGUST 2018

CONFIDENTIAL

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ABBREVIATIONS

AHD	Australian Height Datum
ANZECC	Australian and New Zealand Environment and Conservation Council
BTEX	Benzene, Toluene, Ethylbenzene and Xylene
CCME	Canadian Council of Ministers of the Environment
CHCs	Chlorinated Hydrocarbons
DESI	Detailed Environmental Site Assessment
EIL	Ecological Investigation Levels
EC	Electrical conductivity
EPA	Environment Protection Authority
HALVOL	Halogenated Volatile Organics
HIL	Health Investigation Levels
LRM	LRM Global – Liability & Risk Management Consulting
m BGL	Metres below ground level
MAHs	Monocyclic Aromatic Hydrocarbons
NATA	National Association of Testing Authorities
NEPC	National Environment Protection Council
NEPM	National Environment Protection Measure
NHMRC	National Health and Medical Research Council
OCPs	Organochlorine Pesticides
OPPs	Organophosphorous Pesticides
PAHs	Polycyclic Aromatic Hydrocarbons
PESA	Preliminary Environmental Site Assessment
PCBs	Polychlorinated Biphenyls
PESA	Preliminary Environmental Site Assessment
PID	Photoionisation Detector
QA/QC	Quality Assurance / Quality Control
RAP	Remediation Action Plan
SAQP	Sample and Quality Analysis Plan
SVCHCs	Semi-volatile Chlorinated Hydrocarbons
SVOCs	Semi-volatile Organic Compounds
TDS	Total Dissolved Solids
TCLP	Total Concentration Leachability Potential
TIT	Triple Interceptor Trap
TOC	Total Organic Carbon
TRHs	Total Petroleum Hydrocarbons
USEPA	United States Environmental Protection Agency
VHCs	Volatile Halogenated Hydrocarbons
VOCs	Volatile Organic Compounds

Executive Summary

LRM Global Pty Ltd (LRM) was engaged by Australian Unity Ltd (the client) to complete a Preliminary Environmental Site Assessment (PESA) and subsequent Stage 2 – Detailed Environmental Site Investigation (DESI) of the property located at 266 Longueville Road, Lane Cove, NSW (the site) to document any potential environmental liabilities that are apparent from a comprehensive desktop study, soil and groundwater assessment as part of a development application for a proposed high density retirement village.

The planned development will consist of a seven level structure basement car park levels to a maximum depth of approximately 12 meters below ground level subject to the site slope. Ground level landscaped areas with accessible soils will remain in some isolated areas, however, all fill material will be excavated from site during initial civil works. The majority of planted species will be indigenous to the local area. The ground level of the proposed structure will consist of a loading bay and parking areas, general facilities and residents units due to the sloped nature of the site. Upper levels will consist of high density housing with communal rooftop garden areas on the uppermost level.

The objectives of this investigation are as follows:

- Characterise site soil and groundwater conditions;
- To inform and guide the Remediation Action Plan (RAP) to be enacted during the site redevelopment process;
- Provide all analytical data in summarised tables and provide all other relevant data in the form of a detailed environmental site assessment report for the environmental auditor to consider as part of their audit of the site;
- Council DA conditions for a Stage 2 Detailed Site Investigation Report (as per the NSW EPA's Guidelines for Consultants Reporting on Contaminated Sites);
- A single report detailing the location, type and level of contaminants, compiling all relevant information which details soil and groundwater sampling and testing to date;
- Identify the potential for migration of contaminants off site;
- Provide a statement that the site will be suitable upon remediation for the development proposed; and
- Comply with State Environmental Planning Policy 55 – Remediation of Land.

Planning Objectives

Draft Conditions of Consent: Revised 27June 2018
266 Longueville Road, Lane Cove

PART A – DEFERRED COMMENCEMENT CONSENT CONDITIONS:

The consent will not operate and it may not be acted upon until the Council or its delegate is satisfied as to the following matters:

(i) Deferred Commencement Condition – Contaminated Land

A Stage 2 Detailed Site Investigation Report (as per the NSW EPA's *Guidelines for Consultants Reporting on Contaminated Sites*) shall be submitted to Council for assessment. The report shall identify to Council's satisfaction the location, type and level of contaminants in a single

report compiling all relevant information which details soil sampling and testing to date. The report shall also identify the potential for migration of contaminants off site. The report must include a statement to the effect that the site, upon remediation, will be suitable for the development proposed.

Reason for condition: Compliance with *State Environmental Planning Policy 55 – Remediation of Land*

The key findings of the DESI field investigation are as follows:

Preliminary Assessment

On the basis of the desktop historical review and visual inspection of the site, the following conclusions can be drawn:

- The desktop study indicates that the site is zoned *'R4 High Density Residential'*.
- Acid Sulphate Soils are not potentially present at the site.
- According to the aerial photographs, land titles, historic plans and business directories reviewed, the site was vacant until construction of the Bowling Green commenced in approximately 1961 and has been used as such till this assessment date.
- The surrounding area has undergone light commercial and residential development over time. A review of the historical aerial photographs and EPA records indicate that there have been no quarrying or landfilling activities in the area surrounding the site. As such, it is considered unlikely that there would be a landfill gas issue at this site. However on-site observations and the previous environmental report do indicate infilling has occurred to some extent, however with no evidence of putrescible wastes.
- A search of the NSW OEH Contaminated Land Database and Protection of Environment Operations Act 1997 Public Register found no records for the site.
- A Stage 2 Detailed Environmental Site Investigation is required to characterise the site soils and groundwater.

Soil Investigation

On the basis of the visual aspects of the site, review of the site history and results of soil analysis, the following conclusions can be drawn:

- Soil impacts in the fill material include lead, mercury, PAHs and zinc exceeding adopted site criteria.
- No exceedances in the natural underlying material were reported.
- Asbestos containing materials were identified on the site surface and potentially deeper within fill material;
- Aesthetic issues are present in the form of concrete, brick, glass, general demolition wastes, discarded household goods and household type rubbish. The lateral extent of these materials within the fill profile will be further characterised during test pitting and site excavation works.
- A final site validation sampling assessment will compare soils against adopted NEPM HIL Criteria A for sensitive land use settings and EILs for accessible areas / gardens for the remaining soils after the completion of excavation and fill removal.

Given the development proposed of the site and the fact that all fill material at the site will be excavated and disposed off-site, the future risk the site soils pose to human health is considered low.

Fill Material Waste Classification

- TCLP conducted by SMEC reported only exceedances of criteria for lead.
- Both Nickel and BaP were non-detect or below criteria.
- Approximately 27,000 ton of fill material is required to be removed.
- Asbestos to be removed or abated as appropriate to bonded status and extent.

Soils were compared to the 2008 NSW EPA soil disposal criteria and also the criteria detailed with the NSW EPA excavated natural material order 2014 for offsite disposal purposes.

- The sample analysis results indicate that fill material across the site can generally be classified as "**General Solid Waste**".
- **Hazardous waste** was reported at 4 locations
- Exceedances of the CT1 and CT2 criteria detailed within Table 1 of the NSW EPA Waste Classification Guidelines – Part 1 were noted relating to lead in 21 locations only were reported as "**Restricted Waste**".
- These exceedances will be further delineated with greater accuracy and TCLP analysis during excavation test pitting when full access is available to those fill material domains.
- The fill material at site cannot be currently classified as ENM due to its imported and potentially contaminated nature.

Natural Material Waste Classification

- Currently the sample analysis results indicate that natural material beneath the fill layer across the site can be classified as "VENM" for offsite disposal purposes. No exceedances of the waste criteria were reported in this profile within the samples collected.
- Further characterisation can be completed once excavation has reached this depth and removed the contaminated fill layer above.

Groundwater Investigation

- A groundwater monitoring network consisting of 3 wells was installed across the site.
- Concentrations of metals including aluminum, cadmium, copper, iron, lead, nickel and zinc were reported exceeding the drinking water, fresh water, Aesthetic and Recreational Primary and Secondary Criteria for the site during the two monitoring rounds. However, it should be noted that the concentration reported were minimal and consistent across the site indicating that these concentration are likely naturally occurring and not derived from historical uses at the site.
- Concentrations of Chlorinated hydrocarbons, halogenated benzenes, halogenated hydrocarbons, TPH, BTEX, PAHs, MAHs, OCPs, phenols, phthalates and PCBs were all reported below the laboratory limit of reporting.
- No volatile organic compounds were reported, indicating that the groundwater assessed is unlikely to pose a vapor risk to future site users.

It is considered, based on the results reported from groundwater samples obtained at the site, that the groundwater assessed is unlikely to pose a risk to the current or proposed future site use and is considered not to been polluted as a result of historic site activities.

Conclusions

Based on the soil and groundwater data to date, the site is considered suitable for the proposed aged care facility development with no human health risk posed by the identified subsurface conditions following the proposed off-site disposal of all fill material at the site.

The potential off-site impacts of site sourced contaminates are not yet complete with further soil and groundwater works required, detailed below.

Future site workers potentially coming into contact with contaminated fill material will require contact personal protective equipment in the form of gloves, long sleeves and pants to protect against any dermal contact.

Current site gardeners not coming into contact with soils during maintenance work, e.g. lawn moving of greens would not require PPE. Any more significant works that involve soil disturbance PE as per site constructions works would be required.

Control measures should be implemented during the project test pitting and excavation works which is outlined in the site Remediation Action Plan (RAP). These would include but not limited to;

- Site security, signage, fencing;
- Storm water / surface waters management;
- Soil management plan;
- Noise control plan;
- Dust control plan;
- Odour control plan;
- Occupation health and safety plan;
- Unexpected finds plan;
- Final site validation.

This report satisfies the conditions as required to achieve compliance with State Environmental Planning Policy 55 – Remediation of Land.

Final statement

The site at 266 Longueville Road Lane Cove will be suitable, upon remediation, for the proposed high density residential aged care facility.

- Based on the soil and groundwater data to date, the site is considered suitable for the proposed aged care facility development with no human health risk posed by the identified subsurface conditions following the proposed off-site disposal of all fill material at the site.
- Currently the site poses no risk to site users including gardeners who currently maintain the bowling greens.

- Constraints on the sites current users should include no sub-surface or access to site soils without appropriate PPE and reference to the site Remediation Action Plan. Site soils / fill material are contaminated.

Further works

Further works required to more accurately characterize the site for land use acceptability, waste disposal classification and potential off-site impacts are required. These further works are detailed and guided by the site Remediation Action Plan.

- Soil test pitting targeted locations for hot spot delineation vertically and laterally;
- Asbestos delineation;
- Aesthetic assessment;
- TCLP analysis for soil hot spots for waste classification;
- Further groundwater wells to the eastern boundary of the site to determine potential off-site impacts to Gore Creek;
- Surface water and sediment sampling of Gore Creek;
- Additional groundwater sampling with selected lower LOR as applicable;
- Soil sampling for EIL criteria calculations;
- Final sit validation following removal of fill material;
- Update the site RAP based on this final report.

1.0 INTRODUCTION

LRM Global Pty Ltd (LRM) was engaged by Australian Unity Ltd (the client) to complete a Preliminary Environmental Site Assessment (PESA, completed) and subsequent Stage 2 – Detailed Environmental Site Investigation (DESI, this report) of the property located at 266 Longueville Road, Lane Cove, NSW (the site) to document any potential environmental liabilities that are apparent from a comprehensive desktop study, soil and groundwater assessment as part of a development application for a proposed high density retirement village.

LRM understands that the site is proposed to be developed as high density retirement living with two level basement car parks below the building footprint with open spaced areas to the northern aspect as the building does not occupy the entire site lot. The open space areas consist of existing trees and landscaping planted on natural ground to the north east and north western corners and the central north section also some planted areas on concreted where above basement generator and equipment rooms. The western edge will have a retaining wall interface with the retained forested area outside of the development boundary and will be backfilled with imported clean material and landscaped. The building is seven levels in total with interspaced courtyards. Appendix A shows the site location and feature plans. The below is a figure detailing the boundaries of the site for the purposes of the investigation.

Figure 1: Site Development & Assessment Boundary

Site – 266 Longueville Road, Lane Cove, NSW

2.0 ASSESSMENT OBJECTIVES AND SCOPE

2.1 Assessment Objective

The objective of the preliminary investigation was to obtain and assess historical information pertaining to the site and its previous use, conduct a detailed site inspection to locate any potential sources of soil and groundwater contamination both on and off-site and present these findings in a report that meets council and audit process requirements.

The objectives of this investigation are as follows:

- Characterise site soil and groundwater conditions;
- Satisfy council DA conditions for a Stage 2 Detailed Site Investigation Report (as per the NSW EPA's Guidelines for Consultants Reporting on Contaminated Sites);
- A single report detailing the location, type and level of contaminants, compiling all relevant information which details soil and groundwater sampling and testing to date;
- Identify the potential for migration of contaminants off site;
- Provide a statement that the site will be suitable upon remediation for the development proposed;
- Comply with State Environmental Planning Policy 55 – Remediation of Land;
- Comparison of results against the adopted NEPM criteria;
- Compliance with NSW EPA guidance;
- To inform and guide the Remediation Action Plan (RAP) to be enacted during the site redevelopment process;
- Provide all analytical data in summarised tables and provide all other relevant data in the form of a detailed environmental site assessment report for the environmental auditor to consider as part of their audit of the site; and
- The development of an appropriate waste classification for excavated soils in accordance with NSW EPA Waste Classification Guidelines - Part 1: Classifying waste.

2.2 Scope

LRM Global was engaged by Australian Unity Ltd to complete a Preliminary Environmental Site Assessment (PESA) and subsequent Stage 2 – Detailed Environmental Site Investigation (DESI) of the property located at 266 Longueville Road, Lane Cove, NSW comprising of the following works:

Stage 1 PESA Scope:

- A review of available site records held by property representatives;
- A detailed review of available files, data and other records maintained by regulatory authorities (i.e. Local Council, trade waste authority and EPA);
- Inspection of historical aerial photography;
- Historical title search to first private ownership;
- Site reconnaissance by a qualified environmental consultant;
- Review of previous consultant reports prepared for the site;
- Comparison of results against the adopted NEPM criteria;

- Compliance with NSW EPA guidance;

Stage 2 DESI Scope:

- Conduct a supplementary soil and groundwater assessment to determine the contamination status of the sites subsurface;
- Determine if any soil or groundwater contaminants are at concentrations which pose an adverse human health or environmental threat to the existing and / or proposed land-use;
- Assess the data collected from the sampling and analysis program against policies, regulations, guidelines and standards currently adopted in the state of New South Wales. Data exceeding the appropriate requirements is evaluated in terms of the risks posed by the contamination and remedial measures to be undertaken to minimise those risks;
- Drilling and installation of 3 groundwater monitoring wells on-site;
- Soil sampling across the accessible areas of the site, target depth 12.5m;
- Collection of soil samples from fill and natural material encountered during drilling;
- Logging of monitoring well construction bores and soil bores;
- Surveying and development of monitoring wells prior to sampling works;
- Gauge, purge and collect groundwater samples from 3 groundwater monitoring wells;
- Engagement of NATA accredited laboratories for sample analysis;
- Completion of detailed environmental site assessment and soil disposal classification reports; and
- Inform the development of a RAP.

3.0 SITE IDENTIFICATION

The site is located at 266 Longueville Road, Lane Cove, NSW and is accessible from this street only.

Table 1: Site Identification Information

Site address	266 Longueville Road, Lane Cove	
Site Identification	Bowling Club	
Total site area	Approximately 9,000 m^2	
Municipality	Lane Cove Municipal Council	
Development Application Number	DA/117/2017	
Zoning	High Density Residential R4 (Development area) Environmental Conversation E2 (eastern side), Riparian Land	
Current Title	Lot 1	DP 1227921
Current owner	Lane Cove Council	
Current Title	Lot 1	DP 321353
Current owner	Lane Cove Council	

The site location plan is presented as Figure 2, Appendix A.

The proposed development plans are provided as Figures 10, Appendix A.

4.0 STAGE 1– PRELIMINARY ENVIRONMENTAL SITE ASSESSMENT

4.1 Site and Regional Setting

The following sections detail the site zoning, regional setting, and historical information.

4.1.1 Land use Zoning

The Lane Cove Local Environmental Plan 2009 Land Zoning Maps indicated that the site is Zoned B4 High Density Residential. The immediate general surrounds are zoned R2 Low Density Residential and E2 Environmental Conservation to the east which is defined as Riparian land.

The three relevant Planning Certificates under Section 10.7 Environmental Planning and Assessment Act 1970 are included in Appendix B. These replace the former named Section 149 Certificates.

- The certificates note that the land is not subject to a management order within the definition of the Section 59(2) of the Contaminated Land Management Act 1997;

- The certificates note that loose fill asbestos was used in residential homes in the local government area;
- The certificates note that the land is subject to a Tree Preservation Order; and
- The land is currently under an overland flow study to determine exact locations subject to inundation.

The Lane Cove Local Environmental Plan (LEP) 2009 applies to the land, this includes following plans;

- Lane Cove LEP, Land Reclassification Map – Sheet RPL_004 (Figure 11)
- Lane Cove LEP, Land Zoning Map – Sheet LZN_004 (Figure 12)
- Lane Cove LEP, Env Protection and Riparian Land Map – Sheet CL1_004 (Figure13)

The area to the west of the site within the riparian zoning on the LEP plan and is outside of the development boundary. The regional Lane Cove zoning map is Figure 14 in Appendix B

The LEP zoning plan maps are presented in **Appendix B**.

4.1.2 Local Topography

The site and surrounds slope significantly to the east as they fall away to the adjacent Gore Creek and golf course. The West side of the site is most elevated with the small partially bitumen covered car park, falling away slightly to the east to the first bowling green, with a significant drop west to the second bowling green and further dropping away to the north to the treed area.

A local topographic map is included as Figure 15 within **Appendix B** for reference.

4.1.3 Nearby Sensitive Receptors

The site reconnaissance did not reveal evidence of water pooling or seepage. The nearest sensitive receptor to the site is judged to be predominantly via surface run-off directed towards off-site municipal storm water drains, Gore Creek and Tambourine Creek, Lane Cove River and Woodford Bay, Parramatta River and ultimately Sydney Harbour.

The primary receiving water body for groundwater and surface runoff from the site is Gore Creek which runs immediately along the eastern boundary of the site. Gore Creek Reserve is located downstream of the site and is a recreational reserve. Lane Cove Gore Creek walking track also generally follows the watercourse from near the Pacific Highway to Lane Cove River. Aquatic ecosystems and aesthetic considerations are of primary concern and potentially secondary contract recreation and primary contact recreation, although are no longer considered common practice in the area.

4.1.4 Regional Geology

The Geological Survey of New South Wales, Sydney Map Sheet 1:100,000 (Sheet 9130) shows the site is underlain by the Middle Triassic Age 'Hawkesbury Sandstone' which comprises medium to coarse grained quartz sandstone with minor shale and laminate lenses. The regional geology map is presented as Figure 16 within **Appendix B.**

The soil landscapes are defined as being to the central and west of site as Lucas Heights, Residual and the eastern portion as Deep Creek Alluvial. The soil landscapes map is presented as Figure 18 within **Appendix B**.

4.1.5 Underground Utilities and UPSS

At this stage no evidence of Underground Petrol Storage Systems (UPSS) have been identified on or associated with the site. Should any be discovered, the UPSS Regulation – Sensitive Zones Map for the Lane Cove Municipal Council indicates that the site and surrounding area is located north of and not within a 'Sensitive Zone'. The sensitive zone map is included as Figure 26 for reference should a UPSS be identinfied.

A 'Dial Before You Dig' search has been conducted to determine the presence of underground utilities which may act as a preferential pathway for any potential contamination migration both onsite and offsite. Plans will be included within the DESI Report currently underway.

Figure 17 includes the relevant DBYD search outputs for the site.

4.1.6 Acid Sulphate Soils

The Lane Cove Environmental Plan 2009 Acid Sulphate Soils Map Sheet ASS_004 indicates that soils on the site and in the surrounding area not at risk of Potential Acid Sulphate Soils (PASS).

See attached Figure 25, **Appendix B.**

4.1.7 Local Hydrology and Nearby Groundwater Bores

The hydrogeology maps of Australia indicate that aquifers on-site and surrounding are porous, extensive aquifers of low to moderate productivity.

The Bureau of Meteorology Australian Groundwater Explorer was used in an attempt to search for nearby hydrogeological records for registered groundwater wells in the area.

There are no identified historical groundwater bores on the site.

There were 5 groundwater wells identified during the search within a 500 m radius of the site. There are 4 monitoring wells located 142 – 153 m south of site clearly associated with the ongoing assessment of the service station. One irrigation/ monitoring bore was also identified 135 m south east of the site at a depth of 24 m, this is likely associated with the golf course. Refer to **Appendix B** Figure 23 for surrounding groundwater bore location plan.

4.1.8 Aerial Photographs

As part of the desktop site history brief, aerial photographs of the site and surrounds from 1943, 1951, 1955, 1961, 1965, 1970, 1982, 1991, 2002, 2009, and 2014 were and reviewed. The findings of which are summarised below and copies are provided in **Appendix B.**

1943

The site appears to be vacant and vegetated to the central and east sides with trees. Some walking tracks are evident, as are residential dwellings immediately on the north boundary of the site and across Longueville Road.

1951
The site and surrounds remain relatively unchanged since the 1943 aerial photograph. One additional building has been constructed to the immediate southern boundary of the site and appears to be residential in nature.

1955
The site and surrounds remain relatively unchanged since the 1951 aerial photograph. Adjacent structures do not appear to have changed either.

1961
The first bowling green has been developed on the site to the western edge along with the car park, and the building that serves as the current club house has also been constructed on the southern boundary. The central and eastern portions of the site still remain vegetated.

1965
The majority of the vegetation has been cleared, the second Bowling Green to the east of the site has been constructed and evidence of the golf course development to the east is also present. The onsite building remains visually unchanged.

1970
The site and surrounds remain relatively unchanged since the 1965 aerial photograph. Onsite structures do not appear to have changed, however the apartment block to the south appears to be under or near completion.

1982
The site and surrounds remain relatively unchanged since the 1970 aerial photograph. Onsite structures do not appear to have changed however the apartment block to the south boundary is completed.

1991
The site and surrounds remain relatively unchanged since the 1982 aerial photograph.

2002
The site and surrounds remain relatively unchanged since the 1991 aerial photograph.

2009
The site and surrounds remain relatively unchanged since the 2002 aerial photograph.

2014
There is no significant change from the 2009 aerial photograph of the site.

Aerial Photograph Summary

The aerial photograph review revealed that the site has been used for a bowling green from as early as 1961 and was vacant before that.

The surrounding area has typically been residential, with a shopping strip and service stations to the south, also as early as the 1940s. Historical land titles, plans and business listings have been assessed in conjunction with aerial photographs to identify site occupants.

4.1.9 Historical Land Title Review

A review of the historical land titles pertaining to the site was undertaken in order to determine all site owners, their occupations and the dates to which they occupied the site. A summary of the site occupants is presented below while copies of the full title search records are attached in **Appendix B**.

Table 2A: Historic Title Summaries

Year	Proprietor
(Lot 1 DP 1227921)	
2017 – current	Lane Cove Council
	(Lot 322 DP 1102537)
2006 – 2017	Lane Cove Council
	(Part Portion 322 Parish Willoughby – Area 3 Acres 35 ¾ Perches – CTVol 4337 Folio 52)
1958 – 2006	Council of the Municipality of Lane Cove
1956 – 1958	The Cumberland County Council
1948 – 1956	Dorothy Muriel Macdougall, spinster
1929 – 1948	Ettie Emma Jane Macdougall, spinster
	(Part Portion 322 Parish Willoughby – Area 3 Acres 2 Roods 20 Perches – CTVol 3098 Folio 92)
1920 – 1929	Ettie Emma Jane MacDougall, spinster
	(Part Portion 322 Parish Willoughby – Area 3 Acres 2 Roods 20 Perches – CTVol 1928 Fol's 58, 60 & 62)
1908 – 1920	Frank Winter, modeller Leonard Winter, modeller Louise Heckenberg, wife of Casper Heckenberg

	(Part Portion 322 Parish Willoughby – Area 3 Acres 2 Roods 20 Perches – CTVol 1120 Folio 249)
1907 – 1908	Leonard Winter, modeller Thomas Good fellow
1894 – 1907	Leonard Winter, modeller

Title Tree

Lot 1 DP 1227921

Folio Identifier 1/1227921

Folio Identifier 322/1102537

Certificate of Title Volume 4337 Folio 52

Certificate of Title Volume 3098 Folio 92

Certificate of Title Volume 1928 Folio's 58, 60 & 62

Certificate of Title Volume 1120 Folio 249

Table 2B: Historic Title Summaries

Year	Proprietor
(Lot 1 DP 321353)	
1988 – current	The Council of the Municipality of Lane Cove
	(Lot 1 DP 321353 – Area 1 Rood 24 ¼ Perches – CTVol 4200 Fol 204)
1957 – 1988	The Council of the Municipality of Lane Cove
1928 – 1957	The Commonwealth of Australia
	(Part Portion 322 Parish Willoughby – Area 3 Acres 2 Roods 20 Perches – CTVol 3098 Folio 92)
1920 – 1928	Ettie Emma Jane MacDougall, spinster
	(Part Portion 322 Parish Willoughby – Area 3 Acres 2 Roods 20 Perches – CTVol 1928 Fol's 58, 60 & 62)

1908 – 1920	Frank Winter, modeller Leonard Winter, modeller Louise Heckenberg, wife of Casper Heckenberg
	(Part Portion 322 Parish Willoughby – Area 3 Acres 2 Roods 20 Perches – CTVol 1120 Folio 249)
1907 – 1908	Leonard Winter, modeller Thomas Goodfellow
1894 – 1907	Leonard Winter, modeller

Title Tree

Lot 1 DP 321353

Folio Identifier 1/321353

Certificate of Title Volume 4200 Folio 204

Certificate of Title Volume 3098 Folio 92

Certificate of Title Volume 1928 Folio's 58, 60 & 62

Certificate of Title Volume 1120 Folio 249

According to the land titles search the site has been occupied from as early as 1894. Lot 1 DP 1227921 (the main part of the site) came under Lane Cover ownership in 1956, and prior to that was in private hands. Lot 1 DP 321353 (the North West corner) came under Lane Cove Council ownership in 1928, and was also in the same private ownership prior to that.The title search indicates site ownership but not necessarily site occupancy.

4.1.10 Historic Plans

Three historical maps were reviewed, the 1917 Commonwealth 1:63360 Sheet 423 does not reveal any significant information for the site location. The 1949 update of this plan also does not reveal any significant data and shows road as per the UBD listings. The 1975 plan shows information as consistent with the aerial imagery and UBD listings.

Copies of the plans reviewed are presented within Figure 19 **Appendix B**.

4.1.11 Historic Business Listings

A search of the Sydney UBD Business Listings for the site address was conducted on the listings produced in 1950, 1965, 1970, 1975, 1978, 1982, 1986 and 1991. The listings provide details relating to the business name, address and activities. Details of the business occupying the site address are listed within Table 3. The findings of the business directories are relatively consistent with the historic title search results indicating that the site throughout its history has been occupied by the Ladies Bowling Club from as early as 1965 and prior to that as unlisted. UBD listings are detailed in full in **Appendix B** and Figure 24.

Table 3: UBD Business Listing Site Occupancy and Adjacent Significant Summary

Year	Business name and Address	Business Activity
1991	Caltex Northwood Service Station 10 Northwood Rd	Service Station 73m south
1986	Calico Northwood Service Station 10 Northwood Rd	Service Station 73m south
	Lane Cove Women's Bowling & recreation Club On-Site	**Bowling Club**
1982	**Lane Cove Women's Bowling & recreation Club On-Site**	**Bowling Club**
1978	Caltex Northwood Service Station 10 Northwood Rd	Service Station 73m south
	Lane Cove Women's Bowling & recreation Club On-Site	**Bowling Club**
	BP Northwood Service Station 6 Kenneth Street Norwood	Service Station 117m south
1975	Pascate, L & M. Service Station 10 Northwood Rd	Service Station 73m south
	Lane Cove Women's Bowling & recreation Club On-Site	**Bowling Club**
1970	Partners Service Station 10 Northwood Rd	Service Station 73m south
	Lane Cove Women's Bowling & recreation Club On-Site	**Bowling Club**
1965	**Lane Cove Women's Bowling & recreation Club On-Site**	**Bowling Club**
	Radke, W. H. & Co. Motor Garage 8 Kenneth Street	Service Station and Engineers 117m south
1950	Longueville Service Station Cnr Norwood and Kenneth Streets	Service Station 88m south
	Floyd, A. L. Pleazing Products 5 Northwood Road	Furniture and Toy Manufactures 148m south
	Radke and Dennis 6 Kenneth Street	Service Station 117m south

4.1.12 Council Records Review

A request for information was submitted to the Lane Cove Council to retrieve any significant or relative records pertaining to the site. No significant information was available outside of the LEP records already obtained.

5.0 ENVIRONMENTAL RECORDS REVIEW

Figures 20 – 22 in Appendix B are present in relation to the following searches.

5.1 NSW EPA DECCW Contaminated Land Database (epa.nsw.gov.au)

A search of the NSW EPA DECCW Record of Contaminated Land Notices Database established under Part 3 of the Contaminated Land Management Act 1997 found no records for the site. Details for sites located within 500 m of the site are presented within Table 4 below:

A search of the NSW EPA DECCW List of NSW contaminated sites (current as of July 2017) notified to EPA under Section 60 of the Contaminated Land Management Act 1997 found no records for the site. Details for sites located within 500 m of the site are presented within Table 4 below:

A search of the public register established under Section 308 of the Protection of the Environment Operations Act 1997 found no records for the site. The surrounding sites listed on the register (disregarding surrendered or ceased licences) are summarised in the table below.

Table 4: List of NSW Contaminated Sites Notified to the EPA

Address	Site Name	Contamination Activity Type	Management Class	Distance from site
5 – 7 Northwood Road, Lane Cove	Caltex Service Station	Service Station	Under Assessment	135 m south

5.2 SafeWork Search

A safework search was conducted and the letter included in Appendix B. No records were identified.

5.3 Protection of Environment Operations Act 1997 Public Register

A search of the public register established under Section 308 of the Protection of the Environment Operations Act 1997 found no records for the site or on land within 500 m. The surrounding sites listed on the register within 500 m are limited to surrendered or ceased licences and are summarised in the table below.

Table 5: Surrounding Sites Listed on the Protection of Environment Operations Act 1997 Public Register

Address/ Location	Organisation Name	Licenced Activity & Status	Distance from site
Waterways throughout NSW	Sydney Weed & Pest Management Pty Ltd	Surrendered: Other activities / Non Scheduled Activity – Application of Herbicides	48 m east

Waterways throughout NSW	Luhrmann Environment Management Pty Ltd	Surrendered: Other activities / Non Scheduled Activity – Application of Herbicides	48 m north
Waterways throughout NSW	Robert Orchard	Surrendered: Other activities / Non Scheduled Activity – Application of Herbicides	48 m north

5.4 Contaminated Land and Waste Management Facilities

There are no identified waste management facilities within 500 m of the site. One waste transfer station (Weir Minerals Australia Ltd, licensed activity under POEO Act) was identified approximately 1km away to the north east, too far away to be considered significant in the context of potential off-site impacts.

The NSW contaminated land lists on site 135 m to the south, a Caltex Service Station at 5-7 Longueville Road. This site is currently under assessment.

5.5 EPA PFAS Investigation Program

No records for this site or surrounds were identified. PFAS has been added as a potential contaminant of concern due to the unknown nature of the sites fill material.

5.6 Previous Site Geotechnical and Environmental Reports

An executive summary extract of the below reviewed reports and documents along with bore logs and cross sections is included within **Appendix F.** Full reports are available upon request.

SMEC Australia Pty Ltd, *266 Longueville Road, Lane Cove, Geotechnical and Environmental Investigation Report,* December 2011

A site report at 266 Longueville Road was conducted in December 2011, by SMEC Australia Pty Ltd (Consulting Geotechnical and Environmental Engineers) for the Lane Cove Municipal Council.

The purpose of the investigation was to provide advice on the sub-surface conditions of the land that may be relevant to future redevelopment and also to assess the potential for human health and environmental exposures at the property due to chemical contaminants in the soil. The scope of the environmental component of the investigation included a site inspection and a review of the land use history, as well as a preliminary soil sampling program.

The soil samples were collected from a total of 15 boreholes drilled at evenly spaced locations as access allowed across the site in November 2011. The soil sampling locations are shown on Figure 3 from SMEC's December 2011 report, which is attached to this report, and the soil profile logs providing a description of the fill encountered and soil samples collected is provided in Appendix F. The methodology by which the samples were collected is described in SMEC's December 2011 report.

The soil samples collected were initially analysed for a broad screen of potential chemical contaminants including heavy metals, polycyclic aromatic hydrocarbons (PAH), total petroleum hydrocarbons (TPH), monocyclic aromatic hydrocarbons (BTEX), polychlorinated biphenyls (PCB), organochlorine pesticides (OCP), organophosphorus pesticides (OPP), phenolic compounds, fluoride, cyanide and asbestos. However, in order to further classify the soil selected samples were subsequently tested for leachable lead, nickel and PAHs in January 2012.

Site Geology

The Geological Survey of NSW 1:100,000 Sydney Geological Map (Sheet 9130) shows that the site is underlain by the Middle Triassic Age 'Hawkesbury Sandstone' which comprises medium to coarse grained quartz sandstone with minor shale and laminate lenses. The natural soils encountered during the investigation comprised silty sand topsoil overlying silty and sandy clay subsoil, which are consistent with in-situ weathered soils derived from the Hawkesbury Sandstone formation. Sandstone bedrock was also encountered in each of the 15 boreholes at depths of between 0.2 m and 8.6 m below the ground surface, and depth to bedrock was greatest in the eastern portion of the site. A layer of fill material between 0.2 m and 8.6 m in thickness was also observed at each sample location. The fill is heterogeneous, comprising sands, gravels and clays, and fragments of anthropogenic wastes including bricks, ash, ceramics and glass were observed in the fill at a number of borehole locations.

Site Hydrogeology

A search of the Department of Natural Resources (DNR) groundwater database was performed to identify groundwater wells in the proximity of the site. The search identified a total of eight registered groundwater monitoring wells located within 2 km of the site. Out of the eight wells five are registered for 'monitoring' purposes, two are registered as irrigation bores and the last is registered for 'domestic' purposes.

The aquifer lithology is reported to be sandstone with the database information showing that multiple aquifers are likely to be present in the sandstone bedrock. Aquifer depths in the wells (where reported) are stated as being between 4 m and 144 m below the ground surface with the depth to groundwater in the closest bore to the site (150 m South-east) being approximately 16.8 m below ground level. Additionally, perched groundwater was encountered at the soil/rock interface in multiple boreholes drilled on the site between the depths of 2.0 m and 8.5 m.

Results

The results of the investigation showed that the concentrations of chemical contaminants measured in the soil samples retrieved from the site are generally low and below criteria that are protective of human-health for recreational and also standard and high-density residential land use settings. However, the fill in the east of the site below 1.5 m depth was found to be impacted with lead and polycyclic aromatic hydrocarbons (PAHs) at concentrations which exceed the relevant health-based criteria.

Bore logs and cross sections indicate clearly the increasing fill layer depth heading from west to east, and the level of the natural sandstone beneath.

Elevated concentrations of lead (640 mg/kg to 7 300 mg/kg), total PAH (27 mg/kg) and the PAH species benzo(a)pyrene (1.1 mg/kg to 3.2 mg/kg) were measured in several samples of fill material retrieved from the bowling green area in the east of the site. These concentrations are above the SIL (Column 1) criteria for these analytes. The lead and benzo(a)pyrene concentrations in several samples are also above their respective SIL (Column 3) criteria. Further, the lead concentrations in two samples exceed the SILs (Column 2) criteria. That is, the site could potentially present a risk to human-health for the existing recreational use and also for high and low density residential land use settings where exposure pathways exist.

The concentrations of lead (640 mg/kg to 7 300 mg/kg), mercury (1.2 mg/kg to 3.0 mg/kg) and zinc (220 mg/kg to 820 mg/kg) measured in the soil at a number of locations on the site are above the PILs for these metals of 600 mg/kg, 1 mg/kg and 200 mg/kg respectively. The PILs are criteria which are designed to be protective of plant health within an urban setting.

The sample locations plan, cross sections and bore logs have been included in Appendix F

The full report can be provided upon request.

SMEC Pty Ltd, Soil Sampling and Classification Program, Land at 266Longueville Road, Lane Cove, January 2012.

SMEC as part of a combined geotechnical and environmental investigation provided soil disposal advice for in-situ soils. This investigation showed that due to the presence of anthropogenic materials throughout the imported soils across the site, the imported soils had no prospect for off-site re-use as 'Clean Fill' and as such disposal to landfill was appropriate. The purpose of this report was to determine the waste category of the soils at 266 Longueville Road Lane Cove.

SMEC as part of their combined investigation drilled 15 boreholes across the site and took samples at strategic depths at each. Soil chemistry results were compared to NSW EPA Waste Classification Guidelines and exceedances noted. Lead, nickel and benzo(a)pyrene were noted as contaminants of concern. All samples exceeding the GSW threshold were analysed for TCLP to characterise the mobility of the contaminants of concern. Samples analysed using TCLP for benzo(a)pyrene were all below detection. Nickel and lead were detected in samples analysed using TCLP however only sample BH11_4.3-4.5 exceeded TCLP criteria.

As such SMEC determined the site was classified as General Solid Waste with the exception of a 'hotspot' BH13 which was classified as Restricted Solid Waste under the prevision of General Immobilisation Approval 2009/07. It was suggested that the extent of the hotspot was unknown and further investigation to delineate could determine this.

Applied Ecology Pty Ltd, *Flora, Fauna & Fungi Impact Assessment for a proposed development site at 266 Longueville Road*, January 2012, for Lane Cove Municipal Council.

The purpose of the investigation was to provide a flora, fauna & fungi impact assessment as part of the proposed development at 266 Longueville Road, Lane Cove, NSW. The development of an apartment is being considered for the western part of 266 Longueville Road. Development of the apartment will not extend down the wooded slopes and the golf course on the eastern part of the site. Council is investigating the possibility of a new walking track through the existing bushland to link this site with the Lane Cove Country Club. Prior to any development of the proposal, Council requires to understand the ecological attributes of the immediate area. The scope of the investigation included identification of flora, fauna & fungi species present on the subject/adjacent sites, conservation value of the species and communities identified, analysis of the likely significance of impacts of a future residential development and identification of specific design measures that may be incorporated into development to ameliorate impacts towards the native flora, fauna and fungi.

Flora

Searches conducted on the NSW Wildlife Atlas (www.bionet.nsw.gov.au), PlantNet (www.rbgsyd.nsw.gov.au), and EPBC Act database (www.environment.gov.aul) revealed a total of 10 different threatened flora species reported in the Lane Cove area or within 5km of the study site. A similar search was conducted for Endangered Ecological Communities which revealed three vegetation communities listed for the area. These communities included the Blue Gum High Forest, Coastal Saltmarsh and the Hygrocybeae community.

Fauna

Applied Ecology Pty Ltd opted for passive techniques that involved no handling of animals or traps which may be prone to tampering and theft in urbanised areas endangering both the animals and integrity of the investigation. Various methods were utilised to identify native fauna occupying the targeted/surrounding sites. The various methods included two searches conducted on NSW Wildlife Atlas and EPBC Act database, spotlighting survey, call playback, bat ultrasonic call recordings, diurnal bird census and a Herpetofauna search. The Atlas searches revealed a total of eight threatened fauna species reported for this area.

Fungi

Applied Ecology Pty Ltd conducted an Atlas search and field survey to identify various fungi species native to the site. The Atlas search revealed a total of nine threatened species of fungi reported in the area. One endangered fungi community, the Hygrocybeae community of Lane Cove Bushland Park was also recorded. The field survey was undertaken over a period of over 2 hours, totalling 10 hours of searching.

Conclusion

Based on these results Applied Ecology Pty Ltd provided identification of key threats for the threatened and endangered species of flora, fauna and fungi.

- Reduction in food resources for Powerful Owls by affecting numbers of ringtail possums, or reducing feeding, roosting and breeding habitat for ringtail possums and increasing predation by domestic cats in the area. This has been identified has a key threat for this species.
- Reduction in food resources for Grey-headed Flying Foxes by reducing the quality and/or extent of bushland in the area. This has been identified as a key threatening process for this species.
- Reduction in floristic diversity in Coastal Enriched Sandstone Moist Forest in the area by clearing or changing conditions in surrounding areas.
- Reduction in extent of good quality vegetation in CESMF through invasion of weed species.
- Reduction in condition of CESMF through runoff from proposed development site.
- Reduction in condition of CESMF through sediment deposition during building on proposed development site.

To assist in the mitigation of impacts of the development, Applied Ecology Pty Ltd provided specific measures to reduce and offset impacts. A list of these measure are dot pointed below.

- Choice of suitable plant species for landscaping clearly outlined as part of the development approval.
- Ongoing weed management as part of comprehensive bush regeneration plan for the E2 zone.
- Management of soil stability on slopes below the bowling green area by staged weed removal, stabilisation and revegetation as required.
- Staged removal of shrub layer weeds to retain habitat elements.
- Offset weeds that provide possum food by planting suitable native species.
- Provide supplementary nesting site (e.g. nest boxes) for possums to ensure ongoing food supplies for Powerful Owls.
- Plant native species that provide food resources for Grey-headed Flying Foxes.
- Manage access by developing formals path(s)

- Management of runoff from development site to reduce impacts from changed water quality and quantity.
- Supplementary fungi survey in autumn to confirm presence/absence of threatened fungal species
- Management of pedestrian access through the site and adjoining reserve area. Existing track alignments indicate current usage patterns (Figure 25), and provision of formal walking tracks should reflect these (Figures 22-24). Raised steps are recommended for steeper areas to reduce potential erosion impacts. Given the general lack of suitability of the habitat for *Hygrocybe* fungi, the remainder of the track route should be clearly delineated, but should remain a "natural" bush track.

The full list of identified species of flora, fauna and fungi can be found in full report which can be provided upon request.

Arcadis Australia Pacific Pty Ltd, *266 Longueville Road, May 2017*, for Australian Unity Limited.

The purpose of the investigation was to provide land restoration services on the sub-surface of the land as part of the development of 266 Longueville Road, Lane Cove, NSW. Historical third party environmental reports for the site indicated the presence of polyaromatic hydrocarbons (benzo-a-pyrene) and heavy metal (lead and nickel) contamination on the site associated with historic filling. The preliminary waste classifications of General Solid Waste (estimate 11,350 m^3) and Restricted Waste (estimate 6,000 m^3) were potentially resulting in particularly high disposal costs if not further assessed and managed. The proposed scope of the investigation included insitu waste assessment and reporting, remediation planning/supervision, review of sustainable soil waste disposal sites and site validation.

An indicative cost estimate was undertaken by Environmental Strategies Pty Ltd in collaboration with Arcadis Australia Pacific Pty Ltd. Environmental Strategies Pty Ltd had not undertaken any preceding investigations at the site therefore previous third party geotechnical and preliminary site investigation/insitu waste classification reports prepared by SMEC testing in 2011-2012 provided analytical data with respect to the presence of contamination and waste associated with the historic filling of the site.

Statistical Analysis and Waste Assessment Review

Statistical analysis and waste assessment review of the SMEC (2012) sample data was undertaken to assist with management and remediation estimates. Two statistical reviews were performed in accordance with the NEPM 1999 (2013) Assessment of Contamination Guidelines and NSW EPA (2014) Waste Classification Guidelines utilising the application of 95% UCL with the sample data set under two different scenarios – without removal of identified soil 'hotspots' and with removal of soil 'hotspots'.

Statistical review 1 calculated the 95% Chebychev (Mean, Sd) UCL targeting the lead, benzo(a)pyrene, and nickel in site fill without the removal of identified soil 'hotspots'. The results identified Fill soils were assessed to be General Solid Waste (GSW) at all boreholes with the exception of BH13 which was assessed to be either Restricted Solid Waste (RSW) or Hazardous Waste subject to a General Immobilisation Approval being granted by the EPA for the disposal of ash and/or slag material.

Statistical review 2 followed the same methodology but assumed remediation by physical removal of the hotspots identified at BH11, BH12, BH13 and BH15 in the eastern portion of the site. The results indicated that further delineation of the fill soils is required at BH11, BH12, BH13 and BH15 prior to undertaking localised excavation and offsite disposal of materials. Additionally, it confirmed that all remaining fill soil could be classified as Excavated Natural Material (ENM) in accordance with Protection of the Environment Operations (Waste) Regulation 2005 – General Exemption Under Part 6, Clause 51 and 51A "The excavated natural material exemption 2008."

Conclusion

In providing this advice, Environmental Strategies Pty Ltd concluded with two potential remediation strategies which were offsite disposal and onsite containment. Offsite disposal of excavated materials and waste offered Australian Unity long term certainty of outcome, no ongoing management of contamination and a reduced timeframe for remediation. The cost estimate was broken up into three scenarios based on the estimated volumes associated with the contaminant hotspots.

The onsite containment remediation strategy provided Australian Unity with a sustainable remediation alternative while still mitigating any human health and environmental risk to future occupants of the site. Environmental Strategies believed that the General Solid Waste and Restricted Solid Waste material could be safely encapsulated onsite ensuring removal of any exposure pathways to the contamination and a low likelihood of leachability. Installation of the on-site waste material encapsulation cell would be under the proposed car parking area and would be managed under an Environmental Management Plan (EMP).

6.0 SITE RECONNAISSANCE

Jon Lawson of LRM Global undertook an initial site visit and walk-through of the accessible areas of the property on 14th June 2017 along with Brad May (Environmental Auditor, Epic Environmental).

General Site Condition and Surrounding Area

The entirety of the site's surface could not be inspected due to access limitations relating to both vegetation and slope. No access was gained to the club house however it was not considered significant nor a source of potential contamination.

The surrounding area consisted of residential land use to the north and south, a strip of remnant forest, Gore Creek and golf course to the east. To the west is Longueville Road. A commercial area of shops exists to the north and south along Longueville Road.

- The site is fenced on the northern side with the adjacent residential properties and unfenced on all other boundaries.
- Soil stability is generally good as all surfaces are either grassed or heavily vegetated. Stability to the eastern and northern edge of the lower Bowling Green is less clear due to significant steep slope and vegetation and is likely to have potential for erosion and instability.
- No visible signs of plant stress were evident. Refer to Applied Ecology Report XXx

- No visible evidence of waste drums, fuel storage tanks of associated infrastructure was evident.
- No obvious odours were noted during walkovers and no visible signs of surface contamination, staining, discoloration, bare soil or stressed vegetation.
- The current site building is unused but remains in good condition and is still secured against unauthorised access.
- During site inspections and drilling / sampling works no visible surface waters were observed.
- There is no evidence of flood potential or historical flooding at the site.

Past and Current Site Uses

There is no evidence of any previous site use, buildings, structures or remnant infrastructure. The site is currently divided into two bowling greens, club house, car parking and landscaped areas. The previous in-filled nature and dumping on the site prior to its development is evident. Building and general demolition waste is observable on the battered slopes of the bowling greens and towards the north and east side forested areas.

Potentially Contaminating Sources

No other potential sources of contamination were evident onsite or nearby during the site walk over inspection of accessible parts of the site including gatics, triple interceptor traps or evidence of aboveground or underground storage tanks, chemical storage, bunded areas, septic systems, heating oil tanks, or industrial wastes.

Significant in-filling is evident across the site along with mixed household and demolition wastes. This was visually evident to the battered sides of the bowling greens beneath and intermixed with the sites vegetation. It also is observable spilled down to the eastern edge of the site and further into the riparian zone.

The nearest service station is located approximately 50m to the south, cross and down hydraulic gradient.

Asbestos

Suspect asbestos containing materials were noted during the site inspection and considering the in-filled nature of the site, asbestos is considered a contaminant of concern. The club house will undergo an asbestos audit prior to demolition and if required asbestos removal works and associated clearances will be conducted.

7.0 CONCEPTUAL SITE MODEL

The conceptual site model is derived from the findings of the preliminary site assessment report for the site completed by LRM which are incorporated into this report.

7.1 Potential Sources of contamination

Certain land uses such as commercial, industrial or agricultural etc. have the potential to lead to site contamination, the degree of which is highly variable from site to site. The Department of Urban Affairs and Planning, Environment Protection Authority 1998 Publication 'Managing Land Contamination, Planning Guidelines SEPP 55 – Remediation of Land' Appendix A lists specific land uses and their likely associated risks for contaminating land. The table below lists site land uses, the potential risk said uses and the potential contaminants of concern resulting from same.

Table 6: Potential Sources and Contaminants of Concern

Source	Location	Contaminants of Concern	Media	Comments / Risk Potential
Imported Fill Material - Regional	Entire site (levelling)	Various (commonly PAHs and heavy metals), TRH, OPP/ OCP, asbestos, PFOS / PFAS	Soil/ Groundwater	High
Nearby Service Station	Offsite 75m property to south	TRH/BTEX, PAH, heavy metals	Soil/ Groundwater/ Soil vapour	Low Cross and down gradient
Bowling greens	Entire Site	OCPs, methyl mercury, OPPs	Soil	High, most likely surface soils

7.2 Initial Data Gap Assessment

The following table presents a summary of the initial sampling conducted and data gap analysis in order to guide the next round of soil sampling to be conducted both for locations and analysis. SMEC initial sampling is BH1 – BH15 and the green areas are supplementary LRM sampling borehole locations BH16 – BH42.

Portions of the site will remain inaccessible due to gradient and vegetation and require further assessment following demolition and during site excavation works. This additional data is also required to determine an offsite waste disposal classification under the VENM guidelines for the materials as per the planned basement excavation.

At this stage no groundwater investigation was planned until greater site access had been achieved to reach the eastern edges of the site.

There are no current plans to assess soil vapour at the site, however, the presence of an offsite former service station to the south may warrant such investigation in the future if soil and groundwater results from site investigation works highlight a potential risk.

Table 7: Data Gap Analyses and Sample Analysis Plan

Area	Location	Total depth to sandstone/ termination	Sample Depth	Analytical Suite	Impacts	Gap
Car park	BH1	0.8	0.2	Metals, OCP/OPP & Asbestos		PAH TRH
	BH2	0.2	0.2	BTEX & PAH		Metals TRH
	BH16 LRM	0.8	0.1	Metals, PAH, TRH & Asbestos		
			0.8	Metals, PAH & TRH		
	BH17 LRM	0.8	0.1	Metals, PAH & TRH		
			0.7	Metals, PAH & TRH		
Bowling Green 1	BH3	0.4	0.2	Metals		OCP/OPP
	BH4	1.0	0.2	Metals, BTEX, TRH & PAH		
			0.7	Metals		PAH
	BH5	3.3	1.5	Metals, BTEX, TRH, PAH, OCP/OPP, Phenolics & PCB		
			2.9	Metals, BTEX, PAH & TRH		
	BH6	0.3	0.2	Metals		OCP/OPP
	BH7	1.8	0.2	OCP/OPP, Asbestos & PCB		
	BH8	3.55	0.2	Metals		OCP/OPP
			1.5	Metals, BTEX, PAH & TRH		
	BH18 LRM	0.6	0.1	Metals, OCP/OPP & pH		
			0.6	Metals, PAH & Asbestos		
	BH19 LRM	0.55	0.1	Metals & OCP/OPP		
			0.5	Metals & PAH		
	BH20 LRM	1.9	0.1	Metals, OCP/OPP & pH		
			1.0	Metals & PAH		
			1.9	Metals, PAH & PCB		

Area	Location	Total depth to sandstone/ termination	Sample Depth	Analytical Suite	Impacts	Gap
	BH21 LRM	4.1	0.1	Metals & OCP/OPP		
			1.2	Metals, PAH & Asbestos		
			3.0	Metals, TRH & PCB		
			4.0	Metals & PAH		
	BH22 LRM	1.75	.01	Metals, OCP/OPP & pH		
			1.0	Metals, TRH & Asbestos		
	BH23 LRM	1.35	0.1	Metals & OCP/OPP		
			0.6	Metals & PAH		
	BH24 LRM	4.0	0.1	Metals, OCP/OPP, pH & TRH		
			1.5	Metals, PAH & Asbestos		
			2.8	Metals, TRH & PCB		
House and Garden Area	BH9	0.2	0.2	Metals & Asbestos		OCP/OPP
	BH31 LRM	1.0	0.1	Metals & OCP/OPP		
			1.0	Metals & PAH		
	BH25 LRM		0.2	Metals & OCP/OPP		
	BH26 LRM	0.6	0.2	Metals & OCP/OPP		
	BH33 LRM	1.7	0.2	Metals & OCP/OPP		
			1.0	Metals & PAH		
Bowling Green 2	BH10	2.6	0.2	Metals, TRH, BTEX & PAH	Nickel	OCP/OPP
			1.3	Metals, TRH, PAH & BTEX		
	BH11	9.0	1.5	Metals, TRH, BTEX, PAH, OCP, PCB, Phenolics & Asbestos		
			4.5	Metals, TRH, BTEX, PAH, OCP & Asbestos	Lead	

Area	Location	Total depth to sandstone/ termination	Sample Depth	Analytical Suite	Impacts	Gap
			8.8	Metals, TRH, BTEX, PAH, OPP, PCB & Asbestos		
	BH12	4.9	0.3	Metals & OCP		OPP
			1.5	Metals, TRH, BTEX, PAH, PCB, Phenolics & Asbestos	Lead Benzo(a)	
			4.5	Metals, TRH, BTEX, PAH & OCP	Lead	
	BH13	8.7	1.5	Metals, TRH, BTEX, PAH, OCP, PCB, Phenolics & Asbestos	Benzo(a)	
			4.5	Metals, TRH, BTEX, PAH, PCB, Phenolics & Asbestos	Lead	
			7.5	Metals, TRH, BTEX, PAH & Asbestos	Benzo(a) Lead	
	BH14	2.1	0.3	Metals & OCP/OPP		
	BH15		0.3	Metals, OCP & PCB		OPP
			1.5	Metals, TRH, BTEX, PAH, OPP & Asbestos	Lead	
			4.2	Metals, TRH, BTEX, PAH, PCB, Phenolics & Asbestos	Lead Benzo(a)	
Bowling Green 2	BH27 LRM	1.2 On concrete?	0.1	Metals, OCP/OPP & pH		
			1.0	Metals & PAH		
	BH28 LRM	4.5	0.1	Metals& OCP/OPP		
			2.0	Metals & Asbestos		
			3.0	Metals & PAH		
			4.0	Metals, PCB & TRH		

Area	Location	Total depth to sandstone/ termination	Sample Depth	Analytical Suite	Impacts	Gap
	BH29 LRM	8.0	0.1	Metals, OCP/OPP & pH		
			1.0	Metals & PAH		
			2.0	Metals & Asbestos		
			3.0	Metals & PAH		
			4.0	Metals & PCB		
			5.0	Metals & Asbestos		
			6.0	Metals & PAH		
			7.0	Metals		
			8.0	Metals & TRH		
	BH30 LRM	7.45	0.1	Metals & OCP/OPP		
			1.0	Metals & PAH		
			2.0	Metals & Asbestos		
			3.0	Metals & TRH		
			4.0	Metals & PAH		
			5.0	Metals & Asbestos		
			6.0	Metals & PCB		
			7.0	Metals & TRH		
	BH32 LRM	3.0	0.1	Metals, OCP/OPP & pH		
			1.0	Metals & PAH		
			2.2	Metals & PAH		
			3.0	Metals		
			4.0	Metals & TRH		
Forested areas	BH34 LRM	0.4	0.1	Asbestos, Metals & PAH		
	BH35 LRM	0.4	0.1	Asbestos & Metals		
	BH36 LRM	0.3	0.1	Asbestos & Metals		
	BH37 LRM	0.3	0.1	Asbestos, Metals & PAH		
	BH38 LRM	0.2	0.1	Asbestos, Metals & PAH		
	BH39 LRM	0.5	0.1	Asbestos, Metals & TRH		
	BH40 LRM	0.3	0.2	Metals & PAH		
	BH41 LRM	0.5	0.3	Metals & PAH		

Area	Location	Total depth to sandstone/ termination	Sample Depth	Analytical Suite	Impacts	Gap
	BH42 LRM	0.5	0.2	Metals & OCP/OPP		
QA/QC	Duplicate 1 Duplicate 2 – 4			NEPM Suite Metals		
	Split 1 Split 2 - 4			NEPM Suite Metals		
	Trip Blanks 1			TRH C6-C9		
	Rinsates 1			Metals		

7.3 Receptors

Geology

The main geological units encountered and or at the site, in order of stratigraphic sequence from youngest to oldest include:

- Fill material "*Manmade fill"* consisting of: clays, sands, demolition rubble and household waste.
- Natural – Middle Triassic Age 'Hawkesbury Sandstone' which comprises medium to coarse grained quartz sandstone with minor shale and laminate lenses.

The key transport mechanisms for soil contaminants include mobilisation via surface water flow and infiltration and to a lesser extent through windborne dust.

Groundwater

Groundwater provides a key transport mechanism for contaminants through horizontal and vertical migration of contaminated surface water/stormwater/groundwater through site soils (into the underlying aquifer), and then possible migration of the impact via advection and dispersion toward Gore Creek and eventually the bay. There is a high potential for vertical migration of contaminated surface water through the fill into groundwater and Gore Creek.

Surface water

Surface water drainage over the site is judged to be predominantly via surface run-off directed towards Gore Creek to the east. The majority of the site is currently unsealed. Surface water is considered likely to act as a potential transport mechanism at the site even considering the extent of vegetative coverage over the site. Surface water percolating into a perched water layer within the imported fill is expected to also drain towards Gore Creek and may present potential for contamination to this surface water body.

Exposure Pathways

Based on the identified receptors and the release, fate, and transport characteristics of the CoPC, pathways through which receptors may become exposed include inhalation, ingestion and dermal absorption. These are discussed briefly below in the context of the site setting:

- Inhalation Exposure Pathway: There is low potential for inhalation of fumes from potential soil and groundwater contamination associated with the historic site and offsite activities. There is the potential for creation of dust during disturbance of soils and infrastructure. Risk of potential inhalation of contaminated dusts during future site demolition and excavation works.
- Ingestion Exposure Pathway: Ingestion of contaminants by current and future site workers may occur through day-to-day activities and direct contact with contaminated soils or surface water. Future site layout has all soils excavated to within the natural profile removing this risk.
- Groundwater: A risk to human health exposure from groundwater in the area is associated domestic or irrigation purposes is considered unlikely due to the availability of a reticulated water supply and the only extractive bore identified is on the other side of Gore Creek for the Golf Course. A risk to ecological receptors is likely as groundwater will discharge to Gore Creek and ultimately to the Parramatta River and Sydney Harbour.
- Dermal Exposure Pathway: Exposure may occur via sorption through biological membranes such as skin. This pathway may be a concern whenever contaminated soil; surface water or groundwater comes into direct contact with a biological membrane. This pathway could also be a concern if contaminated surface water (runoff from the site) was to come into direct contact with benthic and aquatic flora and fauna within off-site surface water receiving environments.

The preliminary site investigation identified a number of potential human and environmental receptors of contamination provided an exposure pathway exists. The identified receptors are listed below:

Human Health Receptors:

- Current and future site workers including construction workers during site development and current and future commercial tenants;
- Future maintenance workers and landscapers / gardeners;
- Future site high density residents and staff;
- Offsite receptors including residents and workers on neighbouring properties and recreational users of nearby water courses.

Environmental receptors:

- Onsite flora and fauna;
- Offsite ecosystems including the adjacent remnant Coastal Enriched Sandstone Moist Forest vegetation., the down-gradient surface water environments including Gore Creek the Parramatta River and Sydney Harbour;
- Groundwater beneath the site.

8.0 STAGE 1 PESA CONCLUSIONS AND RECOMMENDATIONS

LRM Global Pty Ltd (LRM) was retained by the client to complete a PESA to document any potential environmental liabilities that are apparent from a comprehensive desktop study and soil and groundwater assessment as part of a Development Application for a proposed high density retirement living residential land use.

Key Findings

- The desktop study indicates that the site is zoned *'R4 High Density Residential'*.
- Acid Sulphate Soils are not likely to be present at the site.
- According to the aerial photographs, land titles, historic plans and business directories reviewed, the site was vacant until construction of the bowling green commenced in approximately 1961 and vacated in 1995. The surrounding area has undergone light commercial and residential development over time. A review of the historical aerial photographs and EPA records indicate that there have been no quarrying or landfilling activities in the area surrounding the site. As such, it is considered unlikely that there would be a landfill gas issue at this site.
- On-site observations and the previous environmental reports indicate significant infilling has occurred on the subject site. No evidence of green waste or putrescible waste was evident and most waste appears to be demolition and household goods related.
- A search of the NSW OEH Contaminated Land Database and Protection of Environment Operations Act 1997 Public Register found no records for the site.

Conclusions

Based on the findings of the Stage 1 historical assessment and reviews of previous reports it is considered that;

- The site has contaminated soils within the fill material;
- The site has the potential for the groundwater to be contaminated.

Recommendations

Based on the findings of the Preliminary Environmental Site Assessment it is recommended that;

- A Detailed Environmental Site Investigation of the soil and groundwater be undertaken to Australian Standards and in accordance with the National Environmental Protection Measure and applicable NSW regulations including the DECCW Waste Classification Guidelines Part 1: Classifying Waste and the Virgin Excavated Natural Material (VENM) for off-site disposal during basement works;
- Further delineation of soil impacts within the impacted fill material;
- Further investigation of the underlying natural material;
- Install groundwater wells to assess the impact of the site fill material on the groundwater;

9.0 STAGE 2 – DETAILED ENVIRONEMTNAL SITE INVESTIGATION

9.1 DESI Objectives

The objectives of the detailed environmental investigation are to implement the recommendations of the preliminary site investigation report and to satisfy the below DA conditions as required by Lance Cove Council.

9.2 Development Application Conditions – Contamination

The following conditions relating to contamination have been requested as a condition by the council.

A Stage 2 Detailed Environmental Site Investigation Report (as per the NSW EPA's Guidelines for Consultants Reporting on Contaminated Sites) shall be submitted to Council for assessment. The report shall identify to Councils satisfaction the location, type and level of contaminants in a single report compiling all relevant information which details soil sampling and testing to date. The report shall also identify the potential for migration of contaminants off site. The report must include a statement to the effect that the site, upon remediation, will be suitable for the development proposed.

Where the DESI states that the site requires remediation, a Remediation Action Plan is to be submitted, prepared by a suitably qualified and competent environmental consultant in accordance with the NSW Government Office of Environment and Heritage Guidelines for Consultants Reporting on Contaminated Sites and the Contaminated Land Management Act 1997.

10.0 DATA QUALITY OBJECTIVES

10.1 Overview

The Data Quality Objective (DQO) process will be applied to the investigations as described below, to ensure that data collection activities are appropriate and achieve the stated objectives.

A process for establishing data quality objectives for an investigation-site has been defined by the NSW DEC *Guidelines for the NSW Site Auditor Scheme (3rd edition, October* 2017). The DQO process will be applied to the validation program, as described below, to ensure that data collection activities are appropriate and achieve the project objectives. The DQO process involves seven steps as follows:

- Step 1: State the problem
- Step 2: Identification of the Assessment Decisions/ Goals
- Step 3: Identification of Decision Inputs
- Step 4: Definition of Study Boundaries
- Step 5: Decision Rules
- Step 6: Limits on Decision Errors
- Step 7: Optimise the design for obtaining data

The seven DQO steps for this project are defined as follows:

10.1.1 STEP 1: State the Problem

The client wishes to develop the site for a high density, aged care facility with a three basement at the deepest point.

The site has historically been used for potentially contaminating activities including imported fill for levelling during its development and operation as a bowling green.

The problem is soil at the site has undergone limited assessment, however further assessment of both soil and groundwater is required to close out existing data gaps and to confirm the findings of the preliminary assessment to determine the sites suitability for the proposed use, the necessity for a remedial action plan, and an off-site soil disposal classification.

Further investigate the lead hotspot to the east of the lower Bowling Green and any impact to the sites groundwater. Further investigate contaminants of concern from the fill material in the sites groundwater.

10.1.2 STEP 2: Identification of the Assessment Decisions/ Goals

Additional data is required to be collected to address the problem described in “Step 1”

- Is the site suitable for the proposed high density, aged care facility land use in respect to CoPC from historical use and filling?
- Is there any impact from potential adjoining off-site contamination that would pose a potential risk to on-site receptors?

- Does residual contamination on the site have the potential to cause unacceptable risks to off-site receptors in the future?
- What is the waste classification of soils that may require off-site disposal?
- Is further assessment (including further assessment of soils required following demolition of existing structures) or remediation/management/validation required?

10.1.3 STEP 3: Identification of Decision Inputs

Data inputs to the decision making process will include:

- Existing data collected from the preliminary site assessment desktop and intrusive studies.
- Quantitative data gained through further soil and groundwater intrusive assessment works and laboratory analysis.
- Adopted Assessment Criteria as detailed in Section 5.0.

10.1.4 STEP 4: Definition of Study Boundaries

The site boundary is depicted within attached Figure 1. The vertical boundaries of the study are as follows:

- Soil Investigation – where possible the soil investigation shall extend to the proposed project excavation depth of 12.5 mbgl.
- Groundwater Investigation – Three wells to be installed within the site title boundaries, to represent up-gradient, site derived and down-gradient groundwater conditions.

Temporal Boundaries – while no temporal boundaries exist as such, the client has expressed a wish that the works are executed promptly.

10.1.5 STEP 5: Decision Rules

In order to decide whether the data obtained is precise, accurate, reliable and reproducible for the site at the time of the investigation, field and laboratory quality control and quality assurance (QA/QC) procedures will be utilised throughout the sampling programs and all sampling work will be carried out in accordance with LRM's Standard Field Operating Procedures, which are based on standard industry practices. QA/QC results will be compared to nominal acceptance limits.

Project analytical data will be compared to NSW EPA made or approved guidelines. The nominated site assessment criteria are presented in Section 5. On the basis of this initial comparison, a decision will be made as to whether or not the contamination may pose a potential risk (environmental or health based), warranting further assessment.

10.1.6 STEP 6: Limits on Decision Errors

Two types of decision errors are possible:

- False Negative - The site (or areas of the site) may be considered 'uncontaminated' when in fact it is contaminated.
- False Positive - The site (or areas of the site) may be considered 'contaminated' when in fact it is not contaminated.

The implications of the first decision error are considered less acceptable than the second, as the first error could involve unacceptable risk to health and/or the environment, and potentially future costs including possible litigation if the site is found to be unsuitable in the future. The risks associated with the second error are primarily limited to unwarranted remediation costs. The limits on the first decision error are therefore addressed by use of conservative investigation criteria (which incorporate a factor of safety) and by analysing any data exceeding these criteria on the basis of the 95% upper confidence level (UCL) of the average concentrations. In accordance with the NEPM, secondary criteria apply as follows:

- The standard deviation of the results should be less than 50% of the relevant investigation or screening level.
- No single value should exceed 250% of the relevant investigation or screening level.

The risk of the second decision error occurring will be will minimised by minimising the potential for unrepresentative data which could arise from the following causes:

- Sampling errors which occur when the sampling program does not adequately detect the variability of a contaminant from point to point across the Site, (i.e. the samples collected are not representative of the Site conditions).
- Measurement errors which occur during sample collection, handling preparation, analysis and data reduction.

To minimise the potential for unrepresentative data, Data Quality Indicators (DQIs) will be evaluated. The DQIs for sampling techniques and laboratory analysis of collected samples will be based on those listed in Section 4.1 of the NSW EPA Auditor Guidelines (DEC October 2017). Step 5 and Step 6 of the data quality objectives will be assessed by reference to data quality indicators as follows:

Completeness – is a measure of the amount of useable data (expressed as %) from data collection activities. The completeness goal is set at there being sufficient valid data generated during the study. If there is insufficient valid data, then additional data are required to be collected. Completeness can be influenced by field issues such as access for sampling or by laboratory issues such as adherence to sample holding times.

Comparability – the confidence (expressed qualitatively) that data may be considered to be equivalent for each sampling and analytical event. Comparability is achieved through adopting consistent sampling techniques and ensuring laboratories use consistent analysis techniques.

Representativeness - expresses the degree to which sample data accurately represents each media present on the site. Representativeness is achieved by collecting samples in an appropriate pattern across the site, by using a sufficient number of sampling locations to characterise the site and by using consistent, repeatable and appropriate methodologies.

Precision - measures the reproducibility or variation of data. The precision of the data is assessed by calculating the Relative Percent Difference (RPD) between primary and duplicate/ inter-lab split samples

LRM adopt nominal acceptance criteria of 30% RPD for duplicates and splits for results >30 times the LOR, 50% for results between 10-30 times the LOR, and 100% for results <10 times

the LOR. It is noted that this will not always be achieved, particularly in heterogeneous media such as imported fill material or disturbed natural materials, or at low analyte concentrations.

Accuracy (bias) - measures quantitatively the closeness of the reported data to the true value. Bias can be introduced during sample collection through cross contamination from contaminated equipment, during sample preservation and transport and from laboratory sample handling, preparation and analysis techniques. Accuracy is assessed by reference to the analytical results of laboratory internal QA/QC samples including spikes, blanks and reference standards.

The nominal "acceptance limits" on laboratory control samples are defined as follows:

Laboratory spikes – 70-130% for metals/inorganics 60-140% for organics.
Laboratory duplicates - <30% for metals/inorganics, <50% for organics.
Laboratory blanks - <practical quantitation limit.

Accuracy of field works is assessed by examining the level of contamination detected in field and rinsate blanks. Blanks should return concentrations of all organic analytes as being less than the practical quantitation limit of the testing laboratory. The individual testing laboratories will conduct an assessment of the internal laboratory QA/QC program however the results will also be independently reviewed and assessed by LRM.

10.1.7 STEP 7: Optimise the Design for Obtaining Data

The sampling program has been designed to provide sufficient information to allow a sound scientific and statistical evaluation of the questions set out in Step 2.

To optimise the design of the investigations, this SAQP has been prepared in consultation with the client, site occupants and the Site Auditor and giving consideration to previous investigations. The SAQP will be reviewed and refined as necessary during the assessment by evaluating field observations and analytical results.

All samples were submitted to a NATA accredited laboratory for analysis. The primary laboratory engaged for the assessment works was Envirolab Pty Ltd and ALS Pty Ltd were engaged as the secondary laboratory.

11.0 ASSESSMENT CRITERIA

11.1 Soil Criteria

In assessing any soil contamination present on this site, and considering the purpose of this assessment, the data will be evaluated against the levels that are given in the NEPM Schedule B (1) Guidelines on the Investigation Levels for Soil and Groundwater [National Environment Protection (Assessment of Site Contamination) Measure 2013].

The approach used by LRM in undertaking these investigation works is based on recognised guidelines for the assessment of potentially contaminated sites, published in but not limited to:

- AS 4482.1 – 2005 *Guide to investigation and sampling of potentially contaminated soil, Part 1: Non- Volatile and semi-volatile compounds;*
- AS 4482.2 – 1999 *Guide to sampling and investigation of potentially contaminated soil, Part 2: Volatile substances;*
- *The National Environment Protection (Assessment of Site Contamination) Measure 1999*, as amended 2013.
- NSW EPA Sampling and design Guidelines (September 1995);
- *Guidelines for consultants reporting on contaminated sites (August 2011);*
- NSW Environment, Climate Change and Water 2010, Vapour intrusion: Technical Note;
- *NSW DECC 2009, Waste Classification Guidelines – Part 1;Classifying Waste;*
- Acid Sulphate Soil Manual (August 1998);
- *NSW EPA Resource Recovery Order under Part 9, Clause 93 of the Protection of the Environment Operations (Waste) Regulation 2014 – The excavated natural material order 2014.*

The full reference list is detailed in Section 24.

Human health risk

Considering the current site and surrounding land use and the proposed site development, human health risk will be assessed for future and existing residents (high density), current and future construction and commercial workers and users of the recreational open spaces at the site.

Soil results will be compared to criteria for high density residential, recreational/ open space and commercial/ industrial land use settings as outlined in the following tables within the NEPM Schedule B1 Guideline on Investigation Levels for Soil and Groundwater, Appendix A:

- Table 1A(1) Health Investigation Levels for soil contaminants – Residential A, B, Recreational/Open space C, Commercial/Industrial D;
- Table 1A(3) Soil HSLs for vapour intrusion (mg/kg) – HSL A&B, HSL C & HSL D;
- Table 1B(7) Management Limits for TPH fractions F1-F4 in soil – “Residential, Parkland and Public Open Space” and “Commercial and industrial”.

Ecological Protection

Open space / landscaped areas and existing vegetated areas will be subjected to ecological protection criteria as per the NEPM.

Currently the site surface consists of imported impacted fill material scheduled for removal and as such is not appropriate for EILs to be applied to. Following remediation works and final setting of site RLs the final site surface soils remaining will be sampled for EIL analysis suites and site specific EILs will be calculated and applied.

Site specific EIL criteria will be calculated once final RLs are established and will be applied to all open space, landscaped, planted and existing / retained vegetated areas as applicable.

In the interim, the below adopted EILs can be used as a guideline;

Table 8: Adopted Ecological Investigation Levels

Contaminant	Assumed Values	EIL (mg/kg)
Arsenic	Generic EIL	100
Chromium III	Derived EIL assumes 1% soil clay content for aged soils within a high traffic NSW suburb	200
Copper	Derived EIL assumes pH of 7, 1% soil clay content and 10% cation exchange capacity for aged soils within a high traffic NSW suburb	220
DDT	Generic EIL	180
Lead	Derived EIL assumes aged soils within a high traffic NSW suburb	1100
Naphthalene	Generic EIL	170
Nickel	Derived EIL assumes 10% cation exchange capacity for aged alluvial sandy soils within a high traffic NSW suburb	170
Zinc	Derived EIL assumes soil pH of 7, 10% cation exchange capacity for aged alluvial sandy soils within a high traffic NSW suburb	520

Note: Cation exchange values are taken from the NSW DPI Agriculture website where published average values for North Coast soils indicate that light sandy alluvial soils have a CEC of 10-20%. The adopted figure of 10% takes a conservative approach towards the assessment.

Waste Classification - The criteria detailed within the NSW EPA Waste Classification Guidelines 2008 and the NSW EPA Resource Recovery Order under Part 9, Clause 93 of the Protection of the Environment Operations (Waste) Regulation 2014 – The excavated natural material order 2014 will be used to classify soils for future disposal off-site.

Soils will be classified using their specific chemical concentrations (SCC) with analysis being conducted for the sites contaminants of concern as identified in Table 2 previously. A separate waste disposal classification will be provided for each geological unit encountered.

The two measurable properties of chemical contaminants used to classify waste are:

- The SCC of any chemical contaminant in the waste, expressed as milligrams per kilogram (mg/kg); and
- The leachable concentration of any chemical contaminant using TCLP, expressed as milligrams per litre (mg/L).

Analysis results will initially be compared to CT1 values for General Solid Waste and CT2 values for restricted solid waste as detailed within Table 1 of the NSW EPA Waste classification guidelines – Part 1.

Where SCC levels exceed the CT1 values for general solid waste further TCLP analysis will be conducted with results compared to the CT1 values for General Solid Waste and CT2 values for restricted solid waste as detailed within Table 2 of the NSW EPA Waste Classification Guidelines – Part 1.

Where contaminant levels exceed the CT1 or CT2 values statistical analysis of sample data for that contaminant involving the calculation of 95% UCL values will be conducted with the aid of “Pro UCL” and results will be compared to values for SCC or TCLP values for that contaminant to ensure that the calculated values are appropriately classified.

Soils that meet the classification criteria for ‘General Solid Waste’ will be classed as VENM or ENM where possible. Further site investigation via test pitting will be required to first ascertain suitability for this application.

The Protection of the Environment Operations Act 1997 (POEO Act) defines virgin excavated natural material (VENM) as natural material (such as clay, gravel, sand, soil or rock fines):

(a) that has been excavated or quarried from areas that are not contaminated with manufactured chemicals, or with process residues, as a result of industrial, commercial, mining or agricultural activities, and

(b) that does not contain any sulfidic ores or soils or any other waste and includes excavated natural material that meets such criteria for virgin excavated natural material as may be approved for the time being pursuant to an EPA Gazettal notice.

Excavated natural material (ENM) is defined as: naturally occurring rock and soil (including but not limited to materials such as sandstone, shale, clay and soil) that has:

a) Been excavated from the ground, and

b) Contains at least 98% (by weight) natural material, and

c) Does not meet the definition of Virgin Excavated Natural Material in the Act.

Excavated natural material does not include material located in a hotspot; that has been processed; or that contains asbestos, Acid Sulphate Soils (ASS), Potential Acid Sulphate soils (PASS) or sulfidic ores.

Aesthetic Considerations – Considering the proposed change in land use from a commercial setting to a primarily residential setting with open recreational space, an aesthetic assessment of the material present on-site is considered necessary and will follow the guidelines outlined within Section 3.6.3 of the NEPM Schedule B(1) Investigation Levels for Soil & Groundwater.

Significant volumes of demolition and household waste have been observed in surface fill areas on the batters and adjacent to the greens. It is considered likely that this material extends in depth along with the imported fill material.

Asbestos Materials – Considering the site's historic use and the presence of imported near surface fill material, it is possible that asbestos containing materials are present within the site's soils. Asbestos materials have been identified in surface soils to the north east side of the site and is considered likely to be heterogeneously distributed within the fill material. Asbestos impacts shall be assessed as per guidelines detailed within Section 4 of the NEPM Schedule B(1) Investigation Levels for Soil & Groundwater. Should visual suspect material be identified during the works they will be assessed against the criteria detailed within Table 7 of the aforementioned NEPM document for residential, recreational and commercial/ industrial land use settings.

11.2 Groundwater Criteria

In assessing any groundwater contamination present on this site, and considering the purpose of this assessment, the data will be evaluated against the levels that are given in the NEPM Schedule B (1) Guidelines on the Investigation Levels for Soil and Groundwater [National Environment Protection (Assessment of Site Contamination) Measure 2013].

The approach used by LRM in undertaking these investigation works is based on recognised guidelines for the assessment of potentially contaminated sites, published in but not limited to:

- *Australian and New Zealand Guidelines for Fresh and Marine Water Quality*, ANZECC / ARMCANZ 2000.
- *The National Environment Protection (Assessment of Site Contamination) Measure 1999*, as amended 2013.
- *NEPM 2013 Table 1c GILs Drinking Water and Fresh Waters*
- Schedule B(6) Guideline on the Framework for Risk-Based Assessment of Groundwater Contamination NEPM, NEPC 2011
- PFAS National Environment Management Plan, January 2018, HEPA.
- Sydney Harbour and Parramatta River Water Quality Objectives

The full reference list is detailed in Section 24.

12.0 DATA QUALITY ASSESSMENT

To minimise the potential for unrepresentative Data Quality Indicators (DQIs) will be evaluated. The DQIs for sampling techniques and laboratory analysis of collected samples will be based on those listed in Section 4.1 of the NSW EPA Auditor Guidelines (DEC October 2017). Step 5 and Step 6 of the data quality objectives will be assessed by reference to data quality indicators.

Field and Analytical QA/QC - Soils

The control measures generated from the field sampling and analytical works program were as follows:

- Suitable records of field observations including bore logs with stratigraphy, visual and olfactory observations and PID readings (**Appendix C**);
- Sampling plan – density, media and location as per the attached SAQP (Appendix F);
- Use of approved and appropriate sampling methods as per the attached SAQP (**Appendix C**);
- Preservation and storage of samples post collection and during transit – refer laboratory SRA (sample receipt advice) regarding temperature of samples and attempt to cool observed upon receipt of samples at the laboratory (**Appendix E**);
- Completed chain of custody (COC) and laboratory sample receipt documentation (**Appendix E**);
- All Sample holding times were within acceptable limits – samples were delivered to the receiving laboratories on the day of sampling;
- All samples have been analysed by NATA accredited Laboratories namely Envirolab (Primary) and ALS Pty Ltd (secondary) using appropriate methods to allow for data comparison to adopted investigation levels;
- Laboratory quality control measures have been conducted in line with NEPM requirements. The laboratories followed internal quality control procedures, e.g. routine analysis of standard solutions, reference materials, reagent blanks, laboratory duplicates and spikes and surrogates. To assess the extent of matrix bias or interference on analyte recovery and sample to sample precision, numerous spike recovery appraisals were conducted by the laboratory. Recovery percentages for the soil spikes were generally between the LRM acceptable ranges of 70 – 130%, or 30 – 150% for phenols, indicating little negative or positive bias on reported analyte concentrations.
- Laboratory RPD acceptance criteria were exceeded at the following locations: BH34 for Split 1 for Copper, Lead, Manganese and Zinc. These soil samples represent fill material and the RPD exceedances are considered to be associated with the non-homogenous nature of the fill material.
- Field blanks and duplicate/ split samples were collected in accordance with Australian standards and are discussed further below.
- Laboratory Data has been reviewed for the occurrence of anomalous or unusual results which are inconsistent with field observations. The data was considered to be consistent

with field observations relating to the levels of contaminants reported within fill and natural materials.

Relative Percent Difference Calculations

LRM adopt nominal acceptance criteria of 30% RPD for duplicates and splits for results >30 times the LOR, 50% for results between 10-30 times the LOR, and 100% for results <10 times the LOR.

Duplicate and triplicate laboratory split samples taken during sampling were analysed for metals during the PESA. The majority of RPDs relating to the soil samples were within acceptable criteria, with the exception of levels of nickel, lead, copper, manganese and zinc.

These results can be attributed to the non-homogenous nature of the fill material at the site, however, as the majority (>99.00%) of RPDs are within the acceptable limits, the data retrieved is considered repeatable and highly reliable. Attached table for soils provide the RPDs that could be calculated with over >99% of results falling within acceptable criteria as per AS4482.1 2005.

Refer to Table 22 within **Appendix D** for Soil RPD calculation results.

Field Blanks

A trip blank was prepared in 40 mL glass vials with a Teflon septum lids and pre-prepared with hydrochloric acid. The trip blank accompanied the samples throughout the entire sampling procedure and during delivery to the receiving laboratory. A trip blank was taken during the soil and groundwater sampling program as they were conducted on the same day and were analysed for TRH C_6-C_9 to determine if samples were potentially exposed to any volatile contaminants via cross contamination during storage and transport.

A rinsate blank was taken from the third stage of the decontamination procedure (the first stage being a solution of tap water and 'Decon 90'; the second stage – tap water; and the third stage is deionized rinse water only) to ensure the decontamination procedure is effective and being appropriately undertaken. Rinsate samples taken during the soil and groundwater sampling program were analysed for metals. During sampling all equipment used was decontaminated in the abovementioned fashion.

Trip and rinsate blank sample analysis reported no analyte concentrations above the laboratory limit of reporting.

Refer to Table 24 in **Appendix D** for QA/QC soil field blank results.

QA/QC Evaluation against Data Quality Indicators

Completeness – is a measure of the amount of useable data (expressed as %) from data collection activities. The completeness goal is set at there being sufficient valid data generated during the study. If there is insufficient valid data, then additional data are required to be collected. Completeness can be influenced by field issues such as access for sampling or by laboratory issues such as adherence to sample holding times. No issues with refusal were noted at the site and hence, the assessment is 100% complete for the DESI soil assessment.

Comparability – the confidence (expressed qualitatively) that data may be considered to be equivalent for each sampling and analytical event. Comparability is achieved through adopting consistent sampling techniques and ensuring laboratories use consistent analysis techniques. All samples were collected using consistent and approved sampling techniques as detailed within the SAQP and were analysed at NATA accredited laboratories throughout all stages of the assessment works.

Representativeness - expresses the degree to which sample data accurately represents each media present on the site. Representativeness is achieved by collecting samples in an appropriate pattern across the site, by using a sufficient number of sampling locations to characterise the site and by using consistent, repeatable and appropriate methodologies. The sampling plan adhered to and exceeded the sampling density requirements as per Australian Standards and NEPM Publications sampling soils at 47 locations across the site during both PESA and DESI intrusive works. Soil sample depths targeted fill material and shallow and deep natural material and analysed them for the majority of identified COPCs. Accordingly the data is considered representative of the media and suitable for interpretative use.

Precision - measures the reproducibility or variation of data. The precision of the data is assessed by calculating the Relative Percent Difference (RPD) between primary and duplicate/ triplicate samples. Over 99% of calculated RPD results from 6 duplicate samples and 6 triplicate samples collected of the soil assessment were within acceptable criteria as per AS4482.1 2005.

Accuracy (bias) - measures quantitatively the closeness of the reported data to the true value. Bias can be introduced during sample collection through cross contamination from contaminated equipment, during sample preservation and transport and from laboratory sample handling, preparation and analysis techniques. Accuracy is assessed by reference to the analytical results of laboratory internal QA/QC samples including spikes, blanks and reference standards.

The nominal “acceptance limits” on laboratory control samples are defined as follows:

Laboratory spikes – 70-130% for metals/inorganics 60-140% for organics.
Laboratory duplicates - <30% for metals/inorganics, <50% for organics.
Laboratory blanks - <practical quantitation limit.

The majority laboratory spikes and blanks were reported within acceptable limits. Laboratory duplicates were exceeded for some levels of metals typically within samples of fill material however, the majority of results were reported within acceptable limits and as such the reported data is considered to be of a sufficiently accurate for interpretive purposes.

Accuracy of field works is assessed by examining the level of contamination detected in field and rinsate blanks. Blanks should return concentrations of all organic analytes as being less than the practical quantitation limit of the testing laboratory. All field blanks collected and analysed during both stages of the soil assessment reported results below the laboratory limit of reporting.

QA/QC Tabulated Frequency Summary

Table 9: QA/QC Samples Required vs. Collected

Quality Control Samples	Minimum Number of QA/QC Samples Required	Total Project QA/QC	
		Soil Required	Soil Collected
Dup Sample	1 in 20	3	6
Split Sample	1 in 20	3	6
Rinsate Blank	1 /matrix / equipment / day	2	2
Trip Blank	1/day/ eskie	2	2
Quality Control Samples	**Minimum Number of QA/QC Samples Required**	**GW Required**	**GW Collected**
Dup Sample	1 in 20	2	2
Split Sample	1 in 20	2	2
Rinsate Blank	1 /matrix / equipment / day	2	2
Trip Blank	1/day/ eskie	2	2

Overall QA/QC Adequacy

It is concluded that the quality control procedures have confirmed that overall data supplied by the laboratories is adequate to arrive at the conclusions of this report.

13.0 SOIL INVESTIGATION

13.1 Field Soil Investigation Objectives

The objectives to achieve the outcomes of the field soil investigation were;

- Assess the data collected from the sampling and analysis program against policies, regulations, guidelines and standards currently adopted in the State of New South Wales. Data exceeding the appropriate requirements is evaluated in terms of the risks posed by the contamination and remedial measures to be undertaken to remove or minimise those risks;
- Determine if the subsurface has been contaminated as a result of historic activities at the site including infilling; and
- The development of an appropriate waste classification for excavated soils in accordance with NSW EPA Waste Classification Guidelines - Part 1: Classifying waste.

The sampling technique adopted in the assessment of soil was in accordance with the Australian Standard 4482:1 – 2005, Guide to the Sampling and Investigation of Potentially Contaminated Soil, Part 1: Non-Volatile and Semi volatile Compounds and Part 2: Volatile Compounds.

Refer to Appendix C for typical soil sampling procedures and also for the SAQP associated with the DESI stage of the works.

The sample regime was guided by the findings of the preliminary soil investigation works and also by the proposed site development. The number of sample locations is in excess of the sample density grid requirements for the site area of approximately 0.9 hectares as detailed within Australian standard AS4482.1-2005 and NEPM Guidelines for assessing contaminated sites. As an evenly spaced grid was not possible due to site elevation changes a detailed assessment of hot spot size identification is no feasible due to the inherent inaccuracies and bias due to the inaccessible areas to date.

Sample target depths aimed to classify and outline the extent of distinct geological units across the site including fill layers and natural soils to the planned excavation depth.

All soil locations were sampled in accordance with AS4482.1-1997(2005). Typically samples were taken within the surface fill material, generally at depths of between 0.1 and 0.5 m below ground level, and within the natural profile below at meter intervals or after geological interface points and at or below the depth of excavation or point of refusal. However, each location varied depending on field conditions encountered. A plan showing the soil bore / monitoring well locations is provided on Figure 4, **Appendix A**.

The analytical program detailed in Tables 10 & 11 below was considered suitable for the objectives of this investigation.

Field methodologies are described in detail in the following sections.

Table 10: Initial Soil Sample Locations

Sample Location/Depth	Purpose	Stratigraphy	Analysis
6/07/2017 – Initial LRM Soil Investigation Works			

BH16 – 0.1	Soil Investigation Bore	Fill	Metals, PAH, TRH
BH16 – 0.8	Soil Investigation Bore	Natural	Metals, PAH, TRH
BH17 – 0.1	Soil Investigation Bore	Fill	Metals, PAH, TRH
BH17 – 0.7	Soil Investigation Bore	Natural	Metals, PAH, TRH
BH18 – 0.1	Soil Investigation Bore	Fill	Metals, OCP/OPP, pH
BH18 – 0.6	Soil Investigation Bore	Natural	Metals, PAH
BH19 – 0.1	Soil Investigation Bore	Fill	Metals, OCP/OPP, pH
BH19 – 0.5	Soil Investigation Bore	Natural	NEPM Basic Suite
BH20 – 0.1	Soil Investigation Bore	Fill	Metals, OCP/OPP, pH
BH20 – 1.0	Soil Investigation Bore	Natural	Metals, pH
BH20 – 1.9	Soil Investigation Bore	Natural	Metals, PAH
BH21 – 0.1	Soil Investigation Bore	Fill	Metals, OCP/OPP
BH21 – 1.2	Soil Investigation Bore	Fill	Metals, PAH
BH21 – 3.0	Soil Investigation Bore	Natural	Metals, TRH, PCB
BH21 – 4.0	Soil Investigation Bore	Natural	Metals, PAH
BH22 – 0.1	Soil Investigation Bore	Fill	Metals, OCP/OPP, pH
BH22 – 1.0	Soil Investigation Bore	Natural	Metals, TRH
BH23 – 0.1	Soil Investigation Bore	Fill	Metals, OCP/OPP
BH23 – 1.0	Soil Investigation Bore	Natural	Metals, PAH
BH24 – 0.1	Soil Investigation Bore	Fill	Metals, OCP/OPP, pH, TRH
BH24 – 1.5	Soil Investigation Bore	Fill	Metals, PAH
BH24 – 2.8	Soil Investigation Bore	Natural	Metals, TRH, PCB

BH25 – 0.2	Soil Investigation Bore	Fill	Metals, OCP/OPP
BH26 – 0.2	Soil Investigation Bore	Fill	Metals, OCP/OPP
BH27 – 0.1	Soil Investigation Bore	Fill	Metals, OCP/OPP, pH
BH27 – 1.0	Soil Investigation Bore	Natural	Metals, PAH
BH28 – 0.1	Soil Investigation Bore	Fill	Metals, OCP/OPP
BH28 – 2.0	Soil Investigation Bore	Natural	Metals
BH28 – 3.0	Soil Investigation Bore	Natural	Metals, PAH
BH28 – 4.0	Soil Investigation Bore	Natural	Metals, PCB, TRH
BH29 – 0.1	Soil Investigation Bore	Fill	Metals, OCP/OPP, pH
BH29 – 1.0	Soil Investigation Bore	Fill	Metals, PAH
BH29 – 2.0	Soil Investigation Bore	Fill	Metals
BH29 – 3.0	Soil Investigation Bore	Fill	Metals, PAH
BH29 – 4.0	Soil Investigation Bore	Fill	Metals, PCB
BH29 – 5.0	Soil Investigation Bore	Fill	Metals
BH29 – 6.0	Soil Investigation Bore	Fill	Metals, PAH
BH29 – 7.0	Soil Investigation Bore	Fill	Metals
BH29 – 8.0	Soil Investigation Bore	Fill	Metals, TRH
BH30 – 0.1	Soil Investigation Bore	Fill	Metals, OCP/OPP
BH30 – 1.0	Soil Investigation Bore	Fill	NEPM Basic Suite
BH30 – 2.0	Soil Investigation Bore	Fill	Metals
BH30 – 3.0	Soil Investigation Bore	Fill	Metals, TRH
BH30 – 4.0	Soil Investigation Bore	Fill	Metals, PAH

BH30 – 5.0	Soil Investigation Bore	Fill	Metals
BH30 – 6.0	Soil Investigation Bore	Fill	Metals, PCB
BH30 – 7.0	Soil Investigation Bore	Natural	Metals, TRH
BH31 – 0.1	Soil Investigation Bore	Fill	Metals, OCP/OPP
BH31 – 1.0	Soil Investigation Bore	Natural	Metals, PAH
BH32 – 0.1	Soil Investigation Bore	Fill	Metals, OCP/OPP, pH
BH32 – 1.0	Soil Investigation Bore	Fill	Metals, PAH
BH32 – 2.2	Soil Investigation Bore	Natural	Metals, PAH
BH32 – 3.0	Soil Investigation Bore	Natural	Metals
BH32 – 4.0	Soil Investigation Bore	Natural	Metals, TRH
BH33 – 0.2	Soil Investigation Bore	Fill	Metals, OCP/OPP
BH33 – 1.0	Soil Investigation Bore	Natural	Metals, PAH
BH34 – 0.1	Soil Investigation Bore	Fill	NEPM Basic Suite
BH35 – 0.1	Soil Investigation Bore	Fill	Metals
BH36 – 0.1	Soil Investigation Bore	Fill	Metals
BH37 – 0.1	Soil Investigation Bore	Fill	Metals, PAH
BH38 – 0.1	Soil Investigation Bore	Fill	Metals, PAH
BH39 – 0.1	Soil Investigation Bore	Fill	Metals, TRH
BH40 – 0.1	Soil Investigation Bore	Fill	Metals
BH41 – 0.1	Soil Investigation Bore	Fill	Metals
BH42 – 0.1	Soil Investigation Bore	Fill	Metals, OCP/OPP

Table 11: Secondary Soil Sample Locations

Sample Location/Depth	Purpose	Stratigraphy	Analysis
10/05/2018 – Additional Soil and Groundwater Investigation Works			
BH43 – 5.0	Groundwater Investigation Well	Natural	NSW Waste Disposal Screen
BH43 – 6.0	Groundwater Investigation Well	Natural	Metals, TRH/BTEX, PAH
BH43 – 7.0	Groundwater Investigation Well	Natural	Metals, TRH/BTEX, PAH
BH43 – 8.0	Groundwater Investigation Well	Natural	Metals, TRH/BTEX, PAH
BH43 – 9.0	Groundwater Investigation Well	Natural	NSW Waste Disposal Screen
BH44 – 5.0	Groundwater Investigation Well	Natural	NSW Waste Disposal Screen
BH44 – 6.0	Groundwater Investigation Well	Natural	Metals, TRH/BTEX, PAH
BH44 – 7.0	Groundwater Investigation Well	Natural	Metals, TRH/BTEX, PAH
BH44 – 8.0	Groundwater Investigation Well	Natural	Metals, TRH/BTEX, PAH
BH44 – 9.0	Groundwater Investigation Well	Natural	NSW Waste Disposal Screen
BH45 – 7.0	Groundwater Investigation Well	Natural	NSW Waste Disposal Screen
BH45 – 7.8	Groundwater Investigation Well	Natural	Metals, TRH/BTEX, PAH
BH45 – 8.0	Groundwater Investigation Well	Natural	NSW Waste Disposal Screen
BH46 – 0.2	Soil Investigation Bore	Fill	NSW Waste Disposal Screen
BH46 – 0.5	Soil Investigation Bore	Natural	Metals, TRH/BTEX, PAH
BH46 – 1.0	Soil Investigation Bore	Natural	Metals, TRH/BTEX, PAH
BH46 – 2.0	Soil Investigation Bore	Natural	Metals, TRH/BTEX, PAH
BH46 – 2.3	Soil Investigation Bore	Natural	NSW Waste Disposal Screen
BH47 – 3.6	Soil Investigation Bore	Fill	NSW Waste Disposal Screen
BH47 – 5.0	Soil Investigation Bore	Natural	Metals, TRH/BTEX, PAH

BH47 – 6.0	Soil Investigation Bore	Natural	Metals, TRH/BTEX, PAH
BH47 – 6.5	Soil Investigation Bore	Natural	Metals, TRH/BTEX, PAH
BH47 – 7.0	Soil Investigation Bore	Natural	NSW Waste Disposal Screen

NEPM Basic Suite –
As, Be, B, Cd, Cr, Co, Cu, Pb, Mn, Hg (total), Ni, Se, Zn, Hexavalent Cr (VI), Cyanide - Free PAH's, Phenol, Pentachlorophenol, Cresols, DDT+DDE+DDD, Aldrin + Dieldrin, Chlordane, Endosulfan, Endrin, Heptachlor, HCB, Methoxychlor, Chlorpyrifos, PCB's (aroclors), Mirex, Toxaphene, Atrazine, Bifenthrin, TRH, BTEXs.

NSW Waste disposal screen –
11 Metals (As, Cd, Cu, Hg, Mo, Ni, Pb, Se, Ag, Sn, Zn), Hexavalent Cr, Cyanide – Total / free, Fluoride - Total by fusion, VOC/TRH (C6-C10), Acid Herbicides, SVOCs, Phthalates, 2,4-DNT & Nitrobenzene, OC/OP, Speciated Phenols, PAH (includes BaP), TRH (C6-C36)

Table 12: Summarised Primary Soil Sample Analysis per Stratigraphy (LRM)

Stratigraphy	**Fill**	**Natural**
Selected analysis	**# Analysis conducted – primary samples**	
PCBs	7	14
PAHs	18	35
TRH/BTEX	13	32
Metals	55	47
OCP	23	9
OPP	23	9
pH	14	9
sVOC	6	9
VOC	6	9
Inorganics	6	9
MAH	6	9

14.0 SOIL RESULTS

Preliminary field soil investigation works were completed on 6th July 2017. The DESI soil works were undertaken on 10th and 11th May 2018 and the DESI groundwater works were undertaken on 14th May 2018.

The main geological units encountered at the site, in order of stratigraphic sequence from youngest to oldest include:

- Fill material - generally clays, silts and sands containing in areas, anthropogenic materials including glass, brick cement ceramics, glass and other miscellaneous debris and occasional organic material including roots.

- Natural – Quaternary Holocene Sands, light brown, fine to medium grained, dry.

The geological observations during site investigation works are presented within the field bore-logs within **Appendix C**. Cross-sections included in **Appendix A** shows the extent of the excavation for the removal of soil at the site for the proposed development.

Soil samples were generally analysed for broad spectrum analytical suites or for general contaminants of concern considered appropriate for the site.

Refer to **Appendix E** for full laboratory data tables and NATA endorsed analysis certificates.

The following presents a summary of the key findings of the soil analytical assessment:

Human Health

Based on the proposed land use for this site (aged care facility), the results were compared against NEPM HIL A sensitive use residential criteria. As all proposed open garden areas of the development shall be planted in validated and/or imported materials, the more sensitive HIL C criteria (recreational/open space) has also been applied to soils to assess the potential for on-site re-use. Exceedances of the HIL A criteria for fill and natural soils are presented within Table 13 below:

Table 13: Human Health Exceedance Summary (mg/kg)

# Sample Results	Analyte	Adopted HIL	Min Conc.	Max Conc.	Locations exceeding investigation levels
Fill Material					
11	Lead	600	6	6,200	**BH11**_4.3 (360) **BH12**_4.5 (640) **BH13**_4.3 (7,300) **BH13**_7.3 (1,400) **BH15**_4.0 (650) **BH22**_1.0 (830) **BH29**_4.0 (790) **BH29**_5.0 (740) **BH29**_8.0 (6,200) **BH30**_6.0 (500) **BH35**_0.1 (1,300)
1	B(a)P	3	<1	3.2	**BH12**_4.3 (3.2)
Natural Material					
47	No Exceedances recorded for any analyte				

Accordingly, it is considered unnecessary to compare the data to less sensitive criteria for existing and proposed commercial / industrial land-uses.

Concentrations of lead and B(a)P were reported exceeding the human health criteria adopted for the site with soil samples as listed above. However, it should be noted at all the exceedances of human health criteria were reported in fill material and that all soil samples collected in natural soils reported concentrations below the human health criteria.

No further exceedances of the adopted human health criteria were noted for any other analyte in soil samples collected at the site.

A plan showing the areas of exceedances of the human health criteria is attached as Figure 6 in **Appendix A.**

Asbestos in Soil

Asbestos containing materials (bonded in nature) were observed to the northern side of the lower Bowling Green and scattered across the lower treed area in the north eastern corner of the site. The extent of heavy vegetation made more detailed investigation difficult. It is likely that further asbestos impacts exit within the site fill material. Following the removal of further vegetation, a test pitting program is required to further assess and delineate more accurately asbestos impacts. Push tube or augur drilling methods are not suitable for assessing asbestos

impacts as asbestos fragments tend to be pushed to the side and not captured within the sample therefore typically underestimating the extent.

Aesthetics

Various anthropogenic materials including but not limited to glass, brick, concrete, bricks and metal were encountered within fill material across the site during investigation works. It is considered that the fill material is aesthetically unsuitable for use in landscaped or garden bed areas. Planned landscaped areas of site should have fill materials stripped during the site development works with chemically and aesthetically suitable material imported as per the landscaping requirements.

Waste Disposal

Soils were compared to the 2008 NSW EPA soil disposal criteria and also the criteria detailed with the NSW EPA excavated natural material order 2014 for off-site disposal purposes. Table 9 below summarises specific contaminant concentration exceedances of the contaminant threshold values outlined in Table 1 of the NSW waste classification guidelines – Part 1 for fill and natural material encountered on-site. Where multiple values exist for the same sample due to laboratory internal duplicate/ triplicate analysis the most elevated value is considered for disposal classification purposes.

Table 14: Waste Disposal SCC without TCLP Exceedance Summary (mg/kg)

# Sample Results*	Analyte	CT1	CT2	Min Conc.	Max Conc.	Sample Locations exceeding Contamination Threshold Concentrations
Fill Material						
55	Lead	100	400	6	6,200	**BH21**_3.0 (120) **BH22**_0.1 (230) **BH22**_1.0 (830) **BH27**_0.1 (130) **BH28**_3.0 (130) **BH28**_4.0 (150) **BH29**_2.0 (220) **BH29**_4.0 (790) **BH29**_5.0 (740) **BH29**_6.0 (260) **BH29**_7.0 (540) **BH29**_8.0 (6,200) **BH30**_1.0 (150) **BH30**_3.0 (130) **BH30**_4.0 (210) **BH30**_5.0 (130) **BH30**_6.0 (500) **BH35**_0.1 (1,300) **BH38**_0.1 (150)
55	Mercury	4	16	<1	6.4	**BH19**_0.1(6.4) **BH20**_0.1(5.2) **BH23**_0.1(4.2) **BH28**_0.1(4.1) **BH30**_0.1(4.4) **BH40**_0.1(5.5) **BH41**_0.1(4.1) **BH42**_0.1(5.2)

55	Nickel	40	160	2	93	**BH38**_0.1 (93)
18	Benzo(a)pyrene	0.8	3.2	<0.05	2.2	**BH30**_1.0 (2.2)
Natural Material						
47	No Exceedances recorded for any analyte					

TCLP Analysis

No TCLP analysis was conducted on the samples from the DESI as it was beyond the scope of those works and laboratory holding times. During excavation / test pitting works TCLP testing will conducted on hot spots identified as restricted waste as required.

Initial TCLP analysis was conducted during the SMEC assessment and is detailed below.

Fill Material Waste Classification

The analysis results of sampling activities undertaken to date indicate that surficial fill material across the site can generally be classified as "General Solid Waste" with the following exceptions. Exceedances of the CT1 and CT2 criteria detailed within Table 1 of the NSW EPA Waste Classification Guidelines – Part 1 were noted as follows:

- **Restricted Waste** - fill materials in 12 locations are currently classified as "Restricted Waste" due to the reported concentrations exceeding the CT1 criteria for lead at four locations (BH21, BH27, BH28 and BH38), mercury at eight locations (BH19, BH20, BH23, BH28, BH30, BH40, BH41 and BH42), nickel at one location (BH38) and benzo(a)pyrene at one location (BH30). Mercury concentrations exceeding the CT1 criteria were all detected in shallow soils (0.1 mbgs) within the footprint of the former bowling greens and are anticipated to be associated with former green keeping activities.
- **Hazardous Waste** – fill materials in four locations (BH22, BH29, BH30 and BH35) are currently classified as "Hazardous Waste" due to the reported lead concentrations exceeding the CT2 criteria. These locations were within fill material at the eastern margin of both former bowling green where fill material is generally at its deepest. Lead impacts at each location are delineated on-site, except for BH35, adjacent to the northern site boundary.
- SMEC report: Lead, nickel and benzo(a)pyrene were noted as contaminants of concern. All samples exceeding the GSW threshold were analysed for TCLP to characterise the mobility of the contaminants of concern. Samples analysed using TCLP for benzo(a)pyrene were all below detection. Nickel and lead were detected in samples analysed using TCLP however only sample BH11_4.3-4.5 exceeded TCLP criteria.
- As such SMEC determined the site was classified as General Solid Waste with the exception of a 'hotspot' BH13 which was classified as Restricted Solid Waste under the prevision of General Immobilisation Approval 2009/07. It was suggested that the extent of the hotspot was unknown and further investigation to delineate could determine this.

It should be noted that these classifications are based on the conservative specific contaminant concentration (SCC) values applied by Table 1 of NSW EPA Waste Classification Guidelines – Part 1 in the absence of TCLP data. Following collection of additional data including TCLP

analysis, the SCC values applicable with TCLP results are considerably less conservative (assuming the TCLP values are not exceeding the criteria) and it is anticipated that the fill material classifications should change considerably, resulting in a much larger quantity of fill being classified as “General Solid Waste” with minimal material classified as “Hazardous Waste”.

These areas of fill will be further investigated, delineated with greater accuracy, resampled and submitted for TCLP analysis during excavation when full access is available to those fill material domains.

Any soils containing asbestos would also be classified as Special Waste - Asbestos Waste. In accordance with the NSW Waste Regulation 2014, waste soils must only be disposed to a waste facility that is appropriately licenced to receive the incoming waste.

The fill material at site cannot be classified as VENM/ENM due to its imported and contaminated nature.

It should be noted that whilst not all fill material falls within the basement excavation it wil be required to be excavated out as part of site works.

Natural Material Waste Classification

Currently the sample analysis results indicate that natural material across the site can be classified as “VENM” for off-site disposal purposes. No exceedances of the waste criteria were reported in the samples collected.

Cross-sections included in **Appendix A** show the extent of the excavation for the removal of soil at the site for the proposed development.

15.0 DISCUSSION – SOIL

Soil samples were collected on site in the initial SMEC soil assessment and on to subsequent assessments by LRM. The initial LRM assessment was additional grid and targeted soil assessment works and the second assessment was for the installation of three groundwater wells and two deeper soil bores, with soil samples taken in natural material in all five bores (including the three groundwater wells) to target the natural profile underlying the fill material.

The initial soil assessment primarily targeted the site fill material, the second assessment groundwater and natural material.

It is noted not all soil bores terminated in natural material or delineated deeper impacts of heavy metals or PAHSs. As the general profile of the sites natural material beneath the fill layer is relatively well understood and documented this is not considered significant to the conceptual model of the site.

Deeper hot spot targeting will be more appropriate during excavation works undertaken for fill material disposal were impacted materials may be segregated and treated independently from other site soils specifically where they may require treatment / stabilisation.

15.1.1 Human Health

The risk based investigation levels developed by the National Environmental Health Forum (NEHF) and incorporated under the NEPM 'Assessment of Site Contamination' for; Low-density Residential Scenario (A levels – used for workers), Medium to High-density Residential Scenario (B levels) are based on a relatively conservative assessment of the potential exposure of adults and children assuming 100% bioavailability of contaminants.

Given the development proposed of the site and the fact that all fill material at the site will be excavated and disposed off-site, the future risk the site soils pose to human health is considered low.

15.1.2 Soil Disposal Classification

Soils were compared to the 2008 NSW EPA soil disposal criteria and also the criteria detailed with the NSW EPA excavated natural material order 2014 for off-site disposal purposes.

Fill Material Waste Classification

These are conservative results without TCLP and will be further delineated with greater accuracy and TCLP analysis during excavation when full access is available to those fill material domains with results and classification expected to drop a level of classification in general.

The fill material at site cannot be classified as ENM due to its imported and contaminated nature.

SMEC and LRM borelogs were used in conjunction with the development plans to determine the approximate volumes of imported and natural materials that will be required to be excavated as part of the development of the site. Soil chemistry data was then used in conjunction with the estimated volumes of fill and natural materials to estimate the volumes of each soil disposal category.

The development plans show that an area of the site is to be dug to 42.40 m AHD for a four level basement. The area to be excavated is approximately 16,000 m3 however as the site's ground surface level varies greatly, the surface elevation across the site was used to more closely represent the volumes to be removed.

The majority (~80%) of the soil to be removed is natural in origin with the surface fill atop it also to be disposed of. The calculated approximate volumes of fill and natural materials to be excavated are shown below.

- Imported Material: 27,200 tons
- Natural Material: 100,150 tons

The natural materials are to be disposed of as Excavated Natural Material and the imported material is to be disposed of as General Solid Waste, Restricted Solid Waste and some Hazardous Solid Waste. It is assumed of the imported material the majority is Restricted Solid Waste (70%) with approximately 15% is Hazardous Solid Waste and 15% General Solid Waste however this is a preliminary estimation only and will change as further investigation occurs.

The calculated approximate volumes of General Solid Waste and Restricted Solid Waste of imported fill are shown below.

- General Solid Waste: 4,080 tons
- Restricted Solid Waste: 21,760 tons
- Hazardous Solid Waste: 4,080 tons

Figure 9 shows a cross section of the site, running from west to east, across the area of excavation. This cross section uses a vertical exaggeration of 4X to show the varied surface elevation and depths of soils across the area of excavation. The depth of excavation as per development plans is also shown in this cross section.

Natural Material Waste Classification

Currently the sample analysis results indicate that natural material across the site can be classified as "VENM" for offsite disposal purposes. No exceedances of the waste criteria were reported in the samples collected.

15.1.3 Ecological Risks

NEPM criteria and have been adopted for the ESLs as per Schedule B (1), Appendix A, Table A1, adopting Urban Residential/Public Open Space. Calculated site specific EILs will be conducted once final site levels are determined following fill material removal to assess any remaining ecological impacts.

16.0 SOIL VAPOUR ASSESSMENT

No direct soil vapour assessment has been conducted as part of this assessment; however results from the soil and groundwater assessment have been compared to adopted NEPM vapour risk criteria with results indicating that no vapour risk is considered likely to exist at the site. Additionally, during soil sampling headspace bag samples were collected and screened using a PID with no significant readings. PID readings are recorded on the field bore-logs within Appendix C. Readings below 10ppm are considered to be not significant due to potential for moisture interference. Bore logs have been updated with exact original PID readings.

17.0 GROUNDWATER ASSESSMENT

17.1 Groundwater Assessment Objectives

- Identify and intercept uppermost aquifer, determine aquifer flow direction, elevation, and likely point of discharge
- Assess the data collected from the sampling and analysis program against policies, regulations, guidelines and standards currently adopted in the State of New South Wales. Data exceeding the appropriate requirements is evaluated in terms of the risks posed by the contamination and remedial measures to be undertaken to remove or minimise those risks;
- Assess the impact of landfill material on groundwater conditions on and off-site; and
- Report findings in a format suitable for review by EPA appointed environmental auditor.

17.2 Groundwater Assessment Criteria

- *Contaminated Sites: Guidelines for the Assessment and Management of Groundwater Contamination, March 2007, NSW DEC.*
- *SEPP 55*
- *NEPM Schedule B(1) – Investigation Levels for Soil and Groundwater, 2013*
- *Schedule B(6) of the site contamination measure (NEPC 2013).*
- *Sydney Harbour and Parramatta RiverWater Quality Objectives*
- *NSW EPA, Waste Classification Guidelines November 2014*
- *NSW EPA, Designing Sampling Programs for Sites Potentially Contaminated by PFAS, November 2016*

- *HEPA, PFAS National Environmental Management Plan January 2018*

17.3 Groundwater Monitoring Well Location Selection Criteria

This report presents an assessment of the groundwater conditions at the site via the sampling and analysis of the three groundwater monitoring wells installed at the site, including field stabilisation measurements taken during groundwater purging prior to sampling. The purpose of the groundwater monitoring was to assess the groundwater quality beneath the site and any impacts on groundwater quality from the sites in-filled material and potential impacts on the adjacent surface waterway, Gore Creek to the east. Due to the aspect of the site adjacent the creek, drilling access was restricted down-hydraulic gradient of the site. This will be addressed within the future remediation action plan.

The current three groundwater wells have been installed as permissible by site access limitations. Figure 9 present the groundwater well locations against site features.

- GW01 is in an ideal location to represent up gradient inflowing groundwater to the site being in the upper north east car park area.
- GW02 is installed to the eastern side of the upper bowling green, representing groundwater in the upper third of the in-filled area of the site.
- GW03 is installed to the eastern central side of the lower green. Having met repeated refusal at the very eastern edge of the green, the well was installed at 9 m bgl within natural material. The maximum depth was reached and the well installed with a likely dry column. Groundwater eventually formed a water column within the well, however, it is not known at this stage whether this represents the upper aquifer or a thin perched layer migrating atop natural rock towards the creek. This will be addressed within the future remediation action plan.

At this stage, access does not allow the installation of any groundwater wells further to the east between the eastern extent of the in-filled area and Gore Creek. Further wells would be required in this area once access permits in order to more accurately assess any potential contaminants leaving the site, and their impact on Gore Creek.

It is likely surface water (and potentially sediment sampling) within Gore Creek, up and down gradient of the site, will be required to further characterise any potential impacts based on identified contaminants of concern exceeding groundwater criteria adopted for the site and for Gore Creek.

18.0 DATA QUALITY ASSESSMENT - GROUNDWATER

To minimise the potential for unrepresentative data, DQIs for the groundwater sampling program will be evaluated. The DQIs for sampling techniques and laboratory analysis of collected samples will be based on those listed in Section 4.1 of the NSW EPA Auditor Guidelines (DEC October 2017). Step 5 and Step 6 of the data quality objectives will be assessed by reference to data quality indicators.

Field and analytical QA/QC

The control measures generated from the field sampling and analytical works program were as follows:

- Suitable records of field observations including well installation logs, development records and groundwater field stabilization logs, including visual observations for turbidity, coloration, sheen and olfactory observations (Appendix C);
- Use of appropriate sampling methods as per the attached SAQP (Appendix C);
- Preservation and storage of samples post collection and during transit – refer laboratory SRA (sample receipt advice) regarding temperature of samples and attempt to cool observed upon receipt of samples at laboratory (Appendix E);
- Completed (COC) chain of custody and laboratory sample receipt documentation (Appendix E);
- All Sample holding times were within acceptable limits – samples were delivered to the receiving laboratories on the day of sampling;
- All samples have been analysed by NATA accredited Laboratories namely Envirolab using appropriate methods to allow for data comparison to adopted investigation levels;
- Laboratory quality control measures have been conducted in line with NEPM requirements. The laboratories followed internal quality control procedures, e.g. routine analysis of standard solutions, reference materials, reagent blanks, laboratory duplicates and spikes and surrogates. To assess the extent of matrix bias or interference on analyte recovery and sample to sample precision, numerous spike recovery appraisals were conducted by the laboratory. Recovery percentages for the soil spikes were generally between the LRM acceptable ranges of 70 – 130%, or 30 – 150% for phenols, indicating little negative or positive bias on reported analyte concentrations;
- Laboratory RPD acceptance criteria were exceeded at any stage during the assessment;
- Field blanks and duplicate/ split samples were collected in accordance with Australian standards and are discussed further below; and
- Laboratory Data has been reviewed for the occurrence of anomalous or unusual results which are inconsistent with field observations. The majority of the data was considered to be consistent with field observations relating to the levels of contaminants reported.

Relative Percent Difference Calculations

LRM adopt nominal acceptance criteria of 30% RPD for duplicates and splits for results >30 times the LOR, 50% for results between 10-30 times the LOR, and 100% for results <10 times the LOR.

Duplicate and Triplicate samples taken during sampling were analysed for the full analyte suite as undertaken for the primary sample (GW01) during the DESI. All RPDs relating to the groundwater samples were within acceptable criteria, with the exception of levels of copper.

The copper RPD exceedance can be attributed to the low concentrations reported. It was also noted that the concentrations reported in the duplicate and triplicate groundwater samples were consistent and below the concentration reported in the primary sample, hence the primary sample concentrations is more conservative.

As all the RPDs (with the exception of copper) are within the acceptable limits, the data retrieved is considered repeatable and highly reliable. Attached tables provide the RPDs that could be calculated with over 99.375% of results falling within acceptable criteria as per AS4482.1 2005.

Refer Table 23 within Appendix D for groundwater RPD calculation results.

Field Blanks

Trip blanks were prepared in 40 mL glass vials with a teflon septum lids and pre-prepared with hydrochloric acid. The trip blanks accompanied the samples throughout the entire sampling procedure and during delivery to the receiving laboratory. A trip blank was taken during the soil and groundwater sampling program as they were conducted on the same day and were analysed for TRH C6-C9 to determine if samples were potentially exposed to any volatile contaminants via cross contamination during storage and transport.

Rinsate blanks were taken from the third stage of the decontamination procedure (the first stage being a solution of tap water and 'Decon 90'; the second stage – tap water; and the third stage is deionized rinse water only) to ensure the decontamination procedure is effective and being appropriately undertaken. Rinsate samples taken during the soil and groundwater sampling program were analysed for metals. During sampling all equipment used was decontaminated in the abovementioned fashion.
Trip and rinsate blank sample analysis reported no analyte concentrations above the laboratory limit of reporting.

Refer to Table 25 in Appendix D for QA/QC field blank results.

QA/QC Evaluation against Data Quality Indicators

Completeness – is a measure of the amount of useable data (expressed as %) from data collection activities. The completeness goal is set at there being sufficient valid data generated during the study. If there is insufficient valid data, then additional data are required to be collected. Completeness can be influenced by field issues such as access for sampling or by laboratory issues such as adherence to sample holding times. Samples were collected and analysed from two of the three groundwater monitoring wells on-site and accordingly the data set is considered 66.6% complete. However, based on the location of the groundwater

monitoring wells and the reported concentrations of analytes reported in the sampled wells, the expected results from the third un-sampled monitoring well are considered unlikely vary.

Comparability – the confidence (expressed qualitatively) that data may be considered to be equivalent for each sampling and analytical event. Comparability is achieved through adopting consistent sampling techniques and ensuring laboratories use consistent analysis techniques. All samples were collected using consistent and approved sampling techniques as detailed within the SAQP and were analysed at NATA accredited laboratories throughout all stages of the assessment works.

Representativeness - expresses the degree to which sample data accurately represents each media present on the site. Representativeness is achieved by collecting samples in an appropriate pattern across the site, by using a sufficient number of sampling locations to characterise the site and by using consistent, repeatable and appropriate methodologies. The monitoring well locations targeted groundwater as it entered the site, at the centre of site and as it exited the site giving a representative data set of groundwater conditions across the site. Samples from all monitoring wells were analysed for all of the identified COPCs. Accordingly the data is considered representative of the media and suitable for interpretative use.

Precision - measures the reproducibility or variation of data. The precision of the data is assessed by calculating the Relative Percent Difference (RPD) between primary and duplicate/ inter-lab split samples. Over 99.375% of calculated RPD results from 1 duplicate sample and 1 triplicate sample collected over the DESI stage of the groundwater assessment were within acceptable criteria as per AS4482.1 2005.

Accuracy (bias) - measures quantitatively the closeness of the reported data to the true value. Bias can be introduced during sample collection through cross contamination from contaminated equipment, during sample preservation and transport and from laboratory sample handling, preparation and analysis techniques. Accuracy is assessed by reference to the analytical results of laboratory internal QA/QC samples including spikes, blanks and reference standards. The nominal “acceptance limits” on laboratory control samples are defined as follows:

Laboratory spikes – 70-130% for metals/inorganics 60-140% for organics.
Laboratory duplicates - <30% for metals/inorganics, <50% for organics.
Laboratory blanks - <practical quantitation limit.

All laboratory spikes, duplicates and blanks were reported within acceptable limits and as such the reported data is considered to be of a sufficiently accurate for interpretive purposes.

Accuracy of field works is assessed by examining the level of contamination detected in trip and rinsate blanks. Blanks should return concentrations of all organic analytes as being less than the practical quantitation limit of the testing laboratory. All blanks collected and analysed during both the assessment reported results below the laboratory limit of reporting.

Overall QA/QC Adequacy

It is concluded that the quality control procedures have confirmed that overall data supplied by the laboratories is adequate to arrive at the conclusions of this report.

19.0 GROUNDWATER WELL INSTALLATION

19.1 Monitoring Well Construction Details

Drilling was undertaken with the use of solid stem augers and or push-tubes for soil sampling purposes where appropriate.

The groundwater monitoring wells were installed by a licensed drilling contractor (Stratacore Pty Ltd). The bore construction methodology is detailed below.

The groundwater monitoring wells were constructed with 50 mm, Class 18, PVC casing and were completed with sealed screw joints. The wells were backfilled with graded and cleaned packing sands around the screen and to 0.5 m above, followed by a bentonite seal, and then grouted with a mix of concrete and bentonite to surface level and topped with a lockable cap and flush gatic cover which was sealed with concrete.

Well depths were selected based on the identified depth of the uppermost aquifer. Groundwater was identified by a marked increase in moisture, at which point GW01 for example was left to stand for approximately one hour at 7 m, 8 m and 9 m and then installed. The process was followed during the installation of GW02 and GW03 as appropriate. The steady rise of standing water level following cessation of drilling indicates a semi-confined aquifer beneath the site. Well depths are listed below:

- GW01: 9.19 m bTOC
- GW02: 11.10 m bTOC
- GW03: 8.80 m bTOC

The groundwater monitoring well bore construction logs are presented in Appendix C.

19.2 Monitoring Well Development

GW03 was found to be dry on the XXX and as such was not developed. GW01 and GW02 had made water and were developed in the following manner:

- SWLs and well depth from the north point of the top of casing were measured.
- The well holding volumes were calculated from the water column height, screen length, borehole, screen and standpipe diameter and sand porosity. Three times this volume was purged from each well using hand bailers. See below for a list of purge volumes:

    - GW01: Approx. 4 m post installation – 21.5 L/HV (70 L removed)
    - GW02: Approx. 4 m post installation – 26 L/HV (80 L removed)
    - GW03: Approx. 1.2 m prior to second monitoring round (purged dry)

- A new hand bailer and string was used for each well.
- Water purged was collected in the stored waste drums for analysis and disposal when full at a later stage (as further GME still required).

- Groundwater purged from the wells was noted to be clear with minor turbidity throughout development clearing with time.

19.3 Groundwater Sampling Details

The following describes the field procedures used during the groundwater monitoring.

Groundwater sampling was undertaken on 14th May 2018 of GW01 and GW02 (LRM Pty Ltd) and of GW01 – GW03 on the 3rd August 2018 (EP Risk Pty Ltd). The sample collection involved purging and sampling through a low flow sampling technique with new, disposable bladder and tubing being lowered slowly into the well and sampling was undertaken once field quality parameters stabilized. Field parameters were recorded by an ex-situ flow through cell. Samples were placed into laboratory prepared containers, and then placed into chilled and appropriately preserved containers for delivery to the laboratory.

The wells were stabilised with the aim of collecting samples that were representative of the groundwater present at the site. The samples were analysed for broad spectrum analytical suites, as per table 15 below.

On-site field measurements included temperature, water temperature, electrical conductivity, pH, redox, dissolved oxygen, standing water level and visual and olfactory observations. Groundwater monitoring field sheets are attached in Appendix C.

Table 15: Groundwater Rounds Sampling Analytes

Well	Round	Analytes
GW01	1	NEPM HIL Screen, TDS, Cations & Anions, pH
	2	TRH/BTEX, VOCs, PAHs, Total Phenolics, Phthalates, OCPs, PCBs, TDS, pH, metals (Al, Ag, As, B, Ba, Be, Cd, Cr, Co, Cu, Fe, Pb, Mn, Hg, Mo, Ni, Se, Sb, Sn, Ti, V, Zn), cation/anions, ammonia, flouride, Hexavalent chromium, total cyanide, PFAS & PFOS
GW02	1	NEPM HIL Screen, TDS, Cations & Anions, pH
	2	TRH/BTEX, VOCs, PAHs, Total Phenolics, Phthalates, OCPs, PCBs, TDS, pH, metals (Al, Ag, As, B, Ba, Be, Cd, Cr, Co, Cu, Fe, Pb, Mn, Hg, Mo, Ni, Se, Sb, Sn, Ti, V, Zn), cation/anions, ammonia, flouride, Hexavalent chromium, total cyanide, PFAS & PFOS
GW03	1	Dry
	2	TRH/BTEX, VOCs, PAHs, Total Phenolics, Phthalates, OCPs, PCBs, TDS, pH, metals (Al, Ag, As, B, Ba, Be, Cd, Cr, Co, Cu, Fe, Pb, Mn, Hg, Mo, Ni, Se, Sb, Sn, Ti, V, Zn), cation/anions, ammonia, flouride, Hexavalent chromium, total cyanide, PFAS & PFOS
Dup & Split	1	NEPM HIL Screen, TDS, Cations & Anions, pH
	2	TRH/BTEX, VOCs, PAHs, Total Phenolics, Phthalates, OCPs, PCBs, TDS, pH, metals (Al, Ag, As, B, Ba, Be, Cd, Cr, Co, Cu, Fe, Pb, Mn, Hg, Mo, Ni, Se, Sb, Sn, Ti, V, Zn), cation/anions, ammonia, flouride, Hexavalent chromium, total cyanide, PFAS & PFOS
Trip Blank	1	TRH
	2	TRH C6-C9
Rinsate Blank	1	N/A – Container smashed in transit, sample compromised
	2	TRH, PAH, Heavy Metals

19.4 Field Observations

Field observations were taken including standing water level, visible phase separated hydrocarbon (PSH) product, temperature, pH, redox, dissolved oxygen and electrical conductivity. Refer to Table 16 below and Appendix C for full stabilisation details. No PSH product was detected at any point during field investigations.

Collected field data observations also included any visual and/or odours identified during sampling. No hydrocarbon odours or sheens indicative of obvious contamination were noted during purging or sampling.

Table 16: Groundwater Field Data Pre-Sampling and Stabilisation

Monitoring Well	Date	Round Number	Temp (°C)	Electrical Conductivity (uS/cm)	pH (Units)	Redox (mV)	Dissolved Oxygen (mg/L)
GW01	14/05/2018	1	19.6	277	4.61	214	5.76
	3/08/2018	2	14.9	685	4.09	11	1.97
GW02	14/05/2018	1	19.2	344	5.11	189	5.18
	3/08/2018	2	16.7	288	3.45	49	3.42
GW03	3/08/2018	2	19.3	664	6.50	115	4.19

20.0 GROUNDWATER RESULTS

Table 17: Groundwater Criteria Exceedance summary table

Analyte (Conc.)	Criteria Exceeded	Sample Location(s)	Round
Aluminium	GIL Fresh Waters	GW01 & GW02	1 & 2
Cadmium	GIL Fresh & Drinking Waters	GW02	1
Copper	GIL Fresh Waters	GW01, GW02 & GW03	1 & 2
Iron	ANZECC 2000 & ADWG 2015	GW01, GW02 & (GW03 ANZECC 2000 only)	1 & 2
Lead	GIL Fresh Waters	GW02	2
Manganese	ANZECC 2000 & ADWG 2015	GW01 – ADWG for Round 2 only GW02 – No Exceedances in Round 2 GW03 – ADWG Only	1 & 2
Nickel	GIL Fresh & Drinking Waters	GW01 (Round 1 GIL FW only), GW02 & GW03	1 & 2
Zinc	GIL Fresh Waters & ANZECC 2000	GW01, GW02 & GW03	1 & 2

Concentrations of Chlorinated hydrocarbons, halogenated benzenes, halogenated hydrocarbons, TPH, BTEX, PAHs, MAHs, OCPs, phenols, phthalates and PCBs were all reported below the laboratory limit of reporting (see detail below regarding LOR vs Criteria)

Refer to Figures 4 and 7 within Appendix A for groundwater well locations and criteria exceedances respectively.

The full laboratory results are presented in Tables 18a, 18b and 18c within Appendix D. Certificates and COCs of the groundwater analysis are presented in Appendix E. The following section outlines the results of the groundwater analytical results.

21.0 GROUNDWATER DISCUSSION

Concentrations of metals including aluminum, cadmium, copper, iron, lead, manganese, nickel and zinc were reported exceeding the drinking water, fresh water and marine water criteria for the site during the recent monitoring round. It should be noted that the concentration reported were minimal and consistent across the site including the up-gradient well GW01 indicating that these concentration are likely naturally occurring and not derived from historical uses at the site.

Also as no volatile organic compounds were reported this indicates that the sites groundwater assessed is unlikely to pose a vapor risk to current and future site users.

PFAS / PFOS compounds were added as contaminants of concern for the second round of groundwater sampling on all three wells. Low levels were reported at wells GW01 and GW02 and non-detects for all compounds al GW03 towards the sites eastern boundary. The highest levels reported were at the up-gradient well to the west, GW01, indicating there is currently no detectable impact on the site groundwater from PFAS / PFOS compounds emanating from the in-filled materials.

TDS was reported at between 180 – 470mg/L with levels at the up-gradient well GW01 being similar to the down gradient well GW03 indicating the site is not having a negative impact of the groundwater exiting towards Gore Creek.

Sydney Harbour and Parramatta Upper Estuary / Areas affected by Urban Development Water Quality Objectives, Aquatic ecosystems, visual amenity and secondary contact recreation criteria aimed at Maintaining or improving the ecological condition of water bodies and their riparian zones over the long term which applies to all natural water including Gore Creek, which will require background levels of listed indicator criteria to be established upstream and downstream of the site to determine if any site derived negative impacts have occurred.

Further investigation is required in the eastern section to further assess the final edge of the landfill material prior to Gore Creek and this is addressed in the RAP where access via significant excavation works is required to allow practical access for a drill rig into this eastern edge area of the site. This stage of works would coincide with surface water / sediment sampling in Gore Creek.

Compounds with criteria below detection. Listed next to the method type and applicable criteria. None of the below contaminants were identified in the site soil assessment as contaminants exceeding NEPM criteria. Only benzo(a)pyrene was identified in two locations exceeding general fill criteria. Analysis of TCLPs will be required prior to acceptance to landfill. As such the below list is not currently considered significant to the characterisation of the sites

groundwater. However the detection limits on these listed contaminants will be lowered for future groundwater sampling rounds:

- Metals, **Silver (Filtered),** ANZECC 2000 FW 95%, Aquatic Ecosystems
- Metals, **Chromium (hexavalent) (Filtered),** ANZECC 2000 FW 95%, Aquatic Ecosystems
- OCP in water, **DDT**, ANZECC 2000 FW 95%, Aquatic Ecosystems
- OCP in water, **Endrin**, ANZECC 2000 FW 95%, Aquatic Ecosystems
- OCP in water, **Heptachlor**, ANZECC 2000 FW 95%, Aquatic Ecosystems
- PAHs in Water, **Benzo(a) pyrene**, NEPM 2013 Table 1C GILs, Drinking Water
- PCBs in water, **Arochlor 1242**, ANZECC 2000 FW 95%, Aquatic Ecosystems
- PCBs in water, **Arochlor 1254**, ANZECC 2000 FW 95%, Aquatic Ecosystems
- Phthalates in water, **Bis(2-ethylhexyl) phthalate**, NEPM 2013 Table 1C GILs, Drinking Water
- Phthalates in water, **Di-n-butyl phthalate,** NEPM 2013 Table 1C GILs, Drinking Water
- VOCs, **1,1-dichloroethene**, Recreational water quality and aesthetics, Secondary Contact Recreation
- VOCs, **Bromomethane**, NEPM 2013 Table 1C GILs, Drinking Water
- VOCs, **Hexachlorobutadiene**, NEPM 2013 Table 1C GILs, Drinking Water
- VOCs, **Vinyl Chloride**, NEPM 2013 Table 1C GILs, Drinking Water

It is considered, based on the results reported from groundwater samples obtained to date at the site, that the groundwater assessed is unlikely to pose a risk to the current or proposed future site use and is considered not to been polluted as a result of historic site activities.

21.1 Sensitive receptors and Water Quality Objectives

The site reconnaissance did not reveal evidence of water pooling or seepage. The nearest sensitive receptor to the site is judged to be predominantly via surface run-off directed towards off-site municipal storm water drains, Gore Creek and Tambourine Creek, Lane Cove River and Woodford Bay, Parramatta River and ultimately Sydney Harbour.

Surveying and gauging of the on-site monitoring well network indicates that the groundwater is interpreted to flow generally south-easterly across the site, following the topography, toward Gore Creek. Refer to Figures 8a and 8b in Appendix A for groundwater monitoring well locations and flow directions.

21.2 Site Dewatering and Discharge Licenses

During construction, site dewatering will be required during the basement excavation works as the planned excavation extends to 12 m bgl and the sites groundwater will be intersected. Dewatering works will result in discharge of the water to the local storm-water drainage system operated by Sydney Water. Temporary extraction and discharge licenses will be required from DPI Water and Sydney Water respectively. Groundwater will likely require treatment prior to discharge from the site relating to pH adjustment and removal of suspended solids prior to release from site.

Any such requirements will likely be stipulated by the discharge license conditions from Sydney water.

Any geotechnical engineering recommendations to reduce the likely lowering of the water table should be adhered to.

22.0 CONCEPTUAL SITE MODEL

The revised conceptual site model is derived from the findings of the DESI program for both soil and groundwater in order to identify any potential and any actual risks under the current and future proposed uses of the site including whilst under construction.

22.1 Sources

- The historical fill material identified at the site with impacts from lead, mercury, zinc and PAHs.
- The application of Methyl mercury to the bowling greens for pest control
- Asbestos and building / demolition debris (aesthetic)
- Landfill leachate

The identified depth of fill across the site extended up to 9.0 mbgl at its deepest point. All fill material at the site will be removed prior to the proposed site development been undertaken and final site surface validation sampling round will be undertaken.

There is no requirement to assess soil vapour at the site at this stage based on the soil and groundwater assessment results.

Groundwater reported no concentrations exceeding the adopted human health criteria (with the exception of metals which were considered natural based on their reported concentrations and consistency across the site) and no volatile analytes were identified, therefore, groundwater is not considered to have been impacted by analyte concentrations reported within soil at the site at this stage of the assessment.

22.2 Data Gaps

Data gaps remain on site primarily due to access issues associated with the sites elevation changes and vegetation coverage.

Test pitting following demolition and vegetation removal works will reveal the full extent of the site surface, further delineation of impacts related to the fill material and groundwater, below details the current identified data gaps;

- Asbestos delineation sub-surface in the fill and beneath vegetation;
- Aesthetic issues in fill material;
- Further grid soil samples in areas of currently inaccessible gradient;
- TCLP analysis of hot spots for more accurate waste disposal classification;
- Hot spot delineation vertically and laterally for more accurate volume estimates;
- EIL sampling of remaining soils for specific criteria calculations;

- Further groundwater wells to the eastern side of site once access is viable to assess potential impacts to Gore Creek;
- Additional soil sampling into the riparian zone to determine impact and extent of intruding fill material;
- Surface water and sediment sampling within Gore Creek to assess impacts from site fill material and groundwater;
- Lower LOR or identified analytes where appropriate;
- Asbestos and hazardous materials survey of the building;

Geology

The main geological units encountered and or at the site, in order of stratigraphic sequence from youngest to oldest include:

- Fill material - generally clays, silts and sands containing in areas, anthropogenic materials including glass, brick cement ceramics, glass and other miscellaneous debris and occasional organic material including roots.
- Natural – Quaternary Holocene Sands, light brown, fine to medium grained, dry.

Exposure Pathways

Based on the identified receptors and the release, fate, and transport characteristics of the CoPC, pathways through which receptors may become exposed include inhalation, ingestion and dermal absorption. These are discussed briefly below in the context of the site setting:

Current Site User Risks

- Inhalation Exposure Pathway: There is currently low potential for creation of dust during disturbance of soils.
- Ingestion Exposure Pathway: There is a low risk of ingestion of contaminants by current site occupants through day-to-day activities and direct contact with contaminated soils or surface water.
- Groundwater: No identified risk to current site users is indicated. No identified risk to ecological receptors, though groundwater is likely to discharge to the Gore Creek and ultimately to Lane Cove River.
- Dermal Exposure Pathway: There is low likelihood of exposure that may occur via sorption through biological membranes such as skin. This pathway may be a concern whenever contaminated soil; surface water or groundwater comes into direct contact with a biological membrane. Current site gardeners should take basic personal protective measures by using gloves.

Construction / Development Stages

- Inhalation Exposure Pathway: There is the potential for inhalation of dusts from potential soil contamination associated with the historic site activities. There is also the potential for creation of dust during disturbance of soils and infrastructure. Risk of potential inhalation of contaminated dusts during future site works.
- Ingestion Exposure Pathway: Ingestion of contaminants by constructions workers may occur through day-to-day activities and direct contact with contaminated soils or surface water.

- Groundwater: Dewatering will be required during basement development works. No significant risk is posed to site workers from ingestion of the groundwater.
- Dermal Exposure Pathway: Exposure may occur via sorption through biological membranes such as skin. This pathway may be a concern whenever contaminated soil; surface water or groundwater comes into direct contact with a biological membrane. This pathway could also be a concern if contaminated surface water (runoff from the site) was to come into direct contact with benthic and aquatic flora and fauna within off-site surface water receiving environments. Site construction workers will also likely encounter fill materials during initial site works.

Future Site Users

- Inhalation Exposure Pathway: No future risk will remain as all contaminated fill will be removed from site during development works.
- Ingestion Exposure Pathway: No future risk will remain as all contaminated fill will be removed from site during development works.
- Groundwater: No future risk to human health is identified. A low risk to ecological receptors is identified via naturally slightly elevated heavy metals concentrations, should groundwater discharge to local waterways.
- Dermal Exposure Pathway: No future risk will remain as all contaminated fill will be removed from site during development works. Garden areas will utilise imported or certified re-used clean fill material.

22.3 Receptors

The preliminary site investigation identified a number of potential human and environmental receptors of contamination provided an exposure pathway exists. The identified receptors are listed below:

Human Health Receptors:
- Current and future site workers including construction workers during site development and current commercial tenants;
- Future site high-density aged care facility residents;
- Future landscape gardeners in the deep planting zone;
- Off-site receptors including residents and workers on neighbouring properties and recreational users of nearby water courses.

Environmental receptors:
- On-site flora and fauna;
- Off-site ecosystems including down-gradient surface water environments including Gore Creek and Lane Cove River;
- Groundwater beneath the site.

Soil Investigation

On the basis of the visual aspects of the site, review of the site history and results of soil analysis, the following conclusions can be drawn:

Given the development proposed of the site and the fact that all fill material at the site will be excavated and disposed off-site, the future risk the site soils pose to human health is considered low. The risk to current users is low as the site remains effectively sealed beneath the vegetation and no volatile impacts were report. Gardening maintenance is generally limited to mowing and therefore not disturbing or accessing the underlying impacted soils.

Soils were compared to the 2008 NSW EPA soil disposal criteria and also the criteria detailed with the NSW EPA excavated natural material order 2014 for offsite disposal purposes. Further classification delineation will be conducted during the test pitting program guided by the site RAP.

All site fill material will be excavated during site works thereby removing all NEPM exceedances identified.

Fill Material Waste Classification

The sample analysis results indicate that surficial fill material across the site can generally be classified as "**General Solid Waste**". Exceedances of the CT1 and CT2 criteria detailed within Table 1 of the NSW EPA Waste Classification Guidelines – Part 1 were noted relating to lead, mercury and B(a)P in 21 locations reported as "**Restricted Waste**" (without TCLP). Lead was reported as "**Hazardous Waste"** in 4 locations only currently without TCLP analysis. These will be further delineated with greater accuracy and TCLP analysis during excavation when full access is available to those fill material domains.

SMEC as part of their combined investigation drilled 15 boreholes across the site and took samples at strategic depths at each. Soil chemistry results were compared to NSW EPA Waste Classification Guidelines and exceedances noted. Lead, nickel and benzo(a)pyrene were noted as contaminants of concern. All samples exceeding the GSW threshold were analysed for TCLP to characterise the mobility of the contaminants of concern. Samples analysed using TCLP for benzo(a)pyrene were all below detection. Nickel and lead were detected in samples analysed using TCLP however only sample BH11_4.3-4.5 exceeded TCLP criteria.

As such SMEC determined the site was classified as General Solid Waste with the exception of a 'hotspot' BH13 which was classified as Restricted Solid Waste under the prevision of General Immobilisation Approval 2009/07. It was suggested that the extent of the hotspot was unknown and further investigation to delineate could determine this.

The fill material at site cannot be classified as ENM due to its imported and contaminated nature at this stage.

Natural Material Waste Classification

Currently the sample analysis results indicate that natural material across the site can be classified as "VENM" for offsite disposal purposes. No exceedances of the waste criteria were reported in the samples collected within the natural material beneath the fill layer.

Groundwater Investigation

A groundwater monitoring network consisting of 3 groundwater monitoring wells was installed across the site.

Concentrations of metals including aluminum, cadmium, copper, lead, nickel and zinc were reported exceeding the Australian drinking water guidelines 2015, NEPM GIL fresh and drinking waters, ANZECC 2000 criteria for the site during the recent monitoring round. However, it should be noted that the concentration reported were minimal and consistent across the site indicating that these concentration are likely naturally occurring and not derived from historical uses at the site.

Concentrations of Chlorinated hydrocarbons, halogenated benzenes, halogenated hydrocarbons, TPH, BTEX, PAHs, MAHs, OCPs, phenols, phthalates and PCBs were all reported below the laboratory limit of reporting.

No volatile organic compounds were reported, indicating that the groundwater assessed is unlikely to pose a vapor risk to current and future site users.

It is considered, based on the results reported from groundwater samples obtained at the site, that the groundwater assessed is unlikely to pose a risk to the current or proposed future site use and is considered not to been polluted as a result of historic site activities. Further investigation is required to adequately assess potential impacts to Gore Creek.

Conclusions

- Site workers potentially coming into contact with contaminated fill material will require contact personal protective equipment in the form of gloves, long sleeves and pants to protect against any dermal contact.
- The fill material removal works will be subject to the implementation of control measures which will be detailed in the RAP.
- All site fill material will be excavated during site works thereby removing all NEPM exceedances identified.
- Surficial fill soils at the site can be classed in general as “General solid waste” and “Restricted waste” for offsite disposal purposes.
- Isolated areas of Hazardous wastes will be further investigated, delineated and classified by TCLP and test pitting.
- Underlying natural materials can currently be classified as natural material largely meeting the definition of virgin excavated natural material (VENM) as detailed in the Protection of the Environment Operations Act 1997 (POEO Act).

Further delineation investigation through additional sampling should be undertaken post demolition more accurately classify the natural soil profile beneath the upper layer of fill material.

Final statement

The site at 266 Longueville Road Lane Cove will be suitable, upon remediation, for the proposed high density residential aged care facility.

- Based on the soil and groundwater data to date, the site is considered suitable for the proposed aged care facility development with no human health risk posed by the identified subsurface conditions following the proposed off-site disposal of all fill material at the site.
- Currently the site poses no risk to site users including gardeners who currently maintain the bowling greens.
- Constraints on the sites current users should include no sub-surface or access to site soils without appropriate PPE and reference to the site Remediation Action Plan. Site soils / fill material are contaminated.

Further works

Further works required to more accurately characterize the site for land use acceptability, waste disposal classification and potential off-site impacts are required. These further works are detailed in the site Remediation Action Plan.

- Soil test pitting targeted locations for hot spot delineation vertically and laterally;
- Asbestos delineation;
- Aesthetic assessment;
- TCLP analysis for soil hot spots for waste classification;
- Further groundwater wells to the eastern boundary of the site to determine potential off-site impacts to Gore Creek;
- Surface water and sediment sampling of Gore Creek;
- Additional groundwater sampling with selected lower LOR as applicable;
- Soil sampling for EIL criteria calculations;
- Update the site RAP based on this final report.

23.0 STATEMENT OF LIMITATIONS

This report has been prepared for Australian Unity Ltd for the purpose set out herein. The services performed by LRM Global Pty Ltd have been conducted with the level of quality and expertise generally associated with activities of this nature by an environmental consulting practice.

Responsibility is disclaimed for any loss or damage other than to Australian Unity Ltd. LRM Global Pty Ltd does not accept any responsibility suffered by any other party whatsoever including, but not limited to, negligence on the part of LRM Global Pty Ltd.

This report is for the use of Australian Unity Ltd and its appointed New South Wales EPA approved environmental auditor and agents namely Brad May and Epic Environmental. LRM Global Pty Ltd does not intend that any other person accept or rely upon it. This report shall only be presented in full, except where written approval with comments is provided by LRM Global Pty Ltd.

The information contained in this report is considered to be accurate on the date of issue in accordance with the current conditions of the site. Whilst the report is accurate to the best of our knowledge and belief, LRM Global Pty Ltd cannot guarantee completeness or accuracy of any descriptions or conclusions based on supplied information, including but not limited to, information provided by previous site assessors and data arising from investigations by any other third party.

24.0 REFERENCES

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Schedule B(5)c Guideline for EIL's for Arsenic, Chromium III, Copper, DDT, Lead, Naphthalene, Nickel & Zinc NEPM, 2011 NEPC

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Resource Recovery Order under Part 9, Clause 93 of the Protection of the Environment Operations (Waste) Regulation, The excavated natural material order 2014

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Applied Ecology Pty Ltd, *Flora, Fauna & Fungi Impact Assessment for a proposed development site at 266 Longueville Road*, January 2012, for Lane Cove Municipal Council.

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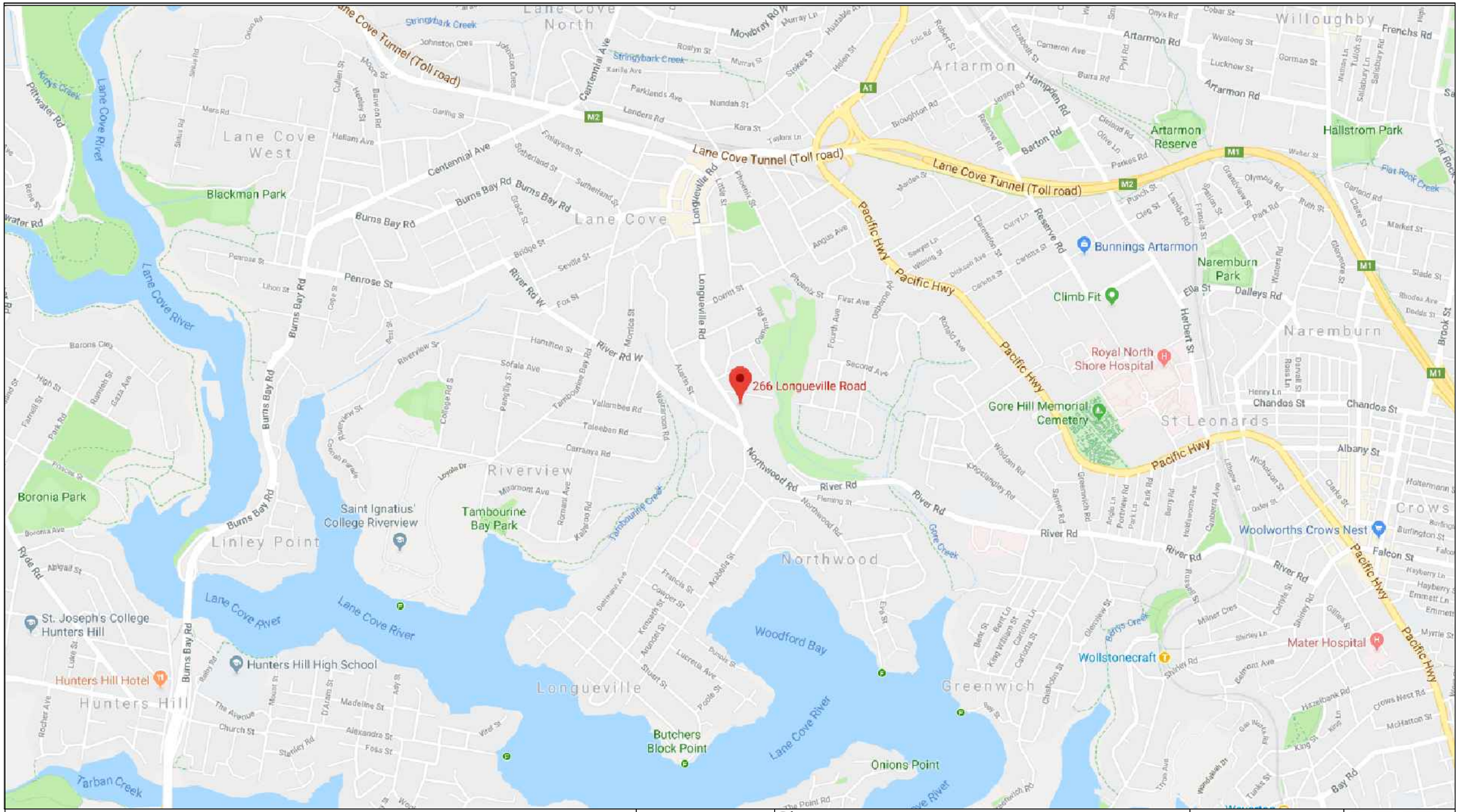
APPENDIX A

SITE PLANS & FIGURES



Site Location

Amemdmants	Site	266 Longueville Road, Lane Cove NSW			N
	Title	Site Location Plan			
	Client	Australian Unity Limited			Figure 2
	Date 07/03/2018	Drawn DY	Checked JL	Scale	Job No: 27380

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Inferred Surficial Water Flow Direction
Gore Creek
Lane Cove Golf Course
Speedway (Service Station)
Assessment Boundary
E2 - Environmental Conservation Zoning
Site 266 Longueville Rd Lane Cove NSW
Title Current Site Layout/Site Features Plan
Client Australian Unity Pty Ltd
Date 17/08/18
Drawn BP
Checked JL
Scale 1:20 (on A3)
N
Figure 3
Job No. 27380
0m 3m 10m
1m 5m 20m
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BH16
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GW01
BH03
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GW02
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GW03
BH45
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BH14
BH30
BH33
BH25
BH26
BH47
BH22
BH15
BH41
Assessment Boundary
GW03 Ground Water Monitoring Well
BH28 LRM Borehole Location
BH10 SMEC Borehole Location
Site 266 Longueville Rd Lane Cove NSW
Title Sample Location Plan Soil and Groundwater
Client Australian Unity Pty Ltd
Date 17/08/18
Drawn DY
Checked JL
Scale 1:15 (on A3)
N
Figure 4
Job No: 27380
0m 3m 10m
1m 5m
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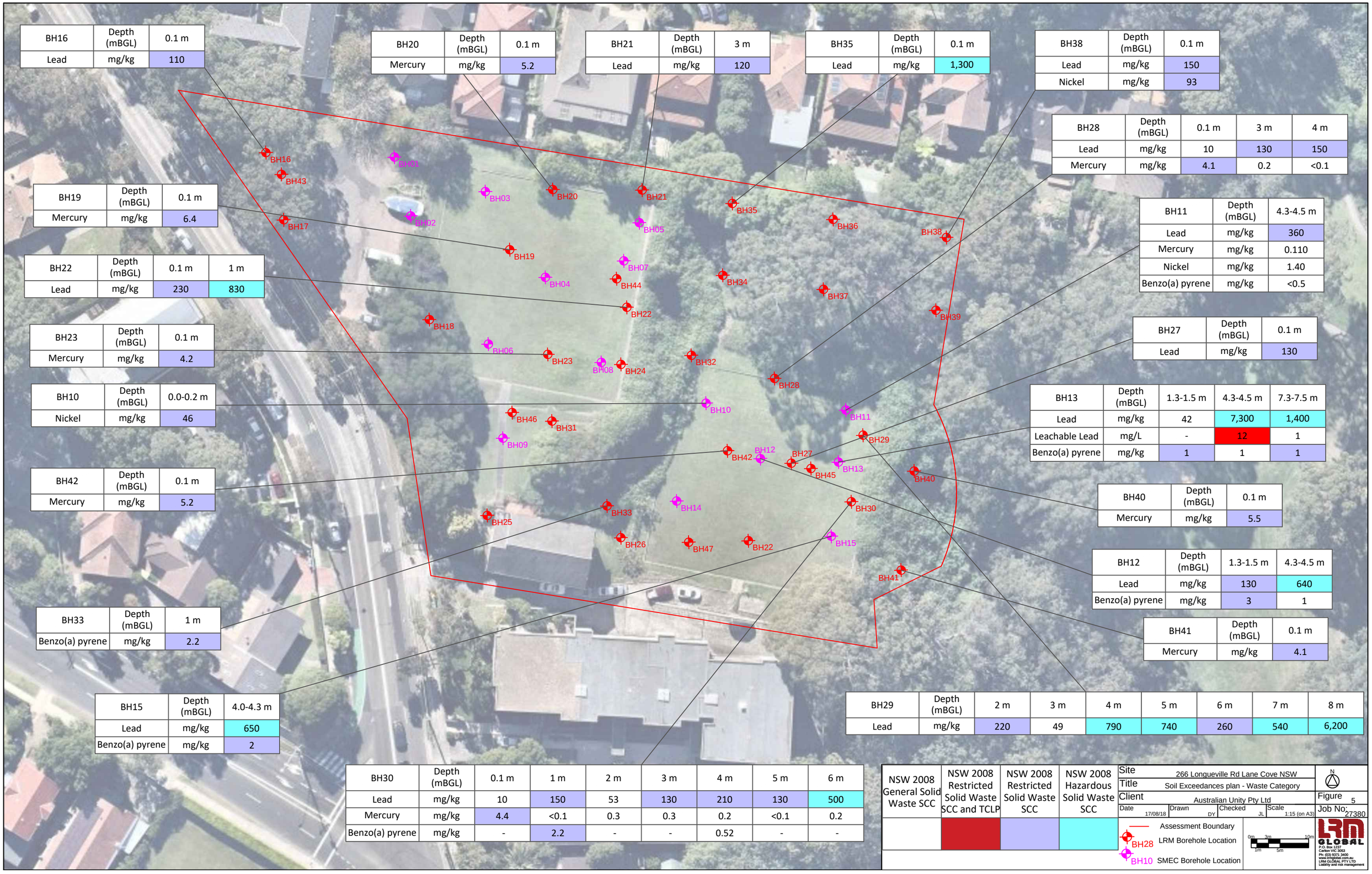

BH16	Depth (mBGL)	0.1 m
Lead	mg/kg	110

BH20	Depth (mBGL)	0.1 m
Mercury	mg/kg	5.2

BH21	Depth (mBGL)	3 m
Lead	mg/kg	120

BH35	Depth (mBGL)	0.1 m
Lead	mg/kg	1,300

BH38	Depth (mBGL)	0.1 m
Lead	mg/kg	150
Nickel	mg/kg	93

BH28	Depth (mBGL)	0.1 m	3 m	4 m
Lead	mg/kg	10	130	150
Mercury	mg/kg	4.1	0.2	<0.1

BH19	Depth (mBGL)	0.1 m
Mercury	mg/kg	6.4

BH11	Depth (mBGL)	4.3-4.5 m
Lead	mg/kg	360
Mercury	mg/kg	0.110
Nickel	mg/kg	1.40
Benzo(a) pyrene	mg/kg	<0.5

BH22	Depth (mBGL)	0.1 m	1 m
Lead	mg/kg	230	830

BH27	Depth (mBGL)	0.1 m
Lead	mg/kg	130

BH23	Depth (mBGL)	0.1 m
Mercury	mg/kg	4.2

BH13	Depth (mBGL)	1.3-1.5 m	4.3-4.5 m	7.3-7.5 m
Lead	mg/kg	42	7,300	1,400
Leachable Lead	mg/L	-	12	1
Benzo(a) pyrene	mg/kg	1	1	1

BH10	Depth (mBGL)	0.0-0.2 m
Nickel	mg/kg	46

BH42	Depth (mBGL)	0.1 m
Mercury	mg/kg	5.2

BH40	Depth (mBGL)	0.1 m
Mercury	mg/kg	5.5

BH12	Depth (mBGL)	1.3-1.5 m	4.3-4.5 m
Lead	mg/kg	130	640
Benzo(a) pyrene	mg/kg	3	1

BH33	Depth (mBGL)	1 m
Benzo(a) pyrene	mg/kg	2.2

BH41	Depth (mBGL)	0.1 m
Mercury	mg/kg	4.1

BH15	Depth (mBGL)	4.0-4.3 m
Lead	mg/kg	650
Benzo(a) pyrene	mg/kg	2

BH29	Depth (mBGL)	2 m	3 m	4 m	5 m	6 m	7 m	8 m
Lead	mg/kg	220	49	790	740	260	540	6,200

BH30	Depth (mBGL)	0.1 m	1 m	2 m	3 m	4 m	5 m	6 m
Lead	mg/kg	10	150	53	130	210	130	500
Mercury	mg/kg	4.4	<0.1	0.3	0.3	0.2	<0.1	0.2
Benzo(a) pyrene	mg/kg	-	2.2	-	-	0.52	-	-

NSW 2008 General Solid Waste SCC	NSW 2008 Restricted Solid Waste SCC and TCLP	NSW 2008 Restricted Solid Waste SCC	NSW 2008 Hazardous Solid Waste SCC

Site: 266 Longueville Rd Lane Cove NSW
Title: Soil Exceedances plan - Waste Category
Client: Australian Unity Pty Ltd
Date: 17/08/18 | Drawn: DY | Checked: JL | Scale: 1:15 (on A3)
Figure: 5
Job No: 27380

Assessment Boundary
BH28 LRM Borehole Location
BH10 SMEC Borehole Location

0m 3m 10m
1m 5m

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BH15
BH41
BH35
Depth (mbgl) 0.1
Lead (mg/kg) 1,300
BH11
Depth (mbgl) 4.3-4.5
Lead (mg/kg) 360
BH22
Depth (mbgl) 1
Lead (mg/kg) 830
BH29
Depth (mbgl) 4 5 7 8
Lead (mg/kg) 790 740 540 6,200
BH13
paste 4.3-4.5 7.3-7.5
Lead (mg/kg) 7,300 1400
BH30
Depth (mbgl) 6
Lead (mg/kg) 500
BH15
Depth (mbgl) 4.0-4.2
Lead (mg/kg) 650
BH12
Depth (mbgl) 1.3-1.5 4.3-4.5
Lead (mg/kg) 130 640
Carcinogenic PAHs (as BaP TEQ) 3.2 0.5
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil
NEPM 2013 Table 1A(1) HILs Rec C Soil
NEPM 2013 Table 1A(1) HILs Res A Soil
NEPM 2013 Table 1A(1) HILs Res B Soil
Assessment Boundary
BH28 LRM Borehole Location
BH10 SMEC Borehole Location
Site 266 Longueville Rd Lane Cove NSW
Title Soil Exceedances plan - HILs
Client Australian Unity Pty Ltd
Date 17/08/18
Drawn BP
Checked JL
Scale 1:15 (on A3)
N
Figure 6
Job No. 27380
0m 3m 10m
1m 5m
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GW01		14/05/2018	3/08/2018
Aluminium (Filtered)	mg/L	0.2*	0.64*
Cadmium (Filtered)	mg/L	<0.0001	<0.0001
Copper (Filtered)	mg/L	0.019	0.032*
Iron (Filtered)	mg/L	2.3	2.9*
Lead (Filtered)	mg/L	0.001	0.004*
Manganese (Filtered)	mg/L	**ЛΦНН**	**ЛΦМФF**
Nickel (Filtered)	mg/L	0.012	0.061*
Zinc (Filtered)	mg/L	0.068	0.26*

GW02		14/05/2018	3/08/2018
Aluminium (Filtered)	mg/L	0.12	1.7
Cadmium (Filtered)	mg/L	0.0003	<0.0001
Copper (Filtered)	mg/L	0.012	0.018
Iron (Filtered)	mg/L	6.1	0.92
Lead (Filtered)	mg/L	<0.001	0.005
Manganese (Filtered)	mg/L	**ЛΦНТ**	0.036
Nickel (Filtered)	mg/L	0.037	0.063
Zinc (Filtered)	mg/L	0.12	0.23

GW03		3/08/2018
Aluminium (Filtered)	mg/L	0.01
Cadmium (Filtered)	mg/L	<0.0001
Copper (Filtered)	mg/L	0.009
Iron (Filtered)	mg/L	0.24
Lead (Filtered)	mg/L	0.001
Manganese (Filtered)	mg/L	**ЛΦМУ**
Nickel (Filtered)	mg/L	0.035
Zinc (Filtered)	mg/L	0.056

ADWG 2015 Aesthetic	ANZECC 2000 FW 95%, Aquatic Ecosystems	NEPM 2013 Table 1C GILs, Drinking Water	Recreational water quality and aesthetics, Secondary Contact Recreation

Assessment Boundary

GW03 Monitoring Well Location

Values with an asterisk are taken from either the Duplicate or the Split as these values were higher than their corresponding primary sample. Refer to GW Table.
Values in **bold** exceed multiple criteria.

Site	266 Longueville Rd Lane Cove NSW
Title	GW Exceedances Plan
Client	Australian Unity Pty Ltd
Date	17/08/18
Drawn	BP
Checked	JL
Scale	1:15 (on A3)
Figure	7
Job No:	27380

0m 3m 10m
1m 5m

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GW01	TOC (m AHD)	SWL (m BTOC)	SWL (m AHD)
29.05.2018	57.0540	4.4300	52.6240

GW02	TOC (m AHD)	SWL (m BTOC)	SWL (m AHD)
29.05.2018	55.4850	6.7200	48.7650

GW03	TOC (m AHD)	SWL (m BTOC)	SWL (m AHD)
29.05.2018	49.6560	8.3800	41.2760

GW01	TOC (m AHD)	SWL (m BTOC)	SWL (m AHD)
3.08.2018	57.0540	4.3200	52.7340

GW02	TOC (m AHD)	SWL (m BTOC)	SWL (m AHD)
3.08.2018	55.4850	6.7300	48.7550

GW03	TOC (m AHD)	SWL (m BTOC)	SWL (m AHD)
3.08.2018	49.6560	7.2300	42.4260

Assessment Boundary

GW03 Monitoring Well Location

— 46 — SWL (intervals of 2 mAHD)

Site	266 Longueville Rd Lane Cove NSW
Title	Standing Water Level 3/08/2018
Client	Australian Unity Pty Ltd
Date	9/08/18
Drawn	BP
Checked	JL
Scale	1:15 (on A3)
Figure:	8b
Job No:	27380

N

0m 3m 10m
1m 5m

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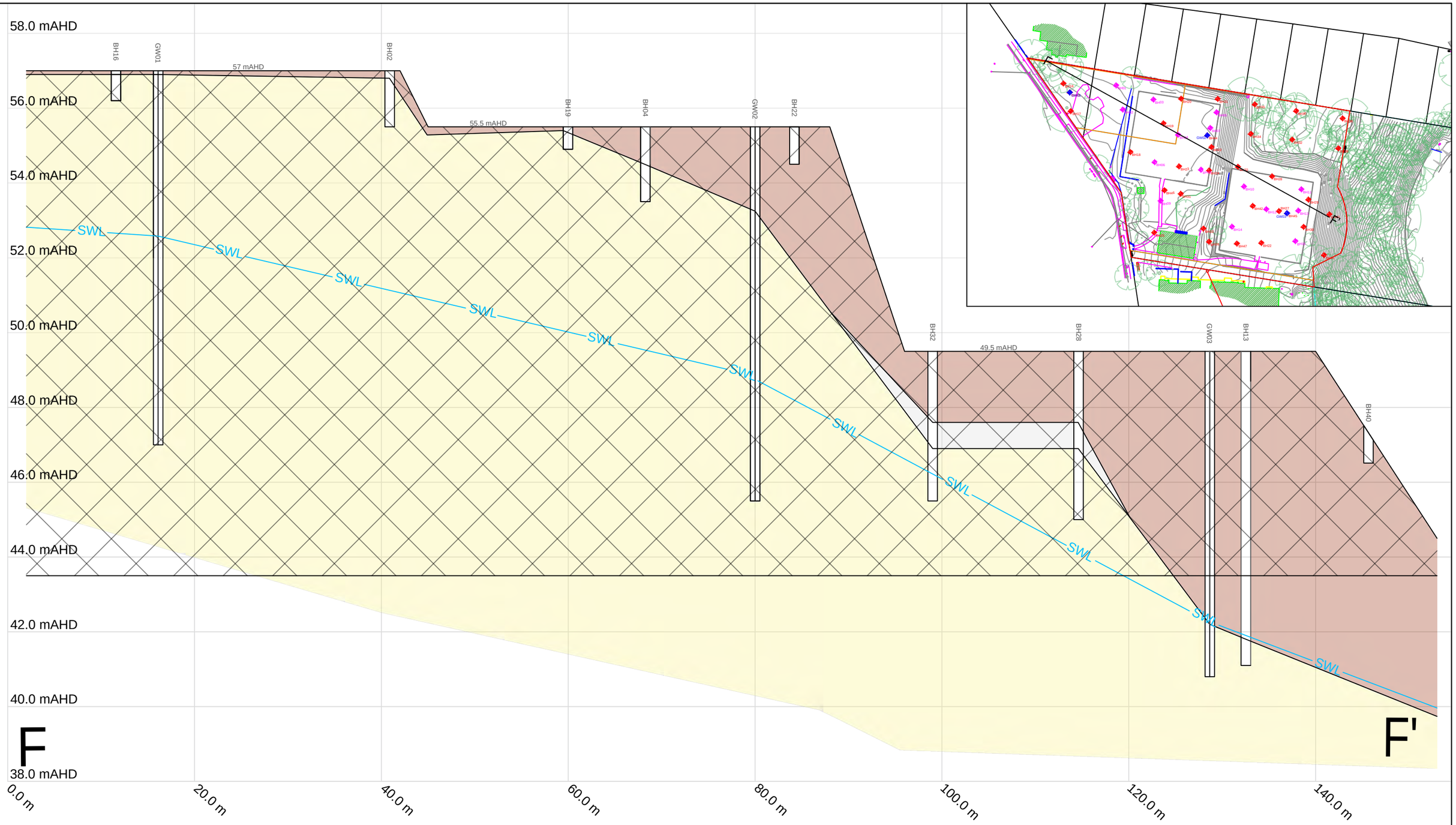

Fill Material

Residual Soil

Sandstone

Area of Excavation

— SWL — Groundwater Standing Water Level

Site	266 Longueville Rd Lane Cove NSW
Title	F-F' Cross Section
Client	Australian Unity Pty Ltd
Date 7/08/18	Drawn BP
Checked JL	Scale 1:10,000 (on A3)
Vertical Exaggeration 4X	
Figure 9	
Job No 27380	

N

0m 3m 10m
1m 5m

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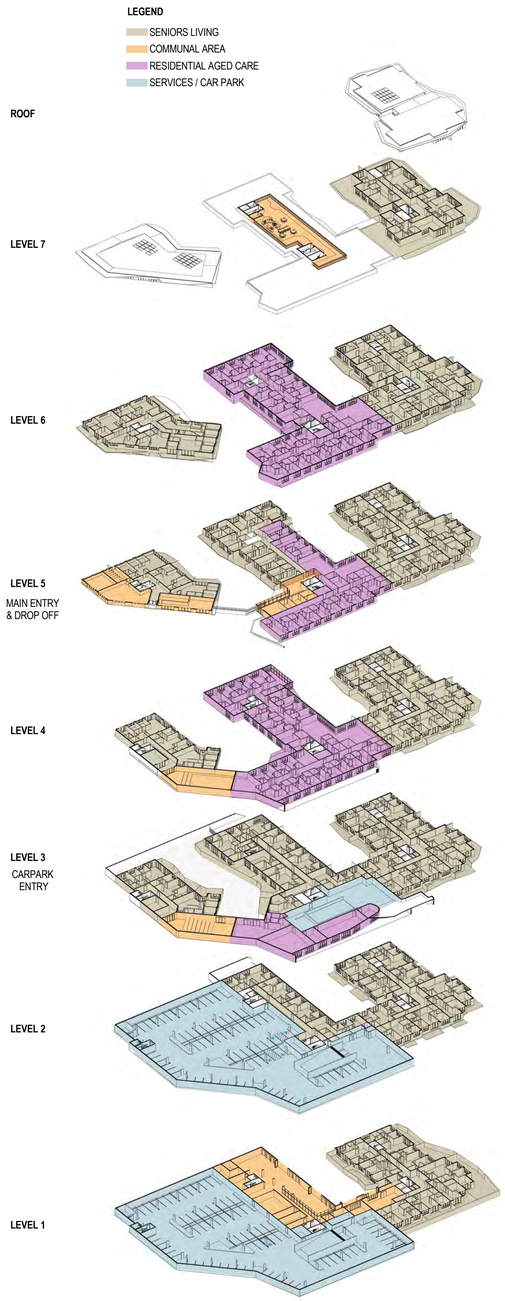
Figure 10 - Development Plans



1 AXONOMETRIC
1 : 75

0 1 2 3 5 10m

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SENIORS LIVING VILLAGE PROJECT

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PERSPECTIVES

As indicated @ A1 21.09.2016

A301 **rev. A**

0 1 2 3 5 10m

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PERSPECTIVES

@ A1

21.09.2016

A302

rev. G

1 Northern Elevation
1 : 200

2 Southern Elevation
1 : 200

0 1 2 3 5 10m

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ELEVATIONS 1

As indicated @ A1

21.09.2016

A303

rev. G

2 Western Elevation
1 : 200

1 Eastern Elevation
1 : 200

0 1 2 3 5 10m

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ELEVATIONS 2

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21.09.2016

A304

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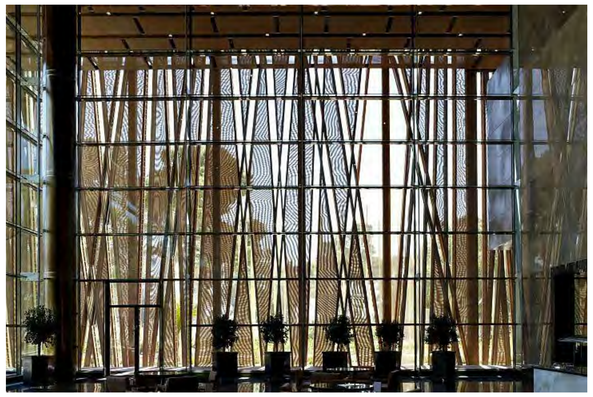

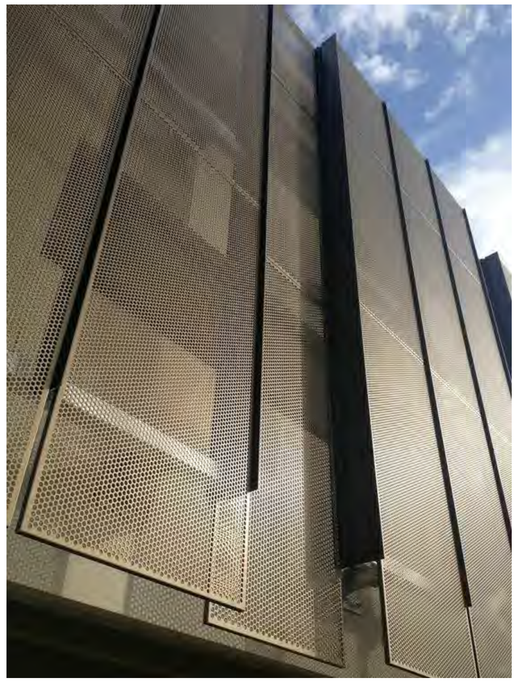

EXTERNAL PALETTE- MOOD BOARD

THE EXTERNAL MATERIALS WERE CHOSEN TO REDUCE THE VISUAL IMPACT ON THE LANDSCAPE; IN COLOURS THAT INTEGRATE WITH THE GREENERY FROM THE BUSHLAND AND SURROUNDINGS

THE BUILDING WOULD SIT ON A ROBUST SANDSTONE BASE, REMINISENCE OF THE SANDSTONE ROCK FOUND ON SITE. ATOP A LIGHT BUILDING WITH GENEROUS BALCONIES AND PRIVATE OPEN SPACES OVERLOOKING GENEROUS COURTYARDS, CREATING A WARM AND HOMELY FEELING.THE ASSYMETRIC BALCONIES CREATE THE IDEA OF EXCLUSIVITY AS EVERY APARTMENT HAS A DIFFERENT CONFIGURATION OF PLAN AND BALCONY.

THE AGED CARE FLOORS HAVE A VIEWING DECK, ENCLOSED IN GLASS ALLOWING VIEWS OF THE SURROUNDING GREENERY AND THE FAR DISTANT CITY VIEWS.

THE METAL MESH, SEMICOVERED ROOF ELEMENTS CREATE A LAYER OF PRIVACY AND SUN PROTECTION WHILE ADDING INTERESTING LIGHT AND SHADOW PATTERNS.

IMAGES ON THIS SHEET ARE FOR INDICATIVE REFERENCES ONLY AND DO NOT REPRESENT ANY THOMSON ADSETT PROJECT

0 1 2 3 5 10m

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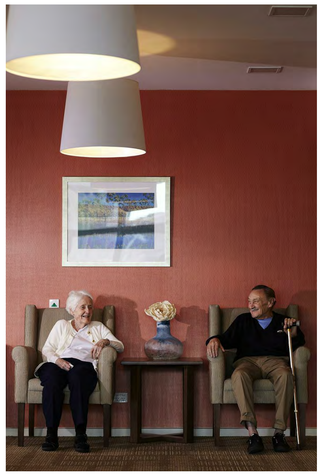
MOOD AND MATERIALS BOARD - EXTERIOR

1 : 1 @ A1

21.09.2016

A350

rev. A



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INTERNAL PALETTE- MOOD BOARD

THE INTERIORS SHALL BE LUXURIOUS WITH CONTEMPORARY FINISHES, WHILST PROVIDING COZINESS MAKING THE APARTMENTS, AND RESIDENTIAL AGED CARE COMFORTABLE. THE SPACES SHALL HAVE FLEXIBILITY TO ALLOW FOR DIFFERENT FINISHES AND FURNITURE ACCORDING TO THE PREFERENCE OF THE RESIDENT

WAY FINDING IS PROPOSED TO BE DONE IN TWO OR MORE LANGUAGES TO EMBRACE THE DIFFERENT CULTURES OF LANE COVE RESIDENTS.

EACH SPACE IS DESIGNED TO PROVIDE A CALMING YET A RICH SENSORY EXPERIENCE TO THE RESIDENTS OF 266 LONGUEVILLE ROAD

0 1 2 3 5 10m

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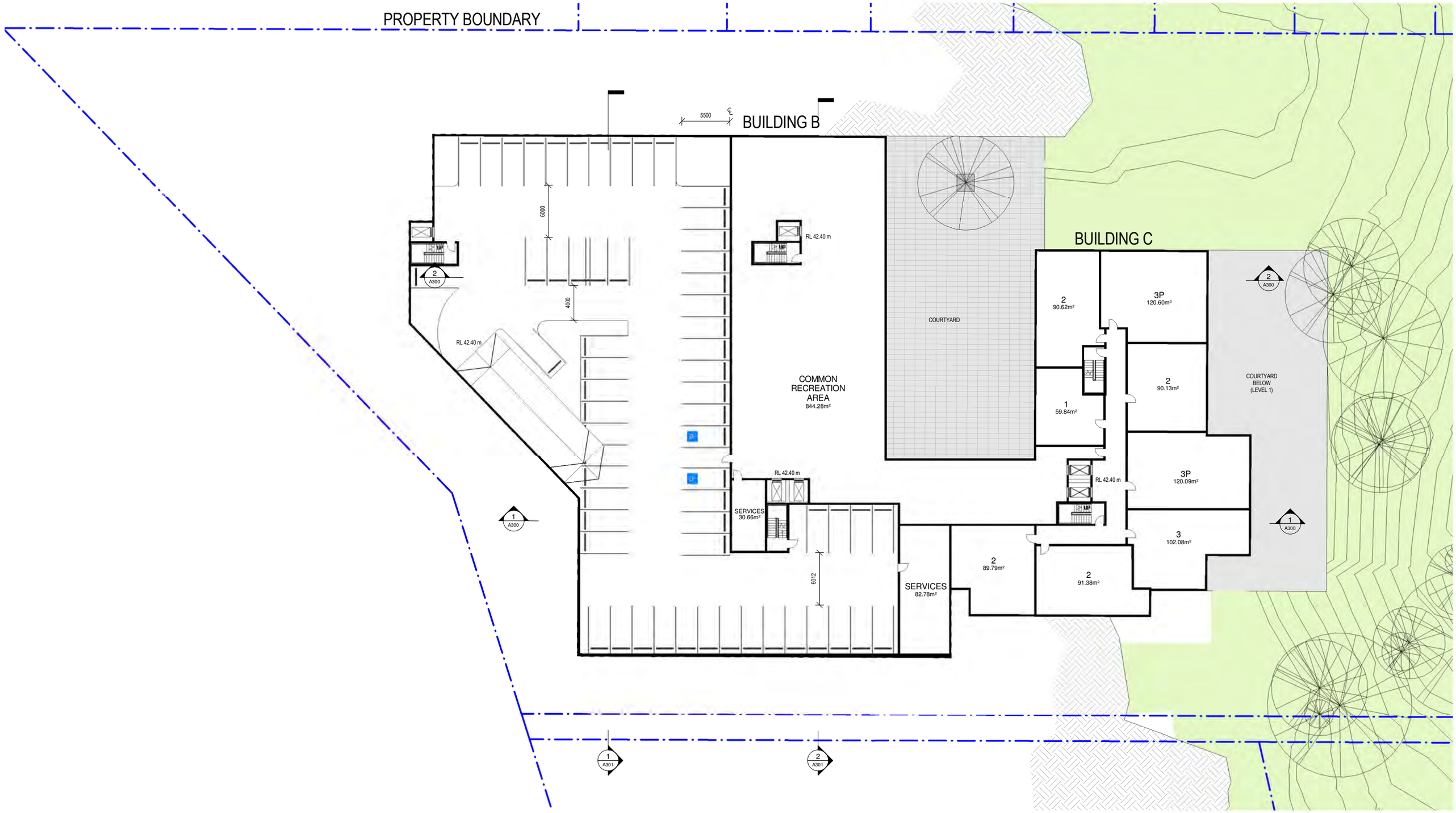
MOOD AND MATERIALS BOARD - INTERIORS

@ A1 21.09.2016

A351 **rev. A**



0 1 2 3 5 10m

SENIORS LIVING VILLAGE PROJECT

266 LOUGUEVILLE RD
LANE COVE
NSW

Australian Unity

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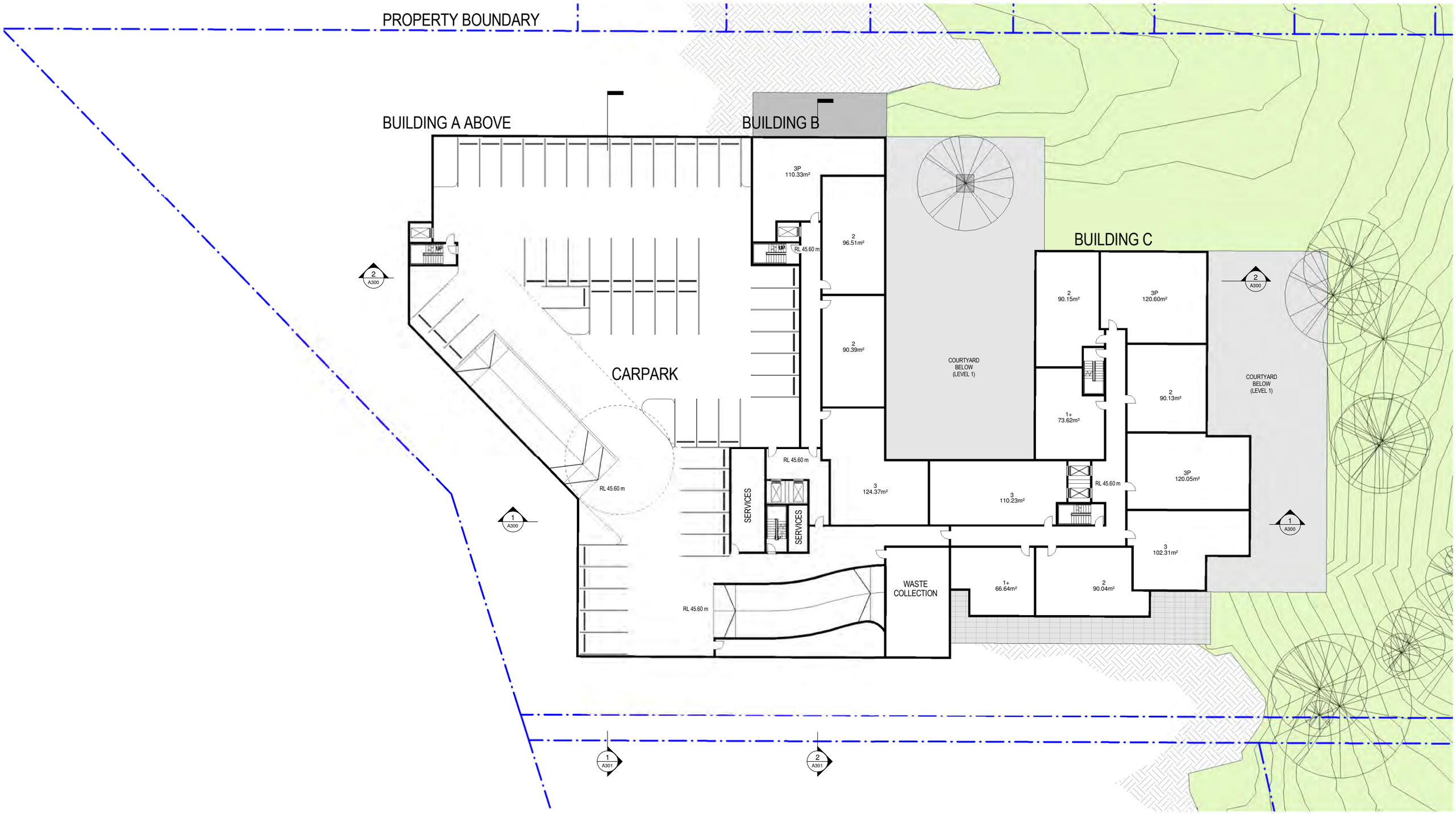
LEVEL 1 FLOOR PLAN (RL 42.400)

1 : 200 @ A1 10.08.2016

A201 **rev. B**



0 1 2 3 5 10m

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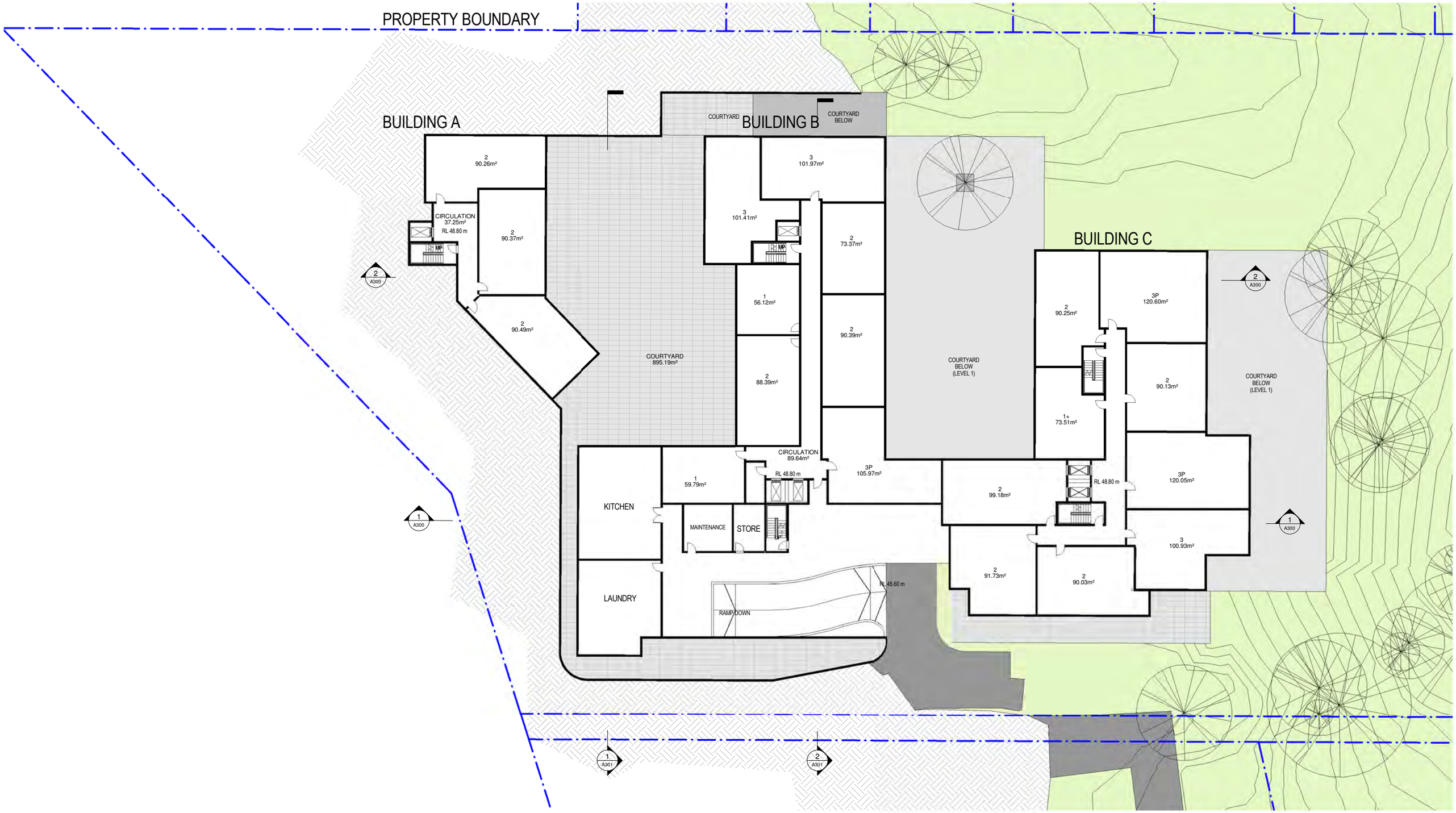
LEVEL 2 FLOOR PLAN (RL45.600)

1 : 200 @ A1 10.08.2016

A202 **rev. B**



0 1 2 3 5 10m

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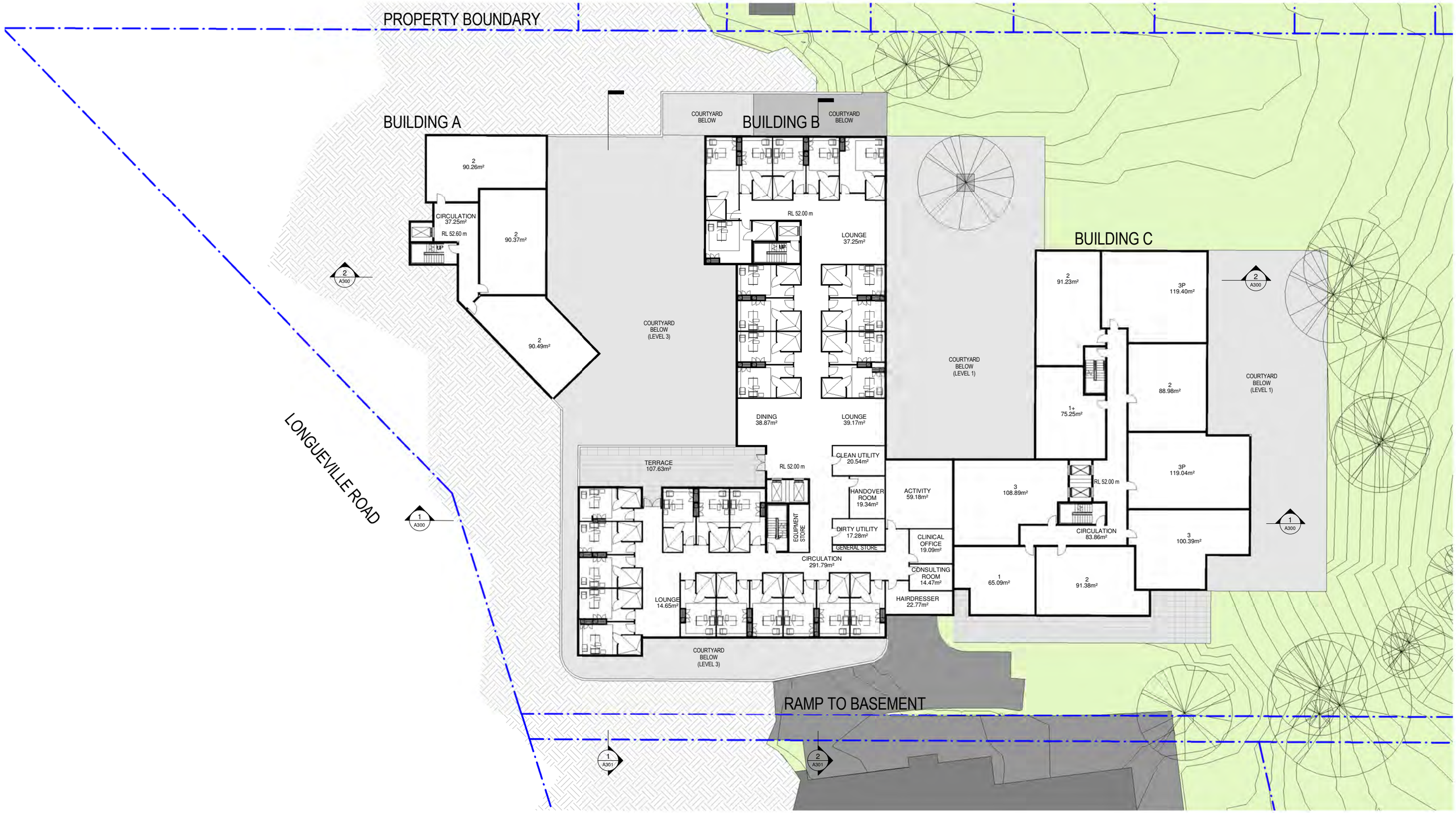
LEVEL 3 FLOOR PLAN (RL48.800)

1 : 200 @ A1 10.08.2016

A203 **rev. B**



0 1 2 3 5 10m

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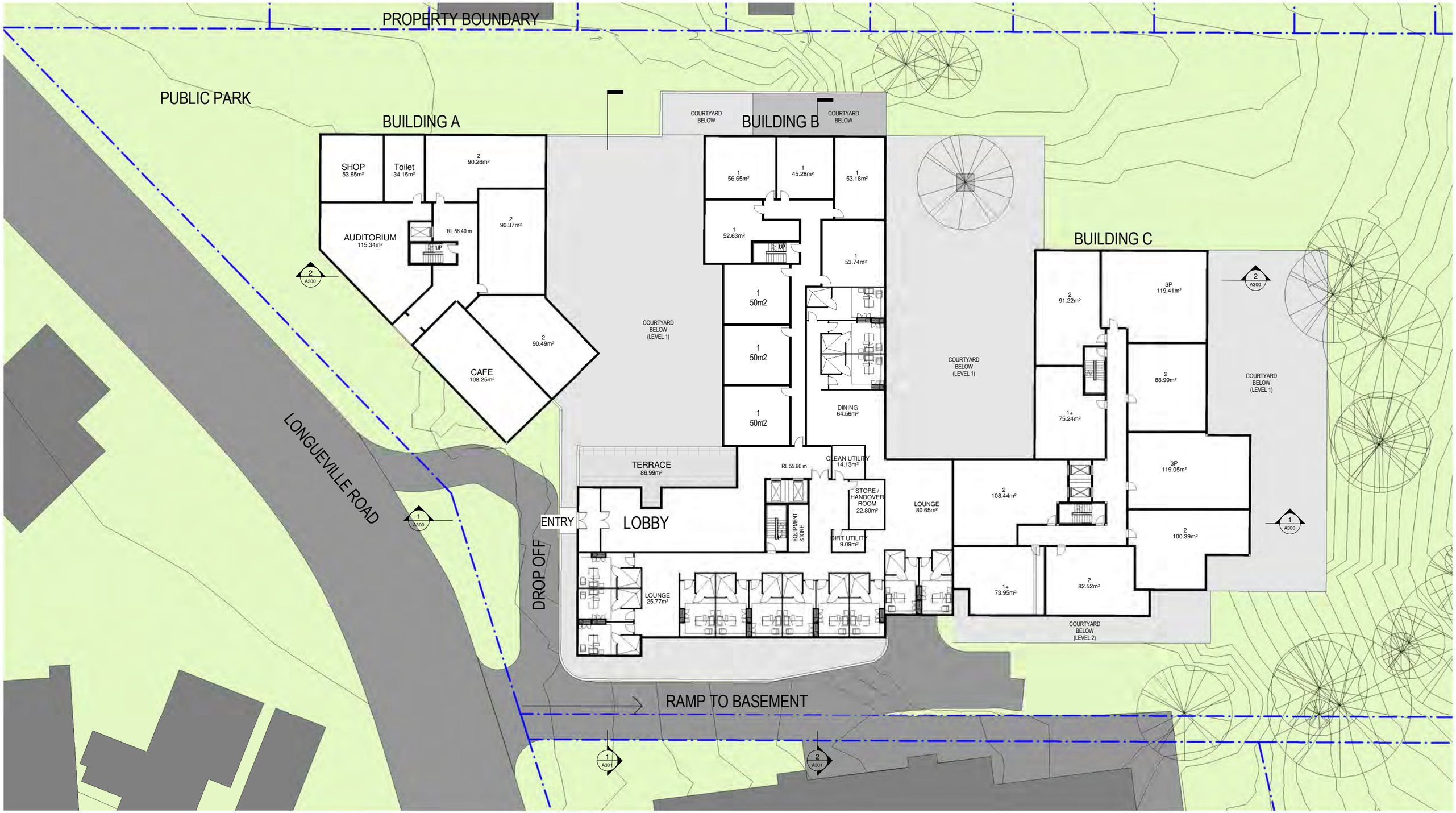
LEVEL 4 FLOOR PLAN (RL52.000)

1 : 200 @ A1 10.08.2016

A204 **rev. B**



0 1 2 3 5 10m

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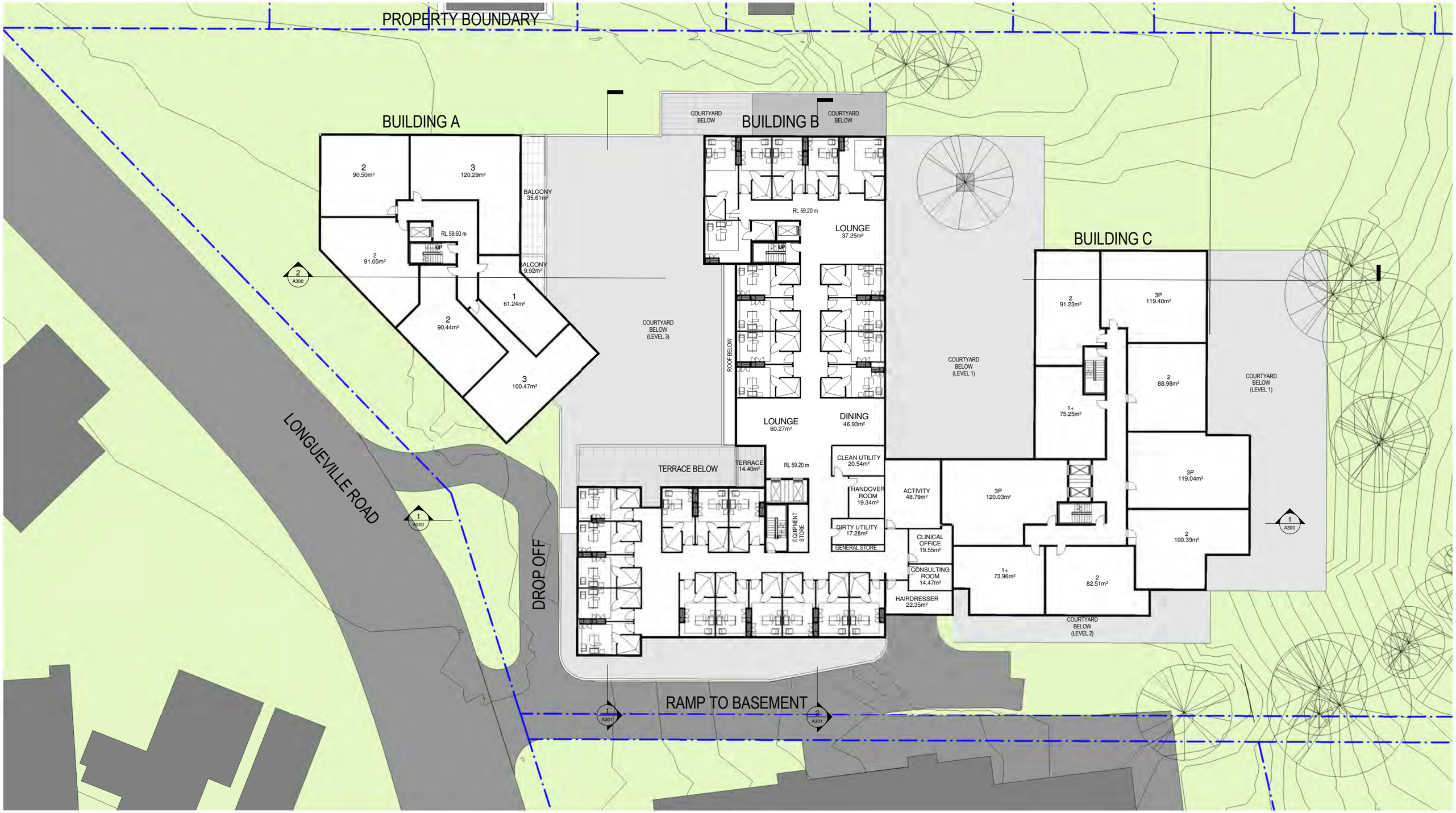
LEVEL 5 FLOOR PLAN (RL 55.600)

1 : 200 @ A1 10.08.2016

A205 **rev. B**



0 1 2 3 5 10m

SENIORS LIVING VILLAGE PROJECT

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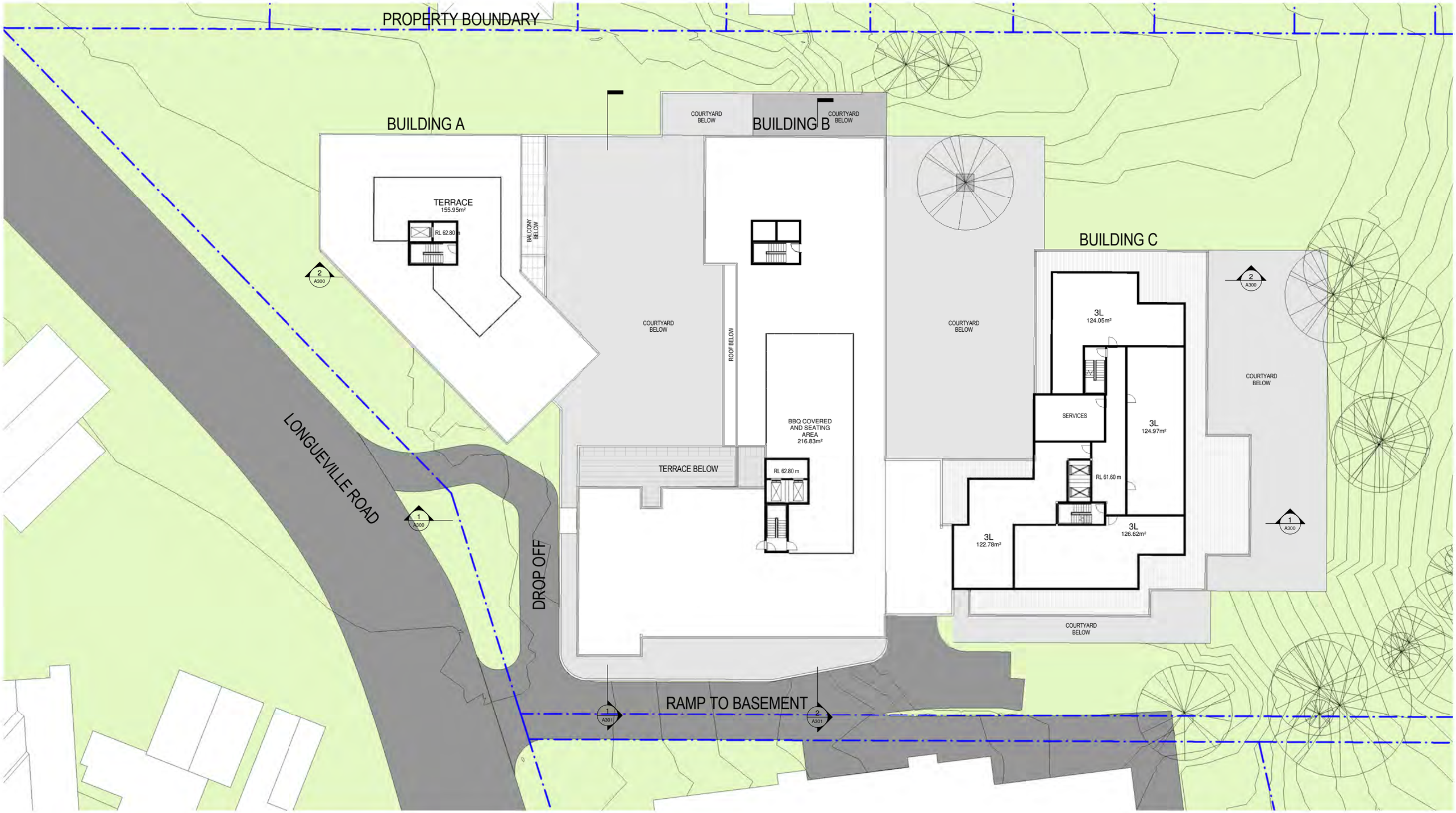
LEVEL 6 FLOOR PLAN (RL 59.200)

1 : 200 @ A1 | 10.08.2016

A206 | **rev. B**



0 1 2 3 5 10m

SENIORS LIVING VILLAGE PROJECT

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LEVEL 7 FLOOR PLAN (RL 62.800)
NON-CONFORMING

1 : 200 @ A1 10.08.2016

A207 **rev. B**

APPENDIX B

HISTORIC RECORDS AND DOCUMENTATION

Figure 11 - Land Reclassification Map

Lane Cove Local Environmental Plan 2009

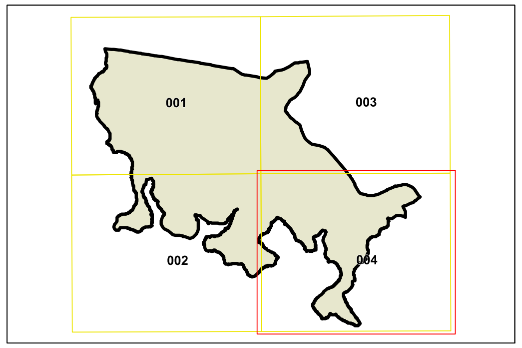
Land Reclassification (Part Lots) Map - Sheet RPL_004

Land Reclassification (Part Lots)

Operational Land

Cadastre

Cadastre 22/12/99 © Land & Property Information (LPI)
Addendum 11/07/14 © Lane Cove Council



N

0 200 400 Metres

Scale: 1:10,000 @ A3

Projection: GDA 1994 MGA Zone 56

Map identification number:
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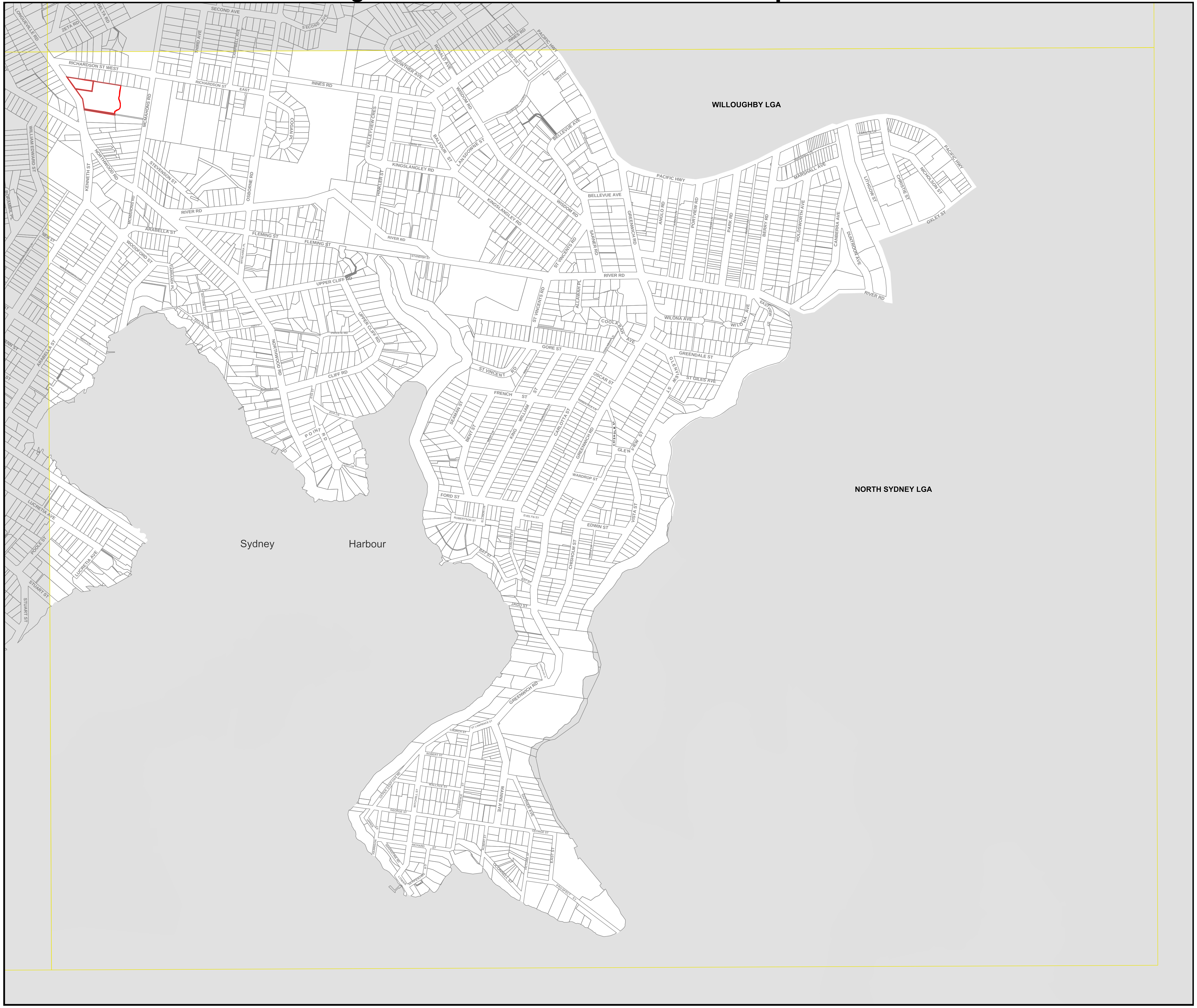


Figure 12 - Land Zoning Map

Lane Cove Local Environmental Plan 2009

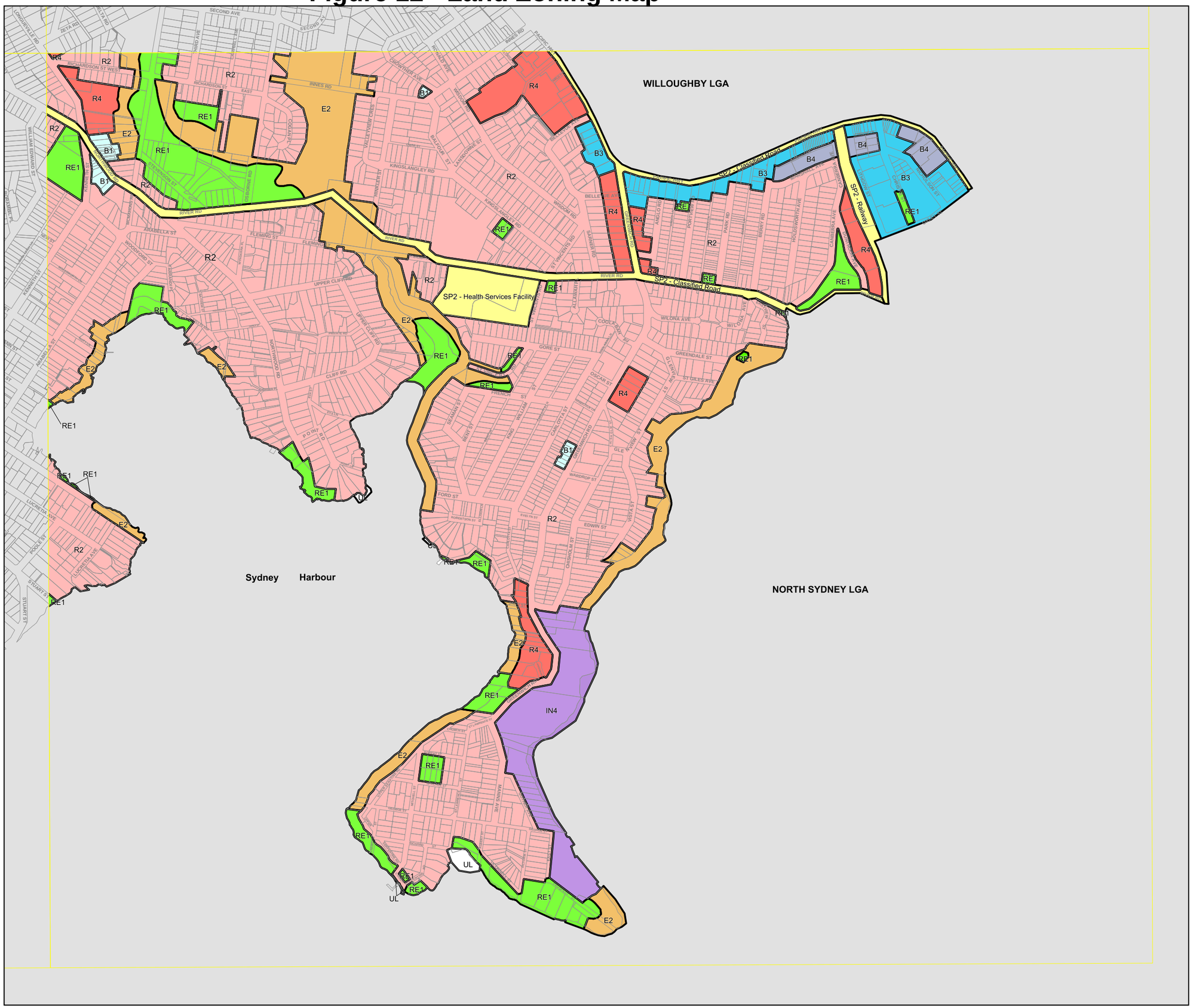
Land Zoning Map - Sheet LZN_004

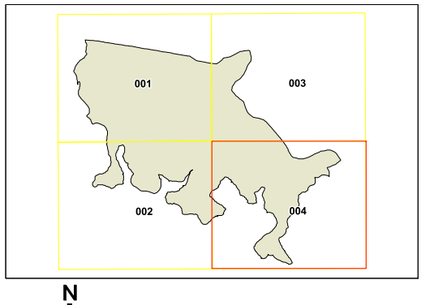
Zone

- B1 Neighbourhood Centre
- B2 Local Centre
- B3 Commercial Core
- B4 Mixed Use
- E2 Environmental Conservation
- E4 Environmental Living
- IN2 Light Industrial
- IN4 Working Waterfront
- R2 Low Density Residential
- R3 Medium Density Residential
- R4 High Density Residential
- RE1 Public Recreation
- SP2 Infrastructure
- UL Unzoned Land

Cadastre

Cadastre 22/12/99 © Land & Property Information (LPI)
Addendum 13/10/2017 © Lane Cove Council





N

0 200 400 Metres

Scale: 1:10,000 @ A3

Projection: GDA 1994
MGA Zone 56

Map identification number:
4700_COM_LZN_004_010_20171013

Figure 13 - Environmental Protection Land Map

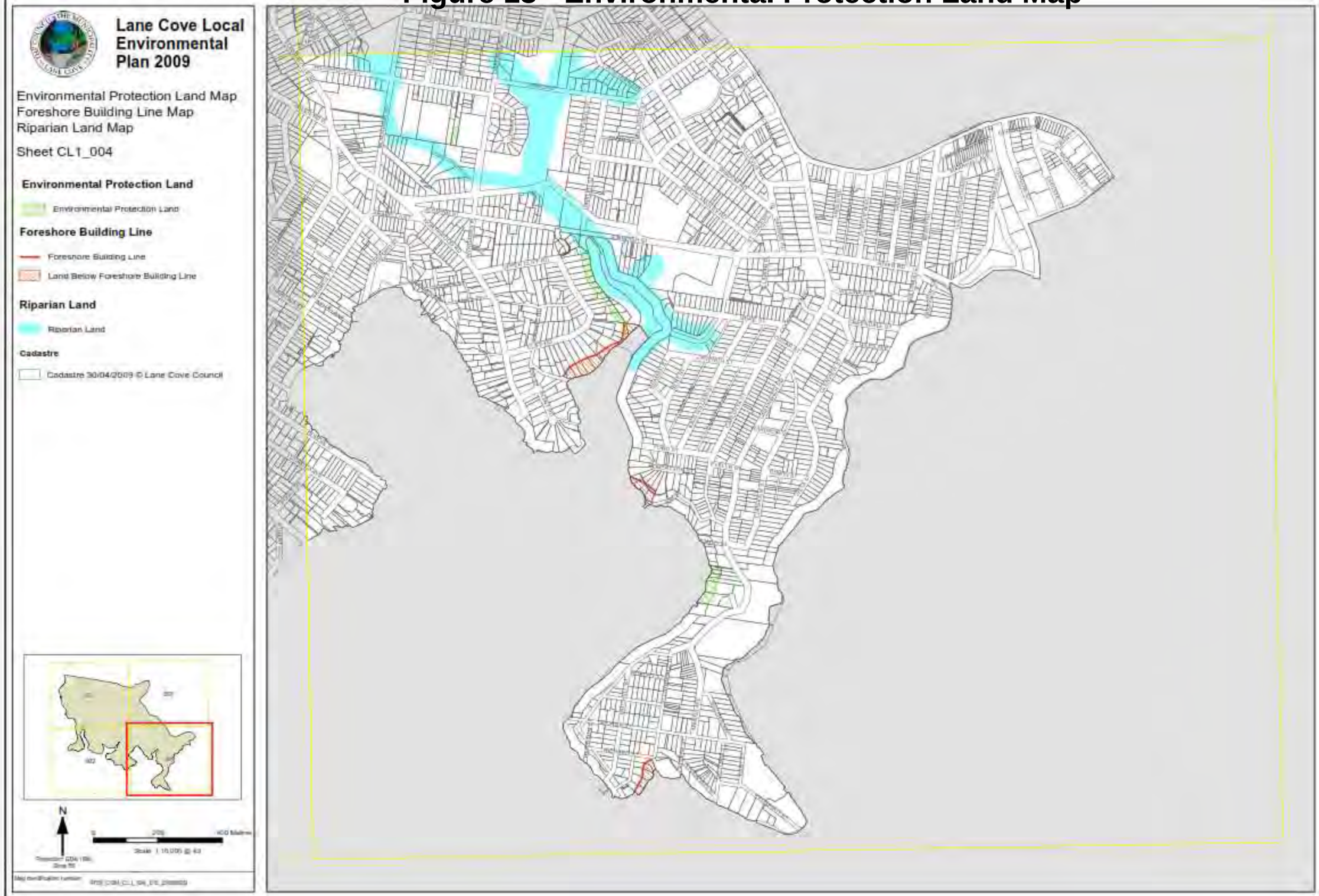
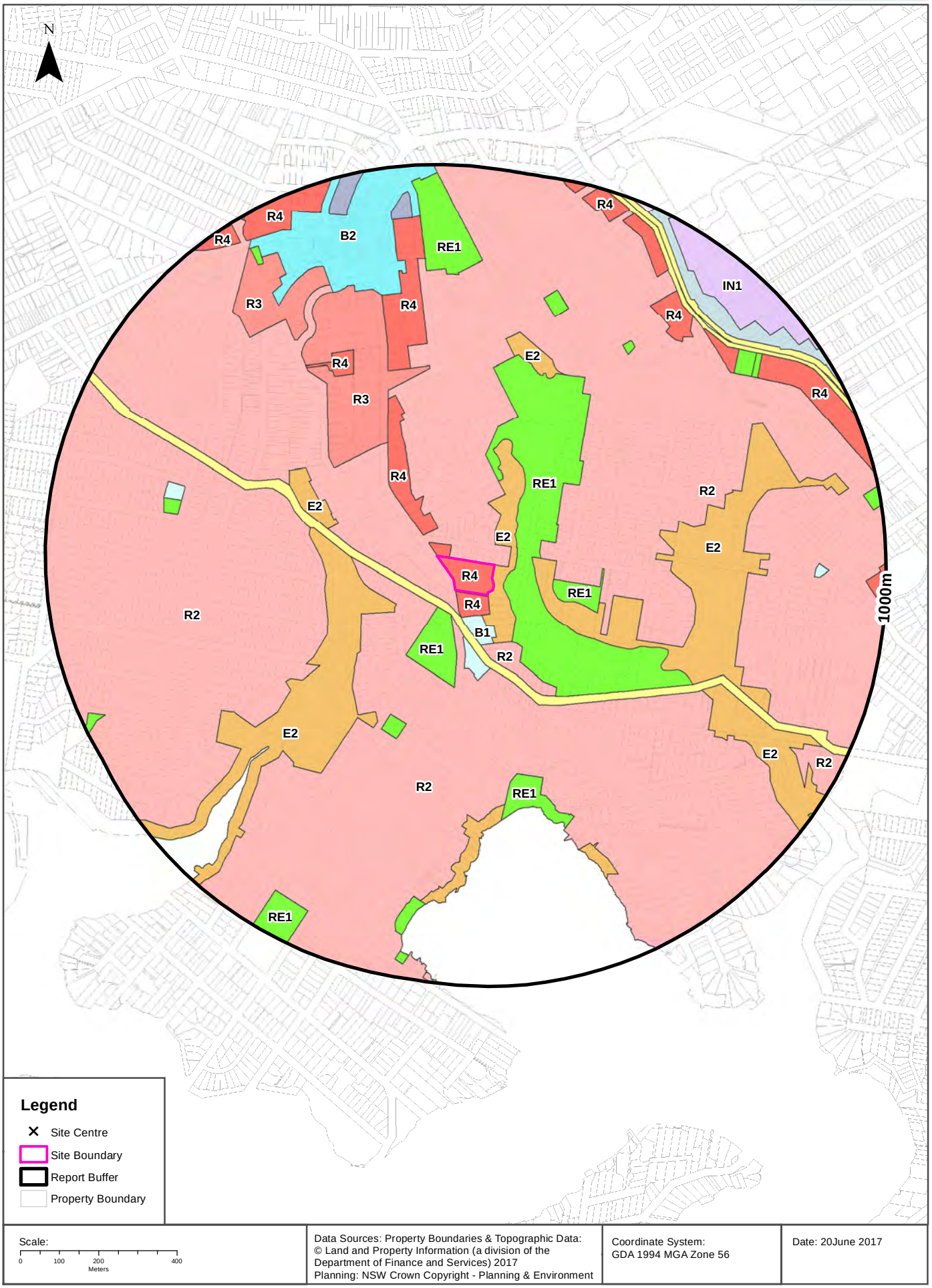


Figure 14 - LEP Planning Zones

LEP Planning Zones

266 Longueville Road, Lane Cove, NSW 2066



Data Sources: Property Boundaries & Topographic Data: © Land and Property Information (a division of the Department of Finance and Services) 2017
Planning: NSW Crown Copyright - Planning & Environment

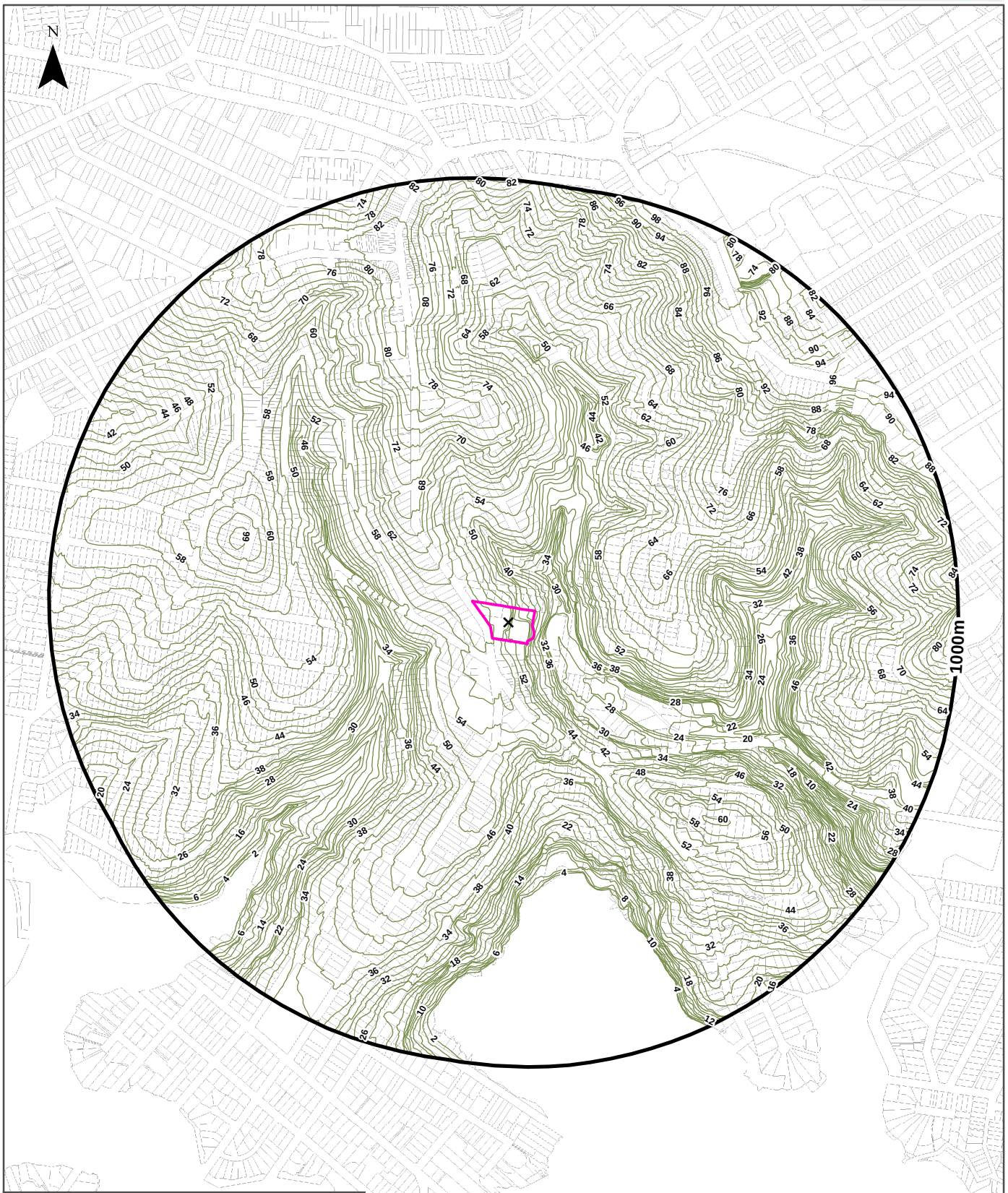
Coordinate System: GDA 1994 MGA Zone 56

Date: 20June 2017

Figure 15 - Elevation Contours

Elevation Contours (m AHD)

266 Longueville Road, Lane Cove, NSW 2066



Legend

- ✕ Site Centre
- Elevation Contour (m AHD)
- Site Boundary
- Report Buffer
- Property Boundary

Accuracy & Currency: This contour data can be up to 0.4 of the contour interval out in height and must therefore not be used for any design or engineering works, but only as a general guide to topography. Gaps may occur along contour lines due to vertical topography, obscured topography in the source photography such as buildings, dense vegetation or dead ground, or the fact that original buildings have been replaced in the intervening thirty years since the original contour capture.

Scale: 0 100 200 400 Meters

Data Sources: Property Boundaries & Topographic Data: © Land and Property Information (a division of the Department of Finance and Services) 2017

Coordinate System: GDA 1994 MGA Zone 56

Date: 20June 2017

Figure 16 - Soil Landscapes

Soil Landscapes

266 Longueville Road, Lane Cove, NSW 2066

Scale: 0 100 200 400 Meters

Data Sources: Property Boundaries & Topographic Data: © Land and Property Information (a division of the Department of Finance and Services) 2017

Coordinate System: GDA 1994 MGA Zone 56

Date: 20June 2017

Soils

266 Longueville Road, Lane Cove, NSW 2066

Soil Landscapes

What are the onsite Soil Landscapes?

Soil Code	Name	Group	Process	Map Sheet	Scale
ALdc	DEEP CREEK		ALLUVIAL	Sydney	1:100,000
RElh	LUCAS HEIGHTS		RESIDUAL	Sydney	1:100,000

What are the Soil Landscapes within the dataset buffer?

Soil Code	Name	Group	Process	Map Sheet	Scale
ALdc	DEEP CREEK		ALLUVIAL	Sydney	1:100,000
COha	HAWKESBURY		COLLUVIAL	Sydney	1:100,000
COwp	WEST PENNANT HILLS		COLLUVIAL	Sydney	1:100,000
DTxx	DISTURBED TERRAIN		DISTURBED TERRAIN	Sydney	1:100,000
ERgn	GLENORIE		EROSIONAL	Sydney	1:100,000
ERgy	GYMEA		EROSIONAL	Sydney	1:100,000
ERla	LAMBERT		EROSIONAL	Sydney	1:100,000
RElh	LUCAS HEIGHTS		RESIDUAL	Sydney	1:100,000
WATER	WATER		WATER	Sydney	1:100,000

Soils Landscapes Data Source : NSW Office of Environment and Heritage
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Figure 17 - Dial Before You Dig Plans

Job No 14698606

Phone: 1100
www.1100.com.au

Caller Details

Contact:	Mr Jon Lawson	**Caller Id:**	956162	**Phone:**	0393713400
Company:	LRM Global	**Mobile:**	0411147722	**Fax:**	0393713499
Address:	65 Stubbs Street Kensington VIC 3031	**Email:**	jon.lawson@lrmglobal.com.au		

Dig Site and Enquiry Details

WARNING: The map below only displays the location of the proposed dig site and does not display any asset owners' pipe or cables. The area highlighted has been used only to identify the participating asset owners, who will send information to you directly.

User Reference: Lane Cove
Working on Behalf of: Private

Enquiry Date:	**Start Date:**	**End Date:**
06/08/2018	31/08/2018	31/08/2018

Address:
266 Longueville Road
Lane Cove NSW 2066

Job Purpose:	**Onsite Activity:**
Design	Planning & Design
Location of Workplace:	**Location in Road:**
Private Property	Not Supplied

- Check the location of the dig site is correct. If not submit a new enquiry.
- If the scope of works change, or plan validity dates expire, resubmit your enquiry.
- Do NOT dig without plans. Safe excavation is your responsibility. If you do not understand the plans or how to proceed safely, please contact the relevant asset owners.

Notes/Description of Works:
Environmental Bores

Your Responsibilities and Duty of Care

- If plans are not received within 2 working days, contact the asset owners directly & quote their Sequence No.
- ALWAYS perform an onsite inspection for the presence of assets. Should you require an onsite location, contact the asset owners directly. Please remember, plans do not detail the exact location of assets.
- Pothole to establish the exact location of all underground assets using a hand shovel, before using heavy machinery.
- Ensure you adhere to any State legislative requirements regarding Duty of Care and safe digging requirements.
- If you damage an underground asset you MUST advise the asset owner immediately.
- By using this service, you agree to Privacy Policy and the terms and disclaimers set out at **www.1100.com.au**
- **For more information on safe excavation practices, visit www.1100.com.au**

Asset Owner Details

The assets owners listed below have been requested to contact you with information about their asset locations within 2 working days.
Additional time should be allowed for information issued by post. It is **your responsibility** to identify the presence of any underground assets in and around your proposed dig site. Please be aware, that not all asset owners are registered with the Dial Before You Dig service, so it is **your responsibility** to identify and contact any asset owners not listed here directly.
** Asset owners highlighted by asterisks ** require that you visit their offices to collect plans.
# Asset owners highlighted with a hash require that you call them to discuss your enquiry or to obtain plans.

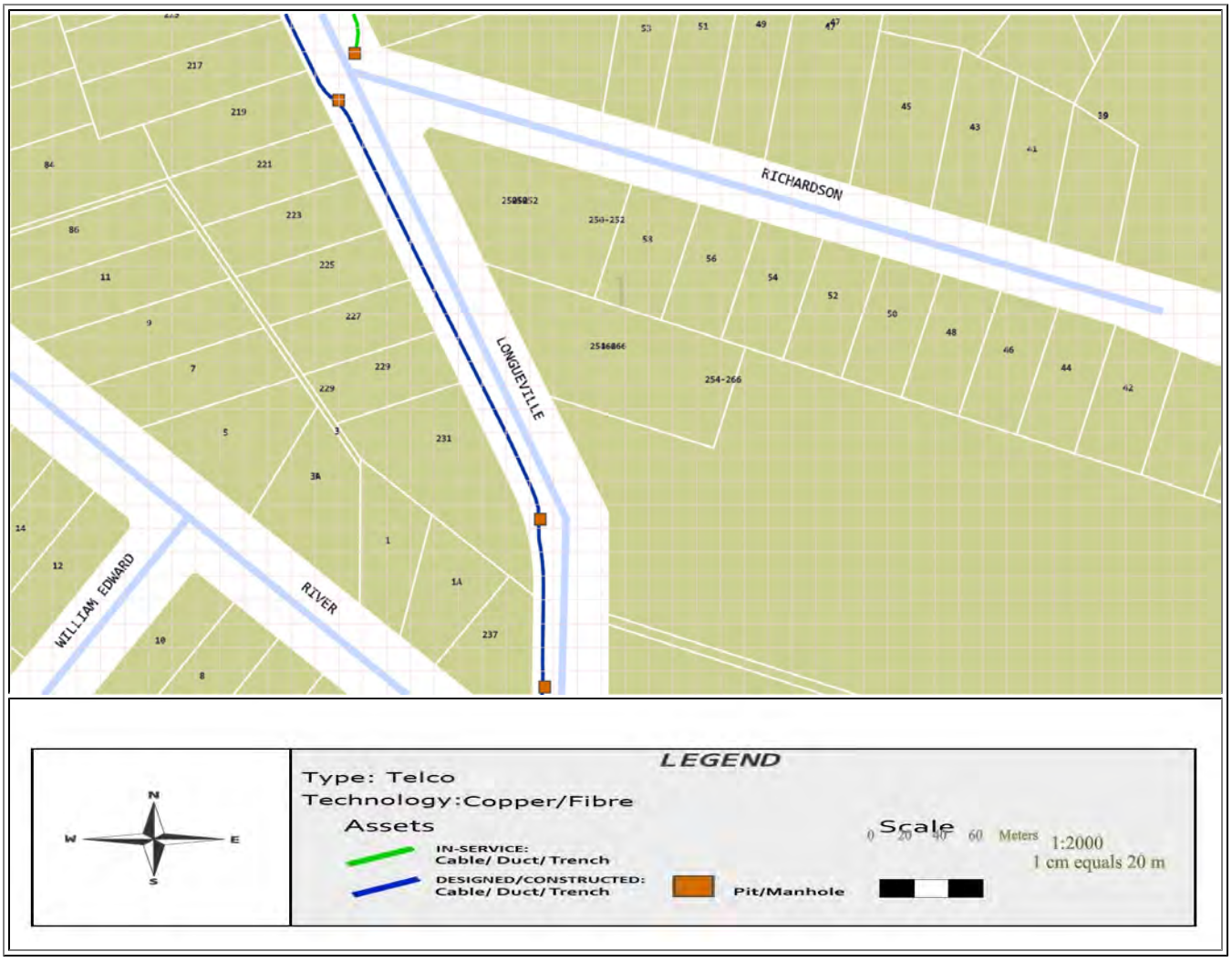
Seq. No.	Authority Name	Phone	Status
74173084	Ausgrid	0249510899	NOTIFIED
74173086	Jemena Gas North	1300880906	NOTIFIED
74173088	NBN Co, NswAct	1800626762	NOTIFIED
74173083	PIPE Networks, Nsw	1800201100	NOTIFIED
74173087	Sydney Water	132092	NOTIFIED
74173085	Telstra NSW, Central	1800653935	NOTIFIED

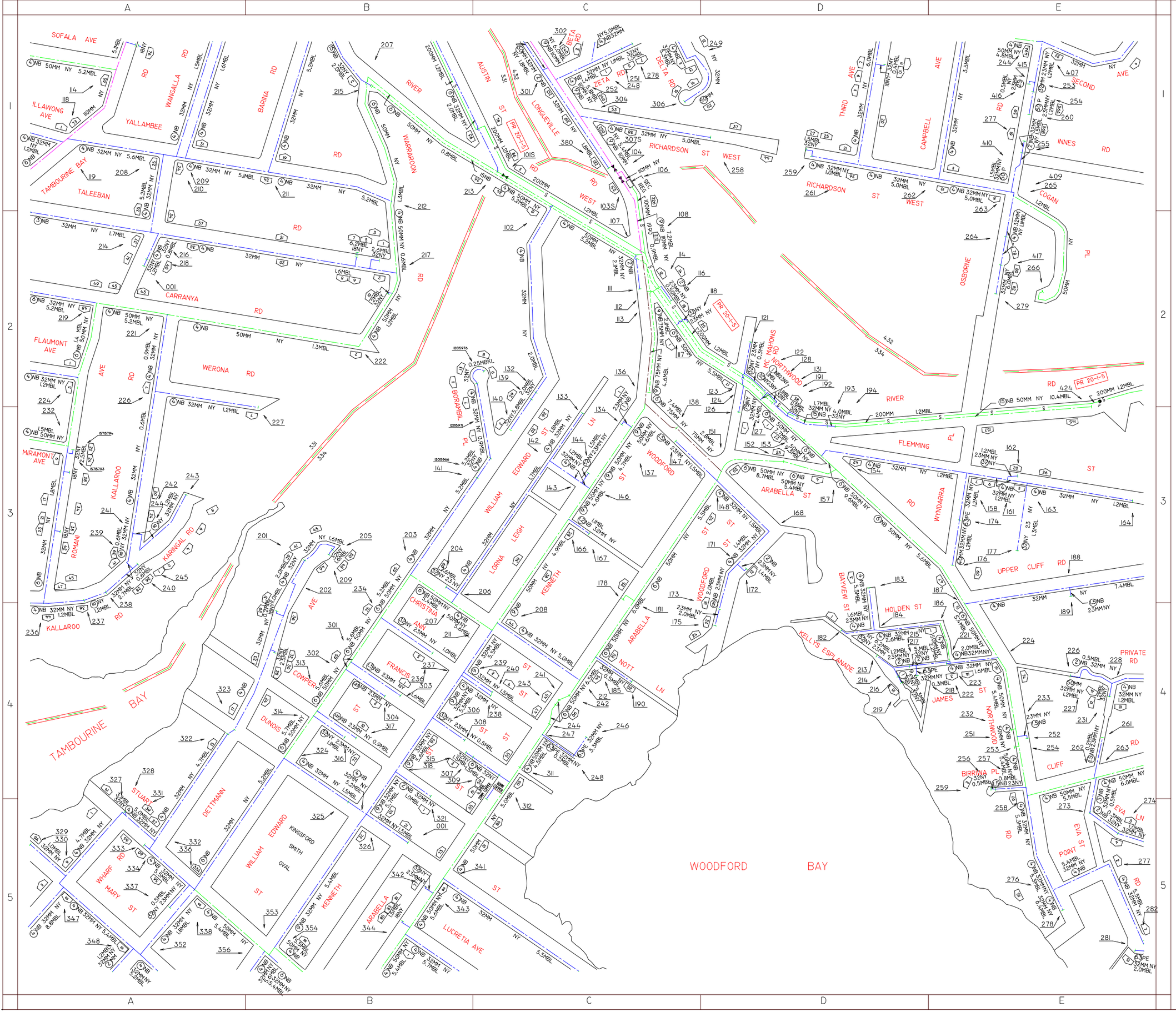
END OF UTILITIES LIST

OCEANIA DAMAGE PREVENTION CONFERENCE
www.oceaniadpc.com
GOLD COAST CONVENTION & EXHIBITION CENTRE
Queensland, Australia
August 20-23, 2018
Platinum Sponsor:
DIAL BEFORE YOU DIG www.1100.com.au
The Essential First Step.

Indicative Plans

Issue Date:	06/08/2018	DIAL BEFORE YOU DIG www.1100.com.au
Location:	266 Longueville Road,Lane Cove,NSW-2066	





GLADESVILLE 6C

SCALE 1:2000

50 0 50 100 150 200

THIS MAP UPDATED ON 04/07/2018
THIS PLAN IS DIAGRAMATIC ONLY. DISTANCES SCALED FROM THIS PLAN MAY NOT BE ACCURATE.
DATE ALTERED:..... BY:.....

G5B	G6A	G6B
G5D	G6C	G6D
G8B	G9A	G9B

ADJOINING MAPS

331 432 334

NETWORK AREA

LANE COVE

MUNICIPALITY AREA

Jemena

KEY

MAX ALLOWABLE OPERATING PRESSURE

T	TRUNK PIPELINE	7000 kPa
P	PRIMARY MAIN	3500 kPa
S	SECONDARY MAIN	1050 kPa
400	NETWORK MAIN	400 kPa
	NETWORK MAIN	300 kPa
	NETWORK MAIN	210 kPa
100	NETWORK MAIN	100 kPa
30	NETWORK MAIN	30 kPa
	NETWORK MAIN	7 kPa
	NETWORK MAIN	2 kPa
	NETWORK MAIN WITH MAIN STUBS	
	PROPOSED MAINS	
PR II-2 3	STEEL MAIN PROJECT NUMBER	
P	PRESSURE MONITORING STATION	
	VALVE	
	SYSTEM PRESSURE REGULATOR	
S	SIPHON	
123	NETWORK NODE	
123S	NETWORK VALVE NODE	
1298	VALVE NUMBER	
6NB	6 INCH CAST IRON MAIN	
150MM	150MM STEEL MAIN	
110MM PE/NY	110MM POLYETHYLENE/NYLON MAIN	
6NB 50MM NY	50MM NYLON INSERTED INTO 6NB MAIN CAST IRON MAIN	
1.2MBL	DISTANCE IN METRES OF MAIN FROM BOUNDARY LINE	
1957	YEAR LAID	
	MUNICIPALITY BOUNDARY	
	NETWORK BOUNDARY	
123	HOUSE NUMBER	

GLADESVILLE 6C

Guide to reading Sydney Water DBYD Plans

February 2015

Asset Information

Legend

Sewer

- Sewer Main (with flow arrow & size type text) — 225 PVC
- Disused Main
- Rising Main
- Maintenance Hole (with upstream depth to invert) — 1.7
- Sub-surface chamber
- Maintenance Hole with Overflow chamber
- Ventshalft EDUCT — VSE
- Ventshaft INDUCT — VSI
- Property Connection Point (with chainage to downstream MH) — 10.6
- Concrete Encased Section — Concrete Encased
- Terminal Maintenance Shaft — TMS
- Maintenance Shaft — MS
- Rodding Point — RP
- Lamphole
- Vertical — VERT
- Pumping Station — SP0882
- Sewer Rehabilitation

Pressure Sewer

- Pressure Sewer Main
- Pump Unit (Alarm, Electrical Cable, Pump Unit) — A
- Property Valve Boundary Assembly
- Stop Valve
- Reducer / Taper
- Flushing Point — FP

Vacuum Sewer

- Pressure Sewer Main
- Division Valve
- Vacuum Chamber
- Clean Out Point

Stormwater

- Stormwater Pipe
- Stormwater Channel
- Stormwater Gully
- Stormwater Maintenance Hole

Property Details

- Boundary Line
- Easement Line
- House Number
- Lot Number
- Proposed Land
- Sydney Water Heritage Site (please call **132 092** and ask for the **Heritage Unit**)

Water

- WaterMain - Potable (with size type text) — 200 PVC
- Disconnected Main - Potable
- Proposed Main - Potable
- Water Main - Recycled
- Special Supply Conditions - Potable
- Special Supply Conditions - Recycled
- Restrained Joints - Potable
- Restrained Joints - Recycled
- Hydrant
- Maintenance Hole
- Stop Valve
- Stop Vale with By-pass
- Stop Valve with Tapers
- Closed Stop Valve
- Air Valve
- Valve
- Scour
- Reducer / Taper
- Vertical Bends
- Reservoir
- Recycled Water is shown as per Potable above. Colour as indicated

Private Mains

- Potable Water Main
- Recycled Water Main
- Sewer Main
- Symbols for Private Mains shown grey

Pipe Types

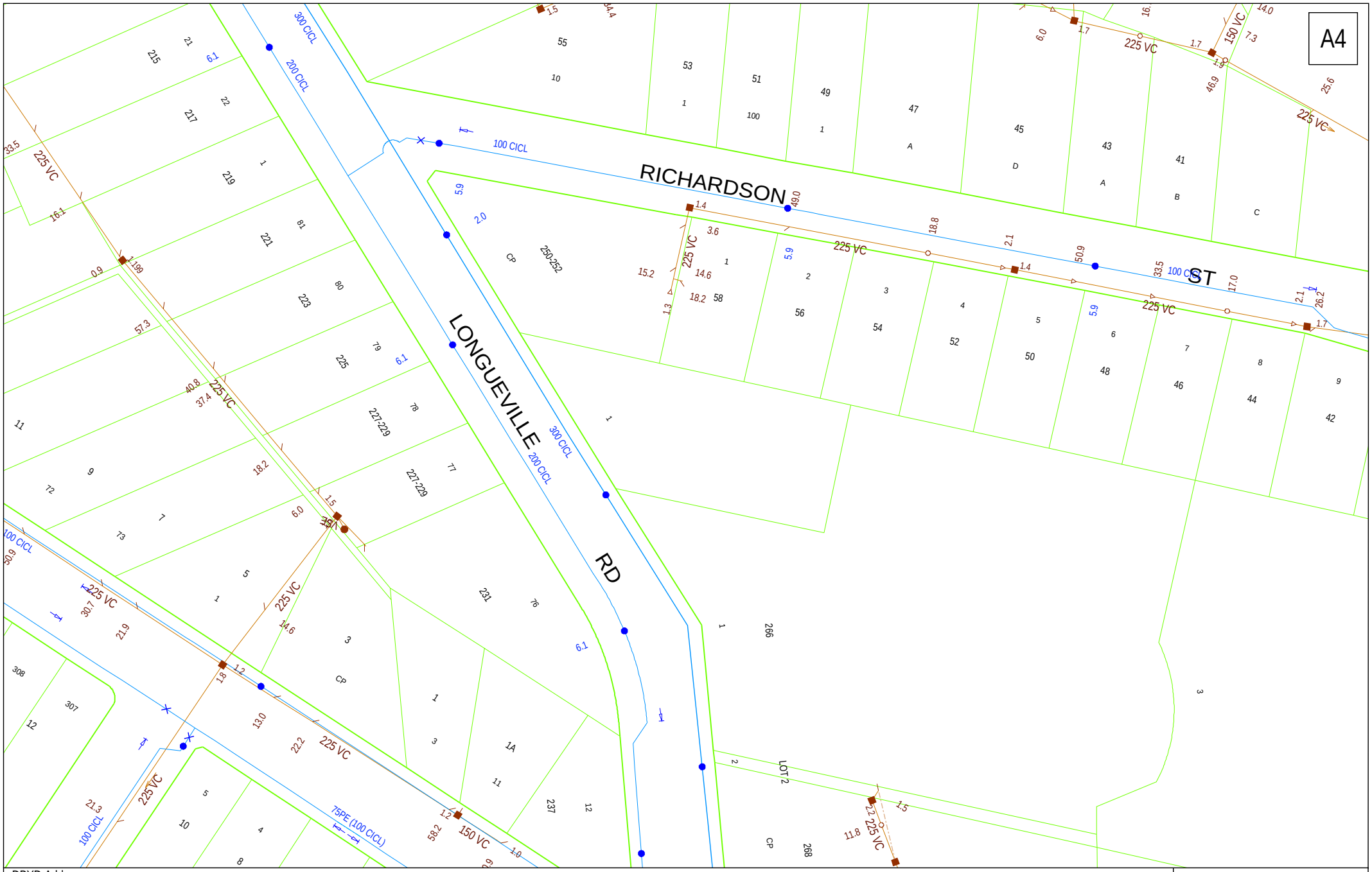
ABS	Acrylonitrile Butadiene Styrene	**AC**	Asbestos Cement
BRICK	Brick	**CI**	Cast Iron
CICL	Cast Iron Cement Lined	**CONC**	Concrete
COPPER	Copper	**DI**	Ductile Iron
DICL	Ductile Iron Cement (mortar) Lined	**DIPL**	Ductile Iron Polymeric Lined
EW	Earthenware	**FIBG**	Fibreglass
FL BAR	Forged Locking Bar	**GI**	Galvanised Iron
GRP	Glass Reinforced Plastics	**HDPE**	High Density Polyethylene
MS	Mild Steel	**MSCL**	Mild Steel Cement Lined
PE	Polyethylene	**PC**	Polymer Concrete
PP	Polypropylene	**PVC**	Polyvinylchloride
PVC - M	Polyvinylchloride, Modified	**PVC - O**	Polyvinylchloride, Oriented
PVC - U	Polyvinylchloride, Unplasticised	**RC**	Reinforced Concrete
RC-PL	Reinforced Concrete Plastics Lined	**S**	Steel
SCL	Steel Cement (mortar) Lined	**SCL IBL**	Steel Cement Lined Internal Bitumen Lined
SGW	Salt Glazed Ware	**SPL**	Steel Polymeric Lined
SS	Stainless Steel	**STONE**	Stone
VC	Vitrified Clay	**WI**	Wrought Iron
WS	Woodstave		

Further Information

Please consult the Dial Before You Dig enquiries page on the Sydney Water website

For general enquiries please call the Customer Contact Centre on **132 092**

In an emergency, or to notify Sydney Water of damage or threats to its structures, call 13 20 90 (24 hours, 7 days)



DBYD Address:
266 Longueville Road
Lane Cove NSW 2066

DBYD Job No: 14698606

DBYD Sequence No: 74173087

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No warranty is given that the information shown is complete or accurate.

SYDNEY WATER CORPORATION

Scale: 1:1000

Date of Production: 06/08/2018

Plan 1 of 1

N

0m 5m 10m 15m 20m

Reading Ausgrid Plans

COMN0119

1 Property Lines

"property line" (PL), sometimes referred to as **"building line" (BL),** is the standard dimensioning reference point on all Ausgrid plans and represents property boundaries.

Typically the PL is the boundary between private property and local council's footpath area or nature reserve. Most residential fences and office blocks are erected along the PL.

"kerb line" (KL) is less frequently referred to on Ausgrid plans, and where used will be identified clearly as KL.

Numbers listed within property boundaries should correspond to recognised "street numbers" (refer to figure 1).

Figure 1

2 Datum References

"datum references" identify distances (in metres) from significant features (such as corners of property boundaries) to reference points such as Ausgrid assets (eg: "conduits", "cables", "joints") (refer to figure 2).

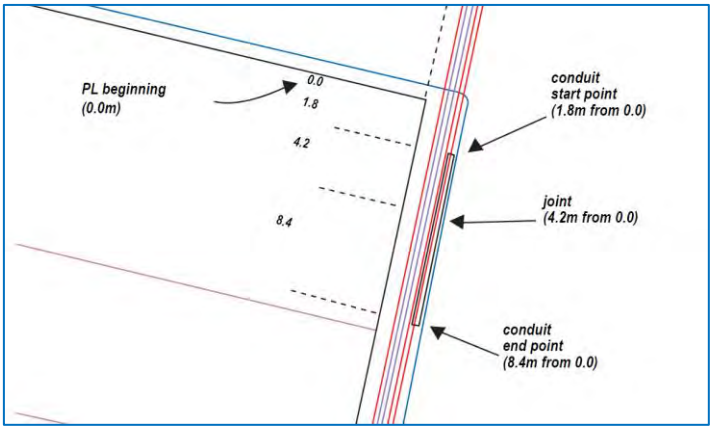


Figure 2

3 Cross Sections

A "cross sections" displayed on Ausgrid plans detail information relating to the relative position (ie: distance from the **"property line",** and the depth of **"cover"**) of Ausgrid assets.

"Cover" is a term used to refer to the depth of cables underground.

A "cross section" leader line will be drawn indicating the location of the displayed **"cable"** or **"conduit"** information on Ausgrid plans.

The distance from **"property line"** (in metres) and depth of **"cover"** (in metres) references are displayed as; ie: 0.6 metres from PL and 0.5 metres underground.

Where distance and cover are not recorded, they will be clearly marked as **"NR".**

NOTE: Distance and cover where indicated may be different to the actual position of the cables (eg: fill may have been placed at site that has changed the ground level).

"PL" distance shown in cross sections is an indicative measure to the centre of the trench allocation from the adjacent property line.

On some plans the "cross sections" may also be shown with a specific number (eg: HR1). This number will match with a cross section detail found in the border of the plot or on a separate plot page (refer to figures 3 and 4).

Figure 3

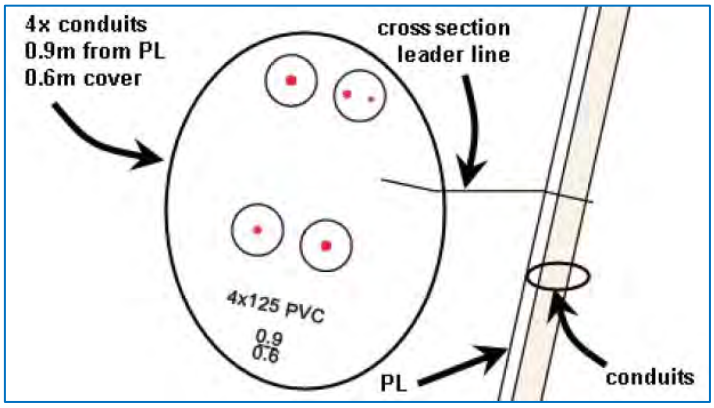


Figure 4

4 Cable Joints and Joint Reports

"cable joints" (numbered individually) and **"joint reports"** (attached to Ausgrid plans) can provide information relating to the relative position of Ausgrid assets, distance from the "property line" (in metres), and the depth of "cover" (in metres) (refer to figures 5 and 6).

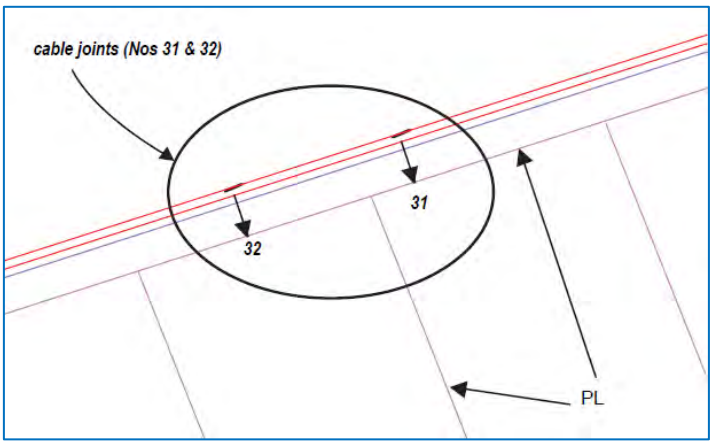


Figure 5

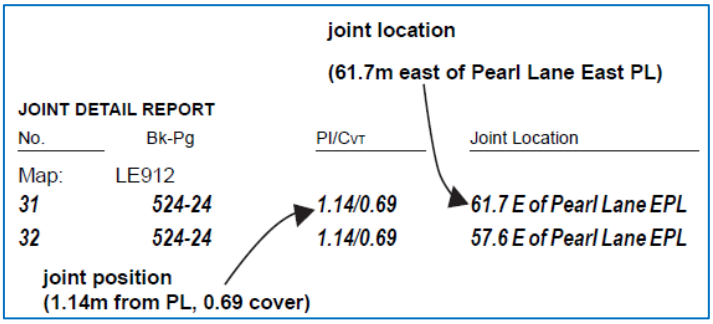


Figure 6

5 Cross Section Detail Boxes

"cross section" detail boxes on the sides of an Ausgrid plan are used when there is insufficient room to display **"cable"** and/or "conduit" information on the Ausgrid plan.

Ausgrid plans (refer to figure 7) are bordered by numeric identifiers along the top and bottom borders and alpha identifiers along the side borders.

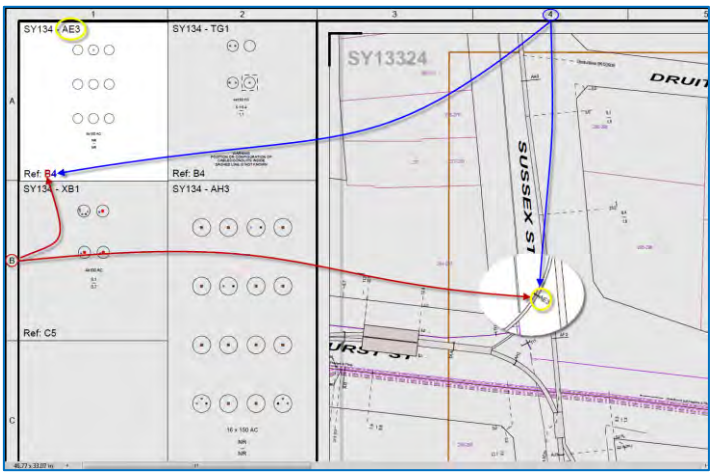


Figure 7

"Cross section" leader line and annotation is drawn on the Ausgrid plan for a reference to **"cable"** and/or **"conduit"** information in the **"cross section"** detail boxes.

6 Pits

Underground **"pits"** are numbered on Ausgrid plans, positioned relative to the **"property line" (PL)**, and can be found on either the footpath (nature strip) or the road (refer figure 8).

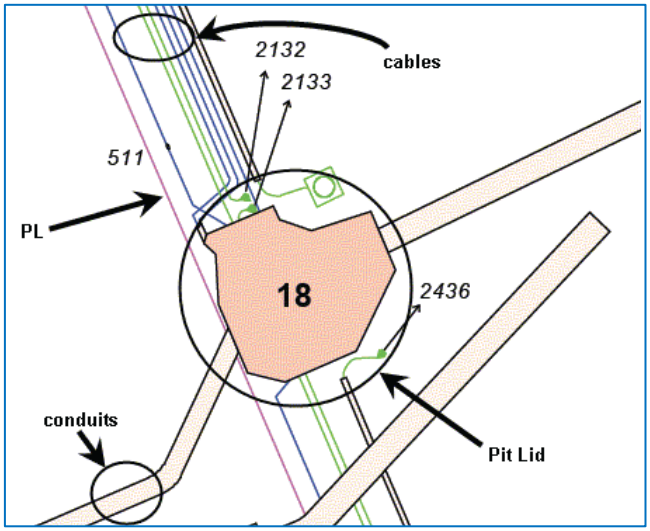


Figure 8

7 Proposal Areas

There are areas where underground work may have been issued for construction by Ausgrid, but details are not yet completely displayed on Ausgrid plans. In such cases a shaded **"proposal area"** is displayed on the Ausgrid plan, indicating underground work may have commenced in the vicinity but is not yet complete.

In some instances cables and other assets within the shaded **"proposal area"** will be shown in a bright magenta colour, indicating that the proposed new work displayed within the shaded area is based on initial planning documentation (refer to figure 9).

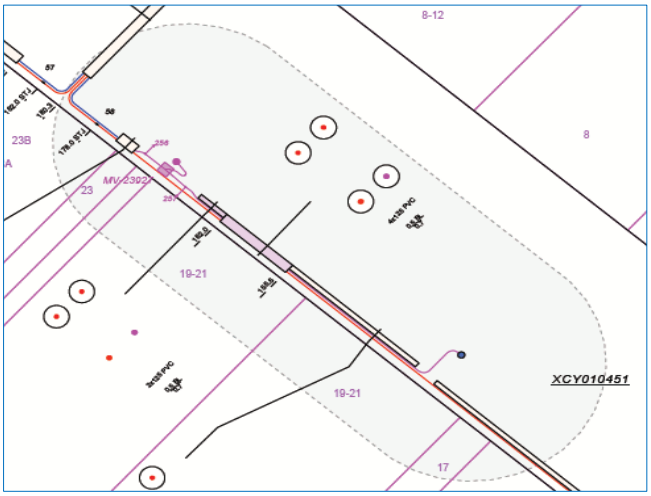


Figure 9

In other instances the shaded **"proposal area"** itself may be shown as a blue colour, indicating that the new work displayed within the shaded area on the Ausgrid plan is yet to include details regarding final depths and dimensioning (refer to figure 10).

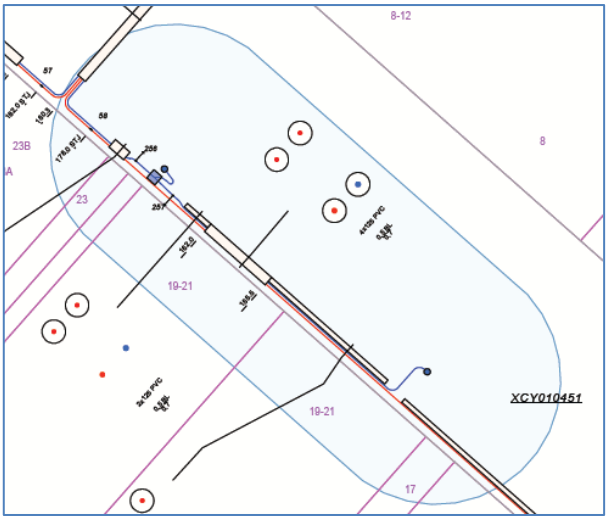


Figure 10

NOTE: In cases where these shaded **"proposal areas"** are displayed on Ausgrid plans.

"Ausgrid's design plans showing the proposed position of its underground cables, overhead lines and structures have been prepared solely for Ausgrid's own planning use. They show the proposed position of such underground cables, overhead lines and structures as proposed at the time of planning and have not necessarily been corrected to take into account any changes to road widths, road levels, fences and buildings subsequent to proposed installation.

Actual installations may vary from proposed installations as it may be necessary to take account of unforeseen above ground or subterranean constructions. Therefore, Ausgrid does not hold out that the design plans show more than the proposed presence or absence of its underground cables, overhead lines and structures in the street and will accept no liability for inaccuracies in the information shown on such design plans from any cause whatsoever."

Any further information regarding information displayed for "proposal areas" can be obtained by contacting the Ausgrid DBYD office at the number indicated on the response to your DBYD enquiry for further information.

8 Ausgrid (ISG) Map Grid

The pale grey line indicates the 1:1000 Ausgrid (ISG) map grid border. The pale grey annotation located in the corners of the Ausgrid plan window, indicates the 1:1000 Ausgrid (ISG) map grid reference.

The 1:1000 Ausgrid (ISG) map grid border and reference on Ausgrid plans should be used when reading the **"joint report"** (see part 4 of this document for more detail) to accurately locate underground cables.

The buffer area shown on the plan should relate to the area requested on the original Dial Before you Dig request.

The grid index box can be used for reference where necessary (located in the bottom right corner of the Ausgrid plans), and will also indicate the buffer area shown on the plan.

9 Ausgrid "Distribution" and "Transmission" Plans

The Ausgrid plans supplied may identify both **"distribution"** and **"transmission"** voltage assets for the area defined in the DBYD request (refer to figure 11).

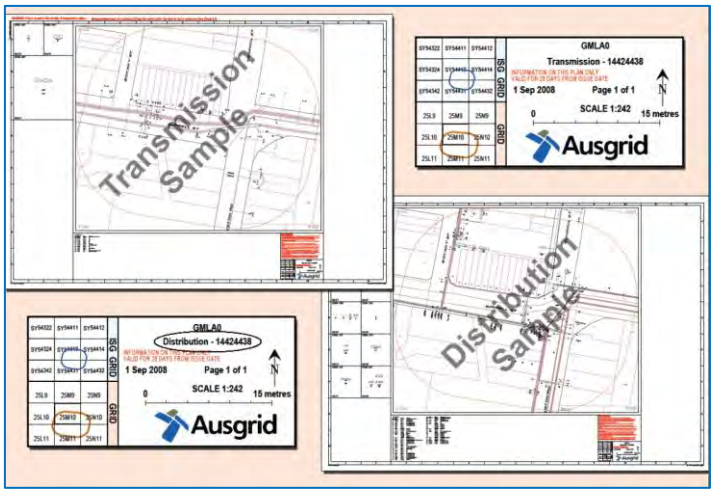


Figure 11

In the Sydney region, the Ausgrid plans are separately labelled as "Distribution **– nnnnnnn"** and **"Transmission – nnnnnnn"**, where **"nnnnnnn"** refers to the DBYD sequence number quoted.

In the Hunter region, the Ausgrid plans show combined **"distribution"** and **"transmission"** voltage assets, and are clearly labelled as **"Distr + Trans –** nnnn**nnn"** where **"nnnnnnn"** refers to the DBYD sequence number.

In the Hunter region, some DBYD requests are covered by PENGUIN grid references. In such cases, the Ausgrid Plans show the grid quoted with a cross-reference to a corresponding Ausgrid (ISG) map grid (eg: PENGUIN 136B3 – DP711, where DP711 is the Ausgrid (ISG) grid) to optimise the legibility of plans due to PENGUIN grid scale.

Some Hunter plans may have transmission cables in the area, when these cables are present there will be a warning printed at the top of the plan supplied:

WARNING: If there is work in the vicinity of transmission cables, Ausgrid must be contacted at least two weeks before the work is due to commence.

10 "Shifting Land Base" on Ausgrid Distribution and Transmission Plans

In some instances, the plans supplied may indicate road or property outlines that appear to have shifted in relation to the Ausgrid assets displayed (refer to figure 12).

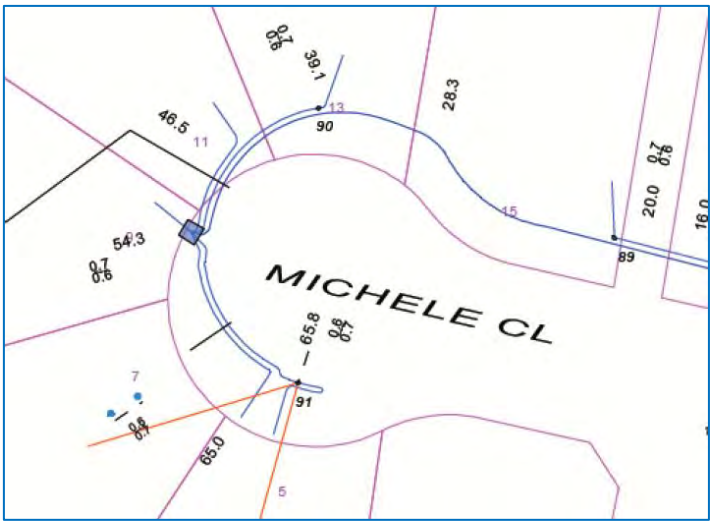


Figure 12

In such instances, always refer to the **"property line"** (in metres) and depth of **"cover"** (in metres) references displayed on the nearest relevant **"cross sections"** to obtain Ausgrid asset location information (*see* Reading Ausgrid Plans, clause 3, Cross Sections for more detail).

11 "Underground Earthing Infrastructure"

In some instances, the plans supplied may also indicate the presence of underground earthing infrastructure associated with underground and/or overhead Ausgrid assets.

The **"Earth Point"** symbol (refer to figure 13) will be shown on plans to minimize risk of disturbance or damage to any Ausgrid underground earthing infrastructure in the vicinity.

Figure 13

12 Aluminium Single Core Cables – Specific Excavation Hazard

Certain cables specifically illustrated in figures 14 and 15 below are susceptible to deterioration that may pose a risk of electric shock when working near them, particularly in damp ground.

For all work on or near Ausgrid's network (where workers have been trained in Ausgrid's "Work Near Underground Power Lines" course) the work practices outlined in NS199 "Safe Electrical Working on Low Voltage Assets" Section 7 for work near low voltage aluminium single core cable must be adhered to. Further information is also available to Accredited Service Providers in Safety Alert SA06_15 issued May 2015.

All other persons must contact Ausgrid before excavating near these cables to arrange for appropriate precautions to be applied.

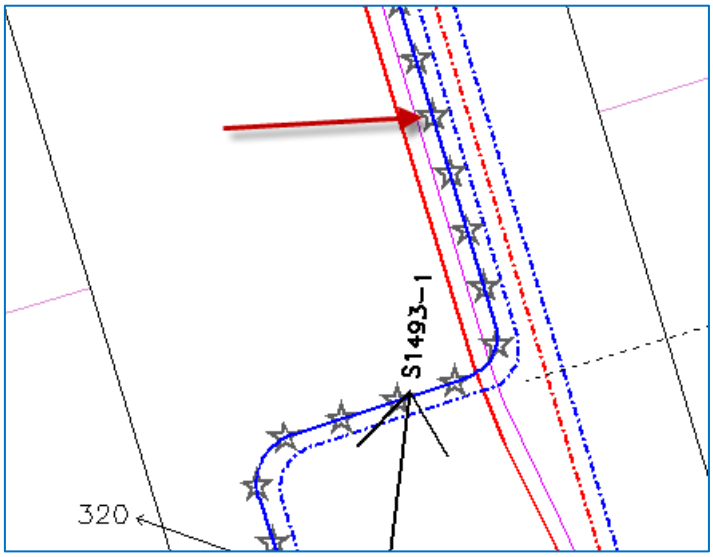


Figure 14

The **"star"** symbols over the cable indicate that it is susceptible to this deterioration.

Cables that are in duct lines have this symbology covered so an at-risk cable is indicated only within a cross section by a **"#"** appended to its cable code as illustrated below.

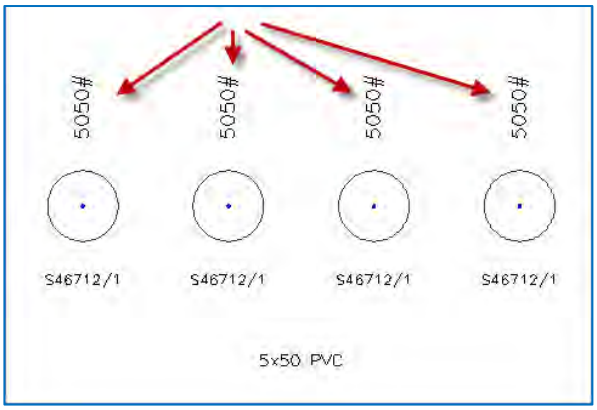
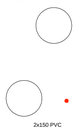


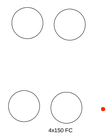
Figure 15

GL632 - AR1



Ref: A4

GL632 - AS1



Ref: B3

JOINT DETAIL REPORT

No.	Blk Pg	PSCvr	Joint Location
Map: GL632			
7	1413-29	0.710-71	25.6 S OF RICHARDSON ST SPL

WARNING

Ausgrid's plans show the position of assets at the time of installation and may not account for subsequent changes to road alignments, fences or buildings. The plans show no more than the presence or absence of Ausgrid assets in the street.

Persons working near electricity networks must exercise care and will be held responsible for any damage caused.

You must excavate by hand or use vacuum excavation to establish the location of Ausgrid underground cables and associated assets.

Underground: Working near a cable may result in electric shock even if no contact is made. Any work in the vicinity of any cable should only be performed using safe work methods developed in accordance with the recommendations included in WorkCover Code of Practice for Excavation and WorkCover Guide for Work Near Underground Assets

as well as recommendations of Ausgrid's Network Standard NS156.

Overhead: Do not excavate near poles or towers until the stability of the foundation has been assessed by Ausgrid. Cables or earth conductors may be present close to substations, poles or towers.

Workers must maintain safe approach distances and follow applicable WorkCover Codes of Practice.

NOTE: 1. You must keep Ausgrid plans on site during excavation works. If the people actually performing the excavation works do not know how to read and interpret Ausgrid's plans, then the work must be directed by a person who knows how to read and interpret the plans. 2. This information includes data from the NSW Digital Cadastral Database by Land and Property Information (c) 2016, used under Creative Commons licence version 4.0.

GL63122	GL63211	GL63212
GL63124	GL63213	GL63214
GL63142	GL63231	GL63232
2SD4	2SE4	2SF4
2SD5	2SE5	2SF5
2SD6	2SE6	2SF6

ISG GRID

GRID

GMLA0

Distribution - 74173084

INFORMATION ON THIS PLAN ONLY VALID FOR 30 DAYS FROM ISSUE DATE

6 Aug 2018

Page 1 of 1

1:161

0 — 10 metres

N

Ausgrid

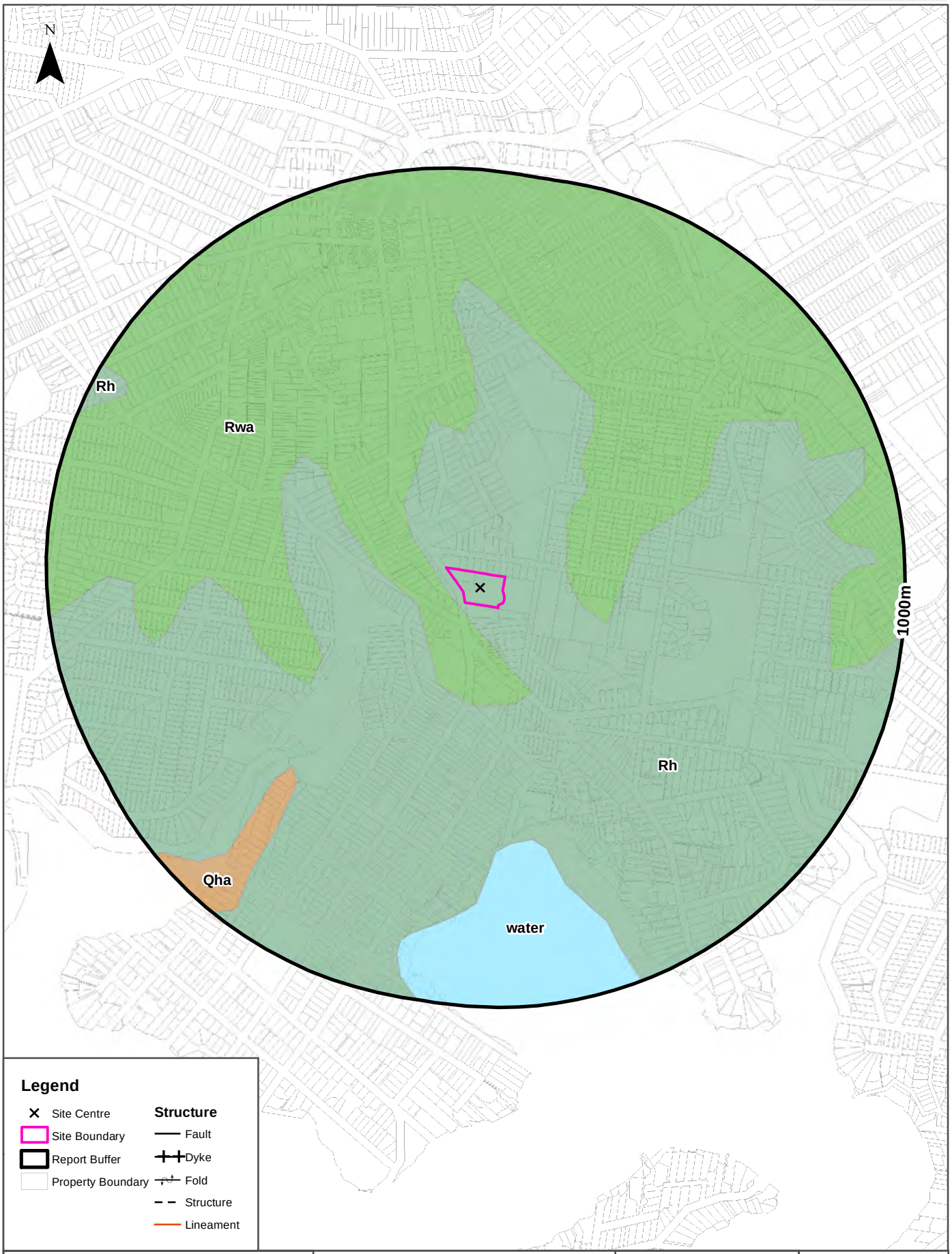
A0 MOCS_std_plot

N_74173084_GMLA0_1.tmpl

Figure 18 - Geology 1:100,000 Plan

Geology 1:100,000

266 Longueville Road, Lane Cove, NSW 2066



Scale: 0 100 200 400 Meters

Data Sources: Property Boundaries & Topographic Data: © Land and Property Information (a division of the Department of Finance and Services) 2017

Coordinate System: GDA 1994 MGA Zone 56

Date: 20June 2017

Geology

266 Longueville Road, Lane Cove, NSW 2066

Geological Units

What are the Geological Units onsite?

Symbol	Description	Unit Name	Group	Sub Group	Age	Dom Lith	Map Sheet	Dataset
Rh	Medium to coarse grained quartz sandstone, very minor shale and laminate lenses				Triassic		Sydney	1:100,000

What are the Geological Units within the dataset buffer?

Symbol	Description	Unit Name	Group	Sub Group	Age	Dom Lith	Map Sheet	Dataset
Qha	Silty to peaty quartz sand, silt, and clay. Ferruginous and humic cementation in places. Common shell layers				Quaternary		Sydney	1:100,000
Rh	Medium to coarse grained quartz sandstone, very minor shale and laminate lenses				Triassic		Sydney	1:100,000
Rwa	Black to dark grey shale and laminate	Ashfield Shale	Wianamatta Group		Triassic		Sydney	1:100,000
water							Sydney	1:100,000

Geological Structures

What are the Geological Structures onsite?

Feature	Name	Description	Map Sheet	Dataset
No features				1:100,000

What are the Geological Structures within the dataset buffer?

Feature	Name	Description	Map Sheet	Dataset
No features				1:100,000

Geological Data Source : NSW Department of Industry, Resources & Energy
© State of New South Wales through the NSW Department of Industry, Resources & Energy

Figure 19 - Historical Maps (1917, 1949, 1975)

Historical Map 1975

266 Longueville Road, Lane Cove, NSW 2066

Scale: 0 250 500 Meters 1,000

Data Sources: Sheet 9130 Edition 1 Sydney, NSW National Topographic Map Series Commonwealth of Australia

Coordinate System: GDA 1994 MGA Zone 56

Date: 20 June 2017

Historical Maps ca.1949

266 Longueville Road, Lane Cove, NSW 2066

Scale: 0 250 500 Meters 1,000

Data Sources: Australia 1:63360 Sheet 423
Sydney, New South Wales
Prepared by Commonwealth Section Imperial General Staff

Coordinate System:
GDA 1994 MGA Zone 56

Date: 20 June 2017

Historical Maps ca.1917

266 Longueville Road, Lane Cove, NSW 2066

Scale: 0 250 500 1,000 Meters

Data Sources: Australia 1:63360 Sheet 423
Sydney, New South Wales
Prepared by Commonwealth Section Imperial General Staff

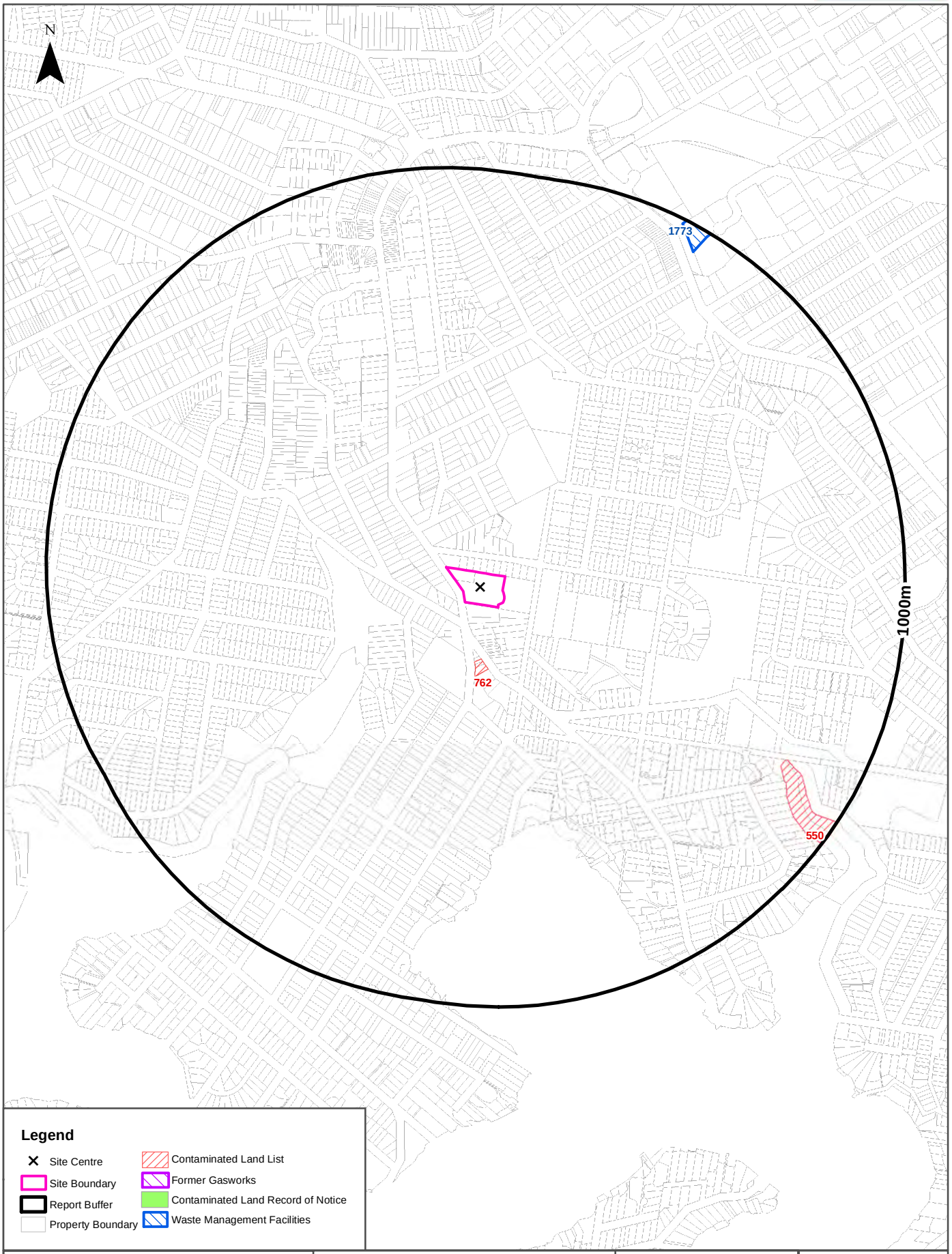
Coordinate System:
GDA 1994 MGA Zone 56

Date: 20 June 2017

Figure 20 - Contaminated Land & Waste Management Facilities

Contaminated Land & Waste Management Facilities

266 Longueville Road, Lane Cove, NSW 2066



Scale: 0 100 200 400 Meters

Data Sources: Property Boundaries & Topographic Data: © Land and Property Information (a division of the Department of Finance and Services) 2017

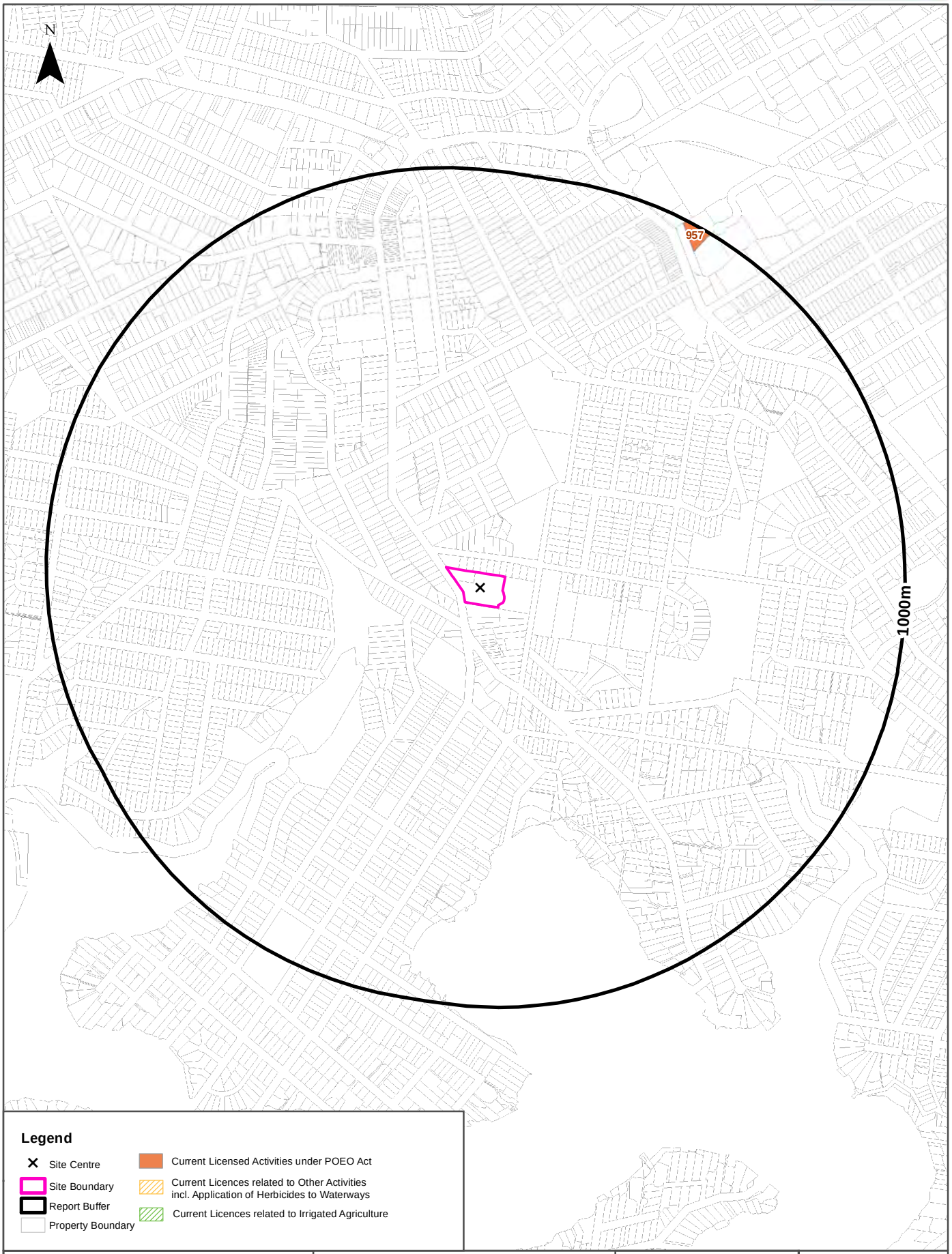
Coordinate System: GDA 1994 MGA Zone 56

Date: 20June 2017

Figure 21 - Current EPA Licensed Activites

Current EPA Licensed Activities

266 Longueville Road, Lane Cove, NSW 2066



Scale: 0 100 200 400 Meters

Data Sources: Property Boundaries & Topographic Data: © Land and Property Information (a division of the Department of Finance and Services) 2017

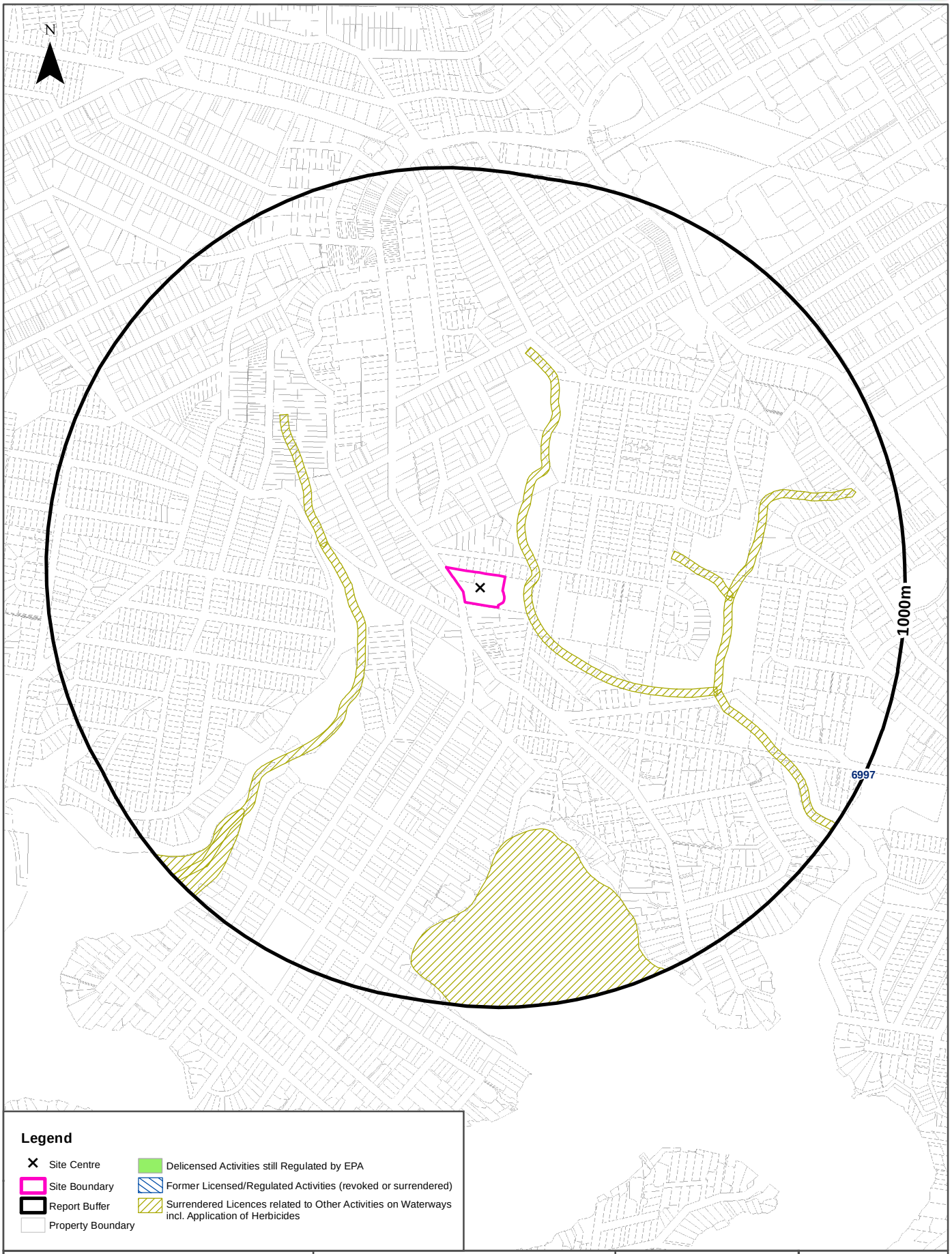
Coordinate System: GDA 1994 MGA Zone 56

Date: 20June 2017

Figure 22 - Delicensed & Former Licensed EPA Activities

Delicensed & Former Licensed EPA Activities

266 Longueville Road, Lane Cove, NSW 2066



Scale: 0 100 200 400 Meters

Data Sources: Property Boundaries & Topographic Data: © Land and Property Information (a division of the Department of Finance and Services) 2017

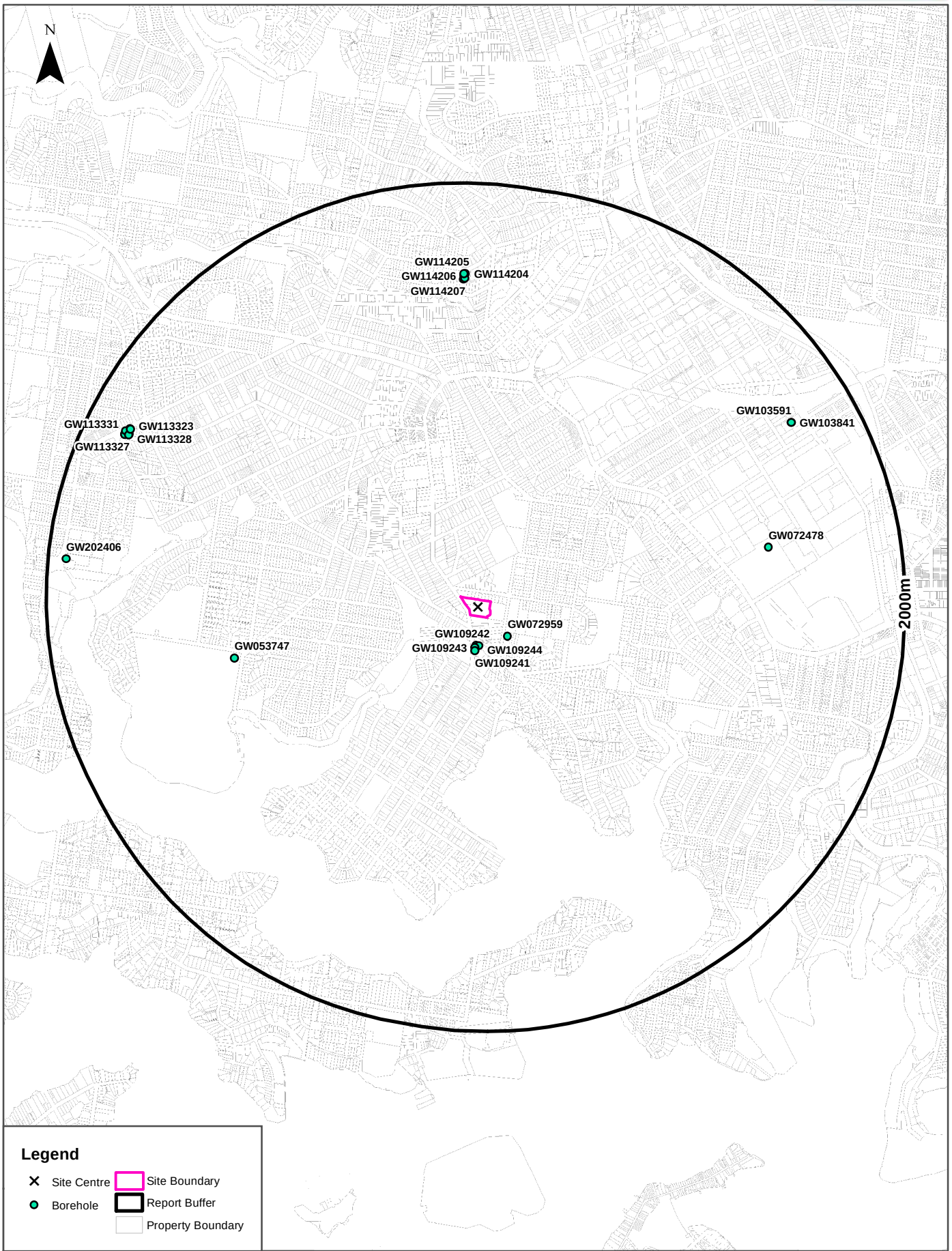
Coordinate System: GDA 1994 MGA Zone 56

Date: 20June 2017

Figure 23 - Groundwater Borehole Proximity Plan

Groundwater Boreholes

266 Longueville Road, Lane Cove, NSW 2066



Scale: 0 100 200 400 600 800 1,000 1,200 Meters

Data Sources: Property Boundaries & Topographic Data: © Land and Property Information (a division of the Department of Finance and Services) 2017

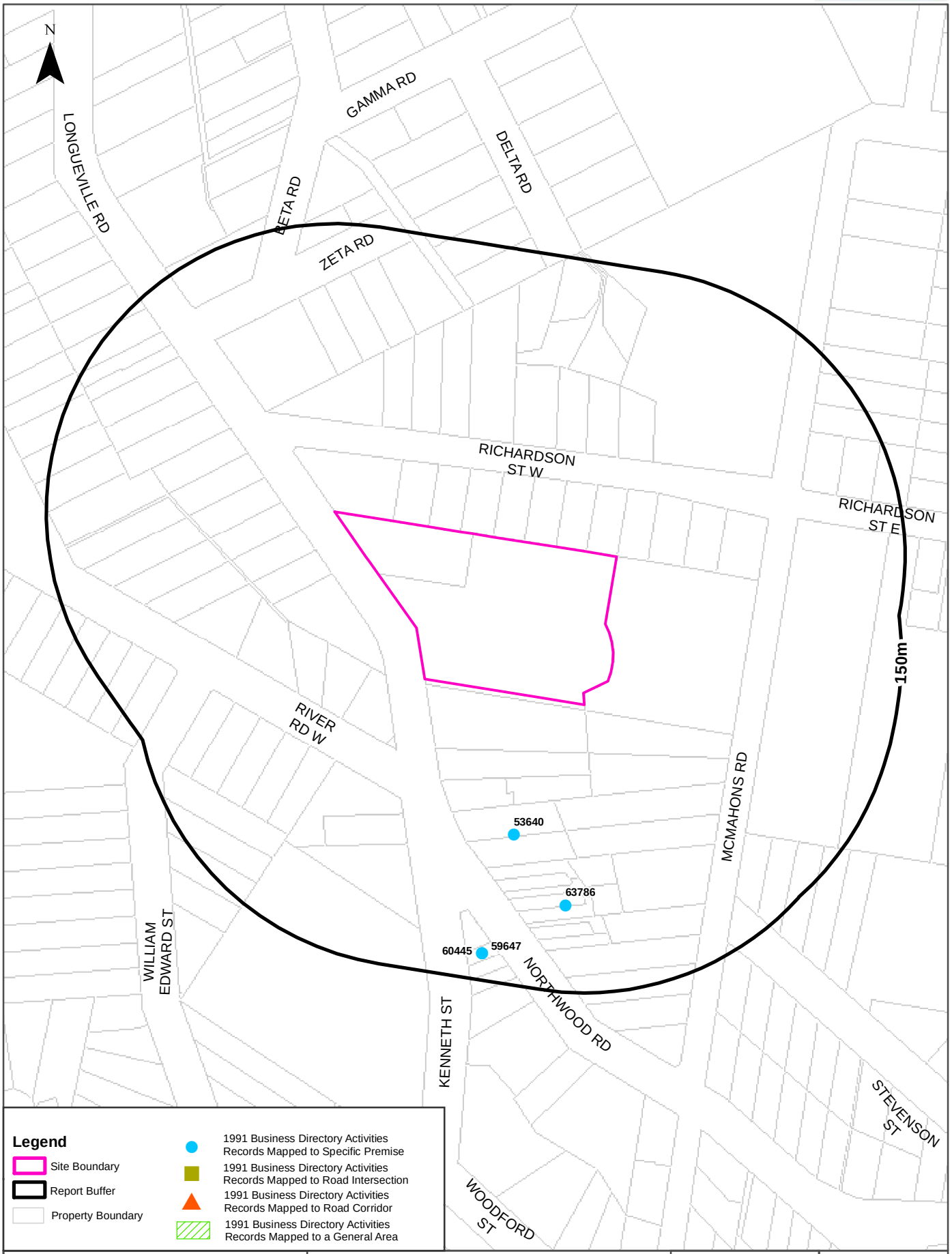
Coordinate System: GDA 1994 MGA Zone 56

Date: 20June 2017

Figure 24 - Historical Business Directory Records

1991 Historical Business Directory Records

266 Longueville Road, Lane Cove, NSW 2066



Scale: 0 20 40 80 120 Meters

Data Sources: Universal Business Directories (UBD) - Derived Data Licensed from Hardie Grant.
Property Boundaries & Topographic Data: © Land and Property Information (a division of the Department of Finance and Services) 2017

Coordinate System: GDA 1994 MGA Zone 56

Date: 20 June 2017

Historical Business Directories

266 Longueville Road, Lane Cove, NSW 2066

1991 Business to Business Directory Records Premise or Road Intersection Matches

Records from the 1991 UBD Business to Business Directory, mapped to a premise or road intersection, within the dataset buffer:

Business Activity	Organisation	Address	Ref No.	Location Confidence	Distance to Feature Point	Direction
Motor Garages & Service Stations	Caltex Northwood Service Station	10 Northwood Rd., Northwood 2066	53640	Premise Match	73m	South
Swimming Pool Mfrs &/or Construction Contractors	Lane Cove Pool Shop	16 Northwood Rd Northwood 2066	63786	Premise Match	105m	South
Property Management	Mackeddie Real Estate Pty. Ltd.	3 Northwood Rd Longeville 2066	59647	Premise Match	136m	South
Real Estate Agents	Mackeddie Real Estate Pty. Ltd.	3 Northwood Rd., Longueville 2066	60445	Premise Match	136m	South

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

1991 Business to Business Directory Records Road or Area Matches

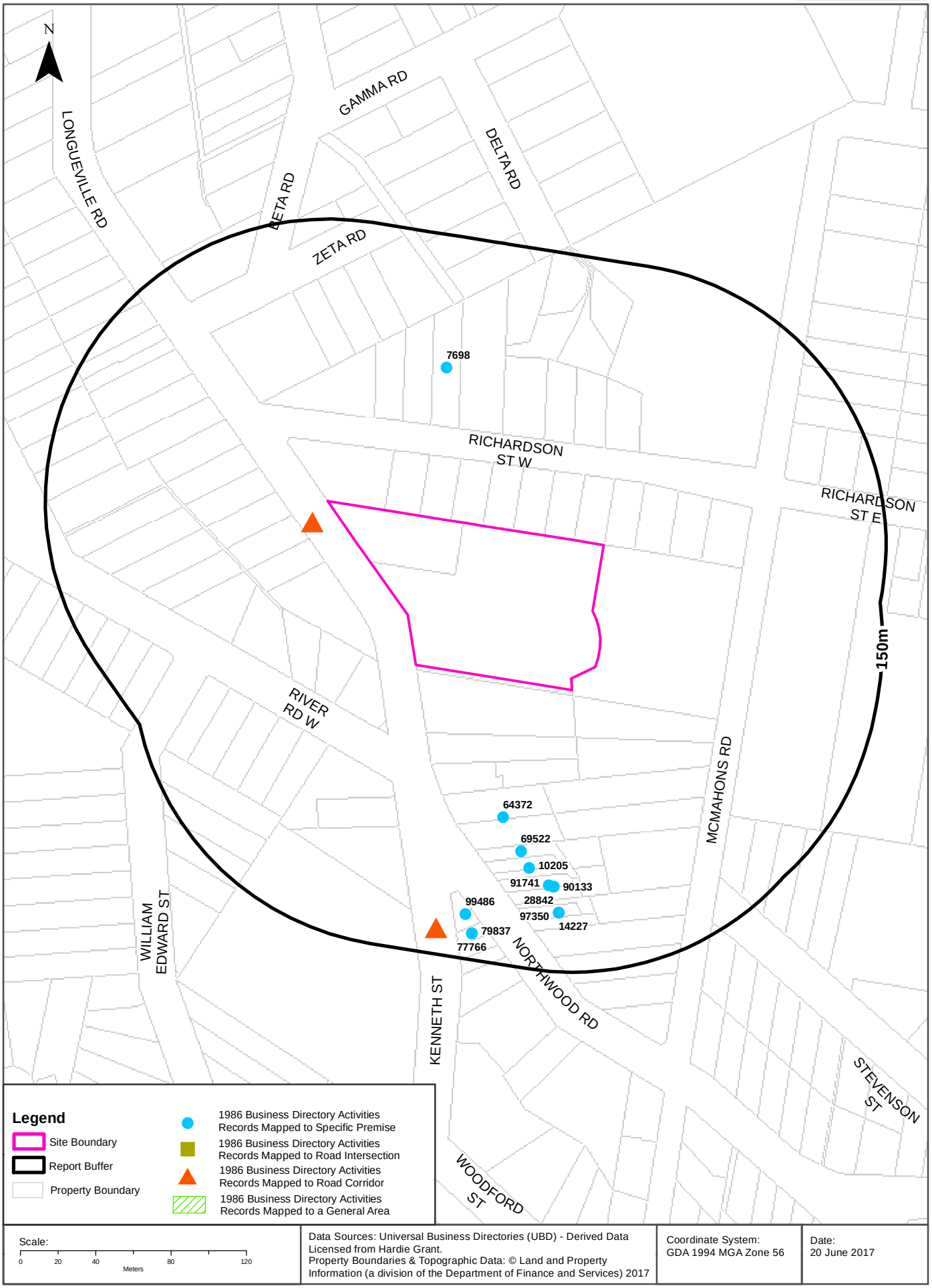
Records from the 1991 UBD Business to Business Directory, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published:

Business Activity	Organisation	Address	Ref No.	Location Confidence	Distance to Road Corridor
N/A	No records in buffer				

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

1986 Historical Business Directory Records

266 Longueville Road, Lane Cove, NSW 2066



Data Sources: Universal Business Directories (UBD) - Derived Data Licensed from Hardie Grant.
Property Boundaries & Topographic Data: © Land and Property Information (a division of the Department of Finance and Services) 2017

Coordinate System:
GDA 1994 MGA Zone 56

Date:
20 June 2017

Historical Business Directories

266 Longueville Road, Lane Cove, NSW 2066

1986 Business to Business Directory Records
Premise or Road Intersection Matches

Records from the 1986 UBD Business to Business Directory, mapped to a premise or road intersection, within the dataset buffer:

Business Activity	Premise	Ref No.	Location Confidence	Distance to Feature Point	Direction
MOTOR GARAGES & SERVICE STATIONS.	Calico Northwood, 10 Northwood Rd., Northwood.	64372	Premise Match	73m	South
BRICKLAYERS.	City Bricklaying Corp. Pty. Ltd., 49 Richardson St., Lane Cove.	7698	Premise Match	80m	North
NEWSAGENTS.	Milowaters Newsagency, 12 Northwood Rd., Northwood.	69522	Premise Match	89m	South
BUTCHERS-RETAIL.	Longueville Butchery, 14 Northwood Rd., Longueville.	10205	Premise Match	97m	South
ENGINEERS – CONSULTING.	Engineering Partners, 16 Northwood Rd., Northwood.	28842	Premise Match	105m	South
SWIMMING POOL &/OR EQUIPMENT MFRS. &/OR DISTS.	Lane Cove Pool Shop, 16 Northwood Rd., Northwood.	90133	Premise Match	105m	South
TAKE-AWAY FOODS.	Shop One, I6A Northwood Rd., Northwood.	91741	Premise Match	105m	South
CHEMISTS-PHARMACEUTICAL.	Foleys Pharmacy, 18B Northwood Rd., Northwood.	14227	Premise Match	119m	South
VETERINARY SURGEONS.	Hopwood, Gregory, P., 18 Northwood Rd., Northwood.	97350	Premise Match	119m	South
WINE &/OR SPIRIT MERCHANTS RETAIL.	Northwood Cellars, 1 Northwood Rd., Northwood.	99486	Premise Match	127m	South
PROPERTY MANAGEMENT.	Mackeddie Real Estate Pty. Ltd., 3 Northwood Rd., Longueville.	77766	Premise Match	136m	South
REAL ESTATE AGENTS.	Mackeddle Real Estate Pty. Ltd., 3 Northwood Rd„ Longueville.	79837	Premise Match	136m	South

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

1986 Business to Business Directory Records
Road or Area Matches

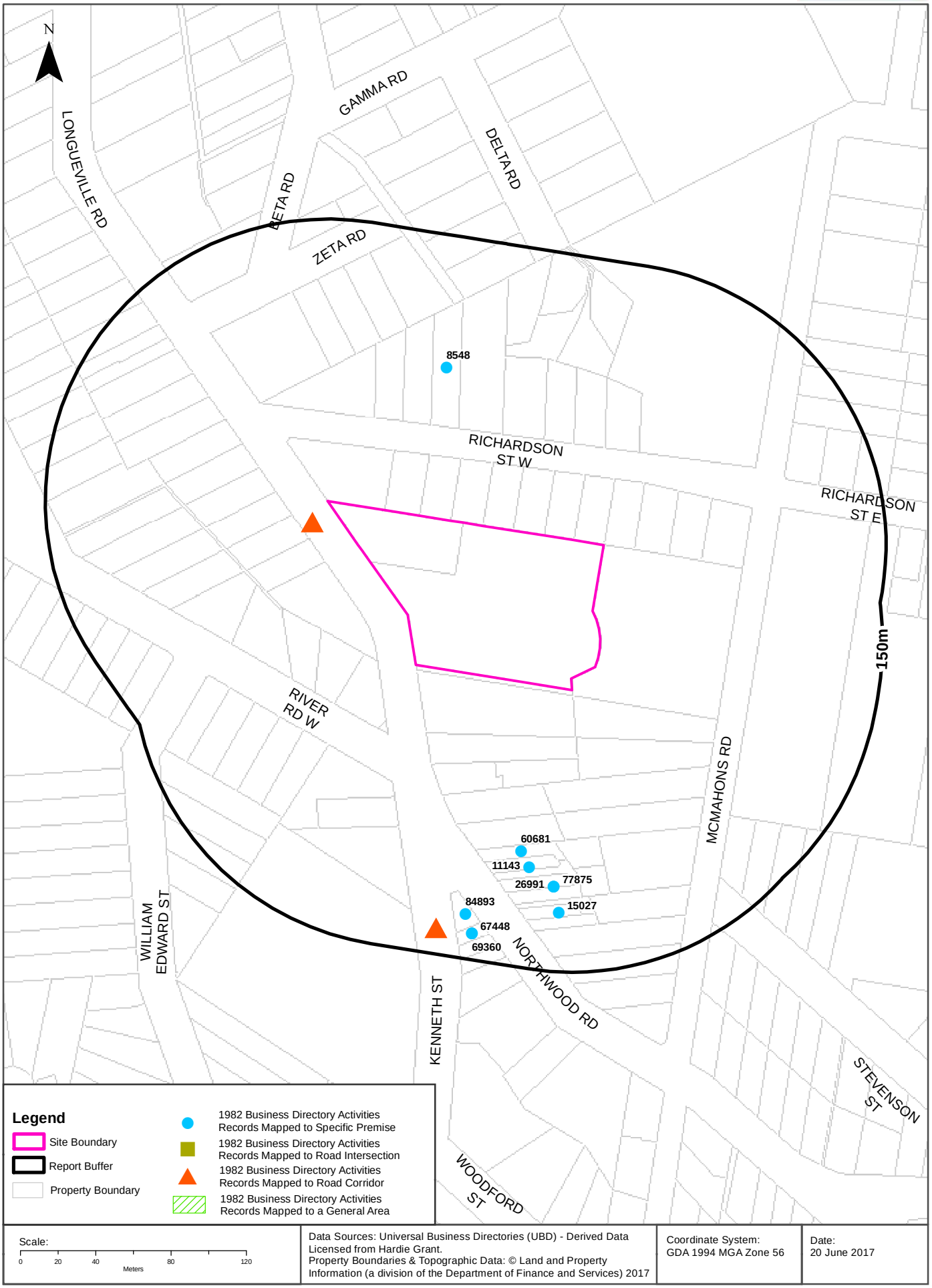
Records from the 1986 UBD Business to Business Directory, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published:

Business Activity	Premise	Ref No.	Location Confidence	Distance to Road Corridor
TAKE-AWAY FOODS.	King of the Roasts, 84 Longueville Rd., Lane Cove.	91147	Road Match	0m
CLUBS &/OR SPORTING BODIES.	Lane Cove Womens Bowling & Recreation Club, Longueville Rd., Lane Cove.	18941	Road Match	0m
MEDICAL PRACTITIONERS.	Norris, J. C., 2 Kenneth St., Northwood.	56741	Road Match	117m

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

1982 Historical Business Directory Records

266 Longueville Road, Lane Cove, NSW 2066



Historical Business Directories

266 Longueville Road, Lane Cove, NSW 2066

1982 Business Directory Records
Premise or Road Intersection Matches

Records from the 1982 UBD Business Directory, mapped to a premise or road intersection, within the dataset buffer:

Business Activity	Premise	Ref No.	Location Confidence	Distance to Feature Point	Direction
BRICKLAYERS. (B6260)	City Bricklaying Corp. Pty. Ltd., 49 Richardson St., Lane Cove.2066.	8548	Premise Match	80m	North
NEWSAGENTS. (N0800)	Milowaters Newsagency, 12 Northwood Rd., Northwood. 2066.	60681	Premise Match	89m	South
BUTCHERS - RETAIL. (B8040)	Longueville Butchery, 14 Northwood Rd., Longueville. 2066.	11143	Premise Match	97m	South
ENGINEERS - CONSULTING. (E6600)	Engineering Partners, 16 Northwood Rd., Northwood. 2066.	26991	Premise Match	105m	South
SWIMMING POOLS & EQUIPMENT.(S8370)	Lane Cove Pool Shop, 16 Northwood Rd., Northwood. 2066.	77875	Premise Match	105m	South
CHEMISTS - PHARMACEUTICAL. (C4110)	Foleys Pharmacy, 18B Northwood Rd., Northwood. 2066.	15027	Premise Match	119m	South
WINE &/OR SPIRIT MERCHANTS -. RETAIL. (W5960)	Northwood Cellars, 1 Northwood Rd., Northwood. 2066.	84893	Premise Match	127m	South
REAL ESTATE AGENTS. (R2555)	Mackeddie Real Estate Pty. Ltd., 3 Northwood Rd Longueville.2066.	69360	Premise Match	136m	South
PROPERTY MANAGEMENT. (P9060)	Mackeddie Real Estate Pty. Ltd., 3 Northwood Rd., Longueville.2066.	67448	Premise Match	136m	South

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1982 Business Directory Records
Road or Area Matches

Records from the 1982 UBD Business Directory, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published:

Business Activity	Premise	Ref No.	Location Confidence	Distance to Road Corridor
CLUBS &/OR SPORTING BODIES.(C5730)	Lane Cove Womens Bowling & Recreation Club, Longueville Rd., LaneCove. 2066.	17270	Road Match	0m
MEDICAL PRACTITIONERS. (M2020)	Norris, J. C., 2 Kenneth St., Northwood. 2066.	49621	Road Match	117m
MEDICAL PRACTITIONERS. (M2020)	Skinner, K., 2 Kenneth St., Northwood. 2066.	50336	Road Match	117m

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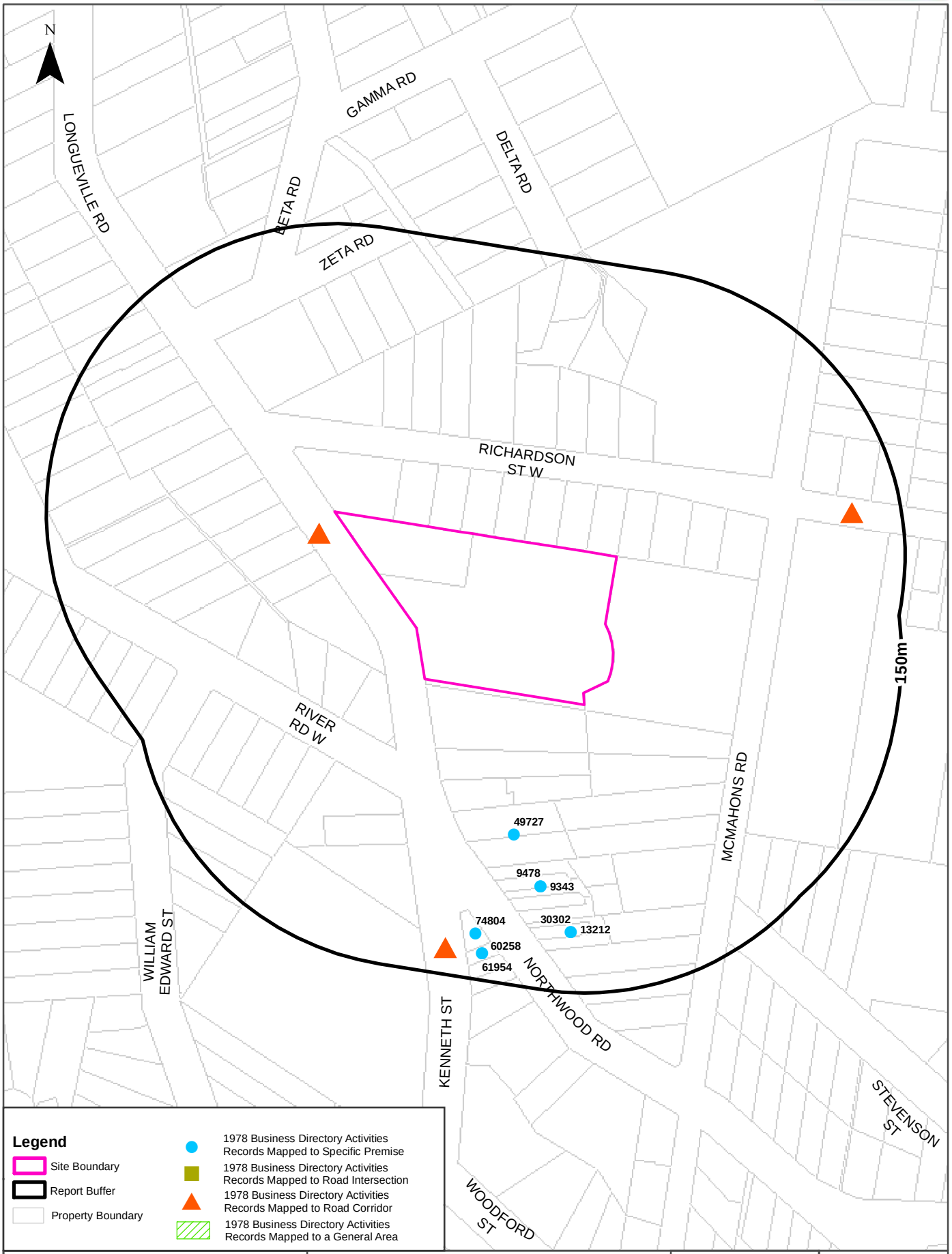
1978 Historical Business Directory Records

266 Longueville Road, Lane Cove, NSW 2066



Scale: 0 20 40 80 120 Meters

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Coordinate System: GDA 1994 MGA Zone 56

Date: 20 June 2017

Historical Business Directories

266 Longueville Road, Lane Cove, NSW 2066

1978 Business Directory Records
Premise or Road Intersection Matches

Records from the 1978 UBD Business Directory, mapped to a premise or road intersection, within the dataset buffer:

Business Activity	Premise	Ref No.	Location Confidence	Distance to Feature Point	Direction
MOTOR GARAGES &/OR ENGINEERS &/OR SERVICE STATIONS.	Caltex Service Station, 10 Northwood Rd., Northwood.	49727	Premise Match	73m	South
BUTCHERS-RETAIL.	Hummerston, P.N. & C.W., 14 Northwood Rd., Longueville.	9343	Premise Match	97m	South
BUTCHERS-RETAIL.	Longueville Butchery, 14 Northwood Rd., Longueville.	9478	Premise Match	97m	South
FRUITERERS &/OR GREENGROCERS.	Bettini, A.O., 18C Northwood Rd., Northwood.	30302	Premise Match	119m	South
CHEMISTS-PHARMACEUTICAL.	Foleys Pharmacy, 18B Northwood Rd., Northwood.	13212	Premise Match	119m	South
WINE &/OR SPIRIT MERCHANTS- RETAIL.	Northwood Cellars, 1 Northwood Rd., Northwood.	74804	Premise Match	127m	South
PROPERTY MANAGEMENT.	Mackeddie Real Estate Pty. Ltd., 3 Northwood Rd., Longueville.	60258	Premise Match	136m	South
REAL ESTATE AGENTS &/OR VALUERS.	Mackeddie Real Estate Pty. Ltd., 3 Northwood Rd., Longueville.	61954	Premise Match	136m	South

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1978 Business Directory Records
Road or Area Matches

Records from the 1978 UBD Business Directory, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published:

Business Activity	Premise	Ref No.	Location Confidence	Distance to Road Corridor
CLUBS &,/OR SPORTING BODIES.	lane Cove Womens Bowling & Recreation Chib. Longueville Rd., Lane Cove.	15614	Road Match	0m
SCHOOLS-KINDERGARTEN, DAY NURSERY.	Kindergarten Union of N.S.W, (Inc.), Richardson Rd., Lane Cove.	65011	Road Match	96m
MOTOR GARAGES &/OR ENGINEERS &/OR SERVICE STATIONS.	BP Northwood Service Station. 6 Kenneth St.. Northwood.	49586	Road Match	117m

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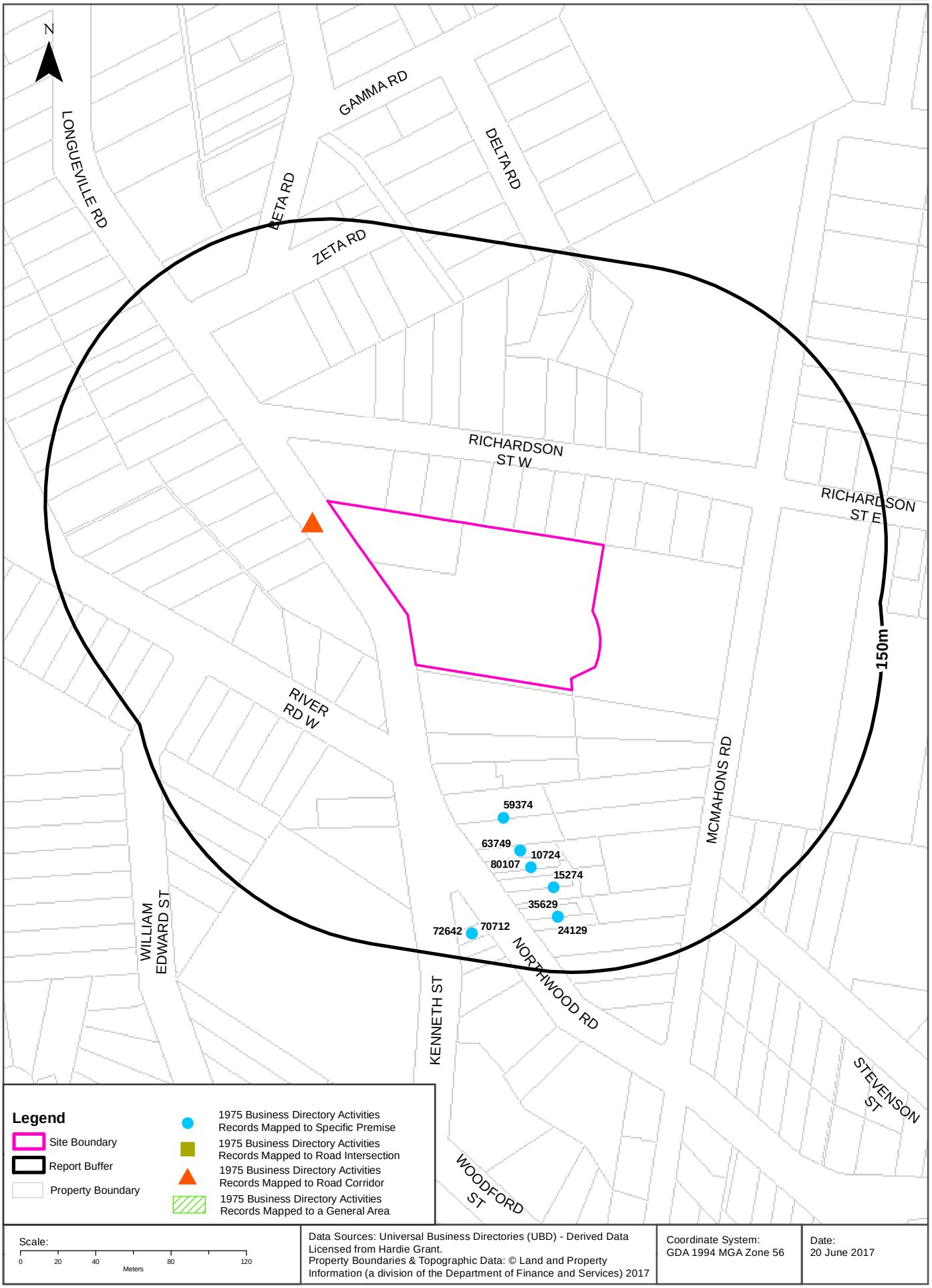
1975 Historical Business Directory Records

266 Longueville Road, Lane Cove, NSW 2066



Historical Business Directories

266 Longueville Road, Lane Cove, NSW 2066

1975 Business Directory Records
Premise or Road Intersection Matches

Records from the 1975 UBD Business Directory, mapped to a premise or road intersection, within the dataset buffer:

Business Activity	Premise	Ref No.	Location Confidence	Distance to Feature Point	Direction
MOTOR GARAGES &/OR ENGINEERS.	Pascate, L. & M., 10 Northwood Rd, Northwood.	59374	Premise Match	73m	South
STATIONERS., RETAIL	Northwood Newsagency, 12 Northwood Rd., Northwood.	80107	Premise Match	89m	South
NEWSAGENTS-GENERAL	Northwood Newsagency. 12 Northwood Rd., Northwood.	63749	Premise Match	89m	South
BUTCHERS-RETAIL	Longueville Butchery, 14 Northwood Rd., Northwood.	10724	Premise Match	97m	South
CHEMISTS-PHARMACEUTICAL	Foley's Pharmacy, 16B Northwood Rd., Northwood.	15274	Premise Match	106m	South
DRY CLEANERS, PRESSERS&/OR DYERS.	Lawrence Dry Cleaners, 18A Northwood Rd., Northwood	24129	Premise Match	121m	South
FRUITERERS &/OR GREENGROCERS.	Northwood Fruit & Vegetable Store, The, 18C Northwood Rd Northwood.	35629	Premise Match	121m	South
REAL ESTATE AGENTS &/OR VALUERS.	MacKeddie Real Estate, 3 Northwood Pd., Longueville.	72642	Premise Match	136m	South
PROPERTY MANAGEMENT.	MacKeddie Real Estate, 3 Northwood Rd., Longueville.	70712	Premise Match	136m	South

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1975 Business Directory Records
Road or Area Matches

Records from the 1975 UBD Business Directory, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published:

Business Activity	Premise	Ref No.	Location Confidence	Distance to Road Corridor
MEDICAL PRACTITIONERS.	Belfer, J. B., 461 Longueville Rd., Lane Cove.	49700	Road Match	0m
LOCAL BODIES.	Lane Cove Council Chambers, Longueville Rd., Lane Cove.	47821	Road Match	0m
CLUBS & /OR SPORTING BODIES	Lane Cove Womens Bowling & Recreation Club, Longueville Rd., Lane Cove.	18080	Road Match	0m

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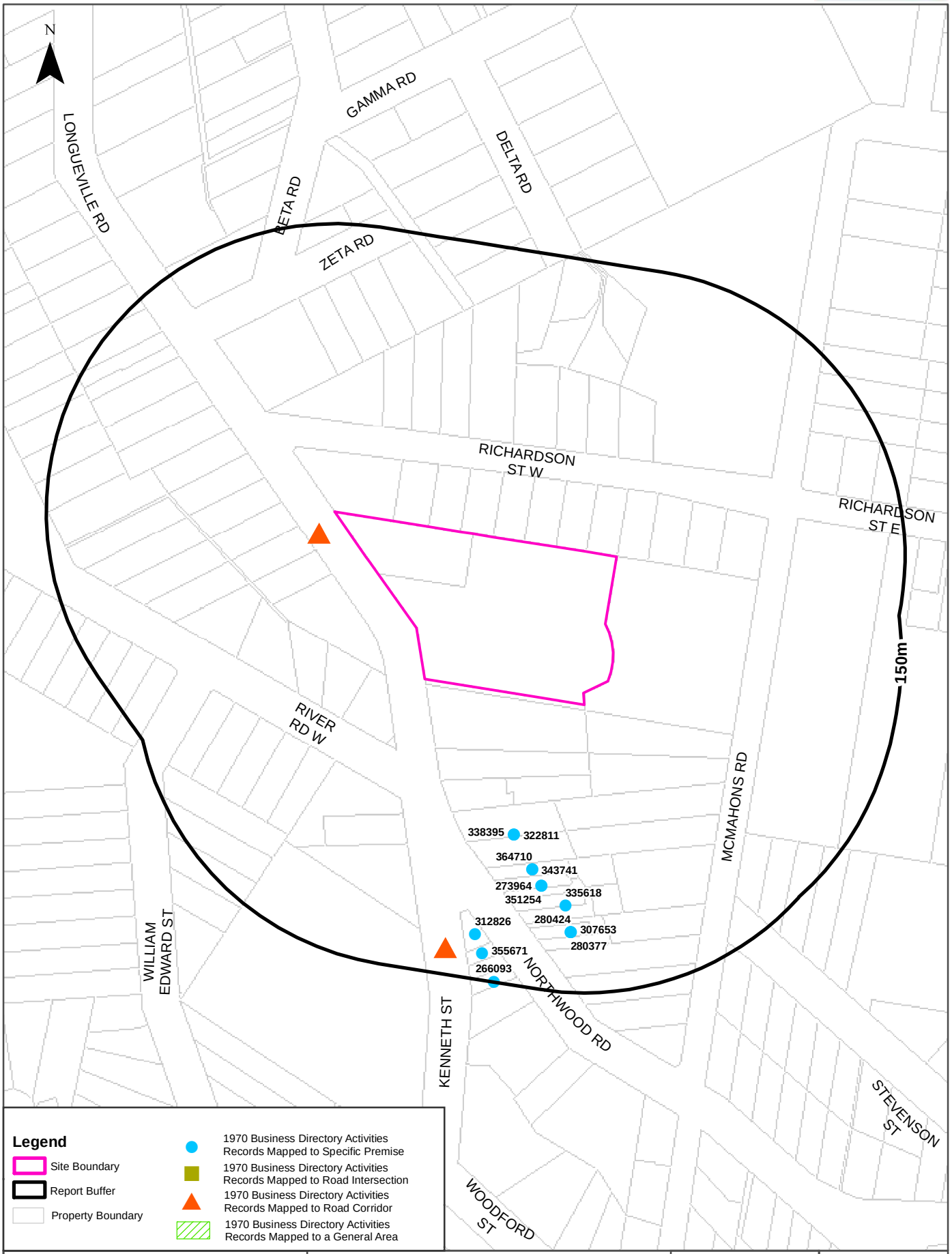
1970 Historical Business Directory Records

266 Longueville Road, Lane Cove, NSW 2066



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Historical Business Directories

266 Longueville Road, Lane Cove, NSW 2066

1970 Business Directory Records
Premise or Road Intersection Matches

Records from the 1970 UBD Business Directory, mapped to a premise or road intersection, within the dataset buffer:

Business Activity	Premise	Ref No.	Location Confidence	Distance to Feature Point	Direction
LAWN MOWER SALES/SERVICE (L310)	Partners Service Station (The),10 Northwood Rd.,Nrthwd	322811	Premise Match	73m	South
MOTOR GARAGES & ENGINEERS(M6S6)	Partners Service Station (The),10 Northwood Rd.NORTHWOOD	338395	Premise Match	73m	South
NEWSAGENTS (N100)	Northwood Newsagency,12 Northwood Rd.,Northwood	343741	Premise Match	89m	South
STATIONERS-RETAIL (S516)	Northwood Newsagency,12 Northwood Rd.,Northwood	364710	Premise Match	89m	South
BUTCHERS-RETAIL (B860)	Longueville Butchery, 14 Northwood Rd., Northwood	273964	Premise Match	97m	South
POULTRY DEALERS-RETAIL (P692)	Longueville Butchery,14 Northwood Rd.,Northwood	351254	Premise Match	97m	South
MOTOR BUS SERVICES (M516)	Longueville Motor Bus Co. Pty. Ltd.r 16 Northwood Rd.,Northwood	335618	Premise Match	105m	South
CHEMISTS-PHARMACEUTICAL (C286)	Foley's Pharmacy, 18b Northwood Rd., Northwood	280377	Premise Match	119m	South
CHEMISTS-PHARMACEUTICAL (C286)	Gieeson, Michael G., 18b Northwood Rd., Northwood	280424	Premise Match	119m	South
FRUITERERS/GREENGROCERS (F640)	Northwood Fruit & Veg.Store (The),18c Northwood Rd.,Northwood .	307653	Premise Match	119m	South
GROCERS-RETAIL (G655)	Northwood Self Service,1 Northwood Rd.,Northwood	312826	Premise Match	127m	South
REAL ESTATE AGENTS/VALUERS(R205)	MacKeddie Real Estate,3 Northwood Rd.6LONGUEVILLE	355671	Premise Match	136m	South

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1970 Business Directory Records
Road or Area Matches

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

Business Activity	Premise	Ref No.	Location Confidence	Distance to Road Corridor
BOOT & SHOE REPAIRERS (B580)	Crispe, AG., LonguevNIe Rd., Lane Cove	268785	Road Match	0m
MUSIC TEACHERS (M780)	Harrison White Studio,9 Longueville Rd.,Lane Cove	342957	Road Match	0m
LOCAL BODIES (L630)	Lane Cove Council Chambers,Longueville Rd.,Lane Cove	323764	Road Match	0m
LIBRARIES-LENDING (L450)	Lane Cove Public Library,Longueville Rd.,Lane Cove	323196	Road Match	0m
CLUBS & SPORTING BODIES (C487)	Lane Cove Women's Bowling & Recreation Club, LonguevilleRd., Lane Cove.	284360	Road Match	0m
BEDDING MANUFACTURERS (B270)	Malba Products, 82 Longueville Rd., Lane Cove	266851	Road Match	0m
CLUBS & SPORTING BODIES (C487)	Lane Cove Bowling & Recreation Club, Kenneth St., Longueville	284351	Road Match	117m
CLUBS & SPORTING BODIES (C487)	Lane Cove Bowling Club., Kenneth St, Lane Cove	284352	Road Match	117m
CLUBS & SPORTING BODIES (C487)	Lane Cove Tennis Club, Kenneth St., Lane Cove	284358	Road Match	117m
CLUBS & SPORTING BODIES (C487)	Longueville Tennis Club, Kenneth St., Longueville	284386	Road Match	117m

Business Activity	Premise	Ref No.	Location Confidence	Distance to Road Corridor
FRUITERERS/GREENGROCERS (F640)	Northwood,Kenneth Street Two,2 Kenneth St.,Northwood	307654	Road Match	117m

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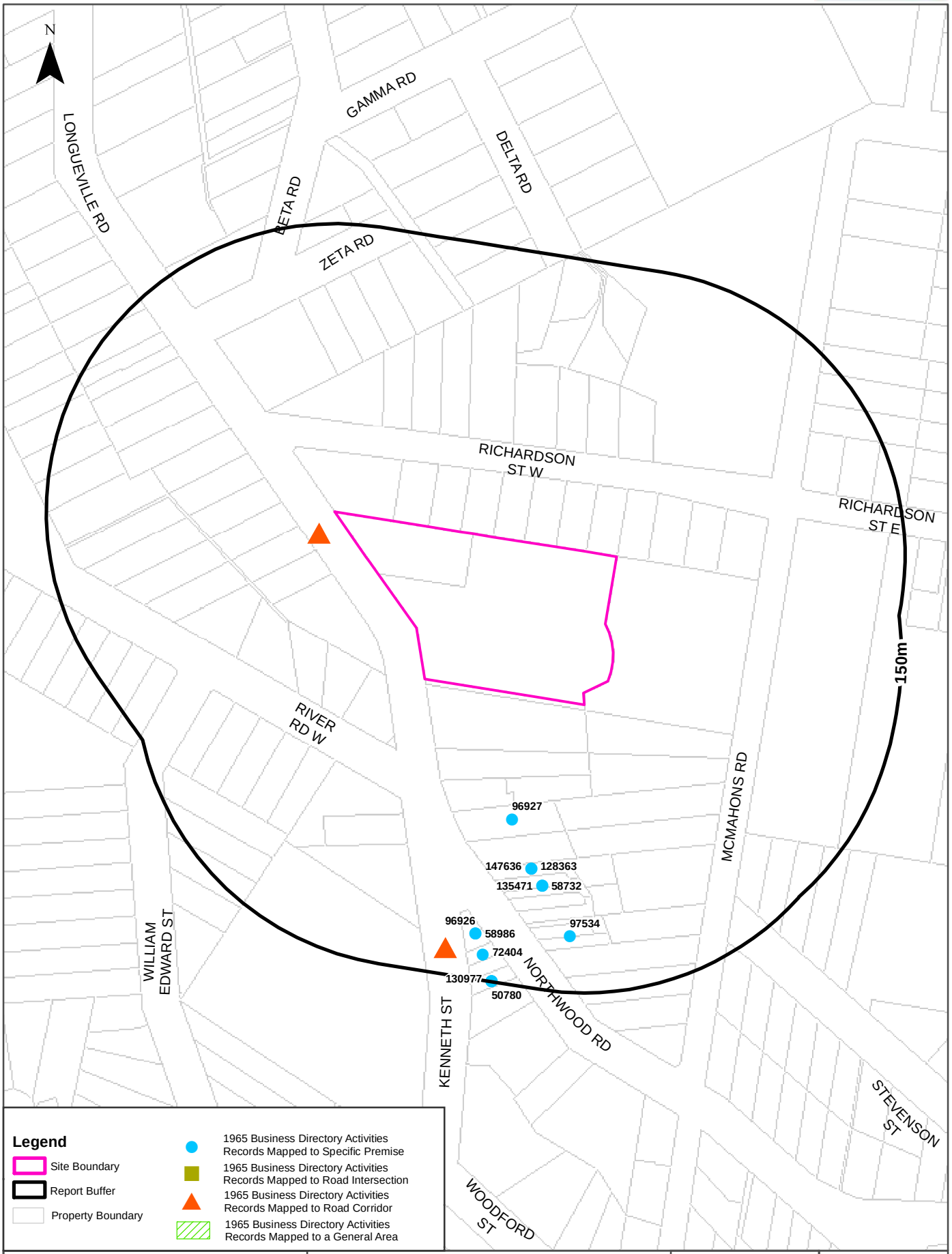
1965 Historical Business Directory Records

266 Longueville Road, Lane Cove, NSW 2066



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Date: 20 June 2017

Historical Business Directories

266 Longueville Road, Lane Cove, NSW 2066

1965 Business Directory Records
Premise or Road Intersection Matches

Records from the 1965 UBD Business Directory, mapped to a premise or road intersection, within the dataset buffer:

Business Activity	Premise	Ref No.	Location Confidence	Distance to Feature Point	Direction
Grocers - Retail	Northwood Service Stores, , 4 Northwood Rd., Northwood	96927	Premise Match	65m	South
STATIONERS—RETAIL	Northwood Newsagency , 12 Northwood Rd., Northwood	147636	Premise Match	89m	South
Newsagents	Northwood Newsagency, 12 Northwood Rd., Northwood	128363	Premise Match	89m	South
Butchers - Retail	Longueville Butchery , 14 Northwood Rd. Northwood	58732	Premise Match	97m	South
Poultry Dealers - Retail	Longueville Butchery, , 14 Northwood Rd., Northwood	135471	Premise Match	97m	South
Haberdashery - Retail	Eighteen-A (8-Teen-A) , 18a Northwood Rd., Northwood	97534	Premise Match	121m	South
Butchers - Retail	Northwood Meat Service (Crawley), , 1a Northwood Rd , Northwood	58986	Premise Match	127m	South
Grocers - Retail	Northwood Self Service, , 1 Northwood Rd., Northwood	96926	Premise Match	127m	South
DELICATESSENS	McKinley, M. & W., 3 Northwood Rd., Northwood	72404	Premise Match	137m	South

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1965 Business Directory Records
Road or Area Matches

Records from the 1965 UBD Business Directory, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published:

Business Activity	Premise	Ref No.	Location Confidence	Distance to Road Corridor
BOOT & SHOE REPAIRERS	Ceisee, A. G., Longuevilte Rd., Lane Cove	53201	Road Match	0m
Local Bodies	Lane Cove Council Chambers, Longueville Rd., Lane Cove	108329	Road Match	0m
Clubs & Sporting Bodies	Lane Cove Women's Bowling & Recreation Club, Longueville Rd., Lane Cove	69034	Road Match	0m
Schools/Colleges - Private/Public	Woodley Preparatory School, , Lonqueville Rd , Longueville	143005	Road Match	0m
Clubs & Sporting Bodies	Lane Cove Bowling & Recreation Club, Kenneth St., Longueville	69029	Road Match	117m
Fruiterers & Greengrocers	Northwood, Kenneth Street "Two", , 2 Kenneth St., Northwood	91837	Road Match	117m
Motor Garages & Engineers - Longueville	Radke, W. H. & Co., 8 Kenneth St.	122954	Road Match	117m

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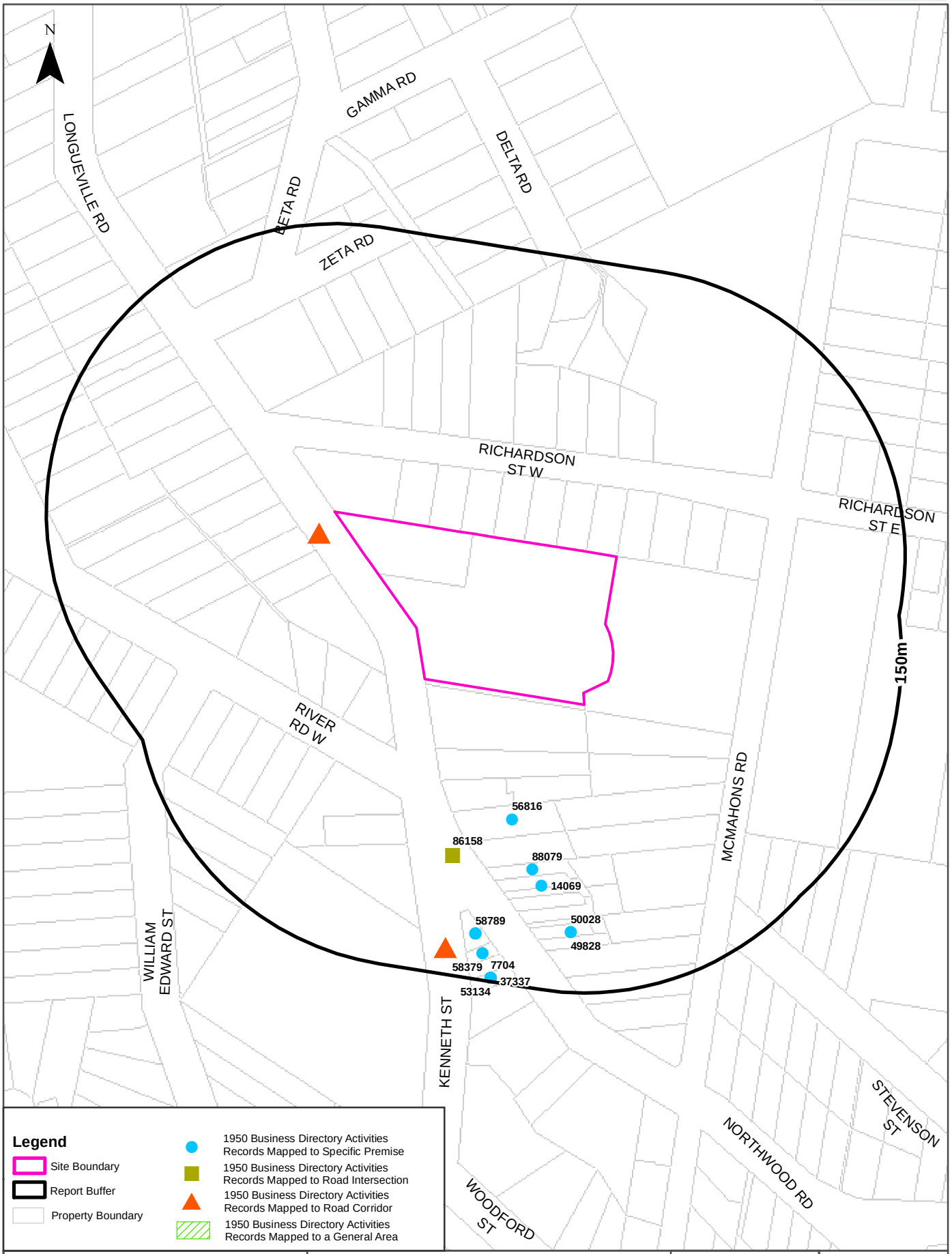
1950 Historical Business Directory Records

266 Longueville Road, Lane Cove, NSW 2066



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Historical Business Directories

266 Longueville Road, Lane Cove, NSW 2066

1950 Business Directory Records
Premise or Road Intersection Matches

Records from the 1950 UBD Business Directory, mapped to a premise or road intersection, within the dataset buffer:

Business Activity	Premise	Ref No.	Location Confidence	Distance to Feature Point	Direction
GROCERS-RETAIL	Chalmers, J., 4 Northwood Rd., Northwood	56816	Premise Match	65m	South
MOTOR SERVICE STATIONS-PETROL, Etc.	Longueville Service Station (Les. Smith), Cnr. Northwood Rd. and Kenneth St., Longueville	86158	Road Intersection	88m	South
NEWSAGENTS	Isles, A. B., 12 Northwood Rd., Northwood	88079	Premise Match	89m	South
BUTCHERS-RETAIL	Outfield, G. H., 14 Northwood Rd., Lane Cove	14069	Premise Match	97m	South
FRUITERERS & GREENGROCERS	Cleary, D., 18 Northwood Rd., Lane Cove	49828	Premise Match	119m	South
FRUITERERS & GREENGROCERS	Emmett, A., 18a Northwood Rd., Lane Cove	50028	Premise Match	119m	South
MIXED BUSINESSES & GENERAL STORES	Pym, A. and J., 1 Northwood Rd., Northwood	80826	Premise Match	127m	South
GROCERS-RETAIL	Pym, A., 1 Northwood Rd., Northwood	58789	Premise Match	127m	South
DELICATESSENS & SMALLGOODS DEALERS	Pyrn, .A, 1 Northwood Rd., Northwood	31068	Premise Match	127m	South
MILK BARS & CONFECTIONERS	ym, A., 1 Northwood Rd., Northwood	77588	Premise Match	127m	South
GROCERS-RETAIL	Merkel, H. P., 3 Northwood Rd., Northwood	58379	Premise Match	136m	South
DELICATESSENS & SMALLGOODS DEALERS	Merkell, N. P., 3 Northwood Rd., Northwood	30889	Premise Match	136m	South
ELECTRICAL CONTRACTORS &/OR ELECTRICIANS	Alliance Electrical Co., 5 Northwood Rd., Northwood	37338	Premise Match	148m	South
ELECTRICAL CONTRACTORS &/OR ELECTRICIANS	Alliance Electrical Co., 5 Northwood Rd., Northwood	37337	Premise Match	148m	South
ELECTRICAL SUPPLIES & APPLIANCES RETAILERS	Alliance Electrical Co., 5 Northwood Rd., Northwood	38349	Premise Match	148m	South
BEAUTY SALONS &/OR LADIES' HAIRDRESSERS	Dudgeon, Miss J., 5a Northwood Rd., Northwood	7083	Premise Match	148m	South
FURNITURE MFRS.-FOLDING &/OR CANVAS	Floyd, A. L. Pleazing Products, 5 Northwood Rd., Northwood	53134	Premise Match	148m	South
TOY MANUFACTURERS	Floyd, A. L. Pleazing Products, 5 Northwood Rd., Northwood	109777	Premise Match	148m	South
BEAUTY SALONS &/OR LADIES' HAIRDRESSERS	Ralph, R., 5a Northwood Rd., Northwood	7704	Premise Match	148m	South

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1950 Business Directory Records
Road or Area Matches

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

Business Activity	Premise	Ref No.	Location Confidence	Distance to Road Corridor
FUNERAL DIRECTORS	Andrews, T. J. Longueville Rd., Lane Cove	51974	Road Match	0m
HALLS	Lane Cove Masonic, Longueville Rd., Lane Cove	60366	Road Match	0m

Business Activity	Premise	Ref No.	Location Confidence	Distance to Road Corridor
HALLS	Lane Cove Town Hall, Longueville Rd., Lane Cove	60367	Road Match	0m
MOTOR GARAGES &/OR ENGINEERS	Radke and Denniss, 6 Kenneth St., Longueville	84252	Road Match	117m
WELDERS-ELECTRIC &/OR OXY	Radke and Denniss, 6 Kenneth St., Longueville	113027	Road Match	117m

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Historical Business Directories

266 Longueville Road, Lane Cove, NSW 2066

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

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

Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Feature Point	Direction
Motor Garages & Service Stations	Caltex Northwood Service Station 10 Northwood Rd., Northwood 2066	53640	1991	Premise Match	73m	South
MOTOR GARAGES & SERVICE STATIONS.	Calico Northwood, 10 Northwood Rd., Northwood.	64372	1986	Premise Match	73m	South
MOTOR GARAGES &/OR ENGINEERS &/OR SERVICE STATIONS.	Caltex Service Station, 10 Northwood Rd., Northwood.	49727	1978	Premise Match	73m	South
MOTOR GARAGES &/OR ENGINEERS.	Pascate, L. & M., 10 Northwood Rd, Northwood.	59374	1975	Premise Match	73m	South
MOTOR GARAGES & ENGINEERS(M6S6)	Partners Service Station (The),10 Northwood Rd.NORTHWOOD	338395	1970	Premise Match	73m	South
MOTOR SERVICE STATIONS-PETROL, Etc.	Longueville Service Station (Les. Smith), Cnr. Northwood Rd. and Kenneth St., Longueville	86158	1950	Road Intersection	88m	South
DRY CLEANERS, PRESSERS&/OR DYERS.	Lawrence Dry Cleaners, 18A Northwood Rd., Northwood	24129	1975	Premise Match	121m	South
Motor Garages & Service Stations	Ampol Longueville ply. Ltd. 7 Northwood Rd., Longueville.-2066	53477	1991	Premise Match	161m	South
MOTOR GARAGES & SERVICE STATIONS.	Ampol Longueville Pty. Ltd., 7 Northwood Rd., Longueville.	63931	1986	Premise Match	161m	South
MOTOR GARAGES &/OR ENGINEERS &/OR SERVICE STATIONS. (M6860)	Ampol Longueville Pty. Ltd., 7 Northwood Rd., Longueville. 2066.	56013	1982	Premise Match	161m	South
MOTOR GARAGES &/OR ENGINEERS &/OR SERVICE STATIONS.	Longueville Service Station, 7 Northwood Rd., Longueville.	50393	1978	Premise Match	161m	South
MOTOR GARAGES &/OR ENGINEERS.	Longueville Service Station. 7 Northwood Rd., Longueville.	59165	1975	Premise Match	161m	South
MOTOR SERVICE STATIONS-PETROL,OIL,Etc. (M716)	Longueville Service Station,7 Northwood Rd.LONGUEVILLE	341284	1970	Premise Match	161m	South
MOTOR SERVICE STATIONS-PETROL,OIL,Etc. (M716)	Longueville Service Station,7 Northwood Rd.NORTHWOOD	341285	1970	Premise Match	161m	South
Motor Service Stations - Petrol, Oil, Etc. - Longueville	Longueville Service Station, 7 Northwood Ave.	125870	1965	Premise Match	161m	South
Motor Garages & Engineers - Longueville	Longueville Service Station, 7 Northwood Rd.	122953	1965	Premise Match	161m	South
MOTOR GARAGES &/OR ENGINEERS &/OR SERVICE STATIONS. (M6860)	BP Northwood Service Station, 9 Northwood Rd , Northwood. 2066.	56268	1982	Premise Match	175m	South
MOTOR SERVICE STATIONS - PETROL, OIL	BP Northwood Service Station, 9 Northwood Rd., Northwood.	61530	1975	Premise Match	175m	South
MOTOR GARAGES &/OR ENGINEERS	Bivens, D,, 35 Wangalla Rd., Lane Cove	83458	1950	Premise Match	641m	West
DRY CLEANERS & PRESSERS.	Riverview Dry Cleaners, 59A Tambourine Bay Rd., Lane Cove.	25495	1986	Premise Match	685m	West
DRY CLEANERS & PRESSERS. (D8500)	Riverview Dry Cleaners, 59A Tambourine Bay Rd., Lane Cove. 2066.	24026	1982	Premise Match	685m	West
DRY CLEANERS, PRESSERS &/OR DYERS	Riverview Dry Cleaners, 59A Tambourine Bay Rd., Lane Cove.	20937	1978	Premise Match	685m	West
DRY CLEANERS, PRESSERS&/OR DYERS.	Riverview Dry Cleaners. 59A Tambourine Bay Rd., Lane Cove.	24311	1975	Premise Match	690m	West
DRY CLEANERS, PRESSERS & DYERS	Vicks Dry Cleaners, 150 Longueville Rd., Lane Cove	35810	1950	Premise Match	806m	North
MOTOR GARAGES &/OR ENGINEERS.	Central Auto Port, 50 Burns Bay Rd., Lane Cove.	58646	1975	Premise Match	828m	North West
DRY CLEANERS, PRESSERS&/OR DYERS.	Lawrence Dry Cleaners, 48 Bums Bay Rd., Lane Cove.	24133	1975	Premise Match	833m	North West
Motor Service Stations - Petrol, Oil, Etc. - Lane Cove	Central Auto Port, 48 Burns Bay Rd.	125834	1965	Premise Match	833m	North West

Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Feature Point	Direction
MOTOR GARAGES &/OR ENGINEERS &/OR SERVICE STATIONS.	Central Auto Port, 50 Burns Bay Rd., Lane Cove.	49778	1978	Premise Match	835m	North West
MOTOR GARAGES & ENGINEERS(M6S6)	Central Auto Port,50 Burns Bay Rd.LANE COVE	337549	1970	Premise Match	835m	North West
MOTOR GARAGES &/OR ENGINEERS &/OR SERVICE STATIONS. (M6860)	Autostrada Pty. Ltd., Rear 373 Pacific H'way., Artarmon. 2064.	56064	1982	Premise Match	853m	North East
MOTOR GARAGES &/OR ENGINEERS &/OR SERVICE STATIONS.	Autostrada Pty. Ltd., 373 Pacific H'way., Artarmon.	49330	1978	Premise Match	853m	North East
MOTOR GARAGES & ENGINEERS(M6S6)	Lardner,Ted Motors,44 Burns Bay Rd.LANE COVE	338145	1970	Premise Match	854m	North West
Motor Garages & Engineers - Lane Cove	Lardner, Tad Motors, 44 Burns Bay Rd.	122879	1965	Premise Match	854m	North West
MOTOR GARAGES &/OR ENGINEERS	Bivens, Don C., 44 Burns Bay Rd., Lane Cove	83459	1950	Premise Match	854m	North West
MOTOR GARAGES & ENGINEERS(M6S6)	White Nicfiolson,B.M.C.,387 Pacific Highway. ARTARMON	338877	1970	Premise Match	858m	North East
DRY CLEANERS & PRESSERS.	Lawrence Dry Cleaners, 56 Burns Bay Rd., Lane Cove.	25394	1986	Premise Match	861m	North West
DRY CLEANERS & PRESSERS. (D8500)	Lawrence Dry Cleaners, 56 Burns Bay Rd., Lane Cove, 2066.	23905	1982	Premise Match	861m	North West
DRY CLEANERS, PRESSERS & DYERS	Tasman Dry Cleaners. 326 Pacific Hghway., Lane Cove	35773	1950	Premise Match	875m	North East
MOTOR SERVICE STATIONS - PETROL, OIL	Golden Fleece Service Station, 395 Pacific H'way, Artarmon.	61790	1975	Premise Match	882m	North East
Motor Service Stations - Petrol, Oil, Etc. - Artarmon	Golden Fleece Service Station, 395 Pacific Hghwy.	125384	1965	Premise Match	882m	North East
Motor Garages & Engineers - Artarmon	Styles, R., 395 Pacific Hghwy.	122120	1965	Premise Match	882m	North East
MOTOR GARAGES &/OR ENGINEERS &/OR SERVICE STATIONS.	Golden Fleece Service Station, 395 Pacific H'way, Artarmon.	50164	1978	Premise Match	885m	North East
MOTOR GARAGES &/OR ENGINEERS &/OR SERVICE STATIONS.	Styles, R., 395 Pacific H'way., Artarmon.	50886	1978	Premise Match	885m	North East
DRY CLEANERS & PRESSERS.	Escort Dry Cleaners. 120 Longueville Rd., Lane Cove.	25296	1986	Premise Match	886m	North
DRY CLEANERS & PRESSERS. (D8500)	Escort Dry Cleaners, 120 Longueville Rd., Lane Cove. 2066.	23826	1982	Premise Match	886m	North
DRY CLEANERS, PRESSERS &/OR DYERS	Escort Dry Cleaners, 120 Longueville Rd., Lane Cove.	20762	1978	Premise Match	886m	North
DRY CLEANERS, PRESSERS&/OR DYERS.	Escort Dry Cleaners, 120 Longueville Rd., Lane Cove.	24019	1975	Premise Match	886m	North
Motor Garages & Service Stations	Artarmon Self Serve Mobil 395 Pacific Hway, Chatswood 2067	53519	1991	Premise Match	886m	North East
MOTOR GARAGES &/OR ENGINEERS &/OR SERVICE STATIONS. (M6860)	Golden Fleece Artarmon Service Station, 395 Pacific H'way,Artarmon. 2064.	56813	1982	Premise Match	886m	North East
MOTOR GARAGES &/OR ENGINEERS &/OR SERVICE STATIONS. (M6860)	Styles, Rex, 395 Pacific H'way., Artarmon. 2064.	57635	1982	Premise Match	886m	North East
MOTOR SERVICE STATIONS-PETROL,OIL,Etc. (M716)	Golden Fleece Service Station,395 Pacific Highway.Artarmon	341161	1970	Premise Match	886m	North East
MOTOR GARAGES & ENGINEERS(M6S6)	Styles,R.,395 Pacific Highway.ARTARMON	338678	1970	Premise Match	886m	North East
MOTOR GARAGES & SERVICE STATIONS.	BP South Lane Cove, 64 Burns Bay Rd., Lane Cove.	64231	1986	Premise Match	895m	North West
MOTOR GARAGES &/OR ENGINEERS &/OR SERVICE STATIONS. (M6860)	Amoco Lane Cove, 64 Burns Bay Rd., Lane Cove. 2066.	55972	1982	Premise Match	895m	North West
MOTOR GARAGES &/OR ENGINEERS &/OR SERVICE STATIONS.	Amoco Lane Cove, 64 Burns Bay Rd.. Lane Cove.	49236	1978	Premise Match	895m	North West
MOTOR GARAGES & SERVICE STATIONS.	Walker Begg, 96 Hotham Pde., Artarmon.	65680	1986	Premise Match	896m	North East
MOTOR GARAGES & ENGINEERS(M6S6)	Lane Cove Service Centre,43-45 Burns Bay Rd.LANE COVE	338138	1970	Premise Match	904m	North West
MOTOR SERVICE STATIONS-PETROL,OIL,Etc. (M716)	Lane Cove (Mobil) Service Centre,45 Burns Bay Rd.LANE COVE	341266	1970	Premise Match	911m	North West
MOTOR GARAGES & SERVICE STATIONS.	Automotive Developmental Services Pty. Ltd., Rear 78 Whiting St., Artarmon.	63990	1986	Premise Match	919m	North East

Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Feature Point	Direction
MOTOR GARAGES &/OR ENGINEERS &/OR SERVICE STATIONS. (M6860)	Pope Automobile Developments, Rear 78 Whiting St., Artarmon.2064.	57394	1982	Premise Match	919m	North East
Motor Service Stations - Petrol, Oil, Etc. - Lane Cove	Lane Cove (Mobil) Service Centre, 45-47 Burns Bay Rd.	125840	1965	Premise Match	924m	North West
MOTOR GARAGES &/OR ENGINEERS &/OR SERVICE STATIONS.	Lane Cove Service Centre, 45 Burns Bay Rd., Lane Cove.	50364	1978	Premise Match	925m	North West
MOTOR GARAGES &/OR ENGINEERS.	Lane Cove Service Centre, 43 Burns Bay Rd., Lane Cove.	59140	1975	Premise Match	925m	North West
DRY CLEANERS, PRESSERS&/OR DYERS.	New Mayfair Dry Cleaning Pty. Ltd., 98 Longueville Rd., Lane Cove.	24238	1975	Premise Match	927m	North
DRY CLEANERS & PRESSERS.	New Mayfair Dry Cleaning Pty. Ltd., 98 Longueville Rd., Lane Cove.	25452	1986	Premise Match	928m	North
DRY CLEANERS & PRESSERS. (D8500)	New Mayfair Dry Cleaning Pty. Ltd., 98 Longueville Rd., Lane Cove.. 2066.	23987	1982	Premise Match	928m	North
DRY CLEANERS, PRESSERS &/OR DYERS	New Mayfair Dry Cleaning Pty. Ltd., 98 Longueville Rd., Lane Cove.	20890	1978	Premise Match	928m	North
DRY CLEANERS,PRESSERS/DYERS (D710)	New Mayfair Dry Cleaners Pty.Ltd.,98 Longueville Rd.,Lane Cove	292418	1970	Premise Match	928m	North
Dry Cleaners, Pressers/Dyers	New Mayfair Dry Cleaners Pty. Ltd., 98 Longueville Rd., Lane Cove	76260	1965	Premise Match	928m	North
MOTOR GARAGES &/OR ENGINEERS.	BP Artarmon Service Station, 327 Pacific H'way, Artarmon.	58512	1975	Premise Match	930m	North East
MOTOR GARAGES &/OR ENGINEERS &/OR SERVICE STATIONS.	B. & W. Motor Engineers, 85 Longueville Rd., Lane Cove.	49358	1978	Premise Match	956m	North
MOTOR GARAGES & ENGINEERS(M6S6)	B. & w. Motor Engineers,85 Longueville Rd.LANE COVE	337230	1970	Premise Match	956m	North
Motor Garages & Engineers - Lane Cove	B. & W. Motor Engineers, 85 Longueville Rd.	122875	1965	Premise Match	956m	North
MOTOR GARAGES &/OR ENGINEERS.	Lane Cove Auto Port. 374 Pacific Hwy, Lane Cove.	59139	1975	Premise Match	964m	North
Motor Service Stations - Petrol, Oil, Etc. - Lane Cove	Lane Cove Auto Port, 374-378 Pacific Hghwy.	125839	1965	Premise Match	964m	North
MOTOR GARAGES & ENGINEERS(M6S6)	Lane Cove Auto Port,374 Pacific Highway.LANE COVE	338137	1970	Premise Match	967m	North East
Motor Garages & Service Stations	Shell Lane Cove Self Serve 374 Pacific H'way, Lane Cove	53862	1991	Road Intersection	969m	North East
MOTOR GARAGES & SERVICE STATIONS.	Shell Lane Cove Self Serve, 374 Pacific H'way., Lane Cove.	65430	1986	Road Intersection	969m	North East
MOTOR GARAGES &/OR ENGINEERS &/OR SERVICE STATIONS.	BP Artarmon Service Station, 327Pacific H'way, Artarmon.	49493	1978	Premise Match	970m	North East
MOTOR GARAGES & ENGINEERS(M6S6)	BP Artarmon Service Station,327 Pacific Highway.ARTARMON	337356	1970	Premise Match	970m	North East
MOTOR GARAGES &/OR ENGINEERS &/OR SERVICE STATIONS. (M6860)	Custom Clutches, 81 Dickson Ave., Artarmon. 2064.	56602	1982	Premise Match	973m	North East
MOTOR GARAGES &/OR ENGINEERS &/OR SERVICE STATIONS. (M6860)	Lane Cove Auto Port, 374 Pacific H'way., Lane Cove. 2066.	57078	1982	Road Intersection	976m	North East
MOTOR GARAGES & SERVICE STATIONS.	Alamain Service Centre, 73 Longueville Rd., Lane Cove.	63868	1986	Premise Match	979m	North
MOTOR GARAGES &/OR ENGINEERS &/OR SERVICE STATIONS. (M6860)	Alamain Service Centre, 73 Longueville Rd., Lane Cove. 2066.	55938	1982	Premise Match	979m	North
MOTOR GARAGES &/OR ENGINEERS &/OR SERVICE STATIONS.	Lane Cove Terminus Motors, 73 Longueville Rd., Lane Cove.	50365	1978	Premise Match	979m	North
MOTOR SERVICE STATIONS-PETROL,OIL,Etc. (M716)	Ampol Service Station,73 Longueville Rd.LANE COVE	340771	1970	Premise Match	979m	North
MOTOR GARAGES & ENGINEERS(M6S6)	Lane Cove Terminus Motors,73 Longueville Rd.LANE COVE	338139	1970	Premise Match	979m	North
Motor Garages & Engineers - Lane Cove	Ampol Garage, 73 Longueville Rd.	122874	1965	Premise Match	979m	North
MOTOR GARAGES &/OR ENGINEERS	Belsey, F. S., 73 Longueville Rd., Lane Cove	83446	1950	Premise Match	979m	North
MOTOR SERVICE STATIONS-PETROL, Etc.	Lane Cove Terminus Motors, 73 Longueville Rd., Lane Cove	86123	1950	Premise Match	979m	North
MOTOR GARAGES &/OR ENGINEERS	Lane Cove Terminus Motors, 73 Longuevlle Rd., Lane Cove	83976	1950	Premise Match	979m	North
Engineers - Laundry & Dry Cleaning	Cooper, Grimm & Turner Engineering Pty. Ltd. , 78 Hotham Pde., Artarmon	83321	1965	Premise Match	980m	North East

Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Feature Point	Direction
Dry Cleaning Machinery & Supplies - Mfrs. &/or Dists.	Cooper, Grimm & Turner Engineering Pty. Ltd., 78 Hotham Pde., Artarmon	76398	1965	Premise Match	980m	North East
MOTOR GARAGES &/OR ENGINEERS.	Lane Cove Terminus Motors. 73 Longueville Rd., Lane Cove.	59141	1975	Premise Match	981m	North
MOTOR GARAGES & SERVICE STATIONS.	Esso Lane Cove Service Station, 382 Pacific H'way, Lane Cove.	64636	1986	Premise Match	986m	North
MOTOR GARAGES &/OR ENGINEERS &/OR SERVICE STATIONS. (M6860)	Esso Lane Cove Service Station, 382 Pacific H'way, Lane Cove.2066.	56705	1982	Premise Match	986m	North
MOTOR GARAGES &/OR ENGINEERS &/OR SERVICE STATIONS.	Esso Servicenter, 382 Pacific H'way, Lane Cove.	49993	1978	Premise Match	986m	North
MOTOR GARAGES & ENGINEERS(M6S6)	Red Carpet Service Station Pty. Ltd.,382 Pacific Highway.LANE COVE	338487	1970	Premise Match	986m	North
MOTOR GARAGES &/OR ENGINEERS.	Esso Servicenter 382 Pacific H'way, Lane Cove.	58830	1975	Premise Match	987m	North
Motor Garages & Service Stations	Ampol Artarmon 301 Pacific H'way., Artarmon. 2064	53458	1991	Premise Match	988m	North East
MOTOR GARAGES & SERVICE STATIONS.	Pit Stop Performance Centre Pty. Ltd., 301 Pacific H'way. Artarmon.	65271	1986	Premise Match	988m	North East
MOTOR GARAGES &/OR ENGINEERS &/OR SERVICE STATIONS. (M6860)	Pit Stop Performance Centre, 301 Pacific H'way., Artarmon. 2064.	57389	1982	Premise Match	988m	North East
MOTOR GARAGES &/OR ENGINEERS &/OR SERVICE STATIONS.	Total Artarmon Service Station, 301 Pacific H'way, Artarmon.	50958	1978	Premise Match	988m	North East
MOTOR SERVICE STATIONS - PETROL, OIL	Total Artarmon Service Station, 301 Pacific H'way, Artarmon.	61987	1975	Premise Match	988m	North East
MOTOR SERVICE STATIONS-PETROL,OIL,Etc. (M716)	Total Artarmon Service Station,301 Pacific Highway.Artarmon	341547	1970	Premise Match	988m	North East
Motor Service Stations - Petrol, Oil, Etc. - Artarmon	Total Artarmon Service Station, 301 Pacific Hghwy.	125388	1965	Premise Match	988m	North East
Motor Garages & Engineers - Artarmon	Castlereagh Tuning Centre, 403 Pacific Hghwy.	122115	1965	Premise Match	997m	North East

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

Historical Business Directories

266 Longueville Road, Lane Cove, NSW 2066

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

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

Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Road Corridor
MOTOR GARAGES &/OR ENGINEERS &/OR SERVICE STATIONS.	BP Northwood Service Station. 6 Kenneth St.. Northwood.	49586	1978	Road Match	117m
MOTOR GARAGES &/OR ENGINEERS	Radke and Denniss, 6 Kenneth St., Longueville	84252	1950	Road Match	117m
Motor Garages & Engineers - Longueville	Radke, W. H. & Co., 8 Kenneth St.	122954	1965	Road Match	117m
MOTOR SERVICE STATIONS-PETROL,OIL,Etc. (M716)	Embassy Services of Auburn Pty. Ltd.,Northwood Rd.NORTHWOOD	341027	1970	Road Match	379m
MOTOR GARAGES &/OR ENGINEERS.	Alto Ford (Artarmon) Pty. Ltd., 387 Pacific H'way., Artarmon.	58323	1975	Road Match	803m
MOTOR SERVICE STATIONS - PETROL, OIL	BP Hanthom Service Station, 422 Pacific H'way, Artarmon.	61413	1975	Road Match	803m
MOTOR GARAGES &/OR ENGINEERS &/OR SERVICE STATIONS.	BP Hanthorn Service Station, 422 Pacific H'way, Artarmon,	49350	1978	Road Match	803m
MOTOR GARAGES &/OR ENGINEERS &/OR SERVICE STATIONS.	Lane Cove Auto Port, Pacific H'way., Lane Cove.	50362	1978	Road Match	803m
MOTOR GARAGES & SERVICE STATIONS.	Pacific Tyrepower Automotive, 341 Pacific H'way., Artarmon.	65224	1986	Road Match	803m
MOTOR GARAGES & SERVICE STATIONS.	Shell Artarmon Auto Port, 247 Pacific H'way., ArtarmOn.	65405	1986	Road Match	803m
MOTOR GARAGES &/OR ENGINEERS &/OR SERVICE STATIONS.	T.V. Auto Port, 247 Pacific H'way, Artarmon.	50930	1978	Road Match	803m
MOTOR GARAGES &/OR ENGINEERS &/OR SERVICE STATIONS. (M6860)	T.V. Auto Port, 247 Pacific H'way, Artarmon. 2064.	57676	1982	Road Match	803m
Motor Service Stations - Petrol, Oil, Etc. - Artarmon	Hanthorn, R. G. & Co., 420 Pacific Hghwy.	125386	1965	Road Match	818m
Motor Service Stations - Petrol, Oil, Etc. - Artarmon	Schmitz, P. B., Pacific Hghwy.	125387	1965	Road Match	818m
MOTOR GARAGES &/OR ENGINEERS	Bennet'5 Corner Garage, Burns Bay Rd., Lane Cove	83448	1950	Road Match	825m
MOTOR GARAGES &/OR ENGINEERS.	Bruce's B. Service Station, 66 Bums Bay Rd., Lane Cove.	58492	1975	Road Match	825m
MOTOR GARAGES &/OR ENGINEERS.	Burns Bay Auto Port, 250 Bums Bay Rd., Lane Cove.	58504	1975	Road Match	825m
MOTOR GARAGES &/OR ENGINEERS	Felton's Service Station, Burns Bay, Rd,, Lane Cove	83738	1950	Road Match	825m
MOTOR SERVICE STATIONS-PETROL, Etc.	Feltons Service Station, Burns Bay Rd., Lane Cove	85954	1950	Road Match	825m
MOTOR GARAGES &/OR ENGINEERS	Hutchison, S. J., Burns Bay Rd., Lane Cove	83901	1950	Road Match	825m

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

Figure 25 - Acid Sulfate Soils Map

Lane Cove Local Environmental Plan 2009

Acid Sulfate Soils Map -

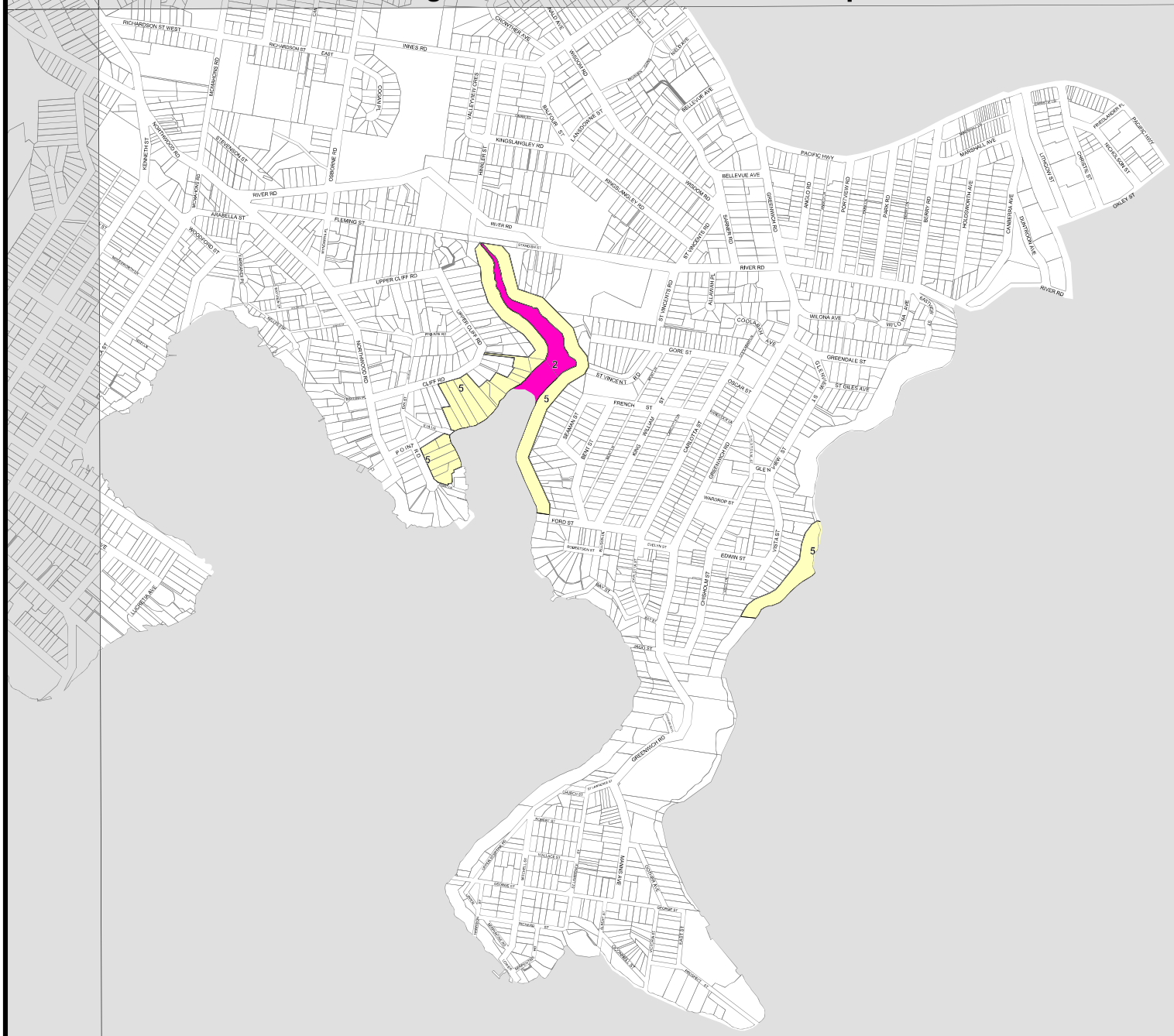
Sheet ASS_004

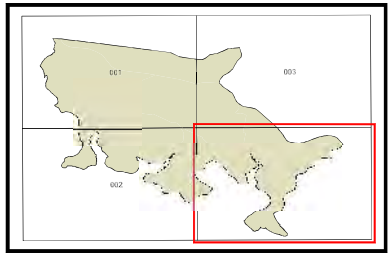
Acid Sulfate Soils

- 2 Class 2
- 3 Class 3
- 5 Class 5

Cadastre

Cadastre 30/04/09 © Lane Cove Council





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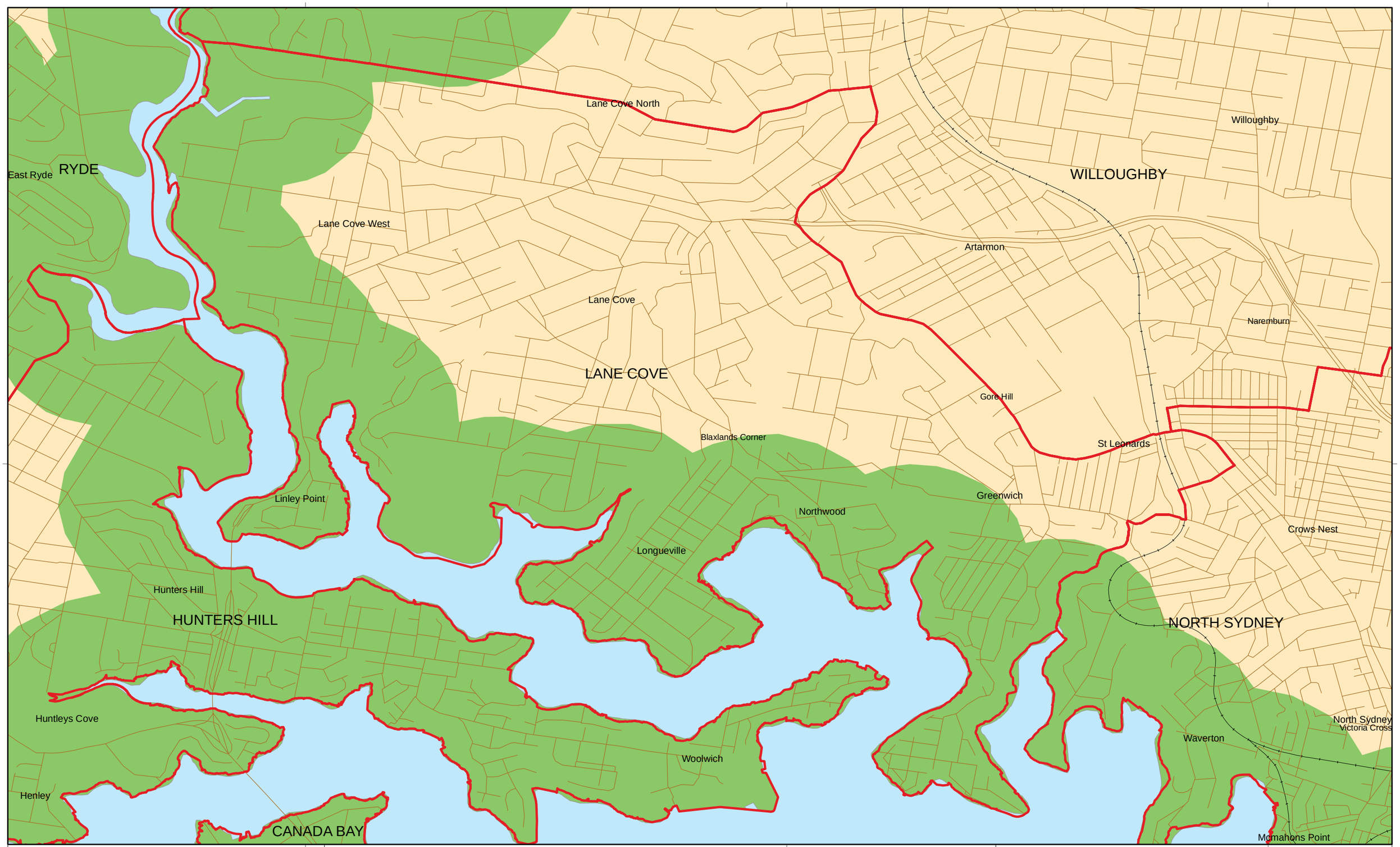
0 metres 500

Projection GDA 1994
Zone 56

Scale: 1:10000 @ A3

Map identification number:
4700_COM_ASS_004_010_20090430

Figure 26 - Sensitive Zone Map



UPSS Regulation - Sensitive Zones Map

LANE COVE MUNICIPAL COUNCIL

Legend

- Council Area
- Road
- Railway
- Sensitive Zone

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This map is not guaranteed to be free from error or omission
The Department of Environment, Climate Change and Water (NSW) and its employees
disclaim liability for any act done on the information in the
map and any consequences of such acts or omissions

Datum/Projection: GCS GDA 1994

Jan 12, 2010

0 0.4
Kilometres

Department of Environment, Climate Change and Water NSW

Scale at A3

1 cm equals 0.20 km

N

Lane Cove Council
48 Longueville Road, Lane Cove NSW 2066 Tel: 9911 3555 Fax: 9911 3600

PLANNING CERTIFICATE

Under Section10.7 Environmental Planning and Assessment Act, 1979

Applicant:
Jon Lawson
65 Stubbs Streey
Kensington VIC 3031

Date of Issue:	15/08/2018
Council Reference:	133596
Applicant Reference:	Lane Cove
Certificate No:	1076

Owner(s): **Lane Cove Council**
Property address: **266 Longueville Road LANE COVE NSW 2066**
Description: **LOT: 1 DP: 321353**
Property Reference: **13319**

INFORMATION PROVIDED PURSUANT TO SECTION 10.7(2) & (5) OF THE ACT

The planning information contained in this certificate applies specifically to the land.

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PART 2:

Sec: 1 Names of relevant planning instruments and DCP

1) The name of each environmental planning instrument that applies to the carrying out of development on the land.
Lane Cove Local Environmental Plan 2009 - gazetted on 19 February 2010

State Environmental Planning Policy No.19: Bushland in Urban Areas - gazetted 24 October 1986

State Environmental Planning Policy No.32: Urban Consolidation (Redevelopment of Urban Land) - gazetted 15 November 1991

State Environmental Planning Policy No.55: Remediation of Land - gazetted 28 August 1998

State Environmental Planning Policy No.64: Advertising and Signage - gazetted 16 March 2001

State Environmental Planning Policy (BASIX) 2004 - gazetted 25 June 2004

State Environmental Planning Policy (Housing for seniors or people with a disability) 2004 Amendment No.2 - gazetted 31 March 2004 effective 12 October 2007

State Environmental Planning Policy (Temporary Structures and Places of Public Entertainment) - gazetted 28 September 2007

State Environmental Planning Policy (Major Projects) 2005 - gazetted 1 August 2005

State Environmental Planning Policy (Infrastructure) 2007 - gazetted 21 December 2007; commenced 1 January 2008

State Environmental Planning Policy (Exempt & Complying Development Codes) - gazetted 12 December 2008

2) The name of each proposed environmental planning instrument that will apply to the carrying out of development on the land and that is or has been the subject of community consultations or on public exhibition under the Act (unless the Director-General has notified the council that the making of the proposed instrument has been deferred indefinitely or has not been approved)
N/A

3) The name of each development control plan that applies to the carrying out of development on the land.
Lane Cove Development Control Plan, effective 22 February 2010

4) In this clause, proposed environmental planning instrument includes a planning proposal for a LEP or draft environmental planning instrument.

Sec: 2 Zoning and land use under relevant LEPs

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The land is zoned: High Density Residential R4

1) **Objectives of zone**
   - To provide for the housing needs of the community within a high density residential environment.
   - To provide a variety of housing types within a high density residential environment.
   - To enable other land uses that provide facilities or services to meet the day to day needs of residents.
   - To provide for a high concentration of housing with good access to transport, services and facilities.
   - To ensure that the existing amenity of residences in the neighbourhood is respected.
   - To avoid the isolation of sites resulting from site amalgamation.
   - To ensure that landscaping is maintained and enhanced as a major element in the residential environment.
2) **Permitted without consent**

   Nil
3) **Permitted with consent**

   Bed and breakfast accommodation; Boarding houses; Child care centres; Community facilities; Exhibition homes; Group homes; Home businesses; Home industries; Hotel or motel accommodation; Multi dwelling housing; Neighbourhood shops; Places of public worship; Residential flat buildings; Respite day care centres; Restaurants or cafes; Roads; Shop top housing; Signage.
4) **Prohibited**

   Any development not specified in item 2 or 3.

5) Whether any development standards applying to the land fix minimum land dimensions for the erection of a dwelling-house on the land and, if so, the minimum land dimensions so fixed:
   Not Applicable

6) Whether the land includes or comprises critical habitat:
   NO

7) Whether the land is in a conservation area (however described):
   NO

8) Whether an item of environmental heritage (however described) is situated on the land:
   NO

Sec: 2A Zoning and land use under State Environmental Planning Policy (Sydney Region Growth Centres) 2006

Not applicable.

Sec: 3 Complying development

1) The extent to which the land is on which complying development may be carried out under each of the codes for complying development because of the provisions of clauses 1.17A (1) (c) to (e), (2), (3) and (4) and 1.19 of State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.

2) The extent to which complying development may not be carried out on that land because of the provisions of clauses 1.17A (1)(c) to (e), (2), (3) and (4) and 1.19 of that Policy and the reasons why it may not be carried out under those clauses.

3) If the council does not have sufficient information to ascertain the extent to which complying development may or may not be carried out on the land, a statement that a restriction applies to the land, but it may not apply to all of the land, and that council does not have sufficient information to ascertain the extent to which complying development may or may not be carried out on the land.

(1) Complying development may be carried out on the land as a whole under the SEPP in accordance with the following Codes (unless the land is excluded elsewhere in this Section):- General Housing Code, Housing Alterations Code, General Development Code, Subdivision Code, Demolition Code and/or Fire Safety Code.

(2) Not applicable.
PLEASE NOTE: All of the provisions of the Low Rise Medium Density Housing Code have been deferred from the Lane Cove Local Government Area

(3) Not applicable

Sec: 4 Coastal Protection

Whether or not the land is affected by the operation of section 38 or 39 of the Coastal Protection Act 1979, but only to the extent that the council has been so notified by the Department of Services, Technology and Administration.

NO

Sec: 4A Certain information relating to beaches and coasts

Not applicable.

Sec: 4B Annual charges under Local Government Act 1993 for coastal protection services that relate to existing coastal protection works

Not applicable.

Sec: 5 Mine subsidence

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Whether or not the land is proclaimed to be a mine subsidence district within the meaning of section 15 of the *Mine Subsidence Compensation Act 1961*:
NO

Sec: 6 Road widening and road realignment

Whether or not the land is affected by any road widening or road realignment under:

a) Division 2 of Part 3 of the *Roads Act 1993*:
Not affected by road widening

b) Any environmental planning instrument:
NO

c) Any resolution of the council:
NO

Sec: 7 Council and other public authority policies on hazard risk restrictions

Whether or not the land is affected by a policy:
a) Adopted by the council, or
b) Adopted by any other public authority and notified to the council for the express purpose of its adoption by that authority being referred to in planning certificates issued by the council, that restricts the development of the land because of the likelihood of :-

Land slip:
NO

Bushfire:
See Section 11.

Tidal inundation:
NO

Subsidence:
NO

Acid Sulphate soils:
NO

Sec: 7A Flood related development controls information

1) Whether or not development on that land or part of the land for the purposes of swelling houses, dual occupancies, multi dwelling housing or residential flat buildings (not including development for the purposes of group homes or seniors housing) is subject to flood related development controls.
The Lane Cove Development Control Plan - effective 22 February 2010 - applies

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2) Whether or not development on that land or part of the land for any other purpose is subject to flood related development controls.
The Lane Cove Development Control Plan - effective 22 February 2010 - applies

Overland Flow
A study is currently being undertaken to determine exact locations subject to overland flow in the Municipality of Lane Cove. Until such time as Council has completed this work, property owners should conduct their own investigations to be satisfied that this property is not affected by overland flow.

Words and expressions in this clause have the same meanings as in the standard instrument set out in the *Standard Instrument (Local Environmental Plans) Order 2006*.

Sec: 8 Land reserved for acquisition

Whether or not any environmental planning instrument or proposed environmental planning instrument referred to in clause 1 makes provision in relation to the acquisition of the land by a public authority, as referred to in section 27 of the Act.
NO

Sec: 9 Contributions plans

Lane Cove Section 94 Contributions Plan.

Sec: 9A Biodiversity certified land

Not applicable.

Sec: 10 Biobanking agreements

Not applicable.

Sec: 11 Bushfire prone land

The land is not identified on the Lane Cove Bushfire Prone Land Map dated 27 May 2016.

Sec: 12 Property vegetation plans

Not applicable.

Sec: 13 Orders under Trees (disputes Between Neighbours) Act 2006

Whether an order has been made under the *Trees (Disputes Between Neighbours) Act 2006* to carry out work in relation to a tree on the land (but only if the council has been notified of the order).
NONE

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Sec: 14 Directions under Part 3A

If there is a direction by the Minister in force under section 75P (2) (c1) of the Act that a provision of an environmental planning instrument prohibiting or restricting the carrying out of a project or a stage of a project on the land under Part 4 of the Act does not have effect, a statement to that effect identifying the provision that does not have effect.
NONE

Sec: 15 Site compatibility certificates and conditions for seniors housing

If the land to which *State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004* applies:
A Site Compatibility Certificate for Seniors Housing was issued on 6 July 2017 (and is valid for 24 months from this date) with respect to this land. A copy of the Site Compatibility Certificate can be obtained from the Head Offices of NSW Planning and Environment by contacting 1300 305 695.

Sec: 16 Site compatibility certificates for infrastructure

Whether there is a valid site compatibility certificate (infrastructure), of which the council is aware, in respect of proposed development on the land.
NO

Sec: 17 Site compatibility certificates and conditions for affordable rental housing

Whether there is a current site compatibility certificate (affordable rental housing), of which the council is aware, in respect of proposed development on the land:
NO

Sec: 18 Paper Subdivision Information

1) The name of any development plan adopted by a relevant authority that applies to the land or that is proposed to be subject to a consent ballot.
Not applicable

2) The date of an subdivision order that applies to the land.
Not applicable

3) Words and expressions used in this clause have the same meaning as they have in Part 16C of this Regulation.

Sec: 19 Site verification certificates

Not applicable

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Sec: 20 Loose-fill asbestos insulation

If the land includes any residential premises (within the meaning of Division 1A of Part 8 of the Home Building Act 1989) that are listed on the register that is required to be maintained under that Division, a statement to that effect.

- **Some residential homes located in the Local Government Area have been identified as containing Loose Fill Asbestos Insulation (LFAI) , for example in the roof space**
- **NSW Fair Trading maintains a Register of these homes that are affected by Loose Fill Asbestos Insulation. This register can be found on NSW Fair Trading's website -** http://www.fairtrading.nsw.gov.au/ftw/Tenants_and_home_owners/Loose_fill_asbestos_insulation.page

You should make your own enquiries as to the age of the buildings on the land to which this certificate relates to confirm the status of the property.

Sec: 21 Affected building notices and building product rectification orders

1) A statement of whether there is any affected building notice of which the council is aware that is in force in respect of the land.
NO

2) A statement of:
(a) whether there is any building product rectification order of which the council is aware that is in force in respect of the land and has not been fully complied with, and
NO

(b) whether any notice of intention to make a building product rectification order of which the council is aware has been given in respect of the land and is outstanding.

NO

3) In this clause:
affected building notice has the same meaning as in Part 4 of the Building Products (Safety) Act 2017.
building product rectification order has the same meaning as in the Building Products (Safety) Act 2017.

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

a) That the land to which the certificate relates is significantly contaminated land within the meaning of that Act – if the land (or part of the land) is significantly contaminated land at the date when the certificate is issued,
NO

b) That the land to which the certificate relates is subject to a management order within the meaning of that Act – if it is subject to such an order at the date when the certificate is issued,
NO

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c) That the land to which the certificate relates is subject of an approved voluntary management proposal within the meaning of that Act – if it is the subject of such an approved proposal at the date when the certificate is issued,
NO

d) That the land to which the certificate relates is subject to an ongoing maintenance order within the meaning of that Act – if it is subject to such an order at the date when the certificate is issued,
NO

e) That the land to which the certificate relates is the subject of a site audit statement within the meaning of that Act – if a copy of such a statement has been provided at any time to the local authority issuing the certificate.
NO

Council records do not have sufficient information about the uses (including previous uses) of the land which is the subject of this Section 10.7 certificate. To confirm that the land hasn't been used for a purpose which would be likely to have contaminated the land, parties should make their own enquiries as to whether the land may be contaminated.

For further information, please contact the Strategic Planning Department on 9911 3612.

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48 Longueville Road, Lane Cove NSW 2066 Tel: 9911 3555 Fax: 9911 3600

Part 5:
ADDITIONAL INFORMATION PROVIDED UNDER SECTION 10.7(5) OF THE ACT

The instruments and the plans should be examined in relation to the specific restrictions which may apply to any development which may be proposed.

The land is subject to a Tree Preservation Order, details of which are available at Council's Customer Service Centre.

The Register of Consents may be examined at Council's Customer Service Centre for particulars relating to development consents which may have been issued for the use or development of the land.

Enquiries regarding Arterial Road Reservations and Regional Open Space should be directed to the Roads and Traffic Authority and Department of Planning respectively.

The information provided concerning the Coastal Protection Act, 1979 is only to the extent that the Council has been notified by the Department of Public Works and Services.

For more information, please contact the Strategic Planning Department on 9911 3555

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Lane Cove Council
48 Longueville Road, Lane Cove NSW 2066 Tel: 9911 3555 Fax: 9911 3600

PLANNING CERTIFICATE

Under Section10.7 Environmental Planning and Assessment Act, 1979

Applicant:
Jon Lawson
65 Stubbs Streey
Kensington VIC 3031

Date of Issue:	15/08/2018
Council Reference:	133596
Applicant Reference:	Lane Cove
Certificate No:	1077

Owner(s): **Lane Cove Council**
Property address: **266 Longueville Road LANE COVE NSW 2066**
Description: **LOT: 1 DP: 1227921**
Property Reference: **21426**

INFORMATION PROVIDED PURSUANT TO SECTION 10.7(2) & (5) OF THE ACT

The planning information contained in this certificate applies specifically to the land.

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PART 2:

Sec: 1 Names of relevant planning instruments and DCP

1) The name of each environmental planning instrument that applies to the carrying out of development on the land.
Lane Cove Local Environmental Plan 2009 - gazetted on 19 February 2010

State Environmental Planning Policy No.19: Bushland in Urban Areas - gazetted 24 October 1986

State Environmental Planning Policy No.32: Urban Consolidation (Redevelopment of Urban Land) - gazetted 15 November 1991

State Environmental Planning Policy No.55: Remediation of Land - gazetted 28 August 1998

State Environmental Planning Policy No.64: Advertising and Signage - gazetted 16 March 2001

State Environmental Planning Policy (BASIX) 2004 - gazetted 25 June 2004

State Environmental Planning Policy (Housing for seniors or people with a disability) 2004 Amendment No.2 - gazetted 31 March 2004 effective 12 October 2007

State Environmental Planning Policy (Temporary Structures and Places of Public Entertainment) - gazetted 28 September 2007

State Environmental Planning Policy (Major Projects) 2005 - gazetted 1 August 2005

State Environmental Planning Policy (Infrastructure) 2007 - gazetted 21 December 2007; commenced 1 January 2008

State Environmental Planning Policy (Exempt & Complying Development Codes) - gazetted 12 December 2008

2) The name of each proposed environmental planning instrument that will apply to the carrying out of development on the land and that is or has been the subject of community consultations or on public exhibition under the Act (unless the Director-General has notified the council that the making of the proposed instrument has been deferred indefinitely or has not been approved)
N/A

3) The name of each development control plan that applies to the carrying out of development on the land.
Lane Cove Development Control Plan, effective 22 February 2010

4) In this clause, proposed environmental planning instrument includes a planning proposal for a LEP or draft environmental planning instrument.

Sec: 2 Zoning and land use under relevant LEPs

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The land is zoned: High Density Residential R4

1) **Objectives of zone**
   - To provide for the housing needs of the community within a high density residential environment.
   - To provide a variety of housing types within a high density residential environment.
   - To enable other land uses that provide facilities or services to meet the day to day needs of residents.
   - To provide for a high concentration of housing with good access to transport, services and facilities.
   - To ensure that the existing amenity of residences in the neighbourhood is respected.
   - To avoid the isolation of sites resulting from site amalgamation.
   - To ensure that landscaping is maintained and enhanced as a major element in the residential environment.
2) **Permitted without consent**

   Nil
3) **Permitted with consent**

   Bed and breakfast accommodation; Boarding houses; Child care centres; Community facilities; Exhibition homes; Group homes; Home businesses; Home industries; Hotel or motel accommodation; Multi dwelling housing; Neighbourhood shops; Places of public worship; Residential flat buildings; Respite day care centres; Restaurants or cafes; Roads; Shop top housing; Signage.
4) **Prohibited**

   Any development not specified in item 2 or 3.

5) Whether any development standards applying to the land fix minimum land dimensions for the erection of a dwelling-house on the land and, if so, the minimum land dimensions so fixed:
   Not Applicable

6) Whether the land includes or comprises critical habitat:
   NO

7) Whether the land is in a conservation area (however described):
   NO

8) Whether an item of environmental heritage (however described) is situated on the land:
   NO

Sec: 2A Zoning and land use under State Environmental Planning Policy (Sydney Region Growth Centres) 2006

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Not applicable.

Sec: 3 Complying development

1) The extent to which the land is on which complying development may be carried out under each of the codes for complying development because of the provisions of clauses 1.17A (1) (c) to (e), (2), (3) and (4) and 1.19 of State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.

2) The extent to which complying development may not be carried out on that land because of the provisions of clauses 1.17A (1)(c) to (e), (2), (3) and (4) and 1.19 of that Policy and the reasons why it may not be carried out under those clauses.

3) If the council does not have sufficient information to ascertain the extent to which complying development may or may not be carried out on the land, a statement that a restriction applies to the land, but it may not apply to all of the land, and that council does not have sufficient information to ascertain the extent to which complying development may or may not be carried out on the land.

(1) Complying development may not be carried out under the SEPP's General Housing Code on the part of the land indicated in(2). Complying development may be carried out on the land elsewhere under the following Codes (unless the land is excluded elsewhere in this Section 3): Housing Alterations Code, General Development Code, Subdivision Code, Demolition Code and/or Fire Safety Code.
(2) Complying development may not be carried out under the SEPP's General Housing Code on the part of the land mapped as within an Environmental Protection area under the LEP. Reason:Envmtl Prtn LEP

(3) Not applicable

Sec: 4 Coastal Protection

Whether or not the land is affected by the operation of section 38 or 39 of the Coastal Protection Act 1979, but only to the extent that the council has been so notified by the Department of Services, Technology and Administration.

NO

Sec: 4A Certain information relating to beaches and coasts

Not applicable.

Sec: 4B Annual charges under Local Government Act 1993 for coastal protection services that relate to existing coastal protection works

Not applicable.

Sec: 5 Mine subsidence

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Whether or not the land is proclaimed to be a mine subsidence district within the meaning of section 15 of the *Mine Subsidence Compensation Act 1961*:
NO

Sec: 6 Road widening and road realignment

Whether or not the land is affected by any road widening or road realignment under:

a) Division 2 of Part 3 of the *Roads Act 1993*:
Not affected by road widening

b) Any environmental planning instrument:
NO

c) Any resolution of the council:
NO

Sec: 7 Council and other public authority policies on hazard risk restrictions

Whether or not the land is affected by a policy:
a) Adopted by the council, or
b) Adopted by any other public authority and notified to the council for the express purpose of its adoption by that authority being referred to in planning certificates issued by the council, that restricts the development of the land because of the likelihood of :-

Land slip:
NO

Bushfire:
See Section 11.

Tidal inundation:
NO

Subsidence:
NO

Acid Sulphate soils:
NO

Sec: 7A Flood related development controls information

1) Whether or not development on that land or part of the land for the purposes of swelling houses, dual occupancies, multi dwelling housing or residential flat buildings (not including development for the purposes of group homes or seniors housing) is subject to flood related development controls.
The Lane Cove Development Control Plan - effective 22 February 2010 - applies

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2) Whether or not development on that land or part of the land for any other purpose is subject to flood related development controls.
The Lane Cove Development Control Plan - effective 22 February 2010 - applies

Overland Flow
A study is currently being undertaken to determine exact locations subject to overland flow in the Municipality of Lane Cove. Until such time as Council has completed this work, property owners should conduct their own investigations to be satisfied that this property is not affected by overland flow.

Words and expressions in this clause have the same meanings as in the standard instrument set out in the *Standard Instrument (Local Environmental Plans) Order 2006*.

Sec: 8 Land reserved for acquisition

Whether or not any environmental planning instrument or proposed environmental planning instrument referred to in clause 1 makes provision in relation to the acquisition of the land by a public authority, as referred to in section 27 of the Act.
NO

Sec: 9 Contributions plans

Lane Cove Section 94 Contributions Plan.

Sec: 9A Biodiversity certified land

Not applicable.

Sec: 10 Biobanking agreements

Not applicable.

Sec: 11 Bushfire prone land

The land is not identified on the Lane Cove Bushfire Prone Land Map dated 27 May 2016.

Sec: 12 Property vegetation plans

Not applicable.

Sec: 13 Orders under Trees (disputes Between Neighbours) Act 2006

Whether an order has been made under the *Trees (Disputes Between Neighbours) Act 2006* to carry out work in relation to a tree on the land (but only if the council has been notified of the order).
NONE

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Sec: 14 Directions under Part 3A

If there is a direction by the Minister in force under section 75P (2) (c1) of the Act that a provision of an environmental planning instrument prohibiting or restricting the carrying out of a project or a stage of a project on the land under Part 4 of the Act does not have effect, a statement to that effect identifying the provision that does not have effect.
NONE

Sec: 15 Site compatibility certificates and conditions for seniors housing

If the land to which *State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004* applies:
A Site Compatibility Certificate for Seniors Housing was issued on 6 July 2017 (and is valid for 24 months from this date) with respect to this land. A copy of the Site Compatibility Certificate can be obtained from the Head Offices of NSW Planning and Environment by contacting 1300 305 695.

Sec: 16 Site compatibility certificates for infrastructure

Whether there is a valid site compatibility certificate (infrastructure), of which the council is aware, in respect of proposed development on the land.
NO

Sec: 17 Site compatibility certificates and conditions for affordable rental housing

Whether there is a current site compatibility certificate (affordable rental housing), of which the council is aware, in respect of proposed development on the land:
NO

Sec: 18 Paper Subdivision Information

1) The name of any development plan adopted by a relevant authority that applies to the land or that is proposed to be subject to a consent ballot.
Not applicable

2) The date of an subdivision order that applies to the land.
Not applicable

3) Words and expressions used in this clause have the same meaning as they have in Part 16C of this Regulation.

Sec: 19 Site verification certificates

Not applicable

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Sec: 20 Loose-fill asbestos insulation

If the land includes any residential premises (within the meaning of Division 1A of Part 8 of the Home Building Act 1989) that are listed on the register that is required to be maintained under that Division, a statement to that effect.

- **Some residential homes located in the Local Government Area have been identified as containing Loose Fill Asbestos Insulation (LFAI) , for example in the roof space**
- **NSW Fair Trading maintains a Register of these homes that are affected by Loose Fill Asbestos Insulation. This register can be found on NSW Fair Trading's website -** http://www.fairtrading.nsw.gov.au/ftw/Tenants_and_home_owners/Loose_fill_asbestos_insulation.page

You should make your own enquiries as to the age of the buildings on the land to which this certificate relates to confirm the status of the property.

Sec: 21 Affected building notices and building product rectification orders

1) A statement of whether there is any affected building notice of which the council is aware that is in force in respect of the land.
NO

2) A statement of:
(a) whether there is any building product rectification order of which the council is aware that is in force in respect of the land and has not been fully complied with, and
NO

(b) whether any notice of intention to make a building product rectification order of which the council is aware has been given in respect of the land and is outstanding.

NO

3) In this clause:
affected building notice has the same meaning as in Part 4 of the Building Products (Safety) Act 2017.
building product rectification order has the same meaning as in the Building Products (Safety) Act 2017.

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

a) That the land to which the certificate relates is significantly contaminated land within the meaning of that Act – if the land (or part of the land) is significantly contaminated land at the date when the certificate is issued,
NO

b) That the land to which the certificate relates is subject to a management order within the meaning of that Act – if it is subject to such an order at the date when the certificate is issued,
NO

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c) That the land to which the certificate relates is subject of an approved voluntary management proposal within the meaning of that Act – if it is the subject of such an approved proposal at the date when the certificate is issued,
NO

d) That the land to which the certificate relates is subject to an ongoing maintenance order within the meaning of that Act – if it is subject to such an order at the date when the certificate is issued,
NO

e) That the land to which the certificate relates is the subject of a site audit statement within the meaning of that Act – if a copy of such a statement has been provided at any time to the local authority issuing the certificate.
NO

Council records do not have sufficient information about the uses (including previous uses) of the land which is the subject of this Section 10.7 certificate. To confirm that the land hasn't been used for a purpose which would be likely to have contaminated the land, parties should make their own enquiries as to whether the land may be contaminated.

For further information, please contact the Strategic Planning Department on 9911 3612.

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Lane Cove Council
48 Longueville Road, Lane Cove NSW 2066 Tel: 9911 3555 Fax: 9911 3600

Part 5:
ADDITIONAL INFORMATION PROVIDED UNDER SECTION 10.7(5) OF THE ACT

The instruments and the plans should be examined in relation to the specific restrictions which may apply to any development which may be proposed.

The land is subject to a Tree Preservation Order, details of which are available at Council's Customer Service Centre.

The Register of Consents may be examined at Council's Customer Service Centre for particulars relating to development consents which may have been issued for the use or development of the land.

Enquiries regarding Arterial Road Reservations and Regional Open Space should be directed to the Roads and Traffic Authority and Department of Planning respectively.

The information provided concerning the Coastal Protection Act, 1979 is only to the extent that the Council has been notified by the Department of Public Works and Services.

For more information, please contact the Strategic Planning Department on 9911 3555

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Lane Cove Council
48 Longueville Road Lane Cove NSW 2066 Tel: 9911 3555 Fax: 9911 3600

PLANNING CERTIFICATE

Under Section10.7 Environmental Planning and Assessment Act, 1979

Applicant:
Jon Lawson
65 Stubbs Streey
Kensington VIC 3031

Date of Issue:	15/08/2018
Council Reference:	133596
Applicant Reference:	Lane Cove
Certificate No:	1078

Owner(s): **Lane Cove Council**
Property address: **266 Longueville Road LANE COVE NSW 2066**
Description: **LOT: 2 DP: 1227921**
Property Reference: **21427**

INFORMATION PROVIDED PURSUANT TO SECTION 10.7(2) & (5) OF THE ACT

The planning information contained in this certificate applies specifically to the land.

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Certain information relating to beaches and coasts	4A
Annual charges: Local Government Act – coastal protection	4B
Mine Subsidence	5
Road Widening and road realignment	6
Council and other public hazard risk restriction	7
Flood related development controls	7A
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Contaminated Land Management Act 1997s.59(2)	Note
Part 5: Additional information for Section 10.7 (5)	Part 5

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PART 2:

Sec: 1 Names of relevant planning instruments and DCP

1) The name of each environmental planning instrument that applies to the carrying out of development on the land.
Lane Cove Local Environmental Plan 2009 - gazetted on 19 February 2010

State Environmental Planning Policy No.19: Bushland in Urban Areas - gazetted 24 October 1986

State Environmental Planning Policy No.32: Urban Consolidation (Redevelopment of Urban Land) - gazetted 15 November 1991

State Environmental Planning Policy No.55: Remediation of Land - gazetted 28 August 1998

State Environmental Planning Policy No.64: Advertising and Signage - gazetted 16 March 2001

State Environmental Planning Policy (BASIX) 2004 - gazetted 25 June 2004

State Environmental Planning Policy (Housing for seniors or people with a disability) 2004 Amendment No.2 - gazetted 31 March 2004 effective 12 October 2007

State Environmental Planning Policy (Temporary Structures and Places of Public Entertainment) - gazetted 28 September 2007

State Environmental Planning Policy (Major Projects) 2005 - gazetted 1 August 2005

State Environmental Planning Policy (Infrastructure) 2007 - gazetted 21 December 2007; commenced 1 January 2008

State Environmental Planning Policy (Exempt & Complying Development Codes) - gazetted 12 December 2008

2) The name of each proposed environmental planning instrument that will apply to the carrying out of development on the land and that is or has been the subject of community consultations or on public exhibition under the Act (unless the Director-General has notified the council that the making of the proposed instrument has been deferred indefinitely or has not been approved)
N/A

3) The name of each development control plan that applies to the carrying out of development on the land.
Lane Cove Development Control Plan, effective 22 February 2010

4) In this clause, proposed environmental planning instrument includes a planning proposal for a LEP or draft environmental planning instrument.

Sec: 2 Zoning and land use under relevant LEPs

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The land is zoned: High Density Residential R4

1) **Objectives of zone**
   - To provide for the housing needs of the community within a high density residential environment.
   - To provide a variety of housing types within a high density residential environment.
   - To enable other land uses that provide facilities or services to meet the day to day needs of residents.
   - To provide for a high concentration of housing with good access to transport, services and facilities.
   - To ensure that the existing amenity of residences in the neighbourhood is respected.
   - To avoid the isolation of sites resulting from site amalgamation.
   - To ensure that landscaping is maintained and enhanced as a major element in the residential environment.
2) **Permitted without consent**

   Nil
3) **Permitted with consent**

   Bed and breakfast accommodation; Boarding houses; Child care centres; Community facilities; Exhibition homes; Group homes; Home businesses; Home industries; Hotel or motel accommodation; Multi dwelling housing; Neighbourhood shops; Places of public worship; Residential flat buildings; Respite day care centres; Restaurants or cafes; Roads; Shop top housing; Signage.
4) **Prohibited**

   Any development not specified in item 2 or 3.

5) Whether any development standards applying to the land fix minimum land dimensions for the erection of a dwelling-house on the land and, if so, the minimum land dimensions so fixed:
   Not Applicable

6) Whether the land includes or comprises critical habitat:
   NO

7) Whether the land is in a conservation area (however described):
   NO

8) Whether an item of environmental heritage (however described) is situated on the land:
   NO

Sec: 2A Zoning and land use under State Environmental Planning Policy (Sydney Region Growth Centres) 2006

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Not applicable.

Sec: 3 Complying development

1) The extent to which the land is on which complying development may be carried out under each of the codes for complying development because of the provisions of clauses 1.17A (1) (c) to (e), (2), (3) and (4) and 1.19 of State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.

2) The extent to which complying development may not be carried out on that land because of the provisions of clauses 1.17A (1)(c) to (e), (2), (3) and (4) and 1.19 of that Policy and the reasons why it may not be carried out under those clauses.

3) If the council does not have sufficient information to ascertain the extent to which complying development may or may not be carried out on the land, a statement that a restriction applies to the land, but it may not apply to all of the land, and that council does not have sufficient information to ascertain the extent to which complying development may or may not be carried out on the land.

(1) Complying development may be carried out on the land as a whole under the SEPP in accordance with the following Codes (unless the land is excluded elsewhere in this Section):- General Housing Code, Housing Alterations Code, General Development Code, Subdivision Code, Demolition Code and/or Fire Safety Code.

(2) Not applicable.
PLEASE NOTE: All of the provisions of the Low Rise Medium Density Housing Code have been deferred from the Lane Cove Local Government Area

(3) Not applicable

Sec: 4 Coastal Protection

Whether or not the land is affected by the operation of section 38 or 39 of the Coastal Protection Act 1979, but only to the extent that the council has been so notified by the Department of Services, Technology and Administration.

NO

Sec: 4A Certain information relating to beaches and coasts

Not applicable.

Sec: 4B Annual charges under Local Government Act 1993 for coastal protection services that relate to existing coastal protection works

Not applicable.

Sec: 5 Mine subsidence

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Whether or not the land is proclaimed to be a mine subsidence district within the meaning of section 15 of the *Mine Subsidence Compensation Act 1961*:
NO

Sec: 6 Road widening and road realignment

Whether or not the land is affected by any road widening or road realignment under:

a) Division 2 of Part 3 of the *Roads Act 1993*:
Not affected by road widening

b) Any environmental planning instrument:
NO

c) Any resolution of the council:
NO

Sec: 7 Council and other public authority policies on hazard risk restrictions

Whether or not the land is affected by a policy:
a) Adopted by the council, or
b) Adopted by any other public authority and notified to the council for the express purpose of its adoption by that authority being referred to in planning certificates issued by the council, that restricts the development of the land because of the likelihood of :-

Land slip:
NO

Bushfire:
See Section 11.

Tidal inundation:
NO

Subsidence:
NO

Acid Sulphate soils:
NO

Sec: 7A Flood related development controls information

1) Whether or not development on that land or part of the land for the purposes of swelling houses, dual occupancies, multi dwelling housing or residential flat buildings (not including development for the purposes of group homes or seniors housing) is subject to flood related development controls.
The Lane Cove Development Control Plan - effective 22 February 2010 - applies

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2) Whether or not development on that land or part of the land for any other purpose is subject to flood related development controls.
The Lane Cove Development Control Plan - effective 22 February 2010 - applies

Overland Flow
A study is currently being undertaken to determine exact locations subject to overland flow in the Municipality of Lane Cove. Until such time as Council has completed this work, property owners should conduct their own investigations to be satisfied that this property is not affected by overland flow.

Words and expressions in this clause have the same meanings as in the standard instrument set out in the *Standard Instrument (Local Environmental Plans) Order 2006*.

Sec: 8 Land reserved for acquisition

Whether or not any environmental planning instrument or proposed environmental planning instrument referred to in clause 1 makes provision in relation to the acquisition of the land by a public authority, as referred to in section 27 of the Act.
NO

Sec: 9 Contributions plans

Lane Cove Section 94 Contributions Plan.

Sec: 9A Biodiversity certified land

Not applicable.

Sec: 10 Biobanking agreements

Not applicable.

Sec: 11 Bushfire prone land

The land is not identified on the Lane Cove Bushfire Prone Land Map dated 27 May 2016.

Sec: 12 Property vegetation plans

Not applicable.

Sec: 13 Orders under Trees (disputes Between Neighbours) Act 2006

Whether an order has been made under the *Trees (Disputes Between Neighbours) Act 2006* to carry out work in relation to a tree on the land (but only if the council has been notified of the order).
NONE

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Sec: 14 Directions under Part 3A

If there is a direction by the Minister in force under section 75P (2) (c1) of the Act that a provision of an environmental planning instrument prohibiting or restricting the carrying out of a project or a stage of a project on the land under Part 4 of the Act does not have effect, a statement to that effect identifying the provision that does not have effect.
NONE

Sec: 15 Site compatibility certificates and conditions for seniors housing

If the land to which *State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004* applies:
A Site Compatibility Certificate for Seniors Housing was issued on 6 July 2017 (and is valid for 24 months from this date) with respect to this land. A copy of the Site Compatibility Certificate can be obtained from the Head Offices of NSW Planning and Environment by contacting 1300 305 695.

Sec: 16 Site compatibility certificates for infrastructure

Whether there is a valid site compatibility certificate (infrastructure), of which the council is aware, in respect of proposed development on the land.
NO

Sec: 17 Site compatibility certificates and conditions for affordable rental housing

Whether there is a current site compatibility certificate (affordable rental housing), of which the council is aware, in respect of proposed development on the land:
NO

Sec: 18 Paper Subdivision Information

1) The name of any development plan adopted by a relevant authority that applies to the land or that is proposed to be subject to a consent ballot.
Not applicable

2) The date of an subdivision order that applies to the land.
Not applicable

3) Words and expressions used in this clause have the same meaning as they have in Part 16C of this Regulation.

Sec: 19 Site verification certificates

Not applicable

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Sec: 20 Loose-fill asbestos insulation

If the land includes any residential premises (within the meaning of Division 1A of Part 8 of the Home Building Act 1989) that are listed on the register that is required to be maintained under that Division, a statement to that effect.

- **Some residential homes located in the Local Government Area have been identified as containing Loose Fill Asbestos Insulation (LFAI) , for example in the roof space**
- **NSW Fair Trading maintains a Register of these homes that are affected by Loose Fill Asbestos Insulation. This register can be found on NSW Fair Trading's website -** http://www.fairtrading.nsw.gov.au/ftw/Tenants_and_home_owners/Loose_fill_asbestos_insulation.page

You should make your own enquiries as to the age of the buildings on the land to which this certificate relates to confirm the status of the property.

Sec: 21 Affected building notices and building product rectification orders

1) A statement of whether there is any affected building notice of which the council is aware that is in force in respect of the land.
NO

2) A statement of:
(a) whether there is any building product rectification order of which the council is aware that is in force in respect of the land and has not been fully complied with, and
NO

(b) whether any notice of intention to make a building product rectification order of which the council is aware has been given in respect of the land and is outstanding.

NO

3) In this clause:
affected building notice has the same meaning as in Part 4 of the Building Products (Safety) Act 2017.
building product rectification order has the same meaning as in the Building Products (Safety) Act 2017.

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

a) That the land to which the certificate relates is significantly contaminated land within the meaning of that Act – if the land (or part of the land) is significantly contaminated land at the date when the certificate is issued,
NO

b) That the land to which the certificate relates is subject to a management order within the meaning of that Act – if it is subject to such an order at the date when the certificate is issued,
NO

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c) That the land to which the certificate relates is subject of an approved voluntary management proposal within the meaning of that Act – if it is the subject of such an approved proposal at the date when the certificate is issued,
NO

d) That the land to which the certificate relates is subject to an ongoing maintenance order within the meaning of that Act – if it is subject to such an order at the date when the certificate is issued,
NO

e) That the land to which the certificate relates is the subject of a site audit statement within the meaning of that Act – if a copy of such a statement has been provided at any time to the local authority issuing the certificate.
NO

Council records do not have sufficient information about the uses (including previous uses) of the land which is the subject of this Section 10.7 certificate. To confirm that the land hasn't been used for a purpose which would be likely to have contaminated the land, parties should make their own enquiries as to whether the land may be contaminated.

For further information, please contact the Strategic Planning Department on 9911 3612.

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Lane Cove Council
48 Longueville Road, Lane Cove NSW 2066 Tel: 9911 3555 Fax: 9911 3600

Part 5:
ADDITIONAL INFORMATION PROVIDED UNDER SECTION 10.7(5) OF THE ACT

The instruments and the plans should be examined in relation to the specific restrictions which may apply to any development which may be proposed.

The land is subject to a Tree Preservation Order, details of which are available at Council's Customer Service Centre.

The Register of Consents may be examined at Council's Customer Service Centre for particulars relating to development consents which may have been issued for the use or development of the land.

Enquiries regarding Arterial Road Reservations and Regional Open Space should be directed to the Roads and Traffic Authority and Department of Planning respectively.

The information provided concerning the Coastal Protection Act, 1979 is only to the extent that the Council has been notified by the Department of Public Works and Services.

For more information, please contact the Strategic Planning Department on 9911 3555

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Email - service@lanecove.nsw.gov.au • Website - www.lanecove.nsw.gov.au • ABN 42 062 211 626

WorkCover NSW
92-100 Donnison Street, Gosford, NSW 2250
Locked Bag 2906, Lisarow, NSW 2252
T 02 4321 5000 F 02 4325 4145
WorkCover Assistance Service 13 10 50
DX 731 Sydney workcover.nsw.gov.au

Our Ref: D11/147592
Your Ref: David Yonge

23 November 2011

Attention: David Yonge
SMEC Testing Services Pty Ltd
PO BOX 6989
Wetherill Park NSW 2164

Dear Mr Yonge,

RE SITE: 266 Longueville Rd Lane Cove NSW 2066

I refer to your site search request received by WorkCover NSW on 21November 2011 requesting information on licences to keep dangerous goods for the above site.

A search of the Stored Chemical Information Database (SCID) and the microfiche records held by WorkCover NSW has not located any records pertaining to the above mentioned premises.

If you have any further queries please contact the Dangerous Goods Licensing Team on (02) 4321 5500.

Yours Sincerely

Brent Jones
Senior Licensing Officer
Dangerous Goods Team

Aerial Imagery 2014

266 Longueville Road, Lane Cove, NSW 2066

Scale:	Data Sources:Aerial Imagery © Land and Property Information (a division of the Department of Finance and Services)	Coordinate System: GDA 1994 MGA Zone 56	Date: 20June 2017
0 25 50 100 Meters			

Aerial Imagery 2009

266 Longueville Road, Lane Cove, NSW 2066

Scale:
0 25 50 100
Meters

Data Sources: Aerial Imagery © 2017 Google Inc, used with permission. Google and the Google logo are registered trademarks of Google Inc.

Coordinate System:
GDA 1994 MGA Zone 56

Date: 15 June 2017

Aerial Imagery 2002

266 Longueville Road, Lane Cove, NSW 2066

Legend

Site Boundary

Buffer 150m

Scale:

0 25 50 100
Meters

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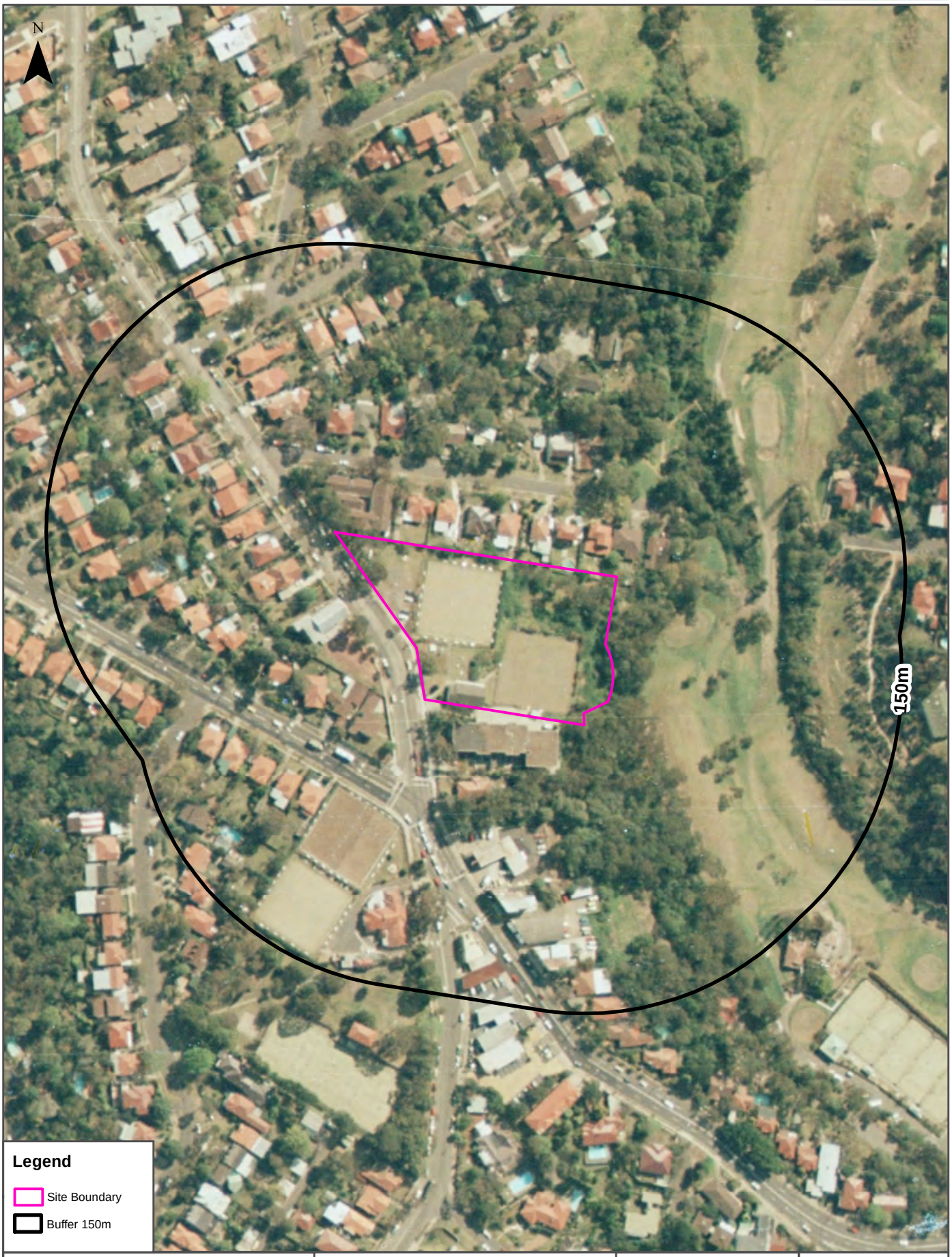
Coordinate System:
GDA 1994 MGA Zone 56

Date: 15 June 2017

Aerial Imagery 1991

266 Longueville Road, Lane Cove, NSW 2066



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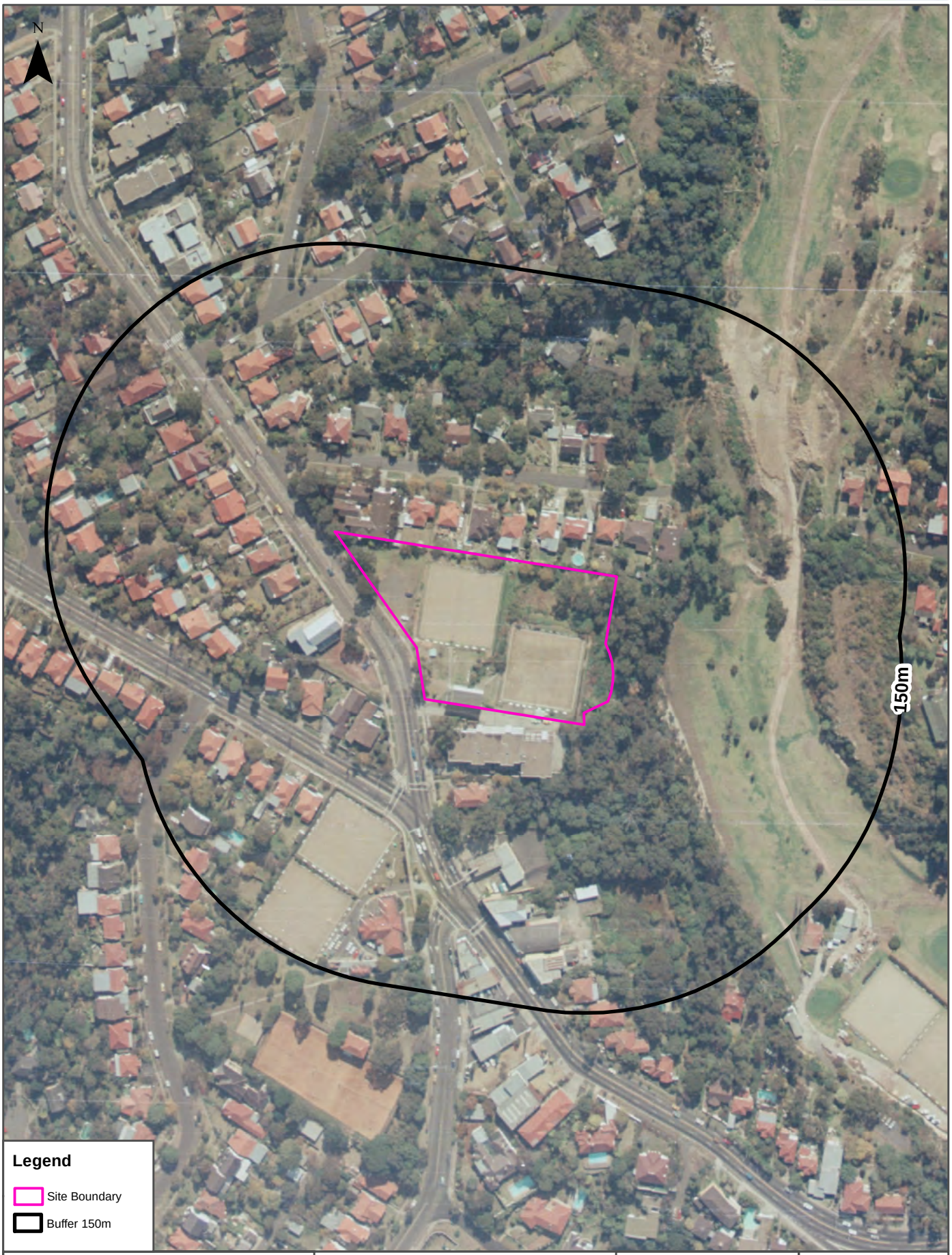
Data Sources: Historical Aerials: © Land and Property Information (a division of the Department of Finance and Services)

Coordinate System: GDA 1994 MGA Zone 56

Date: 15 June, 2017

Aerial Imagery 1982

266 Longueville Road, Lane Cove, NSW 2066



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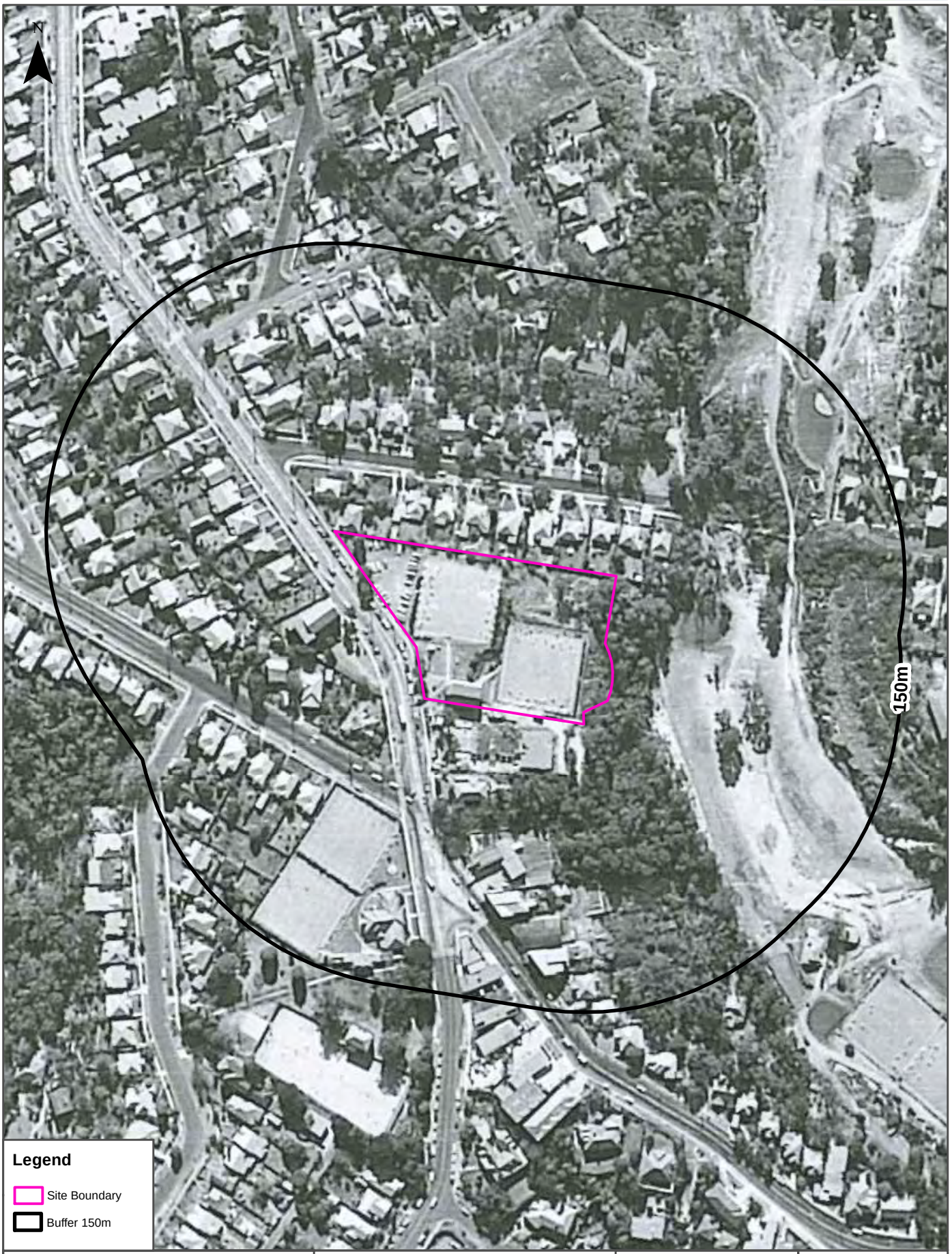
Aerial Imagery 1970

266 Longueville Road, Lane Cove, NSW 2066



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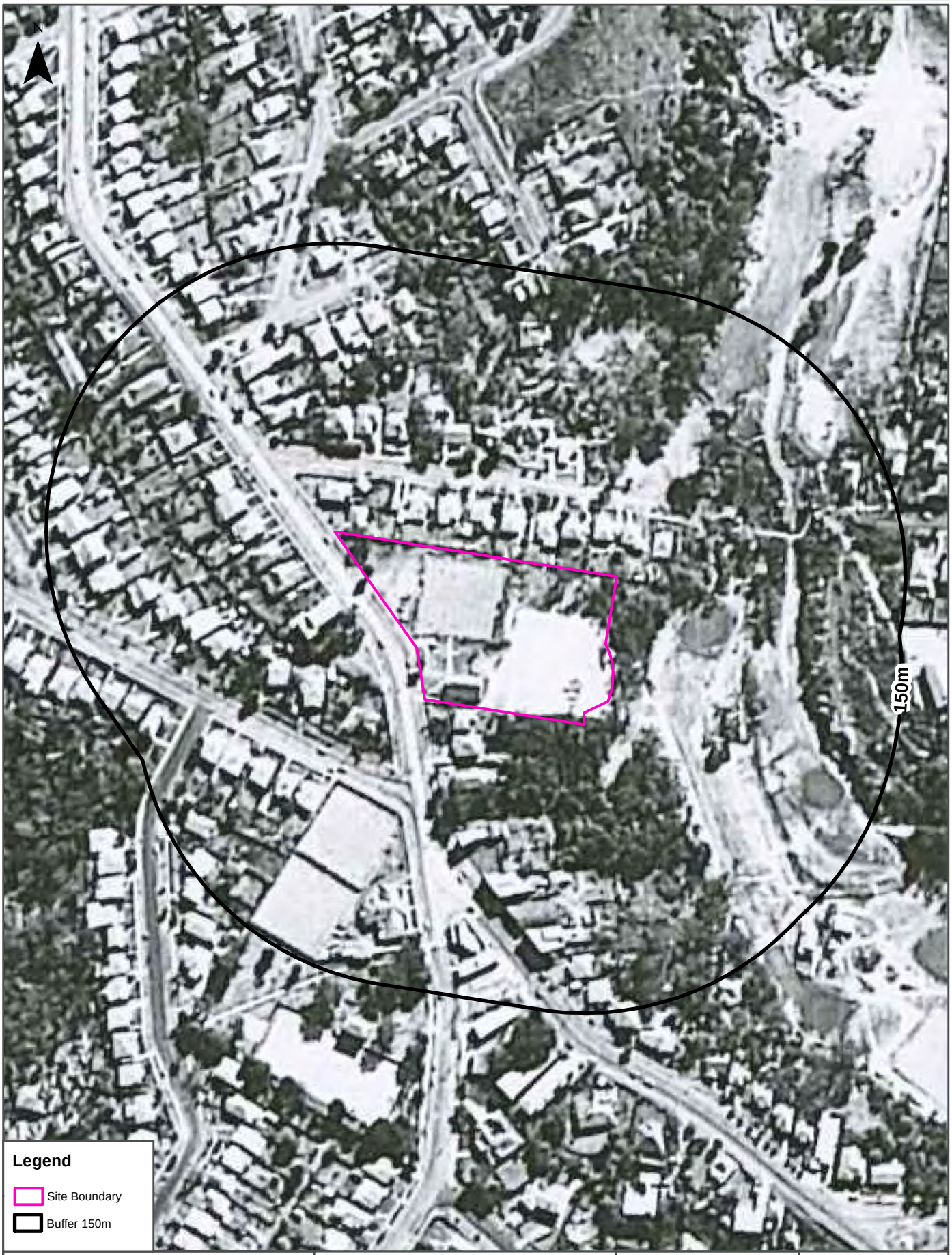
Data Sources: Historical Aerials: © Land and Property Information (a division of the Department of Finance and Services)

Coordinate System:
GDA 1994 MGA Zone 56

Date: 15 June, 2017

Aerial Imagery 1965

266 Longueville Road, Lane Cove, NSW 2066



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Data Sources: Historical Aerials: © Land and Property Information (a division of the Department of Finance and Services)

Coordinate System: GDA 1994 MGA Zone 56

Date: 15 June, 2017

Aerial Imagery 1961

266 Longueville Road, Lane Cove, NSW 2066

Scale: 0 25 50 100 Meters

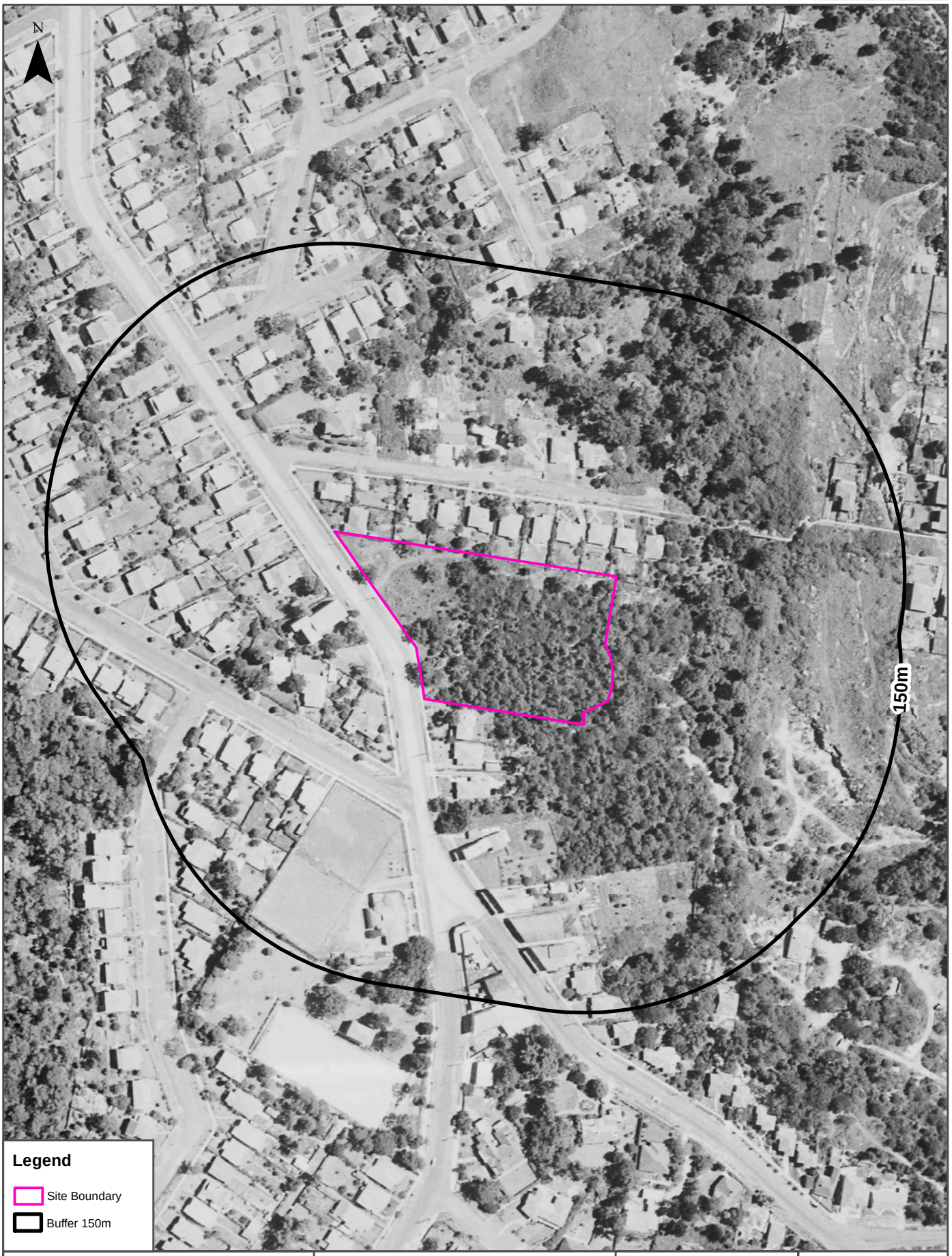
Data Sources: Historical Aerials: © Land and Property Information (a division of the Department of Finance and Services)

Coordinate System: GDA 1994 MGA Zone 56

Date: 15 June, 2017

Aerial Imagery 1955

266 Longueville Road, Lane Cove, NSW 2066



Scale:
0 25 50 100
Meters

Data Sources: Historical Aerials: © Land and Property Information (a division of the Department of Finance and Services)

Coordinate System: GDA 1994 MGA Zone 56

Date: 15 June, 2017

Aerial Imagery 1951

266 Longueville Road, Lane Cove, NSW 2066

Scale: 0 25 50 100 Meters

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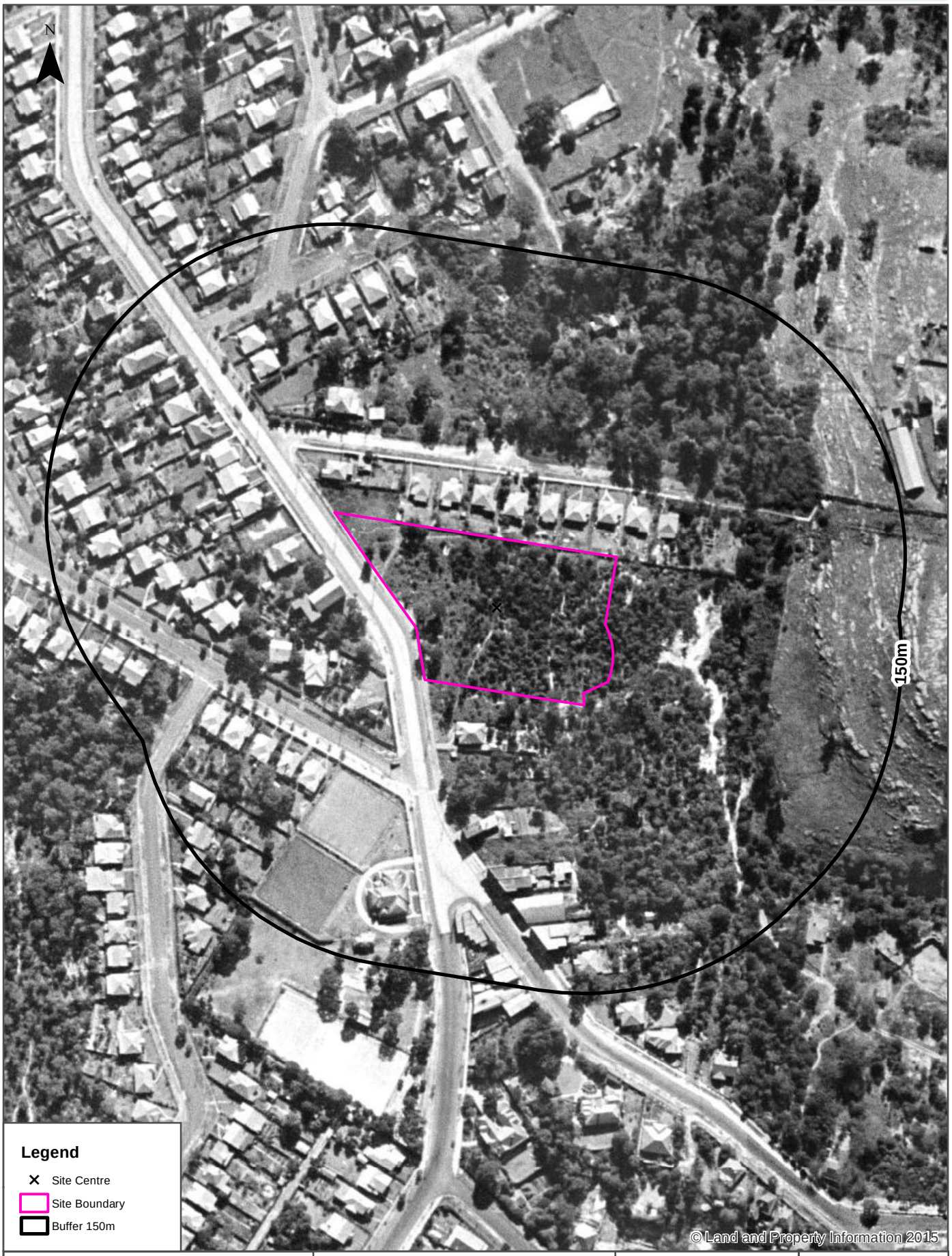
Coordinate System: GDA 1994 MGA Zone 56

Date: 15 June, 2017

Aerial Imagery 1943

266 Longueville Road, Lane Cove, NSW 2066



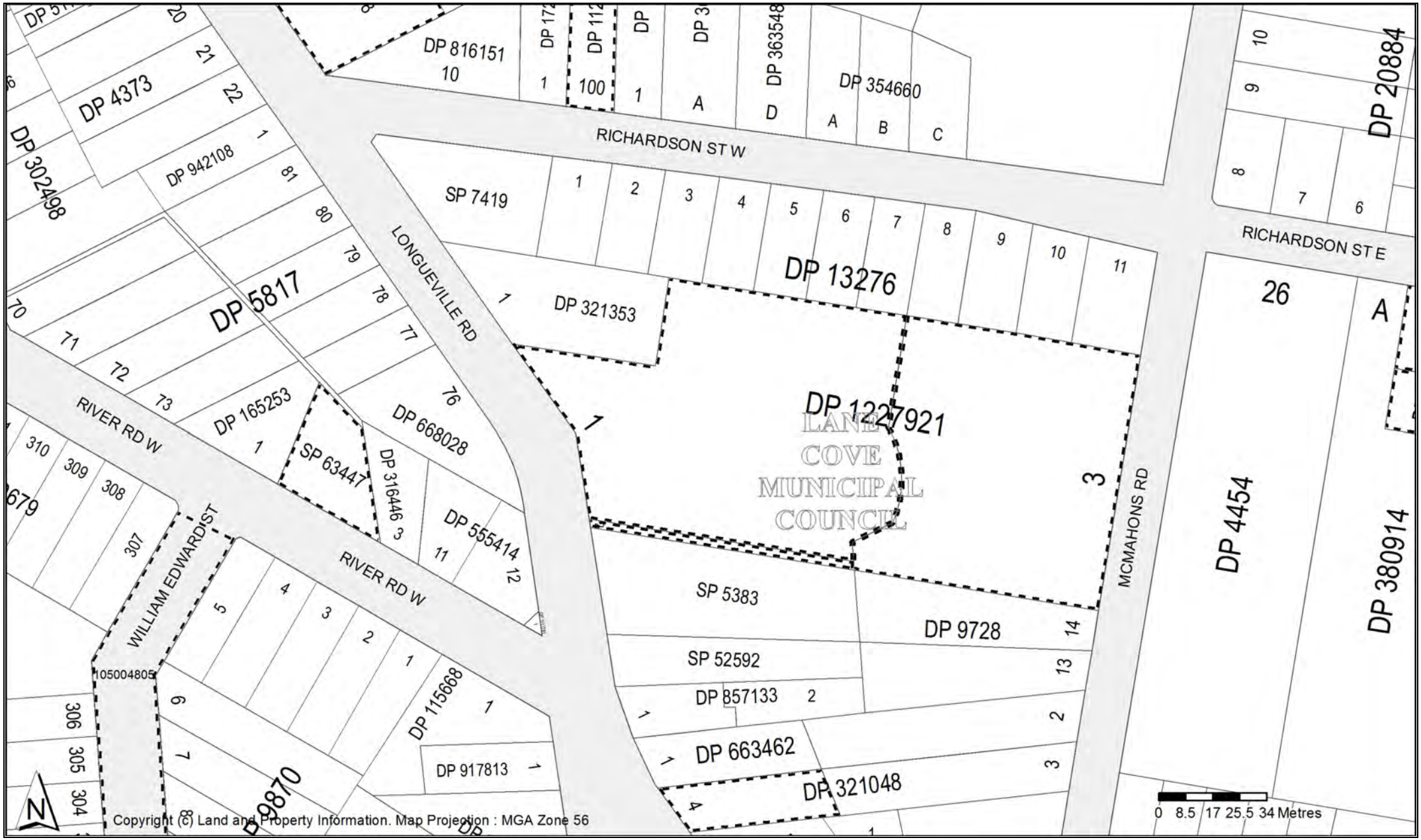
Scale:	Data Sources:Aerial Imagery © Land and Property Information (a division of the Department of Finance and Services)	Coordinate System: GDA 1994 MGA Zone 56	Date: 20June 2017
0 25 50 100 Meters			

Cadastral Records Enquiry Report

Ref : lotsearch - longueville

Requested Parcel : Lot 1 DP 1227921 **Identified Parcel :** Lot 1 DP 1227921

Locality : LANE COVE **LGA :** LANE COVE **Parish :** WILLOUGHBY **County :** CUMBERLAND



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This information is provided as a searching aid only. While every endeavour is made to ensure the current cadastral pattern is accurately reflected, the Registrar General cannot guarantee the information provided. For all ACTIVITY PRIOR to SEPT 2002 you must refer to the RGs Charting and Reference Maps.

	Status	Surv/Comp	Purpose
DP321048			
Lot(s): 4			
DP1064002	REGISTERED	SURVEY	SURVEY INFORMATION ONLY
DP1017134			
Lot(s): 1, 2			
DP380914	HISTORICAL	SURVEY	UNRESEARCHED
DP1127778			
Lot(s): 100			
DP450210	HISTORICAL	SURVEY	UNRESEARCHED
DP1227921			
Lot(s): 1, 3			
DP1102537	HISTORICAL	COMPILATION	DEPARTMENTAL
Lot(s): 2, 3			
DP91655	HISTORICAL	COMPILATION	UNRESEARCHED
SP63447			
DP1017844	HISTORICAL	SURVEY	REDEFINITION
SP64478			
DP4373	HISTORICAL	SURVEY	UNRESEARCHED
DP174177	HISTORICAL	COMPILATION	UNRESEARCHED
DP397152	HISTORICAL	SURVEY	UNRESEARCHED
DP1021521	REGISTERED	SURVEY	CONSOLIDATION
Road			
Polygon Id(s): 105004805			
NSW GAZ. 07-09-2012 Folio : 3930 DEDICATED PUBLIC ROAD			

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Requested Parcel : Lot 1 DP 1227921 **Identified Parcel :** Lot 1 DP 1227921

Locality : LANE COVE **LGA :** LANE COVE **Parish :** WILLOUGHBY **County :** CUMBERLAND

Plan	Surv/Comp	Purpose
DP4373	SURVEY	UNRESEARCHED
DP4454	SURVEY	UNRESEARCHED
DP5817	SURVEY	UNRESEARCHED
DP8423	SURVEY	UNRESEARCHED
DP9728	SURVEY	UNRESEARCHED
DP9870	SURVEY	UNRESEARCHED
DP10679	SURVEY	UNRESEARCHED
DP13276	SURVEY	UNRESEARCHED
DP20884	SURVEY	UNRESEARCHED
DP100900	COMPILATION	UNRESEARCHED
DP105994	SURVEY	UNRESEARCHED
DP115668	COMPILATION	DEPARTMENTAL
DP165253	COMPILATION	UNRESEARCHED
DP172784	SURVEY	UNRESEARCHED
DP184281	COMPILATION	UNRESEARCHED
DP224455	SURVEY	SUBDIVISION
DP302498	COMPILATION	UNRESEARCHED
DP307899	SURVEY	UNRESEARCHED
DP316446	COMPILATION	UNRESEARCHED
DP321048	SURVEY	UNRESEARCHED
DP321353	SURVEY	UNRESEARCHED
DP346706	COMPILATION	UNRESEARCHED
DP354660	COMPILATION	UNRESEARCHED
DP363547	COMPILATION	UNRESEARCHED
DP363548	COMPILATION	UNRESEARCHED
DP380914	SURVEY	UNRESEARCHED
DP445348	COMPILATION	UNRESEARCHED
DP517993	SURVEY	SUBDIVISION
DP555414	SURVEY	SUBDIVISION
DP663462	COMPILATION	DEPARTMENTAL
DP668028	COMPILATION	DEPARTMENTAL
DP816151	SURVEY	CONSOLIDATION
DP857133	SURVEY	SUBDIVISION
DP907301	COMPILATION	UNRESEARCHED
DP917402	COMPILATION	UNRESEARCHED
DP917813	COMPILATION	UNRESEARCHED
DP942108	SURVEY	UNRESEARCHED
DP948555	COMPILATION	UNRESEARCHED
DP948556	COMPILATION	UNRESEARCHED
DP1017134	SURVEY	SUBDIVISION
DP1111781	COMPILATION	DEPARTMENTAL
DP1127778	SURVEY	REDEFINITION
DP1227921	SURVEY	SUBDIVISION
DP1227921	UNRESEARCHED	SUBDIVISION
SP5383	COMPILATION	STRATA PLAN
SP7419	COMPILATION	STRATA PLAN
SP52592	COMPILATION	STRATA PLAN
SP63447	COMPILATION	STRATA PLAN
SP64478	COMPILATION	STRATA PLAN

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Req:R009743 /Doc:DP 0321353 P /Rev:31-Oct-2000 /Sts:OK.OK /Pgs:ALL /Prt:12-Jul-2017 12:25 /Seq:1 of 1
Ref:als /Src:T

B719892

F.P. 321353 (E)

Plan Form No. 6 (for transfers, leases etc.)

Municipality of Lane Cove.
Shire of

M. M.

PLAN

of survey of part of land comprised in C.T. Vol, 3098 Folio, 92.

Parish of Willoughby County of Cumberland

Scale 100 Feet to an Inch.

CONVERSION TABLE ADDED IN DEPARTMENT OF LANDS

DP 321353

FEET	INCHES	METRES
6	7 1/4	2.013
10	-	3.048
56	7 1/4	17.253
66	-	20.117
67	7 1/2	20.612
67	9 1/2	20.663
68	2	20.777
70	7 1/2	21.527
90	3 1/4	27.515
90	9 1/4	27.667
97	0 1/2	29.578
100	-	30.480
100	9	30.709
117	10	35.916
126	-	38.405
150	-	45.720
237	11	72.517

AC	RD	P	SQ M
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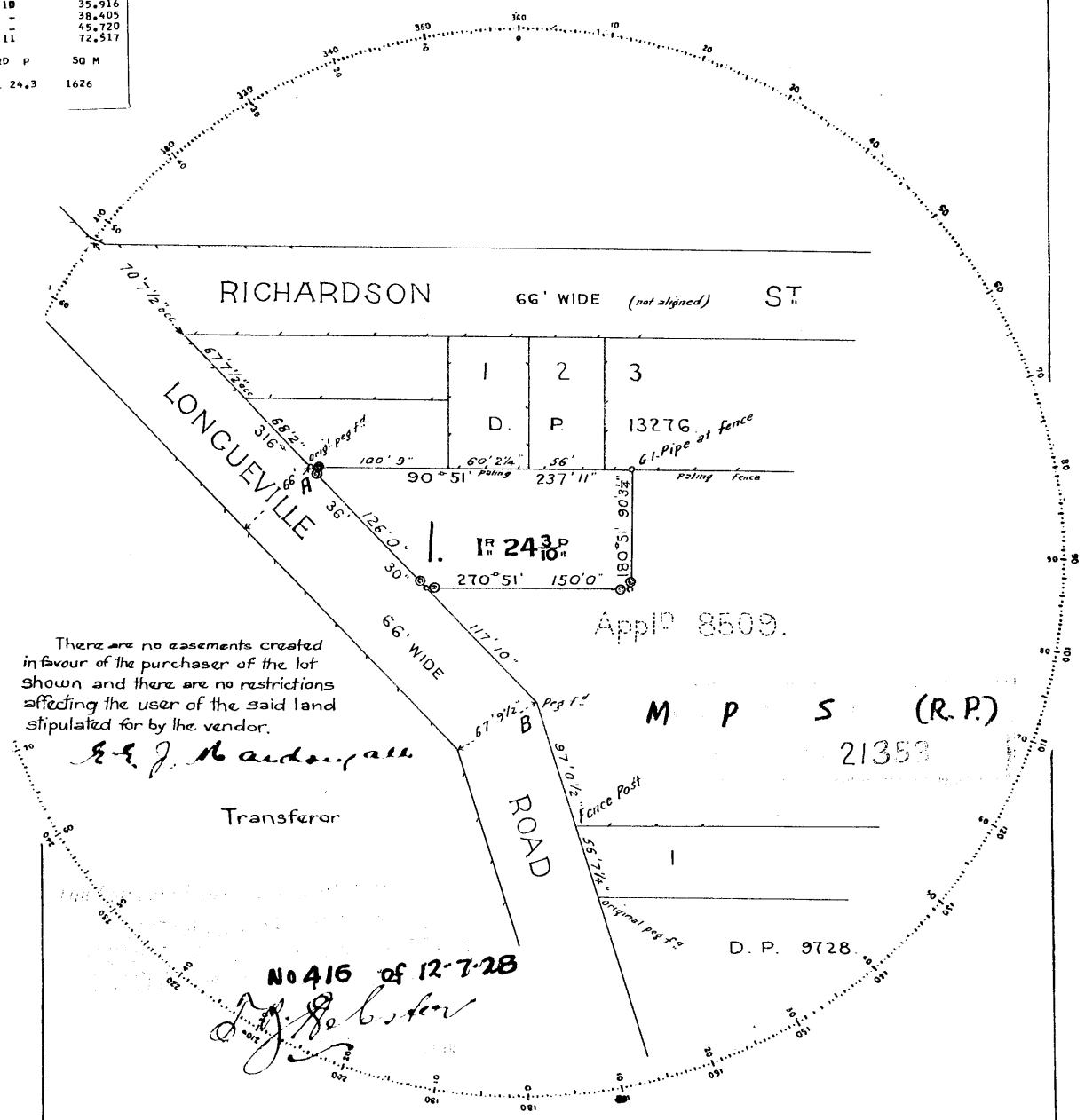


There are no easements created in favour of the purchaser of the lot shown and there are no restrictions affecting the user of the said land stipulated for by the vendor.

E. E. J. Macdougall

Transferor

◎ G.I. Pipes inserted on boundary lines 10 links from corners.

I, Robert James Rain of Sydney Licensed Surveyor specially licensed under the Real Property Act, 1900, do hereby solemnly and sincerely declare (a) that all boundaries and measurements shown on this plan are correct, (b) that all survey marks found and relevant physical objects on or adjacent to the boundaries are correctly represented, (c) that all physical objects indicated actually exist in the positions shown, (d) that the whole of the material facts in relation to the land are correctly represented, (e) that the survey has been made * by me , and I make this solemn declaration conscientiously believing the same to be true, and by virtue of the provisions of the Oaths Act, 1900.

Subscribed and declared before me at Sydney this 12th day of April A.D. 1928

Field Book 4476F

Datum line of Azimuth A.B.

R. J. Rain Licensed Surveyor

H. R. Crummond J.P.

Date of Survey April 1928.

19/9/28

* Here add by me or under my immediate supervision as the case may be

Signatures of parties to be made in this margin.

Solicitor General for Transferree

This is the plan ~~marked~~ referred to in Memorandum of Transfer

Dated 26th Aug 1928

E. J. Macdougall

Transferor.

SCHEDULE OF CURVED BOUNDARIES

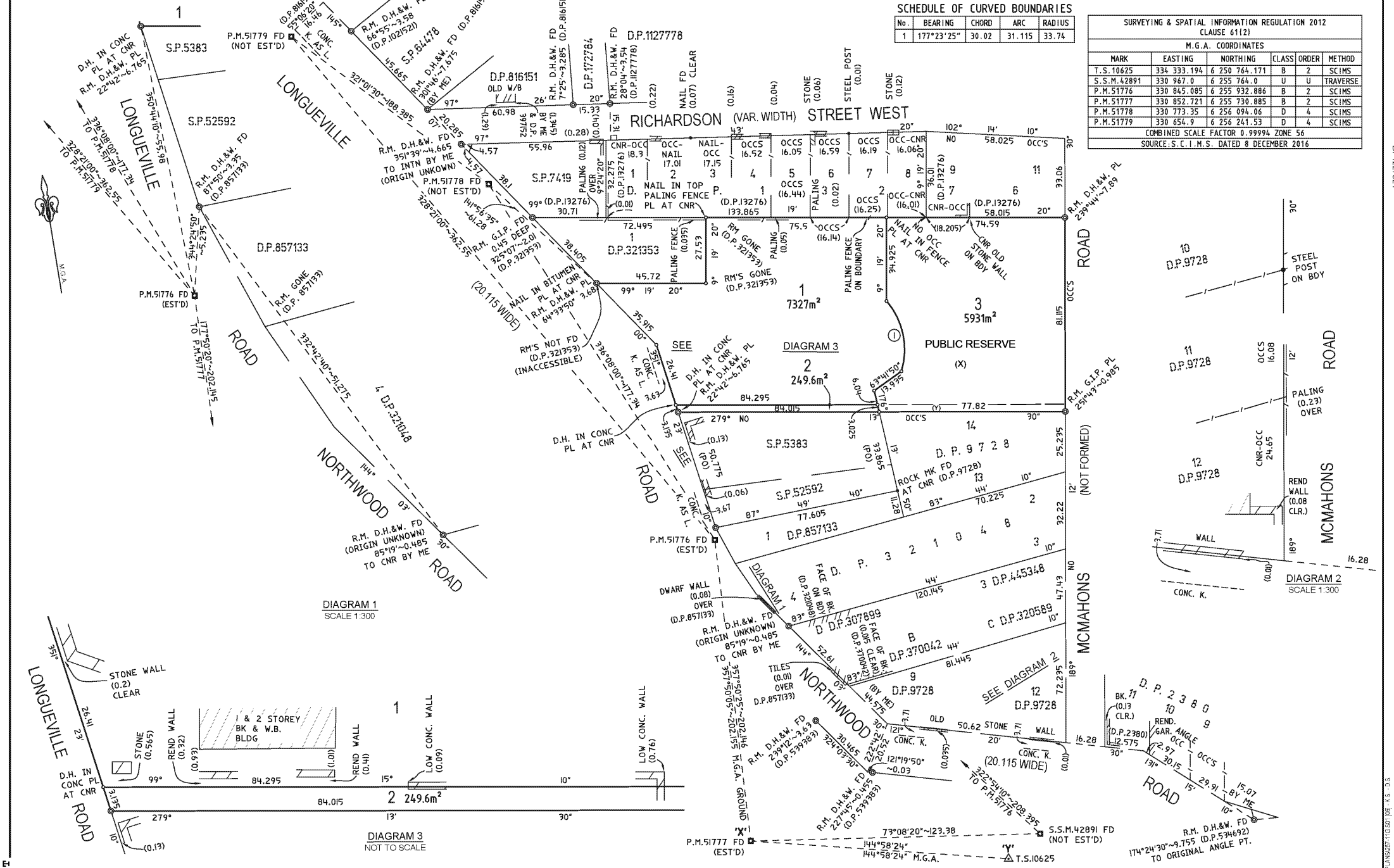
No.	BEARING	CHORD	ARC	RADIUS
1	177°23'25"	30.02	31.115	33.74

SURVEYING & SPATIAL INFORMATION REGULATION 2012
CLAUSE 61(2)

M.G.A. COORDINATES

MARK	EASTING	NORTHING	CLASS	ORDER	METHOD
T.S.10625	334 333.194	6 250 764.171	B	2	SCIMS
S.S.M.42891	330 967.0	6 255 764.0	U	U	TRAVERSE
P.M.51776	330 845.085	6 255 932.886	B	2	SCIMS
P.M.51777	330 852.721	6 255 730.885	B	2	SCIMS
P.M.51778	330 773.35	6 256 094.06	D	4	SCIMS
P.M.51779	330 654.9	6 256 241.53	D	4	SCIMS

COMBINED SCALE FACTOR 0.99994 ZONE 56
SOURCE:S.C.I.M.S. DATED 8 DECEMBER 2016



(X) RESERVATIONS & CONDITIONS IN THE CROWN GRANT.

(Y) LAND EXCLUDES MINERALS (S.536AA LOCAL GOVERNMENT ACT, 1919).

Surveyor: MATTHEW JAMES COOPER Date of Survey: 16 DECEMBER 2016 Surveyor's Ref: 257-11	PLAN OF SUBDIVISION OF LOT 322 D.P.1102537 & LOT 1 D.P.91655	LGA: LANE COVE Locality: LANE COVE Subdivision No.3093 Lengths are in metres. Reduction Ratio 1: 1000	Registered 21.3.2017	DP1227921

Req:R009738 /Doc:DP 1227921 P /Rev:23-Mar-2017 /Sts:SC.OK /Pgs:ALL /Prt:12-Jul-2017 12:25 /Seq:1 of 3
Ref:als /Src:M
DP1227921
CAD REF Z:\257-11\CR_PLANS\257-11G S01 [09] K S - D.S

PLAN FORM 6 (2013) WARNING: Creasing or folding will lead to rejection ePlan

DEPOSITED PLAN ADMINISTRATION SHEET

Sheet 1 of 2 sheet(s)

Office Use Only

Registered: 21.3.2017

Title System: TORRENS

Purpose: SUBDIVISION

Office Use Only

DP1227921

PLAN OF
SUBDIVISION OF LOT 322 D.P.1102537 & LOT 1 D.P.91655

LGA: LANE COVE

Locality: LANE COVE

Parish: WILLOUGHBY

County: CUMBERLAND

Crown Lands NSW/Western Lands Office Approval

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

Signature: .....

Date: .....

File Number: .....

Office: .....

Subdivision Certificate

I, Michael Mason

*Authorised Person/~~*General Manager~~/~~*Accredited Certifier~~, certify that the provisions of s.109J of the *Environmental Planning and Assessment Act 1979* have been satisfied in relation to the proposed subdivision, new road or reserve set out herein.

Signature: .....

Accreditation number: –

Consent Authority: Lane Cove Council

Date of endorsement: 19/12/2016

Subdivision Certificate number: 3093

File number: –

*Strike through inapplicable parts.

Survey Certificate

I, MATTHEW JAMES COOPER

of CRAIG & RHODES PTY LTD

a surveyor registered under the *Surveying and Spatial Information Act 2002*, certify that:

*(a) The land shown in the plan was surveyed in accordance with the *Surveying and Spatial Information Regulation 2012*, is accurate and the survey was completed on 16 DECEMBER 2016

~~*(b) The part of the land shown in the plan(*being/*excluding ^.....~~
~~.....)~~
~~was surveyed in accordance with the *Surveying and Spatial Information Regulation 2012*, is accurate and the survey was completed on, ... the part not surveyed was compiled in accordance with that regulation.~~

~~*(c) The land shown in the plan was compiled in accordance with the *Surveying and Spatial Information Regulation 2012*.~~

Signature ..... Dated: 19/12/16

Surveyor ID: 8834

Datum Line: 'X' - 'Y'

Type: *Urban/~~*Rural~~

The Terrain is ~~*Level-Undulating~~/ *Steep-Mountainous

*Strike through if inapplicable.
^Specify the land actually surveyed or specify and land shown in the plan that is not the subject of the survey.

Statements of intention to dedicate public roads create public reserves and drainage reserves, acquire/resume land.

It is intended to dedicate Lot 3 as a public reserve

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

D.P.2380	D.P.307899	D.P.1017134
D.P.3886	D.P.321048	D.P.1021521
D.P.4454	D.P.321353	D.P.1102537
D.P.8423	D.P.370042	D.P.1127778
D.P.9728	D.P.380914	C.P.14-2005
D.P.13276	D.P.397152	
D.P.20884	D.P.534692	
D.P.58509	D.P.539383	
D.P.91655	D.P.816151	
D.P.224455	D.P.857133	

If space is insufficient continue on PLAN FORM 6A

Signatures, Seals and Section 88B Statements should appear on PLAN FORM 6A

Surveyor's Reference: 257-11

CAD REF: Z:\257-11\CR_PLANS\257-11G S01 [04] - K.S. - D.S.

PLAN FORM 6A (2012) WARNING: **Creasing or folding will lead to rejection** ePlan

DEPOSITED PLAN ADMINISTRATION SHEET

Sheet 2 of 2 sheet(s)

Registered: 21.3.2017

Office Use Only

Office Use Only

DP1227921

PLAN OF
SUBDIVISION OF LOT 322 D.P.1102537 &
LOT 1 D.P.91655

This sheet is for the provision of the following information as required:

- A schedule of lots and addresses - See 60(c) *SSI Regulation 2012*
- Statements of intention to create and release affecting interests in accordance with section 88B *Conveyancing Act 1919*
- Signatures and seals - see 195D *Conveyancing Act 1919*
- Any information which cannot fit in the appropriate panel of sheet 1 of the administration sheets.

Subdivision Certificate number: 3093

Date of Endorsement: 19/12/2016

SURVEYING & SPATIAL INFORMATION REGULATION 2012 CLAUSE 60(c)				
SCHEDULE OF LOTS & ADDRESSES				
LOT	STREET No.	STREET NAME	STREET TYPE	LOCALITY
1	266	LONGUEVILLE	ROAD	LANE COVE
2	266	LONGUEVILLE	ROAD	LANE COVE
3	0	MCMAHONS	ROAD	LANE COVE

LANE COVE COUNCIL, BY ITS DELEGATE PURSUANT TO S.377 LOCAL GOVERNMENT ACT 1919

.....
SIGNATURE OF DELEGATE

Michael Mason
.....
NAME OF DELEGATE

I CERTIFY THAT I AM AN ELIGIBLE WITNESS & THAT THE DELEGATE SIGNED IN MY PRESENCE

A Panich
.....
SIGNATURE OF WITNESS

ANGELA PANICH
.....
NAME OF WITNESS

Angela Elizabeth Panich
Justice of the Peace
NSW Reg. No. 216459

4/77-81 BURNS BAY RD., LANE COVE
ADDRESS OF WITNESS

If space is insufficient use additional annexure sheet

Surveyor's Reference: 257-11

CAD REF: Z:\257-11\CR_PLANS\257-11G S01 (04) - K.S. - D.S.

Advance Legal Searchers

Advance Legal Searchers Pty Ltd hereby certifies that the information contained in this document has been provided electronically by the Registrar General in accordance with Section 96B(2) of the Real Property Act.

Information provided through Tri-Search an approved LPI*NSW* Information Broker

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - TITLE SEARCH

FOLIO: 1/321353

SEARCH DATE	TIME	EDITION NO	DATE
12/7/2017	12:27 PM	1	22/3/2017

LAND

LOT 1 IN DEPOSITED PLAN 321353
LOCAL GOVERNMENT AREA LANE COVE
PARISH OF WILLOUGHBY COUNTY OF CUMBERLAND
TITLE DIAGRAM DP321353

FIRST SCHEDULE

THE COUNCIL OF THE MUNICIPALITY OF LANE COVE (T G835734)

SECOND SCHEDULE (2 NOTIFICATIONS)

1 RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)
2 AM241830 THIS EDITION ISSUED PURSUANT TO S.111 REAL PROPERTY ACT, 1900

NOTATIONS

UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***

ANY ENTRIES PRECEDED BY AN ASTERISK DO NOT APPEAR ON THE CURRENT EDITION OF THE CERTIFICATE OF TITLE. WARNING: THE INFORMATION APPEARING UNDER NOTATIONS HAS NOT BEEN FORMALLY RECORDED IN THE REGISTER.

Advance Legal Searchers

Advance Legal Searchers Pty Ltd hereby certifies that the information contained in this document has been provided electronically by the Registrar General in accordance with Section 96B(2) of the Real Property Act.

Information provided through Tri-Search an approved LPI*NSW* Information Broker

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - TITLE SEARCH

FOLIO: 1/1227921

SEARCH DATE	TIME	EDITION NO	DATE
12/7/2017	12:26 PM	1	22/3/2017

LAND

LOT 1 IN DEPOSITED PLAN 1227921
AT LANE COVE
LOCAL GOVERNMENT AREA LANE COVE
PARISH OF WILLOUGHBY COUNTY OF CUMBERLAND
TITLE DIAGRAM DP1227921

FIRST SCHEDULE

LANE COVE COUNCIL

SECOND SCHEDULE (1 NOTIFICATION)

1 RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)

NOTATIONS

UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***

ANY ENTRIES PRECEDED BY AN ASTERISK DO NOT APPEAR ON THE CURRENT EDITION OF THE CERTIFICATE OF TITLE. WARNING: THE INFORMATION APPEARING UNDER NOTATIONS HAS NOT BEEN FORMALLY RECORDED IN THE REGISTER.

APPENDIX C

FIELD SHEETS & CALIBRATION LOGS

LRM Borehole Logs (BH16 - BH47)

BOREHOLE LOG

Borehole No: BH16

Page Number: 1 of 1

Client: Australian Unity Limited
Project Name: Lane Cove NSW
Project Ref. No: 27380
Location: Lane Cove NSW
Date Drilled: 10/7/2017

Drilling Contractor:
Driller:
Drilling Method: SS
Total Depth (m): 0.8
Diameter (mm):

Easting: 0
Northing: 0
Logged By: JL
Checked By:

DRILLING					
Depth (m)	Lithological Symbol	SOIL DESCRIPTION (Soil type, density/plasticity, moitsure, odour)	Sample ID	PID (ppm)	Other Comments
		Ground Surface			
0.0		Fill Material: Sandy silt, low plasticity, brown, no odour, dry.	0.1	0.2	
		Natural: Clayey sand, fine to medium grained, orange, no odour, dry.			
0.5		Termination @ 0.8m	0.8	0.1	
		End of Investigation			
1.0					

NOTES:

BOREHOLE LOG

Borehole No: BH17

Page Number: 1 of 1

Client: Australian Unity Limited
Project Name: Lane Cove NSW
Project Ref. No: 27380
Location: Lane Cove NSW
Date Drilled: 10/7/2017

Drilling Contractor:
Driller:
Drilling Method: SS
Total Depth (m): 0.8
Diameter (mm):

Easting: 0
Northing: 0
Logged By: JL
Checked By:

DRILLING					
Depth (m)	Lithological Symbol	SOIL DESCRIPTION (Soil type, density/plasticity, moitsure, odour)	Sample ID	PID (ppm)	Other Comments
		Ground Surface			
0.0		Fill Material: Sandy gravel, medium to coarse grained, grey brown, no odou, dry.	0.1	0.2	
		Natural: Sandstone, fine to medium grained, grey orange, no odour, dry.			
0.5			0.7	0.1	
		Termination @ 0.8m			
		End of Investigation			
1.0					

NOTES:

BOREHOLE LOG

Borehole No: BH18

Page Number: 1 of 1

Client: Australian Unity Limited
Project Name: Lane Cove NSW
Project Ref. No: 27380
Location: Lane Cove NSW
Date Drilled: 10/7/2017

Drilling Contractor:
Driller:
Drilling Method: SS
Total Depth (m): 0.6
Diameter (mm):

Easting: 0
Northing: 0
Logged By: JL
Checked By:

DRILLING					
Depth (m)	Lithological Symbol	SOIL DESCRIPTION (Soil type, density/plasticity, moitsure, odour)	Sample ID	PID (ppm)	Other Comments
		Ground Surface			
0.0		Fill Material: Silty sand, fine to medium grained, brown, with gravels, no odour, dry.	0.1	0.1	
0.5		Natural: Sandstone, fine to medium grained, orange, no odour. Refusal @ 0.6 m	0.6	0.3	
		End of Investigation			
1.0					

NOTES:

BOREHOLE LOG

Borehole No: BH19

Client: Australian Unity Limited	***Drilling Contractor:***	***Easting:*** 0
Project Name: Lane Cove NSW	***Driller:***	***Northing:*** 0
Project Ref. No: 27380	***Drilling Method:*** SS	***Logged By:*** JL
Location: Lane Cove NSW	***Total Depth (m):*** 0.55	***Checked By:***
Date Drilled: 10/7/2017	***Diameter (mm):***	

DRILLING					
Depth (m)	**Lithological Symbol**	**SOIL DESCRIPTION (Soil type, density/plasticity, moitsure, odour)**	**Sample ID**	**PID (ppm)**	**Other Comments**
		Ground Surface			
0.0		Fill Material: Silty sand, fine to medium grained, brown, with gravels, no odour, dry.	0.1	0.4	
		Natural: Sandstone, fine to medium grained, grey orange, no odour, dry.			
0.5		Refusal @ 0.55m	0.5	0.0	
		End of Investigation			
1.0					

NOTES:

BOREHOLE LOG

Borehole No: BH20

Page Number: 1 of 1

Client: Australian Unity Limited
Project Name: Lane Cove NSW
Project Ref. No: 27380
Location: Lane Cove NSW
Date Drilled: 10/7/2017

Drilling Contractor:
Driller:
Drilling Method: SS
Total Depth (m): 1.9
Diameter (mm):

Easting: 0
Northing: 0
Logged By: JL
Checked By:

DRILLING					
Depth (m)	Lithological Symbol	SOIL DESCRIPTION (Soil type, density/plasticity, moitsure, odour)	Sample ID	PID (ppm)	Other Comments
		Ground Surface			
0.0		Fill Material: Silty sand, fine to medium grained, brown, with gravels, no odour, dry.	0.1	0.0	
0.5		Fill Material: Gravel, course grained, sub-angular, dark grey, some sand, dry.			
1.0		Natural: Sandstone, fine to medium grained, grey orange, no odour, dry.	1.0	0.3	
1.5		Termination @ 1.9 m			
		End of Investigation	1.9	0.2	
2.0					

NOTES:

BOREHOLE LOG

Borehole No: BH21

Client: Australian Unity Limited
Project Name: Lane Cove NSW
Project Ref. No: 27380
Location: Lane Cove NSW
Date Drilled: 10/7/2017

Drilling Contractor:
Driller:
Drilling Method: SS
Total Depth (m): 4.1
Diameter (mm):

Easting: 0
Northing: 0
Logged By: JL
Checked By:

DRILLING					
Depth (m)	Lithological Symbol	SOIL DESCRIPTION (Soil type, density/plasticity, moitsure, odour)	Sample ID	PID (ppm)	Other Comments
		Ground Surface			
0.0		Fill Material: Silty sand, fine to medium grained, brown, with gravels, no odour, dry.	0.1	0.2	
0.5		Fill Material: Gravelly sandy Clay, medium plasticity, sub-angular gravels, brown. dry.			
1.0			1.2	0.1	
1.5					
2.0					
2.5					
3.0		Residual Soil: sandy Clay, low plasticity, orange brown, with occasional ironstone gravels, becoming grey mottled red. moist	3.0	0.3	
3.5		Natural: Sandstone, fine to medium grained, grey orange, no odour, moist			
4.0		Refusal @ 4.1	4.0	0.0	
		End of Investigation			
4.5					
5.0					

NOTES:

BOREHOLE LOG

Borehole No: BH22

Client: Australian Unity Limited
Project Name: Lane Cove NSW
Project Ref. No: 27380
Location: Lane Cove NSW
Date Drilled: 10/7/2017

Drilling Contractor:
Driller:
Drilling Method: SS
Total Depth (m): 1.0
Diameter (mm):

Easting: 0
Northing: 0
Logged By: JL
Checked By:

DRILLING					
Depth (m)	Lithological Symbol	SOIL DESCRIPTION (Soil type, density/plasticity, moitsure, odour)	Sample ID	PID (ppm)	Other Comments
		Ground Surface			
0.0		Fill Material: Silty sand, fine to medium grained, brown, with gravels, no odour, dry.	0.1	0.5	
		Fill Material: Gravelly sandy Clay, medium plasticity, sub-angular gravels, brown. dry.			
0.5					
1.0		End of Investigation	1.0	0.2	
1.5					
2.0					

NOTES:

BOREHOLE LOG

Borehole No: BH23

Client: Australian Unity Limited
Project Name: Lane Cove NSW
Project Ref. No: 27380
Location: Lane Cove NSW
Date Drilled: 10/7/2017

Drilling Contractor:
Driller:
Drilling Method: SS
Total Depth (m): 1.35
Diameter (mm):

Easting: 0
Northing: 0
Logged By: JL
Checked By:

DRILLING					
Depth (m)	Lithological Symbol	SOIL DESCRIPTION (Soil type, density/plasticity, moitsure, odour)	Sample ID	PID (ppm)	Other Comments
		Ground Surface			
0.0		Fill Material: Silty sand, fine to medium grained, brown, with gravels, no odour.	0.1	0.5	
		Natural: Sandstone, fine to medium grained, orange, no odour.			
0.5					
1.0		Refusal @ 1.35m	1.0	0.2	
		End of Investigation			
1.5					
2.0					

NOTES:

BOREHOLE LOG

Borehole No: BH24

Page Number: 1 of 1

Client: Australian Unity Limited
Project Name: Lane Cove NSW
Project Ref. No: 27380
Location: Lane Cove NSW
Date Drilled: 10/7/2017

Drilling Contractor:
Driller:
Drilling Method: SS
Total Depth (m): 4.1
Diameter (mm):

Easting: 0
Northing: 0
Logged By: JL
Checked By:

DRILLING					
Depth (m)	Lithological Symbol	SOIL DESCRIPTION (Soil type, density/plasticity, moitsure, odour)	Sample ID	PID (ppm)	Other Comments
		Ground Surface			
0.0		Fill Material: Silty sand, fine to medium grained, brown, with gravels, no odour.	0.1	0.4	
0.5		Fill Material: Sandy silty Clay, low-medium plasticity, orange brown, no odours.			
1.0					
1.5			1.5	0.9	
2.0		Residual Soil: Silty Clay, medium-high plasticity, brown, no odour.			
2.5					
			2.8	0.4	
3.0					
3.5		Natural: Sandstone, fine to medium grained, orange brown, no odour.			
4.0		Refusal @ 4.0 m			
		End of Investigation			
4.5					
5.0					

NOTES:

BOREHOLE LOG

Borehole No: BH25

Client: Australian Unity Limited
Project Name: Lane Cove NSW
Project Ref. No: 27380
Location: Lane Cove NSW
Date Drilled: 10/7/2017

Drilling Contractor:
Driller:
Drilling Method: HA
Total Depth (m): 0.2
Diameter (mm):

Easting: 0
Northing: 0
Logged By: JL
Checked By:

DRILLING					
Depth (m)	Lithological Symbol	SOIL DESCRIPTION (Soil type, density/plasticity, moitsure, odour)	Sample ID	PID (ppm)	Other Comments
		Ground Surface			
0.0		Fill Material: Sandy silt, low plasticity, brown, no odour, dry			
		End of Investigation	0.2	0.4	
0.5					
1.0					

NOTES:

BOREHOLE LOG

Borehole No: BH26

Client: Australian Unity Limited
Project Name: Lane Cove NSW
Project Ref. No: 27380
Location: Lane Cove NSW
Date Drilled: 10/7/2017

Drilling Contractor:
Driller:
Drilling Method: HA
Total Depth (m): 0.6
Diameter (mm):

Easting: 0
Northing: 0
Logged By: JL
Checked By:

DRILLING					
Depth (m)	Lithological Symbol	SOIL DESCRIPTION (Soil type, density/plasticity, moitsure, odour)	Sample ID	PID (ppm)	Other Comments
		Ground Surface			
0.0		Fill Material: Sandy silt,fine grained, brown, no odour, dry Refusal @ 0.6m	0.2	0.7	
0.5					
		End of Investigation			
1.0					

NOTES:

BOREHOLE LOG

Borehole No: BH27

Page Number: 1 of 1

Client: Australian Unity Limited
Project Name: Lane Cove NSW
Project Ref. No: 27380
Location: Lane Cove NSW
Date Drilled: 10/7/2017

Drilling Contractor:
Driller:
Drilling Method: SS
Total Depth (m): 1.0
Diameter (mm):

Easting: 0
Northing: 0
Logged By: JL
Checked By:

DRILLING					
Depth (m)	Lithological Symbol	SOIL DESCRIPTION (Soil type, density/plasticity, moitsure, odour)	Sample ID	PID (ppm)	Other Comments
		Ground Surface			
0.0		Fill Material: Sandy silt, low plasticity, brown, no odour, dry			
		Fill Material: Clayey sand, fine to medium grained, orange, no odour, dry	0.1	0.3	
0.5					
1.0		End of Investigation	1.0	0.6	
1.5					
2.0					

NOTES:

BOREHOLE LOG

Borehole No: BH28

Client: Australian Unity Limited
Project Name: Lane Cove NSW
Project Ref. No: 27380
Location: Lane Cove NSW
Date Drilled: 10/7/2017

Drilling Contractor:
Driller:
Drilling Method: SS
Total Depth (m): 4.5
Diameter (mm):

Easting: 0
Northing: 0
Logged By: JL
Checked By:

DRILLING					
Depth (m)	Lithological Symbol	SOIL DESCRIPTION (Soil type, density/plasticity, moitsure, odour)	Sample ID	PID (ppm)	Other Comments
		Ground Surface			
0.0		Fill Material: Silty sand, fine to medium grained, brown, with gravels, no odour, dry.	0.1	0.1	
0.5		Fill Material: Silty sandy, fine to medium grained, grey brown, fragments of gravel, dry, no odour, dry.			
1.0			1.0	0.8	
1.5					
2.0		Residual Soil: Clayey sand, fine to medium grained, orange brown, moist, no odour, moist.	2.0	0.5	
2.5		Natural: Sandstone, fine to medium grained, pale grey, wet, no odour.			
3.0			3.0	0.4	
3.5					
4.0			4.0	0.8	
4.5		End of Investigation			
5.0					

NOTES:

BOREHOLE LOG

Borehole No: BH29

Page Number: 1 of 1

Client: Australian Unity Limited
Project Name: Lane Cove NSW
Project Ref. No: 27380
Location: Lane Cove NSW
Date Drilled: 10/7/2017

Drilling Contractor:
Driller:
Drilling Method: SS
Total Depth (m): 8.0
Diameter (mm):

Easting: 0
Northing: 0
Logged By: JL
Checked By:

DRILLING					
Depth (m)	Lithological Symbol	SOIL DESCRIPTION (Soil type, density/plasticity, moitsure, odour)	Sample ID	PID (ppm)	Other Comments
		Ground Surface			
0.0		Fill Material: Silty sand, fine to medium grained, brown, with gravels, no odour.	0.1	0.0	
0.5		Fill Material: Gravelly clayey Sand, fine to coarse grained,orange brown, with high plasticity clay bands, no odour.			
1.0		Fill Material: Gravelly sandy Clay, medium - high plasticity, grey brown, with brick fragments, ash, porcelain and glass, no odour.	1.0	0.5	
1.5					
2.0			2.0	0.2	
2.5		Fill Material Silty sandy Gravel, fine to course grained, orange brown, with brick fragments and angular sandstone gravel, no odour.			
3.0			3.0	0.3	
3.5					
4.0			4.0	0.2	
4.5					
5.0			5.0	0.0	
5.5					
6.0			6.0	0.7	
6.5					
7.0			7.0	0.4	
7.5					
8.0		End of Investigation	8.0	0.6	
8.5					
9.0					

NOTES:

BOREHOLE LOG

Borehole No: BH30

Client: Australian Unity Limited
Project Name: Lane Cove NSW
Project Ref. No: 27380
Location: Lane Cove NSW
Date Drilled: 10/7/2017

Drilling Contractor:
Driller:
Drilling Method: SS
Total Depth (m): 7.45
Diameter (mm):

Easting: 0
Northing: 0
Logged By: JL
Checked By:

DRILLING					
Depth (m)	Lithological Symbol	SOIL DESCRIPTION (Soil type, density/plasticity, moitsure, odour)	Sample ID	PID (ppm)	Other Comments
		Ground Surface			
0.0		Fill Material: silty sand, fine to medium grained, brown, with gravels, no odour, dry	0.1	0.1	
0.5		Fill Material: gravelly silty Sand, fine to coarse grained, pale brown, with high plasticity clay bands and brickfragments, no odour, dry			
1.0			1.0	0.4	
1.5		Fill Material: sandy silty Clay, medium plasticity, brown, with occasional medium to coarse grained gravels, dry			
2.0			2.0	0.6	
2.5					
3.0			3.0	0.8	
3.5		Fill Material: Gravelly clayey Sand, fine to course grained, grey to orange brown, with brick fragments, ash, porcelain and glass, no odour, dry			
4.0			4.0	1.1	
4.5					
5.0			5.0	0.3	
5.5					
6.0			6.0	0.8	
6.5					
7.0		Natural: Sandstone, fine to medium grained, orange grey, estimate very low to low strength becoming to low medium strength and pale grey, moist	7.0	0.7	
7.5		End of Investigation			
8.0					

NOTES:

BOREHOLE LOG

Borehole No: BH31

Client: Australian Unity Limited
Project Name: Lane Cove NSW
Project Ref. No: 27380
Location: Lane Cove NSW
Date Drilled: 10/7/2017

Drilling Contractor:
Driller:
Drilling Method: SS
Total Depth (m): 1.5
Diameter (mm):

Easting: 0
Northing: 0
Logged By: JL
Checked By:

DRILLING					
Depth (m)	Lithological Symbol	SOIL DESCRIPTION (Soil type, density/plasticity, moitsure, odour)	Sample ID	PID (ppm)	Other Comments
		Ground Surface			
0.0		Fill Material: Sandy silt, low plasticity, brown, no odour, dry.	0.1	0.2	
		Natural: Sandstone, fine to medium grained, orange grey, no odour, dry.			
0.5					
1.0			1.0	0.5	
1.5		End of Investigation			
2.0					

NOTES:

BOREHOLE LOG

Borehole No: BH32

Client: Australian Unity Limited
Project Name: Lane Cove NSW
Project Ref. No: 27380
Location: Lane Cove NSW
Date Drilled: 10/7/2017

Drilling Contractor:
Driller:
Drilling Method: SS
Total Depth (m): 4.0
Diameter (mm):

Easting: 0
Northing: 0
Logged By: JL
Checked By:

DRILLING					
Depth (m)	Lithological Symbol	SOIL DESCRIPTION (Soil type, density/plasticity, moitsure, odour)	Sample ID	PID (ppm)	Other Comments
		Ground Surface			
0.0		Fill Material: Silty sand, fine to medium grained, brown, with gravels, no odour, dry.	0.1	0.2	
0.5		Fill Material: Silty sandy, fine to medium grained, grey brown, fragments of gravel, dry, no odour, dry.			
1.0			1.0	0.5	
1.5					
2.0		Residual Soil: Clayey sand, fine to medium grained, orange brown, moist, no odour, moist.			
			2.2	0.4	
2.5		Natural: Sandstone, fine to medium grained, pale grey, wet, no odour.			
3.0			3.0	0.0	
3.5					
4.0			4.0	010	
		End of Investigation			
4.5					
5.0					

NOTES:

BOREHOLE LOG

Borehole No: BH33

Client: Australian Unity Limited	***Drilling Contractor:***	***Easting:*** 0
Project Name: Lane Cove NSW	***Driller:***	***Northing:*** 0
Project Ref. No: 27380	***Drilling Method:*** HA	***Logged By:*** JL
Location: Lane Cove NSW	***Total Depth (m):*** 1.7	***Checked By:***
Date Drilled: 10/7/2017	***Diameter (mm):***	

DRILLING					
Depth (m)	**Lithological Symbol**	**SOIL DESCRIPTION (Soil type, density/plasticity, moitsure, odour)**	**Sample ID**	**PID (ppm)**	**Other Comments**
		Ground Surface			
0.0		Fill Material: Sandy silt, low plasticity, brown, no odour, dry.	0.2	0.2	
		Natural: Sandstone, fine to medium grained, pale grey, dry.			
0.5					
1.0			1.0	0.9	
		Termination @ 1.7m			
1.5					
		End of Investigation			
2.0					

NOTES:

BOREHOLE LOG

Borehole No: BH34

Page Number: 1 of 1

Client: Australian Unity Limited
Project Name: Lane Cove NSW
Project Ref. No: 27380
Location: Lane Cove NSW
Date Drilled: 10/7/2017

Drilling Contractor:
Driller:
Drilling Method: HA
Total Depth (m): 0.4
Diameter (mm):

Easting: 0
Northing: 0
Logged By: JL
Checked By:

DRILLING					
Depth (m)	Lithological Symbol	SOIL DESCRIPTION (Soil type, density/plasticity, moitsure, odour)	Sample ID	PID (ppm)	Other Comments
		Ground Surface			
0.0		Fill Material: Sandstone, fine to medium grained, dark red grading to pale, no odour, dry. Refusal @ 0.4m	0.1	0.3	DUP1, SPLIT1
0.5		End of Investigation			
1.0					

NOTES:

BOREHOLE LOG

Borehole No: BH35

Client: Australian Unity Limited
Project Name: Lane Cove NSW
Project Ref. No: 27380
Location: Lane Cove NSW
Date Drilled: 10/7/2017

Drilling Contractor:
Driller:
Drilling Method: HA
Total Depth (m): 0.4
Diameter (mm):

Easting: 0
Northing: 0
Logged By: JL
Checked By:

DRILLING					
Depth (m)	Lithological Symbol	SOIL DESCRIPTION (Soil type, density/plasticity, moitsure, odour)	Sample ID	PID (ppm)	Other Comments
		Ground Surface			
0.0		Fill Material: Sandy silt,fine grained, debris, tile fragments, brown, no odour, dry. Refusal @ 0.4m	0.1	0.5	DUP2, SPLIT2
0.5		End of Investigation			
1.0					

NOTES:

BOREHOLE LOG

Borehole No: BH36

Client: Australian Unity Limited
Project Name: Lane Cove NSW
Project Ref. No: 27380
Location: Lane Cove NSW
Date Drilled: 10/7/2017

Drilling Contractor:
Driller:
Drilling Method: HA
Total Depth (m): 0.3
Diameter (mm):

Easting: 0
Northing: 0
Logged By: JL
Checked By:

DRILLING					
Depth (m)	Lithological Symbol	SOIL DESCRIPTION (Soil type, density/plasticity, moitsure, odour)	Sample ID	PID (ppm)	Other Comments
		Ground Surface			
0.0		Fill Material: Sandy silt,fine grained, brown, no odour, dry. Refusal @ 0.3m	0.1	0.0	DUP3, SPLIT3
0.5		End of Investigation			
1.0					

NOTES:

BOREHOLE LOG

Borehole No: BH37

Client: Australian Unity Limited
Project Name: Lane Cove NSW
Project Ref. No: 27380
Location: Lane Cove NSW
Date Drilled: 10/7/2017

Drilling Contractor:
Driller:
Drilling Method: HA
Total Depth (m): 0.3
Diameter (mm):

Easting: 0
Northing: 0
Logged By: JL
Checked By:

DRILLING					
Depth (m)	Lithological Symbol	SOIL DESCRIPTION (Soil type, density/plasticity, moitsure, odour)	Sample ID	PID (ppm)	Other Comments
		Ground Surface			
0.0		Fill Material: Sandy silt,fine grained, brown, no odour, dry. Refusal @ 0.3m	0.1	0.1	DUP4, SPLIT4
		End of Investigation			
0.5					
1.0					

NOTES:

BOREHOLE LOG

Borehole No: BH38

Client: Australian Unity Limited
Project Name: Lane Cove NSW
Project Ref. No: 27380
Location: Lane Cove NSW
Date Drilled: 10/7/2017

Drilling Contractor:
Driller:
Drilling Method: HA
Total Depth (m): 0.5
Diameter (mm):

Easting: 0
Northing: 0
Logged By: JL
Checked By:

DRILLING					
Depth (m)	Lithological Symbol	SOIL DESCRIPTION (Soil type, density/plasticity, moitsure, odour)	Sample ID	PID (ppm)	Other Comments
		Ground Surface			
0.0		Fill Material: Sandy silt,fine grained, brown, no odour, rubbish, glass, brick fragments, dry. Refusal @ 0.5m	0.1	0.7	
0.5		End of Investigation			
1.0					

NOTES:

BOREHOLE LOG

Borehole No: BH39

Client: Australian Unity Limited
Project Name: Lane Cove NSW
Project Ref. No: 27380
Location: Lane Cove NSW
Date Drilled: 10/7/2017

Drilling Contractor:
Driller:
Drilling Method: HA
Total Depth (m): 0.5
Diameter (mm):

Easting: 0
Northing: 0
Logged By: JL
Checked By:

DRILLING					
Depth (m)	Lithological Symbol	SOIL DESCRIPTION (Soil type, density/plasticity, moitsure, odour)	Sample ID	PID (ppm)	Other Comments
		Ground Surface			
0.0		Fill Material: Sandy silt,fine grained, brown, no odour, dry. Refusal @ 0.5m	0.1	0.3	
0.5		End of Investigation			
1.0					

NOTES:

BOREHOLE LOG

Borehole No: BH40

Page Number: 1 of 1

Client: Australian Unity Limited
Project Name: Lane Cove NSW
Project Ref. No: 27380
Location: Lane Cove NSW
Date Drilled: 10/7/2017

Drilling Contractor:
Driller:
Drilling Method: HA
Total Depth (m): 0.2
Diameter (mm):

Easting: 0
Northing: 0
Logged By: JL
Checked By:

DRILLING					
Depth (m)	Lithological Symbol	SOIL DESCRIPTION (Soil type, density/plasticity, moitsure, odour)	Sample ID	PID (ppm)	Other Comments
		Ground Surface			
0.0		Fill Material: Sandy silt,fine grained, brown, no odour, dry.	0.1	0.4	
0.5		End of Investigation			
1.0					

NOTES:

BOREHOLE LOG

Borehole No: BH41

Page Number: 1 of 1

Client: Australian Unity Limited
Project Name: Lane Cove NSW
Project Ref. No: 27380
Location: Lane Cove NSW
Date Drilled: 10/7/2017

Drilling Contractor:
Driller:
Drilling Method: HA
Total Depth (m): 0.2
Diameter (mm):

Easting: 0
Northing: 0
Logged By: JL
Checked By:

DRILLING					
Depth (m)	Lithological Symbol	SOIL DESCRIPTION (Soil type, density/plasticity, moitsure, odour)	Sample ID	PID (ppm)	Other Comments
		Ground Surface			
0.0		Fill Material: Sandy silt,fine grained, brown, no odour, dry.	0.1	0.6	
0.5		End of Investigation			
1.0					

NOTES:

BOREHOLE LOG

Borehole No: BH42

Client: Australian Unity Limited
Project Name: Lane Cove NSW
Project Ref. No: 27380
Location: Lane Cove NSW
Date Drilled: 10/7/2017

Drilling Contractor:
Driller:
Drilling Method: SS
Total Depth (m): 0.2
Diameter (mm):

Easting: 0
Northing: 0
Logged By: JL
Checked By:

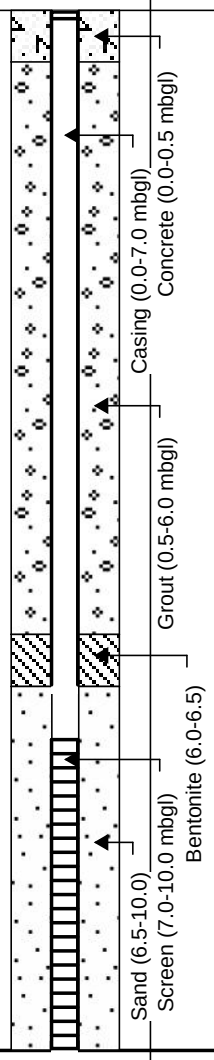
DRILLING					
Depth (m)	Lithological Symbol	SOIL DESCRIPTION (Soil type, density/plasticity, moitsure, odour)	Sample ID	PID (ppm)	Other Comments
		Ground Surface			
0.0		Fill Material: Sandy silt,fine grained, brown, no odour, dry.	0.1	0.8	
0.5		End of Investigation			
1.0					

NOTES:

Monitoring Well: GW01/ BH43

Project Ref. No: 27380
Project Name: Longueville Rd Lane Cove
Completion Date: 10/05/2018
BCL No:
Drilling Contractor: Stratacore Drilling
Page Number: 1 of 1
Drilling Method: SA
Drillers Licence No:
Logged By: JL
Well Diameter (mm): 50
Well Depth (m): 10.0
Checked By: JL
Casing Stickup (m): 0.0
Well Material: PVC
Easting: 0
Location Description:
Northing: 0

Geological Description	Graphic Symbol	Depth	Sample Type	Sample ID	PID (ppm)	Well Construction Details	Additional Observations
Ground Surface							
0.0-0.1 Fill: Silty Sand Moderately moist, brown to dark grey with some organic content. No stains or odours.		0.0					
0.10-10.0 Natural: Sand Fine to medium grained, dry. Becoming stiff with depth. No odours or staining.		1.0					
		2.0					
		3.0					
		4.0					
		5.0		BH43_5.0, Dup5, Split 5	0.3		
		6.0		BH43_6.0	0.4		
		7.0		BH43_7.0	0.2		
Becomes moist @ 7.7 mbgl.		8.0		BH43_8.0	0.7		
		9.0		BH43_9.0	0.0		
Bore terminated @ 10.0 mbgl		10.0					
End of Log							



Groundwater Observations -

Depth Water Encountered During Drilling (mbNS): 7.7
Post Install Water Level (mbNS): 4.36

Sample Type -

- **Hand Auger**
- **Solid Stem Auger**
- **Push Tube**
- **Split Spoon**
- **R.A.B**

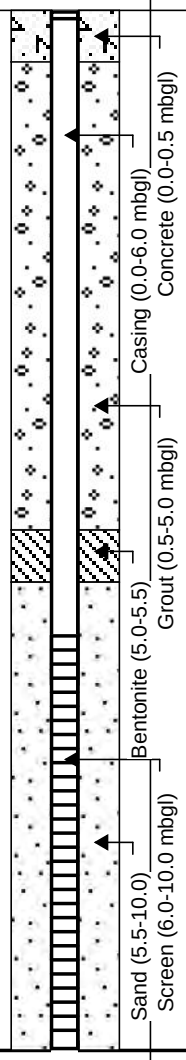
Monitoring Well Construction Key -

- **Screen** 7.0-10.0
- **Backfill** 0.5-6.0
- **Bentonite** 6.0-6.5
- **Filter Pack** 6.5-10.0
- **Grout** 0.0-0.5

Monitoring Well: GW02/ BH44

Project Ref. No: 27380
Project Name: Longueville Rd Lane Cove
Completion Date: 10/05/2018
BCL No:
Drilling Contractor: Stratacore Drilling
Page Number: 1 of 1
Drilling Method: SA
Drillers Licence No:
Logged By: JL
Well Diameter (mm): 50
Well Depth (m): 10.0
Checked By: JL
Casing Stickup (m): 0.0
Well Material: PVC
Easting: 0
Location Description:
Northing: 0

Geological Description	Graphic Symbol	Depth	Sample Type	Sample ID	PID (ppm)	Well Construction Details	Additional Observations
Ground Surface							
0.0-0.1 Fill: Silty Sand Dry, brown to dark grey with some organic content. No stains or odours.		0.0					
0.1-1.5 Fill: Silty Sand Dry, brown to dark grey. No stains or odours.		1.0					
1.5-10.0 Natural: Sand Fine to medium grained. Orange and dry, no odours or staining.		2.0					
		3.0					
		4.0					
Becomes light brown @ 5.0 mbgl.		5.0		BH44_5.0	0.9		
		6.0		BH44_6.0	0.6		
Becomes moist @ 6.2 mbgl. Becomes dark brown @ 7.0 mbgl.		7.0		BH44_7.0	0.7		
		8.0		BH44_8.0	0.1		
		9.0		BH44_9.0	0.2		
Bore terminated @ 10.0 mbgl		10.0					
End of Log							



Groundwater Observations -

Depth Water Encountered During Drilling (mbNS): 10.0
Post Install Water Level (mbNS): 6.62

Sample Type -

- **Hand Auger**
- **Solid Stem Auger**
- **Push Tube**
- **Split Spoon**
- **R.A.B**

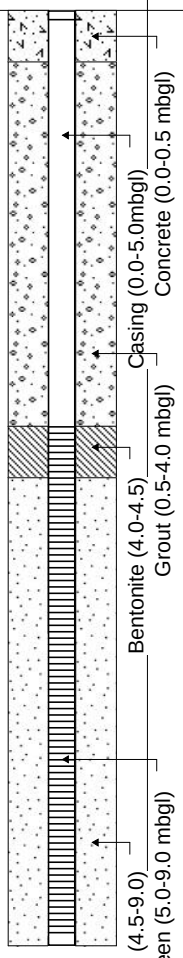
Monitoring Well Construction Key -

- **Screen** 7.0-10.0
- **Backfill** 0.5-6.0
- **Bentonite** 6.0-6.5
- **Filter Pack** 6.5-10.0
- **Grout** 0.0-0.5

Monitoring Well: GW03/BH45

Project Ref. No: 27380	***Project Name:*** Longueville Rd Lane Cove	***Completion Date:*** 10/05/2018
BCL No:	***Drilling Contractor:*** Stratacore Drilling	***Page Number:*** 1 of 1
Drilling Method: SA	***Drillers Licence No:***	***Logged By:*** JL
Well Diameter (mm): 50	***Well Depth (m):*** 10.0	***Checked By:*** JL
Casing Stickup (m): 0.0	***Well Material:*** PVC	***Easting:*** 0
Location Description:		***Northing:*** 0

Geological Description	Graphic Symbol	Depth	Sample Type	Sample ID	PID (ppm)	Well Construction Details	Additional Observations
Ground Surface		0.0					
0.0-0.1 Fill: Silty Sand Dry, brown to dark grey with some organic content. No stains or odours.							
0.1-7.30 Fill: Silty Sand Dry, brown to dark grey. No stains or odours.		1.0 2.0 3.0 4.0 5.0 6.0 7.0		BH45_7.0	0.2		
7.3-8.7 Natural: Sand Brown. Fine to medium grained, dry. Stiff. No odours or staining.		8.0		BH45_7.8 BH45_8.0	0.4 0.7		
Hard reufusal, bore terminated @ 8.7 mbgl on sandstone.		9.0					
End of Log		10.0					



Groundwater Observations -

Depth Water Encountered During Drilling (mbNS): 7.7 **Post Install Water Level (mbNS):** 4.36

Sample Type -

- **Hand Auger**
- **Solid Stem Auger**
- **Push Tube**
- **Split Spoon**
- **R.A.B**

Monitoring Well Construction Key -

- **Screen** 7.0-10.0
- **Backfill** 0.5-6.0
- **Bentonite** 6.0-6.5
- **Filter Pack** 6.5-10.0
- **Grout** 0.0-0.5

BOREHOLE LOG

Borehole No: BH46

Page Number: 1 of 1

Client: Australian Unity Limited
Project Name: Longvueville Rd lane Cove
Project Ref. No: 27380
Location: Lane Cove NSW
Date Drilled: 11/05/2018

Drilling Contractor: Stratacore Drilling
Driller:
Drilling Method: SS
Total Depth (m): 7
Diameter (mm):

Easting: 0
Northing: 0
Logged By: JL
Checked By:

DRILLING					
Depth (m)	Lithological Symbol	SOIL DESCRIPTION (Soil type, density/plasticity, moitsure, odour)	Sample ID	PID (ppm)	Other Comments
		Ground Surface			
0.0		0.00-0.05 Fill: Silty Sand Dry, Brown to dark grey with some organics. No stains or odours.	BH46_0.2	0.2	
0.5		0.05-2.54 Natural: Sand Light brown. Fine to medium grained, moist. Becoming Stiff with depth. No odours or satining.	BH46_0.5	0.4	
1.0			BH46_1.0	0.3	
1.5					
2.0			BH46_2.0, Dup06, Split06	0.2	
			BH46_2.3	0.0	
2.5		Hard refusal, bore terminated @ 2.5 mbgl on sandstone.			
		End of Investigation			
3.0					
3.5					
4.0					
4.5					
5.0					
5.5					
6.0					
6.5					
7.0					
7.5					

NOTES:

BOREHOLE LOG

Borehole No: BH47

Page Number: 1 of 1

Client: Australian Unity Limited
Project Name: Longvueville Rd lane Cove
Project Ref. No: 27380
Location: Lane Cove NSW
Date Drilled: 11/05/2018

Drilling Contractor: Stratacore Drilling
Driller:
Drilling Method: SS
Total Depth (m): 7
Diameter (mm):

Easting: 0
Northing: 0
Logged By: JL
Checked By:

DRILLING					
Depth (m)	Lithological Symbol	SOIL DESCRIPTION (Soil type, density/plasticity, moitsure, odour)	Sample ID	PID (ppm)	Other Comments
		Ground Surface			
0.0		0.00-0.1 Fill: Silty Sand Dry, Brown to dark grey with some organics. No stains or odours.			
0.5		0.1-3.7Fill: Silty Sand Dry, Brown to dark grey. No stains or odours.			
1.0					
1.5					
2.0					
2.5					
3.0					
3.5			BH47_3.6	0.2	
		3.7-7.0 Natural: Sand Light brown. Fine to medium grained, moist. Becoming Stiff with depth. No odours or satining.			
4.0					
4.5					
5.0			BH47_5.0	0.7	
5.5					
6.0			BH47_6.0	0.5	
6.5			BH47_6.5	0.2	
			BH47_7.0	0.3	
7.0		Hard refusal, bore terminated @ 7.0 mbgl on sandstone.			
		End of Investigation			
7.5					

NOTES:

SMEC Borehole Logs (BH1 - BH15)

NON-CORE DRILL HOLE - GEOLOGICAL LOG

HOLE NO : BH1

PROJECT : 266 Longueville Road, Lane Cove GI
LOCATION : Car Park
CLIENT : Lane Cove Council
FEATURE : Car Park
FILE / JOB NO : 30011131
SHEET : 1 OF 1

POSITION : E: 330825.006, N: 6256063.811 (56 MGA94) SURFACE ELEVATION : 56.000 (AHD) ANGLE FROM HORIZONTAL : 90°

RIG TYPE : Edson 3000 MOUNTING : Truck CONTRACTOR : BHC Drilling DRILLER : C.W

DATE STARTED : 10/11/11 DATE COMPLETED : 10/11/11 DATE LOGGED : 10/11/11 LOGGED BY : A.G CHECKED BY : M.G

DRILLING							MATERIAL					
PROGRESS: DRILLING & CASING	PROGRESS: WATER	DRILLING PENETRATION	GROUND WATER LEVELS	SAMPLES & FIELD TESTS	ELEVATION (RL)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION Soil Type, Plasticity or Particle Characteristic, Colour, Secondary and Minor Components	MOISTURE CONDITION	CONSISTENCY RELATIVE DENSITY	STRUCTURE & Other Observations
ADT		E		ES 0.20m	56.0	0.0		ML	Sandy SILT low plasticity, brown, with minor rootlets in the top 100mm 0.30m	D		FILL
				0.60m ES 0.80m				SC	Clayey SAND fine to medium grained, orange 0.80m		D	RESIDUAL SOIL
		M			55.0	1.0			SANDSTONE fine to medium grained, pale grey, estimate very low to low strength becoming low to medium strength at 1.3m			WEATHERED ROCK 0.80: Low TC Bit Resistance
		H							1.50m			1.30: Medium TC Bit Resistance
									BOREHOLE BH1 TERMINATED AT 1.50 m Target depth			
					54.0	2.0						
					53.0	3.0						
					52.0	4.0						
					51.0	5.0						
					50.0	6.0						
					49.0	7.0						
					48.0	8.0						

See Explanatory Notes for details of abbreviations & basis of descriptions.

SMEC AUSTRALIA

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NON-CORE DRILL HOLE - GEOLOGICAL LOG

HOLE NO : BH2

PROJECT : 266 Longueville Road, Lane Cove GI
LOCATION : Car Park
CLIENT : Lane Cove Council
FEATURE : Bowling Green
FILE / JOB NO : 30011131
SHEET : 1 OF 1

POSITION : E: 330825.156, N: 6256047.893 (56 MGA94) SURFACE ELEVATION : 56.000 (AHD) ANGLE FROM HORIZONTAL : 90°

RIG TYPE : Edson 3000 MOUNTING : Truck CONTRACTOR : BHC Drilling DRILLER : C.W

DATE STARTED : 10/11/11 DATE COMPLETED : 10/11/11 DATE LOGGED : 10/11/11 LOGGED BY : A.G CHECKED BY : M.G

DRILLING							MATERIAL					
PROGRESS: DRILLING & CASING	PROGRESS: WATER	DRILLING PENETRATION	GROUND WATER LEVELS	SAMPLES & FIELD TESTS	ELEVATION (RL)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION Soil Type, Plasticity or Particle Characteristic, Colour, Secondary and Minor Components	MOISTURE CONDITION	CONSISTENCY RELATIVE DENSITY	STRUCTURE & Other Observations
AD/T		E		ES 0.20m	56.0	0.0			Sandy GRAVEL medium to coarse grained, grey brown, (Roadbase) 0.20m	D		FILL
		M		0.50m ES 0.70m					SANDSTONE fine to medium grained, grey orange, estimate very low to low strength becoming low to medium strength at 0.7m			WEATHERED ROCK 0.20: Very Low TC Bit Resistance 0.70: Moderate TC Bit Resistance
		H			55.0	1.0			1.50m			
									BOREHOLE BH2 TERMINATED AT 1.50 m Target depth			
					54.0	2.0						
					53.0	3.0						
					52.0	4.0						
					51.0	5.0						
					50.0	6.0						
					49.0	7.0						
					48.0	8.0						

See Explanatory Notes for details of abbreviations & basis of descriptions.

SMEC AUSTRALIA

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NON-CORE DRILL HOLE - GEOLOGICAL LOG

HOLE NO : BH3

PROJECT : 266 Longueville Road, Lane Cove GI
LOCATION : Upper
CLIENT : Lane Cove Council
FEATURE : Bowling Green
FILE / JOB NO : 30011131
SHEET : 1 OF 1

POSITION : E: 330842.726, N: 6256055.884 (56 MGA94) SURFACE ELEVATION : 55.200 (AHD) ANGLE FROM HORIZONTAL : 90°

RIG TYPE : Edson 3000 MOUNTING : Truck CONTRACTOR : BHC Drilling DRILLER : C.W

DATE STARTED : 11/11/11 DATE COMPLETED : 11/11/11 DATE LOGGED : 11/11/11 LOGGED BY : A.G CHECKED BY : M.G

DRILLING							MATERIAL					
PROGRESS: DRILLING & CASING	PROGRESS: WATER	DRILLING PENETRATION	GROUND WATER LEVELS	SAMPLES & FIELD TESTS	ELEVATION (RL)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION Soil Type, Plasticity or Particle Characteristic, Colour, Secondary and Minor Components	MOISTURE CONDITION	CONSISTENCY RELATIVE DENSITY	STRUCTURE & Other Observations
AD/T		E		ES 0.20m	55.0	0.0			Silty SAND fine to medium grained, brown, with gravels from 0.2-0.4m 0.40m	D		TOPSOIL
		M		0.50m ES 0.70m	54.0	1.0			SANDSTONE fine to medium grained, grey orange, estimate very low to low strength 1.50m			WEATHERED ROCK 0.40: Very Low TC Bit Resistance
					53.0	2.0			BOREHOLE BH3 TERMINATED AT 1.50 m Target depth			
					52.0	3.0						
					51.0	4.0						
					50.0	5.0						
					49.0	6.0						
					48.0	7.0						
						8.0						

See Explanatory Notes for details of abbreviations & basis of descriptions.

SMEC AUSTRALIA

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NON-CORE DRILL HOLE - GEOLOGICAL LOG

HOLE NO : BH4

PROJECT : 266 Longueville Road, Lane Cove GI
LOCATION : Upper
CLIENT : Lane Cove Council
FEATURE : Bowling Green
FILE / JOB NO : 30011131
SHEET : 1 OF 1

POSITION : E: 330856.029, N: 6256037.214 (56 MGA94) SURFACE ELEVATION : 55.200 (AHD) ANGLE FROM HORIZONTAL : 90°

RIG TYPE : Edson 3000 MOUNTING : Truck CONTRACTOR : BHC Drilling DRILLER : C.W

DATE STARTED : 11/11/11 DATE COMPLETED : 11/11/11 DATE LOGGED : 11/11/11 LOGGED BY : A.G CHECKED BY : M.G

DRILLING						MATERIAL					
PROGRESS: DRILLING & CASING	PROGRESS: WATER	DRILLING PENETRATION	GROUND WATER LEVELS	SAMPLES & FIELD TESTS	ELEVATION (RL) / DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION Soil Type, Plasticity or Particle Characteristic, Colour, Secondary and Minor Components	MOISTURE CONDITION	CONSISTENCY RELATIVE DENSITY	STRUCTURE & Other Observations
AT		E		ES 0.20m	0.0 / 55.0		SM	Silty SAND fine to medium grained, brown, with rootlets in the top 100mm 0.30m	D		TOPSOIL 0.20: Triplicate ES Taken
		E		0.50m ES 0.70m			GW	GRAVEL coarse grained, to 30 mm, sub-angular, dark grey, with some sand 1.00m			FILL
		M		1.10m ES 1.30m	1.0 / 54.0			SANDSTONE fine to medium grained, grey orange, estimate very low to low strength becoming low to medium strength at 1.7m			WEATHERED ROCK 1.00: Very Low TC Bit Resistance
		H						2.00m			1.70: Medium TC Bit Resistance
					2.0 / 53.0			BOREHOLE BH4 TERMINATED AT 2.00 m Target depth			
					3.0 / 52.0						
					4.0 / 51.0						
					5.0 / 50.0						
					6.0 / 49.0						
					7.0 / 48.0						
					8.0						

See Explanatory Notes for details of abbreviations & basis of descriptions.

SMEC AUSTRALIA

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NON-CORE DRILL HOLE - GEOLOGICAL LOG

HOLE NO : BH5

PROJECT : 266 Longueville Road, Lane Cove GI
LOCATION : Upper
CLIENT : Lane Cove Council
FEATURE : Bowling Green
FILE / JOB NO : 30011131
SHEET : 1 OF 1

POSITION : E: 330874.040, N: 6256048.627 (56 MGA94) SURFACE ELEVATION : 55.200 (AHD) ANGLE FROM HORIZONTAL : 90°

RIG TYPE : Edson 3000 MOUNTING : Truck CONTRACTOR : BHC Drilling DRILLER : C.W

DATE STARTED : 11/11/11 DATE COMPLETED : 11/11/11 DATE LOGGED : 11/11/11 LOGGED BY : A.G CHECKED BY : M.G

DRILLING						MATERIAL					
PROGRESS: DRILLING & CASING	PROGRESS: WATER	DRILLING PENETRATION	GROUND WATER LEVELS	SAMPLES & FIELD TESTS	ELEVATION (RL) / DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION Soil Type, Plasticity or Particle Characteristic, Colour, Secondary and Minor Components	MOISTURE CONDITION	CONSISTENCY RELATIVE DENSITY	STRUCTURE & Other Observations
ADT				ES 0.20m	0.0 55.0		SM	Silty SAND fine to medium grained, brown, with rootlets in the top 100mm 0.40m			TOPSOIL
				1.30m ES	1.0 54.0			Gravelly Sandy CLAY medium plasticity, brown, with sub angular gravels			FILL
		E-H		**1.50m** SPT 3,2,3 N=5			CL	1.50m 1.50: As above but grey brown	D	S - F	1.50: PID = 2ppm
				1.95m	2.0 53.0						2.70: Duplicate ES Taken
				3.00m	3.0			3.00m			
		E		SPT 6,15,25/100mm N=>40	52.0		CL	Sandy CLAY low plasticity, orange brown, with occasional ironstone gravels, becoming grey mottled red 3.30m	M	St	RESIDUAL SOIL 3.20: Minor seepage at soil/rock interface
		M		3.40m 3.70m				SANDSTONE fine to medium grained, grey orange, estimate very low to low strength becoming low to medium strength at 3.7m			WEATHERED ROCK 3.30: Very Low TC Bit Resistance
		H		ES 3.90m							3.70: High TC Bit Resistance
					4.0 51.0			4.00m BOREHOLE BH5 TERMINATED AT 4.00 m Target depth			
					5.0 50.0						
					6.0 49.0						
					7.0 48.0						
					8.0						

See Explanatory Notes for details of abbreviations & basis of descriptions.

SMEC AUSTRALIA

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NON-CORE DRILL HOLE - GEOLOGICAL LOG

HOLE NO : BH6

PROJECT : 266 Longueville Road, Lane Cove GI
LOCATION : Upper
CLIENT : Lane Cove Council
FEATURE : Bowling Green
FILE / JOB NO : 30011131
SHEET : 1 OF 1

POSITION : E: 330842.730, N: 6256025.009 (56 MGA94) SURFACE ELEVATION : 55.200 (AHD) ANGLE FROM HORIZONTAL : 90°

RIG TYPE : Edson 3000 MOUNTING : Truck CONTRACTOR : BHC Drilling DRILLER : C.W

DATE STARTED : 11/11/11 DATE COMPLETED : 11/11/11 DATE LOGGED : 11/11/11 LOGGED BY : A.G CHECKED BY : M.G

DRILLING							MATERIAL					
PROGRESS: DRILLING & CASING	PROGRESS: WATER	DRILLING PENETRATION	GROUND WATER LEVELS	SAMPLES & FIELD TESTS	ELEVATION (RL)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION Soil Type, Plasticity or Particle Characteristic, Colour, Secondary and Minor Components	MOISTURE CONDITION	CONSISTENCY RELATIVE DENSITY	STRUCTURE & Other Observations
ADT		E		ES 0.20m	55.0	0.0		SM	Silty SAND fine to medium grained, brown, with rootlets in the top 100mm 0.30m	D		TOPSOIL
		M		0.50m 0.50m ES					SANDSTONE fine to medium grained, orange, estimate very low to low strength becoming low to medium strength and pale grey at 1.0m			WEATHERED ROCK 0.30: Very Low TC Bit Resistance
		H			54.0	1.0			1.50m 1.50: As above becoming pale grey, low to medium plasticity			1.00: Medium TC Bit Resistance
					53.0	2.0						
					52.0	3.0			3.00m 3.00: As above becoming grey and low strength			
					51.0	4.0			4.50m 4.50: As above becoming low to medium strength			
					50.0	5.0						
					49.0	6.0			6.00m 4.50: As above becoming medium strength BOREHOLE BH6 TERMINATED AT 1.50 m Target depth			
					48.0	7.0						
						8.0						

See Explanatory Notes for details of abbreviations & basis of descriptions.

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NON-CORE DRILL HOLE - GEOLOGICAL LOG

HOLE NO : BH7

PROJECT : 266 Longueville Road, Lane Cove GI
LOCATION : Upper
CLIENT : Lane Cove Council
FEATURE : Bowling Green
FILE / JOB NO : 30011131
SHEET : 1 OF 1

POSITION : E: 330870.600, N: 6256040.032 (56 MGA94) SURFACE ELEVATION : 55.200 (AHD) ANGLE FROM HORIZONTAL : 90°

RIG TYPE : Edson 3000 MOUNTING : Truck CONTRACTOR : BHC Drilling DRILLER : C.W

DATE STARTED : 11/11/11 DATE COMPLETED : 11/11/11 DATE LOGGED : 11/11/11 LOGGED BY : A.G CHECKED BY : M.G

DRILLING							MATERIAL					
PROGRESS: DRILLING & CASING	PROGRESS: WATER	DRILLING PENETRATION	GROUND WATER LEVELS	SAMPLES & FIELD TESTS	ELEVATION (RL)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION Soil Type, Plasticity or Particle Characteristic, Colour, Secondary and Minor Components	MOISTURE CONDITION	CONSISTENCY RELATIVE DENSITY	STRUCTURE & Other Observations
ADT		E		ES 0.20m	55.0	0.0		SM	Silty SAND fine to medium grained, brown, with rootlets in the top 100mm 0.30m	D		TOPSOIL
						1.0		CL	Gravelly Sandy CLAY low plasticity, brown, gravels are sub-angular 1.10m			FILL
				1.30m ES **1.50m** SPT 3, 3, 7 N=10	54.0			CH	Sandy Silty CLAY medium to high plasticity, grey mottled orange, with ironstone gravels 1.80m	M	St	RESIDUAL SOIL 1.50: PID = 1.5ppm 1.60: P.P = 200kPa 1.70: Minor seepage at soil/rock interface
		M		1.95m	53.0	2.0			SANDSTONE fine to medium grained, orange brown, estimate very low to low strength becoming low to medium strength and pale grey at 2.7m			WEATHERED ROCK 1.80: Low TC Bit Resistance
		H		2.70m ES 2.90m					3.00m			2.70: Medium TC Bit Resistance
					52.0	3.0			BOREHOLE BH7 TERMINATED AT 3.00 m Target depth			
					51.0	4.0						
					50.0	5.0						
					49.0	6.0						
					48.0	7.0						
						8.0						

See Explanatory Notes for details of abbreviations & basis of descriptions.

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NON-CORE DRILL HOLE - GEOLOGICAL LOG

HOLE NO : BH8

PROJECT : 266 Longueville Road, Lane Cove GI
LOCATION : Upper
CLIENT : Lane Cove Council
FEATURE : Bowling Green
FILE / JOB NO : 30011131
SHEET : 1 OF 1

POSITION : E: 330866.718, N: 6256022.623 (56 MGA94) SURFACE ELEVATION : 55.200 (AHD) ANGLE FROM HORIZONTAL : 90°

RIG TYPE : Edson 3000 MOUNTING : Truck CONTRACTOR : BHC Drilling DRILLER : C.W

DATE STARTED : 11/11/11 DATE COMPLETED : 11/11/11 DATE LOGGED : 11/11/11 LOGGED BY : A.G CHECKED BY : M.G

DRILLING PROGRESS: DRILLING & CASING	DRILLING PROGRESS: WATER	DRILLING PENETRATION	GROUND WATER LEVELS	SAMPLES & FIELD TESTS	ELEVATION (RL)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION Soil Type, Plasticity or Particle Characteristic, Colour, Secondary and Minor Components	MOISTURE CONDITION	CONSISTENCY RELATIVE DENSITY	STRUCTURE & Other Observations
ADT		E		ES 0.20m	55.0	0.0		SM	Silty SAND fine to medium grained, brown, with rootlets in the top 100mm 0.30m	D		TOPSOIL
				1.50m SPT 1, 2, 1 N=3 1.95m	54.0	1.0		CL	Sandy Silty CLAY low to medium plasticity, orange brown 2.00m	M	S	FILL 1.50: PID = 1.5ppm 1.60: P.P = 25kPa
				2.70m ES 2.90m 3.00m SPT 3, 16, 14 N=30	53.0 52.0	2.0 3.0		CH	Silty CLAY medium to high plasticity, brown 3.35m	M to W	St	RESIDUAL SOIL 3.00: PID = 2.2ppm 3.10: P.P = 150kPa
		M		3.45m 4.20m ES	51.0	4.0			SANDSTONE fine to medium grained, orange brown, estimate very low to low strength becoming low to medium strength and pale grey at 4.3m 4.50m			WEATHERED ROCK 3.35: Seepage at soil/rock interface 3.40: Low TC Bit Resistance
		H		4.40m								4.30: Medium TC Bit Resistance
					50.0 49.0 48.0	5.0 6.0 7.0 8.0			BOREHOLE BH8 TERMINATED AT 4.50 m Target depth			

See Explanatory Notes for details of abbreviations & basis of descriptions.

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NON-CORE DRILL HOLE - GEOLOGICAL LOG

HOLE NO : BH9

PROJECT : 266 Longueville Road, Lane Cove GI
LOCATION : Upper
CLIENT : Lane Cove Council
FEATURE : Bowling Green
FILE / JOB NO : 30011131
SHEET : 1 OF 1

POSITION : E: 330848.230, N: 6256008.151 (56 MGA94) SURFACE ELEVATION : 55.500 (AHD) ANGLE FROM HORIZONTAL : 90°

RIG TYPE : Edson 3000 MOUNTING : Truck CONTRACTOR : BHC Drilling DRILLER : C.W

DATE STARTED : 11/11/11 DATE COMPLETED : 11/11/11 DATE LOGGED : 11/11/11 LOGGED BY : A.G CHECKED BY : M.G

DRILLING						MATERIAL					
PROGRESS: DRILLING & CASING	PROGRESS: WATER	DRILLING PENETRATION	GROUND WATER LEVELS	SAMPLES & FIELD TESTS	ELEVATION (RL) / DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION Soil Type, Plasticity or Particle Characteristic, Colour, Secondary and Minor Components	MOISTURE CONDITION	CONSISTENCY RELATIVE DENSITY	STRUCTURE & Other Observations
ADT		E		ES 0.20m	0.0		SM	0.20m Silty SAND fine to medium grained, brown, with rootlets in the top 100mm	D		TOPSOIL
		M		0.50m				SANDSTONE fine to medium grained, orange grey, estimate very low to low strength becoming low to medium strength and pale grey at 0.5m			WEATHERED ROCK 0.20: Very Low TC Bit Resistance
				ES 0.70m	55.0						0.50: Medium TC Bit Resistance
		H			1.0			1.50m			
					54.0			BOREHOLE BH9 TERMINATED AT 1.50 m Target depth			
					2.0						
					53.0						
					3.0						
					52.0						
					4.0						
					51.0						
					5.0						
					50.0						
					6.0						
					49.0						
					7.0						
					48.0						
					8.0						

See Explanatory Notes for details of abbreviations & basis of descriptions.

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NON-CORE DRILL HOLE - GEOLOGICAL LOG

HOLE NO : BH10

PROJECT : 266 Longueville Road, Lane Cove GI
LOCATION : Lower
CLIENT : Lane Cove Council
FEATURE : Car Park
FILE / JOB NO : 30011131
SHEET : 1 OF 1

POSITION : E: 330887.837, N: 6256015.200 (56 MGA94) SURFACE ELEVATION : 49.500 (AHD) ANGLE FROM HORIZONTAL : 90°

RIG TYPE : Edson 3000 MOUNTING : Truck CONTRACTOR : BHC Drilling DRILLER : C.W

DATE STARTED : 10/11/11 DATE COMPLETED : 10/11/11 DATE LOGGED : 10/11/11 LOGGED BY : A.G CHECKED BY : M.G

DRILLING PROGRESS: DRILLING & CASING	DRILLING PROGRESS: WATER	DRILLING PENETRATION	GROUND WATER LEVELS	SAMPLES & FIELD TESTS	ELEVATION (RL)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION Soil Type, Plasticity or Particle Characteristic, Colour, Secondary and Minor Components	MOISTURE CONDITION	CONSISTENCY RELATIVE DENSITY	STRUCTURE & Other Observations
AD/T		E			49.0	0.0		SM	Silty SAND fine to medium grained, brown, with rootlets in the top 100mm 0.30m	D	VL to L	TOPSOIL 0.10: Triplicate ES Taken
				1.50m SPT 2, 1, 2 N=3 1.95m	48.0	1.0		SM	Silty SAND fine to medium grained, grey brown, with occasional angular gravels 1.90m			FILL 1.50: PID = 3.2ppm
					47.0	2.0		SC	Clayey SAND fine to medium grained, orange brown 2.60m	M to W	MD	RESIDUAL SOIL 2.55: Seepage at soil/rock interface
		M		2.70m ES 2.90m		3.0			SANDSTONE fine to medium grained, pale grey, estimate very low to low strength becoming low to medium strength at 3.3m			WEATHERED ROCK 2.60: Low TC Bit Resistance
		H							3.50m			3.30: Medium TC Bit Resistance
					46.0				BOREHOLE BH10 TERMINATED AT 3.50 m Target depth			
					45.0	4.0						
					44.0	5.0						
					43.0	6.0						
					42.0	7.0						
						8.0						

See Explanatory Notes for details of abbreviations & basis of descriptions.

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NON-CORE DRILL HOLE - GEOLOGICAL LOG

HOLE NO : BH11

PROJECT : 266 Longueville Road, Lane Cove GI
LOCATION : Lower
CLIENT : Lane Cove Council
FEATURE : Bowling Green
FILE / JOB NO : 30011131
SHEET : 1 OF 2

POSITION : E: 330916.180, N: 6256014.449 (56 MGA94) SURFACE ELEVATION : 49.500 (AHD) ANGLE FROM HORIZONTAL : 90°

RIG TYPE : Edson 3000 MOUNTING : Truck CONTRACTOR : BHC Drilling DRILLER : C.W

DATE STARTED : 10/11/11 DATE COMPLETED : 10/11/11 DATE LOGGED : 10/11/11 LOGGED BY : A.G CHECKED BY : M.G

DRILLING PROGRESS: DRILLING & CASING	DRILLING PROGRESS: WATER	DRILLING PENETRATION	GROUND WATER LEVELS	SAMPLES & FIELD TESTS	ELEVATION (RL)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION Soil Type, Plasticity or Particle Characteristic, Colour, Secondary and Minor Components	MOISTURE CONDITION	CONSISTENCY RELATIVE DENSITY	STRUCTURE & Other Observations
AD/T		E		ES 0.20m	49.0	0.0		SM	Silty SAND fine to medium grained, brown, with rootlets in the top 100mm 0.40m	D		TOPSOIL 0.20: PID = 1.1ppm
						1.0		SW	Gravelly Clayey SAND fine to coarse grained, orange brown, with high plasticity clay bands 1.00m	D to M	L	FILL
		E-H		1.30m ES **1.50m** SPT 2, 2, 1 N=3 1.95m	48.0	2.0		CH	Gravelly Sandy CLAY medium to high plasticity, grey brown, with brick fragments, ash, porcelain and glass 2.50m	M	S	1.00: Mixed penetration with cobbles and boulders in fill 1.50: PID = 1.7ppm
				3.00m SPT 8, 8, 8 N=16 3.45m	47.0	3.0		GW	Silty Sandy GRAVEL fine to coarse grained, orange brown, with brick fragments and angular sandstone gravel	D	MD	3.00: PID = 2.2ppm 3.10: P.P = 150kPa
				4.30m ES **4.50m** SPT 6, 10, 6 N=16 4.95m	46.0	4.0			4.00: Clay Lenses			4.50: PID = 10.5ppm
				5.70m ES 5.90m 6.00m SPT 7, 7, 6 N=13 6.45m	45.0	5.0						6.00: PID = 1.6ppm
					44.0	6.0						
					43.0	7.0						7.50: PID = 1.2ppm
					42.0	8.0						

See Explanatory Notes for details of abbreviations & basis of descriptions.

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NON-CORE DRILL HOLE - GEOLOGICAL LOG

HOLE NO : BH11

PROJECT : 266 Longueville Road, Lane Cove GI
LOCATION : Lower
CLIENT : Lane Cove Council
FEATURE : Bowling Green
FILE / JOB NO : 30011131
SHEET : 2 OF 2

POSITION : E: 330916.180, N: 6256014.449 (56 MGA94) SURFACE ELEVATION : 49.500 (AHD) ANGLE FROM HORIZONTAL : 90°

RIG TYPE : Edson 3000 MOUNTING : Truck CONTRACTOR : BHC Drilling DRILLER : C.W

DATE STARTED : 10/11/11 DATE COMPLETED : 10/11/11 DATE LOGGED : 10/11/11 LOGGED BY : A.G CHECKED BY : M.G

DRILLING						MATERIAL					
PROGRESS: DRILLING & CASING	PROGRESS: WATER	DRILLING PENETRATION	GROUND WATER LEVELS	SAMPLES & FIELD TESTS	ELEVATION (RL) / DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION Soil Type, Plasticity or Particle Characteristic, Colour, Secondary and Minor Components	MOISTURE CONDITION	CONSISTENCY RELATIVE DENSITY	STRUCTURE & Other Observations
AD/T		E-H		8.60m ES 8.80m	8.0 41.0		GW	Silty Sandy GRAVEL fine to coarse grained, orange brown, with brick fragments and angular sandstone gravel *(continued)* 8.60m	D	MD	8.55: Seepage at soil/rock interface
		M						SANDSTONE fine to medium grained, orange brown, estimate very low to low strength becoming low to medium strength and pale grey at 9.0m			WEATHERED ROCK 8.60: Low TC Bit Resistance
		H			9.0			9.40m			9.00: Medium TC Bit Resistance
					40.0 10.0 39.0 11.0 38.0 12.0 37.0 13.0 36.0 14.0 35.0 15.0 34.0 16.0			BOREHOLE BH11 TERMINATED AT 9.40 m Target depth			

See Explanatory Notes for details of abbreviations & basis of descriptions.

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NON-CORE DRILL HOLE - GEOLOGICAL LOG

HOLE NO : BH12

PROJECT : 266 Longueville Road, Lane Cove GI
LOCATION : Lower
CLIENT : Lane Cove Council
FEATURE : Bowling Green
FILE / JOB NO : 30011131
SHEET : 1 OF 1

POSITION : E: 330900.328, N: 6256004.913 (56 MGA94) SURFACE ELEVATION : 49.500 (AHD) ANGLE FROM HORIZONTAL : 90°

RIG TYPE : Edson 3000 MOUNTING : Truck CONTRACTOR : BHC Drilling DRILLER : C.W

DATE STARTED : 10/11/11 DATE COMPLETED : 10/11/11 DATE LOGGED : 10/11/11 LOGGED BY : A.G CHECKED BY : M.G

DRILLING PROGRESS: DRILLING & CASING	WATER	DRILLING PENETRATION	GROUND WATER LEVELS	SAMPLES & FIELD TESTS	ELEVATION (RL)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION (Soil Type, Plasticity or Particle Characteristic, Colour, Secondary and Minor Components)	MOISTURE CONDITION	CONSISTENCY / RELATIVE DENSITY	STRUCTURE & Other Observations
AD/T		E		ES 0.20m	49.0	0.0		SM	Silty SAND fine to medium grained, brown, with rootlets in the top 100mm 0.40m	D		TOPSOIL
				1.30m ES **1.50m** SPT 3, 1, 2 N=3	48.0	1.0		CL	Sandy Silty CLAY medium plasticity, brown, with angular gravels, brick fragments, ash and glass sand		S	FILL 1.50: PID = 1.5ppm 1.60: P.P = 40kPa
				1.95m 3.00m SPT 3, 7, 8 N=15 3.45m	47.0	2.0 3.0			3.50m			3.00: PID = 2.7ppm 3.10: P.P = 25kPa
				4.30m ES **4.50m** SPT 2, 3, 3 N=6	46.0 45.0	4.0		GC	Clayey Sandy GRAVEL medium to coarse grained, sub-angular, grey brown 4.90m	M to W	MD L	4.50: PID = 3ppm 0 Slight Odour 4.80: Seepage at soil/rock interface
		M		4.95m 5.70m	44.0	5.0			SANDSTONE fine to medium grained, grey brown, estimate very low to low strength becoming low to medium strength and pale grey at 5.7m 6.00m			WEATHERED ROCK 4.90: Low TC Bit Resistance 5.70: Medium TC Bit Resistance
		H		ES 5.90m		6.0			BOREHOLE BH12 TERMINATED AT 6.00 m Target depth			
					43.0	7.0						
					42.0	8.0						

See Explanatory Notes for details of abbreviations & basis of descriptions.

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NON-CORE DRILL HOLE - GEOLOGICAL LOG

HOLE NO : BH13
FILE / JOB NO : 30011131
SHEET : 1 OF 2

PROJECT : 266 Longueville Road, Lane Cove GI
LOCATION : Lower
CLIENT : Lane Cove Council
FEATURE : Bowling Green

POSITION : E: 330915.675, N: 6256004.801 (56 MGA94) SURFACE ELEVATION : 49.500 (AHD) ANGLE FROM HORIZONTAL : 90°

RIG TYPE : Edson 3000 MOUNTING : Truck CONTRACTOR : BHC Drilling DRILLER : C.W

DATE STARTED : 10/11/11 DATE COMPLETED : 10/11/11 DATE LOGGED : 10/11/11 LOGGED BY : A.G CHECKED BY : M.G

DRILLING | MATERIAL

PROGRESS: DRILLING & CASING	PROGRESS: WATER	DRILLING PENETRATION	GROUND WATER LEVELS	SAMPLES & FIELD TESTS	ELEVATION (RL)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION Soil Type, Plasticity or Particle Characteristic, Colour, Secondary and Minor Components	MOISTURE CONDITION	CONSISTENCY RELATIVE DENSITY	STRUCTURE & Other Observations
AD/T		E		ES 0.20m	49.0	0.0		SM	Silty SAND fine to medium grained, brown, with rootlets in the top 100mm	D		TOPSOIL 0.20: PID = 1.1ppm
						0.40m		CL	Gravelly Silty CLAY low to medium plasticity, pale brown to grey, with angular gravels, brick fragments, ash and glass gravel		S to F	FILL 1.50: PID = 1.7ppm
				1.30m ES 1.50m SPT 3, 2, 3 N=5 1.95m	48.0	1.0, 2.0						
		E-H		2.70m ES 2.90m	47.0	2.50m		SW	Silty Gravelly SAND fine to coarse grained, grey, with brick fragments, ash, porcelain and glass silt		D	
				3.00m SPT 3, 11, 7 N=18 3.45m	46.0	3.0						3.00: PID = 1.9ppm 3.50: Mixed penetration with cobbles and boulders in fill
				4.30m ES 4.50m SPT 11, 11, 12 N=23 4.95m	45.0	4.0, 5.0						4.50: PID = 11ppm
				5.80m ES 6.00m SPT 2, 5, 3 N=8 6.45m	44.0	6.0			6.40 - 7.00: Medium plasticity clay band		L - MD	6.00: PID = 1.6ppm
				7.30m ES 7.50m SPT 2, 1, 0 N=1 7.95m	43.0	7.0					VL	7.30: Duplicate sample taken 7.50: PID = 1ppm
					42.0	8.0						

See Explanatory Notes for details of abbreviations & basis of descriptions.

SMEC AUSTRALIA

UPDATED SMEC LIBRARY_AGS 3_1 RTA 1_1 LIB 08_WITH FENCE TOOL_AND_CAD COLOUR.GLB Log SMEC NON-CORE DRILL HOLE LANE COVE.GPJ <<DrawingFile>> 01/12/2011 08:34 8.2.904

NON-CORE DRILL HOLE - GEOLOGICAL LOG

HOLE NO : BH13

PROJECT : 266 Longueville Road, Lane Cove GI
LOCATION : Lower
CLIENT : Lane Cove Council
FEATURE : Bowling Green
FILE / JOB NO : 30011131
SHEET : 2 OF 2

POSITION : E: 330915.675, N: 6256004.801 (56 MGA94) SURFACE ELEVATION : 49.500 (AHD) ANGLE FROM HORIZONTAL : 90°

RIG TYPE : Edson 3000 MOUNTING : Truck CONTRACTOR : BHC Drilling DRILLER : C.W

DATE STARTED : 10/11/11 DATE COMPLETED : 10/11/11 DATE LOGGED : 10/11/11 LOGGED BY : A.G CHECKED BY : M.G

DRILLING							MATERIAL					
PROGRESS: DRILLING & CASING	PROGRESS: WATER	DRILLING PENETRATION	GROUND WATER LEVELS	SAMPLES & FIELD TESTS	ELEVATION (RL)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION Soil Type, Plasticity or Particle Characteristic, Colour, Secondary and Minor Components	MOISTURE CONDITION	CONSISTENCY RELATIVE DENSITY	STRUCTURE & Other Observations
AD/T		E-H				8.0		SW	8.10m	W	VL	8.00: Seepage at soil/rock interface
		M							SANDSTONE fine to medium grained, orange brown, estimate very low to low strength becoming low to medium strength and pale grey at 8.5m			WEATHERED ROCK 8.10: Low TC Bit Resistance
		H			41.0				8.70m			8.50: Medium TC Bit Resistance
									BOREHOLE BH13 TERMINATED AT 8.70 m Target depth			
						9.0						
					40.0							
						10.0						
					39.0							
						11.0						
					38.0							
						12.0						
					37.0							
						13.0						
					36.0							
						14.0						
					35.0							
						15.0						
					34.0							
						16.0						

See Explanatory Notes for details of abbreviations & basis of descriptions.

SMEC AUSTRALIA

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NON-CORE DRILL HOLE - GEOLOGICAL LOG

HOLE NO : BH14

PROJECT : 266 Longueville Road, Lane Cove GI
LOCATION : Lower
CLIENT : Lane Cove Council
FEATURE : Bowling Green
FILE / JOB NO : 30011131
SHEET : 1 OF 1

POSITION : E: 330881.749, N: 6255997.518 (56 MGA94) SURFACE ELEVATION : 49.500 (AHD) ANGLE FROM HORIZONTAL : 90°

RIG TYPE : Edson 3000 MOUNTING : Truck CONTRACTOR : BHC Drilling DRILLER : C.W

DATE STARTED : 10/11/11 DATE COMPLETED : 10/11/11 DATE LOGGED : 10/11/11 LOGGED BY : A.G CHECKED BY : M.G

DRILLING PROGRESS: DRILLING & CASING	DRILLING PROGRESS: WATER	DRILLING PENETRATION	GROUND WATER LEVELS	SAMPLES & FIELD TESTS	ELEVATION (RL)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION Soil Type, Plasticity or Particle Characteristic, Colour, Secondary and Minor Components	MOISTURE CONDITION	CONSISTENCY RELATIVE DENSITY	STRUCTURE & Other Observations
						0.0		SM	Silty SILT fine to medium, brown, with rootlets in the top 100mm 0.60m			TOPSOIL 0.20: PID = 2.2ppm
		E		1.30m ES **1.50m** SPT 1, 1, 2 N=3 1.95m	49.0 48.0	1.0 2.0		CH	Sandy Silty CLAY high plasticity, grey orange brown 2.10m	D M to W	S	RESIDUAL SOIL 1.50: PID = 2.7ppm 2.00: Seepage at soil/rock interface
		M H			47.0	3.0			SANDSTONE fine to medium grained, orange, estimate very low to low strength becoming low to medium strength and pale grey at 3.0m 3.50m			WEATHERED ROCK 2.10: Low TC Bit Resistance 3.00: Medium TC Bit Resistance
AD/T					46.0 45.0 44.0 43.0 42.0	4.0 5.0 6.0 7.0 8.0			BOREHOLE BH14 TERMINATED AT 3.50 m Target depth			

See Explanatory Notes for details of abbreviations & basis of descriptions.

SMEC AUSTRALIA

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NON-CORE DRILL HOLE - GEOLOGICAL LOG

HOLE NO : BH15

PROJECT : 266 Longueville Road, Lane Cove GI
LOCATION : Lower
CLIENT : Lane Cove Council
FEATURE : Bowling Green
FILE / JOB NO : 30011131
SHEET : 1 OF 1

POSITION : E: 330912.721, N: 6255990.120 (56 MGA94) SURFACE ELEVATION : 49.500 (AHD) ANGLE FROM HORIZONTAL : 90°

RIG TYPE : Edson 3000 MOUNTING : Truck CONTRACTOR : BHC Drilling DRILLER : C.W

DATE STARTED : 10/11/11 DATE COMPLETED : 10/11/11 DATE LOGGED : 10/11/11 LOGGED BY : A.G CHECKED BY : M.G

DRILLING PROGRESS: DRILLING & CASING	DRILLING PROGRESS: WATER	DRILLING PENETRATION	GROUND WATER LEVELS	SAMPLES & FIELD TESTS	ELEVATION (RL)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION Soil Type, Plasticity or Particle Characteristic, Colour, Secondary and Minor Components	MOISTURE CONDITION	CONSISTENCY RELATIVE DENSITY	STRUCTURE & Other Observations
AD/T				0.10m		0.0		SM	Silty SAND fine to medium grained, brown, with rootlets in the top 100mm 0.40m			TOPSOIL 0.20: PID = 1.3ppm
		E		ES 0.30m	49.0	1.0		SW	Gravelly Silty SAND fine to coarse grained, pale brown, with brick fragments and clay layers 1.30m		L	FILL
		E-H		ES 1.50m 1.70m SPT 3, 1, 3 N=4 2.15m	48.0	2.0		CL	Sandy Silty CLAY medium plasticity, brown, with occasional medium to coarse grained gravels 3.20m		F	1.30: Mixed penetration with cobbles and boulders in fill 1.50: PID = 0.9ppm
				2.70m ES 2.90m 3.00m SPT 6, 16, 13 N=29 3.45m	47.0	3.0						3.00: PID = 1.4ppm
				4.20m ES 4.40m 4.50m SPT 12, 16, 12 N=28 4.95m	46.0 45.0	4.0 5.0		SW	Gravelly Clayey SAND fine to coarse grained, grey to orange brown, with brick fragments, ash, porcelain and glass 4.70 - 6.80 - Becoming grey gravelly sand 6.80m	D	D - VD	4.50: PID = 1.3ppm
				5.70m ES 5.90m 6.00m SPT 18, 13, >25100mm N=>38 6.45m	44.0 43.0	6.0						6.00: PID = 3.3ppm 6.70: Seepage at soil/rock interface
		M H				7.0			SANDSTONE fine to medium grained, orange grey, estimate very low to low strength becoming low to medium strength and pale grey at 7.2m 7.40m	W to M		WEATHERED ROCK 6.80: Low TC Bit Resistance 7.20: Medium TC Bit Resistance
					42.0	8.0			BOREHOLE BH15 TERMINATED AT 7.40 m Target depth			

See Explanatory Notes for details of abbreviations & basis of descriptions.

SMEC AUSTRALIA

UPDATED SMEC LIBRARY_AGS 3_1 RTA 1_1 LIB 08_WITH FENCE TOOL_AND_CAD COLOUR.GLB Log_SMEC NON-CORE DRILL HOLE LANE COVE.GPJ <<DrawingFile>> 01/12/2011 08:34 8.2.904

LRM Groundwater Fieldsheets

LRM GLOBAL

GENERAL INFORMATION

Client: O2 Unity Site: Lone Cove

Bore ID: GW02 Date: 14/5/18

Bore Condition: Good

Well Cap Secure: Yes

Bore Locked: No Locking Type:

Weather Conditions: Sunny and clear.

Wind Speed: Wind Direction:

Weather Conditions (Preceding days):

Air Temp °C: Atm. Pressure:

Bore GPS Location: S:
(MAP Datum - AUS GEOD' 66) E:

PURGING & SAMPLE COLLECTION INFORMATION

Field Meter Used:

Flow Through Cell Used:

Depth Tape Used: ✓

Decontamination Procedure Carried Out: ✓

Sampled By: [illegible]

Time sample taken:

Metals Sample Field Filtered: ✓

Filter Type:

Samples placed on ice for transport: ✓

Sampling Device:

1. Stainless Steel Bailer
2. Downhole Submersible Pump
3. QED Well Wizard Bladder Pump
4. Syphon Tube with Non Return Valve
5. Sample Pro Micro Purge Pump X
6. Other

Lab No. :	
Report No. :	

Field Measurements and Stabilisation Record

Time	Purge Rate (L/min)	Volume Purged (L)	Temp (°C)	Electrical Cond. (uS/cm)	pH (Units)	Redox (mV)	Dissolved Oxygen (mg/L)	SWL (mbTOC)	Appearance (colour, turbidity, odour, gas)
Stabilisation Criteria			+/-0.5	+/-3%	+/-0.05	+/-10	+/-10%	< 0.50m	
0845	0.2	1.2	18.86	357	5.00	185	6.20		Slightly turbid, no odour.
0850	0.2	1.2	19.2	346	5.00	188	5.39		
0855	0.2	1.4	19.1	344	5.12	188	4.99		
0900	0.2	1.6	19.2	344	5.11	189	5.18		
Total vol purged (L):						Sample Appearance -			

Field Meter Calibration reference sheet:

GAUGING INFORMATION

Pre-purging SWL (m bTOC) - PVC north side: 6.70

Ground Level to TOC (m) - PVC north side: [illegible]

Pre-purging SWL (m bGL):

Total Depth of Bore (m bTOC) - PVC north side: 11.1

Pump inlet placement (m bTOC) - PVC north side: 7.0 m

Post Sampling SWL (m bTOC) - PVC north side:

Sample Containers Used

	Preservative	Sample Container
Nil		
HNO3(Metals)		
H2SO4		
HCl(VOC)		
Other		

No of Sample Containers:

Volume of sample collected (L): 1.6 L.

General Comments:

Inner Well Casing Diameter

50mm: ✓	100mm:
Other:	

LBM GLOBAL

GENERAL INFORMATION

Client: OZ Unity
Site: Lane Cove
Bore ID: GW101
Date: 14/5/18
Bore Condition: Good
Well Cap Secure: Yes
Bore Locked: No
Locking Type:
Weather Conditions: Sunny Clear
Wind Speed:
Wind Direction:
Weather Conditions (Preceding days):
Air Temp °C:
Atm. Pressure:
Bore GPS Location: S:
(MAP Datum - AUS GEOD' 66) E:

PURGING & SAMPLE COLLECTION INFORMATION

Field Meter Used:
Flow Through Cell Used:
Depth Tape Used: ✓
Decontamination Procedure Carried Out: ✓
Sampled By: JK
Time sample taken:
Metals Sample Field Filtered: ✓
Filter Type:
Samples placed on ice for transport: ✓

Sampling Device:

1. Stainless Steel Bailer
2. Downhole Submersible Pump
3. QED Well Wizard Bladder Pump
4. Syphon Tube with Non Return Valve
5. Sample Pro Micro Purge Pump X
6. Other

Lab No. :	
Report No. :	

Field Measurements and Stabilisation Record

Time	Purge Rate (L/min)	Volume Purged (L)	Temp (°C)	Electrical Cond. (uS/cm)	pH (Units)	Redox (mV)	Dissolved Oxygen (mg/L)	SWL (mbTOC)	Appearance (colour, turbidity, odour, gas)
Stabilisation Criteria			+/-0.5	+/-3%	+/-0.05	+/-10	+/-10%	< 0.50m	
0735	0.2	1.2	18.4	260	4.51	200	6.31		Clear, No odour
0740	0.3	1.3	19.4	294	4.53	211	6.21		
0745	0.3	1.6	19.5	272	4.58	212	6.00		
0750	0.3	1.9	19.6	277	4.61	214	5.76		
Total vol purged (L):						Sample Appearance -			Dup & Split collected.

Field Meter Calibration reference sheet:

GAUGING INFORMATION

Pre-purging SWL (m bTOC) - PVC north side: 1.45
Ground Level to TOC (m) - PVC north side: 0m
Pre-purging SWL (m bGL):
Total Depth of Bore (m bTOC) - PVC north side: 9.2
Pump inlet placement (m bTOC) - PVC north side: 7.5m
Post Sampling SWL (m bTOC) - PVC north side:

General Comments: Dup & Split

Sample Containers Used

	Preservative	Sample Container
Nil		
HNO3(Metals)		
H2SO4		
HCl(VOC)		
Other		

No of Sample Containers:
Volume of sample collected (L): 1.6L.

Inner Well Casing Diameter

50mm: ✓	100mm:
Other:	

EP Risk Groundwater Fieldsheets

EP RISK

Groundwater Sampling Field Parameter Form

Job Number: 27 380		**Date:** 3/8/18	
Project: Lane cove GME		**Well Number:** GW01	
Location: 266 Longueville Rd, Lane cove		**Sampler(s):** NM	

Field Measurements

Organic vapours in well:	0.1	ppm	Measurement device: PID
Depth to Groundwater:	4.32	mBTOC	Measurement Device: IP Probe
Depth to Immiscible Layer:	—	mBTOC	Measurement Device:
Thickness to Immiscible Layer:	—	m	
Well Depth:	9.19	mBTOC	Source: IP Probe
Thickness of Groundwater Column:	4.87	m	

Well Purging

Purge Method: Low flow - Micro Purge

Volume in Casing:	L	Purge Volume:	L
Start Purge: 9:25		End Purge: 9:50	

TIME	TEMP (°C)	ELEC, COND. (+/- 3%)	DO mg/L	DO Sat %	REDOX (+/- 10mv)	pH (+/- 0.05)	SALINITY	Turbidity/TSS (+/- 10%)	PURGE RATE	PUMP INTAKE DEPTH (mBTOC)	Litres removed	Comments (appearance, odour, etc)
9:30	14.3	723 µS	4.46		10 mV	4.11		382 ppm	10/2	5.3	0.2	clear, colourless
9:35	14.9	683 µS	2.26		7 mV	4.12		381 ppm	10/2	5.3	0.2	" "
9:40	14.8	688 µS	2.01		9 mV	4.10		382 ppm	10/2	5.3	0.2	" "
9:45	14.8	686 µS	1.95		12 mV	4.10		384 ppm	10/2	5.3	0.2	" "
9:50	14.9	685 µS	1.97		11 mV	4.09		384 ppm	10/2	5.3	0.2	" "

Sampled from 11:25 to 12:05

EP RISK

Groundwater Sampling Field Parameter Form

Job Number:	27380	**Date:**	3/8/18
Project:	Lane Cove GME	**Well Number:**	GW02
Location:	266 Longueville Rd, Lane Cove	**Sampler(s):**	NM

Field Measurements

Organic vapours in well:	0.0 ppm	Measurement device:	PID
Depth to Groundwater:	6.73 mBTOC	Measurement Device:	IP Probe
Depth to Immiscible Layer:	— mBTOC	Measurement Device:	
Thickness to Immiscible Layer:	— m		
Well Depth:	11.13 mBTOC	Source:	IP Probe
Thickness of Groundwater Column:	4.4 m		

Well Purging

Purge Method: Low flow - Micro Purge

Volume in Casing:	L	Purge Volume:	L
Start Purge:	10:50	End Purge:	11:20

TIME	TEMP (°c)	ELEC, COND. (+/- 3%)	DO mg/L	DO Sat %	REDOX (+/- 10mv)	pH (+/- 0.05)	SALINITY	Turbidity/TSS (+/- 10%)	PURGE RATE	PUMP INTAKE DEPTH (mBTOC)	Litres removed	Comments (appearance, odour, etc)
10:55	16.5	304 µS	4.63		64 mv	4.44		158 PPm	10/5	7.7	0.4	clear, odourless
11:00	17.1	277 µS	4.58		66 mv	4.26		153 PPm	10/5	7.7	0.4	" "
11:05	17.0	286 µS	* ~~5.45~~		70 mv	3.85		152 PPm	10/5	7.9 **	0.2	" "
11:10	16.8	287 µS	3.47		54 mv	3.36		154 PPm	10/5	7.9	0.2	" "
11:15	16.7	289 µS	3.26		49 mv	3.43		154 PPm	10/5	7.9	0.2	" "
11:20	16.7	288 µS	3.42		49 mv	3.45		153 PPm	10/5	7.9	0.2	" "

* 4.68

** Moved 0.2 m below due to drawdown, reduced purge rate.

SOIL SAMPLING PROCEDURES

Planning

Prior to soil sampling at a site, detailed planning is undertaken to review relevant site documentation, environmental standards, regulations and policies, as well as consultation with project stockholders directly interested or involved in the soil sampling works.

The planning phase of soil sampling works, details to the field scientist the proposed excavation method, the likely number and location of soil samples to be collected, the required analysis of the soil samples, the volume of soil samples to be collected and the appropriate sampling containers required.

Excavation is carried out with consideration to the following;

- Depth of assessment required;
- Likely encountered geology, including fill and natural material;
- Ease of access;
- Acceptable site disturbance; and
- Required analysis.

The volumes of soil samples collected and the sample containers used are determined, in consultation with the elected NATA accredited laboratory and vary based on the intended analysis required for soil samples at the project site.

Cleaning Procedures

All sampling equipment is thoroughly cleaned before use and between the collection of soil samples to minimise the risk of cross contamination. This included all hand augers, trowels, scoops etc. and any other applicable equipment that was used. The cleaning procedure for all sampling equipment involved:

- Removal of all soil adhering to the sampling equipment with the use of a brush and washing in tap water;
- Wash the sampling equipment in a bucket with DECON 90 solution (or similar phosphate-free laboratory detergent);
- Rinse the sampling equipment in a second bucket with tap water; and
- Rinse the sampling equipment in a third bucket with de-ionised water.

As part of quality assurance and control of the sampling process, a ‘Rinsate Blank’ sample is taken using de-ionised water off the sampling equipment after the cleaning procedure has been completed. This ‘Rinsate Blank’ sample is analysed and the results used to indicate the effectiveness and integrity of the cleaning procedure.

Sample Collection

The field scientist wore new, clean, nitrile gloves when handling all soil samples and cleaning soil sampling equipment. Soil samples were collected from consolidated material and placed into pre-

washed glass jars with tight fitting screw top lids provided by the laboratory to prevent the loss of volatile contaminants.

Each sample jar was labelled with the following information:

- LRM Global Job Number;
- Project Name;
- Date of Sampling; and
- Sample Name/Number (including depth of sample), all samples were given a unique name/number.

As per Australian Standards AS 4482.2 1999, using the zero headspace procedures, care is taken to disturb the soil as little as possible before being placed into the single-use jars and the sample 'exactly fits,' giving zero headspace.

A duplicate of all soil samples is collected in a PID bag, where screening of the head space with the PID to detect volatile organic compounds in soil gases is undertaken. The PID is 'zeroed' and then calibrated using a 100 ppm standard gas solution of Isobutylene as field works initiate and annually as specified by the manufacturer calibrated and serviced by an appropriately qualified technician.

Sample Transportation and Documentation

Chain-of-custody documentation is completed for all soil samples collected at the project site. The COC includes the information listed above and the chemical analyses required for each sample.

All samples were cooled upon collection prior to analysis. This includes transportation and on-site storage. Samples were stored on-site and during transport in a laboratory chiller box with adequate ice bricks. Samples were transported by the field scientist who also completed the chain-of-custody documentation upon delivery to the receiving NATA accredited laboratories.

The COC, as per AS44821.1 2005, included the following information:

- Names and details of:
  - Person transferring samples.
  - Receiving Laboratory.
  - Client.
- Time and date of;
  - Samples being collected.
  - Samples received by the laboratory.
- Analysis required and turn-around-time.
- Samples with expected high contaminant levels.

Setup and SWL Gauging Procedure

- Prior to departure to the site, field meters (DO, Temp, EC, Redox, pH) are calibrated and data recorded on a Field Meter Calibration Sheet - MGT DOC-FLDCAL.
- Prior to works commencing, review and complete the mgt Groundwater / Leachate/ Surface Water Sampling Job Safety Analysis Sheet. Work should not commence unless all activities can be complied with safely and the JSA is signed off.
- If historical records of the analysis results are available, determine the order of sampling from the least contaminated well to the most contaminated. If historical records are not available, ask the client to determine an order of sampling.
- At each borehole, take air temperature, GPS coordinates and barometric pressure – record on Groundwater Field Log Sheet - MGT DOC-GW2.
- Put a plastic sheet next to the well for placement of all sampling equipment.
- Open bore hole casing – use keys to unlock the casing where required – if the lock is jammed due to weather or dirt, clean it .

- Remove the borehole end cap and clear the top of the bore of dirt and other foreign material, taking care that no material enters the bore.
- Place the end cap in an area that will not receive any contamination from other material.
- If the borehole has any external or internal damage, or there is any source of possible contamination or future damage or contamination, record on the field sheet and take a photograph for future reference.
- Decontaminate the level sensor as per the decontamination procedure detailed below.

GAUGING STANDING WATER LEVEL (SWL)

- Lower the level sensor into the borehole until an audible electronic beep is heard – read the depth measurement from the tape against the top of the PVC pipe on the northern side (or nominated AHD reference point / client reference point) and record on the field log sheet as SWL (m bTOC). Lower the depth tape to the bottom of the bore and read the depth measurement from the tape against the top of the PVC pipe on the northern side (or nominated AHD reference point / client reference point) and record on the field log sheet as Total Depth of Bore (m bTOC).
- Carefully remove the depth tape from the bore, wiping tape dry with paper towel as it is withdrawn from the bore.
- Measure the distance from ground level to the top of the PVC pipe on the northern side (or nominated AHD reference point / client reference point) and record on the field log sheet.
- Compare recorded depths against previous depths on the historical spreadsheet and repeat gauging if possible inconsistencies are noted.

Well Purging Procedures.

LOW FLOW METHOD

- Decontaminate the sampling equipment as per the decontamination procedure detailed below.
- Slowly lower the appropriate sampling equipment into the borehole taking care to minimise disturbance of the groundwater. If the client has a designated pump intake depth, set at that designated level.
- If a client has not designated an inlet depth the following guidelines should be used:
  - Standard landfill analysis –If well construction details are known, the pump intake should be located in the middle or slightly above the middle of the screened interval. If construction details are not known, place inlet at least ¾ of the way down the water column, but no further than 3.0m above the bottom of the bore.
  - Targeting LNAPL's – place inlet at the top of the water column, approximately 0.20m below the SWL (Placement of the pump at the top of the water column for sampling is only recommended in unconfined aquifers, screened across the water table, where this is the desired sampling point).
  - Targeting DNAPL'S – Place inlet at the bottom of the water column – client should be contacted in regards to specific sampling method and pump inlet placement.

- Other / unknown - If well construction details are known, the pump intake should be located in the middle or slightly above the middle of the screened interval. If construction details are not known, place inlet at least ¾ of the way down the water column, but no further than 3.0m above the bottom of the bore

- After installation of the sampling equipment, allow the SWL to stabilise – record the stabilised level on the field log sheet.
- Set the pump purge rate to approximately 0.1L/min and begin purging.
- Monitor Groundwater depth and purge rate and adjust the purge rate to minimise drawdown in the well. The purge rate can be increased up to 0.5L/min as long as drawdown in the well does not exceed 0.5m.
- During purging, run all purged water from the bore through the in-situ probe container where the pH, Temperature, Dissolved Oxygen, Redox Potential, Conductivity, SWL and Purge Water Appearance are measured every 3-5 min and recorded on the field sheet (purge water should be disposed of as re the method below).
- Purge the groundwater and note field parameters until three consecutive readings (see below) have been recorded.

Temperature	+/- 0.5oC
Dissolved Oxygen	+/- 10%
pH	+/- 0.1
Redox potential	+/- 10mV
Conductivity	+/- 3%
Sample Appearance	Consistent colour and turbidity

- Record on the field sheet the Temperature, Conductivity, Dissolved Oxygen, pH, Redox, Sample Appearance, Sample Odour, and post purge SWL at the time of sampling.

Sampling Procedure

- Prior to sampling, label each of the sample containers with the sample ID, Bore ID, Site and Date.
- The sampling rate should be the same or at a lower rate than the purge rate.
- Disconnect the sample discharge line from the flow through cell and use to fill up the sample containers. Place the sample volumes required in appropriately preserved containers, if necessary filter the groundwater in-situ prior to preserving for metals (refer to the above documents for suitable sample containers and preservatives). Containers should be filled in the following order:

  - vials for VOC's
  - bottle for organics
  - bottle for TOC
  - bottle for nutrient analysis
  - bottles with no preservative
  - bottle for metals analysis

- Take care to minimize disturbance and aeration of the sample whilst filling the containers. Place samples in an esky on ice and keep below 4°C during sampling and transport to the laboratory. Samples that are believed to be highly contaminated should be placed in a separate esky to uncontaminated / slightly contaminated samples.
- Record the SWL at the completion of the sampling on the field sheet against the top of the PVC pipe on the northern side (or nominated AHD reference point / client reference point) and record on the field log sheet.
- Remove the sampling equipment from the bore – if Syphon tubing or bladder pump systems are being used, these may remain dedicated to the bore. If dedicated tubing is being used at the bore, remove the sample and/or air line from the pump fittings and place back into well.
- Replace bore cap and lock borehole casing prior to leaving site.

On-Site Sampling Equipment Decontamination Procedures.

Between bores the following decontamination procedures of all sampling equipment is to be followed to ensure that cross contamination of the samples does not occur:

- Wiping of excess dirt from the equipment using paper towel.
- Washing of all sampling equipment with tap water and Phosphate free detergent
- Rinsing all equipment with distilled water.
- Inspection of equipment to determine cleanliness.
- Rinse with distilled water.
- The equipment is then allowed to dry or dried with paper towel.
- When using a submersible pump – run the pump in the above detergent, rinsing water and distilled water as well as cleaning the outside surfaces as shown above.
- When using the bladder pump system break the bladder pump down and wash each section as described above.

ThermoFisher SCIENTIFIC

The world leader in serving science

RENTALS

Equipment Certification Report – TPS 90FLT Water Quality Meter

This Water Quality Meter has been performance checked and calibrated as follows:

Sensor	Concentration	Span 1	Span 2	Traceability Lot #	Pass?
pH	7.00pH/ 4.00pH	7.00 pH	4.00 pH	321063/318962	☑
Conductivity	12.88mS/cm	0.00 mS/cm	12.88 mS/cm	316592	☑
TDS	36.0ppk	0 ppk	36 ppk	318987	☑
Dissolved Oxygen	Sodium Sulphite / Air	0.00 ppm in Sodium Sulphite	9.39 ppm Saturation in Air	5928(SS) 306207 (DI)	☑
Turbidity	360 NTU	0 NTU	360 NTU	316002	☑
Redox (ORP)**240mV	☑	Electrode operability test 240mV +/- 10%. Actual: 250 mV			316292(A) 317541 (B)

☑ Battery Status ____7.1_____(min 7.2V)
☑ Electrical Safety Tag attached (AS/NZS 3760)

☐ Temperature _____21.0_____°C
☐ Electrodes Cleaned and checked

Tag No: _000256_____

Valid to: ___15/09/2018_____

Date: 27/07/2018

Signed: _____

Please check that the following items are received and that all items are cleaned and decontaminated before return. A minimum $30 cleaning / service / repair charge may be applied to any unclean or damaged items. Items not returned will be billed for at the full replacement cost.

Sent	Returned	Item
☑	☐	90FLMV Unit. Ops check/Battery status: ____8.0_____
☑	☐	pH sensor with wetting cap, 5m
☑	☐	Conductivity/TDS/Temperature K=10 sensor, 5m
☑	☐	Dissolved oxygen YSI5739 sensor with wetting cap, 5m
☑	☐	Turbidity sensor, 5m
☑	☐	Power supply 240V to 12V DC 200mA
☑	☐	Instruction Manual
☑	☐	Quick Guide
☑	☐	Storage solution for pH and ORP sensors
☑	☐	Carry Case
☑	☐	Check to confirm electrical safety (tag must be valid)

Date: 27/07/2018

Signed: _____

TFS Reference	CS009276	Return Date: / /
Customer Reference		Return Time:
Equipment ID	90FLTSG	Condition on return:
Equipment Serial No.	U4343	

"We do more than give you great equipment… We give you great solutions!"

Thermo Fisher Scientific Australia Pty Ltd

ABN 52 058 390 917
Unit 5, 4 Talavera Road North Ryde NSW 2113
Ph: 02 8817 4253 Email: RentalsAU@thermofisher.com

Rental Contract

BILL TO

LRM Global Pty Ltd
PO Box 1237
CARLTON VIC 3053

SHIP TO

LRM Global Pty Ltd
Site Contact Name: Jon Lawson
c/o QT Sydney 49 Market St
SYDNEY NSW 2000
Telephone No:

CONTRACT NO:	CS008821
Delivery Date:	09-May-2018
Rental Contact:	
Customer No:	391876
CustomerPO:	TBC
Terms:	30 Days from Statement

Special Instructions:
- Send with consumables (3 x bailers)

QTY	PRODUCT #	DESCRIPTION	START DATE	END DATE	DAY	WK	MTH
1	MPKITC	Micropurge Low Flow Sampling Kit C	10/05/18	10/05/18	$255.00	$760.00	$1,590.00
1	EEP25	- MP15 Controller	10/05/18	10/05/18	$0.00	$0.00	$0.00
1	EEP65	- Sample Pro Pump	10/05/18	10/05/18	$0.00	$0.00	$0.00
1	EEW35	- EFC WQM - Flow Cell	10/05/18	10/05/18	$0.00	$0.00	$0.00
1	EEW45	- 90FLMV WQM	10/05/18	10/05/18	$0.00	$0.00	$0.00
1	EEI20	- Solinst Interface Meter	10/05/18	10/05/18	$0.00	$0.00	$0.00
1	FL	Freight - Local	10/05/18	10/05/18	$39.00	$0.00	$0.00

Subtotal:	$294.00
GST:	$29.40
TOTAL:	$323.40

Please note that this contract is subject to the Terms & Condition of Hire.

RENTING FROM THERMO FISHER SCIENTIFIC

Renting from Thermo Fisher Scientific Australia Pty Ltd (Thermo Fisher Scientific) is subject to the following:

1. Rental Period

The rental period commences on the date show on the Rental Order Confirmation Report and terminates at 12:00pm on the first business day after the period nominated on the Rental Order Confirmation Report. For locations with no overnight courier service, up to one free return travel day is available, if pre-arranged with Thermo Fisher Scientific. No charge for weekend or public holiday use, unless specified. Minimum rental period is one day. Extending the rental period is permitted only with prior approval from Thermo Fisher Scientific. Equipment rented for a period of more than one month will be invoiced on a monthly basis (at end of calendar month). Extending the rental period is permitted with prior written approval from Thermo Fisher Scientific with 24 hours notice prior to the end of the original rental period. Any goods not returned to Thermo Fisher Scientific within the agreed rental period or the agreed/approved extended rental period, will be charged at the standard rates until all equipment and accessories have been returned, regardless of the goods being used or not.

2. Contact ability & Changes

Thermo Fisher Scientific may sometimes need to contact the Renter when previously agreed shipping dates cannot be met. The Renter should ensure that they or an appointed person is contactable by telephone or by other means on the day of shipping. At least 24hrs notice is required prior to the start of the rental agreement for cancellations/changes to delivery sites/date changes/etc. Late changes and cancellations may result in all of the subsequent freight and handling charges being imposed.

3. Freight Charges

Delivery to the Renter:

Unless otherwise notified, Thermo Fisher Scientific will use its own freight service. The Renter will be invoiced for the freight/handling costs incurred. Rental charges associated with extended transit times are at the discretion of Thermo Fisher Scientific.

Returning Equipment to Thermo Fisher Scientific:

Organising the delivery and associated charges of return freight is the responsibility of the Renter, unless prior arrangement is made with Thermo Fisher Scientific. This does not remove the obligation under Item 4.

4. Instrument Maintenance & Calibration

TFS shall at its expense, when deemed necessary, perform maintenance and calibration of equipment. Reports of such calibration are included with the instrument. Much of TFS's equipment will require regular field calibration and it is the responsibility of the Customer to perform such calibrations.

5. Damage or Loss

Damage or loss to equipment during possession or during freight from the Renter to Thermo Fisher Scientific is the responsibility of the Renter. The Renter assumes all financial liability for loss and damage of equipment due to misuse, abuse or accident. Thermo Fisher Scientific is not responsible for any loss of data as collected on Thermo Fisher Scientific rental equipment. Transit insurance charges to cover the value of equipment replacement can be included if desired by the Renter. The Renter must notify Thermo Fisher Scientific immediately if any equipment is lost or damaged or if any problem develops with the rented equipment.

6. Damage, Missing Components & Decontamination

- Additional charges will apply if the Rental equipment is returned incomplete, damaged or if Customer fails to decontaminate and clean equipment.
- When Rental Equipment is returned in damaged conditions, the Customer will be notified immediately that they are liable for all repair costs. After the repair has been completed, Customer will be issued a Repair invoice which must be paid within 30 days from date of Repair invoice.
- When equipment is returned with missing accessories and components, the Customer will be notified immediately. Until all accessories and components, are returned, the Rental period will continue at the applicable rental rate. The Customer will be liable for the full replacement cost of any missing or lost equipment, accessories or components.
- All Rental Equipment must be returned clean and free of any hazardous or non hazardous contamination. A Decontamination & Cleaning Fee will be applied to any Rental Equipment which Customer returns in a contaminated condition. The current Decontamination & Cleaning Fee is $90.00 per hour, exclusive of GST, and the fee will be based upon how long the equipment takes to be cleaned, with a minimum charge of $30.00 exclusive of GST.

7. Instrument Failure

In the event of an instrument failure, Thermo Fisher Scientific must be notified immediately. Please note standard rental charges will continue to apply until Thermo Fisher receives such notification. Thermo Fisher Scientific will in the first instance attempt to guide the customer to rectify the fault, however if the fault cannot be rectified promptly, then Thermo Fisher will ship a replacement equipment. If the reason for equipment failure is determined to be Thermo Fisher Scientific's fault or the equipment has failed for unknown reasons, the costs of issuing a replacement product will be at Thermo Fisher Scientific's expense. No rental charge will be applied for the time the Customer does not have a working instrument when it is determined that the failure was not the Customer's fault. If the failure is determined to be due to the Customer, applicable courier delivery charges will apply for the replacement equipment and the Rental period will continue at the standard rental rates.

8. Liability

Thermo Fisher Scientific is not liable for any loss or damage of any kind whatsoever and howsoever arising (including but not limited to loss arising by reason of delay, non-delivery, defective materials or workmanship) out of or in connection with the supply of goods or services, including (without limitation) any indirect or consequential loss (including without limitation loss of profit, loss of revenue, loss of contract, loss of use of goods, loss on resale, loss of goodwill or increased cost of workings), even if due to the negligence of the Seller or any of its employees or agents.

9. Standard Terms and Conditions of Business

This transaction is subject to our Terms & Conditions of Business which are available on our website www.thermofisher.com.au or by contacting this office.

10. Debit Authority

When the customer has given a credit car or account debit authority, Thermo Fisher Scientific are hereby authorised to debit all fees, charges, additional costs and expenses applicable to the rental from the Customers credit card or account.

11. Rent-2-Buy Program

The Rent to Buy (R2B) Program is only applicable for Customers using Thermo Fisher Scientific Rentals service. It is only applicable for products currently within the rental fleet in Australia. Other products may be considered upon negotiation, so please talk to your local sales representative in the first instance or the Rentals Manager.

- There is no minimum rental period to activate the R2B Program discount.
- The discount applies only to the last rental from Thermo Fisher Scientific. Discounts can't be accumulated with multiple rentals.
- The discount is off the standard list price at the time of purchase.
- The maximum discount for RTB is 50% of one month's rental.
- The applicable rental fees must be paid in full in order to proceed with the R2B Program offer of purchasing a new unit at the discounted rate.
- Notification in writing (e.g. Email) of intent to purchase the rented unit at the R2B Program discount is required within two (2) weeks post return of the rental equipment in order for the R2B Program to be activated. There is no obligation on the renter to purchase a unit even if an intention to purchase is stated.
- Normal warranty terms apply per any equipment purchased.
- The R2B Terms and Conditions can be altered at any time at the discretion of Thermo Fisher Scientific. The Rent to Buy (R2B) program can be withdrawn at any time at the discretion of Thermo Fisher Scientific.
- All standard Rental Terms & Conditions apply to all rentals. These can be found at www.thermofisher.com.au within the rentals section. Similarly, all standard Thermo Fisher Scientific Terms and Conditions apply.
- Thermo Fisher Scientific does not accept any liability for any loss or damages to property, commercial operations or persons for equipment used whilst under the R2B Program.

12. Other Charges

Where applicable, the customer shall be responsible for the payment of all costs, taxes, customs duties or tariffs, imposts and expenses which arise or are incurred from this rental.

13. Payments and Defaults

If the Customer does not have an approved account with Thermo Fisher Scientific, Customer must pay for the full Rental period before the Rental starts. Customers with an approved trading account must provide a PO or reference number and remit payment within 30 days from the date of invoice. Thermo Fisher Scientific does not accept credit card numbers via email or fax. If you wish to pay via credit card, please call Customer Service (1300 735 295).
Should the Customer fail to pay any rental payments when required and immediate action is not taken by the Customer to rectify this situation, the equipment will be removed by Thermo Fisher Scientific and charges applied for due Rental fees and recovery costs.

14. Rental Agreement

- The Equipment is rented to Customer only and ownership of the Equipment shall remain at all times with Thermo Fisher. The Equipment will be physically identified as Thermo Fisher property, and Customer shall not remove or deface these markings on the Equipment.
- Customer must permit Thermo Fisher Scientific employees or agents appointed by Thermo Fisher Scientific to enter the premises where the equipment is located in order to inspect the equipment or to carry repairs at times which are deemed to be necessary by Thermo Fisher.
- The equipment will be kept at the delivery address specified in the Rental Order Confirmation Report unless prior written permission has been obtained to relocate the equipment.
- Customer agrees to keep the equipment free from all liens and encumbrances or other adverse claims of title. Customer shall, at ThermoFisher's request, provide Thermo Fisher with all reasonable assistance (including executing any documents or taking any administrative steps) necessary to perfect ThermoFisher's ownership interest in the Equipment.
- In the event that this agreement terminates for any reason, Thermo Fisher shall be immediately entitled to recover the Equipment from the Customer's premises and Customer hereby grants Thermo Fisher permission to enter onto its premises in order to recover the Equipment in such circumstances.

15. Warranty

Thermo Fisher Scientific warrants that each item of equipment hired is of merchantable quality and reasonably fit for the purpose for which it was designed. The Customer acknowledges that it has not relied upon any statement by Thermo Fisher Scientific in respect to Customer's purpose for utilisation of the equipment and that Thermo Fisher Scientific is not responsible or liable for any failure or unsuitability of equipment to perform the purpose required by the customer.

16. Early Cessation

Thermo Fisher Scientific expressly reserves itself the right of early cessation, which may be exercised on demand and at the absolute discretion of Thermo Fisher Scientific. The applicable rental shall be adjusted and payable on a pro-rata basis.

17. Consumables

Thermo Fisher reserves the right to separately charge for all consumables required for the operation of the equipment.

EP RISK

EP Risk Management Pty Ltd

Photo-ionisation Detector (PID) Calibration Certificate

Project Details		
Date: 3/8/18	Project No.: E8999	Project Manager: Rachel Condon
Time: 8:00 am	Location: Lane Cove	
Weather: Fine		

PID Information				
Calibration	**Actual Value**	**Reading**	**Pass**	
Zero - Fresh Air	0.0 ppm	0.0 ppm	✓	
Span - Isobutylene	100.0ppm	99.6 ppm	✓	
Set Alarm Limits to	High	100 ppm	Low	50 ppm

Operations Check					
✓	Performance Check (pump, lamp, sensor and battery voltage check)				
✓	Battery Charge	✓	Filters Check	✓	Spare battery voltage (5.5 V min) 5.8v
✓	Bump Test		Date: 3/8/18		

Date: 3/8/18 Check By: NM

Signed: N. McGuinness

APPENDIX D

ANALTICAL RESULTS TABLES

								Sampled Date	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017
								Sample ID	BH16 - [TRIP	BH16	BH16	BH17	BH17	BH18	BH18	BH19	BH19	BH20	BH20	BH20	BH21	BH21	BH21	BH21	BH22	BH22	BH23	BH23	BH24	BH24	BH24	BH25	BH26	BH27	BH27	BH28	BH28	BH28	BH28	BH29 - [TRIPLICATE]
								Sample Depth	0.1	0.1	0.8	0.1	0.7	0.1	0.6	0.1	0.5	0.1	1	1.9	0.1	1.2	3	4	0.1	1	0.1	1	0.1	1.5	2.8	0.2	0.2	0.1	1	0.1	2	3	4	8
				NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil	NEPM 2013 Table 1A(1) HILs Rec C Soil	NEPM 2013 Table 1A(1) HILs Res A Soil	NEPM 2013 Table 1A(1) HILs Res B Soil																																				
Chemical Group	**Chemical Name**	**Units**	**EQL**																																						
	3/4-Methylphenol (m/p-cresol)	mg/kg	0.4					-	-	-	-	-	-	-	-	<0.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Benzo(a)pyrene TEQ (LOR)	mg/kg	0.5					-	0.9	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	-	<0.5	<0.5	-	<0.5	-	<0.5	-	-	-	<0.5	-	<0.5	-	-	-	-	<0.5	-	-	0.6	-	-
	Benzo(b+j+k)fluoranthene	mg/kg	0.2					-	1	<0.2	<0.2	<0.2	-	<0.2	-	<0.2	-	<0.2	<0.2	-	<0.2	-	<0.2	-	-	-	<0.2	-	<0.2	-	-	-	-	<0.2	-	-	0.7	-	-
	DCPA (Chlorthal) Diacid	mg/kg	0.5					-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Plasticiser Compounds	mg/kg						-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Scheduled chemicals (NSW Waste 2008)	mg/kg						-	-	-	-	-	<1.3	-	<1.3	<2.5	<1.3	-	-	<1.3	-	-	-	-	<1.3	-	<1.3	-	<1.3	-	-	<1.3	<1.3	<1.3	-	<1.3	-	-	-	-
	Total Positive PAHs	mg/kg	0.05					-	7.1	<0.05	0.4	<0.05	-	0.3	-	<0.05	-	<0.05	<0.05	-	0.06	-	<0.05	-	-	-	<0.05	-	0.4	-	-	-	-	<0.05	-	-	4.2	-	-
	Benzo(a)pyrene TEQ calc (Half)	mg/kg	0.5					-	0.9	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	-	<0.5	<0.5	-	<0.5	-	<0.5	-	-	-	<0.5	-	<0.5	-	-	-	-	<0.5	-	-	0.6	-	-
	Benzo(a)pyrene TEQ calc (Zero)	mg/kg	0.5					-	0.9	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	-	<0.5	<0.5	-	<0.5	-	<0.5	-	-	-	<0.5	-	<0.5	-	-	-	-	<0.5	-	-	0.6	-	-
	Metribuzin	mg/kg	0.5					-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acid Herbicides in Soil	2,6-D	mg/kg	0.5					-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Triazine Herb Soil	Irgarol	mg/kg	0.5					-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BTEX	Benzene	mg/kg	0.2					-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Ethylbenzene	mg/kg	0.5					-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Toluene	mg/kg	0.5					-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Xylene (m & p)	mg/kg	1					-	-	-	-	-	-	-	-	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Xylene (o)	mg/kg	0.5					-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Xylene Total	mg/kg	1					-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	C6-C10 less BTEX (F1)	mg/kg	25					-	-	-	-	-	-	-	-	<25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorinated Hydrocarbons	1,1,1,2-tetrachloroethane	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,1,1-trichloroethane	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,1,2,2-tetrachloroethane	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,1,2-trichloroethane	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,1-dichloroethane	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,1-dichloroethene	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,1-dichloropropene	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,2,3-trichloropropane	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,2-dibromo-3-chloropropane	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,2-dichloroethane	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,2-dichloropropane	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,3-dichloropropane	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2,2-dichloropropane	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Bromochloromethane	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Bromodichloromethane	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Bromoform	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Carbon tetrachloride	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Chlorodibromomethane	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Chloroethane	mg/kg	1					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Chloroform	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Chloromethane	mg/kg	1					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	cis-1,2-dichloroethene	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	cis-1,3-dichloropropene	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dibromomethane	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Hexachlorobutadiene	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Trichloroethene	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Tetrachloroethene	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	trans-1,2-dichloroethene	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	trans-1,3-dichloropropene	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Vinyl chloride	mg/kg	1					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Explosives	Nitrobenzene	mg/kg	0.1					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Halogenated Benzenes	1,2,3-trichlorobenzene	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,2,4-trichlorobenzene	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,2-dichlorobenzene	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,3-dichlorobenzene	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,4-dichlorobenzene	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2-chlorotoluene	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4-chlorotoluene	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Bromobenzene	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Chlorobenzene	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Hexachlorobenzene	mg/kg	0.1	80	10	10	15	-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-	-
Halogenated Hydrocarbons	1,2-dibromoethane	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Bromomethane	mg/kg	1					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dichlorodifluoromethane	mg/kg	1					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Trichlorofluoromethane	mg/kg	1					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Halogenated Phenols	2,3,4,6-tetrachlorophenol	mg/kg	0.2					-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2,4,5-trichlorophenol	mg/kg	0.2					-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2,4,6-trichlorophenol	mg/kg	0.2					-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2,4-dichlorophenol	mg/kg	0.2					-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2,6-dichlorophenol	mg/kg	0.2					-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2-chlorophenol	mg/kg	0.2					-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Pentachlorophenol	mg/kg	1	660	120	100	130	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Herbicides	2,4,5-Trichlorophenoxy Acetic Acid	mg/kg	0.5	5000	800	600	900	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2,4,5-TP (Silvex)	mg/kg	0.5					-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2,4-dichlorophenoxybutanoic acid	mg/kg	0.5					-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Hedonal	mg/kg	0.5	9000	1300	900	1600	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2,4-Dichlorprop	mg/kg	0.5					-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2,4,6-Trichlorophenoxy-acetic acid	mg/kg	0.5					-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2-Chlorophenoxyacetic acid	mg/kg	0.5					-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4-Chlorophenoxy acetic acid	mg/kg	0.5					-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Ametryn	mg/kg	0.5					-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Acifluorfen	mg/kg	2					-	-	-	-	-	-	-	-	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Atrazine	mg/kg	0.5	2500	400	320	470	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Bromoxynil	mg/kg	0.5					-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Clopyralid	mg/kg	0.5					-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Cyanazine	mg/kg	0.5					-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dicamba	mg/kg	0.5					-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dinoseb	mg/kg	1					-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Hexazinone	mg/kg	0.5					-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2-Methyl-4-chlorophenoxyacetic acid	mg/kg	0.5	5000	800	600	900	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2-Methyl-4-Chlorophenoxy Butanoic Acid	mg/kg	0.5	5000	800	600	900	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Mecoprop	mg/kg	0.5	5000	800	600	900	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Prometryn	mg/kg	0.5					-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Propazine	mg/kg	0.5					-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Simazine	mg/kg	0.5					-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Terbutryn	mg/kg	0.5					-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Triclopyr	mg/kg	0.5					-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 18a: Soil Results Compared Against NEPM HILs

							Sampled Date	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017
							Sample ID	BH16 - [TRIPL	BH16	BH16	BH17	BH17	BH18	BH18	BH19	BH19	BH20	BH20	BH20	BH21	BH21	BH21	BH21	BH22	BH22	BH23	BH23	BH24	BH24	BH24	BH25	BH26	BH27	BH27	BH28	BH28	BH28	BH28	BH29 - [TRIPLICATE]
							Sample Depth	0.1	0.1	0.8	0.1	0.7	0.1	0.6	0.1	0.5	0.1	1	1.9	0.1	1.2	3	4	0.1	1	0.1	1	0.1	1.5	2.8	0.2	0.2	0.1	1	0.1	2	3	4	8
Chemical Group	Chemical Name	Units	EQL	NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil	NEPM 2013 Table 1A(1) HILs Rec C Soil	NEPM 2013 Table 1A(1) HILs Res A Soil	NEPM 2013 Table 1A(1) HILs Res B Soil																																
Inorganics	Cyanide (Free)	mg/kg	0.5	1500	240	250	300	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Cyanide Total	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Fluoride	mg/kg	50					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MAH	1,2,4-trimethylbenzene	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,3,5-trimethylbenzene	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Isopropylbenzene	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	n-butylbenzene	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	n-propylbenzene	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	p-isopropyltoluene	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	sec-butylbenzene	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Styrene	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	tert-butylbenzene	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Metals	Arsenic	mg/kg	4	3000	300	100	500	8	8	9	5	16	<4	<4	5	<4	<4	<4	<4	<4	<4	9	<4	<4	<4	<4	<4	<4	<4	<4	22	<4	8	<4	<4	<4	5	7	<4
	Beryllium	mg/kg	1	500	90	60	90	<1	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Boron	mg/kg	3	300000	20000	4500	40000	<3	-	-	-	-	-	-	-	<3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Cadmium	mg/kg	0.4	900	90	20	150	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	1	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
	Chromium (hexavalent)	mg/kg	1	3600	300	100	500	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Chromium (III+VI)	mg/kg	1					16	12	9	14	7	9	6	9	8	9	14	3	14	12	23	5	5	8	7	5	9	9	14	16	4	12	12	7	11	27	14	8
	Cobalt	mg/kg	1	4000	300	100	600	4	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Copper	mg/kg	1	240000	17000	6000	30000	30	21	<1	5	4	8	1	8	2	8	<1	<1	9	3	12	<1	72	16	7	<1	7	3	1	15	<1	17	3	7	4	21	57	6
	Lead	mg/kg	1	1500	600	300	1200	110	89	11	11	13	13	10	13	17	14	8	8	12	23	120	6	230	830	12	4	11	18	15	87	6	130	34	10	52	130	150	3,700
	Manganese	mg/kg	1	60000	19000	3800	14000	190	-	-	-	-	-	-	-	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Mercury	mg/kg	0.1	730	80	40	120	0.2	0.2	<0.1	<0.1	<0.1	3.7	<0.1	6.4	<0.1	5.2	<0.1	<0.1	2.7	<0.1	<0.1	<0.1	0.2	0.2	4.2	<0.1	2.7	<0.1	<0.1	0.2	<0.1	0.2	<0.1	4.1	<0.1	0.2	<0.1	<0.1
	Molybdenum	mg/kg	1					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Nickel	mg/kg	1	6000	1200	400	1200	12	9	<1	1	<1	3	<1	2	<1	3	2	<1	4	3	5	<1	17	4	3	<1	2	1	<1	3	<1	5	<1	3	1	5	17	3
	Selenium	mg/kg	2	10000	700	200	1400	<2	-	-	-	-	-	-	-	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Silver	mg/kg	1					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Tin	mg/kg	1					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Zinc	mg/kg	1	400000	30000	7400	60000	130	84	<1	6	2	18	7	14	5	17	50	1	19	89	640	<1	110	260	18	<1	17	14	8	66	2	140	12	17	28	120	4,600	79
Organic	Terbutylazine	mg/kg	0.5					-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Organochlorine Pesticides	4,4-DDE	mg/kg	0.1					-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-	-
	a-BHC	mg/kg	0.1					-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<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	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-	-
	b-BHC	mg/kg	0.1					-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-	-
	Chlordane (cis)	mg/kg	0.1					-	-	-	-	-	0.2	-	0.1	<0.1	0.1	-	-	0.2	-	-	-	<0.1	-	0.3	-	0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-	-
	Chlordane (trans)	mg/kg	0.1					-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	0.1	-	-	-	<0.1	-	0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-	-
	d-BHC	mg/kg	0.1					-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-	-
	DDD	mg/kg	0.1					-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-	-
	DDT	mg/kg	0.1					-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-	-
	DDT+DDE+DDD	mg/kg	0.1	3600	400	240	600	-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-	-
	Dieldrin	mg/kg	0.1					-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-	-
	Endosulfan I	mg/kg	0.1					-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-	-
	Endosulfan II	mg/kg	0.1					-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<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	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-	-
	Endrin	mg/kg	0.1	100	20	10	20	-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<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	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-	-
	g-BHC (Lindane)	mg/kg	0.1					-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-	-
	Heptachlor	mg/kg	0.1	50	10	6	10	-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<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	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-	-
	Methoxychlor	mg/kg	0.1	2500	400	300	500	-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-	-
	Toxaphene	mg/kg	2	160	30	20	30	-	-	-	-	-	-	-	-	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Organophosphorous Pesticides	Azinophos methyl	mg/kg	0.1					-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-	-
	Bromophos-ethyl	mg/kg	0.1					-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-	-
	Chlorpyrifos	mg/kg	0.1	2000	250	160	340	-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-	-
	Chlorpyrifos-methyl	mg/kg	0.1					-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-	-
	Diazinon	mg/kg	0.1					-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-	-
	Dichlorvos	mg/kg	0.1					-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-	-
	Dimethoate	mg/kg	0.1					-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-	-
	Ethion	mg/kg	0.1					-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-	-
	Fenitrothion	mg/kg	0.1					-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-	-
	Malathion	mg/kg	0.1					-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-	-
	Ronnel	mg/kg	0.1					-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-	-
Other	3,5-Dichlorobenzoic acid	mg/kg	0.5					-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Actril (Ioxynil)	mg/kg	1					-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PAH/Phenols	PAH (total, NSW Waste 2008)	mg/kg						-	6.27	<1.35	0.83	<1.35	-	0.8	-	<1.35	-	<1.35	<1.35	-	0.71	-	<1.35	-	-	-	<1.35	-	1.03	-	-	-	-	<1.35	-	-	3.6	-	-
	2,4-dimethylphenol	mg/kg	0.2					-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2,4-dinitrophenol	mg/kg	2					-	-	-	-	-	-	-	-	<4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2-methylphenol	mg/kg	0.2					-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2-nitrophenol	mg/kg	0.2					-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4,6-Dinitro-2-methylphenol	mg/kg	2					-	-	-	-	-	-	-	-	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4-chloro-3-methylphenol	mg/kg	1					-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4-methylphenol	mg/kg						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4-nitrophenol	mg/kg	4					-	-	-	-	-	-	-	-	<4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Acenaphthene	mg/kg	0.1					-	<0.1	<0.1	<0.1	<0.1	-	<0.1	-	<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	-	<0.1	-	-
	Acenaphthylene	mg/kg	0.1					-	<0.1	<0.1	<0.1	<0.1	-	<0.1	-	<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	-	<0.1	-	-
	Anthracene	mg/kg	0.1					-	<0.1	<0.1	<0.1	<0.1	-	<0.1	-	<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	-	<0.1	-	-
	Benz(a)anthracene	mg/kg	0.1					-	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	-	-	0.4	-	-
	Benzo(a) pyrene	mg/kg	0.05					-	0.67	<0.05	0.08	<0.05	-	0.05	-	<0.05	-	<0.05	<0.05	-	0.06	-	<0.05	-	-	-	<0.05	-	0.08	-	-	-	-	<0.05	-	-	0.4	-	-
	Benzo(b+k)fluoranthene	mg/kg						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Benzo(g,h,i)perylene	mg/kg	0.1					-	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	-	-	0.3	-	-
	Chrysene	mg/kg	0.1					-	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	-	-	0.4	-	-
	Cresol Total	mg/kg		25000	4000	400	4700	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dibenz(a,h)anthracene	mg/kg	0.1					-	<0.1	<0.1	<0.1	<0.1	-	<0.1	-	<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	-	<0.1	-	-
	Fluoranthene	mg/kg	0.1					-	1.3	<0.1	0.1	<0.1	-	0.1	-	<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	-	0.2	-	-	-	-	<0.1	-	-	0.6	-	-
	Fluorene	mg/kg	0.1					-	<0.1	<0.1	<0.1	<0.1	-	<0.1	-	<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	-	<0.1	-	-
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.1					-	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	-	-	0.3	-	-
	Naphthalene	mg/kg	0.1					-	<0.1	<0.1	<0.1	<0.1	-	<0.1	-	<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	-	<0.1	-	-
	PAHs (Sum of total)	mg/kg		4000	300	300	400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Phenanthrene	mg/kg	0.1					-	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	-	-	0.2	-	-
	Phenol	mg/kg	0.2	240000	40000	3000	45000	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Phenolics Total	mg/kg	0.2					-	-	-	-	-	-	-	-	<5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Picloram	mg/kg	0.5	35000	5700	4500	6600	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Pyrene	mg/kg	0.1					-	1.2	<0.1	0.1	<0.1	-	0.1	-	<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	-	0.2	-	-	-	-	<0.1	-	-	0.7	-	-
Pesticides	Pesticides (total, NSW Waste 2008)	mg/kg						-	-	-	-	-	<0.6	-	<0.6	<3.6	<0.6	-	-	<0.6	-	-	-	<0.6	-	<0.6	-	<0.6	-	-	<0.6	<0.6	<0.6	-	<0.6	-	-	-	-
	Bifenthrin	mg/kg	0.5	4500	730	600	840	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Mirex	mg/kg	0.5	100	20	10	20	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Parathion	mg/kg	0.1					-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-	-
Phthalates	Bis(2-ethylhexyl) phthalate	mg/kg	5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Butyl benzyl phthalate	mg/kg	1					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Diethylphthalate	mg/kg	1					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dimethyl phthalate	mg/kg	1					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Di-n-butyl phthalate	mg/kg	5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Di-n-octyl phthalate	mg/kg	1					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Polychlorinated Biphenyls	Arochlor 1016	mg/kg	0.1					-	-	-	-	-	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	<0.1	-
	Arochlor 1221	mg/kg	0.1					-	-	-	-	-	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	<0.1	-
	Arochlor 1232	mg/kg	0.1					-	-	-	-	-	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	<0.1	-
	Arochlor 1242	mg/kg	0.1					-	-	-	-	-	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	<0.1	-
	Arochlor 1248	mg/kg	0.1					-	-	-	-	-	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	<0.1	-
	Arochlor 1254	mg/kg	0.1					-	-	-	-	-	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	<0.1	-
	Arochlor 1260	mg/kg	0.1					-	-	-	-	-	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	<0.1	-
	PCBs (Sum of total)	mg/kg	0.1	7	1	1	1	-	-	-	-	-	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	<0.1	-
Solvents	Cyclohexane	mg/kg	1					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TPH	C10-C16	mg/kg	50					-	<50	<50	<50	<50	-	-	-	<50	-	-	-	-	-	<50	-	-	<50	-	-	<50	-	<50	-	-	-	-	-	-	-	<50	-
	C16-C34	mg/kg	100					-	<100	<100	<100	<100	-	-	-	<100	-	-	-	-	-	<100	-	-	<100	-	-	<100	-	<100	-	-	-	-	-	-	-	<100	-
	C34-C40	mg/kg	100					-	<100	<100	<100	<100	-	-	-	<100	-	-	-	-	-	<100	-	-	<100	-	-	<100	-	<100	-	-	-	-	-	-	-	<100	-
	F2-NAPHTHALENE	mg/kg	50					-	<50	<50	<50	<50	-	-	-	<50	-	-	-	-	-	<50	-	-	<50	-	-	<50	-	<50	-	-	-	-	-	-	-	<50	-
	C6 - C9	mg/kg	25					-	<25	<25	<25	<25	-	-	-	<25	-	-	-	-	-	<25	-	-	<25	-	-	<25	-	<25	-	-	-	-	-	-	-	<25	-
	C10 - C14	mg/kg	50					-	<50	<50	<50	<50	-	-	-	<50	-	-	-	-	-	<50	-	-	<50	-	-	<50	-	<50	-	-	-	-	-	-	-	<50	-
	C15 - C28	mg/kg	100					-	<100	<100	<100	<100	-	-	-	<100	-	-	-	-	-	<100	-	-	<100	-	-	<100	-	<100	-	-	-	-	-	-	-	<100	-
	C29-C36	mg/kg	100					-	<100	<100	<100	<100	-	-	-	<100	-	-	-	-	-	<100	-	-	<100	-	-	<100	-	<100	-	-	-	-	-	-	-	<100	-
	+C10 - C36 (Sum of total)	mg/kg						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	C10 - C40 (Sum of total)	mg/kg	50					-	<50	<50	<50	<50	-	-	-	<50	-	-	-	-	-	<50	-	-	<50	-	-	<50	-	<50	-	-	-	-	-	-	-	<50	-
	C6-C10	mg/kg	25					-	<25	<25	<25	<25	-	-	-	<25	-	-	-	-	-	<25	-	-	<25	-	-	<25	-	<25	-	-	-	-	-	-	-	<25	-

Table 18a: Soil Results Compared Against NEPM HILs

								Sampled Date	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017
								Sample ID	BH29	BH29	BH29	BH29	BH29	BH29	BH29	BH29	BH29	BH30 - (TRIP	BH30	BH30	BH30	BH30	BH30	BH30	BH30	BH30	BH31	BH31	BH32	BH32	BH32	BH32	BH32	BH33	BH33	BH34	Dup1	Split 1	BH35	Dup2	Split 2	BH36	Dup3	Split 3	BH37
								Sample Depth	0.1	1	2	3	4	5	6	7	8	6	0.1	1	2	3	4	5	6	7	0.1	1	0.1	1	2.2	3	4	0.2	1	0.1	0.1		0.1	0.1		0.1	0.1		0.1
				NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil	NEPM 2013 Table 1A(1) HILs Rec C Soil	NEPM 2013 Table 1A(1) HILs Res A Soil	NEPM 2013 Table 1A(1) HILs Res B Soil																																									
Chemical Group	Chemical Name	Units	EQL																																												
	3/4-Methylphenol (m/p-cresol)	mg/kg	0.4					-	-	-	-	-	-	-	-	-	-	-	<0.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.4	<0.4	-	-	-	-	-	-	-	-
	Benzo(a)pyrene TEQ (LOR)	mg/kg	0.5					-	<0.5	-	<0.5	-	-	0.6	-	-	-	-	3.2	-	-	0.7	-	-	-	-	<0.5	-	<0.5	<0.5	-	-	-	3.2	<0.5	<0.5	<0.5	-	-	-	-	-	-	<0.5
	Benzo(b+j+k)fluoranthene	mg/kg	0.2					-	0.2	-	0.3	-	-	0.7	-	-	-	-	3.4	-	-	0.8	-	-	-	-	<0.2	-	<0.2	<0.2	-	-	-	3.1	<0.2	<0.2	-	-	-	-	-	-	-	0.3
	DCPA (Chlorthal) Diacid	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
	Plasticiser Compounds	mg/kg						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Scheduled chemicals (NSW Waste 2008)	mg/kg						<1.3	-	-	-	-	-	-	-	-	-	<1.3	<2.5	-	-	-	-	-	-	-	<1.3	-	<1.3	-	-	-	-	<1.3	-	<2.5	<2.5	<3	-	-	-	-	-	-	-
	Total Positive PAHs	mg/kg	0.05					-	0.97	-	2.1	-	-	3.9	-	-	-	-	22	-	-	5.1	-	-	-	-	<0.05	-	<0.05	0.51	-	-	-	16	<0.05	<0.05	-	-	-	-	-	-	-	1.7
	Benzo(a)pyrene TEQ calc (Half)	mg/kg	0.5					-	<0.5	-	<0.5	-	-	0.6	-	-	-	-	3.2	-	-	0.7	-	-	-	-	<0.5	-	<0.5	<0.5	-	-	-	3.2	<0.5	<0.5	<0.5	-	-	-	-	-	-	<0.5
	Benzo(a)pyrene TEQ calc (Zero)	mg/kg	0.5					-	<0.5	-	<0.5	-	-	0.6	-	-	-	-	3.2	-	-	0.7	-	-	-	-	<0.5	-	<0.5	<0.5	-	-	-	3.2	<0.5	<0.5	<0.5	-	-	-	-	-	-	<0.5
	Metribuzin	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	-	-	-	-	-	-	-	-
Acid Herbicides in Soil	2,6-D	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
Triazine Herb Soil	Irgarol	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	-	-	-	-	-	-	-	-
BTEX	Benzene	mg/kg	0.2					-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	-	-	-	-
	Ethylbenzene	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<1	<0.5	-	-	-	-	-	-	-
	Toluene	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
	Xylene (m & p)	mg/kg	1					-	-	-	-	-	-	-	-	-	-	-	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<2	<2	<1	-	-	-	-	-	-	-
	Xylene (o)	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<1	<0.5	-	-	-	-	-	-	-
	Xylene Total	mg/kg	1					-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<1	<1	-	-	-	-	-	-	-
	C6-C10 less BTEX (F1)	mg/kg	25					-	-	-	-	-	-	-	-	-	-	-	<25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<25	<25	<25	-	-	-	-	-	-	-
Chlorinated Hydrocarbons	1,1,1,2-tetrachloroethane	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-
	1,1,1-trichloroethane	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-
	1,1,2,2-tetrachloroethane	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-
	1,1,2-trichloroethane	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-
	1,1-dichloroethane	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-
	1,1-dichloroethene	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-
	1,1-dichloropropene	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-
	1,2,3-trichloropropane	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-
	1,2-dibromo-3-chloropropane	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-
	1,2-dichloroethane	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-
	1,2-dichloropropane	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-
	1,3-dichloropropane	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-
	2,2-dichloropropane	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-
	Bromochloromethane	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-
	Bromodichloromethane	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-
	Bromoform	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-
	Carbon tetrachloride	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-
	Chlorodibromomethane	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-
	Chloroethane	mg/kg	1					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-
	Chloroform	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-
	Chloromethane	mg/kg	1					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-
	cis-1,2-dichloroethene	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-
	cis-1,3-dichloropropene	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-
	Dibromomethane	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-
	Hexachlorobutadiene	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-
	Trichloroethene	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-
	Tetrachloroethene	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-
	trans-1,2-dichloroethene	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-
	trans-1,3-dichloropropene	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-
	Vinyl chloride	mg/kg	1					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-
Explosives	Nitrobenzene	mg/kg	0.1					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Halogenated Benzenes	1,2,3-trichlorobenzene	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-
	1,2,4-trichlorobenzene	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-
	1,2-dichlorobenzene	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-
	1,3-dichlorobenzene	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-
	1,4-dichlorobenzene	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-
	2-chlorotoluene	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-
	4-chlorotoluene	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-
	Bromobenzene	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-
	Chlorobenzene	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-
	Hexachlorobenzene	mg/kg	0.1	80	10	10	15	<0.1	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	-	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	-	-	-	-	-
Halogenated Hydrocarbons	1,2-dibromoethane	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-
	Bromomethane	mg/kg	1					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-
	Dichlorodifluoromethane	mg/kg	1					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-
	Trichlorofluoromethane	mg/kg	1					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-
Halogenated Phenols	2,3,4,6-tetrachlorophenol	mg/kg	0.2					-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	-	-	-	-
	2,4,5-trichlorophenol	mg/kg	0.2					-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	-	-	-	-
	2,4,6-trichlorophenol	mg/kg	0.2					-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	-	-	-	-
	2,4-dichlorophenol	mg/kg	0.2					-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	-	-	-	-
	2,6-dichlorophenol	mg/kg	0.2					-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	-	-	-	-
	2-chlorophenol	mg/kg	0.2					-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	-	-	-	-
	Pentachlorophenol	mg/kg	1	660	120	100	130	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<1	<1	-	-	-	-	-	-	-
Herbicides	2,4,5-Trichlorophenoxy Acetic Acid	mg/kg	0.5	5000	800	600	900	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
	2,4,5-TP (Silvex)	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
	2,4-dichlorophenoxybutanoic acid	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
	Hedonal	mg/kg	0.5	9000	1300	900	1600	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
	2,4-Dichlorprop	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
	2,4,6-Trichlorophenoxy-acetic acid	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
	2-Chlorophenoxyacetic acid	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
	4-Chlorophenoxy acetic acid	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
	Ametryn	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	-	-	-	-	-	-	-	-
	Acifluorfen	mg/kg	2					-	-	-	-	-	-	-	-	-	-	-	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<2	<2	<2	-	-	-	-	-	-	-
	Atrazine	mg/kg	0.5	2500	400	320	470	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
	Bromoxynil	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
	Clopyralid	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
	Cyanazine	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	-	-	-	-	-	-	-	-
	Dicamba	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
	Dinoseb	mg/kg	1					-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<1	<1	-	-	-	-	-	-	-
	Hexazinone	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	-	-	-	-	-	-	-	-
	2-Methyl-4-chlorophenoxyacetic acid	mg/kg	0.5	5000	800	600	900	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
	2-Methyl-4-Chlorophenoxy Butanoic Acid	mg/kg	0.5	5000	800	600	900	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
	Mecoprop	mg/kg	0.5	5000	800	600	900	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
	Prometryn	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	-	-	-	-	-	-	-	-
	Propazine	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	-	-	-	-	-	-	-	-
	Simazine	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	-	-	-	-	-	-	-	-
	Terbutryn	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	-	-	-	-	-	-	-	-
	Triclopyr	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	-	-	-	-	-	-	-

Table 18a: Soil Results Compared Against NEPM HILs

Australian Unity Limited
266 Longueville Road
Lane Cove

							Sampled Date	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017
							Sample ID	BH29	BH29	BH29	BH29	BH29	BH29	BH29	BH29	BH29	BH30 - [TRIPl	BH30	BH30	BH30	BH30	BH30	BH30	BH30	BH30	BH31	BH31	BH32	BH32	BH32	BH32	BH32	BH33	BH33	BH34	Dup1	Split 1	BH35	Dup2	Split 2	BH36	Dup3	Split 3	BH37
							Sample Depth	0.1	1	2	3	4	5	6	7	8	6	0.1	1	2	3	4	5	6	7	0.1	1	0.1	1	2.2	3	4	0.2	1	0.1	0.1		0.1	0.1		0.1	0.1		0.1
Chemical Group	Chemical Name	Units	EQL	NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil	NEPM 2013 Table 1A(1) HILs Rec C Soil	NEPM 2013 Table 1A(1) HILs Res A Soil	NEPM 2013 Table 1A(1) HILs Res B Soil																																					
Inorganics	Cyanide (Free)	mg/kg	0.5	1500	240	250	300	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
	Cyanide Total	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Fluoride	mg/kg	50					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MAH	1,2,4-trimethylbenzene	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-
	1,3,5-trimethylbenzene	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-
	Isopropylbenzene	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-
	n-butylbenzene	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-
	n-propylbenzene	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-
	p-isopropyltoluene	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-
	sec-butylbenzene	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-
	Styrene	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-
	tert-butylbenzene	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-
Metals	Arsenic	mg/kg	4	3000	300	100	500	<4	6	5	<4	<4	<4	<4	<4	4	<4	<4	5	6	6	<4	<4	<4	<4	32	<4	<4	8	<4	8	<4	<4	<4	<4	<4	4	6	5	4	7	14	8	<4
	Beryllium	mg/kg	1	500	90	60	90	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<1	<1	-	-	-	-	-	-	-
	Boron	mg/kg	3	300000	20000	4500	40000	-	-	-	-	-	-	-	-	-	-	-	<3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<3	<3	<3	-	-	-	-	-	-	-
	Cadmium	mg/kg	0.4	900	90	20	150	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	10	6	8.2	0.5	0.6	<0.4	<0.4
	Chromium (hexavalent)	mg/kg	1	3600	300	100	500	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<1	<1	-	-	-	-	-	-	-
	Chromium (III+VI)	mg/kg	1					8	46	21	4	14	7	12	4	10	17	6	19	17	37	11	6	79	7	10	4	4	10	7	9	14	20	15	4	4	5	22	18	18	12	13	14	8
	Cobalt	mg/kg	1	4000	300	100	600	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<1	<1	-	-	-	-	-	-	-
	Copper	mg/kg	1	240000	17000	6000	30000	7	6	21	2	17	16	11	5	8	19	6	14	15	14	36	3	58	<1	14	<1	36	15	4	11	<1	<1	21	2	2	7	270	230	240	37	47	30	8
	Lead	mg/kg	1	1500	600	300	1200	9	66	220	49	790	740	260	540	6,200	490	10	150	53	130	210	130	500	3	55	5	4	18	15	19	6	7	48	9	7	25	1,300	1,100	1,200	79	91	60	49
	Manganese	mg/kg	1	60000	19000	3800	14000	-	-	-	-	-	-	-	-	-	-	-	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2	7	-	-	-	-	-	-	-
	Mercury	mg/kg	0.1	730	80	40	120	3.2	0.1	0.2	<0.1	0.1	0.6	0.3	<0.1	<0.1	0.1	4.4	<0.1	0.3	0.3	0.2	<0.1	0.2	<0.1	0.5	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.3	0.2	0.2	0.1	0.1	<0.1	0.1
	Molybdenum	mg/kg	1					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Nickel	mg/kg	1	6000	1200	400	1200	3	3	5	<1	11	4	7	2	5	11	2	2	6	3	26	4	23	<1	3	<1	34	1	1	2	<1	<1	2	<1	<1	<1	16	11	13	3	9	3	2
	Selenium	mg/kg	2	10000	700	200	1400	-	-	-	-	-	-	-	-	-	-	-	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<2	<2	<2	-	-	-	-	-	-	-
	Silver	mg/kg	1					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Tin	mg/kg	1					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Zinc	mg/kg	1	400000	30000	7400	60000	16	56	110	17	170	230	90	190	94	370	9	140	66	110	94	89	180	4	54	<1	27	9	10	9	<1	<1	63	11	10	32	730	650	730	230	230	170	90
Organic	Terbutylazine	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	-	-	-	-	-	-	-	-
Organochlorine Pesticides	4,4-DDE	mg/kg	0.1					<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	-	-	-	-	-
	a-BHC	mg/kg	0.1					<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<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	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	-	-	-	-	-
	b-BHC	mg/kg	0.1					<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	-	-	-	-	-
	Chlordane (cis)	mg/kg	0.1					<0.1	-	-	-	-	-	-	-	-	-	0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	-	-	-	-	-
	Chlordane (trans)	mg/kg	0.1					<0.1	-	-	-	-	-	-	-	-	-	0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	-	-	-	-	-
	d-BHC	mg/kg	0.1					<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	-	-	-	-	-
	DDD	mg/kg	0.1					<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	-	-	-	-	-
	DDT	mg/kg	0.1					<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	-	-	-	-	-
	DDT+DDE+DDD	mg/kg	0.1	3600	400	240	600	<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	-	-	-	-	-
	Dieldrin	mg/kg	0.1					<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	-	-	-	-	-
	Endosulfan I	mg/kg	0.1					<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	-	-	-	-	-
	Endosulfan II	mg/kg	0.1					<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<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	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	-	-	-	-	-
	Endrin	mg/kg	0.1	100	20	10	20	<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<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	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	-	-	-	-	-
	g-BHC (Lindane)	mg/kg	0.1					<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	-	-	-	-	-
	Heptachlor	mg/kg	0.1	50	10	6	10	<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<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	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	-	-	-	-	-
	Methoxychlor	mg/kg	0.1	2500	400	300	500	<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	-	-	-	-	-
	Toxaphene	mg/kg	2	160	30	20	30	-	-	-	-	-	-	-	-	-	-	-	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<2	<2	<2	-	-	-	-	-	-	-
Organophosphorous Pesticides	Azinophos methyl	mg/kg	0.1					<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	-	-	-	-	-	-
	Bromophos-ethyl	mg/kg	0.1					<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	-	-	-	-	-	-
	Chlorpyrifos	mg/kg	0.1	2000	250	160	340	<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	-	-	-	-	-
	Chlorpyrifos-methyl	mg/kg	0.1					<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	-	-	-	-	-	-
	Diazinon	mg/kg	0.1					<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	-	-	-	-	-	-
	Dichlorvos	mg/kg	0.1					<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	-	-	-	-	-	-
	Dimethoate	mg/kg	0.1					<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	-	-	-	-	-	-
	Ethion	mg/kg	0.1					<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	-	-	-	-	-	-
	Fenitrothion	mg/kg	0.1					<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	-	-	-	-	-	-
	Malathion	mg/kg	0.1					<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	-	-	-	-	-	-
	Ronnel	mg/kg	0.1					<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	-	-	-	-	-	-
Other	3,5-Dichlorobenzoic acid	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
	Actril (Ioxynil)	mg/kg	1					-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<1	<1	-	-	-	-	-	-	-
PAH/Phenols	PAH (total, NSW Waste 2008)	mg/kg						-	1.2	-	2.05	-	-	3.5	-	-	-	-	18.65	-	-	4.52	-	-	-	-	<1.35	-	<1.35	1.08	-	-	-	12.8	<1.35	<1.35	0.73	-	-	-	-	-	-	1.6
	2,4-dimethylphenol	mg/kg	0.2					-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	-	-	-	-
	2,4-dinitrophenol	mg/kg	2					-	-	-	-	-	-	-	-	-	-	-	<4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<4	<4	<2	-	-	-	-	-	-	-
	2-methylphenol	mg/kg	0.2					-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	-	-	-	-
	2-nitrophenol	mg/kg	0.2					-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	-	-	-	-
	4,6-Dinitro-2-methylphenol	mg/kg	2					-	-	-	-	-	-	-	-	-	-	-	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<2	<2	-	-	-	-	-	-	-	-
	4-chloro-3-methylphenol	mg/kg	1					-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<1	<2	-	-	-	-	-	-	-
	4-methylphenol	mg/kg						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.4	-	-	-	-	-	-	-
	4-nitrophenol	mg/kg	4					-	-	-	-	-	-	-	-	-	-	-	<4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<4	<4	<4	-	-	-	-	-	-	-
	Acenaphthene	mg/kg	0.1					-	<0.1	-	<0.1	-	-	<0.1	-	-	-	-	<0.1	-	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	-	<0.1
	Acenaphthylene	mg/kg	0.1					-	<0.1	-	<0.1	-	-	<0.1	-	-	-	-	0.4	-	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	-	<0.1
	Anthracene	mg/kg	0.1					-	<0.1	-	<0.1	-	-	<0.1	-	-	-	-	0.4	-	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	-	0.2	<0.1	<0.1	<0.1	-	-	-	-	-	-	<0.1
	Benz(a)anthracene	mg/kg	0.1					-	0.1	-	0.2	-	-	0.4	-	-	-	-	2	-	-	0.5	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	-	0.8	<0.1	<0.1	<0.1	-	-	-	-	-	-	0.1
	Benzo(a) pyrene	mg/kg	0.05					-	0.1	-	0.2	-	-	0.5	-	-	-	-	2.2	-	-	0.52	-	-	-	-	<0.05	-	<0.05	0.08	-	-	-	2.2	<0.05	<0.05	0.08	-	-	-	-	-	-	0.2
	Benzo(b+k)fluoranthene	mg/kg						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-
	Benzo(g,h,i)perylene	mg/kg	0.1					-	0.1	-	0.2	-	-	0.3	-	-	-	-	1.6	-	-	0.3	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	-	2.5	<0.1	<0.1	<0.1	-	-	-	-	-	-	0.1
	Chrysene	mg/kg	0.1					-	0.1	-	0.2	-	-	0.4	-	-	-	-	2.1	-	-	0.5	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	-	0.9	<0.1	<0.1	<0.1	-	-	-	-	-	-	0.1
	Cresol Total	mg/kg		25000	4000	400	4700	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-
	Dibenz(a,h)anthracene	mg/kg	0.1					-	<0.1	-	<0.1	-	-	<0.1	-	-	-	-	0.3	-	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	-	0.4	<0.1	<0.1	<0.1	-	-	-	-	-	-	<0.1
	Fluoranthene	mg/kg	0.1					-	0.2	-	0.4	-	-	0.5	-	-	-	-	3.5	-	-	0.9	-	-	-	-	<0.1	-	<0.1	0.2	-	-	-	1.5	<0.1	<0.1	<0.1	-	-	-	-	-	-	0.3
	Fluorene	mg/kg	0.1					-	<0.1	-	<0.1	-	-	<0.1	-	-	-	-	<0.1	-	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	-	<0.1
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.1					-	<0.1	-	0.1	-	-	0.3	-	-	-	-	1.2	-	-	0.3	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	-	1.8	<0.1	<0.1	<0.1	-	-	-	-	-	-	0.1
	Naphthalene	mg/kg	0.1					-	<0.1	-	<0.1	-	-	<0.1	-	-	-	-	<0.1	-	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	-	<0.1
	PAHs (Sum of total)	mg/kg		4000	300	300	400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.08	-	-	-	-	-	-	-
	Phenanthrene	mg/kg	0.1					-	<0.1	-	<0.1	-	-	0.2	-	-	-	-	0.9	-	-	0.2	-	-	-	-	<0.1	-	<0.1	0.1	-	-	-	0.8	<0.1	<0.1	<0.1	-	-	-	-	-	-	0.1
	Phenol	mg/kg	0.2	240000	40000	3000	45000	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	-	-	-	-
	Phenolics Total	mg/kg	0.2					-	-	-	-	-	-	-	-	-	-	-	<5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<5	<5	<0.2	-	-	-	-	-	-	-
	Picloram	mg/kg	0.5	35000	5700	4500	6600	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
	Pyrene	mg/kg	0.1					-	0.2	-	0.4	-	-	0.6	-	-	-	-	3.9	-	-	1	-	-	-	-	<0.1	-	<0.1	0.2	-	-	-	1.5	<0.1	<0.1	<0.1	-	-	-	-	-	-	0.3
Pesticides	Pesticides (total, NSW Waste 2008)	mg/kg						<0.6	-	-	-	-	-	-	-	-	-	<0.6	<3.6	-	-	-	-	-	-	<0.6	-	<0.6	-	-	-	-	<0.6	-	<3.6	<3.6	<3	-	-	-	-	-	-	-
	Bifenthrin	mg/kg	0.5	4500	730	600	840	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
	Mirex	mg/kg	0.5	100	20	10	20	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
	Parathion	mg/kg	0.1					<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	-	-	-	-	-	-
Phthalates	Bis(2-ethylhexyl) phthalate	mg/kg	5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Butyl benzyl phthalate	mg/kg	1					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Diethylphthalate	mg/kg	1					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dimethyl phthalate	mg/kg	1					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Di-n-butyl phthalate	mg/kg	5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Di-n-octyl phthalate	mg/kg	1					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Polychlorinated Biphenyls	Arochlor 1016	mg/kg	0.1					-	-	-	-	<0.1	-	-	-	-	-	-	<0.1	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	-	-	-	-	-	-	-
	Arochlor 1221	mg/kg	0.1					-	-	-	-	<0.1	-	-	-	-	-	-	<0.1	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	-	-	-	-	-	-	-
	Arochlor 1232	mg/kg	0.1					-	-	-	-	<0.1	-	-	-	-	-	-	<0.1	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	-	-	-	-	-	-	-
	Arochlor 1242	mg/kg	0.1					-	-	-	-	<0.1	-	-	-	-	-	-	<0.1	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	-	-	-	-	-	-	-
	Arochlor 1248	mg/kg	0.1					-	-	-	-	<0.1	-	-	-	-	-	-	<0.1	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	-	-	-	-	-	-	-
	Arochlor 1254	mg/kg	0.1					-	-	-	-	<0.1	-	-	-	-	-	-	<0.1	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	-	-	-	-	-	-	-
	Arochlor 1260	mg/kg	0.1					-	-	-	-	<0.1	-	-	-	-	-	-	<0.1	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	-	-	-	-	-	-	-
	PCBs (Sum of total)	mg/kg	0.1	7	1	1	1	-	-	-	-	<0.1	-	-	-	-	-	-	<0.1	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	-	-	-	-	-	-	-
Solvents	Cyclohexane	mg/kg	1					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-
TPH	C10-C16	mg/kg	50					-	-	-	-	-	-	-	-	<50	-	-	<50	-	<50	-	-	-	<50	-	-	-	-	-	-	<50	-	-	<50	<50	<50	-	-	-	-	-	-	-
	C16-C34	mg/kg	100					-	-	-	-	-	-	-	-	<100	-	-	<100	-	<100	-	-	-	<100	-	-	-	-	-	-	<100	-	-	<100	<100	<100	-	-	-	-	-	-	-
	C34-C40	mg/kg	100					-	-	-	-	-	-	-	-	<100	-	-	<100	-	<100	-	-	-	<100	-	-	-	-	-	-	<100	-	-	<100	<100	<100	-	-	-	-	-	-	-
	F2-NAPHTHALENE	mg/kg	50					-	-	-	-	-	-	-	-	<50	-	-	<50	-	<50	-	-	-	<50	-	-	-	-	-	-	<50	-	-	<50	<50	<50	-	-	-	-	-	-	-
	C6 - C9	mg/kg	25					-	-	-	-	-	-	-	-	<25	-	-	<25	-	<25	-	-	-	<25	-	-	-	-	-	-	<25	-	-	<25	<25	<25	-	-	-	-	-	-	-
	C10 - C14	mg/kg	50					-	-	-	-	-	-	-	-	<50	-	-	<50	-	<50	-	-	-	<50	-	-	-	-	-	-	<50	-	-	<50	<50	<50	-	-	-	-	-	-	-
	C15 - C28	mg/kg	100					-	-	-	-	-	-	-	-	<100	-	-	<100	-	<100	-	-	-	<100	-	-	-	-	-	-	<100	-	-	<100	<100	<100	-	-	-	-	-	-	-
	C29-C36	mg/kg	100					-	-	-	-	-	-	-	-	<100	-	-	<100	-	<100	-	-	-	<100	-	-	-	-	-	-	<100	-	-	<100	<100	<100	-	-	-	-	-	-	-
	+C10 - C36 (Sum of total)	mg/kg						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<50	-	-	-	-	-	-	-
	C10 - C40 (Sum of total)	mg/kg	50					-	-	-	-	-	-	-	-	<50	-	-	<50	-	<50	-	-	-	<50	-	-	-	-	-	-	<50	-	-	<50	<50	<50	-	-	-	-	-	-	-
	C6-C10	mg/kg	25					-	-	-	-	-	-	-	-	<25	-	-	<25	-	<25	-	-	-	<25	-	-	-	-	-	-	<25	-	-	<25	<25	<25	-	-	-	-	-	-	-

								Sampled Date	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	10/05/2018	10/05/2018	11/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018
								Sample ID	Dup4	Split 4	BH38	BH39	BH40	BH41	BH42	BH43_5.0	Dup 5	Split 5	BH43_6.0	BH43_7.0	BH43_8.0	BH43_9.0	BH44_5.0	BH44_6.0	BH44_7.0	BH44_8.0	BH44_9.0	BH45_7.0	BH45_7.8	BH45_8.0	BH46_0.2	BH46_0.5	BH46_1.0	BH46_2.0	Dup 6	Split 6	BH46_2.3	BH47_3.6	BH47_5.0	BH47_6.0	BH47_6.5	BH47_7.0
								Sample Depth	0.1		0.1	0.1	0.1	0.1	0.1	5		5	6	7	8	9	5	6	7	8	9	7	7.8	8	0.2	0.5	1	2		6	2.3	3.6	5	6	6.5	7
				NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil	NEPM 2013 Table 1A(1) HILs Rec C Soil	NEPM 2013 Table 1A(1) HILs Res A Soil	NEPM 2013 Table 1A(1) HILs Res B Soil																																					
Chemical Group	**Chemical Name**	**Units**	**EQL**																																							
	3/4-Methylphenol (m/p-cresol)	mg/kg	0.4					-	-	-	-	-	-	-	<0.4	-	-	-	-	-	<0.4	<0.4	-	-	-	<0.4	<0.4	-	<0.4	<0.4	-	-	-	-	-	<0.4	<0.4	-	-	-	<0.4
	Benzo(a)pyrene TEQ (LOR)	mg/kg	0.5					-	-	<0.5	-	-	-	-	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Benzo(b+j+k)fluoranthene	mg/kg	0.2					-	-	0.4	-	-	-	-	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	0.4	0.2	<0.2	<0.2	<0.2
	DCPA (Chlorthal) Diacid	mg/kg	0.5					-	-	-	-	-	-	-	<0.5	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5
	Plasticiser Compounds	mg/kg						-	-	-	-	-	-	-	<5	-	-	-	-	-	<5	<5	-	-	-	<5	<5	-	<5	<5	-	-	-	-	-	<5	<5	-	-	-	<5
	Scheduled chemicals (NSW Waste 2008)	mg/kg						-	-	-	-	-	-	<1.3	<7.5	-	-	-	<7.5	<7.5	-	<7.5	<7.5	-	-	-	<7.5	<7.5	-	<7.5	<7.5	-	-	-	-	-	<7.5	<7.5	-	-	-	<7.5
	Total Positive PAHs	mg/kg	0.05					-	-	2.1	-	-	-	-	<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	<0.05	-	<0.05	2.4	1.1	<0.05	<0.05	0.3
	Benzo(a)pyrene TEQ calc (Half)	mg/kg	0.5					-	-	<0.5	-	-	-	-	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Benzo(a)pyrene TEQ calc (Zero)	mg/kg	0.5					-	-	<0.5	-	-	-	-	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Metribuzin	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acid Herbicides in Soil	2,6-D	mg/kg	0.5					-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5
Triazine Herb Soil	Irgarol	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BTEX	Benzene	mg/kg	0.2					-	-	-	-	-	-	-	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Ethylbenzene	mg/kg	0.5					-	-	-	-	-	-	-	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	<1
	Toluene	mg/kg	0.5					-	-	-	-	-	-	-	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Xylene (m & p)	mg/kg	1					-	-	-	-	-	-	-	<2	<2	-	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	-	<2	<2	<2	<2	<2	<2
	Xylene (o)	mg/kg	0.5					-	-	-	-	-	-	-	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	<1
	Xylene Total	mg/kg	1					-	-	-	-	-	-	-	-	<1	-	<1	<1	<1	<1	-	-	<1	<1	<1	-	-	<1	-	-	<1	<1	<1	<1	-	-	-	<1	<1	<1	-
	C6-C10 less BTEX (F1)	mg/kg	25					-	-	-	-	-	-	-	-	<25	-	<25	<25	<25	<25	-	-	<25	<25	<25	-	-	<25	-	-	<25	<25	<25	<25	-	-	-	<25	<25	<25	
Chlorinated Hydrocarbons	1,1,1,2-tetrachloroethane	mg/kg	0.5					-	-	-	-	-	-	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	1,1,1-trichloroethane	mg/kg	0.5					-	-	-	-	-	-	-	<1	-	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	1,1,2,2-tetrachloroethane	mg/kg	0.5					-	-	-	-	-	-	-	<1	-	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	1,1,2-trichloroethane	mg/kg	0.5					-	-	-	-	-	-	-	<1	-	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	1,1-dichloroethane	mg/kg	0.5					-	-	-	-	-	-	-	<1	-	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	1,1-dichloroethene	mg/kg	0.5					-	-	-	-	-	-	-	<1	-	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	1,1-dichloropropene	mg/kg	0.5					-	-	-	-	-	-	-	<1	-	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	1,2,3-trichloropropane	mg/kg	0.5					-	-	-	-	-	-	-	<1	-	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	1,2-dibromo-3-chloropropane	mg/kg	0.5					-	-	-	-	-	-	-	<1	-	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	1,2-dichloroethane	mg/kg	0.5					-	-	-	-	-	-	-	<1	-	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	1,2-dichloropropane	mg/kg	0.5					-	-	-	-	-	-	-	<1	-	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	1,3-dichloropropane	mg/kg	0.5					-	-	-	-	-	-	-	<1	-	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	2,2-dichloropropane	mg/kg	0.5					-	-	-	-	-	-	-	<1	-	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	Bromochloromethane	mg/kg	0.5					-	-	-	-	-	-	-	<1	-	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	Bromodichloromethane	mg/kg	0.5					-	-	-	-	-	-	-	<1	-	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	Bromoform	mg/kg	0.5					-	-	-	-	-	-	-	<1	-	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	Carbon tetrachloride	mg/kg	0.5					-	-	-	-	-	-	-	<1	-	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	Chlorodibromomethane	mg/kg	0.5					-	-	-	-	-	-	-	<1	-	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	Chloroethane	mg/kg	1					-	-	-	-	-	-	-	<1	-	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	Chloroform	mg/kg	0.5					-	-	-	-	-	-	-	<1	-	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	Chloromethane	mg/kg	1					-	-	-	-	-	-	-	<1	-	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	cis-1,2-dichloroethene	mg/kg	0.5					-	-	-	-	-	-	-	<1	-	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	cis-1,3-dichloropropene	mg/kg	0.5					-	-	-	-	-	-	-	<1	-	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	Dibromomethane	mg/kg	0.5					-	-	-	-	-	-	-	<1	-	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	Hexachlorobutadiene	mg/kg	0.5					-	-	-	-	-	-	-	<1	-	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	Trichloroethene	mg/kg	0.5					-	-	-	-	-	-	-	<1	-	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	Tetrachloroethene	mg/kg	0.5					-	-	-	-	-	-	-	<1	-	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	trans-1,2-dichloroethene	mg/kg	0.5					-	-	-	-	-	-	-	<1	-	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	trans-1,3-dichloropropene	mg/kg	0.5					-	-	-	-	-	-	-	<1	-	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	Vinyl chloride	mg/kg	1					-	-	-	-	-	-	-	<1	-	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
Explosives	Nitrobenzene	mg/kg	0.1					-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
Halogenated Benzenes	1,2,3-trichlorobenzene	mg/kg	0.5					-	-	-	-	-	-	-	<1	-	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	1,2,4-trichlorobenzene	mg/kg	0.5					-	-	-	-	-	-	-	<1	-	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	1,2-dichlorobenzene	mg/kg	0.5					-	-	-	-	-	-	-	<1	-	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	1,3-dichlorobenzene	mg/kg	0.5					-	-	-	-	-	-	-	<1	-	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	1,4-dichlorobenzene	mg/kg	0.5					-	-	-	-	-	-	-	<1	-	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	2-chlorotoluene	mg/kg	0.5					-	-	-	-	-	-	-	<1	-	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	4-chlorotoluene	mg/kg	0.5					-	-	-	-	-	-	-	<1	-	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	Bromobenzene	mg/kg	0.5					-	-	-	-	-	-	-	<1	-	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	Chlorobenzene	mg/kg	0.5					-	-	-	-	-	-	-	<1	-	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	Hexachlorobenzene	mg/kg	0.1	80	10	10	15	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
Halogenated Hydrocarbons	1,2-dibromoethane	mg/kg	0.5					-	-	-	-	-	-	-	<1	-	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	Bromomethane	mg/kg	1					-	-	-	-	-	-	-	<1	-	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	Dichlorodifluoromethane	mg/kg	1					-	-	-	-	-	-	-	<1	-	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	Trichlorofluoromethane	mg/kg	1					-	-	-	-	-	-	-	<1	-	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
Halogenated Phenols	2,3,4,6-tetrachlorophenol	mg/kg	0.2					-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	<0.2	<0.2	-	-	-	-	-	<0.2	<0.2	-	-	-	<0.2
	2,4,5-trichlorophenol	mg/kg	0.2					-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	<0.2	<0.2	-	-	-	-	-	<0.2	<0.2	-	-	-	<0.2
	2,4,6-trichlorophenol	mg/kg	0.2					-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	<0.2	<0.2	-	-	-	-	-	<0.2	<0.2	-	-	-	<0.2
	2,4-dichlorophenol	mg/kg	0.2					-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	<0.2	<0.2	-	-	-	-	-	<0.2	<0.2	-	-	-	<0.2
	2,6-dichlorophenol	mg/kg	0.2					-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	<0.2	<0.2	-	-	-	-	-	<0.2	<0.2	-	-	-	<0.2
	2-chlorophenol	mg/kg	0.2					-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	<0.2	<0.2	-	-	-	-	-	<0.2	<0.2	-	-	-	<0.2
	Pentachlorophenol	mg/kg	1	660	120	100	130	-	-	-	-	-	-	-	<5	-	-	-	-	-	-	<5	<5	-	-	-	<5	<5	-	<5	<5	-	-	-	-	-	<5	<5	-	-	-	<5
Herbicides	2,4,5-Trichlorophenoxy Acetic Acid	mg/kg	0.5	5000	800	600	900	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5
	2,4,5-TP (Silvex)	mg/kg	0.5					-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5
	2,4-dichlorophenoxybutanoic acid	mg/kg	0.5					-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5
	Hedonal	mg/kg	0.5	9000	1300	900	1600	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5
	2,4-Dichlorprop	mg/kg	0.5					-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5
	2,4,6-Trichlorophenoxy-acetic acid	mg/kg	0.5					-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5
	2-Chlorophenoxyacetic acid	mg/kg	0.5					-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5
	4-Chlorophenoxy acetic acid	mg/kg	0.5					-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5
	Ametryn	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Acifluorfen	mg/kg	2					-	-	-	-	-	-	-	<2	-	-	-	-	-	-	<2	<2	-	-	-	<2	<2	-	<2	<2	-	-	-	-	-	<2	<2	-	-	-	<2
	Atrazine	mg/kg	0.5	2500	400	320	470	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Bromoxynil	mg/kg	0.5					-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5
	Clopyralid	mg/kg	0.5					-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5
	Cyanazine	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dicamba	mg/kg	0.5					-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5
	Dinoseb	mg/kg	1					-	-	-	-	-	-	-	<1	-	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	Hexazinone	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2-Methyl-4-chlorophenoxyacetic acid	mg/kg	0.5	5000	800	600	900	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5
	2-Methyl-4-Chlorophenoxy Butanoic Acid	mg/kg	0.5	5000	800	600	900	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5
	Mecoprop	mg/kg	0.5	5000	800	600	900	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5
	Prometryn	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Propazine	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Simazine	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Terbutryn	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Triclopyr	mg/kg	0.5					-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5

LRM GLOBAL

Table 18a: Soil Results Compared Against NEPM HILs

Australian Unity Limited
266 Longueville Road
Lane Cove

Chemical Group	Chemical Name	Units	EQL	NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil	NEPM 2013 Table 1A(1) HILs Rec C Soil	NEPM 2013 Table 1A(1) HILs Res A Soil	NEPM 2013 Table 1A(1) HILs Res B Soil	Dup4	Split 4	BH38	BH39	BH40	BH41	BH42	BH43_5.0	Dup 5	Split 5	BH43_6.0	BH43_7.0	BH43_8.0
							Sampled Date	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	10/05/2018	10/05/2018	11/05/2018	10/05/2018	10/05/2018	10/05/2018
							Sample Depth	0.1		0.1	0.1	0.1	0.1	0.1	5		5	6	7	8
Inorganics	Cyanide (Free)	mg/kg	0.5	1500	240	250	300	-	-	-	-	-	-	-	<0.5	-	-	-	-	-
	Cyanide Total	mg/kg	0.5					-	-	-	-	-	-	-	<0.5	-	-	-	-	-
	Fluoride	mg/kg	50					-	-	-	-	-	-	-	<50	-	-	-	-	-
MAH	1,2,4-trimethylbenzene	mg/kg	0.5					-	-	-	-	-	-	-	<1	-	-	-	-	-
	1,3,5-trimethylbenzene	mg/kg	0.5					-	-	-	-	-	-	-	<1	-	-	-	-	-
	Isopropylbenzene	mg/kg	0.5					-	-	-	-	-	-	-	<1	-	-	-	-	-
	n-butylbenzene	mg/kg	0.5					-	-	-	-	-	-	-	<1	-	-	-	-	-
	n-propylbenzene	mg/kg	0.5					-	-	-	-	-	-	-	<1	-	-	-	-	-
	p-isopropyltoluene	mg/kg	0.5					-	-	-	-	-	-	-	<1	-	-	-	-	-
	sec-butylbenzene	mg/kg	0.5					-	-	-	-	-	-	-	<1	-	-	-	-	-
	Styrene	mg/kg	0.5					-	-	-	-	-	-	-	<1	-	-	-	-	-
	tert-butylbenzene	mg/kg	0.5					-	-	-	-	-	-	-	<1	-	-	-	-	-
Metals	Arsenic	mg/kg	4	3000	300	100	500	<4	<4	7	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
	Beryllium	mg/kg	1	500	90	60	90	-	-	-	-	-	-	-	-	-	-	-	-	-
	Boron	mg/kg	3	300000	20000	4500	40000	-	-	-	-	-	-	-	-	-	-	-	-	-
	Cadmium	mg/kg	0.4	900	90	20	150	<0.4	<0.4	2	0.7	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
	Chromium (hexavalent)	mg/kg	1	3600	300	100	500	-	-	-	-	-	-	-	<1	-	-	-	-	-
	Chromium (III+VI)	mg/kg	1					8	7	180	6	7	6	12	5	6	6	7	7	7
	Cobalt	mg/kg	1	4000	300	100	600	-	-	-	-	-	-	-	-	-	-	-	-	-
	Copper	mg/kg	1	240000	17000	6000	30000	8	7	140	30	10	11	9	4	5	5	6	5	5
	Lead	mg/kg	1	1500	600	300	1200	53	49	150	76	12	53	11	5	5	4	7	6	5
	Manganese	mg/kg	1	60000	19000	3800	14000	-	-	-	-	-	-	-	-	-	-	-	-	-
	Mercury	mg/kg	0.1	730	80	40	120	0.1	0.1	1.3	0.2	5.5	4.1	5.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Molybdenum	mg/kg	1					-	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1
	Nickel	mg/kg	1	6000	1200	400	1200	2	2	93	6	2	2	3	2	2	2	2	3	2
	Selenium	mg/kg	2	10000	700	200	1400	-	-	-	-	-	-	-	<2	<2	<2	<2	<2	<2
	Silver	mg/kg	1					-	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1
	Tin	mg/kg	1					-	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1
	Zinc	mg/kg	1	400000	30000	7400	60000	82	71	680	210	14	71	15	-	-	-	-	-	-
Organic	Terbutylazine	mg/kg	0.5					-	-	-	-	-	-	-	-	-	-	-	-	-
Organochlorine Pesticides	4,4-DDE	mg/kg	0.1					-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-
	a-BHC	mg/kg	0.1					-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-
	Aldrin	mg/kg	0.1					-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-
	b-BHC	mg/kg	0.1					-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-
	Chlordane (cis)	mg/kg	0.1					-	-	-	-	-	-	0.1	<0.1	-	-	-	-	-
	Chlordane (trans)	mg/kg	0.1					-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-
	d-BHC	mg/kg	0.1					-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-
	DDD	mg/kg	0.1					-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-
	DDT	mg/kg	0.1					-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-
	DDT+DDE+DDD	mg/kg	0.1	3600	400	240	600	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-
	Dieldrin	mg/kg	0.1					-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-
	Endosulfan I	mg/kg	0.1					-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-
	Endosulfan II	mg/kg	0.1					-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-
	Endosulfan sulphate	mg/kg	0.1					-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-
	Endrin	mg/kg	0.1	100	20	10	20	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-
	Endrin aldehyde	mg/kg	0.1					-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-
	g-BHC (Lindane)	mg/kg	0.1					-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-
	Heptachlor	mg/kg	0.1	50	10	6	10	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-
	Heptachlor epoxide	mg/kg	0.1					-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-
	Methoxychlor	mg/kg	0.1	2500	400	300	500	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-
	Toxaphene	mg/kg	2	160	30	20	30	-	-	-	-	-	-	-	-	-	-	-	-	-
Organophosphorous Pesticides	Azinophos methyl	mg/kg	0.1					-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-
	Bromophos-ethyl	mg/kg	0.1					-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-
	Chlorpyrifos	mg/kg	0.1	2000	250	160	340	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-
	Chlorpyrifos-methyl	mg/kg	0.1					-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-
	Diazinon	mg/kg	0.1					-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-
	Dichlorvos	mg/kg	0.1					-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-
	Dimethoate	mg/kg	0.1					-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-
	Ethion	mg/kg	0.1					-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-
	Fenitrothion	mg/kg	0.1					-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-
	Malathion	mg/kg	0.1					-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-
	Ronnel	mg/kg	0.1					-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-
Other	3,5-Dichlorobenzoic acid	mg/kg	0.5					-	-	-	-	-	-	-	<0.5	-	-	-	-	-
	Actril (Ioxynil)	mg/kg	1					-	-	-	-	-	-	-	<1	-	-	-	-	-
PAH/Phenols	PAH (total, NSW Waste 2008)	mg/kg						-	-	2	-	-	-	-	<1.35	<1.35	-	<1.35	<1.35	<1.35
	2,4-dimethylphenol	mg/kg	0.2					-	-	-	-	-	-	-	<0.2	-	-	-	-	-
	2,4-dinitrophenol	mg/kg	2					-	-	-	-	-	-	-	<4	-	-	-	-	-
	2-methylphenol	mg/kg	0.2					-	-	-	-	-	-	-	<0.2	-	-	-	-	-
	2-nitrophenol	mg/kg	0.2					-	-	-	-	-	-	-	<0.2	-	-	-	-	-
	4,6-Dinitro-2-methylphenol	mg/kg	2					-	-	-	-	-	-	-	<10	-	-	-	-	-
	4-chloro-3-methylphenol	mg/kg	1					-	-	-	-	-	-	-	<5	-	-	-	-	-
	4-methylphenol	mg/kg						-	-	-	-	-	-	-	-	-	-	-	-	-
	4-nitrophenol	mg/kg	4					-	-	-	-	-	-	-	<4	-	-	-	-	-
	Acenaphthene	mg/kg	0.1					-	-	<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	<0.1
	Anthracene	mg/kg	0.1					-	-	<0.1	-	-	-	-	<0.1	<0.1	-	<0.1	<0.1	<0.1
	Benz(a)anthracene	mg/kg	0.1					-	-	0.2	-	-	-	-	<0.1	<0.1	-	<0.1	<0.1	<0.1
	Benzo(a) pyrene	mg/kg	0.05					-	-	0.2	-	-	-	-	<0.05	<0.05	-	<0.05	<0.05	<0.05
	Benzo(b+k)fluoranthene	mg/kg						-	-	-	-	-	-	-	-	-	-	-	-	-
	Benzo(g,h,i)perylene	mg/kg	0.1					-	-	0.2	-	-	-	-	<0.1	<0.1	-	<0.1	<0.1	<0.1
	Chrysene	mg/kg	0.1					-	-	0.2	-	-	-	-	<0.1	<0.1	-	<0.1	<0.1	<0.1
	Cresol Total	mg/kg		25000	4000	400	4700	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dibenz(a,h)anthracene	mg/kg	0.1					-	-	<0.1	-	-	-	-	<0.1	<0.1	-	<0.1	<0.1	<0.1
	Fluoranthene	mg/kg	0.1					-	-	0.4	-	-	-	-	<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	<0.1
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.1					-	-	0.1	-	-	-	-	<0.1	<0.1	-	<0.1	<0.1	<0.1
	Naphthalene	mg/kg	0.1					-	-	<0.1	-	-	-	-	<0.1	<0.1	-	<0.1	<0.1	<0.1
	PAHs (Sum of total)	mg/kg		4000	300	300	400	-	-	-	-	-	-	-	-	-	-	-	-	-
	Phenanthrene	mg/kg	0.1					-	-	0.1	-	-	-	-	<0.1	<0.1	-	<0.1	<0.1	<0.1
	Phenol	mg/kg	0.2	240000	40000	3000	45000	-	-	-	-	-	-	-	<0.2	-	-	-	-	-
	Phenolics Total	mg/kg	0.2					-	-	-	-	-	-	-	-	-	-	-	-	-
	Picloram	mg/kg	0.5	35000	5700	4500	6600	-	-	-	-	-	-	-	<0.5	-	-	-	-	-
	Pyrene	mg/kg	0.1					-	-	0.3	-	-	-	-	<0.1	<0.1	-	<0.1	<0.1	<0.1
Pesticides	Pesticides (total, NSW Waste 2008)	mg/kg						-	-	-	-	-	-	<0.6	<5.6	-	-	-	-	-
	Bifenthrin	mg/kg	0.5	4500	730	600	840	-	-	-	-	-	-	-	-	-	-	-	-	-
	Mirex	mg/kg	0.5	100	20	10	20	-	-	-	-	-	-	-	-	-	-	-	-	-
	Parathion	mg/kg	0.1					-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-
Phthalates	Bis(2-ethylhexyl) phthalate	mg/kg	5					-	-	-	-	-	-	-	<5	-	-	-	-	-
	Butyl benzyl phthalate	mg/kg	1					-	-	-	-	-	-	-	<1	-	-	-	-	-
	Diethylphthalate	mg/kg	1					-	-	-	-	-	-	-	<1	-	-	-	-	-
	Dimethyl phthalate	mg/kg	1					-	-	-	-	-	-	-	<1	-	-	-	-	-
	Di-n-butyl phthalate	mg/kg	5					-	-	-	-	-	-	-	<5	-	-	-	-	-
	Di-n-octyl phthalate	mg/kg	1					-	-	-	-	-	-	-	<1	-	-	-	-	-
Polychlorinated Biphenyls	Arochlor 1016	mg/kg	0.1					-	-	-	-	-	-	-	-	-	-	-	-	-
	Arochlor 1221	mg/kg	0.1					-	-	-	-	-	-	-	-	-	-	-	-	-
	Arochlor 1232	mg/kg	0.1					-	-	-	-	-	-	-	-	-	-	-	-	-
	Arochlor 1242	mg/kg	0.1					-	-	-	-	-	-	-	-	-	-	-	-	-
	Arochlor 1248	mg/kg	0.1					-	-	-	-	-	-	-	-	-	-	-	-	-
	Arochlor 1254	mg/kg	0.1					-	-	-	-	-	-	-	-	-	-	-	-	-
	Arochlor 1260	mg/kg	0.1					-	-	-	-	-	-	-	-	-	-	-	-	-
	PCBs (Sum of total)	mg/kg	0.1	7	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Solvents	Cyclohexane	mg/kg	1					-	-	-	-	-	-	-	<1	-	-	-	-	-
TPH	C10-C16	mg/kg	50					-	-	-	68	-	-	-	<50	<50	-	<50	<50	<50
	C16-C34	mg/kg	100					-	-	-	640	-	-	-	<100	<100	-	<100	<100	<100
	C34-C40	mg/kg	100					-	-	-	370	-	-	-	<100	<100	-	<100	<100	<100
	F2-NAPHTHALENE	mg/kg	50					-	-	-	-	-	-	-	-	<50	-	<50	<50	<50
	C6 - C9	mg/kg	25					-	-	-	<25	-	-	-	<25	<25	-	<25	<25	<25
	C10 - C14	mg/kg	50					-	-	-	<50	-	-	-	<50	<50	-	<50	<50	<50
	C15 - C28	mg/kg	100					-	-	-	360	-	-	-	<100	<100	-	<100	<100	<100
	C29-C36	mg/kg	100					-	-	-	480	-	-	-	<100	<100	-	<100	<100	<100
	+C10 - C36 (Sum of total)	mg/kg						-	-	-	-	-	-	-	-	-	-	-	-	-
	C10 - C40 (Sum of total)	mg/kg	50					-	-	-	1,100	-	-	-	<50	<50	-	<50	<50	<50
	C6-C10	mg/kg	25					-	-	-	<25	-	-	-	<25	<25	-	<25	<25	<25

Chemical Name	BH43_9.0	BH44_5.0	BH44_6.0	BH44_7.0	BH44_8.0	BH44_9.0	BH45_7.0	BH45_7.8	BH45_8.0	BH46_0.2	BH46_0.5	BH46_1.0	BH46_2.0	Dup 6	Spilt 6	BH46_2.3	BH47_3.6	BH47_5.0	BH47_6.0	BH47_6.5	BH47_7.0
Sampled Date	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018
Sample Depth	9	5	6	7	8	9	7	7.8	8	0.2	0.5	1	2		6	2.3	3.6	5	6	6.5	7
Cyanide (Free)	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5
Cyanide Total	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5
Fluoride	<50	<50	-	-	-	<50	<50	-	<50	<50	-	-	-	-	-	<50	<50	-	-	-	<50
1,2,4-trimethylbenzene	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
1,3,5-trimethylbenzene	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
Isopropylbenzene	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
n-butylbenzene	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
n-propylbenzene	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
p-isopropyltoluene	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
sec-butylbenzene	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
Styrene	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
tert-butylbenzene	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
Arsenic	<4	<4	8	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	4	<4	4	<4	<4
Beryllium	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Boron	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cadmium	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium (hexavalent)	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
Chromium (III+VI)	7	4	15	12	16	13	9	9	12	5	5	3	9	10	9	10	9	9	10	9	6
Cobalt	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Copper	4	1	3	4	5	3	4	2	6	<1	<1	<1	<1	<1	<1	<1	4	3	6	5	2
Lead	4	4	12	4	3	4	10	16	19	6	7	7	6	6	6	5	25	14	14	13	8
Manganese	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mercury	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Molybdenum	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1	1	2	1	<1	<1	<1	1	<1
Nickel	2	<1	1	2	5	3	3	1	3	<1	<1	<1	<1	<1	<1	<1	2	3	1	1	1
Selenium	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Silver	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tin	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Zinc	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Terbutylazine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4,4-DDE	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
a-BHC	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
Aldrin	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
b-BHC	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
Chlordane (cis)	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
Chlordane (trans)	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
d-BHC	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
DDD	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
DDT	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
DDT+DDE+DDD	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
Dieldrin	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
Endosulfan I	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
Endosulfan II	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
Endosulfan sulphate	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
Endrin	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
Endrin aldehyde	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
g-BHC (Lindane)	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
Heptachlor	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
Heptachlor epoxide	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
Methoxychlor	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
Toxaphene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Azinophos methyl	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
Bromophos-ethyl	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
Chlorpyrifos	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
Chlorpyrifos-methyl	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
Diazinon	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
Dichlorvos	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
Dimethoate	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
Ethion	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
Fenitrothion	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
Malathion	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
Ronnel	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
3,5-Dichlorobenzoic acid	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5
Actril (Ioxynil)	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
PAH (total, NSW Waste 2008)	<1.35	<1.35	1.09	<1.35	<1.35	<1.35	<1.35	<1.35	<1.35	<1.35	<1.35	<1.35	<1.35	<1.35	-	<1.35	2.3	1.25	<1.35	<1.35	0.81
2,4-dimethylphenol	<0.2	<0.2	-	-	-	<0.2	<0.2	-	<0.2	<0.2	-	-	-	-	-	<0.2	<0.2	-	-	-	<0.2
2,4-dinitrophenol	<4	<4	-	-	-	<4	<4	-	<4	<4	-	-	-	-	-	<4	<4	-	-	-	<4
2-methylphenol	<0.2	<0.2	-	-	-	<0.2	<0.2	-	<0.2	<0.2	-	-	-	-	-	<0.2	<0.2	-	-	-	<0.2
2-nitrophenol	<0.2	<0.2	-	-	-	<0.2	<0.2	-	<0.2	<0.2	-	-	-	-	-	<0.2	<0.2	-	-	-	<0.2
4,6-Dinitro-2-methylphenol	<10	<10	-	-	-	<10	<10	-	<10	<10	-	-	-	-	-	<10	<10	-	-	-	<10
4-chloro-3-methylphenol	<5	<5	-	-	-	<5	<5	-	<5	<5	-	-	-	-	-	<5	<5	-	-	-	<5
4-methylphenol	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-nitrophenol	<4	<4	-	-	-	<4	<4	-	<4	<4	-	-	-	-	-	<4	<4	-	-	-	<4
Acenaphthene	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benz(a)anthracene	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	0.2	0.1	<0.1	<0.1	<0.1
Benzo(a) pyrene	<0.05	<0.05	0.09	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	0.2	0.1	<0.05	<0.05	0.06
Benzo(b+k)fluoranthene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(g,h,i)perylene	<0.1	<0.1	<0.1	<0.1	<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
Chrysene	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	0.2	0.1	<0.1	<0.1	<0.1
Cresol Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibenz(a,h)anthracene	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	<0.1	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	0.4	0.2	<0.1	<0.1	0.1
Fluorene	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-c,d)pyrene	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PAHs (Sum of total)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenanthrene	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	0.2	<0.1	<0.1	<0.1	<0.1
Phenol	<0.2	<0.2	-	-	-	<0.2	<0.2	-	<0.2	<0.2	-	-	-	-	-	<0.2	<0.2	-	-	-	<0.2
Phenolics Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Picloram	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5
Pyrene	<0.1	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	0.5	0.3	<0.1	<0.1	0.1
Pesticides (total, NSW Waste 2008)	<5.6	<5.6	-	-	-	<5.6	<5.6	-	<5.6	<5.6	-	-	-	-	-	<5.6	<5.6	-	-	-	<5.6
Bifenthrin	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mirex	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Parathion	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
Bis(2-ethylhexyl) phthalate	<5	<5	-	-	-	<5	<5	-	<5	<5	-	-	-	-	-	<5	<5	-	-	-	<5
Butyl benzyl phthalate	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
Diethylphthalate	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
Dimethyl phthalate	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
Di-n-butyl phthalate	<5	<5	-	-	-	<5	<5	-	<5	<5	-	-	-	-	-	<5	<5	-	-	-	<5
Di-n-octyl phthalate	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
Arochlor 1016	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arochlor 1221	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arochlor 1232	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arochlor 1242	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arochlor 1248	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arochlor 1254	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arochlor 1260	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCBs (Sum of total)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cyclohexane	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
C10-C16	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	-	<50	<50	<50	<50	<50	<50
C16-C34	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	-	<100	<100	<100	<100	<100	<100
C34-C40	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	-	<100	<100	<100	<100	<100	<100
F2-NAPHTHALENE	-	-	<50	<50	<50	-	-	<50	-	-	<50	<50	<50	<50	-	-	-	<50	<50	<50	-
C6 - C9	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	-	<25	<25	<25	<25	<25	<25
C10 - C14	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	-	<50	<50	<50	<50	<50	<50
C15 - C28	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	-	<100	<100	<100	<100	<100	<100
C29-C36	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	-	<100	<100	<100	<100	<100	<100
+C10 - C36 (Sum of total)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C10 - C40 (Sum of total)	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	-	<50	<50	<50	<50	<50	<50
C6-C10	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	-	<25	<25	<25	<25	<25	<25

Table 18b: Soil Results Compared Against NEPM HSLs

															Sampled Date	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017
															Field Date	BH16 - [TRIPl	BH16	BH16	BH17	BH17	BH18	BH18	BH19	BH19	BH20	BH20	BH20	BH21	BH21	BH21	BH21	BH22	BH22	BH23	BH23	BH24	BH24	BH24	BH25	BH26	BH27	BH27	BH28	BH28	BH28	BH28
															Sample Depth	0.1	0.1	0.8	0.1	0.7	0.1	0.6	0.1	0.5	0.1	1	1.9	0.1	1.2	3	4	0.1	1	0.1	1	0.1	1.5	2.8	0.2	0.2	0.1	1	0.1	2	3	4
				NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion				NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion				NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion																																		
Chemical Group	**Chemical Name**	**Units**	**EQL**	0-1m	1-2m	2-4m	>4m	0-1m	1-2m	2-4m	>4m	0-1m	1-2m	2-4m	>4m																															
	3/4-Methylphenol (m/p-cresol)	mg/kg	0.4													-	-	-	-	-	-	-	-	<0.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Benzo(a)pyrene TEQ (LOR)	mg/kg	0.5													-	0.9	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	-	<0.5	<0.5	-	<0.5	-	<0.5	-	-	-	<0.5	-	<0.5	-	-	-	-	<0.5	-	-	0.6	-
	Benzo(b+j+k)fluoranthene	mg/kg	0.2													-	1	<0.2	<0.2	<0.2	-	<0.2	-	<0.2	-	<0.2	<0.2	-	<0.2	-	<0.2	-	-	-	<0.2	-	<0.2	-	-	-	-	<0.2	-	-	0.7	-
	DCPA (Chlorthal) Diacid	mg/kg	0.5													-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Plasticiser Compounds	mg/kg														-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Scheduled chemicals (NSW Waste 2008)	mg/kg														-	-	-	-	-	<1.3	-	<1.3	<2.5	<1.3	-	-	<1.3	-	-	-	<1.3	-	<1.3	-	<1.3	-	-	<1.3	<1.3	<1.3	-	<1.3	-	-	-
	Total Positive PAHs	mg/kg	0.05													-	7.1	<0.05	0.4	<0.05	-	0.3	-	<0.05	-	<0.05	<0.05	-	0.06	-	<0.05	-	-	-	<0.05	-	0.4	-	-	-	-	<0.05	-	-	4.2	-
	Benzo(a)pyrene TEQ calc (Half)	mg/kg	0.5													-	0.9	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	-	<0.5	<0.5	-	<0.5	-	<0.5	-	-	-	<0.5	-	<0.5	-	-	-	-	<0.5	-	-	0.6	-
	Benzo(a)pyrene TEQ calc (Zero)	mg/kg	0.5													-	0.9	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	-	<0.5	<0.5	-	<0.5	-	<0.5	-	-	-	<0.5	-	<0.5	-	-	-	-	<0.5	-	-	0.6	-
	Metribuzin	mg/kg	0.5													-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acid Herbicides	2,6-D	mg/kg	0.5													-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Triazine Herb	Irgarol	mg/kg	0.5													-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BTEX	Benzene	mg/kg	0.2	3|4	3|4|6	3|6|9	3|10|20	NL	NL	NL	NL	0.5|0.6|0.7	0.5|0.7|1	0.5|1|2	0.5|2|3	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Ethylbenzene	mg/kg	0.5	NL	NL	NL	NL	NL	NL	NL	NL	NL|55	NL	NL	NL	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Toluene	mg/kg	0.5	NL	NL	NL	NL	NL	NL	NL	NL	160|390|480	NL|220	NL|310	NL|540	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Xylene (m & p)	mg/kg	1													-	-	-	-	-	-	-	-	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Xylene (o)	mg/kg	0.5													-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Xylene Total	mg/kg	1	NL|230	NL	NL	NL	NL	NL	NL	NL	40|95|110	60|210|310	NL|95	NL|170	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	C6-C10 less BTEX (F1)	mg/kg	25	250|260|310	360|370|480	NL|590|630	NL	NL	NL	NL	NL	40|45|50	65|70|90	100|110|150	190|200|290	-	-	-	-	-	-	-	-	<25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorinated Hydrocarbons	1,1,1,2-tetrachloroethane	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,1,1-trichloroethane	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,1,2,2-tetrachloroethane	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,1,2-trichloroethane	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,1-dichloroethane	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,1-dichloroethene	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,1-dichloropropene	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,2,3-trichloropropane	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,2-dibromo-3-chloropropane	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,2-dichloroethane	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,2-dichloropropane	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,3-dichloropropane	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2,2-dichloropropane	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Bromochloromethane	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Bromodichloromethane	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Bromoform	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Carbon tetrachloride	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Chlorodibromomethane	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Chloroethane	mg/kg	1													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Chloroform	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Chloromethane	mg/kg	1													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	cis-1,2-dichloroethene	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	cis-1,3-dichloropropene	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dibromomethane	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Hexachlorobutadiene	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Trichloroethene	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Tetrachloroethene	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	trans-1,2-dichloroethene	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	trans-1,3-dichloropropene	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Vinyl chloride	mg/kg	1													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Explosives	Nitrobenzene	mg/kg	0.1													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Halogenated Benzenes	1,2,3-trichlorobenzene	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,2,4-trichlorobenzene	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,2-dichlorobenzene	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,3-dichlorobenzene	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,4-dichlorobenzene	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2-chlorotoluene	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4-chlorotoluene	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Bromobenzene	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Chlorobenzene	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Hexachlorobenzene	mg/kg	0.1													-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
Halogenated Hydrocarbons	1,2-dibromoethane	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Bromomethane	mg/kg	1													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dichlorodifluoromethane	mg/kg	1													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Trichlorofluoromethane	mg/kg	1													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Halogenated Phenols	2,3,4,6-tetrachlorophenol	mg/kg	0.2													-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2,4,5-trichlorophenol	mg/kg	0.2													-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2,4,6-trichlorophenol	mg/kg	0.2													-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2,4-dichlorophenol	mg/kg	0.2													-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2,6-dichlorophenol	mg/kg	0.2													-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2-chlorophenol	mg/kg	0.2													-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Pentachlorophenol	mg/kg	1													-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Herbicides	2,4,5-Trichlorophenoxy Acetic Acid	mg/kg	0.5													-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2,4,5-TP (Silvex)	mg/kg	0.5													-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2,4-dichlorophenoxybutanoic acid	mg/kg	0.5													-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Hedonal	mg/kg	0.5													-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2,4-Dichlorprop	mg/kg	0.5													-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2,4,6-Trichlorophenoxy-acetic acid	mg/kg	0.5													-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2-Chlorophenoxyacetic acid	mg/kg	0.5													-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4-Chlorophenoxy acetic acid	mg/kg	0.5													-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Ametryn	mg/kg	0.5													-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Acifluorfen	mg/kg	2													-	-	-	-	-	-	-	-	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Atrazine	mg/kg	0.5													-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Bromoxynil	mg/kg	0.5													-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Clopyralid	mg/kg	0.5													-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Cyanazine	mg/kg	0.5													-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dicamba	mg/kg	0.5													-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dinoseb	mg/kg	1													-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Hexazinone	mg/kg	0.5													-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2-Methyl-4-chlorophenoxyacetic acid	mg/kg	0.5													-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2-Methyl-4-Chlorophenoxy Butanoic Acid	mg/kg	0.5													-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Mecoprop	mg/kg	0.5													-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Prometryn	mg/kg	0.5													-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Propazine	mg/kg	0.5													-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Simazine	mg/kg	0.5													-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Terbutryn	mg/kg	0.5													-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Triclopyr	mg/kg	0.5													-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Inorganics	Cyanide (Free)	mg/kg	0.5													-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Cyanide Total	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Fluoride	mg/kg	50													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 18b: Soil Results Compared Against NEPM HSLs

															Sampled Date	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017
															Field Date	BH16 - [TRIPL	BH16	BH16	BH17	BH17	BH18	BH18	BH19	BH19	BH20	BH20	BH20	BH21	BH21	BH21	BH21	BH22	BH22	BH23	BH23	BH24	BH24	BH24	BH25	BH26	BH27	BH27	BH28	BH28	BH28	BH28
															Sample Depth	0.1	0.1	0.8	0.1	0.7	0.1	0.6	0.1	0.5	0.1	1	1.9	0.1	1.2	3	4	0.1	1	0.1	1	0.1	1.5	2.8	0.2	0.2	0.1	1	0.1	2	3	4
				NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion				NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion				NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion																																				
Chemical Group	Chemical Name	Units	EQL	0-1m	1-2m	2-4m	>4m	0-1m	1-2m	2-4m	>4m	0-1m	1-2m	2-4m	>4m																															
MAH	1,2,4-trimethylbenzene	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,3,5-trimethylbenzene	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Isopropylbenzene	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	n-butylbenzene	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	n-propylbenzene	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	p-isopropyltoluene	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	sec-butylbenzene	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Styrene	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	tert-butylbenzene	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Metals	Arsenic	mg/kg	4													8	8	9	5	16	<4	<4	5	<4	<4	<4	<4	<4	<4	9	<4	<4	<4	<4	<4	<4	<4	<4	22	<4	8	<4	<4	<4	5	7
	Beryllium	mg/kg	1													<1	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Boron	mg/kg	3													<3	-	-	-	-	-	-	-	<3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Cadmium	mg/kg	0.4													<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	1	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
	Chromium (hexavalent)	mg/kg	1													-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Chromium (III+VI)	mg/kg	1													16	12	9	14	7	9	6	9	8	9	14	3	14	12	23	5	5	8	7	5	9	9	14	16	4	12	12	7	11	27	14
	Cobalt	mg/kg	1													4	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Copper	mg/kg	1													30	21	<1	5	4	8	1	8	2	8	<1	<1	9	3	12	<1	72	16	7	<1	7	3	1	15	<1	17	3	7	4	21	57
	Lead	mg/kg	1													110	89	11	11	13	13	10	13	17	14	8	8	12	23	120	6	230	830	12	4	11	18	15	87	6	130	34	10	52	130	150
	Manganese	mg/kg	1													190	-	-	-	-	-	-	-	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Mercury	mg/kg	0.1													0.2	0.2	<0.1	<0.1	<0.1	3.7	<0.1	6.4	<0.1	5.2	<0.1	<0.1	2.7	<0.1	<0.1	<0.1	0.2	0.2	4.2	<0.1	2.7	<0.1	<0.1	0.2	<0.1	0.2	<0.1	4.1	<0.1	0.2	<0.1
	Molybdenum	mg/kg	1													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Nickel	mg/kg	1													12	9	<1	1	<1	3	<1	2	<1	3	2	<1	4	3	5	<1	17	4	3	<1	2	1	<1	3	<1	5	<1	3	1	5	17
	Selenium	mg/kg	2													<2	-	-	-	-	-	-	-	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Silver	mg/kg	1													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Tin	mg/kg	1													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Zinc	mg/kg	1													130	84	<1	6	2	18	7	14	5	17	50	1	19	89	640	<1	110	260	18	<1	17	14	8	66	2	140	12	17	28	120	4,600
Organic	Terbutylazine	mg/kg	0.5													-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Organochlorine Pesticides	4,4-DDE	mg/kg	0.1													-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	a-BHC	mg/kg	0.1													-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<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	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	b-BHC	mg/kg	0.1													-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	Chlordane (cis)	mg/kg	0.1													-	-	-	-	-	0.2	-	0.1	<0.1	0.1	-	-	0.2	-	-	-	<0.1	-	0.3	-	0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	Chlordane (trans)	mg/kg	0.1													-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	0.1	-	-	-	<0.1	-	0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	d-BHC	mg/kg	0.1													-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	DDD	mg/kg	0.1													-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	DDT	mg/kg	0.1													-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	DDT+DDE+DDD	mg/kg	0.1													-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	Dieldrin	mg/kg	0.1													-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	Endosulfan I	mg/kg	0.1													-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	Endosulfan II	mg/kg	0.1													-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<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	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	Endrin	mg/kg	0.1													-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<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	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	g-BHC (Lindane)	mg/kg	0.1													-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<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	-	-	-	<0.1	-	<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	-	-	-	<0.1	-	<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	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	Toxaphene	mg/kg	2													-	-	-	-	-	-	-	-	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Organophosphorous Pesticides	Azinophos methyl	mg/kg	0.1													-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	Bromophos-ethyl	mg/kg	0.1													-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	Chlorpyrifos	mg/kg	0.1													-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	Chlorpyrifos-methyl	mg/kg	0.1													-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	Diazinon	mg/kg	0.1													-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	Dichlorvos	mg/kg	0.1													-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	Dimethoate	mg/kg	0.1													-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	Ethion	mg/kg	0.1													-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	Fenitrothion	mg/kg	0.1													-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	Malathion	mg/kg	0.1													-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	Ronnel	mg/kg	0.1													-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
Other	3,5-Dichlorobenzoic acid	mg/kg	0.5													-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Actril (Ioxynil)	mg/kg	1													-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PAH/Phenols	PAH (total, NSW Waste 2008)	mg/kg														-	6.27	<1.35	0.83	<1.35	-	0.8	-	<1.35	-	<1.35	<1.35	-	0.71	-	<1.35	-	-	-	<1.35	-	1.03	-	-	-	-	<1.35	-	-	3.6	-
	2,4-dimethylphenol	mg/kg	0.2													-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2,4-dinitrophenol	mg/kg	2													-	-	-	-	-	-	-	-	<4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2-methylphenol	mg/kg	0.2													-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2-nitrophenol	mg/kg	0.2													-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4,6-Dinitro-2-methylphenol	mg/kg	2													-	-	-	-	-	-	-	-	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4-chloro-3-methylphenol	mg/kg	1													-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4-methylphenol	mg/kg														-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4-nitrophenol	mg/kg	4													-	-	-	-	-	-	-	-	<4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Acenaphthene	mg/kg	0.1													-	<0.1	<0.1	<0.1	<0.1	-	<0.1	-	<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	-	<0.1	-
	Acenaphthylene	mg/kg	0.1													-	<0.1	<0.1	<0.1	<0.1	-	<0.1	-	<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	-	<0.1	-
	Anthracene	mg/kg	0.1													-	<0.1	<0.1	<0.1	<0.1	-	<0.1	-	<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	-	<0.1	-
	Benz(a)anthracene	mg/kg	0.1													-	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	-	-	0.4	-
	Benzo(a) pyrene	mg/kg	0.05													-	0.67	<0.05	0.08	<0.05	-	0.05	-	<0.05	-	<0.05	<0.05	-	0.06	-	<0.05	-	-	-	<0.05	-	0.08	-	-	-	-	<0.05	-	-	0.4	-
	Benzo(b+k)fluoranthene	mg/kg														-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Benzo(g,h,i)perylene	mg/kg	0.1													-	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	-	-	0.3	-
	Chrysene	mg/kg	0.1													-	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	-	-	0.4	-
	Cresol Total	mg/kg														-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dibenz(a,h)anthracene	mg/kg	0.1													-	<0.1	<0.1	<0.1	<0.1	-	<0.1	-	<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	-	<0.1	-
	Fluoranthene	mg/kg	0.1													-	1.3	<0.1	0.1	<0.1	-	0.1	-	<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	-	0.2	-	-	-	-	<0.1	-	-	0.6	-
	Fluorene	mg/kg	0.1													-	<0.1	<0.1	<0.1	<0.1	-	<0.1	-	<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	-	<0.1	-
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.1													-	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	-	-	0.3	-
	Naphthalene	mg/kg	0.1	NL	NL	NL	NL	NL	NL	NL	NL	3|4|5	NL	NL	NL	-	<0.1	<0.1	<0.1	<0.1	-	<0.1	-	<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	-	<0.1	-
	PAHs (Sum of total)	mg/kg														-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Phenanthrene	mg/kg	0.1													-	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	-	-	0.2	-
	Phenol	mg/kg	0.2													-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Phenolics Total	mg/kg	0.2													-	-	-	-	-	-	-	-	<5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Picloram	mg/kg	0.5													-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Pyrene	mg/kg	0.1													-	1.2	<0.1	0.1	<0.1	-	0.1	-	<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	-	0.2	-	-	-	-	<0.1	-	-	0.7	-
Pesticides	Pesticides (total, NSW Waste 2008)	mg/kg														-	-	-	-	-	<0.6	-	<0.6	<3.6	<0.6	-	-	<0.6	-	-	-	<0.6	-	<0.6	-	<0.6	-	-	<0.6	<0.6	<0.6	-	<0.6	-	-	-
	Bifenthrin	mg/kg	0.5													-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Mirex	mg/kg	0.5													-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Parathion	mg/kg	0.1													-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
Phthalates	Bis(2-ethylhexyl) phthalate	mg/kg	5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Butyl benzyl phthalate	mg/kg	1													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Diethylphthalate	mg/kg	1													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dimethyl phthalate	mg/kg	1													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Di-n-butyl phthalate	mg/kg	5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Di-n-octyl phthalate	mg/kg	1													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Polychlorinated Biphenyls	Arochlor 1016	mg/kg	0.1													-	-	-	-	-	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	<0.1
	Arochlor 1221	mg/kg	0.1													-	-	-	-	-	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	<0.1
	Arochlor 1232	mg/kg	0.1													-	-	-	-	-	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	<0.1
	Arochlor 1242	mg/kg	0.1													-	-	-	-	-	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	<0.1
	Arochlor 1248	mg/kg	0.1													-	-	-	-	-	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	<0.1
	Arochlor 1254	mg/kg	0.1													-	-	-	-	-	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	<0.1
	Arochlor 1260	mg/kg	0.1													-	-	-	-	-	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	<0.1
	PCBs (Sum of total)	mg/kg	0.1													-	-	-	-	-	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	<0.1
Solvents	Cyclohexane	mg/kg	1													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TPH	C10-C16	mg/kg	50													-	<50	<50	<50	<50	-	-	-	<50	-	-	-	-	-	<50	-	-	<50	-	-	<50	-	<50	-	-	-	-	-	-	-	<50
	C16-C34	mg/kg	100													-	<100	<100	<100	<100	-	-	-	<100	-	-	-	-	-	<100	-	-	<100	-	-	<100	-	<100	-	-	-	-	-	-	-	<100
	C34-C40	mg/kg	100													-	<100	<100	<100	<100	-	-	-	<100	-	-	-	-	-	<100	-	-	<100	-	-	<100	-	<100	-	-	-	-	-	-	-	<100
	F2-NAPHTHALENE	mg/kg	50	NL	NL	NL	NL	NL	NL	NL	NL	110|230|280	NL|240	NL|440	NL	-	<50	<50	<50	<50	-	-	-	<50	-	-	-	-	-	<50	-	-	<50	-	-	<50	-	<50	-	-	-	-	-	-	-	<50
	C6 - C9	mg/kg	25													-	<25	<25	<25	<25	-	-	-	<25	-	-	-	-	-	<25	-	-	<25	-	-	<25	-	<25	-	-	-	-	-	-	-	<25
	C10 - C14	mg/kg	50													-	<50	<50	<50	<50	-	-	-	<50	-	-	-	-	-	<50	-	-	<50	-	-	<50	-	<50	-	-	-	-	-	-	-	<50
	C15 - C28	mg/kg	100													-	<100	<100	<100	<100	-	-	-	<100	-	-	-	-	-	<100	-	-	<100	-	-	<100	-	<100	-	-	-	-	-	-	-	<100
	C29-C36	mg/kg	100													-	<100	<100	<100	<100	-	-	-	<100	-	-	-	-	-	<100	-	-	<100	-	-	<100	-	<100	-	-	-	-	-	-	-	<100
	+C10 - C36 (Sum of total)	mg/kg														-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	C10 - C40 (Sum of total)	mg/kg	50													-	<50	<50	<50	<50	-	-	-	<50	-	-	-	-	-	<50	-	-	<50	-	-	<50	-	<50	-	-	-	-	-	-	-	<50
	C6-C10	mg/kg	25													-	<25	<25	<25	<25	-	-	-	<25	-	-	-	-	-	<25	-	-	<25	-	-	<25	-	<25	-	-	-	-	-	-	-	<25

				NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion				NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion				NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion			
				0-1m	1-2m	2-4m	>4m	0-1m	1-2m	2-4m	>4m	0-1m	1-2m	2-4m	>4m
Chemical Group	**Chemical Name**	**Units**	**EQL**												
	3/4-Methylphenol (m/p-cresol)	mg/kg	0.4												
	Benzo(a)pyrene TEQ (LOR)	mg/kg	0.5												
	Benzo(b+j+k)fluoranthene	mg/kg	0.2												
	DCPA (Chlorthal) Diacid	mg/kg	0.5												
	Plasticiser Compounds	mg/kg													
	Scheduled chemicals (NSW Waste 2008)	mg/kg													
	Total Positive PAHs	mg/kg	0.05												
	Benzo(a)pyrene TEQ calc (Half)	mg/kg	0.5												
	Benzo(a)pyrene TEQ calc (Zero)	mg/kg	0.5												
	Metribuzin	mg/kg	0.5												
Acid Herbicides	2,6-D	mg/kg	0.5												
Triazine Herb	Irgarol	mg/kg	0.5												
BTEX	Benzene	mg/kg	0.2	3|4	3|4|6	3|6|9	3|10|20	NL	NL	NL	NL	0.5|0.6|0.7	0.5|0.7|1	0.5|1|2	0.5|2|3
	Ethylbenzene	mg/kg	0.5	NL	NL	NL	NL	NL	NL	NL	NL	NL|55	NL	NL	NL
	Toluene	mg/kg	0.5	NL	NL	NL	NL	NL	NL	NL	NL	160|390|480	NL|220	NL|310	NL|540
	Xylene (m & p)	mg/kg	1												
	Xylene (o)	mg/kg	0.5												
	Xylene Total	mg/kg	1	NL|230	NL	NL	NL	NL	NL	NL	NL	40|95|110	60|210|310	NL|95	NL|170
	C6-C10 less BTEX (F1)	mg/kg	25	250|260|310	360|370|480	NL|590|630	NL	NL	NL	NL	NL	40|45|50	65|70|90	100|110|150	190|200|290
Chlorinated Hydrocarbons	1,1,1,2-tetrachloroethane	mg/kg	0.5												
	1,1,1-trichloroethane	mg/kg	0.5												
	1,1,2,2-tetrachloroethane	mg/kg	0.5												
	1,1,2-trichloroethane	mg/kg	0.5												
	1,1-dichloroethane	mg/kg	0.5												
	1,1-dichloroethene	mg/kg	0.5												
	1,1-dichloropropene	mg/kg	0.5												
	1,2,3-trichloropropane	mg/kg	0.5												
	1,2-dibromo-3-chloropropane	mg/kg	0.5												
	1,2-dichloroethane	mg/kg	0.5												
	1,2-dichloropropane	mg/kg	0.5												
	1,3-dichloropropane	mg/kg	0.5												
	2,2-dichloropropane	mg/kg	0.5												
	Bromochloromethane	mg/kg	0.5												
	Bromodichloromethane	mg/kg	0.5												
	Bromoform	mg/kg	0.5												
	Carbon tetrachloride	mg/kg	0.5												
	Chlorodibromomethane	mg/kg	0.5												
	Chloroethane	mg/kg	1												
	Chloroform	mg/kg	0.5												
	Chloromethane	mg/kg	1												
	cis-1,2-dichloroethene	mg/kg	0.5												
	cis-1,3-dichloropropene	mg/kg	0.5												
	Dibromomethane	mg/kg	0.5												
	Hexachlorobutadiene	mg/kg	0.5												
	Trichloroethene	mg/kg	0.5												
	Tetrachloroethene	mg/kg	0.5												
	trans-1,2-dichloroethene	mg/kg	0.5												
	trans-1,3-dichloropropene	mg/kg	0.5												
	Vinyl chloride	mg/kg	1												
Explosives	Nitrobenzene	mg/kg	0.1												
Halogenated Benzenes	1,2,3-trichlorobenzene	mg/kg	0.5												
	1,2,4-trichlorobenzene	mg/kg	0.5												
	1,2-dichlorobenzene	mg/kg	0.5												
	1,3-dichlorobenzene	mg/kg	0.5												
	1,4-dichlorobenzene	mg/kg	0.5												
	2-chlorotoluene	mg/kg	0.5												
	4-chlorotoluene	mg/kg	0.5												
	Bromobenzene	mg/kg	0.5												
	Chlorobenzene	mg/kg	0.5												
	Hexachlorobenzene	mg/kg	0.1												
Halogenated Hydrocarbons	1,2-dibromoethane	mg/kg	0.5												
	Bromomethane	mg/kg	1												
	Dichlorodifluoromethane	mg/kg	1												
	Trichlorofluoromethane	mg/kg	1												
Halogenated Phenols	2,3,4,6-tetrachlorophenol	mg/kg	0.2												
	2,4,5-trichlorophenol	mg/kg	0.2												
	2,4,6-trichlorophenol	mg/kg	0.2												
	2,4-dichlorophenol	mg/kg	0.2												
	2,6-dichlorophenol	mg/kg	0.2												
	2-chlorophenol	mg/kg	0.2												
	Pentachlorophenol	mg/kg	1												
Herbicides	2,4,5-Trichlorophenoxy Acetic Acid	mg/kg	0.5												
	2,4,5-TP (Silvex)	mg/kg	0.5												
	2,4-dichlorophenoxybutanoic acid	mg/kg	0.5												
	Hedonal	mg/kg	0.5												
	2,4-Dichlorprop	mg/kg	0.5												
	2,4,6-Trichlorophenoxy-acetic acid	mg/kg	0.5												
	2-Chlorophenoxyacetic acid	mg/kg	0.5												
	4-Chlorophenoxy acetic acid	mg/kg	0.5												
	Ametryn	mg/kg	0.5												
	Acifluorfen	mg/kg	2												
	Atrazine	mg/kg	0.5												
	Bromoxynil	mg/kg	0.5												
	Clopyralid	mg/kg	0.5												
	Cyanazine	mg/kg	0.5												
	Dicamba	mg/kg	0.5												
	Dinoseb	mg/kg	1												
	Hexazinone	mg/kg	0.5												
	2-Methyl-4-chlorophenoxyacetic acid	mg/kg	0.5												
	2-Methyl-4-Chlorophenoxy Butanoic Acid	mg/kg	0.5												
	Mecoprop	mg/kg	0.5												
	Prometryn	mg/kg	0.5												
	Propazine	mg/kg	0.5												
	Simazine	mg/kg	0.5												
	Terbutryn	mg/kg	0.5												
	Triclopyr	mg/kg	0.5												
Inorganics	Cyanide (Free)	mg/kg	0.5												
	Cyanide Total	mg/kg	0.5												
	Fluoride	mg/kg	50												

Sampled Date	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017
Field Date	BH29 - (TRIP	BH29	BH29	BH29	BH29	BH29	BH29	BH29	BH29	BH29	BH29	BH30 - (TRIP	BH30	BH30	BH30	BH30	BH30	BH30	BH30	BH30	BH30	BH30	BH31	BH31	BH32	BH32	BH32	BH32	BH32	BH33	BH33	BH34	Dup1	Split 1	BH35	Dup2	Split 2	BH36
Sample Depth	8	0.1	1	2	3	4	5	6	7	8	6	0.1	1	2	3	4	5	6	7	0.1	1	0.1	1	2.2	3	4	0.2	1	0.1	0.1		0.1	0.1		0.1
3/4-Methylphenol (m/p-cresol)	-	-	-	-	-	-	-	-	-	-	-	-	<0.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.4	<0.4	-	-	-	-	-
Benzo(a)pyrene TEQ (LOR)	-	-	<0.5	-	<0.5	-	-	0.6	-	-	-	-	3.2	-	-	0.7	-	-	-	-	-	<0.5	-	<0.5	<0.5	-	-	-	3.2	<0.5	<0.5	<0.5	-	-	-	-	-
Benzo(b+j+k)fluoranthene	-	-	0.2	-	0.3	-	-	0.7	-	-	-	-	3.4	-	-	0.8	-	-	-	-	-	<0.2	-	<0.2	<0.2	-	-	-	3.1	<0.2	<0.2	-	-	-	-	-
DCPA (Chlorthal) Diacid	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	-	-	-	-	-
Plasticiser Compounds	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Scheduled chemicals (NSW Waste 2008)	-	<1.3	-	-	-	-	-	-	-	-	-	<1.3	<2.5	-	-	-	-	-	-	<1.3	-	<1.3	-	-	-	-	<1.3	-	<2.5	<2.5	<3	-	-	-	-
Total Positive PAHs	-	-	0.97	-	2.1	-	-	3.9	-	-	-	-	22	-	-	5.1	-	-	-	-	-	<0.05	-	<0.05	0.51	-	-	-	16	<0.05	<0.05	-	-	-	-	-
Benzo(a)pyrene TEQ calc (Half)	-	-	<0.5	-	<0.5	-	-	0.6	-	-	-	-	3.2	-	-	0.7	-	-	-	-	-	<0.5	-	<0.5	<0.5	-	-	-	3.2	<0.5	<0.5	<0.5	-	-	-	-
Benzo(a)pyrene TEQ calc (Zero)	-	-	<0.5	-	<0.5	-	-	0.6	-	-	-	-	3.2	-	-	0.7	-	-	-	-	-	<0.5	-	<0.5	<0.5	-	-	-	3.2	<0.5	<0.5	<0.5	-	-	-	-
Metribuzin	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	-	-	-	-	-
2,6-D	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	-	-	-	-
Irgarol	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	-	-	-	-	-
Benzene	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	-
Ethylbenzene	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<1	<0.5	-	-	-	-
Toluene	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	-	-	-	-
Xylene (m & p)	-	-	-	-	-	-	-	-	-	-	-	-	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<2	<2	<1	-	-	-	-
Xylene (o)	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<1	<0.5	-	-	-	-
Xylene Total	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<1	<1	-	-	-	-
C6-C10 less BTEX (F1)	-	-	-	-	-	-	-	-	-	-	-	-	<25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<25	<25	<25	-	-	-	-
1,1,1,2-tetrachloroethane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-
1,1,1-trichloroethane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-
1,1,2,2-tetrachloroethane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-
1,1,2-trichloroethane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-
1,1-dichloroethane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-
1,1-dichloroethene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-
1,1-dichloropropene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-
1,2,3-trichloropropane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-
1,2-dibromo-3-chloropropane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-
1,2-dichloroethane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-
1,2-dichloropropane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-
1,3-dichloropropane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-
2,2-dichloropropane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-
Bromochloromethane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-
Bromodichloromethane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-
Bromoform	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-
Carbon tetrachloride	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-
Chlorodibromomethane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-
Chloroethane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-
Chloroform	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-
Chloromethane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-
cis-1,2-dichloroethene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-
cis-1,3-dichloropropene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-
Dibromomethane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-
Hexachlorobutadiene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-
Trichloroethene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-
Tetrachloroethene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-
trans-1,2-dichloroethene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-
trans-1,3-dichloropropene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-
Vinyl chloride	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-
Nitrobenzene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,3-trichlorobenzene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-
1,2,4-trichlorobenzene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-
1,2-dichlorobenzene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-
1,3-dichlorobenzene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-
1,4-dichlorobenzene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-
2-chlorotoluene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-
4-chlorotoluene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-
Bromobenzene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-
Chlorobenzene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-
Hexachlorobenzene	-	<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	-	-
1,2-dibromoethane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-
Bromomethane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-
Dichlorodifluoromethane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-
Trichlorofluoromethane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-
2,3,4,6-tetrachlorophenol	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	-
2,4,5-trichlorophenol	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	-
2,4,6-trichlorophenol	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	-
2,4-dichlorophenol	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	-
2,6-dichlorophenol	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	-
2-chlorophenol	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	-
Pentachlorophenol	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<1	<1	-	-	-	-
2,4,5-Trichlorophenoxy Acetic Acid	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	-	-	-	-
2,4,5-TP (Silvex)	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	-	-	-	-
2,4-dichlorophenoxybutanoic acid	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	-	-	-	-
Hedonal	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	-	-	-	-
2,4-Dichlorprop	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	-	-	-	-
2,4,6-Trichlorophenoxy-acetic acid	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	-	-	-	-
2-Chlorophenoxyacetic acid	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	-	-	-	-
4-Chlorophenoxy acetic acid	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	-	-	-	-
Ametryn	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	-	-	-	-	-
Acifluorfen	-	-	-	-	-	-	-	-	-	-	-	-	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<2	<2	<2	-	-	-	-
Atrazine	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	-	-	-	-
Bromoxynil	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	-	-	-	-
Clopyralid	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	-	-	-	-
Cyanazine	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	-	-	-	-	-
Dicamba	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	-	-	-	-
Dinoseb	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<1	<1	-	-	-	-
Hexazinone	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	-	-	-	-	-
2-Methyl-4-chlorophenoxyacetic acid	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	-	-	-	-
2-Methyl-4-Chlorophenoxy Butanoic Acid	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	-	-	-	-
Mecoprop	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	-	-	-	-
Prometryn	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	-	-	-	-	-
Propazine	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	-	-	-	-	-
Simazine	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	-	-	-	-	-
Terbutryn	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	-	-	-	-	-
Triclopyr	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	-	-	-	-
Cyanide (Free)	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	-	-	-	-
Cyanide Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fluoride	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

LRM GLOBAL

Table 18b: Soil Results Compared Against NEPM HSLs

Australian Unity Limited
266 Longueville Road
Lane Cove

															Sampled Date	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017
															Field Date	BH29 - [TRIPL	BH29	BH29	BH29	BH29	BH29	BH29	BH29	BH29	BH29	BH30 - [TRIPL	BH30	BH30	BH30	BH30	BH30	BH30	BH30	BH30	BH31	BH31	BH32	BH32	BH32	BH32	BH32	BH33	BH33	BH34	Dup1	Split 1	BH35	Dup2	Split 2	BH36
															Sample Depth	8	0.1	1	2	3	4	5	6	7	8	6	0.1	1	2	3	4	5	6	7	0.1	1	0.1	1	2.2	3	4	0.2	1	0.1	0.1		0.1	0.1		0.1
				NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion				NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion				NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion																																							
Chemical Group	Chemical Name	Units	EQL	0-1m	1-2m	2-4m	>4m	0-1m	1-2m	2-4m	>4m	0-1m	1-2m	2-4m	>4m																																			
MAH	1,2,4-trimethylbenzene	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-
	1,3,5-trimethylbenzene	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-
	Isopropylbenzene	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-
	n-butylbenzene	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-
	n-propylbenzene	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-
	p-isopropyltoluene	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-
	sec-butylbenzene	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-
	Styrene	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-
	tert-butylbenzene	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-
Metals	Arsenic	mg/kg	4													<4	<4	6	5	<4	<4	<4	<4	<4	4	<4	<4	5	6	6	<4	<4	<4	<4	32	<4	<4	8	<4	8	<4	<4	<4	<4	<4	4	6	5	4	7
	Beryllium	mg/kg	1													-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<1	<1	-	-	-	-
	Boron	mg/kg	3													-	-	-	-	-	-	-	-	-	-	-	-	<3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<3	<3	<3	-	-	-	-
	Cadmium	mg/kg	0.4													<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	10	6	8.2	0.5
	Chromium (hexavalent)	mg/kg	1													-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<1	<1	-	-	-	-
	Chromium (III+VI)	mg/kg	1													8	8	46	21	4	14	7	12	4	10	17	6	19	17	37	11	6	79	7	10	4	4	10	7	9	14	20	15	4	4	5	22	18	18	12
	Cobalt	mg/kg	1													-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<1	<1	-	-	-	-
	Copper	mg/kg	1													6	7	6	21	2	17	16	11	5	8	19	6	14	15	14	36	3	58	<1	14	<1	36	15	4	11	<1	<1	21	2	2	7	270	230	240	37
	Lead	mg/kg	1													3,700	9	66	220	49	790	740	260	540	6,200	490	10	150	53	130	210	130	500	3	55	5	4	18	15	19	6	7	48	9	7	25	1,300	1,100	1,200	79
	Manganese	mg/kg	1													-	-	-	-	-	-	-	-	-	-	-	-	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2	7	-	-	-	-
	Mercury	mg/kg	0.1													<0.1	3.2	0.1	0.2	<0.1	0.1	0.6	0.3	<0.1	<0.1	0.1	4.4	<0.1	0.3	0.3	0.2	<0.1	0.2	<0.1	0.5	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.3	0.2	0.2	0.1
	Molybdenum	mg/kg	1													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Nickel	mg/kg	1													3	3	3	5	<1	11	4	7	2	5	11	2	2	6	3	26	4	23	<1	3	<1	34	1	1	2	<1	<1	2	<1	<1	<1	16	11	13	3
	Selenium	mg/kg	2													-	-	-	-	-	-	-	-	-	-	-	-	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<2	<2	<2	-	-	-	-
	Silver	mg/kg	1													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Tin	mg/kg	1													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Zinc	mg/kg	1													79	16	56	110	17	170	230	90	190	94	370	9	140	66	110	94	89	180	4	54	<1	27	9	10	9	<1	<1	63	11	10	32	730	650	730	230
Organic	Terbutylazine	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	-	-	-	-	-
Organochlorine Pesticides	4,4-DDE	mg/kg	0.1													-	<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	-	-
	a-BHC	mg/kg	0.1													-	<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<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	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	-	-
	b-BHC	mg/kg	0.1													-	<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	-	-
	Chlordane (cis)	mg/kg	0.1													-	<0.1	-	-	-	-	-	-	-	-	-	0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	-	-
	Chlordane (trans)	mg/kg	0.1													-	<0.1	-	-	-	-	-	-	-	-	-	0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	-	-
	d-BHC	mg/kg	0.1													-	<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	-	-
	DDD	mg/kg	0.1													-	<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	-	-
	DDT	mg/kg	0.1													-	<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	-	-
	DDT+DDE+DDD	mg/kg	0.1													-	<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	-	-
	Dieldrin	mg/kg	0.1													-	<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	-	-
	Endosulfan I	mg/kg	0.1													-	<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	-	-
	Endosulfan II	mg/kg	0.1													-	<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<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	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	-	-
	Endrin	mg/kg	0.1													-	<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<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	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	-	-
	g-BHC (Lindane)	mg/kg	0.1													-	<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<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	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	-	-
	Heptachlor epoxide	mg/kg	0.1													-	<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<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	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	-	-
	Toxaphene	mg/kg	2													-	-	-	-	-	-	-	-	-	-	-	-	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<2	<2	<2	-	-	-	-
Organophosphorous Pesticides	Azinophos methyl	mg/kg	0.1													-	<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	-	-	-
	Bromophos-ethyl	mg/kg	0.1													-	<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	-	-	-
	Chlorpyrifos	mg/kg	0.1													-	<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	-	-
	Chlorpyrifos-methyl	mg/kg	0.1													-	<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	-	-	-
	Diazinon	mg/kg	0.1													-	<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	-	-	-
	Dichlorvos	mg/kg	0.1													-	<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	-	-	-
	Dimethoate	mg/kg	0.1													-	<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	-	-	-
	Ethion	mg/kg	0.1													-	<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	-	-	-
	Fenitrothion	mg/kg	0.1													-	<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	-	-	-
	Malathion	mg/kg	0.1													-	<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	-	-	-
	Ronnel	mg/kg	0.1													-	<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	-	-	-
Other	3,5-Dichlorobenzoic acid	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	-	-	-	-
	Actril (Ioxynil)	mg/kg	1													-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<1	<1	-	-	-	-
PAH/Phenols	PAH (total, NSW Waste 2008)	mg/kg														-	-	1.2	-	2.05	-	-	3.5	-	-	-	-	18.65	-	-	4.52	-	-	-	-	<1.35	-	<1.35	1.08	-	-	-	12.8	<1.35	<1.35	0.73	-	-	-	-
	2,4-dimethylphenol	mg/kg	0.2													-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	-
	2,4-dinitrophenol	mg/kg	2													-	-	-	-	-	-	-	-	-	-	-	-	<4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<4	<4	<2	-	-	-	-
	2-methylphenol	mg/kg	0.2													-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	-
	2-nitrophenol	mg/kg	0.2													-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	-
	4,6-Dinitro-2-methylphenol	mg/kg	2													-	-	-	-	-	-	-	-	-	-	-	-	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<2	<2	-	-	-	-	-
	4-chloro-3-methylphenol	mg/kg	1													-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<1	<2	-	-	-	-
	4-methylphenol	mg/kg														-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.4	-	-	-	-
	4-nitrophenol	mg/kg	4													-	-	-	-	-	-	-	-	-	-	-	-	<4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<4	<4	<4	-	-	-	-
	Acenaphthene	mg/kg	0.1													-	-	<0.1	-	<0.1	-	-	<0.1	-	-	-	-	<0.1	-	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	<0.1	<0.1	-	-	-	-
	Acenaphthylene	mg/kg	0.1													-	-	<0.1	-	<0.1	-	-	<0.1	-	-	-	-	0.4	-	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	<0.1	<0.1	-	-	-	-
	Anthracene	mg/kg	0.1													-	-	<0.1	-	<0.1	-	-	<0.1	-	-	-	-	0.4	-	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	-	0.2	<0.1	<0.1	<0.1	-	-	-	-
	Benz(a)anthracene	mg/kg	0.1													-	-	0.1	-	0.2	-	-	0.4	-	-	-	-	2	-	-	0.5	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	-	0.8	<0.1	<0.1	<0.1	-	-	-	-
	Benzo(a) pyrene	mg/kg	0.05													-	-	0.1	-	0.2	-	-	0.5	-	-	-	-	2.2	-	-	0.52	-	-	-	-	<0.05	-	<0.05	0.08	-	-	-	2.2	<0.05	<0.05	0.08	-	-	-	-
	Benzo(b+k)fluoranthene	mg/kg														-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-
	Benzo(g,h,i)perylene	mg/kg	0.1													-	-	0.1	-	0.2	-	-	0.3	-	-	-	-	1.6	-	-	0.3	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	-	2.5	<0.1	<0.1	<0.1	-	-	-	-
	Chrysene	mg/kg	0.1													-	-	0.1	-	0.2	-	-	0.4	-	-	-	-	2.1	-	-	0.5	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	-	0.9	<0.1	<0.1	<0.1	-	-	-	-
	Cresol Total	mg/kg														-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-
	Dibenz(a,h)anthracene	mg/kg	0.1													-	-	<0.1	-	<0.1	-	-	<0.1	-	-	-	-	0.3	-	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	-	0.4	<0.1	<0.1	<0.1	-	-	-	-
	Fluoranthene	mg/kg	0.1													-	-	0.2	-	0.4	-	-	0.5	-	-	-	-	3.5	-	-	0.9	-	-	-	-	<0.1	-	<0.1	0.2	-	-	-	1.5	<0.1	<0.1	<0.1	-	-	-	-
	Fluorene	mg/kg	0.1													-	-	<0.1	-	<0.1	-	-	<0.1	-	-	-	-	<0.1	-	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	<0.1	<0.1	-	-	-	-
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.1													-	-	<0.1	-	0.1	-	-	0.3	-	-	-	-	1.2	-	-	0.3	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	-	1.8	<0.1	<0.1	<0.1	-	-	-	-
	Naphthalene	mg/kg	0.1	NL	NL	NL	NL	NL	NL	NL	NL	3|4|5	NL	NL	NL	-	-	<0.1	-	<0.1	-	-	<0.1	-	-	-	-	<0.1	-	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	<0.1	<0.1	-	-	-	-
	PAHs (Sum of total)	mg/kg														-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.08	-	-	-	-
	Phenanthrene	mg/kg	0.1													-	-	<0.1	-	<0.1	-	-	0.2	-	-	-	-	0.9	-	-	0.2	-	-	-	-	<0.1	-	<0.1	0.1	-	-	-	0.8	<0.1	<0.1	<0.1	-	-	-	-
	Phenol	mg/kg	0.2													-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	-
	Phenolics Total	mg/kg	0.2													-	-	-	-	-	-	-	-	-	-	-	-	<5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<5	<5	<0.2	-	-	-	-
	Picloram	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	-	-	-	-
	Pyrene	mg/kg	0.1													-	-	0.2	-	0.4	-	-	0.6	-	-	-	-	3.9	-	-	1	-	-	-	-	<0.1	-	<0.1	0.2	-	-	-	1.5	<0.1	<0.1	<0.1	-	-	-	-
Pesticides	Pesticides (total, NSW Waste 2008)	mg/kg														-	<0.6	-	-	-	-	-	-	-	-	-	<0.6	<3.6	-	-	-	-	-	-	<0.6	-	<0.6	-	-	-	-	<0.6	-	<3.6	<3.6	<3	-	-	-	-
	Bifenthrin	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	-	-	-	-
	Mirex	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	-	-	-	-
	Parathion	mg/kg	0.1													-	<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	-	-	-
Phthalates	Bis(2-ethylhexyl) phthalate	mg/kg	5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Butyl benzyl phthalate	mg/kg	1													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Diethylphthalate	mg/kg	1													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dimethyl phthalate	mg/kg	1													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Di-n-butyl phthalate	mg/kg	5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Di-n-octyl phthalate	mg/kg	1													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Polychlorinated Biphenyls	Arochlor 1016	mg/kg	0.1													-	-	-	-	-	<0.1	-	-	-	-	-	-	<0.1	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	-	-	-	-
	Arochlor 1221	mg/kg	0.1													-	-	-	-	-	<0.1	-	-	-	-	-	-	<0.1	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	-	-	-	-
	Arochlor 1232	mg/kg	0.1													-	-	-	-	-	<0.1	-	-	-	-	-	-	<0.1	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	-	-	-	-
	Arochlor 1242	mg/kg	0.1													-	-	-	-	-	<0.1	-	-	-	-	-	-	<0.1	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	-	-	-	-
	Arochlor 1248	mg/kg	0.1													-	-	-	-	-	<0.1	-	-	-	-	-	-	<0.1	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	-	-	-	-
	Arochlor 1254	mg/kg	0.1													-	-	-	-	-	<0.1	-	-	-	-	-	-	<0.1	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	-	-	-	-
	Arochlor 1260	mg/kg	0.1													-	-	-	-	-	<0.1	-	-	-	-	-	-	<0.1	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	-	-	-	-
	PCBs (Sum of total)	mg/kg	0.1													-	-	-	-	-	<0.1	-	-	-	-	-	-	<0.1	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	-	-	-	-
Solvents	Cyclohexane	mg/kg	1													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-
TPH	C10-C16	mg/kg	50													-	-	-	-	-	-	-	-	-	<50	-	-	<50	-	<50	-	-	-	<50	-	-	-	-	-	-	<50	-	-	<50	<50	<50	-	-	-	-
	C16-C34	mg/kg	100													-	-	-	-	-	-	-	-	-	<100	-	-	<100	-	<100	-	-	-	<100	-	-	-	-	-	-	<100	-	-	<100	<100	<100	-	-	-	-
	C34-C40	mg/kg	100													-	-	-	-	-	-	-	-	-	<100	-	-	<100	-	<100	-	-	-	<100	-	-	-	-	-	-	<100	-	-	<100	<100	<100	-	-	-	-
	F2-NAPHTHALENE	mg/kg	50	NL	NL	NL	NL	NL	NL	NL	NL	110|230|280	NL|240	NL|440	NL	-	-	-	-	-	-	-	-	-	<50	-	-	<50	-	<50	-	-	-	<50	-	-	-	-	-	-	<50	-	-	<50	<50	<50	-	-	-	-
	C6 - C9	mg/kg	25													-	-	-	-	-	-	-	-	-	<25	-	-	<25	-	<25	-	-	-	<25	-	-	-	-	-	-	<25	-	-	<25	<25	<25	-	-	-	-
	C10 - C14	mg/kg	50													-	-	-	-	-	-	-	-	-	<50	-	-	<50	-	<50	-	-	-	<50	-	-	-	-	-	-	<50	-	-	<50	<50	<50	-	-	-	-
	C15 - C28	mg/kg	100													-	-	-	-	-	-	-	-	-	<100	-	-	<100	-	<100	-	-	-	<100	-	-	-	-	-	-	<100	-	-	<100	<100	<100	-	-	-	-
	C29-C36	mg/kg	100													-	-	-	-	-	-	-	-	-	<100	-	-	<100	-	<100	-	-	-	<100	-	-	-	-	-	-	<100	-	-	<100	<100	<100	-	-	-	-
	+C10 - C36 (Sum of total)	mg/kg														-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<50	-	-	-	-
	C10 - C40 (Sum of total)	mg/kg	50													-	-	-	-	-	-	-	-	-	<50	-	-	<50	-	<50	-	-	-	<50	-	-	-	-	-	-	<50	-	-	<50	<50	<50	-	-	-	-
	C6-C10	mg/kg	25													-	-	-	-	-	-	-	-	-	<25	-	-	<25	-	<25	-	-	-	<25	-	-	-	-	-	-	<25	-	-	<25	<25	<25	-	-	-	-

LRM GLOBAL

Table 18b: Soil Results Compared Against NEPM HSLs

Australian Unity Limited
266 Longueville Road
Lane Cove

															Sampled Date	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	10/05/2018	10/05/2018	11/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018
															Field Date	Dup3	Split 3	BH37	Dup4	Split 4	BH38	BH39	BH40	BH41	BH42	BH43_5.0	Dup 5	Split 5	BH43_6.0	BH43_7.0	BH43_8.0	BH43_9.0	BH44_5.0	BH44_6.0	BH44_7.0	BH44_8.0	BH44_9.0	BH45_7.0	BH45_7.8	BH45_8.0	BH46_0.2	BH46_0.5	BH46_1.0	BH46_2.0	Dup 6	Spilt 6	BH46_2.3	BH47_3.6	BH47_5.0	BH47_6.0	BH47_6.5	BH47_7.0
															Sample Depth	0.1		0.1	0.1		0.1	0.1	0.1	0.1	0.1	5		5	6	7	8	9	5	6	7	8	9	7	7.8	8	0.2	0.5	1	2		6	2.3	3.6	5	6	6.5	7
				NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion				NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion				NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion																																											
Chemical Group	Chemical Name	Units	EQL	0-1m	1-2m	2-4m	>4m	0-1m	1-2m	2-4m	>4m	0-1m	1-2m	2-4m	>4m																																					
	3/4-Methylphenol (m/p-cresol)	mg/kg	0.4													-	-	-	-	-	-	-	-	-	-	<0.4	-	-	-	-	-	<0.4	<0.4	-	-	-	<0.4	<0.4	-	<0.4	<0.4	-	-	-	-	-	<0.4	<0.4	-	-	-	<0.4
	Benzo(a)pyrene TEQ (LOR)	mg/kg	0.5													-	-	<0.5	-	-	<0.5	-	-	-	-	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Benzo(b+j+k)fluoranthene	mg/kg	0.2													-	-	0.3	-	-	0.4	-	-	-	-	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	0.4	0.2	<0.2	<0.2	<0.2
	DCPA (Chlorthal) Diacid	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5
	Plasticiser Compounds	mg/kg														-	-	-	-	-	-	-	-	-	-	<5	-	-	-	-	-	<5	<5	-	-	-	<5	<5	-	<5	<5	-	-	-	-	-	<5	<5	-	-	-	<5
	Scheduled chemicals (NSW Waste 2008)	mg/kg														-	-	-	-	-	-	-	-	-	<1.3	<7.5	-	-	-	-	-	<7.5	<7.5	-	-	-	<7.5	<7.5	-	<7.5	<7.5	-	-	-	-	-	<7.5	<7.5	-	-	-	<7.5
	Total Positive PAHs	mg/kg	0.05													-	-	1.7	-	-	2.1	-	-	-	-	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	0.65	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	2.4	1.1	<0.05	<0.05	0.3
	Benzo(a)pyrene TEQ calc (Half)	mg/kg	0.5													-	-	<0.5	-	-	<0.5	-	-	-	-	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Benzo(a)pyrene TEQ calc (Zero)	mg/kg	0.5													-	-	<0.5	-	-	<0.5	-	-	-	-	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<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
	Metribuzin	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acid Herbicides	2,6-D	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5
Triazine Herb	Irgarol	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BTEX	Benzene	mg/kg	0.2	3|4	3|4|6	3|6|9	3|10|20	NL	NL	NL	NL	0.5|0.6|0.7	0.5|0.7|1	0.5|1|2	0.5|2|3	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Ethylbenzene	mg/kg	0.5	NL	NL	NL	NL	NL	NL	NL	NL	NL|55	NL	NL	NL	-	-	-	-	-	-	-	-	-	-	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	<1
	Toluene	mg/kg	0.5	NL	NL	NL	NL	NL	NL	NL	NL	160|390|480	NL|220	NL|310	NL|540	-	-	-	-	-	-	-	-	-	-	<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	<0.5	<0.5	<0.5	<0.5	<0.5
	Xylene (m & p)	mg/kg	1													-	-	-	-	-	-	-	-	-	-	<2	<2	-	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	-	<2	<2	<2	<2	<2	<2
	Xylene (o)	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	<1
	Xylene Total	mg/kg	1	NL|230	NL	NL	NL	NL	NL	NL	NL	40|95|110	60|210|310	NL|95	NL|170	-	-	-	-	-	-	-	-	-	-	-	<1	-	<1	<1	<1	-	-	<1	<1	<1	-	-	<1	-	-	<1	<1	<1	<1	-	-	-	<1	<1	<1	-
	C6-C10 less BTEX (F1)	mg/kg	25	250|260|310	360|370|480	NL|590|630	NL	NL	NL	NL	NL	40|45|50	65|70|90	100|110|150	190|200|290	-	-	-	-	-	-	-	-	-	-	-	<25	-	<25	<25	<25	-	-	<25	<25	<25	-	-	<25	-	-	<25	<25	<25	<25	-	-	-	<25	<25	<25	-
Chlorinated Hydrocarbons	1,1,1,2-tetrachloroethane	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	1,1,1-trichloroethane	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	1,1,2,2-tetrachloroethane	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	1,1,2-trichloroethane	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	1,1-dichloroethane	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	1,1-dichloroethene	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	1,1-dichloropropene	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	1,2,3-trichloropropane	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	1,2-dibromo-3-chloropropane	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	1,2-dichloroethane	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	1,2-dichloropropane	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	1,3-dichloropropane	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	2,2-dichloropropane	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	Bromochloromethane	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	Bromodichloromethane	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	Bromoform	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	Carbon tetrachloride	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	Chlorodibromomethane	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	Chloroethane	mg/kg	1													-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	Chloroform	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	Chloromethane	mg/kg	1													-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	cis-1,2-dichloroethene	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	cis-1,3-dichloropropene	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	Dibromomethane	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	Hexachlorobutadiene	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	Trichloroethene	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	Tetrachloroethene	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	trans-1,2-dichloroethene	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	trans-1,3-dichloropropene	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	Vinyl chloride	mg/kg	1													-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
Explosives	Nitrobenzene	mg/kg	0.1													-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
Halogenated Benzenes	1,2,3-trichlorobenzene	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	1,2,4-trichlorobenzene	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	1,2-dichlorobenzene	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	1,3-dichlorobenzene	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	1,4-dichlorobenzene	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	2-chlorotoluene	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	4-chlorotoluene	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	Bromobenzene	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	Chlorobenzene	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	Hexachlorobenzene	mg/kg	0.1													-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
Halogenated Hydrocarbons	1,2-dibromoethane	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	Bromomethane	mg/kg	1													-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	Dichlorodifluoromethane	mg/kg	1													-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	Trichlorofluoromethane	mg/kg	1													-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
Halogenated Phenols	2,3,4,6-tetrachlorophenol	mg/kg	0.2													-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	<0.2	<0.2	-	-	-	-	-	<0.2	<0.2	-	-	-	<0.2
	2,4,5-trichlorophenol	mg/kg	0.2													-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	<0.2	<0.2	-	-	-	-	-	<0.2	<0.2	-	-	-	<0.2
	2,4,6-trichlorophenol	mg/kg	0.2													-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	<0.2	<0.2	-	-	-	-	-	<0.2	<0.2	-	-	-	<0.2
	2,4-dichlorophenol	mg/kg	0.2													-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	<0.2	<0.2	-	-	-	-	-	<0.2	<0.2	-	-	-	<0.2
	2,6-dichlorophenol	mg/kg	0.2													-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	<0.2	<0.2	-	-	-	-	-	<0.2	<0.2	-	-	-	<0.2
	2-chlorophenol	mg/kg	0.2													-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	<0.2	<0.2	-	-	-	-	-	<0.2	<0.2	-	-	-	<0.2
	Pentachlorophenol	mg/kg	1													-	-	-	-	-	-	-	-	-	-	<5	-	-	-	-	-	<5	<5	-	-	-	<5	<5	-	<5	<5	-	-	-	-	-	<5	<5	-	-	-	<5
Herbicides	2,4,5-Trichlorophenoxy Acetic Acid	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5
	2,4,5-TP (Silvex)	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5
	2,4-dichlorophenoxybutanoic acid	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5
	Hedonal	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5
	2,4-Dichlorprop	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5
	2,4,6-Trichlorophenoxy-acetic acid	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5
	2-Chlorophenoxyacetic acid	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5
	4-Chlorophenoxy acetic acid	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5
	Ametryn	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Acifluorfen	mg/kg	2													-	-	-	-	-	-	-	-	-	-	<2	-	-	-	-	-	<2	<2	-	-	-	<2	<2	-	<2	<2	-	-	-	-	-	<2	<2	-	-	-	<2
	Atrazine	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Bromoxynil	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5
	Clopyralid	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5
	Cyanazine	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dicamba	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5
	Dinoseb	mg/kg	1													-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
	Hexazinone	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2-Methyl-4-chlorophenoxyacetic acid	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5
	2-Methyl-4-Chlorophenoxy Butanoic Acid	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5
	Mecoprop	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5
	Prometryn	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Propazine	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Simazine	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Terbutryn	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Triclopyr	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5
Inorganics	Cyanide (Free)	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5
	Cyanide Total	mg/kg	0.5													-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5
	Fluoride	mg/kg	50													-	-	-	-	-	-	-	-	-	-	<50	-	-	-	-	-	<50	<50	-	-	-	<50	<50	-	<50	<50	-	-	-	-	-	<50	<50	-	-	-	<50

Table 18b: Soil Results Compared Against NEPM HSLs

Australian Unity Limited
266 Longueville Road
Lane Cove

Chemical Group	Chemical Name	Units	EQL	NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion				NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion				NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion			
				0-1m	1-2m	2-4m	>4m	0-1m	1-2m	2-4m	>4m	0-1m	1-2m	2-4m	>4m
MAH	1,2,4-trimethylbenzene	mg/kg	0.5												
	1,3,5-trimethylbenzene	mg/kg	0.5												
	Isopropylbenzene	mg/kg	0.5												
	n-butylbenzene	mg/kg	0.5												
	n-propylbenzene	mg/kg	0.5												
	p-isopropyltoluene	mg/kg	0.5												
	sec-butylbenzene	mg/kg	0.5												
	Styrene	mg/kg	0.5												
	tert-butylbenzene	mg/kg	0.5												
Metals	Arsenic	mg/kg	4												
	Beryllium	mg/kg	1												
	Boron	mg/kg	3												
	Cadmium	mg/kg	0.4												
	Chromium (hexavalent)	mg/kg	1												
	Chromium (III+VI)	mg/kg	1												
	Cobalt	mg/kg	1												
	Copper	mg/kg	1												
	Lead	mg/kg	1												
	Manganese	mg/kg	1												
	Mercury	mg/kg	0.1												
	Molybdenum	mg/kg	1												
	Nickel	mg/kg	1												
	Selenium	mg/kg	2												
	Silver	mg/kg	1												
	Tin	mg/kg	1												
	Zinc	mg/kg	1												
Organic	Terbutylazine	mg/kg	0.5												
Organochlorine Pesticides	4,4-DDE	mg/kg	0.1												
	a-BHC	mg/kg	0.1												
	Aldrin	mg/kg	0.1												
	b-BHC	mg/kg	0.1												
	Chlordane (cis)	mg/kg	0.1												
	Chlordane (trans)	mg/kg	0.1												
	d-BHC	mg/kg	0.1												
	DDD	mg/kg	0.1												
	DDT	mg/kg	0.1												
	DDT+DDE+DDD	mg/kg	0.1												
	Dieldrin	mg/kg	0.1												
	Endosulfan I	mg/kg	0.1												
	Endosulfan II	mg/kg	0.1												
	Endosulfan sulphate	mg/kg	0.1												
	Endrin	mg/kg	0.1												
	Endrin aldehyde	mg/kg	0.1												
	g-BHC (Lindane)	mg/kg	0.1												
	Heptachlor	mg/kg	0.1												
	Heptachlor epoxide	mg/kg	0.1												
	Methoxychlor	mg/kg	0.1												
	Toxaphene	mg/kg	2												
Organophosphorous Pesticides	Azinophos methyl	mg/kg	0.1												
	Bromophos-ethyl	mg/kg	0.1												
	Chlorpyrifos	mg/kg	0.1												
	Chlorpyrifos-methyl	mg/kg	0.1												
	Diazinon	mg/kg	0.1												
	Dichlorvos	mg/kg	0.1												
	Dimethoate	mg/kg	0.1												
	Ethion	mg/kg	0.1												
	Fenitrothion	mg/kg	0.1												
	Malathion	mg/kg	0.1												
	Ronnel	mg/kg	0.1												
Other	3,5-Dichlorobenzoic acid	mg/kg	0.5												
	Actril (Ioxynil)	mg/kg	1												
PAH/Phenols	PAH (total, NSW Waste 2008)	mg/kg													
	2,4-dimethylphenol	mg/kg	0.2												
	2,4-dinitrophenol	mg/kg	2												
	2-methylphenol	mg/kg	0.2												
	2-nitrophenol	mg/kg	0.2												
	4,6-Dinitro-2-methylphenol	mg/kg	2												
	4-chloro-3-methylphenol	mg/kg	1												
	4-methylphenol	mg/kg													
	4-nitrophenol	mg/kg	4												
	Acenaphthene	mg/kg	0.1												
	Acenaphthylene	mg/kg	0.1												
	Anthracene	mg/kg	0.1												
	Benz(a)anthracene	mg/kg	0.1												
	Benzo(a) pyrene	mg/kg	0.05												
	Benzo(b+k)fluoranthene	mg/kg													
	Benzo(g,h,i)perylene	mg/kg	0.1												
	Chrysene	mg/kg	0.1												
	Cresol Total	mg/kg													
	Dibenz(a,h)anthracene	mg/kg	0.1												
	Fluoranthene	mg/kg	0.1												
	Fluorene	mg/kg	0.1												
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.1												
	Naphthalene	mg/kg	0.1	NL	NL	NL	NL	NL	NL	NL	NL	3|4|5	NL	NL	NL
	PAHs (Sum of total)	mg/kg													
	Phenanthrene	mg/kg	0.1												
	Phenol	mg/kg	0.2												
	Phenolics Total	mg/kg	0.2												
	Picloram	mg/kg	0.5												
	Pyrene	mg/kg	0.1												
Pesticides	Pesticides (total, NSW Waste 2008)	mg/kg													
	Bifenthrin	mg/kg	0.5												
	Mirex	mg/kg	0.5												
	Parathion	mg/kg	0.1												
Phthalates	Bis(2-ethylhexyl) phthalate	mg/kg	5												
	Butyl benzyl phthalate	mg/kg	1												
	Diethylphthalate	mg/kg	1												
	Dimethyl phthalate	mg/kg	1												
	Di-n-butyl phthalate	mg/kg	5												
	Di-n-octyl phthalate	mg/kg	1												
Polychlorinated Biphenyls	Arochlor 1016	mg/kg	0.1												
	Arochlor 1221	mg/kg	0.1												
	Arochlor 1232	mg/kg	0.1												
	Arochlor 1242	mg/kg	0.1												
	Arochlor 1248	mg/kg	0.1												
	Arochlor 1254	mg/kg	0.1												
	Arochlor 1260	mg/kg	0.1												
	PCBs (Sum of total)	mg/kg	0.1												
Solvents	Cyclohexane	mg/kg	1												
TPH	C10-C16	mg/kg	50												
	C16-C34	mg/kg	100												
	C34-C40	mg/kg	100												
	F2-NAPHTHALENE	mg/kg	50	NL	NL	NL	NL	NL	NL	NL	NL	110|230|280	NL|240	NL|440	NL
	C6 - C9	mg/kg	25												
	C10 - C14	mg/kg	50												
	C15 - C28	mg/kg	100												
	C29-C36	mg/kg	100												
	+C10 - C36 (Sum of total)	mg/kg													
	C10 - C40 (Sum of total)	mg/kg	50												
	C6-C10	mg/kg	25												

Field Date	Dup3	Split 3	BH37	Dup4	Split 4	BH38	BH39	BH40	BH41	BH42	BH43_5.0	Dup 5	Split 5	BH43_6.0
Sampled Date	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	10/05/2018	10/05/2018	11/05/2018	10/05/2018
Sample Depth	0.1		0.1	0.1		0.1	0.1	0.1	0.1	0.1	5		5	6
1,2,4-trimethylbenzene	-	-	-	-	-	-	-	-	-	-	<1	-	-	-
1,3,5-trimethylbenzene	-	-	-	-	-	-	-	-	-	-	<1	-	-	-
Isopropylbenzene	-	-	-	-	-	-	-	-	-	-	<1	-	-	-
n-butylbenzene	-	-	-	-	-	-	-	-	-	-	<1	-	-	-
n-propylbenzene	-	-	-	-	-	-	-	-	-	-	<1	-	-	-
p-isopropyltoluene	-	-	-	-	-	-	-	-	-	-	<1	-	-	-
sec-butylbenzene	-	-	-	-	-	-	-	-	-	-	<1	-	-	-
Styrene	-	-	-	-	-	-	-	-	-	-	<1	-	-	-
tert-butylbenzene	-	-	-	-	-	-	-	-	-	-	<1	-	-	-
Arsenic	14	8	<4	<4	<4	7	<4	<4	<4	<4	<4	<4	<4	<4
Beryllium	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Boron	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cadmium	0.6	<0.4	<0.4	<0.4	<0.4	2	0.7	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium (hexavalent)	-	-	-	-	-	-	-	-	-	-	<1	-	-	-
Chromium (III+VI)	13	14	8	8	7	180	6	7	6	12	5	6	6	7
Cobalt	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Copper	47	30	8	8	7	140	30	10	11	9	4	5	5	6
Lead	91	60	49	53	49	150	76	12	53	11	5	5	4	7
Manganese	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mercury	0.1	<0.1	0.1	0.1	0.1	1.3	0.2	5.5	4.1	5.2	<0.1	<0.1	<0.1	<0.1
Molybdenum	-	-	-	-	-	-	-	-	-	-	<1	<1	<1	<1
Nickel	9	3	2	2	2	93	6	2	2	3	2	2	2	2
Selenium	-	-	-	-	-	-	-	-	-	-	<2	<2	<2	<2
Silver	-	-	-	-	-	-	-	-	-	-	<1	<1	<1	<1
Tin	-	-	-	-	-	-	-	-	-	-	<1	<1	<1	<1
Zinc	230	170	90	82	71	680	210	14	71	15	-	-	-	-
Terbutylazine	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4,4-DDE	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-
a-BHC	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-
Aldrin	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-
b-BHC	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-
Chlordane (cis)	-	-	-	-	-	-	-	-	-	0.1	<0.1	-	-	-
Chlordane (trans)	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-
d-BHC	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-
DDD	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-
DDT	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-
DDT+DDE+DDD	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-
Dieldrin	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-
Endosulfan I	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-
Endosulfan II	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-
Endosulfan sulphate	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-
Endrin	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-
Endrin aldehyde	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-
g-BHC (Lindane)	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-
Heptachlor	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-
Heptachlor epoxide	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-
Methoxychlor	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-
Toxaphene	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Azinophos methyl	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-
Bromophos-ethyl	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-
Chlorpyrifos	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-
Chlorpyrifos-methyl	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-
Diazinon	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-
Dichlorvos	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-
Dimethoate	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-
Ethion	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-
Fenitrothion	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-
Malathion	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-
Ronnel	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-
3,5-Dichlorobenzoic acid	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-
Actril (Ioxynil)	-	-	-	-	-	-	-	-	-	-	<1	-	-	-
PAH (total, NSW Waste 2008)	-	-	1.6	-	-	2	-	-	-	-	<1.35	<1.35	-	<1.35
2,4-dimethylphenol	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-
2,4-dinitrophenol	-	-	-	-	-	-	-	-	-	-	<4	-	-	-
2-methylphenol	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-
2-nitrophenol	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-
4,6-Dinitro-2-methylphenol	-	-	-	-	-	-	-	-	-	-	<10	-	-	-
4-chloro-3-methylphenol	-	-	-	-	-	-	-	-	-	-	<5	-	-	-
4-methylphenol	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-nitrophenol	-	-	-	-	-	-	-	-	-	-	<4	-	-	-
Acenaphthene	-	-	<0.1	-	-	<0.1	-	-	-	-	<0.1	<0.1	-	<0.1
Acenaphthylene	-	-	<0.1	-	-	<0.1	-	-	-	-	<0.1	<0.1	-	<0.1
Anthracene	-	-	<0.1	-	-	<0.1	-	-	-	-	<0.1	<0.1	-	<0.1
Benz(a)anthracene	-	-	0.1	-	-	0.2	-	-	-	-	<0.1	<0.1	-	<0.1
Benzo(a) pyrene	-	-	0.2	-	-	0.2	-	-	-	-	<0.05	<0.05	-	<0.05
Benzo(b+k)fluoranthene	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(g,h,i)perylene	-	-	0.1	-	-	0.2	-	-	-	-	<0.1	<0.1	-	<0.1
Chrysene	-	-	0.1	-	-	0.2	-	-	-	-	<0.1	<0.1	-	<0.1
Cresol Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibenz(a,h)anthracene	-	-	<0.1	-	-	<0.1	-	-	-	-	<0.1	<0.1	-	<0.1
Fluoranthene	-	-	0.3	-	-	0.4	-	-	-	-	<0.1	<0.1	-	<0.1
Fluorene	-	-	<0.1	-	-	<0.1	-	-	-	-	<0.1	<0.1	-	<0.1
Indeno(1,2,3-c,d)pyrene	-	-	0.1	-	-	0.1	-	-	-	-	<0.1	<0.1	-	<0.1
Naphthalene	-	-	<0.1	-	-	<0.1	-	-	-	-	<0.1	<0.1	-	<0.1
PAHs (Sum of total)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenanthrene	-	-	0.1	-	-	0.1	-	-	-	-	<0.1	<0.1	-	<0.1
Phenol	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-
Phenolics Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Picloram	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-
Pyrene	-	-	0.3	-	-	0.3	-	-	-	-	<0.1	<0.1	-	<0.1
Pesticides (total, NSW Waste 2008)	-	-	-	-	-	-	-	-	-	<0.6	<5.6	-	-	-
Bifenthrin	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mirex	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Parathion	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-
Bis(2-ethylhexyl) phthalate	-	-	-	-	-	-	-	-	-	-	<5	-	-	-
Butyl benzyl phthalate	-	-	-	-	-	-	-	-	-	-	<1	-	-	-
Diethylphthalate	-	-	-	-	-	-	-	-	-	-	<1	-	-	-
Dimethyl phthalate	-	-	-	-	-	-	-	-	-	-	<1	-	-	-
Di-n-butyl phthalate	-	-	-	-	-	-	-	-	-	-	<5	-	-	-
Di-n-octyl phthalate	-	-	-	-	-	-	-	-	-	-	<1	-	-	-
Arochlor 1016	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arochlor 1221	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arochlor 1232	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arochlor 1242	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arochlor 1248	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arochlor 1254	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arochlor 1260	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCBs (Sum of total)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cyclohexane	-	-	-	-	-	-	-	-	-	-	<1	-	-	-
C10-C16	-	-	-	-	-	-	68	-	-	-	<50	<50	-	<50
C16-C34	-	-	-	-	-	-	640	-	-	-	<100	<100	-	<100
C34-C40	-	-	-	-	-	-	370	-	-	-	<100	<100	-	<100
F2-NAPHTHALENE	-	-	-	-	-	-	68	-	-	-	-	<50	-	<50
C6 - C9	-	-	-	-	-	-	<25	-	-	-	<25	<25	-	<25
C10 - C14	-	-	-	-	-	-	<50	-	-	-	<50	<50	-	<50
C15 - C28	-	-	-	-	-	-	360	-	-	-	<100	<100	-	<100
C29-C36	-	-	-	-	-	-	480	-	-	-	<100	<100	-	<100
+C10 - C36 (Sum of total)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C10 - C40 (Sum of total)	-	-	-	-	-	-	1,100	-	-	-	<50	<50	-	<50
C6-C10	-	-	-	-	-	-	<25	-	-	-	<25	<25	-	<25

Field Date	BH43_7.0	BH43_8.0	BH43_9.0	BH44_5.0	BH44_6.0	BH44_7.0	BH44_8.0	BH44_9.0	BH45_7.0	BH45_7.8	BH45_8.0	BH46_0.2	BH46_0.5	BH46_1.0	BH46_2.0	Dup 6	Spilt 6	BH46_2.3	BH47_3.6	BH47_5.0	BH47_6.0	BH47_6.5	BH47_7.0
Sampled Date	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018
Sample Depth	7	8	9	5	6	7	8	9	7	7.8	8	0.2	0.5	1	2		6	2.3	3.6	5	6	6.5	7
1,2,4-trimethylbenzene	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
1,3,5-trimethylbenzene	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
Isopropylbenzene	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
n-butylbenzene	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
n-propylbenzene	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
p-isopropyltoluene	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
sec-butylbenzene	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
Styrene	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
tert-butylbenzene	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
Arsenic	<4	<4	<4	<4	8	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	4	<4	4	<4	<4
Beryllium	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Boron	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cadmium	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium (hexavalent)	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
Chromium (III+VI)	7	7	7	4	15	12	16	13	9	9	12	5	5	3	9	10	9	10	9	9	10	9	6
Cobalt	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Copper	5	5	4	1	3	4	5	3	4	2	6	<1	<1	<1	<1	<1	<1	<1	4	3	6	5	2
Lead	6	5	4	4	12	4	3	4	10	16	19	6	7	7	6	6	6	5	25	14	14	13	8
Manganese	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mercury	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Molybdenum	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1	1	2	1	<1	<1	<1	1	<1
Nickel	3	2	2	<1	1	2	5	3	3	1	3	<1	<1	<1	<1	<1	<1	<1	2	3	1	1	1
Selenium	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Silver	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tin	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Zinc	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Terbutylazine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4,4-DDE	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
a-BHC	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
Aldrin	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
b-BHC	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
Chlordane (cis)	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
Chlordane (trans)	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
d-BHC	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
DDD	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
DDT	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
DDT+DDE+DDD	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
Dieldrin	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
Endosulfan I	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
Endosulfan II	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
Endosulfan sulphate	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
Endrin	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
Endrin aldehyde	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
g-BHC (Lindane)	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
Heptachlor	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
Heptachlor epoxide	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
Methoxychlor	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
Toxaphene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Azinophos methyl	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
Bromophos-ethyl	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
Chlorpyrifos	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
Chlorpyrifos-methyl	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
Diazinon	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
Dichlorvos	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
Dimethoate	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
Ethion	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
Fenitrothion	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
Malathion	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
Ronnel	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
3,5-Dichlorobenzoic acid	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5
Actril (Ioxynil)	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
PAH (total, NSW Waste 2008)	<1.35	<1.35	<1.35	<1.35	1.09	<1.35	<1.35	<1.35	<1.35	<1.35	<1.35	<1.35	<1.35	<1.35	<1.35	<1.35	-	<1.35	2.3	1.25	<1.35	<1.35	0.81
2,4-dimethylphenol	-	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	<0.2	<0.2	-	-	-	-	-	<0.2	<0.2	-	-	-	<0.2
2,4-dinitrophenol	-	-	<4	<4	-	-	-	<4	<4	-	<4	<4	-	-	-	-	-	<4	<4	-	-	-	<4
2-methylphenol	-	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	<0.2	<0.2	-	-	-	-	-	<0.2	<0.2	-	-	-	<0.2
2-nitrophenol	-	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	<0.2	<0.2	-	-	-	-	-	<0.2	<0.2	-	-	-	<0.2
4,6-Dinitro-2-methylphenol	-	-	<10	<10	-	-	-	<10	<10	-	<10	<10	-	-	-	-	-	<10	<10	-	-	-	<10
4-chloro-3-methylphenol	-	-	<5	<5	-	-	-	<5	<5	-	<5	<5	-	-	-	-	-	<5	<5	-	-	-	<5
4-methylphenol	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-nitrophenol	-	-	<4	<4	-	-	-	<4	<4	-	<4	<4	-	-	-	-	-	<4	<4	-	-	-	<4
Acenaphthene	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benz(a)anthracene	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	0.2	0.1	<0.1	<0.1	<0.1
Benzo(a) pyrene	<0.05	<0.05	<0.05	<0.05	0.09	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	0.2	0.1	<0.05	<0.05	0.06
Benzo(b+k)fluoranthene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(g,h,i)perylene	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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
Chrysene	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	0.2	0.1	<0.1	<0.1	<0.1
Cresol Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibenz(a,h)anthracene	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	<0.1	<0.1	<0.1	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	0.4	0.2	<0.1	<0.1	0.1
Fluorene	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-c,d)pyrene	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PAHs (Sum of total)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenanthrene	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	0.2	<0.1	<0.1	<0.1	<0.1
Phenol	-	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	<0.2	<0.2	-	-	-	-	-	<0.2	<0.2	-	-	-	<0.2
Phenolics Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Picloram	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	-	-	<0.5	<0.5	-	-	-	<0.5
Pyrene	<0.1	<0.1	<0.1	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	0.5	0.3	<0.1	<0.1	0.1
Pesticides (total, NSW Waste 2008)	-	-	<5.6	<5.6	-	-	-	<5.6	<5.6	-	<5.6	<5.6	-	-	-	-	-	<5.6	<5.6	-	-	-	<5.6
Bifenthrin	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mirex	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Parathion	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
Bis(2-ethylhexyl) phthalate	-	-	<5	<5	-	-	-	<5	<5	-	<5	<5	-	-	-	-	-	<5	<5	-	-	-	<5
Butyl benzyl phthalate	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
Diethylphthalate	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
Dimethyl phthalate	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
Di-n-butyl phthalate	-	-	<5	<5	-	-	-	<5	<5	-	<5	<5	-	-	-	-	-	<5	<5	-	-	-	<5
Di-n-octyl phthalate	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
Arochlor 1016	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arochlor 1221	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arochlor 1232	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arochlor 1242	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arochlor 1248	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arochlor 1254	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arochlor 1260	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCBs (Sum of total)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cyclohexane	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	-	-	<1	<1	-	-	-	<1
C10-C16	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	-	<50	<50	<50	<50	<50	<50
C16-C34	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	-	<100	<100	<100	<100	<100	<100
C34-C40	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	-	<100	<100	<100	<100	<100	<100
F2-NAPHTHALENE	<50	<50	-	-	<50	<50	<50	-	-	<50	-	-	<50	<50	<50	<50	-	-	-	<50	<50	<50	-
C6 - C9	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	-	<25	<25	<25	<25	<25	<25
C10 - C14	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	-	<50	<50	<50	<50	<50	<50
C15 - C28	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	-	<100	<100	<100	<100	<100	<100
C29-C36	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	-	<100	<100	<100	<100	<100	<100
+C10 - C36 (Sum of total)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C10 - C40 (Sum of total)	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	-	<50	<50	<50	<50	<50	<50
C6-C10	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	-	<25	<25	<25	<25	<25	<25

Table 18c: Soil Results Compared Against TRH Management Limits

					Sampled Date	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017
					Field Date	BH16 - [TRIP	BH16	BH16	BH17	BH17	BH18	BH18	BH19	BH19	BH20	BH20	BH20	BH21	BH21	BH21	BH21	BH22	BH22	BH23	BH23	BH24	BH24	BH25	BH25	BH26	BH27	BH27	BH28	BH28	BH28
					Sample Depth	0.1	0.1	0.8	0.1	0.7	0.1	0.6	0.1	0.5	0.1	1	1.9	0.1	1.2	3	4	0.1	1	0.1	1	0.1	1.5	2.8	0.2	0.2	0.1	1	0.1	2	3	4
				NEPM 2013 Table 1B(7) Management Limits Comm / Ind	NEPM 2013 Table 1B(7) Management Limits in Res / Parkland																															
Chemical Group	**Chemical Name**	**Units**	**EQL**																																	
	3/4-Methylphenol (m/p-cresol)	mg/kg	0.4			-	-	-	-	-	-	-	-	<0.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Benzo(a)pyrene TEQ (LOR)	mg/kg	0.5			-	0.9	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	-	<0.5	<0.5	-	<0.5	-	<0.5	-	-	-	<0.5	-	<0.5	-	-	-	-	<0.5	-	-	0.6	-
	Benzo(b+j+k)fluoranthene	mg/kg	0.2			-	1	<0.2	<0.2	<0.2	-	<0.2	-	<0.2	-	<0.2	<0.2	-	<0.2	-	<0.2	-	-	-	<0.2	-	<0.2	-	-	-	-	<0.2	-	-	0.7	-
	DCPA (Chlorthal) Diacid	mg/kg	0.5			-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Plasticiser Compounds	mg/kg				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Scheduled chemicals (NSW Waste 2008)	mg/kg				-	-	-	-	-	<1.3	-	<1.3	<2.5	<1.3		-	<1.3	-	-	-	<1.3	-	<1.3	-	<1.3	-	-	<1.3	<1.3	<1.3	-	<1.3	-	-	-
	Total Positive PAHs	mg/kg	0.05			-	7.1	<0.05	0.4	<0.05	-	0.3	-	<0.05	-	<0.05	<0.05	-	0.06	-	<0.05	-	-	-	<0.05	-	0.4	-	-	-	-	<0.05	-	-	4.2	-
	Benzo(a)pyrene TEQ calc (Half)	mg/kg	0.5			-	0.9	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	-	<0.5	<0.5	-	<0.5	-	<0.5	-	-	-	<0.5	-	<0.5	-	-	-	-	<0.5	-	-	0.6	-
	Benzo(a)pyrene TEQ calc (Zero)	mg/kg	0.5			-	0.9	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	-	<0.5	<0.5	-	<0.5	-	<0.5	-	-	-	<0.5	-	<0.5	-	-	-	-	<0.5	-	-	0.6	-
	Metribuzin	mg/kg	0.5			-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acid Herbicides	2,6-D	mg/kg	0.5			-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Triazine Herb	Irgarol	mg/kg	0.5			-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BTEX	Benzene	mg/kg	0.2			-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Ethylbenzene	mg/kg	0.5			-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Toluene	mg/kg	0.5			-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Xylene (m & p)	mg/kg	1			-	-	-	-	-	-	-	-	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Xylene (o)	mg/kg	0.5			-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Xylene Total	mg/kg	1			-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	C6-C10 less BTEX (F1)	mg/kg	25			-	-	-	-	-	-	-	-	<25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorinated Hydrocarbons	1,1,1,2-tetrachloroethane	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,1,1-trichloroethane	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,1,2,2-tetrachloroethane	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,1,2-trichloroethane	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,1-dichloroethane	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,1-dichloroethene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,1-dichloropropene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,2,3-trichloropropane	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,2-dibromo-3-chloropropane	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,2-dichloroethane	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,2-dichloropropane	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,3-dichloropropane	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2,2-dichloropropane	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Bromochloromethane	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Bromodichloromethane	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Bromoform	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Carbon tetrachloride	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Chlorodibromomethane	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Chloroethane	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Chloroform	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Chloromethane	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	cis-1,2-dichloroethene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	cis-1,3-dichloropropene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dibromomethane	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Hexachlorobutadiene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Trichloroethene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Tetrachloroethene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	trans-1,2-dichloroethene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	trans-1,3-dichloropropene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Vinyl chloride	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Explosives	Nitrobenzene	mg/kg	0.1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Halogenated Benzenes	1,2,3-trichlorobenzene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,2,4-trichlorobenzene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,2-dichlorobenzene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,3-dichlorobenzene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,4-dichlorobenzene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2-chlorotoluene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4-chlorotoluene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Bromobenzene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Chlorobenzene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Hexachlorobenzene	mg/kg	0.1			-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
Halogenated Hydrocarbons	1,2-dibromoethane	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Bromomethane	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dichlorodifluoromethane	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Trichlorofluoromethane	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Halogenated Phenols	2,3,4,6-tetrachlorophenol	mg/kg	0.2			-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2,4,5-trichlorophenol	mg/kg	0.2			-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2,4,6-trichlorophenol	mg/kg	0.2			-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2,4-dichlorophenol	mg/kg	0.2			-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2,6-dichlorophenol	mg/kg	0.2			-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2-chlorophenol	mg/kg	0.2			-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Pentachlorophenol	mg/kg	1			-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Herbicides	2,4,5-Trichlorophenoxy Acetic Acid	mg/kg	0.5			-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2,4,5-TP (Silvex)	mg/kg	0.5			-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2,4-dichlorophenoxybutanoic acid	mg/kg	0.5			-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Hedonal	mg/kg	0.5			-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2,4-Dichlorprop	mg/kg	0.5			-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2,4,6-Trichlorophenoxy-acetic acid	mg/kg	0.5			-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2-Chlorophenoxyacetic acid	mg/kg	0.5			-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4-Chlorophenoxy acetic acid	mg/kg	0.5			-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Ametryn	mg/kg	0.5			-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Acifluorfen	mg/kg	2			-	-	-	-	-	-	-	-	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Atrazine	mg/kg	0.5			-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Bromoxynil	mg/kg	0.5			-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Clopyralid	mg/kg	0.5			-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Cyanazine	mg/kg	0.5			-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dicamba	mg/kg	0.5			-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dinoseb	mg/kg	1			-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Hexazinone	mg/kg	0.5			-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2-Methyl-4-chlorophenoxyacetic acid	mg/kg	0.5			-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2-Methyl-4-Chlorophenoxy Butanoic Acid	mg/kg	0.5			-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Mecoprop	mg/kg	0.5			-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Prometryn	mg/kg	0.5			-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Propazine	mg/kg	0.5			-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Simazine	mg/kg	0.5			-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Terbutryn	mg/kg	0.5			-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Triclopyr	mg/kg	0.5			-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Inorganics	Cyanide (Free)	mg/kg	0.5			-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Cyanide Total	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Fluoride	mg/kg	50			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MAH	1,2,4-trimethylbenzene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,3,5-trimethylbenzene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Isopropylbenzene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	n-butylbenzene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	n-propylbenzene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	p-isopropyltoluene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	sec-butylbenzene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Styrene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	tert-butylbenzene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 18c: Soil Results Compared Against TRH Management Limits

					Sampled Date	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017
					Field Date	BH16 - [TRIP	BH16	BH16	BH17	BH17	BH18	BH18	BH19	BH19	BH20	BH20	BH20	BH21	BH21	BH21	BH21	BH22	BH22	BH23	BH23	BH24	BH24	BH24	BH25	BH26	BH27	BH27	BH28	BH28	BH28	BH28
					Sample Depth	0.1	0.1	0.8	0.1	0.7	0.1	0.6	0.1	0.5	0.1	1	1.9	0.1	1.2	3	4	0.1	1	0.1	1	0.1	1.5	2.8	0.2	0.2	0.1	1	0.1	2	3	4
				NEPM 2013 Table 1B(7) Management Limits Comm / Ind	NEPM 2013 Table 1B(7) Management Limits in Res / Parkland																																
Chemical Group	Chemical Name	Units	EQL																																		
Metals	Arsenic	mg/kg	4			8	8	9	5	16	<4	<4	5	<4	<4	<4	<4	<4	<4	9	<4	<4	<4	<4	<4	<4	<4	<4	22	<4	8	<4	<4	<4	5	7
	Beryllium	mg/kg	1			<1	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Boron	mg/kg	3			<3	-	-	-	-	-	-	-	<3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Cadmium	mg/kg	0.4			<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	1	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
	Chromium (hexavalent)	mg/kg	1			-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Chromium (III+VI)	mg/kg	1			16	12	9	14	7	9	6	9	8	9	14	3	14	12	23	5	5	8	7	5	9	9	14	16	4	12	12	7	11	27	14
	Cobalt	mg/kg	1			4	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Copper	mg/kg	1			30	21	<1	5	4	8	1	8	2	8	<1	<1	9	3	12	<1	72	16	7	<1	7	3	1	15	<1	17	3	7	4	21	57
	Lead	mg/kg	1			110	89	11	11	13	13	10	13	17	14	8	8	12	23	120	6	230	830	12	4	11	18	15	87	6	130	34	10	52	130	150
	Manganese	mg/kg	1			190	-	-	-	-	-	-	-	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Mercury	mg/kg	0.1			0.2	0.2	<0.1	<0.1	<0.1	3.7	<0.1	6.4	<0.1	5.2	<0.1	<0.1	2.7	<0.1	<0.1	<0.1	0.2	0.2	4.2	<0.1	2.7	<0.1	<0.1	0.2	<0.1	0.2	<0.1	4.1	<0.1	0.2	<0.1
	Molybdenum	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Nickel	mg/kg	1			12	9	<1	1	<1	3	<1	2	<1	3	2	<1	4	3	5	<1	17	4	3	<1	2	1	<1	3	<1	5	<1	3	1	5	17
	Selenium	mg/kg	2			<2	-	-	-	-	-	-	-	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Silver	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Tin	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Zinc	mg/kg	1			130	84	<1	6	2	18	7	14	5	17	50	1	19	89	640	<1	110	260	18	<1	17	14	8	66	2	140	12	17	28	120	4,600
Organic	Terbutylazine	mg/kg	0.5			-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Organochlorine Pesticides	4,4-DDE	mg/kg	0.1			-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	a-BHC	mg/kg	0.1			-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<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	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	b-BHC	mg/kg	0.1			-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	Chlordane (cis)	mg/kg	0.1			-	-	-	-	-	0.2	-	0.1	<0.1	0.1	-	-	0.2	-	-	-	<0.1	-	0.3	-	0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	Chlordane (trans)	mg/kg	0.1			-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	0.1	-	-	-	<0.1	-	0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	d-BHC	mg/kg	0.1			-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	DDD	mg/kg	0.1			-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	DDT	mg/kg	0.1			-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	DDT+DDE+DDD	mg/kg	0.1			-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	Dieldrin	mg/kg	0.1			-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	Endosulfan I	mg/kg	0.1			-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	Endosulfan II	mg/kg	0.1			-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<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	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	Endrin	mg/kg	0.1			-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<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	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	g-BHC (Lindane)	mg/kg	0.1			-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<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	-	-	-	<0.1	-	<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	-	-	-	<0.1	-	<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	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	Toxaphene	mg/kg	2			-	-	-	-	-	-	-	-	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Organophosphorous Pesticides	Azinophos methyl	mg/kg	0.1			-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	Bromophos-ethyl	mg/kg	0.1			-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	Chlorpyrifos	mg/kg	0.1			-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	Chlorpyrifos-methyl	mg/kg	0.1			-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	Diazinon	mg/kg	0.1			-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	Dichlorvos	mg/kg	0.1			-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	Dimethoate	mg/kg	0.1			-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	Ethion	mg/kg	0.1			-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	Fenitrothion	mg/kg	0.1			-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	Malathion	mg/kg	0.1			-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	Ronnel	mg/kg	0.1			-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
Other	3,5-Dichlorobenzoic acid	mg/kg	0.5			-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Actril (Ioxynil)	mg/kg	1			-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PAH/Phenols	PAH (total, NSW Waste 2008)	mg/kg				-	6.27	<1.35	0.83	<1.35	-	0.8	-	<1.35	-	<1.35	<1.35	-	0.71	-	<1.35	-	-	-	<1.35	-	1.03	-	-	-	-	<1.35	-	-	3.6	-
	2,4-dimethylphenol	mg/kg	0.2			-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2,4-dinitrophenol	mg/kg	2			-	-	-	-	-	-	-	-	<4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2-methylphenol	mg/kg	0.2			-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2-nitrophenol	mg/kg	0.2			-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4,6-Dinitro-2-methylphenol	mg/kg	2			-	-	-	-	-	-	-	-	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4-chloro-3-methylphenol	mg/kg	1			-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4-methylphenol	mg/kg				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4-nitrophenol	mg/kg	4			-	-	-	-	-	-	-	-	<4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Acenaphthene	mg/kg	0.1			-	<0.1	<0.1	<0.1	<0.1	-	<0.1	-	<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	-	<0.1	-
	Acenaphthylene	mg/kg	0.1			-	<0.1	<0.1	<0.1	<0.1	-	<0.1	-	<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	-	<0.1	-
	Anthracene	mg/kg	0.1			-	<0.1	<0.1	<0.1	<0.1	-	<0.1	-	<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	-	<0.1	-
	Benz(a)anthracene	mg/kg	0.1			-	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	-	-	0.4	-
	Benzo(a) pyrene	mg/kg	0.05			-	0.67	<0.05	0.08	<0.05	-	0.05	-	<0.05	-	<0.05	<0.05	-	0.06	-	<0.05	-	-	-	<0.05	-	0.08	-	-	-	-	<0.05	-	-	0.4	-
	Benzo(b+k)fluoranthene	mg/kg				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Benzo(g,h,i)perylene	mg/kg	0.1			-	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	-	-	0.3	-
	Chrysene	mg/kg	0.1			-	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	-	-	0.4	-
	Cresol Total	mg/kg				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dibenz(a,h)anthracene	mg/kg	0.1			-	<0.1	<0.1	<0.1	<0.1	-	<0.1	-	<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	-	<0.1	-
	Fluoranthene	mg/kg	0.1			-	1.3	<0.1	0.1	<0.1	-	0.1	-	<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	-	0.2	-	-	-	-	<0.1	-	-	0.6	-
	Fluorene	mg/kg	0.1			-	<0.1	<0.1	<0.1	<0.1	-	<0.1	-	<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	-	<0.1	-
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.1			-	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	-	-	0.3	-
	Naphthalene	mg/kg	0.1			-	<0.1	<0.1	<0.1	<0.1	-	<0.1	-	<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	-	<0.1	-
	PAHs (Sum of total)	mg/kg				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Phenanthrene	mg/kg	0.1			-	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	-	-	0.2	-
	Phenol	mg/kg	0.2			-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Phenolics Total	mg/kg	0.2			-	-	-	-	-	-	-	-	<5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Picloram	mg/kg	0.5			-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Pyrene	mg/kg	0.1			-	1.2	<0.1	0.1	<0.1	-	0.1	-	<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	-	0.2	-	-	-	-	<0.1	-	-	0.7	-
Pesticides	Pesticides (total, NSW Waste 2008)	mg/kg				-	-	-	-	-	<0.6	-	<0.6	<3.6	<0.6	-	-	<0.6	-	-	-	<0.6	-	<0.6	-	<0.6	-	-	<0.6	<0.6	<0.6	-	<0.6	-	-	-
	Bifenthrin	mg/kg	0.5			-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Mirex	mg/kg	0.5			-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Parathion	mg/kg	0.1			-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
Phthalates	Bis(2-ethylhexyl) phthalate	mg/kg	5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Butyl benzyl phthalate	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Diethylphthalate	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dimethyl phthalate	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Di-n-butyl phthalate	mg/kg	5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Di-n-octyl phthalate	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Polychlorinated Biphenyls	Arochlor 1016	mg/kg	0.1			-	-	-	-	-	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	<0.1
	Arochlor 1221	mg/kg	0.1			-	-	-	-	-	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	<0.1
	Arochlor 1232	mg/kg	0.1			-	-	-	-	-	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	<0.1
	Arochlor 1242	mg/kg	0.1			-	-	-	-	-	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	<0.1
	Arochlor 1248	mg/kg	0.1			-	-	-	-	-	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	<0.1
	Arochlor 1254	mg/kg	0.1			-	-	-	-	-	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	<0.1
	Arochlor 1260	mg/kg	0.1			-	-	-	-	-	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	<0.1
	PCBs (Sum of total)	mg/kg	0.1			-	-	-	-	-	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	<0.1
Solvents	Cyclohexane	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TRH	C10-C16	mg/kg	50	1000	1000	-	<50	<50	<50	<50	-	-	-	<50	-	-	-	-	-	<50	-	-	<50	-	-	<50	-	<50	-	-	-	-	-	-	-	<50
	C16-C34	mg/kg	100	3500|5000	2500|3500	-	<100	<100	<100	<100	-	-	-	<100	-	-	-	-	-	<100	-	-	<100	-	-	<100	-	<100	-	-	-	-	-	-	-	<100
	C34-C40	mg/kg	100	10000	10000	-	<100	<100	<100	<100	-	-	-	<100	-	-	-	-	-	<100	-	-	<100	-	-	<100	-	<100	-	-	-	-	-	-	-	<100
	F2-NAPHTHALENE	mg/kg	50			-	<50	<50	<50	<50	-	-	-	<50	-	-	-	-	-	<50	-	-	<50	-	-	<50	-	<50	-	-	-	-	-	-	-	<50
	C6 - C9	mg/kg	25			-	<25	<25	<25	<25	-	-	-	<25	-	-	-	-	-	<25	-	-	<25	-	-	<25	-	<25	-	-	-	-	-	-	-	<25
	C10 - C14	mg/kg	50			-	<50	<50	<50	<50	-	-	-	<50	-	-	-	-	-	<50	-	-	<50	-	-	<50	-	<50	-	-	-	-	-	-	-	<50
	C15 - C28	mg/kg	100			-	<100	<100	<100	<100	-	-	-	<100	-	-	-	-	-	<100	-	-	<100	-	-	<100	-	<100	-	-	-	-	-	-	-	<100
	C29-C36	mg/kg	100			-	<100	<100	<100	<100	-	-	-	<100	-	-	-	-	-	<100	-	-	<100	-	-	<100	-	<100	-	-	-	-	-	-	-	<100
	+C10 - C36 (Sum of total)	mg/kg				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	C10 - C40 (Sum of total)	mg/kg	50			-	<50	<50	<50	<50	-	-	-	<50	-	-	-	-	-	<50	-	-	<50	-	-	<50	-	<50	-	-	-	-	-	-	-	<50
	C6-C10	mg/kg	25	700|800	700|800	-	<25	<25	<25	<25	-	-	-	<25	-	-	-	-	-	<25	-	-	<25	-	-	<25	-	<25	-	-	-	-	-	-	-	<25

Table 18c: Soil Results Compared Against TRH Management Limits

					Sampled Date	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017
					Field Date	BH29 - [TRIP	BH29	BH29	BH29	BH29	BH29	BH29	BH29	BH29	BH30 - [TRIP	BH30	BH30	BH30	BH30	BH30	BH30	BH30	BH30	BH31	BH31	BH32	BH32	BH32	BH32	BH32	BH33	BH33	BH34	BH35	BH36	BH37	BH38	BH39	BH40	BH41	BH42
					Sample Depth	8	0.1	1	2	3	4	5	6	7	8	6	0.1	1	2	3	4	5	6	7	0.1	1	0.1	1	2.2	3	4	0.2	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
				NEPM 2013 Table 1B(7) Management Limits Comm / Ind	NEPM 2013 Table 1B(7) Management Limits in Res / Parkland																																				
Chemical Group	Chemical Name	Units	EQL																																						
	3/4-Methylphenol (m/p-cresol)	mg/kg	0.4			-	-	-	-	-	-	-	-	-	-	-	<0.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.4	-	-	-	-	-	-	-	-
	Benzo(a)pyrene TEQ (LOR)	mg/kg	0.5			-	-	<0.5	-	<0.5	-	-	0.6	-	-	-	-	3.2	-	-	0.7	-	-	-	-	<0.5	-	<0.5	<0.5	-	-	-	3.2	<0.5	-	-	<0.5	<0.5	-	-	-	-
	Benzo(b+j+k)fluoranthene	mg/kg	0.2			-	-	0.2	-	0.3	-	-	0.7	-	-	-	-	3.4	-	-	0.8	-	-	-	-	<0.2	-	<0.2	<0.2	-	-	-	3.1	<0.2	-	-	0.3	0.4	-	-	-	-
	DCPA (Chlorthal) Diacid	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	Plasticiser Compounds	mg/kg				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Scheduled chemicals (NSW Waste 2008)	mg/kg				-	<1.3	-	-	-	-	-	-	-	-	-	<1.3	<2.5	-	-	-	-	-	-	<1.3	-	<1.3	-	-	-	-	<1.3	-	<2.5	-	-	-	-	-	-	-	<1.3
	Total Positive PAHs	mg/kg	0.05			-	-	0.97	-	2.1	-	-	3.9	-	-	-	-	22	-	-	5.1	-	-	-	-	<0.05	-	<0.05	0.51	-	-	-	16	<0.05	-	-	1.7	2.1	-	-	-	-
	Benzo(a)pyrene TEQ calc (Half)	mg/kg	0.5			-	-	<0.5	-	<0.5	-	-	0.6	-	-	-	-	3.2	-	-	0.7	-	-	-	-	<0.5	-	<0.5	<0.5	-	-	-	3.2	<0.5	-	-	<0.5	<0.5	-	-	-	-
	Benzo(a)pyrene TEQ calc (Zero)	mg/kg	0.5			-	-	<0.5	-	<0.5	-	-	0.6	-	-	-	-	3.2	-	-	0.7	-	-	-	-	<0.5	-	<0.5	<0.5	-	-	-	3.2	<0.5	-	-	<0.5	<0.5	-	-	-	-
	Metribuzin	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
Acid Herbicides	2,6-D	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
Triazine Herb	Irgarol	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
BTEX	Benzene	mg/kg	0.2			-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-
	Ethylbenzene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-
	Toluene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	Xylene (m & p)	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<2	-	-	-	-	-	-	-	-
	Xylene (o)	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-
	Xylene Total	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-
	C6-C10 less BTEX (F1)	mg/kg	25			-	-	-	-	-	-	-	-	-	-	-	<25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<25	-	-	-	-	-	-	-	-
Chlorinated Hydrocarbons	1,1,1,2-tetrachloroethane	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,1,1-trichloroethane	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,1,2,2-tetrachloroethane	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,1,2-trichloroethane	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,1-dichloroethane	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,1-dichloroethene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,1-dichloropropene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,2,3-trichloropropane	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,2-dibromo-3-chloropropane	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,2-dichloroethane	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,2-dichloropropane	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,3-dichloropropane	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2,2-dichloropropane	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Bromochloromethane	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Bromodichloromethane	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Bromoform	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Carbon tetrachloride	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Chlorodibromomethane	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Chloroethane	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Chloroform	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Chloromethane	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	cis-1,2-dichloroethene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	cis-1,3-dichloropropene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dibromomethane	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Hexachlorobutadiene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Trichloroethene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Tetrachloroethene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	trans-1,2-dichloroethene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	trans-1,3-dichloropropene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Vinyl chloride	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Explosives	Nitrobenzene	mg/kg	0.1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Halogenated Benzenes	1,2,3-trichlorobenzene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,2,4-trichlorobenzene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,2-dichlorobenzene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,3-dichlorobenzene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,4-dichlorobenzene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2-chlorotoluene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4-chlorotoluene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Bromobenzene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Chlorobenzene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Hexachlorobenzene	mg/kg	0.1			-	<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-	-	-	<0.1
Halogenated Hydrocarbons	1,2-dibromoethane	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Bromomethane	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dichlorodifluoromethane	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Trichlorofluoromethane	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Halogenated Phenols	2,3,4,6-tetrachlorophenol	mg/kg	0.2			-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-
	2,4,5-trichlorophenol	mg/kg	0.2			-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-
	2,4,6-trichlorophenol	mg/kg	0.2			-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-
	2,4-dichlorophenol	mg/kg	0.2			-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-
	2,6-dichlorophenol	mg/kg	0.2			-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-
	2-chlorophenol	mg/kg	0.2			-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-
	Pentachlorophenol	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-
Herbicides	2,4,5-Trichlorophenoxy Acetic Acid	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	2,4,5-TP (Silvex)	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	2,4-dichlorophenoxybutanoic acid	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	Hedonal	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	2,4-Dichlorprop	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	2,4,6-Trichlorophenoxy-acetic acid	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	2-Chlorophenoxyacetic acid	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	4-Chlorophenoxy acetic acid	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	Ametryn	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	Acifluorfen	mg/kg	2			-	-	-	-	-	-	-	-	-	-	-	-	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<2	-	-	-	-	-	-	-	-
	Atrazine	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	Bromoxynil	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	Clopyralid	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	Cyanazine	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	Dicamba	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	Dinoseb	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-
	Hexazinone	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	2-Methyl-4-chlorophenoxyacetic acid	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	2-Methyl-4-Chlorophenoxy Butanoic Acid	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	Mecoprop	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	Prometryn	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	Propazine	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	Simazine	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	Terbutryn	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	Triclopyr	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
Inorganics	Cyanide (Free)	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	Cyanide Total	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Fluoride	mg/kg	50			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MAH	1,2,4-trimethylbenzene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,3,5-trimethylbenzene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Isopropylbenzene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	n-butylbenzene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	n-propylbenzene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	p-isopropyltoluene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	sec-butylbenzene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Styrene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	tert-butylbenzene	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 18c: Soil Results Compared Against TRH Management Limits

					Sampled Date	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017
					Field Date	BH29 - [TRIP	BH29	BH29	BH29	BH29	BH29	BH29	BH29	BH29	BH29	BH30 - [TRIP	BH30	BH30	BH30	BH30	BH30	BH30	BH30	BH30	BH31	BH31	BH32	BH32	BH32	BH32	BH32	BH33	BH33	BH34	BH35	BH36	BH37	BH38	BH39	BH40	BH41	BH42
					Sample Depth	8	0.1	1	2	3	4	5	6	7	8	6	0.1	1	2	3	4	5	6	7	0.1	1	0.1	1	2.2	3	4	0.2	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
				NEPM 2013 Table 1B(7) Management Limits Comm / Ind	NEPM 2013 Table 1B(7) Management Limits in Res / Parkland																																								
Chemical Group	**Chemical Name**	**Units**	**EQL**																																								
Metals	Arsenic	mg/kg	4			<4	<4	6	5	<4	<4	<4	<4	<4	4	<4	<4	5	6	6	<4	<4	<4	<4	32	<4	<4	8	<4	8	<4	<4	<4	<4	6	7	<4	7	<4	<4	<4	<4
	Beryllium	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-
	Boron	mg/kg	3			-	-	-	-	-	-	-	-	-	-	-	-	<3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<3	-	-	-	-	-	-	-	-
	Cadmium	mg/kg	0.4			<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	10	0.5	<0.4	2	0.7	<0.4	<0.4	<0.4
	Chromium (hexavalent)	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-
	Chromium (III+VI)	mg/kg	1			8	8	46	21	4	14	7	12	4	10	17	6	19	17	37	11	6	79	7	10	4	4	10	7	9	14	20	15	4	22	12	8	180	6	7	6	12
	Cobalt	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-
	Copper	mg/kg	1			6	7	6	21	2	17	16	11	5	8	19	6	14	15	14	36	3	58	<1	14	<1	36	15	4	11	<1	<1	21	2	270	37	8	140	30	10	11	9
	Lead	mg/kg	1			3,700	9	66	220	49	790	740	260	540	6,200	490	10	150	53	130	210	130	500	3	55	5	4	18	15	19	6	7	48	9	1,300	79	49	150	76	12	53	11
	Manganese	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-
	Mercury	mg/kg	0.1			<0.1	3.2	0.1	0.2	<0.1	0.1	0.6	0.3	<0.1	<0.1	0.1	4.4	<0.1	0.3	0.3	0.2	<0.1	0.2	<0.1	0.5	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.3	0.1	0.1	1.3	0.2	5.5	4.1	5.2
	Molybdenum	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Nickel	mg/kg	1			3	3	3	5	<1	11	4	7	2	5	11	2	2	6	3	26	4	23	<1	3	<1	34	1	1	2	<1	<1	2	<1	16	3	2	93	6	2	2	3
	Selenium	mg/kg	2			-	-	-	-	-	-	-	-	-	-	-	-	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<2	-	-	-	-	-	-	-	-
	Silver	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Tin	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Zinc	mg/kg	1			79	16	56	110	17	170	230	90	190	94	370	9	140	66	110	94	89	180	4	54	<1	27	9	10	9	<1	<1	63	11	730	230	90	680	210	14	71	15
Organic	Terbutylazine	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
Organochlorine Pesticides	4,4-DDE	mg/kg	0.1			-	<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-	-	-	<0.1
	a-BHC	mg/kg	0.1			-	<0.1	-	-	-	-	-	-	-	-	-	<0.1	<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	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-	-	-	<0.1
	b-BHC	mg/kg	0.1			-	<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-	-	-	<0.1
	Chlordane (cis)	mg/kg	0.1			-	<0.1	-	-	-	-	-	-	-	-	-	0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-	-	-	0.1
	Chlordane (trans)	mg/kg	0.1			-	<0.1	-	-	-	-	-	-	-	-	-	0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-	-	-	<0.1
	d-BHC	mg/kg	0.1			-	<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-	-	-	<0.1
	DDD	mg/kg	0.1			-	<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-	-	-	<0.1
	DDT	mg/kg	0.1			-	<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-	-	-	<0.1
	DDT+DDE+DDD	mg/kg	0.1			-	<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-	-	-	<0.1
	Dieldrin	mg/kg	0.1			-	<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-	-	-	<0.1
	Endosulfan I	mg/kg	0.1			-	<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-	-	-	<0.1
	Endosulfan II	mg/kg	0.1			-	<0.1	-	-	-	-	-	-	-	-	-	<0.1	<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	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-	-	-	<0.1
	Endrin	mg/kg	0.1			-	<0.1	-	-	-	-	-	-	-	-	-	<0.1	<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	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-	-	-	<0.1
	g-BHC (Lindane)	mg/kg	0.1			-	<0.1	-	-	-	-	-	-	-	-	-	<0.1	<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	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-	-	-	<0.1
	Heptachlor epoxide	mg/kg	0.1			-	<0.1	-	-	-	-	-	-	-	-	-	<0.1	<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	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-	-	-	<0.1
	Toxaphene	mg/kg	2			-	-	-	-	-	-	-	-	-	-	-	-	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<2	-	-	-	-	-	-	-	-
Organophosphorous Pesticides	Azinophos methyl	mg/kg	0.1			-	<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-	-	-	<0.1
	Bromophos-ethyl	mg/kg	0.1			-	<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-	-	-	<0.1
	Chlorpyrifos	mg/kg	0.1			-	<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-	-	-	<0.1
	Chlorpyrifos-methyl	mg/kg	0.1			-	<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-	-	-	<0.1
	Diazinon	mg/kg	0.1			-	<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-	-	-	<0.1
	Dichlorvos	mg/kg	0.1			-	<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-	-	-	<0.1
	Dimethoate	mg/kg	0.1			-	<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-	-	-	<0.1
	Ethion	mg/kg	0.1			-	<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-	-	-	<0.1
	Fenitrothion	mg/kg	0.1			-	<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-	-	-	<0.1
	Malathion	mg/kg	0.1			-	<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-	-	-	<0.1
	Ronnel	mg/kg	0.1			-	<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-	-	-	<0.1
Other	3,5-Dichlorobenzoic acid	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	Actril (Ioxynil)	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-
PAH/Phenols	PAH (total, NSW Waste 2008)	mg/kg				-	-	1.2	-	2.05	-	-	3.5	-	-	-	-	18.65	-	-	4.52	-	-	-	-	<1.35	-	<1.35	1.08	-	-	12.8	<1.35	-	-	1.6	2	-	-	-	-
	2,4-dimethylphenol	mg/kg	0.2			-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-
	2,4-dinitrophenol	mg/kg	2			-	-	-	-	-	-	-	-	-	-	-	-	<4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<4	-	-	-	-	-	-	-	-
	2-methylphenol	mg/kg	0.2			-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-
	2-nitrophenol	mg/kg	0.2			-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-
	4,6-Dinitro-2-methylphenol	mg/kg	2			-	-	-	-	-	-	-	-	-	-	-	-	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<2	-	-	-	-	-	-	-	-
	4-chloro-3-methylphenol	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-
	4-methylphenol	mg/kg				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4-nitrophenol	mg/kg	4			-	-	-	-	-	-	-	-	-	-	-	-	<4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<4	-	-	-	-	-	-	-	-
	Acenaphthene	mg/kg	0.1			-	-	<0.1	-	<0.1	-	-	<0.1	-	-	-	-	<0.1	-	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	<0.1	<0.1	-	-	<0.1	<0.1	-	-	-	-
	Acenaphthylene	mg/kg	0.1			-	-	<0.1	-	<0.1	-	-	<0.1	-	-	-	-	0.4	-	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	<0.1	<0.1	-	-	<0.1	<0.1	-	-	-	-
	Anthracene	mg/kg	0.1			-	-	<0.1	-	<0.1	-	-	<0.1	-	-	-	-	0.4	-	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	0.2	<0.1	-	-	<0.1	<0.1	-	-	-	-
	Benz(a)anthracene	mg/kg	0.1			-	-	0.1	-	0.2	-	-	0.4	-	-	-	-	2	-	-	0.5	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	0.8	<0.1	-	-	0.1	0.2	-	-	-	-
	Benzo(a) pyrene	mg/kg	0.05			-	-	0.1	-	0.2	-	-	0.5	-	-	-	-	2.2	-	-	0.52	-	-	-	-	<0.05	-	<0.05	0.08	-	-	2.2	<0.05	-	-	0.2	0.2	-	-	-	-
	Benzo(b+k)fluoranthene	mg/kg				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Benzo(g,h,i)perylene	mg/kg	0.1			-	-	0.1	-	0.2	-	-	0.3	-	-	-	-	1.6	-	-	0.3	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	2.5	<0.1	-	-	0.1	0.2	-	-	-	-
	Chrysene	mg/kg	0.1			-	-	0.1	-	0.2	-	-	0.4	-	-	-	-	2.1	-	-	0.5	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	0.9	<0.1	-	-	0.1	0.2	-	-	-	-
	Cresol Total	mg/kg				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dibenz(a,h)anthracene	mg/kg	0.1			-	-	<0.1	-	<0.1	-	-	<0.1	-	-	-	-	0.3	-	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	0.4	<0.1	-	-	<0.1	<0.1	-	-	-	-
	Fluoranthene	mg/kg	0.1			-	-	0.2	-	0.4	-	-	0.5	-	-	-	-	3.5	-	-	0.9	-	-	-	-	<0.1	-	<0.1	0.2	-	-	1.5	<0.1	-	-	0.3	0.4	-	-	-	-
	Fluorene	mg/kg	0.1			-	-	<0.1	-	<0.1	-	-	<0.1	-	-	-	-	<0.1	-	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	<0.1	<0.1	-	-	<0.1	<0.1	-	-	-	-
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.1			-	-	<0.1	-	0.1	-	-	0.3	-	-	-	-	1.2	-	-	0.3	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	1.8	<0.1	-	-	0.1	0.1	-	-	-	-
	Naphthalene	mg/kg	0.1			-	-	<0.1	-	<0.1	-	-	<0.1	-	-	-	-	<0.1	-	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	<0.1	<0.1	-	-	<0.1	<0.1	-	-	-	-
	PAHs (Sum of total)	mg/kg				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Phenanthrene	mg/kg	0.1			-	-	<0.1	-	<0.1	-	-	0.2	-	-	-	-	0.9	-	-	0.2	-	-	-	-	<0.1	-	<0.1	0.1	-	-	0.8	<0.1	-	-	0.1	0.1	-	-	-	-
	Phenol	mg/kg	0.2			-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-
	Phenolics Total	mg/kg	0.2			-	-	-	-	-	-	-	-	-	-	-	-	<5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<5	-	-	-	-	-	-	-	-
	Picloram	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	Pyrene	mg/kg	0.1			-	-	0.2	-	0.4	-	-	0.6	-	-	-	-	3.9	-	-	1	-	-	-	-	<0.1	-	<0.1	0.2	-	-	1.5	<0.1	-	-	0.3	0.3	-	-	-	-
Pesticides	Pesticides (total, NSW Waste 2008)	mg/kg				-	<0.6	-	-	-	-	-	-	-	-	-	<0.6	<3.6	-	-	-	-	-	-	<0.6	-	<0.6	-	-	-	-	<0.6	-	<3.6	-	-	-	-	-	-	-	<0.6
	Bifenthrin	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	Mirex	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	Parathion	mg/kg	0.1			-	<0.1	-	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-	-	-	<0.1
Phthalates	Bis(2-ethylhexyl) phthalate	mg/kg	5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Butyl benzyl phthalate	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Diethylphthalate	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dimethyl phthalate	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Di-n-butyl phthalate	mg/kg	5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Di-n-octyl phthalate	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Polychlorinated Biphenyls	Arochlor 1016	mg/kg	0.1			-	-	-	-	-	<0.1	-	-	-	-	-	-	<0.1	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-
	Arochlor 1221	mg/kg	0.1			-	-	-	-	-	<0.1	-	-	-	-	-	-	<0.1	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-
	Arochlor 1232	mg/kg	0.1			-	-	-	-	-	<0.1	-	-	-	-	-	-	<0.1	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-
	Arochlor 1242	mg/kg	0.1			-	-	-	-	-	<0.1	-	-	-	-	-	-	<0.1	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-
	Arochlor 1248	mg/kg	0.1			-	-	-	-	-	<0.1	-	-	-	-	-	-	<0.1	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-
	Arochlor 1254	mg/kg	0.1			-	-	-	-	-	<0.1	-	-	-	-	-	-	<0.1	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-
	Arochlor 1260	mg/kg	0.1			-	-	-	-	-	<0.1	-	-	-	-	-	-	<0.1	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-
	PCBs (Sum of total)	mg/kg	0.1			-	-	-	-	-	<0.1	-	-	-	-	-	-	<0.1	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-
Solvents	Cyclohexane	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TRH	C10-C16	mg/kg	50	1000	1000	-	-	-	-	-	-	-	-	-	<50	-	-	<50	-	<50	-	-	-	<50	-	-	-	-	-	-	<50	-	-	<50	-	-	-	-	**68**	-	-	-
	C16-C34	mg/kg	100	3500|5000	2500|3500	-	-	-	-	-	-	-	-	-	<100	-	-	<100	-	<100	-	-	-	<100	-	-	-	-	-	-	<100	-	-	<100	-	-	-	-	**640**	-	-	-
	C34-C40	mg/kg	100	10000	10000	-	-	-	-	-	-	-	-	-	<100	-	-	<100	-	<100	-	-	-	<100	-	-	-	-	-	-	<100	-	-	<100	-	-	-	-	**370**	-	-	-
	F2-NAPHTHALENE	mg/kg	50			-	-	-	-	-	-	-	-	-	<50	-	-	<50	-	<50	-	-	-	<50	-	-	-	-	-	-	<50	-	-	<50	-	-	-	-	-	-	-	-
	C6 - C9	mg/kg	25			-	-	-	-	-	-	-	-	-	<25	-	-	<25	-	<25	-	-	-	<25	-	-	-	-	-	-	<25	-	-	<25	-	-	-	-	<25	-	-	-
	C10 - C14	mg/kg	50			-	-	-	-	-	-	-	-	-	<50	-	-	<50	-	<50	-	-	-	<50	-	-	-	-	-	-	<50	-	-	<50	-	-	-	-	<50	-	-	-
	C15 - C28	mg/kg	100			-	-	-	-	-	-	-	-	-	<100	-	-	<100	-	<100	-	-	-	<100	-	-	-	-	-	-	<100	-	-	<100	-	-	-	-	**360**	-	-	-
	C29-C36	mg/kg	100			-	-	-	-	-	-	-	-	-	<100	-	-	<100	-	<100	-	-	-	<100	-	-	-	-	-	-	<100	-	-	<100	-	-	-	-	**480**	-	-	-
	+C10 - C36 (Sum of total)	mg/kg				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	C10 - C40 (Sum of total)	mg/kg	50			-	-	-	-	-	-	-	-	-	<50	-	-	<50	-	<50	-	-	-	<50	-	-	-	-	-	-	<50	-	-	<50	-	-	-	-	**1,100**	-	-	-
	C6-C10	mg/kg	25	700|800	700|800	-	-	-	-	-	-	-	-	-	<25	-	-	<25	-	<25	-	-	-	<25	-	-	-	-	-	-	<25	-	-	<25	-	-	-	-	<25	-	-	-

					Sampled Date	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018
					Field Date	Dup1	Dup2	Dup3	Dup4	Split 1	Split 2	Split 3	Split 4	BH43_5.0	BH43_6.0	BH43_7.0	BH43_8.0	BH43_9.0	BH44_5.0	BH44_6.0	BH44_7.0	BH44_8.0	BH44_9.0	BH45_7.0	BH45_7.8	BH45_8.0	Dup 5	BH46_0.2	BH46_0.5	BH46_1.0	BH46_2.0	BH46_2.3	BH47_3.6	BH47_5.0	BH47_6.0	BH47_6.5	BH47_7.0	Dup 6	Split 6	Split 5
					Sample Depth	0.1	0.1	0.1	0.1					5	6	7	8	9	5	6	7	8	9	7	7.8	8		0.2	0.5	1	2	2.3	3.6	5	6	6.5	7		6	5
				NEPM 2013 Table 1B(7) Management Limits Comm / Ind	NEPM 2013 Table 1B(7) Management Limits in Res / Parkland																																				
Chemical Group	**Chemical Name**	**Units**	**EQL**																																				
	3/4-Methylphenol (m/p-cresol)	mg/kg	0.4			<0.4	-	-	-	-	-	-	-	<0.4	-	-	-	<0.4	<0.4	-	-	-	<0.4	<0.4	-	<0.4	-	<0.4	-	-	-	<0.4	<0.4	-	-	-	<0.4	-	-	-
	Benzo(a)pyrene TEQ (LOR)	mg/kg	0.5			<0.5	-	-	-	<0.5	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-
	Benzo(b+j+k)fluoranthene	mg/kg	0.2			<0.2	-	-	-	-	-	-	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.4	0.2	<0.2	<0.2	<0.2	<0.2	-	-
	DCPA (Chlorthal) Diacid	mg/kg	0.5			<0.5	-	-	-	<0.5	-	-	-	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	-	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	-	-	-
	Plasticiser Compounds	mg/kg				-	-	-	-	-	-	-	-	<5	-	-	-	<5	<5	-	-	-	<5	<5	-	<5	-	<5	-	-	-	<5	<5	-	-	-	<5	-	-	-
	Scheduled chemicals (NSW Waste 2008)	mg/kg				<2.5	-	-	-	<3	-	-	-	<7.5	-	-	-	<7.5	<7.5	-	-	-	<7.5	<7.5	-	<7.5	-	<7.5	-	-	-	<7.5	<7.5	-	-	-	<7.5	-	-	-
	Total Positive PAHs	mg/kg	0.05			<0.05	-	-	-	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.65	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	2.4	1.1	<0.05	<0.05	0.3	<0.05	-	-
	Benzo(a)pyrene TEQ calc (Half)	mg/kg	0.5			<0.5	-	-	-	<0.5	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-
	Benzo(a)pyrene TEQ calc (Zero)	mg/kg	0.5			<0.5	-	-	-	<0.5	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<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	-	-
	Metribuzin	mg/kg	0.5			<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acid Herbicides	2,6-D	mg/kg	0.5			<0.5	-	-	-	<0.5	-	-	-	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	-	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	-	-	-
Triazine Herb	Irgarol	mg/kg	0.5			<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BTEX	Benzene	mg/kg	0.2			<0.2	-	-	-	<0.2	-	-	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	-
	Ethylbenzene	mg/kg	0.5			<1	-	-	-	<0.5	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	-
	Toluene	mg/kg	0.5			<0.5	-	-	-	<0.5	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-
	Xylene (m & p)	mg/kg	1			<2	-	-	-	<1	-	-	-	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	-	-
	Xylene (o)	mg/kg	0.5			<1	-	-	-	<0.5	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	-
	Xylene Total	mg/kg	1			<1	-	-	-	<1	-	-	-	-	<1	<1	<1	-	-	<1	<1	<1	-	-	<1	-	<1	-	<1	<1	<1	-	-	<1	<1	<1	-	<1	-	-
	C6-C10 less BTEX (F1)	mg/kg	25			<25	-	-	-	<25	-	-	-	-	<25	<25	<25	-	-	<25	<25	<25	-	-	<25	-	<25	-	<25	<25	<25	-	-	<25	<25	<25	-	<25	-	-
Chlorinated Hydrocarbons	1,1,1,2-tetrachloroethane	mg/kg	0.5			-	-	-	-	<0.5	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	-	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-
	1,1,1-trichloroethane	mg/kg	0.5			-	-	-	-	<0.5	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	-	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-
	1,1,2,2-tetrachloroethane	mg/kg	0.5			-	-	-	-	<0.5	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	-	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-
	1,1,2-trichloroethane	mg/kg	0.5			-	-	-	-	<0.5	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	-	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-
	1,1-dichloroethane	mg/kg	0.5			-	-	-	-	<0.5	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	-	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-
	1,1-dichloroethene	mg/kg	0.5			-	-	-	-	<0.5	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	-	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-
	1,1-dichloropropene	mg/kg	0.5			-	-	-	-	<0.5	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	-	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-
	1,2,3-trichloropropane	mg/kg	0.5			-	-	-	-	<0.5	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	-	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-
	1,2-dibromo-3-chloropropane	mg/kg	0.5			-	-	-	-	<0.5	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	-	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-
	1,2-dichloroethane	mg/kg	0.5			-	-	-	-	<0.5	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	-	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-
	1,2-dichloropropane	mg/kg	0.5			-	-	-	-	<0.5	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	-	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-
	1,3-dichloropropane	mg/kg	0.5			-	-	-	-	<0.5	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	-	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-
	2,2-dichloropropane	mg/kg	0.5			-	-	-	-	<0.5	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	-	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-
	Bromochloromethane	mg/kg	0.5			-	-	-	-	<0.5	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	-	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-
	Bromodichloromethane	mg/kg	0.5			-	-	-	-	<0.5	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	-	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-
	Bromoform	mg/kg	0.5			-	-	-	-	<0.5	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	-	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-
	Carbon tetrachloride	mg/kg	0.5			-	-	-	-	<0.5	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	-	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-
	Chlorodibromomethane	mg/kg	0.5			-	-	-	-	<0.5	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	-	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-
	Chloroethane	mg/kg	1			-	-	-	-	<1	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	-	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-
	Chloroform	mg/kg	0.5			-	-	-	-	<0.5	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	-	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-
	Chloromethane	mg/kg	1			-	-	-	-	<1	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	-	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-
	cis-1,2-dichloroethene	mg/kg	0.5			-	-	-	-	<0.5	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	-	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-
	cis-1,3-dichloropropene	mg/kg	0.5			-	-	-	-	<0.5	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	-	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-
	Dibromomethane	mg/kg	0.5			-	-	-	-	<0.5	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	-	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-
	Hexachlorobutadiene	mg/kg	0.5			-	-	-	-	<0.5	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	-	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-
	Trichloroethene	mg/kg	0.5			-	-	-	-	<0.5	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	-	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-
	Tetrachloroethene	mg/kg	0.5			-	-	-	-	<0.5	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	-	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-
	trans-1,2-dichloroethene	mg/kg	0.5			-	-	-	-	<0.5	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	-	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-
	trans-1,3-dichloropropene	mg/kg	0.5			-	-	-	-	<0.5	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	-	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-
	Vinyl chloride	mg/kg	1			-	-	-	-	<1	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	-	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-
Explosives	Nitrobenzene	mg/kg	0.1			-	-	-	-	-	-	-	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	-	-	-
Halogenated Benzenes	1,2,3-trichlorobenzene	mg/kg	0.5			-	-	-	-	<0.5	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	-	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-
	1,2,4-trichlorobenzene	mg/kg	0.5			-	-	-	-	<0.5	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	-	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-
	1,2-dichlorobenzene	mg/kg	0.5			-	-	-	-	<0.5	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	-	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-
	1,3-dichlorobenzene	mg/kg	0.5			-	-	-	-	<0.5	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	-	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-
	1,4-dichlorobenzene	mg/kg	0.5			-	-	-	-	<0.5	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	-	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-
	2-chlorotoluene	mg/kg	0.5			-	-	-	-	<0.5	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	-	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-
	4-chlorotoluene	mg/kg	0.5			-	-	-	-	<0.5	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	-	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-
	Bromobenzene	mg/kg	0.5			-	-	-	-	<0.5	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	-	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-
	Chlorobenzene	mg/kg	0.5			-	-	-	-	<0.5	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	-	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-
	Hexachlorobenzene	mg/kg	0.1			<0.1	-	-	-	<0.1	-	-	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	-	-	-
Halogenated Hydrocarbons	1,2-dibromoethane	mg/kg	0.5			-	-	-	-	<0.5	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	-	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-
	Bromomethane	mg/kg	1			-	-	-	-	<1	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	-	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-
	Dichlorodifluoromethane	mg/kg	1			-	-	-	-	<1	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	-	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-
	Trichlorofluoromethane	mg/kg	1			-	-	-	-	<1	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	-	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-
Halogenated Phenols	2,3,4,6-tetrachlorophenol	mg/kg	0.2			<0.2	-	-	-	<0.2	-	-	-	<0.2	-	-	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	<0.2	-	<0.2	-	-	-	<0.2	<0.2	-	-	-	<0.2	-	-	-
	2,4,5-trichlorophenol	mg/kg	0.2			<0.2	-	-	-	<0.2	-	-	-	<0.2	-	-	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	<0.2	-	<0.2	-	-	-	<0.2	<0.2	-	-	-	<0.2	-	-	-
	2,4,6-trichlorophenol	mg/kg	0.2			<0.2	-	-	-	<0.2	-	-	-	<0.2	-	-	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	<0.2	-	<0.2	-	-	-	<0.2	<0.2	-	-	-	<0.2	-	-	-
	2,4-dichlorophenol	mg/kg	0.2			<0.2	-	-	-	<0.2	-	-	-	<0.2	-	-	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	<0.2	-	<0.2	-	-	-	<0.2	<0.2	-	-	-	<0.2	-	-	-
	2,6-dichlorophenol	mg/kg	0.2			<0.2	-	-	-	<0.2	-	-	-	<0.2	-	-	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	<0.2	-	<0.2	-	-	-	<0.2	<0.2	-	-	-	<0.2	-	-	-
	2-chlorophenol	mg/kg	0.2			<0.2	-	-	-	<0.2	-	-	-	<0.2	-	-	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	<0.2	-	<0.2	-	-	-	<0.2	<0.2	-	-	-	<0.2	-	-	-
	Pentachlorophenol	mg/kg	1			<1	-	-	-	<1	-	-	-	<5	-	-	-	<5	<5	-	-	-	<5	<5	-	<5	-	<5	-	-	-	<5	<5	-	-	-	<5	-	-	-
Herbicides	2,4,5-Trichlorophenoxy Acetic Acid	mg/kg	0.5			<0.5	-	-	-	<0.5	-	-	-	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	-	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	-	-	-
	2,4,5-TP (Silvex)	mg/kg	0.5			<0.5	-	-	-	<0.5	-	-	-	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	-	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	-	-	-
	2,4-dichlorophenoxybutanoic acid	mg/kg	0.5			<0.5	-	-	-	<0.5	-	-	-	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	-	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	-	-	-
	Hedonal	mg/kg	0.5			<0.5	-	-	-	<0.5	-	-	-	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	-	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	-	-	-
	2,4-Dichlorprop	mg/kg	0.5			<0.5	-	-	-	<0.5	-	-	-	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	-	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	-	-	-
	2,4,6-Trichlorophenoxy-acetic acid	mg/kg	0.5			<0.5	-	-	-	<0.5	-	-	-	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	-	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	-	-	-
	2-Chlorophenoxyacetic acid	mg/kg	0.5			<0.5	-	-	-	<0.5	-	-	-	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	-	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	-	-	-
	4-Chlorophenoxy acetic acid	mg/kg	0.5			<0.5	-	-	-	<0.5	-	-	-	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	-	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	-	-	-
	Ametryn	mg/kg	0.5			<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Acifluorfen	mg/kg	2			<2	-	-	-	<2	-	-	-	<2	-	-	-	<2	<2	-	-	-	<2	<2	-	<2	-	<2	-	-	-	<2	<2	-	-	-	<2	-	-	-
	Atrazine	mg/kg	0.5			<0.5	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Bromoxynil	mg/kg	0.5			<0.5	-	-	-	<0.5	-	-	-	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	-	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	-	-	-
	Clopyralid	mg/kg	0.5			<0.5	-	-	-	<0.5	-	-	-	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	-	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	-	-	-
	Cyanazine	mg/kg	0.5			<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dicamba	mg/kg	0.5			<0.5	-	-	-	<0.5	-	-	-	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	-	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	-	-	-
	Dinoseb	mg/kg	1			<1	-	-	-	<1	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	-	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-
	Hexazinone	mg/kg	0.5			<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2-Methyl-4-chlorophenoxyacetic acid	mg/kg	0.5			<0.5	-	-	-	<0.5	-	-	-	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	-	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	-	-	-
	2-Methyl-4-Chlorophenoxy Butanoic Acid	mg/kg	0.5			<0.5	-	-	-	<0.5	-	-	-	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	-	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	-	-	-
	Mecoprop	mg/kg	0.5			<0.5	-	-	-	<0.5	-	-	-	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	-	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	-	-	-
	Prometryn	mg/kg	0.5			<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Propazine	mg/kg	0.5			<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Simazine	mg/kg	0.5			<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Terbutryn	mg/kg	0.5			<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Triclopyr	mg/kg	0.5			<0.5	-	-	-	<0.5	-	-	-	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	-	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	-	-	-
Inorganics	Cyanide (Free)	mg/kg	0.5			<0.5	-	-	-	<0.5	-	-	-	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	-	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	-	-	-
	Cyanide Total	mg/kg	0.5			-	-	-	-	-	-	-	-	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	-	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	-	-	-
	Fluoride	mg/kg	50			-	-	-	-	-	-	-	-	<50	-	-	-	<50	<50	-	-	-	<50	<50	-	<50	-	<50	-	-	-	<50	<50	-	-	-	<50	-	-	-
MAH	1,2,4-trimethylbenzene	mg/kg	0.5			-	-	-	-	<0.5	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	-	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-
	1,3,5-trimethylbenzene	mg/kg	0.5			-	-	-	-	<0.5	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	-	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-
	Isopropylbenzene	mg/kg	0.5			-	-	-	-	<0.5	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	-	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-
	n-butylbenzene	mg/kg	0.5			-	-	-	-	<0.5	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	-	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-
	n-propylbenzene	mg/kg	0.5			-	-	-	-	<0.5	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	-	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-
	p-isopropyltoluene	mg/kg	0.5			-	-	-	-	<0.5	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	-	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-
	sec-butylbenzene	mg/kg	0.5			-	-	-	-	<0.5	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	-	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-
	Styrene	mg/kg	0.5			-	-	-	-	<0.5	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	-	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-
	tert-butylbenzene	mg/kg	0.5			-	-	-	-	<0.5	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	-	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-

Table 18c: Soil Results Compared Against TRH Management Limits

Chemical Group	Chemical Name	Units	EQL	NEPM 2013 Table 1B(7) Management Limits Comm / Ind	NEPM 2013 Table 1B(7) Management Limits in Res / Parkland	Dup1	Dup2	Dup3	Dup4	Split 1	Split 2	Split 3	Split 4	BH43_5.0	BH43_6.0	BH43_7.0	BH43_8.0	BH43_9.0	BH44_5.0	BH44_6.0	BH44_7.0	BH44_8.0	BH44_9.0	BH45_7.0	BH45_7.8	BH45_8.0	Dup 5	BH46_0.2	BH46_0.5	BH46_1.0	BH46_2.0	BH46_2.3	BH47_3.6	BH47_5.0	BH47_6.0	BH47_6.5	BH47_7.0	Dup 6	Spilt 6	Split 5
Sampled Date						6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018
Sample Depth						0.1	0.1	0.1	0.1					5	6	7	8	9	5	6	7	8	9	7	7.8	8		0.2	0.5	1	2	2.3	3.6	5	6	6.5	7		6	5
Metals	Arsenic	mg/kg	4			<4	5	14	<4	4	4	8	<4	<4	<4	<4	<4	<4	<4	8	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	4	<4	4	<4	<4	<4	<4	<4
	Beryllium	mg/kg	1			<1	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Boron	mg/kg	3			<3	-	-	-	<3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Cadmium	mg/kg	0.4			<0.4	6	0.6	<0.4	<0.4	8.2	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
	Chromium (hexavalent)	mg/kg	1			<1	-	-	-	<1	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	-	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-
	Chromium (III+VI)	mg/kg	1			4	18	13	8	5	18	14	7	5	7	7	7	7	4	15	12	16	13	9	9	12	6	5	5	3	9	10	9	9	10	9	6	10	9	6
	Cobalt	mg/kg	1			<1	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Copper	mg/kg	1			2	230	47	8	7	240	30	7	4	6	5	5	4	1	3	4	5	3	4	2	6	5	<1	<1	<1	<1	<1	4	3	6	5	2	<1	<1	5
	Lead	mg/kg	1			7	1,100	91	53	25	1,200	60	49	5	7	6	5	4	4	12	4	3	4	10	16	19	5	6	7	7	6	5	25	14	14	13	8	6	6	4
	Manganese	mg/kg	1			2	-	-	-	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Mercury	mg/kg	0.1			<0.1	0.2	0.1	0.1	<0.1	0.2	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Molybdenum	mg/kg	1			-	-	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1	1	<1	<1	<1	1	<1	1	2	<1
	Nickel	mg/kg	1			<1	11	9	2	<1	13	3	2	2	2	3	2	2	<1	1	2	5	3	3	1	3	2	<1	<1	<1	<1	<1	2	3	1	1	1	<1	<1	2
	Selenium	mg/kg	2			<2	-	-	-	<2	-	-	-	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
	Silver	mg/kg	1			-	-	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Tin	mg/kg	1			-	-	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Zinc	mg/kg	1			10	650	230	82	32	730	170	71	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Organic	Terbutylazine	mg/kg	0.5			<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Organochlorine Pesticides	4,4-DDE	mg/kg	0.1			<0.1	-	-	-	<0.1	-	-	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	-	-	-
	a-BHC	mg/kg	0.1			<0.1	-	-	-	<0.1	-	-	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<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	-	-	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	-	-	-
	b-BHC	mg/kg	0.1			<0.1	-	-	-	<0.1	-	-	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	-	-	-
	Chlordane (cis)	mg/kg	0.1			<0.1	-	-	-	<0.1	-	-	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	-	-	-
	Chlordane (trans)	mg/kg	0.1			<0.1	-	-	-	<0.1	-	-	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	-	-	-
	d-BHC	mg/kg	0.1			<0.1	-	-	-	<0.1	-	-	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	-	-	-
	DDD	mg/kg	0.1			<0.1	-	-	-	<0.1	-	-	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	-	-	-
	DDT	mg/kg	0.1			<0.1	-	-	-	<0.1	-	-	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	-	-	-
	DDT+DDE+DDD	mg/kg	0.1			<0.1	-	-	-	<0.1	-	-	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	-	-	-
	Dieldrin	mg/kg	0.1			<0.1	-	-	-	<0.1	-	-	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	-	-	-
	Endosulfan I	mg/kg	0.1			<0.1	-	-	-	<0.1	-	-	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	-	-	-
	Endosulfan II	mg/kg	0.1			<0.1	-	-	-	<0.1	-	-	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<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	-	-	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	-	-	-
	Endrin	mg/kg	0.1			<0.1	-	-	-	<0.1	-	-	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<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	-	-	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	-	-	-
	g-BHC (Lindane)	mg/kg	0.1			<0.1	-	-	-	<0.1	-	-	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<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	-	-	-	<0.1	<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	-	-	-	<0.1	<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	-	-	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	-	-	-
	Toxaphene	mg/kg	2			<2	-	-	-	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Organophosphorous Pesticides	Azinophos methyl	mg/kg	0.1			<0.1	-	-	-	-	-	-	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	-	-	-
	Bromophos-ethyl	mg/kg	0.1			<0.1	-	-	-	-	-	-	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	-	-	-
	Chlorpyrifos	mg/kg	0.1			<0.1	-	-	-	<0.1	-	-	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	-	-	-
	Chlorpyrifos-methyl	mg/kg	0.1			<0.1	-	-	-	-	-	-	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	-	-	-
	Diazinon	mg/kg	0.1			<0.1	-	-	-	-	-	-	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	-	-	-
	Dichlorvos	mg/kg	0.1			<0.1	-	-	-	-	-	-	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	-	-	-
	Dimethoate	mg/kg	0.1			<0.1	-	-	-	-	-	-	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	-	-	-
	Ethion	mg/kg	0.1			<0.1	-	-	-	-	-	-	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	-	-	-
	Fenitrothion	mg/kg	0.1			<0.1	-	-	-	-	-	-	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	-	-	-
	Malathion	mg/kg	0.1			<0.1	-	-	-	-	-	-	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	-	-	-
	Ronnel	mg/kg	0.1			<0.1	-	-	-	-	-	-	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	-	-	-
Other	3,5-Dichlorobenzoic acid	mg/kg	0.5			<0.5	-	-	-	<0.5	-	-	-	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	-	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	-	-	-
	Actril (Ioxynil)	mg/kg	1			<1	-	-	-	<1	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	-	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-
PAH/Phenols	PAH (total, NSW Waste 2008)	mg/kg				<1.35	-	-	-	0.73	-	-	-	<1.35	<1.35	<1.35	<1.35	<1.35	<1.35	1.09	<1.35	<1.35	<1.35	<1.35	<1.35	<1.35	<1.35	<1.35	<1.35	<1.35	<1.35	<1.35	2.3	1.25	<1.35	<1.35	0.81	<1.35	-	-
	2,4-dimethylphenol	mg/kg	0.2			<0.2	-	-	-	<0.2	-	-	-	<0.2	-	-	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	<0.2	-	<0.2	-	-	-	<0.2	<0.2	-	-	-	<0.2	-	-	-
	2,4-dinitrophenol	mg/kg	2			<4	-	-	-	<2	-	-	-	<4	-	-	-	<4	<4	-	-	-	<4	<4	-	<4	-	<4	-	-	-	<4	<4	-	-	-	<4	-	-	-
	2-methylphenol	mg/kg	0.2			<0.2	-	-	-	<0.2	-	-	-	<0.2	-	-	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	<0.2	-	<0.2	-	-	-	<0.2	<0.2	-	-	-	<0.2	-	-	-
	2-nitrophenol	mg/kg	0.2			<0.2	-	-	-	<0.2	-	-	-	<0.2	-	-	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	<0.2	-	<0.2	-	-	-	<0.2	<0.2	-	-	-	<0.2	-	-	-
	4,6-Dinitro-2-methylphenol	mg/kg	2			<2	-	-	-	-	-	-	-	<10	-	-	-	<10	<10	-	-	-	<10	<10	-	<10	-	<10	-	-	-	<10	<10	-	-	-	<10	-	-	-
	4-chloro-3-methylphenol	mg/kg	1			<1	-	-	-	<2	-	-	-	<5	-	-	-	<5	<5	-	-	-	<5	<5	-	<5	-	<5	-	-	-	<5	<5	-	-	-	<5	-	-	-
	4-methylphenol	mg/kg				-	-	-	-	<0.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4-nitrophenol	mg/kg	4			<4	-	-	-	<4	-	-	-	<4	-	-	-	<4	<4	-	-	-	<4	<4	-	<4	-	<4	-	-	-	<4	<4	-	-	-	<4	-	-	-
	Acenaphthene	mg/kg	0.1			<0.1	-	-	-	<0.1	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	-
	Acenaphthylene	mg/kg	0.1			<0.1	-	-	-	<0.1	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	-
	Anthracene	mg/kg	0.1			<0.1	-	-	-	<0.1	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	-
	Benz(a)anthracene	mg/kg	0.1			<0.1	-	-	-	<0.1	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.1	-	-
	Benzo(a) pyrene	mg/kg	0.05			<0.05	-	-	-	0.08	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.09	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.2	0.1	<0.05	<0.05	0.06	<0.05	-	-
	Benzo(b+k)fluoranthene	mg/kg				-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Benzo(g,h,i)perylene	mg/kg	0.1			<0.1	-	-	-	<0.1	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.1	-	-
	Chrysene	mg/kg	0.1			<0.1	-	-	-	<0.1	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.1	-	-
	Cresol Total	mg/kg				-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dibenz(a,h)anthracene	mg/kg	0.1			<0.1	-	-	-	<0.1	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	-
	Fluoranthene	mg/kg	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	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.4	0.2	<0.1	<0.1	0.1	<0.1	-	-
	Fluorene	mg/kg	0.1			<0.1	-	-	-	<0.1	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	-
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.1			<0.1	-	-	-	<0.1	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	-
	Naphthalene	mg/kg	0.1			<0.1	-	-	-	<0.1	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	-
	PAHs (Sum of total)	mg/kg				-	-	-	-	0.08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Phenanthrene	mg/kg	0.1			<0.1	-	-	-	<0.1	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<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	<0.1	-	-
	Phenol	mg/kg	0.2			<0.2	-	-	-	<0.2	-	-	-	<0.2	-	-	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	<0.2	-	<0.2	-	-	-	<0.2	<0.2	-	-	-	<0.2	-	-	-
	Phenolics Total	mg/kg	0.2			<5	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Picloram	mg/kg	0.5			<0.5	-	-	-	<0.5	-	-	-	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	-	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	-	-	-
	Pyrene	mg/kg	0.1			<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	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.5	0.3	<0.1	<0.1	0.1	<0.1	-	-
Pesticides	Pesticides (total, NSW Waste 2008)	mg/kg				<3.6	-	-	-	<3	-	-	-	<5.6	-	-	-	<5.6	<5.6	-	-	-	<5.6	<5.6	-	<5.6	-	<5.6	-	-	-	<5.6	<5.6	-	-	-	<5.6	-	-	-
	Bifenthrin	mg/kg	0.5			<0.5	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Mirex	mg/kg	0.5			<0.5	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Parathion	mg/kg	0.1			<0.1	-	-	-	-	-	-	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	-	-	-
Phthalates	Bis(2-ethylhexyl) phthalate	mg/kg	5			-	-	-	-	-	-	-	-	<5	-	-	-	<5	<5	-	-	-	<5	<5	-	<5	-	<5	-	-	-	<5	<5	-	-	-	<5	-	-	-
	Butyl benzyl phthalate	mg/kg	1			-	-	-	-	-	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	-	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-
	Diethylphthalate	mg/kg	1			-	-	-	-	-	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	-	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-
	Dimethyl phthalate	mg/kg	1			-	-	-	-	-	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	-	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-
	Di-n-butyl phthalate	mg/kg	5			-	-	-	-	-	-	-	-	<5	-	-	-	<5	<5	-	-	-	<5	<5	-	<5	-	<5	-	-	-	<5	<5	-	-	-	<5	-	-	-
	Di-n-octyl phthalate	mg/kg	1			-	-	-	-	-	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	-	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-
Polychlorinated Biphenyls	Arochlor 1016	mg/kg	0.1			<0.1	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Arochlor 1221	mg/kg	0.1			<0.1	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Arochlor 1232	mg/kg	0.1			<0.1	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Arochlor 1242	mg/kg	0.1			<0.1	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Arochlor 1248	mg/kg	0.1			<0.1	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Arochlor 1254	mg/kg	0.1			<0.1	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Arochlor 1260	mg/kg	0.1			<0.1	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	PCBs (Sum of total)	mg/kg	0.1			<0.1	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Solvents	Cyclohexane	mg/kg	1			-	-	-	-	<1	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	-	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-
TRH	C10-C16	mg/kg	50	1000	1000	<50	-	-	-	<50	-	-	-	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	-	-
	C16-C34	mg/kg	100	3500|5000	2500|3500	<100	-	-	-	<100	-	-	-	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	-	-
	C34-C40	mg/kg	100	10000	10000	<100	-	-	-	<100	-	-	-	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	-	-
	F2-NAPHTHALENE	mg/kg	50			<50	-	-	-	<50	-	-	-	-	<50	<50	<50	-	-	<50	<50	<50	-	-	<50	-	<50	-	<50	<50	<50	-	-	<50	<50	<50	-	<50	-	-
	C6 - C9	mg/kg	25			<25	-	-	-	<25	-	-	-	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	-	-
	C10 - C14	mg/kg	50			<50	-	-	-	<50	-	-	-	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	-	-
	C15 - C28	mg/kg	100			<100	-	-	-	<100	-	-	-	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	-	-
	C29-C36	mg/kg	100			<100	-	-	-	<100	-	-	-	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	-	-
	+C10 - C36 (Sum of total)	mg/kg				-	-	-	-	<50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	C10 - C40 (Sum of total)	mg/kg	50			<50	-	-	-	<50	-	-	-	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	-	-
	C6-C10	mg/kg	25	700|800	700|800	<25	-	-	-	<25	-	-	-	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	-	-

Table 19: Soil Results Compared Against Adopted EILs

					Sampled Date	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017
					Sample Name	BH16	BH16	BH17	BH17	BH18	BH18	BH19	BH19	BH20	BH20	BH20	BH21	BH21	BH21	BH21	BH22	BH22	BH23	BH23	BH24	BH24	BH24	BH25	BH26
					SampleDepth	0.1	0.8	0.1	0.7	0.1	0.6	0.1	0.5	0.1	1	1.9	0.1	1.2	3	4	0.1	1	0.1	1	0.1	1.5	2.8	0.2	0.2
Chemical Group	**Chemical Name**	**Units**	**EQL**	Adopted Ecological Investigation Levels																									
	3/4-Methylphenol (m/p-cresol)	mg/kg	0.4		-	-	-	-	-	-	-	<0.4	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-
	Benzo(a)pyrene TEQ (LOR)	mg/kg	0.5		0.9	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	-	<0.5	<0.5	-	<0.5	-	<0.5	-	-	-	<0.5	-	<0.5	-	-	-
	Benzo(b+j+k)fluoranthene	mg/kg	0.2		1	<0.2	<0.2	<0.2	-	<0.2	-	<0.2	-	<0.2	<0.2	-	<0.2	-	<0.2	-	-	-	<0.2	-	<0.2	-	-	-
	DCPA (Chlorthal) Diacid	mg/kg	0.5		-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Plasticiser Compounds	mg/kg	5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Scheduled chemicals (NSW Waste 2008)	mg/kg	1.3		-	-	-	-	<1.3	-	<1.3	<2.5	<1.3	-	-	-	<1.3	-	-	-	<1.3	-	<1.3	-	<1.3	-	-	<1.3	<1.3
	Total Positive PAHs	mg/kg	0.05		7.1	<0.05	0.4	<0.05	-	0.3	-	<0.05	-	<0.05	<0.05	-	0.06	-	<0.05	-	-	-	<0.05	-	0.4	-	-	-
	Benzo(a)pyrene TEQ calc (Half)	mg/kg	0.5		0.9	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	-	<0.5	<0.5	-	<0.5	-	<0.5	-	-	-	<0.5	-	<0.5	-	-	-
	Benzo(a)pyrene TEQ calc (Zero)	mg/kg	0.5		0.9	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	-	<0.5	<0.5	-	<0.5	-	<0.5	-	-	-	<0.5	-	<0.5	-	-	-
	Metribuzin	mg/kg	0.5		-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acid Herbicides	2,6-D	mg/kg	0.5		-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Triazine Herb	Irgarol	mg/kg	0.5		-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Benzene	mg/kg	0.2		-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Ethylbenzene	mg/kg	0.5		-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Toluene	mg/kg	0.5		-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BTEX	Xylene (m & p)	mg/kg	1		-	-	-	-	-	-	-	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Xylene (o)	mg/kg	0.5		-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Xylene Total	mg/kg	1		-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	C6-C10 less BTEX (F1)	mg/kg	25		-	-	-	-	-	-	-	<25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,1,1,2-tetrachloroethane	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,1,1-trichloroethane	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,1,2,2-tetrachloroethane	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,1,2-trichloroethane	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,1-dichloroethane	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,1-dichloroethene	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,1-dichloropropene	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,2,3-trichloropropane	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,2-dibromo-3-chloropropane	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,2-dichloroethane	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,2-dichloropropane	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,3-dichloropropane	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2,2-dichloropropane	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Bromochloromethane	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorinated Hydrocarbons	Bromodichloromethane	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Bromoform	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Carbon tetrachloride	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Chlorodibromomethane	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Chloroethane	mg/kg	1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Chloroform	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Chloromethane	mg/kg	1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	cis-1,2-dichloroethene	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	cis-1,3-dichloropropene	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dibromomethane	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Hexachlorobutadiene	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Trichloroethene	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Tetrachloroethene	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	trans-1,2-dichloroethene	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	trans-1,3-dichloropropene	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Vinyl chloride	mg/kg	1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Explosives	Nitrobenzene	mg/kg	0.1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,2,3-trichlorobenzene	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,2,4-trichlorobenzene	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,2-dichlorobenzene	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,3-dichlorobenzene	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Halogenated Benzenes	1,4-dichlorobenzene	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2-chlorotoluene	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4-chlorotoluene	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Bromobenzene	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Chlorobenzene	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Hexachlorobenzene	mg/kg	0.1		-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1
	1,2-dibromoethane	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Halogenated Hydrocarbons	Bromomethane	mg/kg	1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dichlorodifluoromethane	mg/kg	1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Trichlorofluoromethane	mg/kg	1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2,3,4,6-tetrachlorophenol	mg/kg	0.2		-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2,4,5-trichlorophenol	mg/kg	0.2		-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2,4,6-trichlorophenol	mg/kg	0.2		-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Halogenated Phenols	2,4-dichlorophenol	mg/kg	0.2		-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2,6-dichlorophenol	mg/kg	0.2		-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2-chlorophenol	mg/kg	0.2		-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Pentachlorophenol	mg/kg	1		-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2,4,5-Trichlorophenoxy Acetic Acid	mg/kg	0.5		-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2,4,5-TP (Silvex)	mg/kg	0.5		-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2,4-dichlorophenoxybutanoic acid	mg/kg	0.5		-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Hedonal	mg/kg	0.5		-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2,4-Dichlorprop	mg/kg	0.5		-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2,4,6-Trichlorophenoxy-acetic acid	mg/kg	0.5		-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2-Chlorophenoxyacetic acid	mg/kg	0.5		-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4-Chlorophenoxy acetic acid	mg/kg	0.5		-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Ametryn	mg/kg	0.5		-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Acifluorfen	mg/kg	2		-	-	-	-	-	-	-	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Herbicides	Atrazine	mg/kg	0.5		-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Bromoxynil	mg/kg	0.5		-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Clopyralid	mg/kg	0.5		-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Cyanazine	mg/kg	0.5		-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dicamba	mg/kg	0.5		-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dinoseb	mg/kg	1		-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Hexazinone	mg/kg	0.5		-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2-Methyl-4-chlorophenoxyacetic acid	mg/kg	0.5		-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2-Methyl-4-Chlorophenoxy Butanoic Acid	mg/kg	0.5		-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Mecoprop	mg/kg	0.5		-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Prometryn	mg/kg	0.5		-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Propazine	mg/kg	0.5		-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Simazine	mg/kg	0.5		-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Terbutryn	mg/kg	0.5		-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Triclopyr	mg/kg	0.5		-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Cyanide (Free)	mg/kg	0.5		-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Inorganics	Cyanide Total	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Fluoride	mg/kg	50		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,2,4-trimethylbenzene	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,3,5-trimethylbenzene	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Isopropylbenzene	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MAH	n-butylbenzene	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	n-propylbenzene	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	p-isopropyltoluene	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	sec-butylbenzene	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Styrene	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	tert-butylbenzene	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Arsenic	mg/kg	4	100	8	9	5	16	<4	<4	5	<4	<4	<4	<4	<4	<4	9	<4	<4	<4	<4	<4	<4	<4	<4	22	<4
	Beryllium	mg/kg	1		-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Boron	mg/kg	3		-	-	-	-	-	-	-	<3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Cadmium	mg/kg	0.4		<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	1	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
	Chromium (hexavalent)	mg/kg	1		-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Chromium (III+VI)	mg/kg	1	200	12	9	14	7	9	6	9	8	9	14	3	14	12	23	5	5	8	7	5	9	9	14	16	4
	Cobalt	mg/kg	1		-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Copper	mg/kg	1	220	21	<1	5	4	8	1	8	2	8	<1	<1	9	3	12	<1	72	16	7	<1	7	3	1	15	<1
Metals	Lead	mg/kg	1	1,100	89	11	11	13	13	10	13	17	14	8	8	12	23	120	6	230	830	12	4	11	18	15	87	6
	Manganese	mg/kg	1		-	-	-	-	-	-	-	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Mercury	mg/kg	0.1		0.2	<0.1	<0.1	<0.1	3.7	<0.1	6.4	<0.1	5.2	<0.1	<0.1	2.7	<0.1	<0.1	<0.1	0.2	0.2	4.2	<0.1	2.7	<0.1	<0.1	0.2	<0.1
	Molybdenum	mg/kg	1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Nickel	mg/kg	1	170	9	<1	1	<1	3	<1	2	<1	3	2	<1	4	3	5	<1	17	4	3	<1	2	1	<1	3	<1
	Selenium	mg/kg	2		-	-	-	-	-	-	-	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Silver	mg/kg	1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Tin	mg/kg	1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Zinc	mg/kg	1	520	84	<1	6	2	18	7	14	5	17	50	1	19	89	640	<1	110	260	18	<1	17	14	8	66	2
Organic	Terbutylazine	mg/kg	0.5		-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 19: Soil Results Compared Against Adopted EILs

				Sampled Date	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017
				Sample Name	BH16	BH16	BH17	BH17	BH18	BH18	BH19	BH19	BH20	BH20	BH20	BH21	BH21	BH21	BH21	BH22	BH22	BH23	BH23	BH24	BH24	BH24	BH25	BH26
				SampleDepth	0.1	0.8	0.1	0.7	0.1	0.6	0.1	0.5	0.1	1	1.9	0.1	1.2	3	4	0.1	1	0.1	1	0.1	1.5	2.8	0.2	0.2
Chemical Group	**Chemical Name**	**Units**	**EQL**	Adopted Ecological Investigation Levels																								
Organochlorine Pesticides	4,4-DDE	mg/kg	0.1		-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	0.1	-	-	<0.1	<0.1
	a-BHC	mg/kg	0.1		-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<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	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1
	b-BHC	mg/kg	0.1		-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1
	Chlordane (cis)	mg/kg	0.1		-	-	-	-	0.2	-	0.1	<0.1	0.1	-	-	0.2	-	-	-	<0.1	-	0.3	-	0.1	-	-	<0.1	<0.1
	Chlordane (trans)	mg/kg	0.1		-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	0.1	-	-	-	<0.1	-	0.1	-	<0.1	-	-	<0.1	<0.1
	d-BHC	mg/kg	0.1		-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1
	DDD	mg/kg	0.1		-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1
	DDT	mg/kg	0.1	180	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1
	DDT+DDE+DDD	mg/kg	0.1		-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	0.1	-	-	<0.1	<0.1
	Dieldrin	mg/kg	0.1		-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1
	Endosulfan I	mg/kg	0.1		-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1
	Endosulfan II	mg/kg	0.1		-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<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	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1
	Endrin	mg/kg	0.1		-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<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	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1
	g-BHC (Lindane)	mg/kg	0.1		-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<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	-	-	-	<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	-	-	-	<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	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1
	Toxaphene	mg/kg	2		-	-	-	-	-	-	-	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Organophosphorous Pesticides	Azinophos methyl	mg/kg	0.1		-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1
	Bromophos-ethyl	mg/kg	0.1		-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1
	Chlorpyrifos	mg/kg	0.1		-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1
	Chlorpyrifos-methyl	mg/kg	0.1		-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1
	Diazinon	mg/kg	0.1		-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1
	Dichlorvos	mg/kg	0.1		-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1
	Dimethoate	mg/kg	0.1		-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1
	Ethion	mg/kg	0.1		-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1
	Fenitrothion	mg/kg	0.1		-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1
	Malathion	mg/kg	0.1		-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1
	Ronnel	mg/kg	0.1		-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1
Other	3,5-Dichlorobenzoic acid	mg/kg	0.5		-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Actril (Ioxynil)	mg/kg	1		-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PAH/Phenols	PAH (total, NSW Waste 2008)	mg/kg			6.27	<1.35	0.83	<1.35	-	0.8	-	<1.35	-	<1.35	<1.35	-	0.71	-	<1.35	-	-	-	<1.35	-	1.03	-	-	-
	2,4-dimethylphenol	mg/kg	0.2		-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2,4-dinitrophenol	mg/kg	2		-	-	-	-	-	-	-	<4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2-methylphenol	mg/kg	0.2		-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2-nitrophenol	mg/kg	0.2		-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4,6-Dinitro-2-methylphenol	mg/kg	2		-	-	-	-	-	-	-	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4-chloro-3-methylphenol	mg/kg	1		-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4-methylphenol	mg/kg			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4-nitrophenol	mg/kg	4		-	-	-	-	-	-	-	<4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Acenaphthene	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	-	<0.1	-	<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	-	<0.1	-	-	-
	Acenaphthylene	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	-	<0.1	-	<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	-	<0.1	-	-	-
	Anthracene	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	-	<0.1	-	<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	-	<0.1	-	-	-
	Benz(a)anthracene	mg/kg	0.1		0.6	<0.1	<0.1	<0.1	-	<0.1	-	<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	-	<0.1	-	-	-
	Benzo(a) pyrene	mg/kg	0.05		0.67	<0.05	0.08	<0.05	-	0.05	-	<0.05	-	<0.05	<0.05	-	0.06	-	<0.05	-	-	-	<0.05	-	0.08	-	-	-
	Benzo(b+k)fluoranthene	mg/kg			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Benzo(g,h,i)perylene	mg/kg	0.1		0.6	<0.1	<0.1	<0.1	-	<0.1	-	<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	-	<0.1	-	-	-
	Chrysene	mg/kg	0.1		0.6	<0.1	<0.1	<0.1	-	<0.1	-	<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	-	<0.1	-	-	-
	Cresol Total	mg/kg			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dibenz(a,h)anthracene	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	-	<0.1	-	<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	-	<0.1	-	-	-
	Fluoranthene	mg/kg	0.1		1.3	<0.1	0.1	<0.1	-	0.1	-	<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	-	0.2	-	-	-
	Fluorene	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	-	<0.1	-	<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	-	<0.1	-	-	-
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.1		0.5	<0.1	<0.1	<0.1	-	<0.1	-	<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	-	<0.1	-	-	-
	Naphthalene	mg/kg	0.1	170	<0.1	<0.1	<0.1	<0.1	-	<0.1	-	<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	-	<0.1	-	-	-
	PAHs (Sum of total)	mg/kg			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Phenanthrene	mg/kg	0.1		0.5	<0.1	<0.1	<0.1	-	<0.1	-	<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	-	<0.1	-	-	-
	Phenol	mg/kg	0.2		-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Phenolics Total	mg/kg	0.2		-	-	-	-	-	-	-	<5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Picloram	mg/kg	0.5		-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Pyrene	mg/kg	0.1		1.2	<0.1	0.1	<0.1	-	0.1	-	<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	-	0.2	-	-	-
Pesticides	Pesticides (total, NSW Waste 2008)	mg/kg			-	-	-	-	<0.6	-	<0.6	<3.6	<0.6	-	-	<0.6	-	-	-	<0.6	-	<0.6	-	<0.6	-	-	<0.6	<0.6
	Bifenthrin	mg/kg	0.5		-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Mirex	mg/kg	0.5		-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Parathion	mg/kg	0.1		-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1
Phthalates	Bis(2-ethylhexyl) phthalate	mg/kg	5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Butyl benzyl phthalate	mg/kg	1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Diethylphthalate	mg/kg	1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dimethyl phthalate	mg/kg	1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Di-n-butyl phthalate	mg/kg	5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Di-n-octyl phthalate	mg/kg	1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Polychlorinated Biphenyls	Arochlor 1016	mg/kg	0.1		-	-	-	-	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	-	-	-	-	-	-	<0.1	-	-
	Arochlor 1221	mg/kg	0.1		-	-	-	-	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	-	-	-	-	-	-	<0.1	-	-
	Arochlor 1232	mg/kg	0.1		-	-	-	-	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	-	-	-	-	-	-	<0.1	-	-
	Arochlor 1242	mg/kg	0.1		-	-	-	-	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	-	-	-	-	-	-	<0.1	-	-
	Arochlor 1248	mg/kg	0.1		-	-	-	-	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	-	-	-	-	-	-	<0.1	-	-
	Arochlor 1254	mg/kg	0.1		-	-	-	-	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	-	-	-	-	-	-	<0.1	-	-
	Arochlor 1260	mg/kg	0.1		-	-	-	-	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	-	-	-	-	-	-	<0.1	-	-
	PCBs (Sum of total)	mg/kg	0.1		-	-	-	-	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	-	-	-	-	-	-	<0.1	-	-
Solvents	Cyclohexane	mg/kg	1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TRH	C10-C16	mg/kg	50		<50	<50	<50	<50	-	-	-	<50	-	-	-	-	-	<50	-	-	<50	-	-	<50	-	<50	-	-
	C16-C34	mg/kg	100		<100	<100	<100	<100	-	-	-	<100	-	-	-	-	-	<100	-	-	<100	-	-	<100	-	<100	-	-
	C34-C40	mg/kg	100		<100	<100	<100	<100	-	-	-	<100	-	-	-	-	-	<100	-	-	<100	-	-	<100	-	<100	-	-
	F2-NAPHTHALENE	mg/kg	50		<50	<50	<50	<50	-	-	-	<50	-	-	-	-	-	<50	-	-	<50	-	-	<50	-	<50	-	-
	C6 - C9	mg/kg	25		<25	<25	<25	<25	-	-	-	<25	-	-	-	-	-	<25	-	-	<25	-	-	<25	-	<25	-	-
	C10 - C14	mg/kg	50		<50	<50	<50	<50	-	-	-	<50	-	-	-	-	-	<50	-	-	<50	-	-	<50	-	<50	-	-
	C15 - C28	mg/kg	100		<100	<100	<100	<100	-	-	-	<100	-	-	-	-	-	<100	-	-	<100	-	-	<100	-	<100	-	-
	C29-C36	mg/kg	100		<100	<100	<100	<100	-	-	-	<100	-	-	-	-	-	<100	-	-	<100	-	-	<100	-	<100	-	-
	+C10 - C36 (Sum of total)	mg/kg			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	C10 - C40 (Sum of total)	mg/kg	50		<50	<50	<50	<50	-	-	-	<50	-	-	-	-	-	<50	-	-	<50	-	-	<50	-	<50	-	-
	C6-C10	mg/kg	25		<25	<25	<25	<25	-	-	-	<25	-	-	-	-	-	<25	-	-	<25	-	-	<25	-	<25	-	-

Table 19: Soil Results Compared Against Adopted EILs

					Sampled Date	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017
					Sample Name	BH27	BH27	BH28	BH28	BH28	BH28	BH29	BH29	BH29	BH29	BH29	BH29	BH29	BH29	BH29	BH30	BH30	BH30	BH30	BH30	BH30	BH30	BH30	BH31	BH31	BH32	BH32	BH32	BH32	BH32	BH33	BH33	BH34
					SampleDepth	0.1	1	0.1	2	3	4	0.1	1	2	3	4	5	6	7	8	0.1	1	2	3	4	5	6	7	0.1	1	0.1	1	2.2	3	4	0.2	1	0.1
Chemical Group	Chemical Name	Units	EQL	Adopted Ecological Investigation Levels																																		
	3/4-Methylphenol (m/p-cresol)	mg/kg	0.4		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.4
	Benzo(a)pyrene TEQ (LOR)	mg/kg	0.5		-	<0.5	-	-	0.6	-	-	<0.5	-	<0.5	-	-	0.6	-	-	-	3.2	-	-	0.7	-	-	-	-	<0.5	-	<0.5	<0.5	<0.5	-	-	3.2	<0.5
	Benzo(b+j+k)fluoranthene	mg/kg	0.2		-	<0.2	-	-	0.7	-	-	0.2	-	0.3	-	-	0.7	-	-	-	3.4	-	-	0.8	-	-	-	-	<0.2	-	<0.2	<0.2	-	-	-	3.1	<0.2
	DCPA (Chlorthal) Diacid	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5
	Plasticiser Compounds	mg/kg	5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Scheduled chemicals (NSW Waste 2008)	mg/kg	1.3		<1.3	-	<1.3	-	-	-	<1.3	-	-	-	-	-	-	-	-	<1.3	<2.5	-	-	-	-	-	-	<1.3	-	<1.3	-	-	-	-	<1.3	-	<2.5
	Total Positive PAHs	mg/kg	0.05		-	<0.05	-	-	4.2	-	-	0.97	-	2.1	-	-	3.9	-	-	-	22	-	-	5.1	-	-	-	-	<0.05	-	<0.05	0.51	-	-	-	16	<0.05
	Benzo(a)pyrene TEQ calc (Half)	mg/kg	0.5		-	<0.5	-	-	0.6	-	-	<0.5	-	<0.5	-	-	0.6	-	-	-	3.2	-	-	0.7	-	-	-	-	<0.5	-	<0.5	<0.5	-	-	-	3.2	<0.5
	Benzo(a)pyrene TEQ calc (Zero)	mg/kg	0.5		-	<0.5	-	-	0.6	-	-	<0.5	-	<0.5	-	-	0.6	-	-	-	3.2	-	-	0.7	-	-	-	-	<0.5	-	<0.5	<0.5	-	-	-	3.2	<0.5
	Metribuzin	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5
Acid Herbicides	2,6-D	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5
Triazine Herb	Irgarol	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5
	Benzene	mg/kg	0.2		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2
	Ethylbenzene	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1
	Toluene	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5
BTEX	Xylene (m & p)	mg/kg	1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<2
	Xylene (o)	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1
	Xylene Total	mg/kg	1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1
	C6-C10 less BTEX (F1)	mg/kg	25		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<25
	1,1,1,2-tetrachloroethane	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,1,1-trichloroethane	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,1,2,2-tetrachloroethane	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,1,2-trichloroethane	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,1-dichloroethane	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,1-dichloroethene	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,1-dichloropropene	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,2,3-trichloropropane	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,2-dibromo-3-chloropropane	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,2-dichloroethane	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,2-dichloropropane	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,3-dichloropropane	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2,2-dichloropropane	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Bromochloromethane	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorinated Hydrocarbons	Bromodichloromethane	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Bromoform	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Carbon tetrachloride	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Chlorodibromomethane	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Chloroethane	mg/kg	1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Chloroform	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Chloromethane	mg/kg	1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	cis-1,2-dichloroethene	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	cis-1,3-dichloropropene	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dibromomethane	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Hexachlorobutadiene	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Trichloroethene	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Tetrachloroethene	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	trans-1,2-dichloroethene	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	trans-1,3-dichloropropene	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Vinyl chloride	mg/kg	1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Explosives	Nitrobenzene	mg/kg	0.1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,2,3-trichlorobenzene	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,2,4-trichlorobenzene	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,2-dichlorobenzene	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,3-dichlorobenzene	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Halogenated Benzenes	1,4-dichlorobenzene	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2-chlorotoluene	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4-chlorotoluene	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Bromobenzene	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Chlorobenzene	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Hexachlorobenzene	mg/kg	0.1		<0.1	-	<0.1	-	-	-	<0.1	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1
	1,2-dibromoethane	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Halogenated Hydrocarbons	Bromomethane	mg/kg	1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dichlorodifluoromethane	mg/kg	1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Trichlorofluoromethane	mg/kg	1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2,3,4,6-tetrachlorophenol	mg/kg	0.2		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2
	2,4,5-trichlorophenol	mg/kg	0.2		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2
	2,4,6-trichlorophenol	mg/kg	0.2		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2
Halogenated Phenols	2,4-dichlorophenol	mg/kg	0.2		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2
	2,6-dichlorophenol	mg/kg	0.2		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2
	2-chlorophenol	mg/kg	0.2		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2
	Pentachlorophenol	mg/kg	1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1
	2,4,5-Trichlorophenoxy Acetic Acid	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5
	2,4,5-TP (Silvex)	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5
	2,4-dichlorophenoxybutanoic acid	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5
	Hedonal	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5
	2,4-Dichlorprop	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5
	2,4,6-Trichlorophenoxy-acetic acid	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5
	2-Chlorophenoxyacetic acid	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5
	4-Chlorophenoxy acetic acid	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5
	Ametryn	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5
	Acifluorfen	mg/kg	2		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<2
	Atrazine	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5
	Bromoxynil	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5
Herbicides	Clopyralid	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5
	Cyanazine	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5
	Dicamba	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5
	Dinoseb	mg/kg	1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1
	Hexazinone	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5
	2-Methyl-4-chlorophenoxyacetic acid	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5
	2-Methyl-4-Chlorophenoxy Butanoic Acid	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5
	Mecoprop	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5
	Prometryn	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5
	Propazine	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5
	Simazine	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5
	Terbutryn	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5
	Triclopyr	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5
	Cyanide (Free)	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5
Inorganics	Cyanide Total	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Fluoride	mg/kg	50		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,2,4-trimethylbenzene	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,3,5-trimethylbenzene	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Isopropylbenzene	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	n-butylbenzene	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MAH	n-propylbenzene	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	p-isopropyltoluene	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	sec-butylbenzene	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Styrene	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	tert-butylbenzene	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Arsenic	mg/kg	4	100	8	<4	<4	<4	5	7	<4	6	5	<4	<4	<4	<4	<4	4	<4	5	6	6	<4	<4	<4	<4	32	<4	<4	8	<4	8	<4	<4	<4	<4
	Beryllium	mg/kg	1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1
	Boron	mg/kg	3		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<3
	Cadmium	mg/kg	0.4		<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
	Chromium (hexavalent)	mg/kg	1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1
	Chromium (III+VI)	mg/kg	1	200	12	12	7	11	27	14	8	46	21	4	14	7	12	4	10	6	19	17	37	11	6	79	7	10	4	4	10	7	9	14	20	15	4
	Cobalt	mg/kg	1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1
	Copper	mg/kg	1	220	17	3	7	4	21	57	7	6	21	2	17	16	11	5	8	6	14	15	14	36	3	58	<1	14	<1	36	15	4	11	<1	<1	21	2
Metals	Lead	mg/kg	1	1,100	130	34	10	52	130	150	9	66	220	49	790	740	260	540	6,200	10	150	53	130	210	130	500	3	55	5	4	18	15	19	6	7	48	9
	Manganese	mg/kg	1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
	Mercury	mg/kg	0.1		0.2	<0.1	4.1	<0.1	0.2	<0.1	3.2	0.1	0.2	<0.1	0.1	0.6	0.3	<0.1	<0.1	4.4	<0.1	0.3	0.3	0.2	<0.1	0.2	<0.1	0.5	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Molybdenum	mg/kg	1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Nickel	mg/kg	1	170	5	<1	3	1	5	17	3	3	5	<1	11	4	7	2	5	2	2	6	3	26	4	23	<1	3	<1	34	1	1	2	<1	<1	2	<1
	Selenium	mg/kg	2		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<2
	Silver	mg/kg	1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Tin	mg/kg	1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Zinc	mg/kg	1	520	140	12	17	28	120	4,600	16	56	110	17	170	230	90	190	94	9	140	66	110	94	89	180	4	54	<1	27	9	10	9	<1	<1	63	11
Organic	Terbutylazine	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5

Table 19: Soil Results Compared Against Adopted EILs

					Sampled Date	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017
					Sample Name	BH27	BH27	BH28	BH28	BH28	BH28	BH29	BH29	BH29	BH29	BH29	BH29	BH29	BH29	BH29	BH30	BH30	BH30	BH30	BH30	BH30	BH30	BH30	BH31	BH31	BH32	BH32	BH32	BH32	BH32	BH33	BH33	BH34
					SampleDepth	0.1	1	0.1	2	3	4	0.1	1	2	3	4	5	6	7	8	0.1	1	2	3	4	5	6	7	0.1	1	0.1	1	2.2	3	4	0.2	1	0.1
				Adopted Ecological Investigation Levels																																			
Chemical Group	Chemical Name	Units	EQL																																				
Organochlorine Pesticides	4,4-DDE	mg/kg	0.1		<0.1	-	<0.1	-	-	-	<0.1	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1
	a-BHC	mg/kg	0.1		<0.1	-	<0.1	-	-	-	<0.1	-	-	-	-	-	-	-	-	<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	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1
	b-BHC	mg/kg	0.1		<0.1	-	<0.1	-	-	-	<0.1	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1
	Chlordane (cis)	mg/kg	0.1		<0.1	-	<0.1	-	-	-	<0.1	-	-	-	-	-	-	-	-	0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1
	Chlordane (trans)	mg/kg	0.1		<0.1	-	<0.1	-	-	-	<0.1	-	-	-	-	-	-	-	-	0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1
	d-BHC	mg/kg	0.1		<0.1	-	<0.1	-	-	-	<0.1	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1
	DDD	mg/kg	0.1		<0.1	-	<0.1	-	-	-	<0.1	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1
	DDT	mg/kg	0.1	180	<0.1	-	<0.1	-	-	-	<0.1	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1
	DDT+DDE+DDD	mg/kg	0.1		<0.1	-	<0.1	-	-	-	<0.1	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1
	Dieldrin	mg/kg	0.1		<0.1	-	<0.1	-	-	-	<0.1	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1
	Endosulfan I	mg/kg	0.1		<0.1	-	<0.1	-	-	-	<0.1	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1
	Endosulfan II	mg/kg	0.1		<0.1	-	<0.1	-	-	-	<0.1	-	-	-	-	-	-	-	-	<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	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1
	Endrin	mg/kg	0.1		<0.1	-	<0.1	-	-	-	<0.1	-	-	-	-	-	-	-	-	<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	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1
	g-BHC (Lindane)	mg/kg	0.1		<0.1	-	<0.1	-	-	-	<0.1	-	-	-	-	-	-	-	-	<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	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1
	Heptachlor epoxide	mg/kg	0.1		<0.1	-	<0.1	-	-	-	<0.1	-	-	-	-	-	-	-	-	<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	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1
	Toxaphene	mg/kg	2		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<2
Organophosphorous Pesticides	Azinophos methyl	mg/kg	0.1		<0.1	-	<0.1	-	-	-	<0.1	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1
	Bromophos-ethyl	mg/kg	0.1		<0.1	-	<0.1	-	-	-	<0.1	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1
	Chlorpyrifos	mg/kg	0.1		<0.1	-	<0.1	-	-	-	<0.1	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1
	Chlorpyrifos-methyl	mg/kg	0.1		<0.1	-	<0.1	-	-	-	<0.1	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1
	Diazinon	mg/kg	0.1		<0.1	-	<0.1	-	-	-	<0.1	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1
	Dichlorvos	mg/kg	0.1		<0.1	-	<0.1	-	-	-	<0.1	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1
	Dimethoate	mg/kg	0.1		<0.1	-	<0.1	-	-	-	<0.1	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1
	Ethion	mg/kg	0.1		<0.1	-	<0.1	-	-	-	<0.1	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1
	Fenitrothion	mg/kg	0.1		<0.1	-	<0.1	-	-	-	<0.1	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1
	Malathion	mg/kg	0.1		<0.1	-	<0.1	-	-	-	<0.1	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1
	Ronnel	mg/kg	0.1		<0.1	-	<0.1	-	-	-	<0.1	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1
Other	3,5-Dichlorobenzoic acid	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5
	Actril (Ioxynil)	mg/kg	1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1
PAH/Phenols	PAH (total, NSW Waste 2008)	mg/kg			-	<1.35	-	-	3.6	-	-	1.2	-	2.05	-	-	3.5	-	-	-	18.65	-	-	4.52	-	-	-	-	<1.35	-	<1.35	1.08	-	-	-	12.8	<1.35
	2,4-dimethylphenol	mg/kg	0.2		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2
	2,4-dinitrophenol	mg/kg	2		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<4
	2-methylphenol	mg/kg	0.2		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2
	2-nitrophenol	mg/kg	0.2		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2
	4,6-Dinitro-2-methylphenol	mg/kg	2		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<2
	4-chloro-3-methylphenol	mg/kg	1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1
	4-methylphenol	mg/kg			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4-nitrophenol	mg/kg	4		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<4
	Acenaphthene	mg/kg	0.1		-	<0.1	-	-	<0.1	-	-	<0.1	-	<0.1	-	-	<0.1	-	-	-	<0.1	-	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1
	Acenaphthylene	mg/kg	0.1		-	<0.1	-	-	<0.1	-	-	<0.1	-	<0.1	-	-	<0.1	-	-	-	0.4	-	-	<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	-	-	-	0.4	-	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	-	0.2	<0.1
	Benz(a)anthracene	mg/kg	0.1		-	<0.1	-	-	0.4	-	-	0.1	-	0.2	-	-	0.4	-	-	-	2	-	-	0.5	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	-	0.8	<0.1
	Benzo(a) pyrene	mg/kg	0.05		-	<0.05	-	-	0.4	-	-	0.1	-	0.2	-	-	0.5	-	-	-	2.2	-	-	0.52	-	-	-	-	<0.05	-	<0.05	0.08	-	-	-	2.2	<0.05
	Benzo(b+k)fluoranthene	mg/kg			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Benzo(g,h,i)perylene	mg/kg	0.1		-	<0.1	-	-	0.3	-	-	0.1	-	0.2	-	-	0.3	-	-	-	1.6	-	-	0.3	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	-	2.5	<0.1
	Chrysene	mg/kg	0.1		-	<0.1	-	-	0.4	-	-	0.1	-	0.2	-	-	0.4	-	-	-	2.1	-	-	0.5	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	-	0.9	<0.1
	Cresol Total	mg/kg			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dibenz(a,h)anthracene	mg/kg	0.1		-	<0.1	-	-	<0.1	-	-	<0.1	-	<0.1	-	-	<0.1	-	-	-	0.3	-	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	-	0.4	<0.1
	Fluoranthene	mg/kg	0.1		-	<0.1	-	-	0.6	-	-	0.2	-	0.4	-	-	0.5	-	-	-	3.5	-	-	0.9	-	-	-	-	<0.1	-	<0.1	0.2	-	-	-	1.5	<0.1
	Fluorene	mg/kg	0.1		-	<0.1	-	-	<0.1	-	-	<0.1	-	<0.1	-	-	<0.1	-	-	-	<0.1	-	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.1		-	<0.1	-	-	0.3	-	-	<0.1	-	0.1	-	-	0.3	-	-	-	1.2	-	-	0.3	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	-	1.8	<0.1
	Naphthalene	mg/kg	0.1	170	-	<0.1	-	-	<0.1	-	-	<0.1	-	<0.1	-	-	<0.1	-	-	-	<0.1	-	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1
	PAHs (Sum of total)	mg/kg			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Phenanthrene	mg/kg	0.1		-	<0.1	-	-	0.2	-	-	<0.1	-	<0.1	-	-	0.2	-	-	-	0.9	-	-	0.2	-	-	-	-	<0.1	-	<0.1	0.1	-	-	-	0.8	<0.1
	Phenol	mg/kg	0.2		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2
	Phenolics Total	mg/kg	0.2		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<5
	Picloram	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5
	Pyrene	mg/kg	0.1		-	<0.1	-	-	0.7	-	-	0.2	-	0.4	-	-	0.6	-	-	-	3.9	-	-	1	-	-	-	-	<0.1	-	<0.1	0.2	-	-	-	1.5	<0.1
Pesticides	Pesticides (total, NSW Waste 2008)	mg/kg			<0.6	-	<0.6	-	-	-	<0.6	-	-	-	-	-	-	-	-	<0.6	<3.6	-	-	-	-	-	-	<0.6	-	<0.6	-	-	-	-	<0.6	-	<3.6
	Bifenthrin	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5
	Mirex	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5
	Parathion	mg/kg	0.1		<0.1	-	<0.1	-	-	-	<0.1	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1
Phthalates	Bis(2-ethylhexyl) phthalate	mg/kg	5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Butyl benzyl phthalate	mg/kg	1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Diethylphthalate	mg/kg	1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dimethyl phthalate	mg/kg	1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Di-n-butyl phthalate	mg/kg	5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Di-n-octyl phthalate	mg/kg	1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Polychlorinated Biphenyls	Arochlor 1016	mg/kg	0.1		-	-	-	-	-	<0.1	-	-	-	-	<0.1	-	-	-	-	-	<0.1	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	<0.1
	Arochlor 1221	mg/kg	0.1		-	-	-	-	-	<0.1	-	-	-	-	<0.1	-	-	-	-	-	<0.1	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	<0.1
	Arochlor 1232	mg/kg	0.1		-	-	-	-	-	<0.1	-	-	-	-	<0.1	-	-	-	-	-	<0.1	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	<0.1
	Arochlor 1242	mg/kg	0.1		-	-	-	-	-	<0.1	-	-	-	-	<0.1	-	-	-	-	-	<0.1	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	<0.1
	Arochlor 1248	mg/kg	0.1		-	-	-	-	-	<0.1	-	-	-	-	<0.1	-	-	-	-	-	<0.1	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	<0.1
	Arochlor 1254	mg/kg	0.1		-	-	-	-	-	<0.1	-	-	-	-	<0.1	-	-	-	-	-	<0.1	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	<0.1
	Arochlor 1260	mg/kg	0.1		-	-	-	-	-	<0.1	-	-	-	-	<0.1	-	-	-	-	-	<0.1	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	<0.1
	PCBs (Sum of total)	mg/kg	0.1		-	-	-	-	-	<0.1	-	-	-	-	<0.1	-	-	-	-	-	<0.1	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	<0.1
Solvents	Cyclohexane	mg/kg	1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TRH	C10-C16	mg/kg	50		-	-	-	-	-	<50	-	-	-	-	-	-	-	-	<50	-	<50	-	<50	-	-	-	<50	-	-	-	-	-	-	-	<50	-	-	<50
	C16-C34	mg/kg	100		-	-	-	-	-	<100	-	-	-	-	-	-	-	-	<100	-	<100	-	<100	-	-	-	<100	-	-	-	-	-	-	-	<100	-	-	<100
	C34-C40	mg/kg	100		-	-	-	-	-	<100	-	-	-	-	-	-	-	-	<100	-	<100	-	<100	-	-	-	<100	-	-	-	-	-	-	-	<100	-	-	<100
	F2-NAPHTHALENE	mg/kg	50		-	-	-	-	-	<50	-	-	-	-	-	-	-	-	<50	-	<50	-	<50	-	-	-	<50	-	-	-	-	-	-	-	<50	-	-	<50
	C6 - C9	mg/kg	25		-	-	-	-	-	<25	-	-	-	-	-	-	-	-	<25	-	<25	-	<25	-	-	-	<25	-	-	-	-	-	-	-	<25	-	-	<25
	C10 - C14	mg/kg	50		-	-	-	-	-	<50	-	-	-	-	-	-	-	-	<50	-	<50	-	<50	-	-	-	<50	-	-	-	-	-	-	-	<50	-	-	<50
	C15 - C28	mg/kg	100		-	-	-	-	-	<100	-	-	-	-	-	-	-	-	<100	-	<100	-	<100	-	-	-	<100	-	-	-	-	-	-	-	<100	-	-	<100
	C29-C36	mg/kg	100		-	-	-	-	-	<100	-	-	-	-	-	-	-	-	<100	-	<100	-	<100	-	-	-	<100	-	-	-	-	-	-	-	<100	-	-	<100
	+C10 - C36 (Sum of total)	mg/kg			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	C10 - C40 (Sum of total)	mg/kg	50		-	-	-	-	-	<50	-	-	-	-	-	-	-	-	<50	-	<50	-	<50	-	-	-	<50	-	-	-	-	-	-	-	<50	-	-	<50
	C6-C10	mg/kg	25		-	-	-	-	-	<25	-	-	-	-	-	-	-	-	<25	-	<25	-	<25	-	-	-	<25	-	-	-	-	-	-	-	<25	-	-	<25

Australian Unity Limited
266 Longueville Road
Lane Cove

Table 19: Soil Results Compared Against Adopted EILs

				Sampled Date	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018
				Sample Name	BH35	BH36	BH37	BH38	BH39	BH40	BH41	BH42	BH43_5.0	BH43_6.0	BH43_7.0	BH43_8.0	BH43_9.0	BH44_5.0	BH44_6.0	BH44_7.0	BH44_8.0	BH44_9.0	BH45_7.0	BH45_7.8	BH45_8.0	BH46_0.2	BH46_0.5	BH46_1.0	BH46_2.0	BH46_2.3	BH47_3.6	BH47_5.0	BH47_6.0	BH47_6.5	BH47_7.0
				SampleDepth	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	5	6	7	8	9	5	6	7	8	9	7	7.8	8	0.2	0.5	1	2	2.3	3.6	5	6	6.5	7
Chemical Group	**Chemical Name**	**Units**	**EQL**	Adopted Ecological Investigation Levels																															
	3/4-Methylphenol (m/p-cresol)	mg/kg	0.4		-	-	-	-	-	-	-	-	<0.4	-	-	-	<0.4	<0.4	-	-	-	<0.4	<0.4	-	<0.4	<0.4	-	-	-	<0.4	<0.4	-	-	-	<0.4
	Benzo(a)pyrene TEQ (LOR)	mg/kg	0.5		-	-	<0.5	<0.5	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Benzo(b+j+k)fluoranthene	mg/kg	0.2		-	-	0.3	0.4	-	-	-	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.4	0.2	<0.2	<0.2	<0.2
	DCPA (Chlorthal) Diacid	mg/kg	0.5		-	-	-	-	-	-	-	-	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5
	Plasticiser Compounds	mg/kg	5		-	-	-	-	-	-	-	-	<5	-	-	-	<5	<5	-	-	-	<5	<5	-	<5	<5	-	-	-	<5	<5	-	-	-	<5
	Scheduled chemicals (NSW Waste 2008)	mg/kg	1.3		-	-	-	-	-	-	-	<1.3	<7.5	-	-	-	<7.5	<7.5	-	-	-	<7.5	<7.5	-	<7.5	<7.5	-	-	-	<7.5	<7.5	-	-	-	<7.5
	Total Positive PAHs	mg/kg	0.05		-	-	1.7	2.1	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.65	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	2.4	1.1	<0.05	<0.05	0.3
	Benzo(a)pyrene TEQ calc (Half)	mg/kg	0.5		-	-	<0.5	<0.5	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Benzo(a)pyrene TEQ calc (Zero)	mg/kg	0.5		-	-	<0.5	<0.5	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Metribuzin	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acid Herbicides	2,6-D	mg/kg	0.5		-	-	-	-	-	-	-	-	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5
Triazine Herb	Irgarol	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BTEX	Benzene	mg/kg	0.2		-	-	-	-	-	-	-	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Ethylbenzene	mg/kg	0.5		-	-	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Toluene	mg/kg	0.5		-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Xylene (m & p)	mg/kg	1		-	-	-	-	-	-	-	-	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
	Xylene (o)	mg/kg	0.5		-	-	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Xylene Total	mg/kg	1		-	-	-	-	-	-	-	-	-	<1	<1	<1	-	-	<1	<1	<1	-	-	<1	-	-	<1	<1	<1	-	-	<1	<1	<1	-
	C6-C10 less BTEX (F1)	mg/kg	25		-	-	-	-	-	-	-	-	-	<25	<25	<25	-	-	<25	<25	<25	-	-	<25	-	-	<25	<25	<25	-	-	<25	<25	<25	-
Chlorinated Hydrocarbons	1,1,1,2-tetrachloroethane	mg/kg	0.5		-	-	-	-	-	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1
	1,1,1-trichloroethane	mg/kg	0.5		-	-	-	-	-	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1
	1,1,2,2-tetrachloroethane	mg/kg	0.5		-	-	-	-	-	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1
	1,1,2-trichloroethane	mg/kg	0.5		-	-	-	-	-	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1
	1,1-dichloroethane	mg/kg	0.5		-	-	-	-	-	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1
	1,1-dichloroethene	mg/kg	0.5		-	-	-	-	-	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1
	1,1-dichloropropene	mg/kg	0.5		-	-	-	-	-	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1
	1,2,3-trichloropropane	mg/kg	0.5		-	-	-	-	-	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1
	1,2-dibromo-3-chloropropane	mg/kg	0.5		-	-	-	-	-	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1
	1,2-dichloroethane	mg/kg	0.5		-	-	-	-	-	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1
	1,2-dichloropropane	mg/kg	0.5		-	-	-	-	-	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1
	1,3-dichloropropane	mg/kg	0.5		-	-	-	-	-	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1
	2,2-dichloropropane	mg/kg	0.5		-	-	-	-	-	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1
	Bromochloromethane	mg/kg	0.5		-	-	-	-	-	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1
	Bromodichloromethane	mg/kg	0.5		-	-	-	-	-	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1
	Bromoform	mg/kg	0.5		-	-	-	-	-	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1
	Carbon tetrachloride	mg/kg	0.5		-	-	-	-	-	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1
	Chlorodibromomethane	mg/kg	0.5		-	-	-	-	-	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1
	Chloroethane	mg/kg	1		-	-	-	-	-	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1
	Chloroform	mg/kg	0.5		-	-	-	-	-	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1
	Chloromethane	mg/kg	1		-	-	-	-	-	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1
	cis-1,2-dichloroethene	mg/kg	0.5		-	-	-	-	-	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1
	cis-1,3-dichloropropene	mg/kg	0.5		-	-	-	-	-	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1
	Dibromomethane	mg/kg	0.5		-	-	-	-	-	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1
	Hexachlorobutadiene	mg/kg	0.5		-	-	-	-	-	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1
	Trichloroethene	mg/kg	0.5		-	-	-	-	-	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1
	Tetrachloroethene	mg/kg	0.5		-	-	-	-	-	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1
	trans-1,2-dichloroethene	mg/kg	0.5		-	-	-	-	-	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1
	trans-1,3-dichloropropene	mg/kg	0.5		-	-	-	-	-	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1
	Vinyl chloride	mg/kg	1		-	-	-	-	-	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1
Explosives	Nitrobenzene	mg/kg	0.1		-	-	-	-	-	-	-	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1
Halogenated Benzenes	1,2,3-trichlorobenzene	mg/kg	0.5		-	-	-	-	-	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1
	1,2,4-trichlorobenzene	mg/kg	0.5		-	-	-	-	-	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1
	1,2-dichlorobenzene	mg/kg	0.5		-	-	-	-	-	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1
	1,3-dichlorobenzene	mg/kg	0.5		-	-	-	-	-	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1
	1,4-dichlorobenzene	mg/kg	0.5		-	-	-	-	-	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1
	2-chlorotoluene	mg/kg	0.5		-	-	-	-	-	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1
	4-chlorotoluene	mg/kg	0.5		-	-	-	-	-	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1
	Bromobenzene	mg/kg	0.5		-	-	-	-	-	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1
	Chlorobenzene	mg/kg	0.5		-	-	-	-	-	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1
	Hexachlorobenzene	mg/kg	0.1		-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1
Halogenated Hydrocarbons	1,2-dibromoethane	mg/kg	0.5		-	-	-	-	-	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1
	Bromomethane	mg/kg	1		-	-	-	-	-	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1
	Dichlorodifluoromethane	mg/kg	1		-	-	-	-	-	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1
	Trichlorofluoromethane	mg/kg	1		-	-	-	-	-	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1
Halogenated Phenols	2,3,4,6-tetrachlorophenol	mg/kg	0.2		-	-	-	-	-	-	-	-	<0.2	-	-	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	-	-	<0.2
	2,4,5-trichlorophenol	mg/kg	0.2		-	-	-	-	-	-	-	-	<0.2	-	-	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	-	-	<0.2
	2,4,6-trichlorophenol	mg/kg	0.2		-	-	-	-	-	-	-	-	<0.2	-	-	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	-	-	<0.2
	2,4-dichlorophenol	mg/kg	0.2		-	-	-	-	-	-	-	-	<0.2	-	-	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	-	-	<0.2
	2,6-dichlorophenol	mg/kg	0.2		-	-	-	-	-	-	-	-	<0.2	-	-	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	-	-	<0.2
	2-chlorophenol	mg/kg	0.2		-	-	-	-	-	-	-	-	<0.2	-	-	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	-	-	<0.2
	Pentachlorophenol	mg/kg	1		-	-	-	-	-	-	-	-	<5	-	-	-	<5	<5	-	-	-	<5	<5	-	<5	<5	-	-	-	<5	<5	-	-	-	<5
Herbicides	2,4,5-Trichlorophenoxy Acetic Acid	mg/kg	0.5		-	-	-	-	-	-	-	-	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5
	2,4,5-TP (Silvex)	mg/kg	0.5		-	-	-	-	-	-	-	-	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5
	2,4-dichlorophenoxybutanoic acid	mg/kg	0.5		-	-	-	-	-	-	-	-	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5
	Hedonal	mg/kg	0.5		-	-	-	-	-	-	-	-	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5
	2,4-Dichlorprop	mg/kg	0.5		-	-	-	-	-	-	-	-	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5
	2,4,6-Trichlorophenoxy-acetic acid	mg/kg	0.5		-	-	-	-	-	-	-	-	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5
	2-Chlorophenoxyacetic acid	mg/kg	0.5		-	-	-	-	-	-	-	-	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5
	4-Chlorophenoxy acetic acid	mg/kg	0.5		-	-	-	-	-	-	-	-	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5
	Ametryn	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Acifluorfen	mg/kg	2		-	-	-	-	-	-	-	-	<2	-	-	-	<2	<2	-	-	-	<2	<2	-	<2	<2	-	-	-	<2	<2	-	-	-	<2
	Atrazine	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Bromoxynil	mg/kg	0.5		-	-	-	-	-	-	-	-	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5
	Clopyralid	mg/kg	0.5		-	-	-	-	-	-	-	-	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5
	Cyanazine	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dicamba	mg/kg	0.5		-	-	-	-	-	-	-	-	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5
	Dinoseb	mg/kg	1		-	-	-	-	-	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1
	Hexazinone	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2-Methyl-4-chlorophenoxyacetic acid	mg/kg	0.5		-	-	-	-	-	-	-	-	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5
	2-Methyl-4-Chlorophenoxy Butanoic Acid	mg/kg	0.5		-	-	-	-	-	-	-	-	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5
	Mecoprop	mg/kg	0.5		-	-	-	-	-	-	-	-	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5
	Prometryn	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Propazine	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Simazine	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Terbutryn	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Triclopyr	mg/kg	0.5		-	-	-	-	-	-	-	-	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5
Inorganics	Cyanide (Free)	mg/kg	0.5		-	-	-	-	-	-	-	-	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5
	Cyanide Total	mg/kg	0.5		-	-	-	-	-	-	-	-	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5
	Fluoride	mg/kg	50		-	-	-	-	-	-	-	-	<50	-	-	-	<50	<50	-	-	-	<50	<50	-	<50	<50	-	-	-	<50	<50	-	-	-	<50
MAH	1,2,4-trimethylbenzene	mg/kg	0.5		-	-	-	-	-	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1
	1,3,5-trimethylbenzene	mg/kg	0.5		-	-	-	-	-	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1
	Isopropylbenzene	mg/kg	0.5		-	-	-	-	-	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1
	n-butylbenzene	mg/kg	0.5		-	-	-	-	-	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1
	n-propylbenzene	mg/kg	0.5		-	-	-	-	-	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1
	p-isopropyltoluene	mg/kg	0.5		-	-	-	-	-	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1
	sec-butylbenzene	mg/kg	0.5		-	-	-	-	-	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1
	Styrene	mg/kg	0.5		-	-	-	-	-	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1
	tert-butylbenzene	mg/kg	0.5		-	-	-	-	-	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1
Metals	Arsenic	mg/kg	4	100	6	7	<4	7	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	8	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	4	<4	4	<4	<4
	Beryllium	mg/kg	1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Boron	mg/kg	3		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Cadmium	mg/kg	0.4		10	0.5	<0.4	2	0.7	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
	Chromium (hexavalent)	mg/kg	1		-	-	-	-	-	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1
	Chromium (III+VI)	mg/kg	1	200	22	12	8	180	6	7	6	12	5	7	7	7	7	4	15	12	16	13	9	9	12	5	5	3	9	10	9	9	10	9	6
	Cobalt	mg/kg	1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Copper	mg/kg	1	220	270	37	8	140	30	10	11	9	4	6	5	5	4	1	3	4	5	3	4	2	6	<1	<1	<1	<1	<1	4	3	6	5	2
	Lead	mg/kg	1	1,100	1,300	79	49	150	76	12	53	11	5	7	6	5	4	4	12	4	3	4	10	16	19	6	7	7	6	5	25	14	14	13	8
	Manganese	mg/kg	1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Mercury	mg/kg	0.1		0.3	0.1	0.1	1.3	0.2	5.5	4.1	5.2	<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	<0.1	<0.1	<0.1	<0.1	<0.1
	Molybdenum	mg/kg	1		-	-	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1	1	<1	<1	<1	1	<1
	Nickel	mg/kg	1	170	16	3	2	93	6	2	2	3	2	2	3	2	2	<1	1	2	5	3	3	1	3	<1	<1	<1	<1	<1	2	3	1	1	1
	Selenium	mg/kg	2		-	-	-	-	-	-	-	-	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
	Silver	mg/kg	1		-	-	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Tin	mg/kg	1		-	-	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Zinc	mg/kg	1	520	730	230	90	680	210	14	71	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Organic	Terbutylazine	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 19: Soil Results Compared Against Adopted EILs

				Sampled Date	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018
				Sample Name	BH35	BH36	BH37	BH38	BH39	BH40	BH41	BH42	BH43_5.0	BH43_6.0	BH43_7.0	BH43_8.0	BH43_9.0	BH44_5.0	BH44_6.0	BH44_7.0	BH44_8.0	BH44_9.0	BH45_7.0	BH45_7.8	BH45_8.0	BH46_0.2	BH46_0.5	BH46_1.0	BH46_2.0	BH46_2.3	BH47_3.6	BH47_5.0	BH47_6.0	BH47_6.5	BH47_7.0
				SampleDepth	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	5	6	7	8	9	5	6	7	8	9	7	7.8	8	0.2	0.5	1	2	2.3	3.6	5	6	6.5	7
Chemical Group	**Chemical Name**	**Units**	**EQL**	Adopted Ecological Investigation Levels																															
Organochlorine Pesticides	4,4-DDE	mg/kg	0.1		-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1
	a-BHC	mg/kg	0.1		-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<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	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1
	b-BHC	mg/kg	0.1		-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1
	Chlordane (cis)	mg/kg	0.1		-	-	-	-	-	-	-	0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1
	Chlordane (trans)	mg/kg	0.1		-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1
	d-BHC	mg/kg	0.1		-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1
	DDD	mg/kg	0.1		-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1
	DDT	mg/kg	0.1	180	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1
	DDT+DDE+DDD	mg/kg	0.1		-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1
	Dieldrin	mg/kg	0.1		-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1
	Endosulfan I	mg/kg	0.1		-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1
	Endosulfan II	mg/kg	0.1		-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<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	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1
	Endrin	mg/kg	0.1		-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<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	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1
	g-BHC (Lindane)	mg/kg	0.1		-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<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	<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	<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	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1
	Toxaphene	mg/kg	2		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Organophosphorous Pesticides	Azinophos methyl	mg/kg	0.1		-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1
	Bromophos-ethyl	mg/kg	0.1		-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1
	Chlorpyrifos	mg/kg	0.1		-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1
	Chlorpyrifos-methyl	mg/kg	0.1		-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1
	Diazinon	mg/kg	0.1		-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1
	Dichlorvos	mg/kg	0.1		-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1
	Dimethoate	mg/kg	0.1		-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1
	Ethion	mg/kg	0.1		-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1
	Fenitrothion	mg/kg	0.1		-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1
	Malathion	mg/kg	0.1		-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1
	Ronnel	mg/kg	0.1		-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1
Other	3,5-Dichlorobenzoic acid	mg/kg	0.5		-	-	-	-	-	-	-	-	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5
	Actril (Ioxynil)	mg/kg	1		-	-	-	-	-	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1
PAH/Phenols	PAH (total, NSW Waste 2008)	mg/kg			-	-	1.6	2	-	-	-	-	<1.35	<1.35	<1.35	<1.35	<1.35	<1.35	1.09	<1.35	<1.35	<1.35	<1.35	<1.35	<1.35	<1.35	<1.35	<1.35	<1.35	<1.35	2.3	1.25	<1.35	<1.35	0.81
	2,4-dimethylphenol	mg/kg	0.2		-	-	-	-	-	-	-	-	<0.2	-	-	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	-	-	<0.2
	2,4-dinitrophenol	mg/kg	2		-	-	-	-	-	-	-	-	<4	-	-	-	<4	<4	-	-	-	<4	<4	-	<4	<4	-	-	-	<4	<4	-	-	-	<4
	2-methylphenol	mg/kg	0.2		-	-	-	-	-	-	-	-	<0.2	-	-	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	-	-	<0.2
	2-nitrophenol	mg/kg	0.2		-	-	-	-	-	-	-	-	<0.2	-	-	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	-	-	<0.2
	4,6-Dinitro-2-methylphenol	mg/kg	2		-	-	-	-	-	-	-	-	<10	-	-	-	<10	<10	-	-	-	<10	<10	-	<10	<10	-	-	-	<10	<10	-	-	-	<10
	4-chloro-3-methylphenol	mg/kg	1		-	-	-	-	-	-	-	-	<5	-	-	-	<5	<5	-	-	-	<5	<5	-	<5	<5	-	-	-	<5	<5	-	-	-	<5
	4-methylphenol	mg/kg			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4-nitrophenol	mg/kg	4		-	-	-	-	-	-	-	-	<4	-	-	-	<4	<4	-	-	-	<4	<4	-	<4	<4	-	-	-	<4	<4	-	-	-	<4
	Acenaphthene	mg/kg	0.1		-	-	<0.1	<0.1	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Acenaphthylene	mg/kg	0.1		-	-	<0.1	<0.1	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Anthracene	mg/kg	0.1		-	-	<0.1	<0.1	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Benz(a)anthracene	mg/kg	0.1		-	-	0.1	0.2	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.2	0.1	<0.1	<0.1	<0.1
	Benzo(a) pyrene	mg/kg	0.05		-	-	0.2	0.2	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.09	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.2	0.1	<0.05	<0.05	0.06
	Benzo(b+k)fluoranthene	mg/kg			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Benzo(g,h,i)perylene	mg/kg	0.1		-	-	0.1	0.2	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.2	<0.1	<0.1	<0.1	<0.1
	Chrysene	mg/kg	0.1		-	-	0.1	0.2	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.2	0.1	<0.1	<0.1	<0.1
	Cresol Total	mg/kg			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dibenz(a,h)anthracene	mg/kg	0.1		-	-	<0.1	<0.1	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Fluoranthene	mg/kg	0.1		-	-	0.3	0.4	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.4	0.2	<0.1	<0.1	0.1
	Fluorene	mg/kg	0.1		-	-	<0.1	<0.1	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.1		-	-	0.1	0.1	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1
	Naphthalene	mg/kg	0.1	170	-	-	<0.1	<0.1	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	PAHs (Sum of total)	mg/kg			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Phenanthrene	mg/kg	0.1		-	-	0.1	0.1	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<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
	Phenol	mg/kg	0.2		-	-	-	-	-	-	-	-	<0.2	-	-	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	-	-	<0.2
	Phenolics Total	mg/kg	0.2		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Picloram	mg/kg	0.5		-	-	-	-	-	-	-	-	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5
	Pyrene	mg/kg	0.1		-	-	0.3	0.3	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.5	0.3	<0.1	<0.1	0.1
Pesticides	Pesticides (total, NSW Waste 2008)	mg/kg			-	-	-	-	-	-	-	<0.6	<5.6	-	-	-	<5.6	<5.6	-	-	-	<5.6	<5.6	-	<5.6	<5.6	-	-	-	<5.6	<5.6	-	-	-	<5.6
	Bifenthrin	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Mirex	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Parathion	mg/kg	0.1		-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1
Phthalates	Bis(2-ethylhexyl) phthalate	mg/kg	5		-	-	-	-	-	-	-	-	<5	-	-	-	<5	<5	-	-	-	<5	<5	-	<5	<5	-	-	-	<5	<5	-	-	-	<5
	Butyl benzyl phthalate	mg/kg	1		-	-	-	-	-	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1
	Diethylphthalate	mg/kg	1		-	-	-	-	-	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1
	Dimethyl phthalate	mg/kg	1		-	-	-	-	-	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1
	Di-n-butyl phthalate	mg/kg	5		-	-	-	-	-	-	-	-	<5	-	-	-	<5	<5	-	-	-	<5	<5	-	<5	<5	-	-	-	<5	<5	-	-	-	<5
	Di-n-octyl phthalate	mg/kg	1		-	-	-	-	-	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1
Polychlorinated Biphenyls	Arochlor 1016	mg/kg	0.1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Arochlor 1221	mg/kg	0.1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Arochlor 1232	mg/kg	0.1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Arochlor 1242	mg/kg	0.1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Arochlor 1248	mg/kg	0.1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Arochlor 1254	mg/kg	0.1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Arochlor 1260	mg/kg	0.1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	PCBs (Sum of total)	mg/kg	0.1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Solvents	Cyclohexane	mg/kg	1		-	-	-	-	-	-	-	-	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1
TRH	C10-C16	mg/kg	50		-	-	-	-	68	-	-	-	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
	C16-C34	mg/kg	100		-	-	-	-	640	-	-	-	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
	C34-C40	mg/kg	100		-	-	-	-	370	-	-	-	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
	F2-NAPHTHALENE	mg/kg	50		-	-	-	-	-	-	-	-	-	<50	<50	<50	-	-	<50	<50	<50	-	-	<50	-	-	<50	<50	<50	-	-	<50	<50	<50	-
	C6 - C9	mg/kg	25		-	-	-	-	<25	-	-	-	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25
	C10 - C14	mg/kg	50		-	-	-	-	<50	-	-	-	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
	C15 - C28	mg/kg	100		-	-	-	-	360	-	-	-	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
	C29-C36	mg/kg	100		-	-	-	-	480	-	-	-	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
	+C10 - C36 (Sum of total)	mg/kg			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	C10 - C40 (Sum of total)	mg/kg	50		-	-	-	-	1,100	-	-	-	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
	C6-C10	mg/kg	25		-	-	-	-	<25	-	-	-	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25

Table 19: Soil Results Compared Against Adopted EILs

					Sampled Date	6/07/2017	6/07/2017	6/07/2017	6/07/2017	10/05/2018	11/05/2018	6/07/2017	6/07/2017	6/07/2017	6/07/2017	11/05/2018	11/05/2018
					Sample Name	Dup1	Dup2	Dup3	Dup4	Dup 5	Dup 6	Split 1	Split 2	Split 3	Split 4	Split 5	Spilt 6
					SampleDepth	0.1	0.1	0.1	0.1							5	6
Chemical Group	**Chemical Name**	**Units**	**EQL**	Adopted Ecological Investigation Levels													
	3/4-Methylphenol (m/p-cresol)	mg/kg	0.4		<0.4	-	-	-	-	-	-	-	-	-	-	-
	Benzo(a)pyrene TEQ (LOR)	mg/kg	0.5		<0.5	-	-	-	<0.5	<0.5	<0.5	-	-	-	-	-
	Benzo(b+j+k)fluoranthene	mg/kg	0.2		<0.2	-	-	-	<0.2	<0.2	-	-	-	-	-	-
	DCPA (Chlorthal) Diacid	mg/kg	0.5		<0.5	-	-	-	-	-	<0.5	-	-	-	-	-
	Plasticiser Compounds	mg/kg	5		-	-	-	-	-	-	-	-	-	-	-	-
	Scheduled chemicals (NSW Waste 2008)	mg/kg	1.3		<2.5	-	-	-	-	-	<3	-	-	-	-	-
	Total Positive PAHs	mg/kg	0.05		<0.05	-	-	-	<0.05	<0.05	-	-	-	-	-	-
	Benzo(a)pyrene TEQ calc (Half)	mg/kg	0.5		<0.5	-	-	-	<0.5	<0.5	<0.5	-	-	-	-	-
	Benzo(a)pyrene TEQ calc (Zero)	mg/kg	0.5		<0.5	-	-	-	<0.5	<0.5	<0.5	-	-	-	-	-
	Metribuzin	mg/kg	0.5		<0.5	-	-	-	-	-	-	-	-	-	-	-
Acid Herbicides	2,6-D	mg/kg	0.5		<0.5	-	-	-	-	-	<0.5	-	-	-	-	-
Triazine Herb	Irgarol	mg/kg	0.5		<0.5	-	-	-	-	-	-	-	-	-	-	-
	Benzene	mg/kg	0.2		<0.2	-	-	-	<0.2	<0.2	<0.2	-	-	-	-	-
	Ethylbenzene	mg/kg	0.5		<1	-	-	-	<1	<1	<0.5	-	-	-	-	-
	Toluene	mg/kg	0.5		<0.5	-	-	-	<0.5	<0.5	<0.5	-	-	-	-	-
BTEX	Xylene (m & p)	mg/kg	1		<2	-	-	-	<2	<2	<1	-	-	-	-	-
	Xylene (o)	mg/kg	0.5		<1	-	-	-	<1	<1	<0.5	-	-	-	-	-
	Xylene Total	mg/kg	1		<1	-	-	-	<1	<1	<1	-	-	-	-	-
	C6-C10 less BTEX (F1)	mg/kg	25		<25	-	-	-	<25	<25	<25	-	-	-	-	-
	1,1,1,2-tetrachloroethane	mg/kg	0.5		-	-	-	-	-	-	<0.5	-	-	-	-	-
	1,1,1-trichloroethane	mg/kg	0.5		-	-	-	-	-	-	<0.5	-	-	-	-	-
	1,1,2,2-tetrachloroethane	mg/kg	0.5		-	-	-	-	-	-	<0.5	-	-	-	-	-
	1,1,2-trichloroethane	mg/kg	0.5		-	-	-	-	-	-	<0.5	-	-	-	-	-
	1,1-dichloroethane	mg/kg	0.5		-	-	-	-	-	-	<0.5	-	-	-	-	-
	1,1-dichloroethene	mg/kg	0.5		-	-	-	-	-	-	<0.5	-	-	-	-	-
	1,1-dichloropropene	mg/kg	0.5		-	-	-	-	-	-	<0.5	-	-	-	-	-
	1,2,3-trichloropropane	mg/kg	0.5		-	-	-	-	-	-	<0.5	-	-	-	-	-
	1,2-dibromo-3-chloropropane	mg/kg	0.5		-	-	-	-	-	-	<0.5	-	-	-	-	-
	1,2-dichloroethane	mg/kg	0.5		-	-	-	-	-	-	<0.5	-	-	-	-	-
	1,2-dichloropropane	mg/kg	0.5		-	-	-	-	-	-	<0.5	-	-	-	-	-
	1,3-dichloropropane	mg/kg	0.5		-	-	-	-	-	-	<0.5	-	-	-	-	-
	2,2-dichloropropane	mg/kg	0.5		-	-	-	-	-	-	<0.5	-	-	-	-	-
	Bromochloromethane	mg/kg	0.5		-	-	-	-	-	-	<0.5	-	-	-	-	-
Chlorinated Hydrocarbons	Bromodichloromethane	mg/kg	0.5		-	-	-	-	-	-	<0.5	-	-	-	-	-
	Bromoform	mg/kg	0.5		-	-	-	-	-	-	<0.5	-	-	-	-	-
	Carbon tetrachloride	mg/kg	0.5		-	-	-	-	-	-	<0.5	-	-	-	-	-
	Chlorodibromomethane	mg/kg	0.5		-	-	-	-	-	-	<0.5	-	-	-	-	-
	Chloroethane	mg/kg	1		-	-	-	-	-	-	<1	-	-	-	-	-
	Chloroform	mg/kg	0.5		-	-	-	-	-	-	<0.5	-	-	-	-	-
	Chloromethane	mg/kg	1		-	-	-	-	-	-	<1	-	-	-	-	-
	cis-1,2-dichloroethene	mg/kg	0.5		-	-	-	-	-	-	<0.5	-	-	-	-	-
	cis-1,3-dichloropropene	mg/kg	0.5		-	-	-	-	-	-	<0.5	-	-	-	-	-
	Dibromomethane	mg/kg	0.5		-	-	-	-	-	-	<0.5	-	-	-	-	-
	Hexachlorobutadiene	mg/kg	0.5		-	-	-	-	-	-	<0.5	-	-	-	-	-
	Trichloroethene	mg/kg	0.5		-	-	-	-	-	-	<0.5	-	-	-	-	-
	Tetrachloroethene	mg/kg	0.5		-	-	-	-	-	-	<0.5	-	-	-	-	-
	trans-1,2-dichloroethene	mg/kg	0.5		-	-	-	-	-	-	<0.5	-	-	-	-	-
	trans-1,3-dichloropropene	mg/kg	0.5		-	-	-	-	-	-	<0.5	-	-	-	-	-
	Vinyl chloride	mg/kg	1		-	-	-	-	-	-	<1	-	-	-	-	-
Explosives	Nitrobenzene	mg/kg	0.1		-	-	-	-	-	-	-	-	-	-	-	-
	1,2,3-trichlorobenzene	mg/kg	0.5		-	-	-	-	-	-	<0.5	-	-	-	-	-
	1,2,4-trichlorobenzene	mg/kg	0.5		-	-	-	-	-	-	<0.5	-	-	-	-	-
	1,2-dichlorobenzene	mg/kg	0.5		-	-	-	-	-	-	<0.5	-	-	-	-	-
	1,3-dichlorobenzene	mg/kg	0.5		-	-	-	-	-	-	<0.5	-	-	-	-	-
Halogenated Benzenes	1,4-dichlorobenzene	mg/kg	0.5		-	-	-	-	-	-	<0.5	-	-	-	-	-
	2-chlorotoluene	mg/kg	0.5		-	-	-	-	-	-	<0.5	-	-	-	-	-
	4-chlorotoluene	mg/kg	0.5		-	-	-	-	-	-	<0.5	-	-	-	-	-
	Bromobenzene	mg/kg	0.5		-	-	-	-	-	-	<0.5	-	-	-	-	-
	Chlorobenzene	mg/kg	0.5		-	-	-	-	-	-	<0.5	-	-	-	-	-
	Hexachlorobenzene	mg/kg	0.1		<0.1	-	-	-	-	-	<0.1	-	-	-	-	-
	1,2-dibromoethane	mg/kg	0.5		-	-	-	-	-	-	<0.5	-	-	-	-	-
Halogenated	Bromomethane	mg/kg	1		-	-	-	-	-	-	<1	-	-	-	-	-
Hydrocarbons	Dichlorodifluoromethane	mg/kg	1		-	-	-	-	-	-	<1	-	-	-	-	-
	Trichlorofluoromethane	mg/kg	1		-	-	-	-	-	-	<1	-	-	-	-	-
	2,3,4,6-tetrachlorophenol	mg/kg	0.2		<0.2	-	-	-	-	-	<0.2	-	-	-	-	-
	2,4,5-trichlorophenol	mg/kg	0.2		<0.2	-	-	-	-	-	<0.2	-	-	-	-	-
	2,4,6-trichlorophenol	mg/kg	0.2		<0.2	-	-	-	-	-	<0.2	-	-	-	-	-
Halogenated Phenols	2,4-dichlorophenol	mg/kg	0.2		<0.2	-	-	-	-	-	<0.2	-	-	-	-	-
	2,6-dichlorophenol	mg/kg	0.2		<0.2	-	-	-	-	-	<0.2	-	-	-	-	-
	2-chlorophenol	mg/kg	0.2		<0.2	-	-	-	-	-	<0.2	-	-	-	-	-
	Pentachlorophenol	mg/kg	1		<1	-	-	-	-	-	<1	-	-	-	-	-
	2,4,5-Trichlorophenoxy Acetic Acid	mg/kg	0.5		<0.5	-	-	-	-	-	<0.5	-	-	-	-	-
	2,4,5-TP (Silvex)	mg/kg	0.5		<0.5	-	-	-	-	-	<0.5	-	-	-	-	-
	2,4-dichlorophenoxybutanoic acid	mg/kg	0.5		<0.5	-	-	-	-	-	<0.5	-	-	-	-	-
	Hedonal	mg/kg	0.5		<0.5	-	-	-	-	-	<0.5	-	-	-	-	-
	2,4-Dichlorprop	mg/kg	0.5		<0.5	-	-	-	-	-	<0.5	-	-	-	-	-
	2,4,6-Trichlorophenoxy-acetic acid	mg/kg	0.5		<0.5	-	-	-	-	-	<0.5	-	-	-	-	-
	2-Chlorophenoxyacetic acid	mg/kg	0.5		<0.5	-	-	-	-	-	<0.5	-	-	-	-	-
	4-Chlorophenoxy acetic acid	mg/kg	0.5		<0.5	-	-	-	-	-	<0.5	-	-	-	-	-
	Ametryn	mg/kg	0.5		<0.5	-	-	-	-	-	-	-	-	-	-	-
	Acifluorfen	mg/kg	2		<2	-	-	-	-	-	<2	-	-	-	-	-
	Atrazine	mg/kg	0.5		<0.5	-	-	-	-	-	<0.5	-	-	-	-	-
	Bromoxynil	mg/kg	0.5		<0.5	-	-	-	-	-	<0.5	-	-	-	-	-
Herbicides	Clopyralid	mg/kg	0.5		<0.5	-	-	-	-	-	<0.5	-	-	-	-	-
	Cyanazine	mg/kg	0.5		<0.5	-	-	-	-	-	-	-	-	-	-	-
	Dicamba	mg/kg	0.5		<0.5	-	-	-	-	-	<0.5	-	-	-	-	-
	Dinoseb	mg/kg	1		<1	-	-	-	-	-	<1	-	-	-	-	-
	Hexazinone	mg/kg	0.5		<0.5	-	-	-	-	-	-	-	-	-	-	-
	2-Methyl-4-chlorophenoxyacetic acid	mg/kg	0.5		<0.5	-	-	-	-	-	<0.5	-	-	-	-	-
	2-Methyl-4-Chlorophenoxy Butanoic Acid	mg/kg	0.5		<0.5	-	-	-	-	-	<0.5	-	-	-	-	-
	Mecoprop	mg/kg	0.5		<0.5	-	-	-	-	-	<0.5	-	-	-	-	-
	Prometryn	mg/kg	0.5		<0.5	-	-	-	-	-	-	-	-	-	-	-
	Propazine	mg/kg	0.5		<0.5	-	-	-	-	-	-	-	-	-	-	-
	Simazine	mg/kg	0.5		<0.5	-	-	-	-	-	-	-	-	-	-	-
	Terbutryn	mg/kg	0.5		<0.5	-	-	-	-	-	-	-	-	-	-	-
	Triclopyr	mg/kg	0.5		<0.5	-	-	-	-	-	<0.5	-	-	-	-	-
	Cyanide (Free)	mg/kg	0.5		<0.5	-	-	-	-	-	<0.5	-	-	-	-	-
Inorganics	Cyanide Total	mg/kg	0.5		-	-	-	-	-	-	-	-	-	-	-	-
	Fluoride	mg/kg	50		-	-	-	-	-	-	-	-	-	-	-	-
	1,2,4-trimethylbenzene	mg/kg	0.5		-	-	-	-	-	-	<0.5	-	-	-	-	-
	1,3,5-trimethylbenzene	mg/kg	0.5		-	-	-	-	-	-	<0.5	-	-	-	-	-
	Isopropylbenzene	mg/kg	0.5		-	-	-	-	-	-	<0.5	-	-	-	-	-
	n-butylbenzene	mg/kg	0.5		-	-	-	-	-	-	<0.5	-	-	-	-	-
MAH	n-propylbenzene	mg/kg	0.5		-	-	-	-	-	-	<0.5	-	-	-	-	-
	p-isopropyltoluene	mg/kg	0.5		-	-	-	-	-	-	<0.5	-	-	-	-	-
	sec-butylbenzene	mg/kg	0.5		-	-	-	-	-	-	<0.5	-	-	-	-	-
	Styrene	mg/kg	0.5		-	-	-	-	-	-	<0.5	-	-	-	-	-
	tert-butylbenzene	mg/kg	0.5		-	-	-	-	-	-	<0.5	-	-	-	-	-
	Arsenic	mg/kg	4	100	<4	5	14	<4	<4	<4	4	4	8	<4	<4	<4
	Beryllium	mg/kg	1		<1	-	-	-	-	-	<1	-	-	-	-	-
	Boron	mg/kg	3		<3	-	-	-	-	-	<3	-	-	-	-	-
	Cadmium	mg/kg	0.4		<0.4	6	0.6	<0.4	<0.4	<0.4	<0.4	8.2	<0.4	<0.4	<0.4	<0.4
	Chromium (hexavalent)	mg/kg	1		<1	-	-	-	-	-	<1	-	-	-	-	-
	Chromium (III+VI)	mg/kg	1	200	4	18	13	8	6	10	5	18	14	7	6	9
	Cobalt	mg/kg	1		<1	-	-	-	-	-	<1	-	-	-	-	-
	Copper	mg/kg	1	220	2	230	47	8	5	<1	7	240	30	7	5	<1
Metals	Lead	mg/kg	1	1,100	7	1,100	91	53	5	6	25	1,200	60	49	4	6
	Manganese	mg/kg	1		2	-	-	-	-	-	7	-	-	-	-	-
	Mercury	mg/kg	0.1		<0.1	0.2	0.1	0.1	<0.1	<0.1	<0.1	0.2	<0.1	0.1	<0.1	<0.1
	Molybdenum	mg/kg	1		-	-	-	-	<1	1	-	-	-	-	<1	2
	Nickel	mg/kg	1	170	<1	11	9	2	2	<1	<1	13	3	2	2	<1
	Selenium	mg/kg	2		<2	-	-	-	<2	<2	<2	-	-	-	<2	<2
	Silver	mg/kg	1		-	-	-	-	<1	<1	-	-	-	-	<1	<1
	Tin	mg/kg	1		-	-	-	-	<1	<1	-	-	-	-	<1	<1
	Zinc	mg/kg	1	520	10	650	230	82	-	-	32	730	170	71	-	-
Organic	Terbutylazine	mg/kg	0.5		<0.5	-	-	-	-	-	-	-	-	-	-	-

Table 19: Soil Results Compared Against Adopted EILs

				Sampled Date	6/07/2017	6/07/2017	6/07/2017	6/07/2017	10/05/2018	11/05/2018	6/07/2017	6/07/2017	6/07/2017	6/07/2017	11/05/2018	11/05/2018
				Sample Name	Dup1	Dup2	Dup3	Dup4	Dup 5	Dup 6	Split 1	Split 2	Split 3	Split 4	Split 5	Spilt 6
				SampleDepth	0.1	0.1	0.1	0.1							5	6
Chemical Group	**Chemical Name**	**Units**	**EQL**	Adopted Ecological Investigation Levels												
Organochlorine Pesticides	4,4-DDE	mg/kg	0.1		<0.1	-	-	-	-	-	<0.1	-	-	-	-	-
	a-BHC	mg/kg	0.1		<0.1	-	-	-	-	-	<0.1	-	-	-	-	-
	Aldrin	mg/kg	0.1		<0.1	-	-	-	-	-	<0.1	-	-	-	-	-
	b-BHC	mg/kg	0.1		<0.1	-	-	-	-	-	<0.1	-	-	-	-	-
	Chlordane (cis)	mg/kg	0.1		<0.1	-	-	-	-	-	<0.1	-	-	-	-	-
	Chlordane (trans)	mg/kg	0.1		<0.1	-	-	-	-	-	<0.1	-	-	-	-	-
	d-BHC	mg/kg	0.1		<0.1	-	-	-	-	-	<0.1	-	-	-	-	-
	DDD	mg/kg	0.1		<0.1	-	-	-	-	-	<0.1	-	-	-	-	-
	DDT	mg/kg	0.1	180	<0.1	-	-	-	-	-	<0.1	-	-	-	-	-
	DDT+DDE+DDD	mg/kg	0.1		<0.1	-	-	-	-	-	<0.1	-	-	-	-	-
	Dieldrin	mg/kg	0.1		<0.1	-	-	-	-	-	<0.1	-	-	-	-	-
	Endosulfan I	mg/kg	0.1		<0.1	-	-	-	-	-	<0.1	-	-	-	-	-
	Endosulfan II	mg/kg	0.1		<0.1	-	-	-	-	-	<0.1	-	-	-	-	-
	Endosulfan sulphate	mg/kg	0.1		<0.1	-	-	-	-	-	<0.1	-	-	-	-	-
	Endrin	mg/kg	0.1		<0.1	-	-	-	-	-	<0.1	-	-	-	-	-
	Endrin aldehyde	mg/kg	0.1		<0.1	-	-	-	-	-	<0.1	-	-	-	-	-
	g-BHC (Lindane)	mg/kg	0.1		<0.1	-	-	-	-	-	<0.1	-	-	-	-	-
	Heptachlor	mg/kg	0.1		<0.1	-	-	-	-	-	<0.1	-	-	-	-	-
	Heptachlor epoxide	mg/kg	0.1		<0.1	-	-	-	-	-	<0.1	-	-	-	-	-
	Methoxychlor	mg/kg	0.1		<0.1	-	-	-	-	-	<0.1	-	-	-	-	-
	Toxaphene	mg/kg	2		<2	-	-	-	-	-	<2	-	-	-	-	-
Organophosphorous Pesticides	Azinophos methyl	mg/kg	0.1		<0.1	-	-	-	-	-	-	-	-	-	-	-
	Bromophos-ethyl	mg/kg	0.1		<0.1	-	-	-	-	-	-	-	-	-	-	-
	Chlorpyrifos	mg/kg	0.1		<0.1	-	-	-	-	-	<0.1	-	-	-	-	-
	Chlorpyrifos-methyl	mg/kg	0.1		<0.1	-	-	-	-	-	-	-	-	-	-	-
	Diazinon	mg/kg	0.1		<0.1	-	-	-	-	-	-	-	-	-	-	-
	Dichlorvos	mg/kg	0.1		<0.1	-	-	-	-	-	-	-	-	-	-	-
	Dimethoate	mg/kg	0.1		<0.1	-	-	-	-	-	-	-	-	-	-	-
	Ethion	mg/kg	0.1		<0.1	-	-	-	-	-	-	-	-	-	-	-
	Fenitrothion	mg/kg	0.1		<0.1	-	-	-	-	-	-	-	-	-	-	-
	Malathion	mg/kg	0.1		<0.1	-	-	-	-	-	-	-	-	-	-	-
	Ronnel	mg/kg	0.1		<0.1	-	-	-	-	-	-	-	-	-	-	-
Other	3,5-Dichlorobenzoic acid	mg/kg	0.5		<0.5	-	-	-	-	-	<0.5	-	-	-	-	-
	Actril (Ioxynil)	mg/kg	1		<1	-	-	-	-	-	<1	-	-	-	-	-
PAH/Phenols	PAH (total, NSW Waste 2008)	mg/kg			<1.35	-	-	-	<1.35	<1.35	0.73	-	-	-	-	-
	2,4-dimethylphenol	mg/kg	0.2		<0.2	-	-	-	-	-	<0.2	-	-	-	-	-
	2,4-dinitrophenol	mg/kg	2		<4	-	-	-	-	-	<2	-	-	-	-	-
	2-methylphenol	mg/kg	0.2		<0.2	-	-	-	-	-	<0.2	-	-	-	-	-
	2-nitrophenol	mg/kg	0.2		<0.2	-	-	-	-	-	<0.2	-	-	-	-	-
	4,6-Dinitro-2-methylphenol	mg/kg	2		<2	-	-	-	-	-	-	-	-	-	-	-
	4-chloro-3-methylphenol	mg/kg	1		<1	-	-	-	-	-	<2	-	-	-	-	-
	4-methylphenol	mg/kg			-	-	-	-	-	-	<0.4	-	-	-	-	-
	4-nitrophenol	mg/kg	4		<4	-	-	-	-	-	<4	-	-	-	-	-
	Acenaphthene	mg/kg	0.1		<0.1	-	-	-	<0.1	<0.1	<0.1	-	-	-	-	-
	Acenaphthylene	mg/kg	0.1		<0.1	-	-	-	<0.1	<0.1	<0.1	-	-	-	-	-
	Anthracene	mg/kg	0.1		<0.1	-	-	-	<0.1	<0.1	<0.1	-	-	-	-	-
	Benz(a)anthracene	mg/kg	0.1		<0.1	-	-	-	<0.1	<0.1	<0.1	-	-	-	-	-
	Benzo(a) pyrene	mg/kg	0.05		<0.05	-	-	-	<0.05	<0.05	0.08	-	-	-	-	-
	Benzo(b+k)fluoranthene	mg/kg			-	-	-	-	-	-	<0.2	-	-	-	-	-
	Benzo(g,h,i)perylene	mg/kg	0.1		<0.1	-	-	-	<0.1	<0.1	<0.1	-	-	-	-	-
	Chrysene	mg/kg	0.1		<0.1	-	-	-	<0.1	<0.1	<0.1	-	-	-	-	-
	Cresol Total	mg/kg			-	-	-	-	-	-	<0.2	-	-	-	-	-
	Dibenz(a,h)anthracene	mg/kg	0.1		<0.1	-	-	-	<0.1	<0.1	<0.1	-	-	-	-	-
	Fluoranthene	mg/kg	0.1		<0.1	-	-	-	<0.1	<0.1	<0.1	-	-	-	-	-
	Fluorene	mg/kg	0.1		<0.1	-	-	-	<0.1	<0.1	<0.1	-	-	-	-	-
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.1		<0.1	-	-	-	<0.1	<0.1	<0.1	-	-	-	-	-
	Naphthalene	mg/kg	0.1	170	<0.1	-	-	-	<0.1	<0.1	<0.1	-	-	-	-	-
	PAHs (Sum of total)	mg/kg			-	-	-	-	-	-	0.08	-	-	-	-	-
	Phenanthrene	mg/kg	0.1		<0.1	-	-	-	<0.1	<0.1	<0.1	-	-	-	-	-
	Phenol	mg/kg	0.2		<0.2	-	-	-	-	-	<0.2	-	-	-	-	-
	Phenolics Total	mg/kg	0.2		<5	-	-	-	-	-	<0.2	-	-	-	-	-
	Picloram	mg/kg	0.5		<0.5	-	-	-	-	-	<0.5	-	-	-	-	-
	Pyrene	mg/kg	0.1		<0.1	-	-	-	<0.1	<0.1	<0.1	-	-	-	-	-
Pesticides	Pesticides (total, NSW Waste 2008)	mg/kg			<3.6	-	-	-	-	-	<3	-	-	-	-	-
	Bifenthrin	mg/kg	0.5		<0.5	-	-	-	-	-	<0.5	-	-	-	-	-
	Mirex	mg/kg	0.5		<0.5	-	-	-	-	-	<0.5	-	-	-	-	-
	Parathion	mg/kg	0.1		<0.1	-	-	-	-	-	-	-	-	-	-	-
Phthalates	Bis(2-ethylhexyl) phthalate	mg/kg	5		-	-	-	-	-	-	-	-	-	-	-	-
	Butyl benzyl phthalate	mg/kg	1		-	-	-	-	-	-	-	-	-	-	-	-
	Diethylphthalate	mg/kg	1		-	-	-	-	-	-	-	-	-	-	-	-
	Dimethyl phthalate	mg/kg	1		-	-	-	-	-	-	-	-	-	-	-	-
	Di-n-butyl phthalate	mg/kg	5		-	-	-	-	-	-	-	-	-	-	-	-
	Di-n-octyl phthalate	mg/kg	1		-	-	-	-	-	-	-	-	-	-	-	-
Polychlorinated Biphenyls	Arochlor 1016	mg/kg	0.1		<0.1	-	-	-	-	-	<0.1	-	-	-	-	-
	Arochlor 1221	mg/kg	0.1		<0.1	-	-	-	-	-	<0.1	-	-	-	-	-
	Arochlor 1232	mg/kg	0.1		<0.1	-	-	-	-	-	<0.1	-	-	-	-	-
	Arochlor 1242	mg/kg	0.1		<0.1	-	-	-	-	-	<0.1	-	-	-	-	-
	Arochlor 1248	mg/kg	0.1		<0.1	-	-	-	-	-	<0.1	-	-	-	-	-
	Arochlor 1254	mg/kg	0.1		<0.1	-	-	-	-	-	<0.1	-	-	-	-	-
	Arochlor 1260	mg/kg	0.1		<0.1	-	-	-	-	-	<0.1	-	-	-	-	-
	PCBs (Sum of total)	mg/kg	0.1		<0.1	-	-	-	-	-	<0.1	-	-	-	-	-
Solvents	Cyclohexane	mg/kg	1		-	-	-	-	-	-	<1	-	-	-	-	-
TRH	C10-C16	mg/kg	50		<50	-	-	-	<50	<50	<50	-	-	-	-	-
	C16-C34	mg/kg	100		<100	-	-	-	<100	<100	<100	-	-	-	-	-
	C34-C40	mg/kg	100		<100	-	-	-	<100	<100	<100	-	-	-	-	-
	F2-NAPHTHALENE	mg/kg	50		<50	-	-	-	<50	<50	<50	-	-	-	-	-
	C6 - C9	mg/kg	25		<25	-	-	-	<25	<25	<25	-	-	-	-	-
	C10 - C14	mg/kg	50		<50	-	-	-	<50	<50	<50	-	-	-	-	-
	C15 - C28	mg/kg	100		<100	-	-	-	<100	<100	<100	-	-	-	-	-
	C29-C36	mg/kg	100		<100	-	-	-	<100	<100	<100	-	-	-	-	-
	+C10 - C36 (Sum of total)	mg/kg			-	-	-	-	-	-	<50	-	-	-	-	-
	C10 - C40 (Sum of total)	mg/kg	50		<50	-	-	-	<50	<50	<50	-	-	-	-	-
	C6-C10	mg/kg	25		<25	-	-	-	<25	<25	<25	-	-	-	-	-

Table 20: Soil Results Compared Against NSW EPA 2008 Waste Criteria

					Sampled Date	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017
					Sample Loc.	BH16	BH16	BH17	BH17	BH18	BH18	BH19	BH19	BH20	BH20	BH20	BH21	BH21	BH21	BH21	BH22	BH22	BH23	BH23	BH24	BH24	BH24	BH25	BH26	BH27	BH27	BH28	BH28	BH28	BH28
					Sample Depth	0.1	0.8	0.1	0.7	0.1	0.6	0.1	0.5	0.1	1	1.9	0.1	1.2	3	4	0.1	1	0.1	1	0.1	1.5	2.8	0.2	0.2	0.1	1	0.1	2	3	4
				NSW 2008 Restricted Waste	NSW 2008 Hazardous Waste																															
Chemical Group	**Chemical Name**	**Units**	**EQL**																																	
	3/4-Methylphenol (m/p-cresol)	mg/kg	0.4			-	-	-	-	-	-	-	<0.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Benzo(a)pyrene TEQ (LOR)	mg/kg	0.5			0.9	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	-	<0.5	<0.5	-	<0.5	-	<0.5	-	-	-	<0.5	-	<0.5	-	-	-	-	<0.5	-	-	0.6	-
	Benzo(b+j+k)fluoranthene	mg/kg	0.2			1	<0.2	<0.2	<0.2	-	<0.2	-	<0.2	-	<0.2	<0.2	-	<0.2	-	<0.2	-	-	-	<0.2	-	<0.2	-	-	-	-	<0.2	-	-	0.7	-
	DCPA (Chlorthal) Diacid	mg/kg	0.5			-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Plasticiser Compounds	mg/kg	5	20	80	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Scheduled chemicals (NSW Waste 2008)	mg/kg	7.5			-	-	-	-	<1.3	-	<1.3	<2.5	<1.3	-	-	<1.3	-	-	-	<1.3	-	<1.3	-	<1.3	-	-	<1.3	<1.3	<1.3	-	<1.3	-	-	-
	Total Positive PAHs	mg/kg	0.05			7.1	<0.05	0.4	<0.05	-	0.3	-	<0.05	-	<0.05	<0.05	-	0.06	-	<0.05	-	-	-	<0.05	-	0.4	-	-	-	-	<0.05	-	-	4.2	-
	Benzo(a)pyrene TEQ calc (Half)	mg/kg	0.5			0.9	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	-	<0.5	<0.5	-	<0.5	-	<0.5	-	-	-	<0.5	-	<0.5	-	-	-	-	<0.5	-	-	0.6	-
	Benzo(a)pyrene TEQ calc (Zero)	mg/kg	0.5			0.9	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	-	<0.5	<0.5	-	<0.5	-	<0.5	-	-	-	<0.5	-	<0.5	-	-	-	-	<0.5	-	-	0.6	-
	Metribuzin	mg/kg	0.5			-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acid Herbicides in Soil	2,6-D	mg/kg	0.5			-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Triazine Herb Soil	Irgarol	mg/kg	0.5			-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BTEX	Benzene	mg/kg	0.2	10	40	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Ethylbenzene	mg/kg	1	600	2400	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Toluene	mg/kg	0.5	288	1152	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Xylene (m & p)	mg/kg	2			-	-	-	-	-	-	-	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Xylene (o)	mg/kg	1			-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Xylene Total	mg/kg	1	1000	4000	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	C6-C10 less BTEX (F1)	mg/kg	25			-	-	-	-	-	-	-	<25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorinated Hydrocarbons	1,1,1,2-tetrachloroethane	mg/kg	1	200	800	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,1,1-trichloroethane	mg/kg	1	600	2400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,1,2,2-tetrachloroethane	mg/kg	1	26	104	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,1,2-trichloroethane	mg/kg	1	24	96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,1-dichloroethane	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,1-dichloroethene	mg/kg	1	14	56	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,1-dichloropropene	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,2,3-trichloropropane	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,2-dibromo-3-chloropropane	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,2-dichloroethane	mg/kg	1	10	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,2-dichloropropane	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,3-dichloropropane	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2,2-dichloropropane	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Bromochloromethane	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Bromodichloromethane	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Bromoform	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Carbon tetrachloride	mg/kg	1	10	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Chlorodibromomethane	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Chloroethane	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Chloroform	mg/kg	1	120	480	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Chloromethane	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	cis-1,2-dichloroethene	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	cis-1,3-dichloropropene	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dibromomethane	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Hexachlorobutadiene	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Trichloroethene	mg/kg	1	10	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Tetrachloroethene	mg/kg	1	14	56	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	trans-1,2-dichloroethene	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	trans-1,3-dichloropropene	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Vinyl chloride	mg/kg	1	4	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Explosives	Nitrobenzene	mg/kg	0.1	40	160	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Halogenated Benzenes	1,2,3-trichlorobenzene	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,2,4-trichlorobenzene	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,2-dichlorobenzene	mg/kg	1	86	344	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,3-dichlorobenzene	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,4-dichlorobenzene	mg/kg	1	150	600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2-chlorotoluene	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4-chlorotoluene	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Bromobenzene	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Chlorobenzene	mg/kg	1	2000	8000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Hexachlorobenzene	mg/kg	0.1			-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
Halogenated Hydrocarbons	1,2-dibromoethane	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Bromomethane	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dichlorodifluoromethane	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Trichlorofluoromethane	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Halogenated Phenols	2,3,4,6-tetrachlorophenol	mg/kg	0.2			-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2,4,5-trichlorophenol	mg/kg	0.2	8000	32000	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2,4,6-trichlorophenol	mg/kg	0.2	40	160	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2,4-dichlorophenol	mg/kg	0.2			-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2,6-dichlorophenol	mg/kg	0.2			-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2-chlorophenol	mg/kg	0.2			-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Pentachlorophenol	mg/kg	1			-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Herbicides	2,4,5-Trichlorophenoxy Acetic Acid	mg/kg	0.5			-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2,4,5-TP (Silvex)	mg/kg	0.5			-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2,4-dichlorophenoxybutanoic acid	mg/kg	0.5			-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Hedonal	mg/kg	0.5	200	800	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2,4-Dichlorprop	mg/kg	0.5			-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2,4,6-Trichlorophenoxy-acetic acid	mg/kg	0.5			-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2-Chlorophenoxyacetic acid	mg/kg	0.5			-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4-Chlorophenoxy acetic acid	mg/kg	0.5			-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Ametryn	mg/kg	0.5			-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Acifluorfen	mg/kg	2			-	-	-	-	-	-	-	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Atrazine	mg/kg	0.5			-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Bromoxynil	mg/kg	0.5			-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Clopyralid	mg/kg	0.5			-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Cyanazine	mg/kg	0.5			-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dicamba	mg/kg	0.5			-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dinoseb	mg/kg	1			-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Hexazinone	mg/kg	0.5			-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2-Methyl-4-chlorophenoxyacetic acid	mg/kg	0.5			-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2-Methyl-4-Chlorophenoxy Butanoic Acid	mg/kg	0.5			-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Mecoprop	mg/kg	0.5			-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Prometryn	mg/kg	0.5			-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Propazine	mg/kg	0.5			-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Simazine	mg/kg	0.5			-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Terbutryn	mg/kg	0.5			-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Triclopyr	mg/kg	0.5	40	160	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 20: Soil Results Compared Against NSW EPA 2008 Waste Criteria

Australian Unity Limited
266 Langueville Road
Lane Cove, NSW

					Sampled Date	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017
					Sample Loc.	BH16	BH16	BH17	BH17	BH18	BH18	BH19	BH19	BH20	BH20	BH20	BH21	BH21	BH21	BH21	BH22	BH22	BH23	BH23	BH24	BH24	BH24	BH25	BH26	BH27	BH27	BH28	BH28	BH28	BH28
					Sample Depth	0.1	0.8	0.1	0.7	0.1	0.6	0.1	0.5	0.1	1	1.9	0.1	1.2	3	4	0.1	1	0.1	1	0.1	1.5	2.8	0.2	0.2	0.1	1	0.1	2	3	4
				NSW 2008 Restricted Waste	NSW 2008 Hazardous Waste																														
Chemical Group	**Chemical Name**	**Units**	**EQL**																																
Inorganics	Cyanide (Free)	mg/kg	0.5			-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Cyanide Total	mg/kg	0.5	320	1280	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Fluoride	mg/kg	50	3000	12000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MAH	1,2,4-trimethylbenzene	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,3,5-trimethylbenzene	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Isopropylbenzene	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	n-butylbenzene	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	n-propylbenzene	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	p-isopropyltoluene	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	sec-butylbenzene	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Styrene	mg/kg	1	60	240	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	tert-butylbenzene	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Metals	Arsenic	mg/kg	4	100	400	8	9	5	16	<4	<4	5	<4	<4	<4	<4	<4	<4	9	<4	<4	<4	<4	<4	<4	<4	<4	22	<4	8	<4	<4	<4	5	7
	Beryllium	mg/kg	1	20	80	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Boron	mg/kg	3			-	-	-	-	-	-	-	<3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Cadmium	mg/kg	0.4	20	80	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	1	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
	Chromium (hexavalent)	mg/kg	1	100	400	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Chromium (III+VI)	mg/kg	1			12	9	14	7	9	6	9	8	9	14	3	14	12	23	5	5	8	7	5	9	9	14	16	4	12	12	7	11	27	14
	Cobalt	mg/kg	1			-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Copper	mg/kg	1			21	<1	5	4	8	1	8	2	8	<1	<1	9	3	12	<1	72	16	7	<1	7	3	1	15	<1	17	3	7	4	21	57
	Lead	mg/kg	1	100	400	89	11	11	13	13	10	13	17	14	8	8	12	23	120	6	230	830	12	4	11	18	15	87	6	130	34	10	52	130	150
	Manganese	mg/kg	1			-	-	-	-	-	-	-	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Mercury	mg/kg	0.1	4	16	0.2	<0.1	<0.1	<0.1	3.7	<0.1	6.4	<0.1	5.2	<0.1	<0.1	2.7	<0.1	<0.1	<0.1	0.2	0.2	4.2	<0.1	2.7	<0.1	<0.1	0.2	<0.1	0.2	<0.1	4.1	<0.1	0.2	<0.1
	Molybdenum	mg/kg	1	100	400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Nickel	mg/kg	1	40	160	9	<1	1	<1	3	<1	2	<1	3	2	<1	4	3	5	<1	17	4	3	<1	2	1	<1	3	<1	5	<1	3	1	5	17
	Selenium	mg/kg	2	20	80	-	-	-	-	-	-	-	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Silver	mg/kg	1	100	400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Tin	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Zinc	mg/kg	1			84	<1	6	2	18	7	14	5	17	50	1	19	89	640	<1	110	260	18	<1	17	14	8	66	2	140	12	17	28	120	4,600
Organic	Terbutylazine	mg/kg	0.5			-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Organochlorine Pesticides	4,4-DDE	mg/kg	0.1			-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	a-BHC	mg/kg	0.1			-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<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	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	b-BHC	mg/kg	0.1			-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	Chlordane (cis)	mg/kg	0.1			-	-	-	-	0.2	-	0.1	<0.1	0.1	-	-	0.2	-	-	-	<0.1	-	0.3	-	0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	Chlordane (trans)	mg/kg	0.1			-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	0.1	-	-	-	<0.1	-	0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	d-BHC	mg/kg	0.1			-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	DDD	mg/kg	0.1			-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	DDT	mg/kg	0.1			-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	DDT+DDE+DDD	mg/kg	0.1			-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	Dieldrin	mg/kg	0.1			-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	Endosulfan I	mg/kg	0.1			-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	Endosulfan II	mg/kg	0.1			-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<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	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	Endrin	mg/kg	0.1			-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<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	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	g-BHC (Lindane)	mg/kg	0.1			-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<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	-	-	-	<0.1	-	<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	-	-	-	<0.1	-	<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	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	Toxaphene	mg/kg	2			-	-	-	-	-	-	-	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Organophosphorous Pesticides	Azinophos methyl	mg/kg	0.1			-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	Bromophos-ethyl	mg/kg	0.1			-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	Chlorpyrifos	mg/kg	0.1	4	16	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	Chlorpyrifos-methyl	mg/kg	0.1			-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	Diazinon	mg/kg	0.1			-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	Dichlorvos	mg/kg	0.1			-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	Dimethoate	mg/kg	0.1			-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	Ethion	mg/kg	0.1			-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	Fenitrothion	mg/kg	0.1			-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	Malathion	mg/kg	0.1			-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
	Ronnel	mg/kg	0.1			-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
Other	3,5-Dichlorobenzoic acid	mg/kg	0.5			-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Actril (Ioxynil)	mg/kg	1			-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PAH/Phenols	PAH (total, NSW Waste 2008)	mg/kg				6.27	<1.35	0.83	<1.35	-	0.8	-	<1.35	-	<1.35	<1.35	-	0.71	-	<1.35	-	-	-	<1.35	-	1.03	-	-	-	-	<1.35	-	-	3.6	-
	2,4-dimethylphenol	mg/kg	0.2			-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2,4-dinitrophenol	mg/kg	4			-	-	-	-	-	-	-	<4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2-methylphenol	mg/kg	0.2	4000	16000	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2-nitrophenol	mg/kg	0.2			-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4,6-Dinitro-2-methylphenol	mg/kg	2			-	-	-	-	-	-	-	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4-chloro-3-methylphenol	mg/kg	1			-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4-nitrophenol	mg/kg	4			-	-	-	-	-	-	-	<4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Acenaphthene	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	-	<0.1	-	<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	-	<0.1	-
	Acenaphthylene	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	-	<0.1	-	<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	-	<0.1	-
	Anthracene	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	-	<0.1	-	<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	-	<0.1	-
	Benz(a)anthracene	mg/kg	0.1			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	-	-	0.4	-
	Benzo(a) pyrene	mg/kg	0.05	0.8	3.2	0.67	<0.05	0.08	<0.05	-	0.05	-	<0.05	-	<0.05	<0.05	-	0.06	-	<0.05	-	-	-	<0.05	-	0.08	-	-	-	-	<0.05	-	-	0.4	-
	Benzo(g,h,i)perylene	mg/kg	0.1			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	-	-	0.3	-
	Chrysene	mg/kg	0.1			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	-	-	0.4	-
	Dibenz(a,h)anthracene	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	-	<0.1	-	<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	-	<0.1	-
	Fluoranthene	mg/kg	0.1			1.3	<0.1	0.1	<0.1	-	0.1	-	<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	-	0.2	-	-	-	-	<0.1	-	-	0.6	-
	Fluorene	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	-	<0.1	-	<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	-	<0.1	-
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.1			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	-	-	0.3	-
	Naphthalene	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	-	<0.1	-	<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	-	<0.1	-
	Phenanthrene	mg/kg	0.1			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	-	-	0.2	-
	Phenol	mg/kg	0.2			-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Phenolics Total	mg/kg	5			-	-	-	-	-	-	-	<5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Picloram	mg/kg	0.5	60	240	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Pyrene	mg/kg	0.1			1.2	<0.1	0.1	<0.1	-	0.1	-	<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	-	0.2	-	-	-	-	<0.1	-	-	0.7	-
Pesticides	Pesticides (total, NSW Waste 2008)	mg/kg				-	-	-	-	<0.6	-	<0.6	<3.6	<0.6	-	-	<0.6	-	-	-	<0.6	-	<0.6	-	<0.6	-	-	<0.6	<0.6	<0.6	-	<0.6	-	-	-
	Bifenthrin	mg/kg	0.5			-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Mirex	mg/kg	0.5			-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Parathion	mg/kg	0.1			-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
Phthalates	Bis(2-ethylhexyl) phthalate	mg/kg	5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Butyl benzyl phthalate	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Diethylphthalate	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dimethyl phthalate	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Di-n-butyl phthalate	mg/kg	5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Di-n-octyl phthalate	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Polychlorinated Biphenyls	Arochlor 1016	mg/kg	0.1			-	-	-	-	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	<0.1
	Arochlor 1221	mg/kg	0.1			-	-	-	-	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	<0.1
	Arochlor 1232	mg/kg	0.1			-	-	-	-	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	<0.1
	Arochlor 1242	mg/kg	0.1			-	-	-	-	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	<0.1
	Arochlor 1248	mg/kg	0.1			-	-	-	-	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	<0.1
	Arochlor 1254	mg/kg	0.1			-	-	-	-	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	<0.1
	Arochlor 1260	mg/kg	0.1			-	-	-	-	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	<0.1
	PCBs (Sum of total)	mg/kg	0.1			-	-	-	-	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	<0.1
Solvents	Cyclohexane	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TPH	C10-C16	mg/kg	50			<50	<50	<50	<50	-	-	-	<50	-	-	-	-	-	<50	-	-	<50	-	-	<50	-	<50	-	-	-	-	-	-	-	<50
	C16-C34	mg/kg	100			<100	<100	<100	<100	-	-	-	<100	-	-	-	-	-	<100	-	-	<100	-	-	<100	-	<100	-	-	-	-	-	-	-	<100
	C34-C40	mg/kg	100			<100	<100	<100	<100	-	-	-	<100	-	-	-	-	-	<100	-	-	<100	-	-	<100	-	<100	-	-	-	-	-	-	-	<100
	F2-NAPHTHALENE	mg/kg	50			<50	<50	<50	<50	-	-	-	<50	-	-	-	-	-	<50	-	-	<50	-	-	<50	-	<50	-	-	-	-	-	-	-	<50
	C6 - C9	mg/kg	25	650	2,600	<25	<25	<25	<25	-	-	-	<25	-	-	-	-	-	<25	-	-	<25	-	-	<25	-	<25	-	-	-	-	-	-	-	<25
	C10 - C14	mg/kg	50			<50	<50	<50	<50	-	-	-	<50	-	-	-	-	-	<50	-	-	<50	-	-	<50	-	<50	-	-	-	-	-	-	-	<50
	C15 - C28	mg/kg	100			<100	<100	<100	<100	-	-	-	<100	-	-	-	-	-	<100	-	-	<100	-	-	<100	-	<100	-	-	-	-	-	-	-	<100
	C29-C36	mg/kg	100			<100	<100	<100	<100	-	-	-	<100	-	-	-	-	-	<100	-	-	<100	-	-	<100	-	<100	-	-	-	-	-	-	-	<100
	C10-C36 (Sum of Total)	mg/kg	100	10,000	40,000	<100	<100	<100	<100	-	-	-	<100	-	-	-	-	-	<100	-	-	<100	-	-	<100	-	<100	-	-	-	-	-	-	-	<100
	C10 - C40 (Sum of total)	mg/kg	50			<50	<50	<50	<50	-	-	-	<50	-	-	-	-	-	<50	-	-	<50	-	-	<50	-	<50	-	-	-	-	-	-	-	<50
	C6-C10	mg/kg	25			<25	<25	<25	<25	-	-	-	<25	-	-	-	-	-	<25	-	-	<25	-	-	<25	-	<25	-	-	-	-	-	-	-	<25

Table 20: Soil Results Compared Against NSW EPA 2008 Waste Criteria

					Sampled Date	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017
					Sample Loc.	BH29	BH29	BH29	BH29	BH29	BH29	BH29	BH29	BH29	BH30	BH30	BH30	BH30	BH30	BH30	BH30	BH30	BH30	BH31	BH31	BH32	BH32	BH32	BH32	BH32	BH33	BH33	BH34	BH35	BH36	BH37	BH38	BH39	BH40	BH41	BH42
					Sample Depth	0.1	1	2	3	4	5	6	7	8	0.1	1	2	3	4	5	6	7	0.1	1	0.1	1	2.2	3	4	0.2	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
				NSW 2008 Restricted Waste	NSW 2008 Hazardous Waste																																						
Chemical Group	**Chemical Name**	**Units**	**EQL**																																								
	3/4-Methylphenol (m/p-cresol)	mg/kg	0.4			-	-	-	-	-	-	-	-	-	-	<0.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.4	-	-	-	-	-	-	-	-
	Benzo(a)pyrene TEQ (LOR)	mg/kg	0.5			-	<0.5	-	<0.5	-	-	0.6	-	-	-	3.2	-	-	0.7	-	-	-	-	<0.5	-	<0.5	<0.5	-	-	-	3.2	<0.5	-	-	<0.5	<0.5	-	-	-	-
	Benzo(b+j+k)fluoranthene	mg/kg	0.2			-	0.2	-	0.3	-	-	0.7	-	-	-	3.4	-	-	0.8	-	-	-	-	<0.2	-	<0.2	<0.2	-	-	-	3.1	<0.2	-	-	0.3	0.4	-	-	-	-
	DCPA (Chlorthal) Diacid	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	Plasticiser Compounds	mg/kg	5	20	80	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Scheduled chemicals (NSW Waste 2008)	mg/kg	7.5			<1.3	-	-	-	-	-	-	-	-	<1.3	<2.5	-	-	-	-	-	-	<1.3	-	<1.3	-	-	-	-	<1.3	-	<2.5	-	-	-	-	-	-	-	<1.3
	Total Positive PAHs	mg/kg	0.05			-	0.97	-	2.1	-	-	3.9	-	-	-	22	-	-	5.1	-	-	-	-	<0.05	-	<0.05	0.51	-	-	-	16	<0.05	-	-	1.7	2.1	-	-	-	-
	Benzo(a)pyrene TEQ calc (Half)	mg/kg	0.5			-	<0.5	-	<0.5	-	-	0.6	-	-	-	3.2	-	-	0.7	-	-	-	-	<0.5	-	<0.5	<0.5	-	-	-	3.2	<0.5	-	-	<0.5	<0.5	-	-	-	-
	Benzo(a)pyrene TEQ calc (Zero)	mg/kg	0.5			-	<0.5	-	<0.5	-	-	0.6	-	-	-	3.2	-	-	0.7	-	-	-	-	<0.5	-	<0.5	<0.5	-	-	-	3.2	<0.5	-	-	<0.5	<0.5	-	-	-	-
	Metribuzin	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
Acid Herbicides in Soil	2,6-D	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
Triazine Herb Soil	Irgarol	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
BTEX	Benzene	mg/kg	0.2	10	40	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-
	Ethylbenzene	mg/kg	1	600	2400	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-
	Toluene	mg/kg	0.5	288	1152	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	Xylene (m & p)	mg/kg	2			-	-	-	-	-	-	-	-	-	-	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<2	-	-	-	-	-	-	-	-
	Xylene (o)	mg/kg	1			-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-
	Xylene Total	mg/kg	1	1000	4000	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-
	C6-C10 less BTEX (F1)	mg/kg	25			-	-	-	-	-	-	-	-	-	-	<25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<25	-	-	-	-	-	-	-	-
Chlorinated Hydrocarbons	1,1,1,2-tetrachloroethane	mg/kg	1	200	800	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,1,1-trichloroethane	mg/kg	1	600	2400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,1,2,2-tetrachloroethane	mg/kg	1	26	104	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,1,2-trichloroethane	mg/kg	1	24	96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,1-dichloroethane	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,1-dichloroethene	mg/kg	1	14	56	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,1-dichloropropene	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,2,3-trichloropropane	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,2-dibromo-3-chloropropane	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,2-dichloroethane	mg/kg	1	10	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,2-dichloropropane	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,3-dichloropropane	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2,2-dichloropropane	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Bromochloromethane	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Bromodichloromethane	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Bromoform	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Carbon tetrachloride	mg/kg	1	10	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Chlorodibromomethane	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Chloroethane	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Chloroform	mg/kg	1	120	480	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Chloromethane	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	cis-1,2-dichloroethene	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	cis-1,3-dichloropropene	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dibromomethane	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Hexachlorobutadiene	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Trichloroethene	mg/kg	1	10	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Tetrachloroethene	mg/kg	1	14	56	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	trans-1,2-dichloroethene	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	trans-1,3-dichloropropene	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Vinyl chloride	mg/kg	1	4	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Explosives	Nitrobenzene	mg/kg	0.1	40	160	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Halogenated Benzenes	1,2,3-trichlorobenzene	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,2,4-trichlorobenzene	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,2-dichlorobenzene	mg/kg	1	86	344	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,3-dichlorobenzene	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,4-dichlorobenzene	mg/kg	1	150	600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2-chlorotoluene	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4-chlorotoluene	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Bromobenzene	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Chlorobenzene	mg/kg	1	2000	8000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Hexachlorobenzene	mg/kg	0.1			<0.1	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-	-	-	<0.1
Halogenated Hydrocarbons	1,2-dibromoethane	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Bromomethane	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dichlorodifluoromethane	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Trichlorofluoromethane	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Halogenated Phenols	2,3,4,6-tetrachlorophenol	mg/kg	0.2			-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-
	2,4,5-trichlorophenol	mg/kg	0.2	8000	32000	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-
	2,4,6-trichlorophenol	mg/kg	0.2	40	160	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-
	2,4-dichlorophenol	mg/kg	0.2			-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-
	2,6-dichlorophenol	mg/kg	0.2			-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-
	2-chlorophenol	mg/kg	0.2			-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-
	Pentachlorophenol	mg/kg	1			-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-
Herbicides	2,4,5-Trichlorophenoxy Acetic Acid	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	2,4,5-TP (Silvex)	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	2,4-dichlorophenoxybutanoic acid	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	Hedonal	mg/kg	0.5	200	800	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	2,4-Dichlorprop	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	2,4,6-Trichlorophenoxy-acetic acid	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	2-Chlorophenoxyacetic acid	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	4-Chlorophenoxy acetic acid	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	Ametryn	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	Acifluorfen	mg/kg	2			-	-	-	-	-	-	-	-	-	-	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<2	-	-	-	-	-	-	-	-
	Atrazine	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	Bromoxynil	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	Clopyralid	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	Cyanazine	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	Dicamba	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	Dinoseb	mg/kg	1			-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-
	Hexazinone	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	2-Methyl-4-chlorophenoxyacetic acid	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	2-Methyl-4-Chlorophenoxy Butanoic Acid	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	Mecoprop	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	Prometryn	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	Propazine	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	Simazine	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	Terbutryn	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	Triclopyr	mg/kg	0.5	40	160	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-

LRM GLOBAL

Table 20: Soil Results Compared Against NSW EPA 2008 Waste Criteria

Australian Unity Limited
266 Langueville Road
Lane Cove, NSW

					Sampled Date	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017
					Sample Loc.	BH29	BH29	BH29	BH29	BH29	BH29	BH29	BH29	BH29	BH30	BH30	BH30	BH30	BH30	BH30	BH30	BH30	BH31	BH31	BH32	BH32	BH32	BH32	BH32	BH33	BH33	BH34	BH35	BH36	BH37	BH38	BH39	BH40	BH41	BH42
					Sample Depth	0.1	1	2	3	4	5	6	7	8	0.1	1	2	3	4	5	6	7	0.1	1	0.1	1	2.2	3	4	0.2	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
				NSW 2008 Restricted Waste	NSW 2008 Hazardous Waste																																		
Chemical Group	**Chemical Name**	**Units**	**EQL**																																				
Inorganics	Cyanide (Free)	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	Cyanide Total	mg/kg	0.5	320	1280	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Fluoride	mg/kg	50	3000	12000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MAH	1,2,4-trimethylbenzene	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,3,5-trimethylbenzene	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Isopropylbenzene	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	n-butylbenzene	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	n-propylbenzene	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	p-isopropyltoluene	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	sec-butylbenzene	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Styrene	mg/kg	1	60	240	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	tert-butylbenzene	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Metals	Arsenic	mg/kg	4	100	400	<4	6	5	<4	<4	<4	<4	<4	4	<4	5	6	6	<4	<4	<4	<4	32	<4	<4	8	<4	8	<4	<4	<4	<4	6	7	<4	7	<4	<4	<4	<4
	Beryllium	mg/kg	1	20	80	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-
	Boron	mg/kg	3			-	-	-	-	-	-	-	-	-	-	<3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<3	-	-	-	-	-	-	-	-
	Cadmium	mg/kg	0.4	20	80	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	10	0.5	<0.4	2	0.7	<0.4	<0.4	<0.4
	Chromium (hexavalent)	mg/kg	1	100	400	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-
	Chromium (III+VI)	mg/kg	1			8	46	21	4	14	7	12	4	10	6	19	17	37	11	6	79	7	10	4	4	10	7	9	14	20	15	4	22	12	8	180	6	7	6	12
	Cobalt	mg/kg	1			-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-
	Copper	mg/kg	1			7	6	21	2	17	16	11	5	8	6	14	15	14	36	3	58	<1	14	<1	36	15	4	11	<1	<1	21	2	270	37	8	140	30	10	11	9
	Lead	mg/kg	1	100	400	9	66	220	49	790	740	260	540	6,200	10	150	53	130	210	130	500	3	55	5	4	18	15	19	6	7	48	9	1,300	79	49	150	76	12	53	11
	Manganese	mg/kg	1			-	-	-	-	-	-	-	-	-	-	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-
	Mercury	mg/kg	0.1	4	16	3.2	0.1	0.2	<0.1	0.1	0.6	0.3	<0.1	<0.1	4.4	<0.1	0.3	0.3	0.2	<0.1	0.2	<0.1	0.5	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.3	0.1	0.1	1.3	0.2	5.5	4.1	5.2
	Molybdenum	mg/kg	1	100	400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Nickel	mg/kg	1	40	160	3	3	5	<1	11	4	7	2	5	2	2	6	3	26	4	23	<1	3	<1	34	1	1	2	<1	<1	2	<1	16	3	2	93	6	2	2	3
	Selenium	mg/kg	2	20	80	-	-	-	-	-	-	-	-	-	-	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<2	-	-	-	-	-	-	-	-
	Silver	mg/kg	1	100	400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Tin	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Zinc	mg/kg	1			16	56	110	17	170	230	90	190	94	9	140	66	110	94	89	180	4	54	<1	27	9	10	9	<1	<1	11	730	230	90	680	210	14	71	15
Organic	Terbutylazine	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
Organochlorine Pesticides	4,4-DDE	mg/kg	0.1			<0.1	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-	-	-	<0.1
	a-BHC	mg/kg	0.1			<0.1	-	-	-	-	-	-	-	-	<0.1	<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	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-	-	-	<0.1
	b-BHC	mg/kg	0.1			<0.1	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-	-	-	<0.1
	Chlordane (cis)	mg/kg	0.1			<0.1	-	-	-	-	-	-	-	-	0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-	-	-	0.1
	Chlordane (trans)	mg/kg	0.1			<0.1	-	-	-	-	-	-	-	-	0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-	-	-	<0.1
	d-BHC	mg/kg	0.1			<0.1	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-	-	-	<0.1
	DDD	mg/kg	0.1			<0.1	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-	-	-	<0.1
	DDT	mg/kg	0.1			<0.1	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-	-	-	<0.1
	DDT+DDE+DDD	mg/kg	0.1			<0.1	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-	-	-	<0.1
	Dieldrin	mg/kg	0.1			<0.1	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-	-	-	<0.1
	Endosulfan I	mg/kg	0.1			<0.1	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-	-	-	<0.1
	Endosulfan II	mg/kg	0.1			<0.1	-	-	-	-	-	-	-	-	<0.1	<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	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-	-	-	<0.1
	Endrin	mg/kg	0.1			<0.1	-	-	-	-	-	-	-	-	<0.1	<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	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-	-	-	<0.1
	g-BHC (Lindane)	mg/kg	0.1			<0.1	-	-	-	-	-	-	-	-	<0.1	<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	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-	-	-	<0.1
	Heptachlor epoxide	mg/kg	0.1			<0.1	-	-	-	-	-	-	-	-	<0.1	<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	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-	-	-	<0.1
	Toxaphene	mg/kg	2			-	-	-	-	-	-	-	-	-	-	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<2	-	-	-	-	-	-	-	-
Organophosphorous Pesticides	Azinophos methyl	mg/kg	0.1			<0.1	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-	-	-	<0.1
	Bromophos-ethyl	mg/kg	0.1			<0.1	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-	-	-	<0.1
	Chlorpyrifos	mg/kg	0.1	4	16	<0.1	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-	-	-	<0.1
	Chlorpyrifos-methyl	mg/kg	0.1			<0.1	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-	-	-	<0.1
	Diazinon	mg/kg	0.1			<0.1	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-	-	-	<0.1
	Dichlorvos	mg/kg	0.1			<0.1	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-	-	-	<0.1
	Dimethoate	mg/kg	0.1			<0.1	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-	-	-	<0.1
	Ethion	mg/kg	0.1			<0.1	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-	-	-	<0.1
	Fenitrothion	mg/kg	0.1			<0.1	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-	-	-	<0.1
	Malathion	mg/kg	0.1			<0.1	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-	-	-	<0.1
	Ronnel	mg/kg	0.1			<0.1	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-	-	-	<0.1
Other	3,5-Dichlorobenzoic acid	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	Actril (Ioxynil)	mg/kg	1			-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-
PAH/Phenols	PAH (total, NSW Waste 2008)	mg/kg				-	1.2	-	2.05	-	-	3.5	-	-	-	18.65	-	-	4.52	-	-	-	-	<1.35	-	<1.35	1.08	-	-	-	12.8	<1.35	-	-	1.6	2	-	-	-
	2,4-dimethylphenol	mg/kg	0.2			-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-
	2,4-dinitrophenol	mg/kg	4			-	-	-	-	-	-	-	-	-	-	<4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<4	-	-	-	-	-	-	-	-
	2-methylphenol	mg/kg	0.2	4000	16000	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-
	2-nitrophenol	mg/kg	0.2			-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-
	4,6-Dinitro-2-methylphenol	mg/kg	2			-	-	-	-	-	-	-	-	-	-	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<2	-	-	-	-	-	-	-	-
	4-chloro-3-methylphenol	mg/kg	1			-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-
	4-nitrophenol	mg/kg	4			-	-	-	-	-	-	-	-	-	-	<4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<4	-	-	-	-	-	-	-	-
	Acenaphthene	mg/kg	0.1			-	<0.1	-	<0.1	-	-	<0.1	-	-	-	<0.1	-	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	<0.1	<0.1	-	-	-
	Acenaphthylene	mg/kg	0.1			-	<0.1	-	<0.1	-	-	<0.1	-	-	-	0.4	-	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	<0.1	<0.1	-	-	-
	Anthracene	mg/kg	0.1			-	<0.1	-	<0.1	-	-	<0.1	-	-	-	0.4	-	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	-	0.2	<0.1	-	-	<0.1	<0.1	-	-	-
	Benz(a)anthracene	mg/kg	0.1			-	0.1	-	0.2	-	-	0.4	-	-	-	2	-	-	0.5	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	-	0.8	<0.1	-	-	0.1	0.2	-	-	-
	Benzo(a) pyrene	mg/kg	0.05	0.8	3.2	-	0.1	-	0.2	-	-	0.5	-	-	-	2.2	-	-	0.52	-	-	-	-	<0.05	-	<0.05	0.08	-	-	-	2.2	<0.05	-	-	0.2	0.2	-	-	-
	Benzo(g,h,i)perylene	mg/kg	0.1			-	0.1	-	0.2	-	-	0.3	-	-	-	1.6	-	-	0.3	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	-	2.5	<0.1	-	-	0.1	0.2	-	-	-
	Chrysene	mg/kg	0.1			-	0.1	-	0.2	-	-	0.4	-	-	-	2.1	-	-	0.5	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	-	0.9	<0.1	-	-	0.1	0.2	-	-	-
	Dibenz(a,h)anthracene	mg/kg	0.1			-	<0.1	-	<0.1	-	-	<0.1	-	-	-	0.3	-	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	-	0.4	<0.1	-	-	<0.1	<0.1	-	-	-
	Fluoranthene	mg/kg	0.1			-	0.2	-	0.4	-	-	0.5	-	-	-	3.5	-	-	0.9	-	-	-	-	<0.1	-	<0.1	0.2	-	-	-	1.5	<0.1	-	-	0.3	0.4	-	-	-
	Fluorene	mg/kg	0.1			-	<0.1	-	<0.1	-	-	<0.1	-	-	-	<0.1	-	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	<0.1	<0.1	-	-	-
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.1			-	<0.1	-	0.1	-	-	0.3	-	-	-	1.2	-	-	0.3	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	-	1.8	<0.1	-	-	0.1	0.1	-	-	-
	Naphthalene	mg/kg	0.1			-	<0.1	-	<0.1	-	-	<0.1	-	-	-	<0.1	-	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	<0.1	<0.1	-	-	-
	Phenanthrene	mg/kg	0.1			-	<0.1	-	<0.1	-	-	0.2	-	-	-	0.9	-	-	0.2	-	-	-	-	<0.1	-	<0.1	0.1	-	-	-	0.8	<0.1	-	-	0.1	0.1	-	-	-
	Phenol	mg/kg	0.2			-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	-
	Phenolics Total	mg/kg	5			-	-	-	-	-	-	-	-	-	-	<5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<5	-	-	-	-	-	-	-	-
	Picloram	mg/kg	0.5	60	240	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	Pyrene	mg/kg	0.1			-	0.2	-	0.4	-	-	0.6	-	-	-	3.9	-	-	1	-	-	-	-	<0.1	-	<0.1	0.2	-	-	-	1.5	<0.1	-	-	0.3	0.3	-	-	-
Pesticides	Pesticides (total, NSW Waste 2008)	mg/kg				<0.6	-	-	-	-	-	-	-	-	<0.6	<3.6	-	-	-	-	-	-	<0.6	-	<0.6	-	-	-	-	<0.6	-	<3.6	-	-	-	-	-	-	-	<0.6
	Bifenthrin	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	Mirex	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	Parathion	mg/kg	0.1			<0.1	-	-	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-	-	-	<0.1
Phthalates	Bis(2-ethylhexyl) phthalate	mg/kg	5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Butyl benzyl phthalate	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Diethylphthalate	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dimethyl phthalate	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Di-n-butyl phthalate	mg/kg	5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Di-n-octyl phthalate	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Polychlorinated Biphenyls	Arochlor 1016	mg/kg	0.1			-	-	-	-	<0.1	-	-	-	-	-	<0.1	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-
	Arochlor 1221	mg/kg	0.1			-	-	-	-	<0.1	-	-	-	-	-	<0.1	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-
	Arochlor 1232	mg/kg	0.1			-	-	-	-	<0.1	-	-	-	-	-	<0.1	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-
	Arochlor 1242	mg/kg	0.1			-	-	-	-	<0.1	-	-	-	-	-	<0.1	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-
	Arochlor 1248	mg/kg	0.1			-	-	-	-	<0.1	-	-	-	-	-	<0.1	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-
	Arochlor 1254	mg/kg	0.1			-	-	-	-	<0.1	-	-	-	-	-	<0.1	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-
	Arochlor 1260	mg/kg	0.1			-	-	-	-	<0.1	-	-	-	-	-	<0.1	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-
	PCBs (Sum of total)	mg/kg	0.1			-	-	-	-	<0.1	-	-	-	-	-	<0.1	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-
Solvents	Cyclohexane	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TPH	C10-C16	mg/kg	50			-	-	-	-	-	-	-	-	<50	-	<50	-	<50	-	-	-	<50	-	-	-	-	-	-	<50	-	-	<50	-	-	-	-	**68**	-	-	-
	C16-C34	mg/kg	100			-	-	-	-	-	-	-	-	<100	-	<100	-	<100	-	-	-	<100	-	-	-	-	-	-	<100	-	-	<100	-	-	-	-	**640**	-	-	-
	C34-C40	mg/kg	100			-	-	-	-	-	-	-	-	<100	-	<100	-	<100	-	-	-	<100	-	-	-	-	-	-	<100	-	-	<100	-	-	-	-	**370**	-	-	-
	F2-NAPHTHALENE	mg/kg	50			-	-	-	-	-	-	-	-	<50	-	<50	-	<50	-	-	-	<50	-	-	-	-	-	-	<50	-	-	<50	-	-	-	-	-	-	-	-
	C6 - C9	mg/kg	25	650	2,600	-	-	-	-	-	-	-	-	<25	-	<25	-	<25	-	-	-	<25	-	-	-	-	-	-	<25	-	-	<25	-	-	-	-	<25	-	-	-
	C10 - C14	mg/kg	50			-	-	-	-	-	-	-	-	<50	-	<50	-	<50	-	-	-	<50	-	-	-	-	-	-	<50	-	-	<50	-	-	-	-	<50	-	-	-
	C15 - C28	mg/kg	100			-	-	-	-	-	-	-	-	<100	-	<100	-	<100	-	-	-	<100	-	-	-	-	-	-	<100	-	-	<100	-	-	-	-	**360**	-	-	-
	C29-C36	mg/kg	100			-	-	-	-	-	-	-	-	<100	-	<100	-	<100	-	-	-	<100	-	-	-	-	-	-	<100	-	-	<100	-	-	-	-	**480**	-	-	-
	C10-C36 (Sum of Total)	mg/kg	100	10,000	40,000	-	-	-	-	-	-	-	-	<100	-	<100	-	<100	-	-	-	<100	-	-	-	-	-	-	<100	-	-	<100	-	-	-	-	**840**	-	-	-
	C10 - C40 (Sum of total)	mg/kg	50			-	-	-	-	-	-	-	-	<50	-	<50	-	<50	-	-	-	<50	-	-	-	-	-	-	<50	-	-	<50	-	-	-	-	**1,100**	-	-	-
	C6-C10	mg/kg	25			-	-	-	-	-	-	-	-	<25	-	<25	-	<25	-	-	-	<25	-	-	-	-	-	-	<25	-	-	<25	-	-	-	-	<25	-	-	-

Table 20: Soil Results Compared Against NSW EPA 2008 Waste Criteria

					Sampled Date	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	6/07/2017	6/07/2017	6/07/2017	6/07/2017	10/05/2018	11/05/2018	6/07/2017	6/07/2017	6/07/2017
					Sample Loc.	BH43_5.0	BH43_6.0	BH43_7.0	BH43_8.0	BH43_9.0	BH44_5.0	BH44_6.0	BH44_7.0	BH44_8.0	BH44_9.0	BH45_7.0	BH45_7.8	BH45_8.0	BH46_0.2	BH46_0.5	BH46_1.0	BH46_2.0	BH46_2.3	BH47_3.6	BH47_5.0	BH47_6.0	BH47_6.5	BH47_7.0	Dup1	Dup2	Dup3	Dup4	Dup 5	Dup 6	BH16 - [SPLIT]	BH29 - [SPLIT]	BH30 - [SPLIT]
					Sample Depth	5	6	7	8	9	5	6	7	8	9	7	7.8	8	0.2	0.5	1	2	2.3	3.6	5	6	6.5	7	0.1	0.1	0.1	0.1			0.1	8	6
				NSW 2008 Restricted Waste	NSW 2008 Hazardous Waste																																		
Chemical Group	**Chemical Name**	**Units**	**EQL**																																				
	3/4-Methylphenol (m/p-cresol)	mg/kg	0.4			<0.4	-	-	-	<0.4	<0.4	-	-	-	<0.4	<0.4	-	<0.4	<0.4	-	-	-	<0.4	<0.4	-	-	-	<0.4	<0.4	-	-	-	-	-	-	-	-
	Benzo(a)pyrene TEQ (LOR)	mg/kg	0.5			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-
	Benzo(b+j+k)fluoranthene	mg/kg	0.2			<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.4	0.2	<0.2	<0.2	<0.2	<0.2	-	-	-	<0.2	<0.2	-	-	-
	DCPA (Chlorthal) Diacid	mg/kg	0.5			<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-	-	-	-	-	-
	Plasticiser Compounds	mg/kg	5	20	80	<5	-	-	-	<5	<5	-	-	-	<5	<5	-	<5	<5	-	-	-	<5	<5	-	-	-	<5	-	-	-	-	-	-	-	-	-
	Scheduled chemicals (NSW Waste 2008)	mg/kg	7.5			<7.5	-	-	-	<7.5	<7.5	-	-	-	<7.5	<7.5	-	<7.5	<7.5	-	-	-	<7.5	<7.5	-	-	-	<7.5	<2.5	-	-	-	-	-	-	-	-
	Total Positive PAHs	mg/kg	0.05			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.65	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	2.4	1.1	<0.05	<0.05	0.3	<0.05	-	-	-	<0.05	<0.05	-	-	-
	Benzo(a)pyrene TEQ calc (Half)	mg/kg	0.5			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-
	Benzo(a)pyrene TEQ calc (Zero)	mg/kg	0.5			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-
	Metribuzin	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
Acid Herbicides in Soil	2,6-D	mg/kg	0.5			<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-	-	-	-	-	-
Triazine Herb Soil	Irgarol	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
BTEX	Benzene	mg/kg	0.2	10	40	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	-	-	<0.2	<0.2	-	-	-
	Ethylbenzene	mg/kg	1	600	2400	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	-	-	<1	<1	-	-	-
	Toluene	mg/kg	0.5	288	1152	<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	<0.5	<0.5	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-
	Xylene (m & p)	mg/kg	2			<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	-	-	-	<2	<2	-	-	-
	Xylene (o)	mg/kg	1			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	-	-	<1	<1	-	-	-
	Xylene Total	mg/kg	1	1000	4000	-	<1	<1	<1	-	-	<1	<1	<1	-	-	<1	-	-	<1	<1	<1	-	-	<1	<1	<1	-	<1	-	-	-	<1	<1	-	-	-
	C6-C10 less BTEX (F1)	mg/kg	25			-	<25	<25	<25	-	-	<25	<25	<25	-	-	<25	-	-	<25	<25	<25	-	-	<25	<25	<25	-	<25	-	-	-	<25	<25	-	-	-
Chlorinated Hydrocarbons	1,1,1,2-tetrachloroethane	mg/kg	1	200	800	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-
	1,1,1-trichloroethane	mg/kg	1	600	2400	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-
	1,1,2,2-tetrachloroethane	mg/kg	1	26	104	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-
	1,1,2-trichloroethane	mg/kg	1	24	96	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-
	1,1-dichloroethane	mg/kg	1			<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-
	1,1-dichloroethene	mg/kg	1	14	56	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-
	1,1-dichloropropene	mg/kg	1			<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-
	1,2,3-trichloropropane	mg/kg	1			<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-
	1,2-dibromo-3-chloropropane	mg/kg	1			<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-
	1,2-dichloroethane	mg/kg	1	10	40	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-
	1,2-dichloropropane	mg/kg	1			<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-
	1,3-dichloropropane	mg/kg	1			<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-
	2,2-dichloropropane	mg/kg	1			<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-
	Bromochloromethane	mg/kg	1			<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-
	Bromodichloromethane	mg/kg	1			<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-
	Bromoform	mg/kg	1			<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-
	Carbon tetrachloride	mg/kg	1	10	40	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-
	Chlorodibromomethane	mg/kg	1			<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-
	Chloroethane	mg/kg	1			<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-
	Chloroform	mg/kg	1	120	480	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-
	Chloromethane	mg/kg	1			<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-
	cis-1,2-dichloroethene	mg/kg	1			<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-
	cis-1,3-dichloropropene	mg/kg	1			<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-
	Dibromomethane	mg/kg	1			<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-
	Hexachlorobutadiene	mg/kg	1			<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-
	Trichloroethene	mg/kg	1	10	40	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-
	Tetrachloroethene	mg/kg	1	14	56	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-
	trans-1,2-dichloroethene	mg/kg	1			<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-
	trans-1,3-dichloropropene	mg/kg	1			<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-
	Vinyl chloride	mg/kg	1	4	16	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-
Explosives	Nitrobenzene	mg/kg	0.1	40	160	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	-	-	-	-	-	-	-	-	-
Halogenated Benzenes	1,2,3-trichlorobenzene	mg/kg	1			<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-
	1,2,4-trichlorobenzene	mg/kg	1			<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-
	1,2-dichlorobenzene	mg/kg	1	86	344	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-
	1,3-dichlorobenzene	mg/kg	1			<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-
	1,4-dichlorobenzene	mg/kg	1	150	600	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-
	2-chlorotoluene	mg/kg	1			<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-
	4-chlorotoluene	mg/kg	1			<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-
	Bromobenzene	mg/kg	1			<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-
	Chlorobenzene	mg/kg	1	2000	8000	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-
	Hexachlorobenzene	mg/kg	0.1			<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	-	-	-	-	-
Halogenated Hydrocarbons	1,2-dibromoethane	mg/kg	1			<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-
	Bromomethane	mg/kg	1			<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-
	Dichlorodifluoromethane	mg/kg	1			<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-
	Trichlorofluoromethane	mg/kg	1			<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-
Halogenated Phenols	2,3,4,6-tetrachlorophenol	mg/kg	0.2			<0.2	-	-	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	-	-	-	-	-	-	-
	2,4,5-trichlorophenol	mg/kg	0.2	8000	32000	<0.2	-	-	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	-	-	-	-	-	-	-
	2,4,6-trichlorophenol	mg/kg	0.2	40	160	<0.2	-	-	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	-	-	-	-	-	-	-
	2,4-dichlorophenol	mg/kg	0.2			<0.2	-	-	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	-	-	-	-	-	-	-
	2,6-dichlorophenol	mg/kg	0.2			<0.2	-	-	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	-	-	-	-	-	-	-
	2-chlorophenol	mg/kg	0.2			<0.2	-	-	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	-	-	-	-	-	-	-
	Pentachlorophenol	mg/kg	1			<5	-	-	-	<5	<5	-	-	-	<5	<5	-	<5	<5	-	-	-	<5	<5	-	-	-	<5	<1	-	-	-	-	-	-	-	-
Herbicides	2,4,5-Trichlorophenoxy Acetic Acid	mg/kg	0.5			<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-	-	-	-	-	-
	2,4,5-TP (Silvex)	mg/kg	0.5			<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-	-	-	-	-	-
	2,4-dichlorophenoxybutanoic acid	mg/kg	0.5			<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-	-	-	-	-	-
	Hedonal	mg/kg	0.5	200	800	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-	-	-	-	-	-
	2,4-Dichlorprop	mg/kg	0.5			<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-	-	-	-	-	-
	2,4,6-Trichlorophenoxy-acetic acid	mg/kg	0.5			<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-	-	-	-	-	-
	2-Chlorophenoxyacetic acid	mg/kg	0.5			<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-	-	-	-	-	-
	4-Chlorophenoxy acetic acid	mg/kg	0.5			<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-	-	-	-	-	-
	Ametryn	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	Acifluorfen	mg/kg	2			<2	-	-	-	<2	<2	-	-	-	<2	<2	-	<2	<2	-	-	-	<2	<2	-	-	-	<2	<2	-	-	-	-	-	-	-	-
	Atrazine	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	Bromoxynil	mg/kg	0.5			<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-	-	-	-	-	-
	Clopyralid	mg/kg	0.5			<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-	-	-	-	-	-
	Cyanazine	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	Dicamba	mg/kg	0.5			<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-	-	-	-	-	-
	Dinoseb	mg/kg	1			<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	-	-	-	-	-	-	-
	Hexazinone	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	2-Methyl-4-chlorophenoxyacetic acid	mg/kg	0.5			<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-	-	-	-	-	-
	2-Methyl-4-Chlorophenoxy Butanoic Acid	mg/kg	0.5			<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-	-	-	-	-	-
	Mecoprop	mg/kg	0.5			<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-	-	-	-	-	-
	Prometryn	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	Propazine	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	Simazine	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	Terbutryn	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	Triclopyr	mg/kg	0.5	40	160	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-	-	-	-	-	-

Table 20: Soil Results Compared Against NSW EPA 2008 Waste Criteria

Australian Unity Limited
266 Langueville Road
Lane Cove, NSW

Chemical Group	Chemical Name	Units	EQL	NSW 2008 Restricted Waste	NSW 2008 Hazardous Waste	BH43_5.0	BH43_6.0	BH43_7.0	BH43_8.0	BH43_9.0	BH44_5.0	BH44_6.0	BH44_7.0	BH44_8.0	BH44_9.0	BH45_7.0	BH45_7.8	BH45_8.0	BH46_0.2	BH46_0.5	BH46_1.0	BH46_2.0	BH46_2.3	BH47_3.6	BH47_5.0	BH47_6.0	BH47_6.5	BH47_7.0	Dup1	Dup2	Dup3	Dup4	Dup 5	Dup 6	BH16 - [SPLIT]	BH29 - [SPLIT]	BH30 - [SPLIT]
	Sampled Date					10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018	6/07/2017	6/07/2017	6/07/2017	6/07/2017	10/05/2018	11/05/2018	6/07/2017	6/07/2017	6/07/2017
	Sample Depth					5	6	7	8	9	5	6	7	8	9	7	7.8	8	0.2	0.5	1	2	2.3	3.6	5	6	6.5	7	0.1	0.1	0.1	0.1			0.1	8	6
Inorganics	Cyanide (Free)	mg/kg	0.5			<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-	-	-	-	-	-
	Cyanide Total	mg/kg	0.5	320	1280	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	-	-	-	-	-	-	-	-	-
	Fluoride	mg/kg	50	3000	12000	<50	-	-	-	<50	<50	-	-	-	<50	<50	-	<50	<50	-	-	-	<50	<50	-	-	-	<50	-	-	-	-	-	-	-	-	-
MAH	1,2,4-trimethylbenzene	mg/kg	1			<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-
	1,3,5-trimethylbenzene	mg/kg	1			<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-
	Isopropylbenzene	mg/kg	1			<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-
	n-butylbenzene	mg/kg	1			<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-
	n-propylbenzene	mg/kg	1			<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-
	p-isopropyltoluene	mg/kg	1			<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-
	sec-butylbenzene	mg/kg	1			<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-
	Styrene	mg/kg	1	60	240	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-
	tert-butylbenzene	mg/kg	1			<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-
Metals	Arsenic	mg/kg	4	100	400	<4	<4	<4	<4	<4	<4	8	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	4	<4	4	<4	<4	<4	5	14	<4	<4	<4	8	<4	<4
	Beryllium	mg/kg	1	20	80	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	<1	-	-
	Boron	mg/kg	3			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<3	-	-	-	-	-	<3	-	-
	Cadmium	mg/kg	0.4	20	80	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	6	0.6	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
	Chromium (hexavalent)	mg/kg	1	100	400	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	-	-	-	-	-	-	-
	Chromium (III+VI)	mg/kg	1			5	7	7	7	7	4	15	12	16	13	9	9	12	5	5	3	9	10	9	9	10	9	6	4	18	13	8	6	10	16	8	17
	Cobalt	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	4	-	-
	Copper	mg/kg	1			4	6	5	5	4	1	3	4	5	3	4	2	6	<1	<1	<1	<1	<1	4	3	6	5	2	2	230	47	8	5	<1	30	6	19
	Lead	mg/kg	1	100	400	5	7	6	5	4	4	12	4	3	4	10	16	19	6	7	7	6	5	25	14	14	13	8	7	1,100	91	53	5	6	110	3,700	490
	Manganese	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	190	-	-
	Mercury	mg/kg	0.1	4	16	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.1	0.1
	Molybdenum	mg/kg	1	100	400	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1	1	<1	<1	<1	1	<1	-	-	-	-	<1	1	-	-	-
	Nickel	mg/kg	1	40	160	2	2	3	2	2	<1	1	2	5	3	3	1	3	<1	<1	<1	<1	<1	2	3	1	1	1	<1	11	9	2	2	<1	12	3	11
	Selenium	mg/kg	2	20	80	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	-	-	-	<2	<2	<2	-	-
	Silver	mg/kg	1	100	400	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	-	-	-	<1	<1	-	-	-
	Tin	mg/kg	1			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	-	-	-	<1	<1	-	-	-
	Zinc	mg/kg	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	650	230	82	-	-	130	79	370
Organic	Terbutylazine	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
Organochlorine Pesticides	4,4-DDE	mg/kg	0.1			<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	-	-	-	-	-
	a-BHC	mg/kg	0.1			<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<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	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	-	-	-	-	-
	b-BHC	mg/kg	0.1			<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	-	-	-	-	-
	Chlordane (cis)	mg/kg	0.1			<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	-	-	-	-	-
	Chlordane (trans)	mg/kg	0.1			<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	-	-	-	-	-
	d-BHC	mg/kg	0.1			<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	-	-	-	-	-
	DDD	mg/kg	0.1			<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	-	-	-	-	-
	DDT	mg/kg	0.1			<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	-	-	-	-	-
	DDT+DDE+DDD	mg/kg	0.1			<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	-	-	-	-	-
	Dieldrin	mg/kg	0.1			<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	-	-	-	-	-
	Endosulfan I	mg/kg	0.1			<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	-	-	-	-	-
	Endosulfan II	mg/kg	0.1			<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<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	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	-	-	-	-	-
	Endrin	mg/kg	0.1			<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<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	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	-	-	-	-	-
	g-BHC (Lindane)	mg/kg	0.1			<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<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	-	<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	-	<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	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	-	-	-	-	-
	Toxaphene	mg/kg	2			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<2	-	-	-	-	-	-	-	-
Organophosphorous Pesticides	Azinophos methyl	mg/kg	0.1			<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	-	-	-	-	-
	Bromophos-ethyl	mg/kg	0.1			<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	-	-	-	-	-
	Chlorpyrifos	mg/kg	0.1	4	16	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	-	-	-	-	-
	Chlorpyrifos-methyl	mg/kg	0.1			<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	-	-	-	-	-
	Diazinon	mg/kg	0.1			<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	-	-	-	-	-
	Dichlorvos	mg/kg	0.1			<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	-	-	-	-	-
	Dimethoate	mg/kg	0.1			<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	-	-	-	-	-
	Ethion	mg/kg	0.1			<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	-	-	-	-	-
	Fenitrothion	mg/kg	0.1			<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	-	-	-	-	-
	Malathion	mg/kg	0.1			<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	-	-	-	-	-
	Ronnel	mg/kg	0.1			<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	-	-	-	-	-
Other	3,5-Dichlorobenzoic acid	mg/kg	0.5			<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-	-	-	-	-	-
	Actril (loxynil)	mg/kg	1			<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1	<1	-	-	-	-	-	-	-	-
PAH/Phenols	PAH (total, NSW Waste 2008)	mg/kg				<1.35	<1.35	<1.35	<1.35	<1.35	<1.35	1.09	<1.35	<1.35	<1.35	<1.35	<1.35	<1.35	<1.35	<1.35	<1.35	<1.35	<1.35	2.3	1.25	<1.35	<1.35	0.81	<1.35	-	-	-	<1.35	<1.35	-	-	-
	2,4-dimethylphenol	mg/kg	0.2			<0.2	-	-	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	-	-	-	-	-	-	-
	2,4-dinitrophenol	mg/kg	4			<4	-	-	-	<4	<4	-	-	-	<4	<4	-	<4	<4	-	-	-	<4	<4	-	-	-	<4	<4	-	-	-	-	-	-	-	-
	2-methylphenol	mg/kg	0.2	4000	16000	<0.2	-	-	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	-	-	-	-	-	-	-
	2-nitrophenol	mg/kg	0.2			<0.2	-	-	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	-	-	-	-	-	-	-
	4,6-Dinitro-2-methylphenol	mg/kg	2			<10	-	-	-	<10	<10	-	-	-	<10	<10	-	<10	<10	-	-	-	<10	<10	-	-	-	<10	<2	-	-	-	-	-	-	-	-
	4-chloro-3-methylphenol	mg/kg	1			<5	-	-	-	<5	<5	-	-	-	<5	<5	-	<5	<5	-	-	-	<5	<5	-	-	-	<5	<1	-	-	-	-	-	-	-	-
	4-nitrophenol	mg/kg	4			<4	-	-	-	<4	<4	-	-	-	<4	<4	-	<4	<4	-	-	-	<4	<4	-	-	-	<4	<4	-	-	-	-	-	-	-	-
	Acenaphthene	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-
	Acenaphthylene	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-
	Anthracene	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-
	Benz(a)anthracene	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.1	-	-	-	<0.1	<0.1	-	-	-
	Benzo(a) pyrene	mg/kg	0.05	0.8	3.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.09	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.2	0.1	<0.05	<0.05	0.06	<0.05	-	-	-	<0.05	<0.05	-	-	-
	Benzo(g,h,i)perylene	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.1	-	-	-	<0.1	<0.1	-	-	-
	Chrysene	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.1	-	-	-	<0.1	<0.1	-	-	-
	Dibenz(a,h)anthracene	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-
	Fluoranthene	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.4	0.2	<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	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-
	Naphthalene	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-
	Phenanthrene	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<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	<0.1	-	-	-	<0.1	<0.1	-	-	-
	Phenol	mg/kg	0.2			<0.2	-	-	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	-	-	-	-	-	-	-
	Phenolics Total	mg/kg	5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<5	-	-	-	-	-	-	-	-
	Picloram	mg/kg	0.5	60	240	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-	-	-	-	-	-
	Pyrene	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.5	0.3	<0.1	<0.1	0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-
Pesticides	Pesticides (total, NSW Waste 2008)	mg/kg				<5.6	-	-	-	<5.6	<5.6	-	-	-	<5.6	<5.6	-	<5.6	<5.6	-	-	-	<5.6	<5.6	-	-	-	<5.6	<3.6	-	-	-	-	-	-	-	-
	Bifenthrin	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	Mirex	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-
	Parathion	mg/kg	0.1			<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	-	-	-	-	-	-	-	-
Phthalates	Bis(2-ethylhexyl) phthalate	mg/kg	5			<5	-	-	-	<5	<5	-	-	-	<5	<5	-	<5	<5	-	-	-	<5	<5	-	-	-	<5	-	-	-	-	-	-	-	-	-
	Butyl benzyl phthalate	mg/kg	1			<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-
	Diethylphthalate	mg/kg	1			<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-
	Dimethyl phthalate	mg/kg	1			<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-
	Di-n-butyl phthalate	mg/kg	5			<5	-	-	-	<5	<5	-	-	-	<5	<5	-	<5	<5	-	-	-	<5	<5	-	-	-	<5	-	-	-	-	-	-	-	-	-
	Di-n-octyl phthalate	mg/kg	1			<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-
Polychlorinated Biphenyls	Arochlor 1016	mg/kg	0.1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-
	Arochlor 1221	mg/kg	0.1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-
	Arochlor 1232	mg/kg	0.1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-
	Arochlor 1242	mg/kg	0.1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-
	Arochlor 1248	mg/kg	0.1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-
	Arochlor 1254	mg/kg	0.1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-
	Arochlor 1260	mg/kg	0.1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-
	PCBs (Sum of total)	mg/kg	0.1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-
Solvents	Cyclohexane	mg/kg	1			<1	-	-	-	<1	<1	-	-	-	<1	<1	-	<1	<1	-	-	-	<1	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-
TPH	C10-C16	mg/kg	50			<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	-	-	-	<50	<50	-	-	-
	C16-C34	mg/kg	100			<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	-	-	-	<100	<100	-	-	-
	C34-C40	mg/kg	100			<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	-	-	-	<100	<100	-	-	-
	F2-NAPHTHALENE	mg/kg	50			-	<50	<50	<50	-	-	<50	<50	<50	-	-	<50	-	-	<50	<50	<50	-	-	<50	<50	<50	-	<50	-	-	-	<50	<50	-	-	-
	C6 - C9	mg/kg	25	650	2,600	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	-	-	-	<25	<25	-	-	-
	C10 - C14	mg/kg	50			<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	-	-	-	<50	<50	-	-	-
	C15 - C28	mg/kg	100			<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	-	-	-	<100	<100	-	-	-
	C29-C36	mg/kg	100			<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	-	-	-	<100	<100	-	-	-
	C10-C36 (Sum of Total)	mg/kg	100	10,000	40,000	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	-	-	-	<100	<100	-	-	-
	C10 - C40 (Sum of total)	mg/kg	50			<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	-	-	-	<50	<50	-	-	-
	C6-C10	mg/kg	25			<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	-	-	-	<25	<25	-	-	-

Table 21: Groundwater Results

Australian Unity Ltd
266 Longueville Road,
Lane Cove

								Round 1		Round 2		Round 1	QA/QC			
							Field ID	GW01	GW01	GW02	GW02	GW03	Dup 1	DUP/03/08/18	Split 1	SPLIT/03/08/18
							Sampled Date	14/05/2018	3/08/2018	14/05/2018	3/08/2018	3/08/2018	14/05/2018	3/08/2018	14/05/2018	3/08/2018
Method Type	**Chemical Name**	**Units**	**EQL**	ADWG 2015 Aesthetic	ANZECC/ARMCANZ (2000) Fresh and Marine Water Quality. Irrigation	NEPM 2013 Table 1C GILs, Drinking Water	NEPM 2013 Table 1C GILs, Fresh Waters									
Heavy Metals	Aluminium (Filtered)	mg/L	0.01		5		**0.055**	**0.19**	**0.5**	**0.12**	**1.7**	0.01	**0.2**	**0.41**	**0.18**	**0.64**
	Antimony (Filtered)	mg/L	0.001			0.003		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	Arsenic (Filtered)	mg/L	0.001		0.1	0.01		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	Barium (Filtered)	mg/L	0.001			2		0.036	0.021	0.056	0.059	0.094	0.033	0.022	0.032	0.025
	Beryllium (Filtered)	mg/L	0.0005		0.1	0.06		0.0005	0.0008	<0.0005	<0.0005	<0.0005	<0.0005	0.0007	<0.0005	0.0009
	Boron (Filtered)	mg/L	0.02		0.5	4	**0.37**	0.09	0.06	0.1	0.04	0.1	0.09	0.06	0.09	0.08
	Cadmium (Filtered)	mg/L	0.0001		0.01	0.002	**0.0002**	<0.0001	<0.0001	**0.0003**	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
	Chromium (III+VI) (Filtered)	mg/L	0.001		0.1			<0.001	0.001	<0.001	0.002	0.001	<0.001	<0.001	<0.001	0.001
	Cobalt (Filtered)	mg/L	0.001		0.05			0.011	0.004	0.018	0.001	0.005	0.011	0.004	0.011	0.005
	Copper (Filtered)	mg/L	0.001	1	0.2	2	**0.0014**	**0.019**	**0.006**	**0.012**	**0.018**	**0.009**	**0.007**	**0.032**	**0.007**	**0.007**
	Iron (Filtered)	mg/L	0.01	0.3	0.2			2.3	2.4	6.1	0.92	0.24	2.3	2	2.2	2.9
	Lead (Filtered)	mg/L	0.001		2	0.01	**0.0034**	0.001	0.002	<0.001	**0.005**	0.001	0.001	**0.004**	0.001	0.003
	Manganese (Filtered)	mg/L	0.005	0.1	0.2	0.5	**1.9**	0.22	0.16	0.27	0.036	0.18	0.22	0.15	0.21	0.19
	Mercury (Filtered)	mg/L	0.00005		0.002	0.001	**0.00006**	<0.00005	<0.00005	<0.00005	<0.00005	0.00005	<0.00005	<0.00005	<0.00005	<0.00005
	Molybdenum (Filtered)	mg/L	0.001		0.01	0.05		<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001
	Nickel (Filtered)	mg/L	0.001		1	0.02	**0.011**	**0.012**	**0.052**	**0.037**	**0.063**	**0.035**	0.01	**0.054**	0.009	**0.061**
	Selenium (Filtered)	mg/L	0.001		0.02	0.01	**0.005**	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	Silver (Filtered)	mg/L	0.001			0.1	**0.00005**	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	Thallium (Filtered)	mg/L	0.001					<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	Tin (Filtered)	mg/L	0.001					<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001
	Vanadium (Filtered)	mg/L	0.001		0.1			<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001
	Zinc (Filtered)	mg/L	0.001	3	0.02		**0.008**	**0.068**	**0.22**	**0.12**	**0.23**	**0.056**	**0.062**	**0.2**	**0.061**	**0.26**
Inorganics	Alkalinity (Bicarbonate as CaCO3)	mg/L	5					8	<5	7	<5	230	7	<5	7	<5
	Alkalinity (Carbonate)	mg/L	5					<5	<5	<5	<5	<5	<5	<5	<5	-
	Alkalinity (Hydroxide) as CaCO3	µg/L	5000					<5000	<5000	<5000	<5000	<5000	<5000	<5000	<5000	-
	Alkalinity (total) as CaCO3	mg/L	5					8	<5	7	<5	230	7	<5	7	<5
	Calcium (Filtered)	mg/L	0.5					4.8	0.9	11	2	100	4.8	0.9	4.8	0.8
	Carbonate as CaCO3	mg/L	5					-	-	-	-	-	-	-	-	<5
	Chloride	mg/L	1	250				93	110	39	48	30	89	110	88	110
	Hydroxide	µg/L	5000					-	-	-	-	-	-	-	-	<5000
	Magnesium (Filtered)	mg/L	0.5					5.2	4.8	5.7	6.3	9.3	4.9	4.5	4.7	4.5
	Potassium (Filtered)	mg/L	0.5					2.1	1.1	8.3	1	9.3	2	1.1	2	0.9
	Sodium (Filtered)	mg/L	0.5	180				140	140	32	33	16	130	140	130	110
	Sulphate (Filtered)	mg/L	1	250	1000	500		110	120	59	47	98	110	120	100	150
	Ammonia	mg/L	0.005	0.5			**0.9**	-	<0.005	-	0.041	0.34	-	<0.005	-	0.007
	Chromium (hexavalent) (Filtered)	mg/L	0.005			0.05	**0.001**	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-
	Cyanide Total	mg/L	0.004			0.08	**0.007**	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	-
	Fluoride	mg/L	0.1		1	1.5		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	pH (Lab)	pH_Units	0.1					5	4.4	5.1	4.2	6.8	4.9	4.4	4.9	4.2
	TDS	mg/L	5	600				440	440	230	180	470	420	430	430	370
OCP	4,4-DDE	µg/L	0.2					<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	a-BHC	µg/L	0.2					<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Aldrin	µg/L	0.2					<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	b-BHC	µg/L	0.2					<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Chlordane (cis)	µg/L	0.2					<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Chlordane (trans)	µg/L	0.2					<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	d-BHC	µg/L	0.2					<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	DDD	µg/L	0.2					<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	DDT	µg/L	0.2			9	**0.006**	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Dieldrin	µg/L	0.2					<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Endosulfan I	µg/L	0.2					<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Endosulfan II	µg/L	0.2					<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Endosulfan sulphate	µg/L	0.2					<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Endrin	µg/L	0.2				**0.01**	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Endrin aldehyde	µg/L	0.2					<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	g-BHC (Lindane)	µg/L	0.2			10	**0.2**	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Heptachlor	µg/L	0.2				**0.01**	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Heptachlor epoxide	µg/L	0.2			0.3		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Hexachlorobenzene	µg/L	0.2					<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Methoxychlor	µg/L	0.2					<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
PAHs	Acenaphthene	µg/L	1					<1	<1	<1	<1	<1	<1	<1	<1	<1
	Acenaphthylene	µg/L	1					<1	<1	<1	<1	<1	<1	<1	<1	<1
	Anthracene	µg/L	1					<1	<1	<1	<1	<1	<1	<1	<1	<1
	Benz(a)anthracene	µg/L	1					<1	<1	<1	<1	<1	<1	<1	<1	<1
	Benzo(a) pyrene	µg/L	1			0.01		<1	<1	<1	<1	<1	<1	<1	<1	<1
	Benzo(b+k)fluoranthene	µg/L						-	-	-	-	-	-	-	-	<2
	Benzo(g,h,i)perylene	µg/L	1					<1	<1	<1	<1	<1	<1	<1	<1	<1
	Chrysene	µg/L	1					<1	<1	<1	<1	<1	<1	<1	<1	<1
	Dibenz(a,h)anthracene	µg/L	1					<1	<1	<1	<1	<1	<1	<1	<1	<1
	Fluoranthene	µg/L	1					<1	<1	<1	<1	<1	<1	<1	<1	<1
	Fluorene	µg/L	1					<1	<1	<1	<1	<1	<1	<1	<1	<1
	Indeno(1,2,3-c,d)pyrene	µg/L	1					<1	<1	<1	<1	<1	<1	<1	<1	<1
	Naphthalene	µg/L	1				**16**	<1	<1	<1	<1	<1	<1	<1	<1	<1
	PAHs (Sum of total)	µg/L	1					<1	<1	<1	<1	<1	<1	<1	<1	<1
	Phenanthrene	µg/L	1					<1	<1	<1	<1	<1	<1	<1	<1	<1
	Pyrene	µg/L	1					<1	<1	<1	<1	<1	<1	<1	<1	<1
PCBs	Arochlor 1016	µg/L	2					<2	<2	<2	<2	<2	<2	<2	<2	<2
	Arochlor 1221	µg/L	2					<2	<2	<2	<2	<2	<2	<2	<2	<2
	Arochlor 1232	µg/L	2					<2	<2	<2	<2	<2	<2	<2	<2	<2
	Arochlor 1242	µg/L	2				**0.3**	<2	<2	<2	<2	<2	<2	<2	<2	<2
	Arochlor 1248	µg/L	2					<2	<2	<2	<2	<2	<2	<2	<2	<2
	Arochlor 1254	µg/L	2				**0.01**	<2	<2	<2	<2	<2	<2	<2	<2	<2
	Arochlor 1260	µg/L	2					<2	<2	<2	<2	<2	<2	<2	<2	<2
PFAS Short	Total Positive PFAS	µg/L	0.01					-	0.02	-	0.01	<0.01	-	0.03	-	-
	Total Positive PFHxS & PFOS	µg/L	0.01			0.07*	**0.7***	-	0.02	-	0.01	<0.01	-	0.03	-	-
	Total Positive PFOA & PFOS	µg/L	0.01					-	<0.01	-	<0.01	<0.01	-	<0.01	-	-
	8:2 FTS	µg/L	0.01					-	<0.01	-	<0.01	<0.01	-	<0.01	-	-
	Extracted ISTD 13C2 6:2FTS	%						-	87	-	94	87	-	86	-	-
	Extracted ISTD 13C2 8:2FTS	%						-	68	-	67	75	-	61	-	-
	Extracted ISTD 13C4 PFOA	%						-	110	-	103	110	-	105	-	-
	Extracted ISTD 13C4 PFOS	%						-	82	-	89	77	-	82	-	-
	Extracted ISTD 18O2 PFHxS	%						-	86	-	81	75	-	72	-	-
	6:2 Fluorotelomer Sulfonate (6:2 FtS)	mg/L	0.00001					-	<0.00001	-	<0.00001	<0.00001	-	<0.00001	-	-
	Perfluorohexanesulfonic acid - PFHxS	µg/L	0.01					-	0.02	-	0.01	<0.01	-	0.03	-	-
	Perfluorooctanesulfonic acid PFOS	µg/L	0.01		0.13*		**0.13***	-	<0.01	-	<0.01	<0.01	-	<0.01	-	-
	Perfluorooctanoate PFOA	mg/L	0.00001		0.22*	0.56*	**5.6***	-	<0.00001	-	<0.00001	<0.00001	-	<0.00001	-	-

Table 21: Groundwater Results

Australian Unity Ltd
266 Longueville Road,
Lane Cove

							Field ID	GW01	GW01	GW02	GW02	GW03	Dup 1	DUP/03/08/18	Split 1	SPLIT/03/08/18
							Sampled Date	14/05/2018	3/08/2018	14/05/2018	3/08/2018	3/08/2018	14/05/2018	3/08/2018	14/05/2018	3/08/2018
Method Type	**Chemical Name**	**Units**	**EQL**	ADWG 2015 Aesthetic	ANZECC/ARMCANZ (2000) Fresh and Marine Water Quality. Irrigation	NEPM 2013 Table 1C GILs, Drinking Water	NEPM 2013 Table 1C GILs, Fresh Waters									
Phenols	Phenolics Total	µg/L	50					<50	-	<50	-	-	<50	-	<50	-
Phthalates	Bis(2-ethylhexyl) phthalate	µg/L	50			10		<50	<50	<50	<50	<50	<50	<50	<50	<50
	Butyl benzyl phthalate	µg/L	10					<10	<10	<10	<10	<10	<10	<10	<10	<10
	Diethylphthalate	µg/L	10				**1000**	<10	<10	<10	<10	<10	<10	<10	<10	<10
	Dimethyl phthalate	µg/L	10				**3700**	<10	<10	<10	<10	<10	<10	<10	<10	<10
	Di-n-butyl phthalate	µg/L	50				**10**	<50	<50	<50	<50	<50	<50	<50	<50	<50
	Di-n-octyl phthalate	µg/L	10					<10	<10	<10	<10	<10	<10	<10	<10	<10
svTRH (C10-C40)	C10-C16	mg/L	0.05					-	<0.05	-	<0.05	<0.05	-	<0.05	-	-
	C16-C34	mg/L	0.1					-	<0.1	-	<0.1	<0.1	-	<0.1	-	-
	C34-C40	mg/L	0.1					-	<0.1	-	<0.1	<0.1	-	<0.1	-	-
	F2-NAPHTHALENE	mg/L	0.05					-	<0.05	-	<0.05	<0.05	-	<0.05	-	-
	C10 - C14	µg/L	50					-	<50	-	<50	<50	-	<50	-	-
	C15 - C28	µg/L	100					-	<100	-	<100	<100	-	<100	-	-
	C29-C36	µg/L	100					-	<100	-	<100	<100	-	<100	-	-
Total Phenolics	Phenolics Total	µg/L	50					-	<50	-	<50	<50	-	<50	-	-
TRH Water(C10-C40)	C10-C16	mg/L	0.05					<0.05	-	<0.05	-	-	<0.05	-	<0.05	<0.05
	C16-C34	mg/L	0.1					<0.1	-	<0.1	-	-	<0.1	-	<0.1	<0.1
	C34-C40	mg/L	0.1					<0.1	-	<0.1	-	-	<0.1	-	<0.1	<0.1
	F2-NAPHTHALENE	mg/L	0.05					<0.05	-	<0.05	-	-	<0.05	-	<0.05	<0.05
	C10 - C14	µg/L	50					<50	-	<50	-	-	<50	-	<50	<50
	C15 - C28	µg/L	100					<100	-	<100	-	-	<100	-	<100	<100
	C29-C36	µg/L	100					<100	-	<100	-	-	<100	-	<100	<100
VOCs	1,1,1,2-tetrachloroethane	µg/L	1					<1	<1	<1	<1	<1	<1	<1	<1	<1
	1,1,1-trichloroethane	µg/L	1					<1	<1	<1	<1	<1	<1	<1	<1	<1
	1,1,2,2-tetrachloroethane	µg/L	1					<1	<1	<1	<1	<1	<1	<1	<1	<1
	1,1,2-trichloroethane	µg/L	1				**6500**	<1	<1	<1	<1	<1	<1	<1	<1	<1
	1,1-dichloroethane	µg/L	1					<1	<1	<1	<1	<1	<1	<1	<1	<1
	1,1-dichloroethene	µg/L	1			30		<1	<1	<1	<1	<1	<1	<1	<1	<1
	1,1-dichloropropene	µg/L	1					<1	<1	<1	<1	<1	<1	<1	<1	<1
	1,2,3-trichlorobenzene	µg/L	1			30	**3**	<1	<1	<1	<1	<1	<1	<1	<1	<1
	1,2,3-trichloropropane	µg/L	1					<1	<1	<1	<1	<1	<1	<1	<1	<1
	1,2,4-trichlorobenzene	µg/L	1			30	**85**	<1	<1	<1	<1	<1	<1	<1	<1	<1
	1,2,4-trimethylbenzene	µg/L	1					<1	<1	<1	<1	<1	<1	<1	<1	<1
	1,2-dibromo-3-chloropropane	µg/L	1					<1	<1	<1	<1	<1	<1	<1	<1	<1
	1,2-dibromoethane	µg/L	1					<1	<1	<1	<1	<1	<1	<1	<1	<1
	1,2-dichlorobenzene	µg/L	1	1		1500	**160**	<1	<1	<1	<1	<1	<1	<1	<1	<1
	1,2-dichloroethane	µg/L	1			3		<1	<1	<1	<1	<1	<1	<1	<1	<1
	1,2-dichloropropane	µg/L	1					<1	<1	<1	<1	<1	<1	<1	<1	<1
	1,3,5-trimethylbenzene	µg/L	1					<1	<1	<1	<1	<1	<1	<1	<1	<1
	1,3-dichlorobenzene	µg/L	1	20			**260**	<1	<1	<1	<1	<1	<1	<1	<1	<1
	1,3-dichloropropane	µg/L	1					<1	<1	<1	<1	<1	<1	<1	<1	<1
	1,4-dichlorobenzene	µg/L	1	0.3		40	**60**	<1	<1	<1	<1	<1	<1	<1	<1	<1
	2,2-dichloropropane	µg/L	1					<1	<1	<1	<1	<1	<1	<1	<1	<1
	2-chlorotoluene	µg/L	1					<1	<1	<1	<1	<1	<1	<1	<1	<1
	4-chlorotoluene	µg/L	1					<1	<1	<1	<1	<1	<1	<1	<1	<1
	Benzene	µg/L	1			1	**950**	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Bromobenzene	µg/L	1					<1	<1	<1	<1	<1	<1	<1	<1	<1
	Bromochloromethane	µg/L	1					<1	<1	<1	<1	<1	<1	<1	<1	<1
	Bromodichloromethane	µg/L	1					<1	<1	<1	<1	<1	<1	<1	<1	<1
	Bromoform	µg/L	1					<1	<1	<1	<1	<1	<1	<1	<1	<1
	Bromomethane	µg/L	10			1		<10	<10	<10	<10	<10	<10	<10	<10	<10
	Carbon tetrachloride	µg/L	1			3		<1	<1	<1	<1	<1	<1	<1	<1	<1
	Chlorobenzene	µg/L	1	10		300		<1	<1	<1	<1	<1	<1	<1	<1	<1
	Chlorodibromomethane	µg/L	1					<1	<1	<1	<1	<1	<1	<1	<1	<1
	Chloroethane	µg/L	10					<10	<10	<10	<10	<10	<10	<10	<10	<10
	Chloroform	µg/L	1					<1	<1	<1	<1	<1	<1	<1	<1	<1
	Chloromethane	µg/L	10					<10	<10	<10	<10	<10	<10	<10	<10	<10
	cis-1,2-dichloroethene	µg/L	1					<1	<1	<1	<1	<1	<1	<1	<1	<1
	cis-1,3-dichloropropene	µg/L	1					<1	<1	<1	<1	<1	<1	<1	<1	<1
	Cyclohexane	mg/L	0.001					<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	Dibromomethane	µg/L	1					<1	<1	<1	<1	<1	<1	<1	<1	<1
	Dichlorodifluoromethane	µg/L	10					<10	<10	<10	<10	<10	<10	<10	<10	<10
	Ethylbenzene	µg/L	1	3		300		<1	<1	<1	<1	<1	<1	<1	<1	<1
	Hexachlorobutadiene	µg/L	1			0.7		<1	<1	<1	<1	<1	<1	<1	<1	<1
	Isopropylbenzene	µg/L	1					<1	<1	<1	<1	<1	<1	<1	<1	<1
	n-butylbenzene	µg/L	1					<1	<1	<1	<1	<1	<1	<1	<1	<1
	n-propylbenzene	µg/L	1					<1	<1	<1	<1	<1	<1	<1	<1	<1
	p-isopropyltoluene	µg/L	1					<1	<1	<1	<1	<1	<1	<1	<1	<1
	sec-butylbenzene	µg/L	1					<1	<1	<1	<1	<1	<1	<1	<1	<1
	Styrene	µg/L	1	4		30		<1	<1	<1	<1	<1	<1	<1	<1	<1
	Trichloroethene	µg/L	1					<1	<1	<1	<1	<1	<1	<1	<1	<1
	tert-butylbenzene	µg/L	1					<1	<1	<1	<1	<1	<1	<1	<1	<1
	Tetrachloroethene	µg/L	1			50		<1	<1	<1	<1	<1	<1	<1	<1	<1
	Toluene	µg/L	1	25		800		<1	<1	<1	<1	<1	<1	<1	<1	<1
	trans-1,2-dichloroethene	µg/L	1					<1	<1	<1	<1	<1	<1	<1	<1	<1
	trans-1,3-dichloropropene	µg/L	1					<1	<1	<1	<1	<1	<1	<1	<1	<1
	Trichlorofluoromethane	µg/L	10					<10	<10	<10	<10	<10	<10	<10	<10	<10
	Vinyl chloride	µg/L	10			0.3		<10	<10	<10	<10	<10	<10	<10	<10	<10
	Xylene (m & p)	µg/L	2					<2	<2	<2	<2	<2	<2	<2	<2	<2
	Xylene (o)	µg/L	1				**350**	<1	<1	<1	<1	<1	<1	<1	<1	<1
vTRH & BTEXN	Benzene	µg/L	1			1	**950**	<1	-	<1	-	-	<1	-	<1	-
	Ethylbenzene	µg/L	1	3		300		<1	-	<1	-	-	<1	-	<1	-
	Naphthalene	µg/L	1				**16**	<1	-	<1	-	-	<1	-	<1	-
	Toluene	µg/L	1	25		800		<1	-	<1	-	-	<1	-	<1	-
	C6 - C9	µg/L	10					<10	-	<10	-	-	<10	-	<10	-
	Xylene (m & p)	µg/L	2					<2	-	<2	-	-	<2	-	<2	-
	Xylene (o)	µg/L	1				**350**	<1	-	<1	-	-	<1	-	<1	-
	C6-C10 less BTEX (F1)	mg/L	0.01					<0.01	-	<0.01	-	-	<0.01	-	<0.01	-
	C6-C10	mg/L	0.01					<0.01	-	<0.01	-	-	<0.01	-	<0.01	-
vTRH(C6-C10)/BTEXN	Benzene	µg/L	1			1	**950**	-	<1	-	<1	<1	-	<1	-	<1
	Ethylbenzene	µg/L	1	3		300		-	<1	-	<1	<1	-	<1	-	<1
	Naphthalene	µg/L	1				**16**	-	<1	-	<1	<1	-	<1	-	<1
	Toluene	µg/L	1	25		800		-	<1	-	<1	<1	-	<1	-	<1
	C6 - C9	µg/L	10					-	<10	-	<10	<10	-	<10	-	<10
	Xylene (m & p)	µg/L	2					-	<2	-	<2	<2	-	<2	-	<2
	Xylene (o)	µg/L	1				**350**	-	<1	-	<1	<1	-	<1	-	<1
	C6-C10 less BTEX (F1)	mg/L	0.01					-	<0.01	-	<0.01	<0.01	-	<0.01	-	<0.01
	C6-C10	mg/L	0.01					-	<0.01	-	<0.01	<0.01	-	<0.01	-	<0.01

Table 22: Soil RPDs

Australian Unity Ltd
266 Longueville Road
Lane Cove

			Lab Report Number	170939	170939		170939	170939		170939	170939		170939	170939		191466	191466		191466	191466		170939	11218		170939	11218		170939	11218		170939	11218		191466	191466		191466	191466	
			Field ID	BH34	Dup1	**RPD**	BH35	Dup2	**RPD**	BH36	Dup3	**RPD**	BH37	Dup4	**RPD**	BH43_5.0	Dup 5	**RPD**	BH46_2.0	Dup 6	**RPD**	BH34	Split 1	**RPD**	BH35	Split 2	**RPD**	BH36	Split 3	**RPD**	BH37	Split 4	**RPD**	BH43_5.0	Split 5	**RPD**	BH46_2.0	Spilt 6	**RPD**
			Sampled Date	6/07/2017	6/07/2017		6/07/2017	6/07/2017		6/07/2017	6/07/2017		6/07/2017	6/07/2017		10/05/2018	10/05/2018		11/05/2018	11/05/2018		6/07/2017	6/07/2017		6/07/2017	6/07/2017		6/07/2017	6/07/2017		6/07/2017	6/07/2017		10/05/2018	10/05/2018		11/05/2018	11/05/2018	
Method Type	**Chemical Name**	**Units**	**EQL**																																				
BTEX	Benzene	mg/kg	0.2	<0.2	<0.2	0	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	0	<0.2	<0.2	0	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-
	Ethylbenzene	mg/kg	1 (Primary): 0.5 (Interlab)	<1.0	<1.0	0	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	<1.0	0	<1.0	<0.5	0	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-
	Toluene	mg/kg	0.5	<0.5	<0.5	0	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	0	<0.5	<0.5	0	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-
	Xylene (m & p)	mg/kg	2 (Primary): 1 (Interlab)	<2.0	<2.0	0	-	-	-	-	-	-	-	-	-	-	-	-	<2.0	<2.0	0	<2.0	<1.0	0	-	-	-	-	-	-	-	-	-	-	-	-	<2.0	-	-
	Xylene (o)	mg/kg	1 (Primary): 0.5 (Interlab)	<1.0	<1.0	0	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	<1.0	0	<1.0	<0.5	0	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-
	Xylene Total	mg/kg	1	<1.0	<1.0	0	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	<1.0	0	<1.0	<1.0	0	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-
	C6-C10 less BTEX (F1)	mg/kg	25	<25.0	<25.0	0	-	-	-	-	-	-	-	-	-	-	-	-	<25.0	<25.0	0	<25.0	<25.0	0	-	-	-	-	-	-	-	-	-	-	-	-	<25.0	-	-
Speciated Phenols	2,3,4,6-tetrachlorophenol	mg/kg	0.2	<0.2	<0.2	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2,4,5-trichlorophenol	mg/kg	0.2	<0.2	<0.2	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2,4,6-trichlorophenol	mg/kg	0.2	<0.2	<0.2	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2,4-dichlorophenol	mg/kg	0.2	<0.2	<0.2	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2,6-dichlorophenol	mg/kg	0.2	<0.2	<0.2	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2-chlorophenol	mg/kg	0.2	<0.2	<0.2	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Pentachlorophenol	mg/kg	1	<1.0	<1.0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	<1.0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3/4-Methylphenol (m/p-cresol)	mg/kg	0.4	<0.4	<0.4	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2,4-dimethylphenol	mg/kg	0.2	<0.2	<0.2	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2,4-dinitrophenol	mg/kg	4 (Primary): 2 (Interlab)	<4.0	<4.0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<4.0	<2.0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2-methylphenol	mg/kg	0.2	<0.2	<0.2	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2-nitrophenol	mg/kg	0.2	<0.2	<0.2	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4,6-Dinitro-2-methylphenol	mg/kg	2	<2.0	<2.0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4-chloro-3-methylphenol	mg/kg	1 (Primary): 2 (Interlab)	<1.0	<1.0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	<2.0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4-nitrophenol	mg/kg	4	<4.0	<4.0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<4.0	<4.0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Phenol	mg/kg	0.2	<0.2	<0.2	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Herbicides	2,4,5-Trichlorophenoxy Acetic Acid	mg/kg	0.5	<0.5	<0.5	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2,4,5-TP (Silvex)	mg/kg	0.5	<0.5	<0.5	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2,4-dichlorophenoxybutanoic acid	mg/kg	0.5	<0.5	<0.5	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Hedonal	mg/kg	0.5	<0.5	<0.5	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2,4-Dichlorprop	mg/kg	0.5	<0.5	<0.5	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2,4,6-Trichlorophenoxy-acetic acid	mg/kg	0.5	<0.5	<0.5	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2-Chlorophenoxyacetic acid	mg/kg	0.5	<0.5	<0.5	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4-Chlorophenoxy acetic acid	mg/kg	0.5	<0.5	<0.5	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Acifluorfen	mg/kg	2	<2.0	<2.0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<2.0	<2.0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Bromoxynil	mg/kg	0.5	<0.5	<0.5	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Clopyralid	mg/kg	0.5	<0.5	<0.5	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dicamba	mg/kg	0.5	<0.5	<0.5	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dinoseb	mg/kg	1	<1.0	<1.0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	<1.0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2-Methyl-4-chlorophenoxyacetic acid	mg/kg	0.5	<0.5	<0.5	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2-Methyl-4-Chlorophenoxy Butanoic Acid	mg/kg	0.5	<0.5	<0.5	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Mecoprop	mg/kg	0.5	<0.5	<0.5	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Triclopyr	mg/kg	0.5	<0.5	<0.5	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	DCPA (Chlorthal) Diacid	mg/kg	0.5	<0.5	<0.5	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2,6-D	mg/kg	0.5	<0.5	<0.5	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Metribuzin	mg/kg	0.5	<0.5	<0.5	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Irgarol	mg/kg	0.5	<0.5	<0.5	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Ametryn	mg/kg	0.5	<0.5	<0.5	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Atrazine	mg/kg	0.5	<0.5	<0.5	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Cyanazine	mg/kg	0.5	<0.5	<0.5	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Hexazinone	mg/kg	0.5	<0.5	<0.5	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Prometryn	mg/kg	0.5	<0.5	<0.5	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Propazine	mg/kg	0.5	<0.5	<0.5	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Simazine	mg/kg	0.5	<0.5	<0.5	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Terbutryn	mg/kg	0.5	<0.5	<0.5	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3,5-Dichlorobenzoic acid	mg/kg	0.5	<0.5	<0.5	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Actril (Ioxynil)	mg/kg	1	<1.0	<1.0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	<1.0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Picloram	mg/kg	0.5	<0.5	<0.5	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cyanide	Cyanide (Free)	mg/kg	0.5	<0.5	<0.5	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Heavy Metals	Arsenic	mg/kg	4	<4.0	<4.0	0	6.0	5.0	18	7.0	14.0	67	<4.0	<4.0	0	<4.0	<4.0	0	<4.0	<4.0	0	<4.0	4.0	0	6.0	4.0	40	7.0	8.0	13	<4.0	<4.0	0	<4.0	<4.0	0	<4.0	<4.0	0
	Beryllium	mg/kg	1	<1.0	<1.0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	<1.0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Boron	mg/kg	3	<3.0	<3.0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<3.0	<3.0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Cadmium	mg/kg	0.4	<0.4	<0.4	0	10.0	6.0	50	0.5	0.6	18	<0.4	<0.4	0	<0.4	<0.4	0	<0.4	<0.4	0	<0.4	<0.4	0	10.0	8.2	20	0.5	<0.4	22	<0.4	<0.4	0	<0.4	<0.4	0	<0.4	<0.4	0
	Chromium (III+VI)	mg/kg	1	4.0	4.0	0	22.0	18.0	20	12.0	13.0	8	8.0	8.0	0	5.0	6.0	18	9.0	10.0	11	4.0	5.0	22	22.0	18.0	20	12.0	14.0	15	8.0	7.0	13	5.0	6.0	18	9.0	9.0	0
	Chromium (hexavalent)	mg/kg	1	<1.0	<1.0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	<1.0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Cobalt	mg/kg	1	<1.0	<1.0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	<1.0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Copper	mg/kg	1	2.0	2.0	0	270.0	230.0	16	37.0	47.0	24	8.0	8.0	0	4.0	5.0	22	<1.0	<1.0	0	**2.0**	**7.0**	**111**	270.0	240.0	12	37.0	30.0	21	8.0	7.0	13	4.0	5.0	22	<1.0	<1.0	0
	Lead	mg/kg	1	9.0	7.0	25	1300.0	1100.0	17	79.0	91.0	14	49.0	53.0	8	5.0	5.0	0	6.0	6.0	0	**9.0**	**25.0**	**94**	1300.0	1200.0	8	79.0	60.0	27	49.0	49.0	0	5.0	4.0	22	6.0	6.0	0
	Manganese	mg/kg	1	2.0	2.0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**2.0**	**7.0**	**111**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Mercury	mg/kg	0.1	<0.1	<0.1	0	0.3	0.2	40	0.1	0.1	0	0.1	0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	0.3	0.2	40	0.1	<0.1	0	0.1	0.1	0	<0.1	<0.1	0	<0.1	<0.1	0
	Molybdenum	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	<1.0	0	1.0	1.0	0	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	<1.0	0	1.0	2.0	67
	Nickel	mg/kg	1	<1.0	<1.0	0	16.0	11.0	37	3.0	9.0	100	2.0	2.0	0	2.0	2.0	0	<1.0	<1.0	0	<1.0	<1.0	0	16.0	13.0	21	3.0	3.0	0	2.0	2.0	0	2.0	2.0	0	<1.0	<1.0	0
	Silver	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	<1.0	0	<1.0	<1.0	0	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	<1.0	0	<1.0	<1.0	0
	Selenium	mg/kg	2	<2.0	<2.0	0	-	-	-	-	-	-	-	-	-	<2.0	<2.0	0	<2.0	<2.0	0	<2.0	<2.0	0	-	-	-	-	-	-	-	-	-	<2.0	<2.0	0	<2.0	<2.0	0
	Tin	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	<1.0	0	<1.0	<1.0	0	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	<1.0	0	<1.0	<1.0	0
	Zinc	mg/kg	1	11.0	10.0	10	730.0	650.0	12	230.0	230.0	0	90.0	82.0	9	-	-	-	-	-	-	**11.0**	**32.0**	**98**	730.0	730.0	0	230.0	170.0	30	90.0	71.0	24	-	-	-	-	-	-

Table 22: Soil RPDs

Australian Unity Ltd
266 Longueville Road
Lane Cove

	Lab Report Number			170939	170939		170939	170939		170939	170939		170939	170939		191466	191466		191466	191466		170939	11218		170939	11218		170939	11218		170939	11218		191466	191466		191466	191466	
	Field ID			BH34	Dup1	**RPD**	BH35	Dup2	**RPD**	BH36	Dup3	**RPD**	BH37	Dup4	**RPD**	BH43_5.0	Dup 5	**RPD**	BH46_2.0	Dup 6	**RPD**	BH34	Split 1	**RPD**	BH35	Split 2	**RPD**	BH36	Split 3	**RPD**	BH37	Split 4	**RPD**	BH43_5.0	Split 5	**RPD**	BH46_2.0	Spilt 6	**RPD**
	Sampled Date			6/07/2017	6/07/2017		6/07/2017	6/07/2017		6/07/2017	6/07/2017		6/07/2017	6/07/2017		10/05/2018	10/05/2018		11/05/2018	11/05/2018		6/07/2017	6/07/2017		6/07/2017	6/07/2017		6/07/2017	6/07/2017		6/07/2017	6/07/2017		10/05/2018	10/05/2018		11/05/2018	11/05/2018	
OCPs	4,4-DDE	mg/kg	0.1	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	a-BHC	mg/kg	0.1	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Aldrin	mg/kg	0.1	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	b-BHC	mg/kg	0.1	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Chlordane (cis)	mg/kg	0.1	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Chlordane (trans)	mg/kg	0.1	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	d-BHC	mg/kg	0.1	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	DDD	mg/kg	0.1	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	DDT	mg/kg	0.1	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	DDT+DDE+DDD	mg/kg	0.1	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dieldrin	mg/kg	0.1	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Endosulfan I	mg/kg	0.1	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Endosulfan II	mg/kg	0.1	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Endrin	mg/kg	0.1	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Endrin aldehyde	mg/kg	0.1	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	g-BHC (Lindane)	mg/kg	0.1	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Heptachlor	mg/kg	0.1	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Methoxychlor	mg/kg	0.1	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Hexachlorobenzene	mg/kg	0.1	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OPPs	Azinophos methyl	mg/kg	0.1	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Bromophos-ethyl	mg/kg	0.1	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Chlorpyrifos	mg/kg	0.1	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Chlorpyrifos-methyl	mg/kg	0.1	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Diazinon	mg/kg	0.1	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dichlorvos	mg/kg	0.1	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dimethoate	mg/kg	0.1	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Ethion	mg/kg	0.1	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Fenitrothion	mg/kg	0.1	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Malathion	mg/kg	0.1	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Ronnel	mg/kg	0.1	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Parathion	mg/kg	0.1	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cyanide Tphenol	Phenolics Total	mg/kg	5 (Primary): 0.2 (Interlab)	<5.0	<5.0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<5.0	<0.2	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PAHs	Acenaphthene	mg/kg	0.1	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	<0.1	-	-	<0.1	-	-
	Acenaphthylene	mg/kg	0.1	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	<0.1	-	-	<0.1	-	-
	Anthracene	mg/kg	0.1	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	<0.1	-	-	<0.1	-	-
	Benz(a)anthracene	mg/kg	0.1	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	<0.1	-	-	<0.1	-	-
	Benzo(a) pyrene	mg/kg	0.05	<0.05	<0.05	0	-	-	-	-	-	-	-	-	-	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	0.08	46	-	-	-	-	-	-	-	-	-	<0.05	-	-	<0.05	-	-
	Benzo(g,h,i)perylene	mg/kg	0.1	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	<0.1	-	-	<0.1	-	-
	Chrysene	mg/kg	0.1	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	<0.1	-	-	<0.1	-	-
	Dibenz(a,h)anthracene	mg/kg	0.1	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	<0.1	-	-	<0.1	-	-
	Fluoranthene	mg/kg	0.1	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	<0.1	-	-	<0.1	-	-
	Fluorene	mg/kg	0.1	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	<0.1	-	-	<0.1	-	-
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	<0.1	-	-	<0.1	-	-
	Naphthalene	mg/kg	0.1 (Primary): 1 (Interlab)	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	<0.1	-	-	<0.1	-	-
	Phenanthrene	mg/kg	0.1	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	<0.1	-	-	<0.1	-	-
	Pyrene	mg/kg	0.1	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	<0.1	-	-	<0.1	-	-
	Benzo(a)pyrene TEQ (LOR)	mg/kg	0.5	<0.5	<0.5	0	-	-	-	-	-	-	-	-	-	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0	-	-	-	-	-	-	-	-	-	<0.5	-	-	<0.5	-	-
	Benzo(b+j+k)fluoranthene	mg/kg	0.2	<0.2	<0.2	0	-	-	-	-	-	-	-	-	-	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	<0.2	-	-
	Total Positive PAHs	mg/kg	0.05	<0.05	<0.05	0	-	-	-	-	-	-	-	-	-	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	-	-	-	-	-	-	-	-	-	-	-	<0.05	-	-	<0.05	-	-
	Benzo(a)pyrene TEQ calc (Half)	mg/kg	0.5	<0.5	<0.5	0	-	-	-	-	-	-	-	-	-	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0	-	-	-	-	-	-	-	-	-	<0.5	-	-	<0.5	-	-
	Benzo(a)pyrene TEQ calc (Zero)	mg/kg	0.5	<0.5	<0.5	0	-	-	-	-	-	-	-	-	-	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0	-	-	-	-	-	-	-	-	-	<0.5	-	-	<0.5	-	-
	Naphthalene	mg/kg	1 (Primary): 0.1 (Interlab)	<1.0	<1.0	0	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	<1.0	0	<1.0	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-
SVOCs	Toxaphene	mg/kg	2	<2.0	<2.0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<2.0	<2.0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Mirex	mg/kg	0.5	<0.5	<0.5	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Synth Pyrethroid	Bifenthrin	mg/kg	0.5	<0.5	<0.5	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCBs in Soil	Arochlor 1016	mg/kg	0.1	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Arochlor 1221	mg/kg	0.1	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Arochlor 1232	mg/kg	0.1	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Arochlor 1242	mg/kg	0.1	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Arochlor 1248	mg/kg	0.1	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Arochlor 1254	mg/kg	0.1	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Arochlor 1260	mg/kg	0.1	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	PCBs (Sum of total)	mg/kg	0.1	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TRH Soil C10-C40 NEPM	C10-C16	mg/kg	50	<50.0	<50.0	0	-	-	-	-	-	-	-	-	-	<50.0	<50.0	0	<50.0	<50.0	0	<50.0	<50.0	0	-	-	-	-	-	-	-	-	-	<50.0	-	-	<50.0	-	-
	C16-C34	mg/kg	100	<100.0	<100.0	0	-	-	-	-	-	-	-	-	-	<100.0	<100.0	0	<100.0	<100.0	0	<100.0	<100.0	0	-	-	-	-	-	-	-	-	-	<100.0	-	-	<100.0	-	-
	C34-C40	mg/kg	100	<100.0	<100.0	0	-	-	-	-	-	-	-	-	-	<100.0	<100.0	0	<100.0	<100.0	0	<100.0	<100.0	0	-	-	-	-	-	-	-	-	-	<100.0	-	-	<100.0	-	-
	F2-NAPHTHALENE	mg/kg	50	<50.0	<50.0	0	-	-	-	-	-	-	-	-	-	-	-	-	<50.0	<50.0	0	<50.0	<50.0	0	-	-	-	-	-	-	-	-	-	-	-	-	<50.0	-	-
	C10 - C14	mg/kg	50	<50.0	<50.0	0	-	-	-	-	-	-	-	-	-	<50.0	<50.0	0	<50.0	<50.0	0	<50.0	<50.0	0	-	-	-	-	-	-	-	-	-	<50.0	-	-	<50.0	-	-
	C15 - C28	mg/kg	100	<100.0	<100.0	0	-	-	-	-	-	-	-	-	-	<100.0	<100.0	0	<100.0	<100.0	0	<100.0	<100.0	0	-	-	-	-	-	-	-	-	-	<100.0	-	-	<100.0	-	-
	C29-C36	mg/kg	100	<100.0	<100.0	0	-	-	-	-	-	-	-	-	-	<100.0	<100.0	0	<100.0	<100.0	0	<100.0	<100.0	0	-	-	-	-	-	-	-	-	-	<100.0	-	-	<100.0	-	-
	C10 - C40 (Sum of total)	mg/kg	50	<50.0	<50.0	0	-	-	-	-	-	-	-	-	-	<50.0	<50.0	0	<50.0	<50.0	0	<50.0	<50.0	0	-	-	-	-	-	-	-	-	-	<50.0	-	-	<50.0	-	-
	C6 - C9	mg/kg	25	<25.0	<25.0	0	-	-	-	-	-	-	-	-	-	<25.0	<25.0	0	<25.0	<25.0	0	<25.0	<25.0	0	-	-	-	-	-	-	-	-	-	<25.0	-	-	<25.0	-	-
	C6-C10	mg/kg	25	<25.0	<25.0	0	-	-	-	-	-	-	-	-	-	<25.0	<25.0	0	<25.0	<25.0	0	<25.0	<25.0	0	-	-	-	-	-	-	-	-	-	<25.0	-	-	<25.0	-	-

*RPDs have only been considered where a concentration is greater than 1 times the EQL.
**High RPDs are in bold (Acceptable RPDs for each EQL multiplier range are: 100 (1-10 x EQL); 50 (10-30 x EQL); 30 (> 30 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

Table 23: Groundwater RPDs

Australian Unity Ltd
266 Longueville Road
Lane Cove

			Lab Report #	191604	191604		191604	191604		197675	197675		197675	14401		191604	ES1814906	
			Field ID	GW01	Dup 1	**RPD**	GW01	Split 1	**RPD**	GW01	DUP/03/08/18	**RPD**	GW01	SPLIT/03/08/18	**RPD**	GW01	Split 1	**RPD**
			Sampled Date	14/05/2018	14/05/2018		14/05/2018	14/05/2018		3/08/2018	3/08/2018		3/08/2018	3/08/2018		14/05/2018	14/05/2018	
Method Type	**Chemical Name**	**Units**	**EQL**															
PFAS	Total Positive PFAS	µg/L	0.01	-	-	-	-	-	-	0.02	0.03	40	0.02	-	-	-	-	-
	Total Positive PFHxS & PFOS	µg/L	0.01	-	-	-	-	-	-	0.02	0.03	40	0.02	-	-	-	-	-
	Total Positive PFOA & PFOS	µg/L	0.01	-	-	-	-	-	-	<0.01	<0.01	0	<0.01	-	-	-	-	-
	8:2 FTS	µg/L	0.01	-	-	-	-	-	-	<0.01	<0.01	0	<0.01	-	-	-	-	-
	Extracted ISTD 13C2 6:2FTS	%		-	-	-	-	-	-	87.0	86.0	1	87.0	-	-	-	-	-
	Extracted ISTD 13C2 8:2FTS	%		-	-	-	-	-	-	68.0	61.0	11	68.0	-	-	-	-	-
	Extracted ISTD 13C4 PFOA	%		-	-	-	-	-	-	110.0	105.0	5	110.0	-	-	-	-	-
	Extracted ISTD 13C4 PFOS	%		-	-	-	-	-	-	82.0	82.0	0	82.0	-	-	-	-	-
	Extracted ISTD 18O2 PFHxS	%		-	-	-	-	-	-	86.0	72.0	18	86.0	-	-	-	-	-
	Perfluorohexanesulfonic acid - PFHxS	µg/L	0.01	-	-	-	-	-	-	0.02	0.03	40	0.02	-	-	-	-	-
	Perfluorooctanesulfonic acid PFOS	µg/L	0.01	-	-	-	-	-	-	<0.01	<0.01	0	<0.01	-	-	-	-	-
	Perfluorooctanoate	mg/l	0.00001	-	-	-	-	-	-	<0.0	<0.0	0	<0.0	-	-	-	-	-
	6:2 Fluorotelomer Sulfonate (6:2 FtS)	mg/l	0.00001	-	-	-	-	-	-	<0.0	<0.0	0	<0.0	-	-	-	-	-
vTRH & BTEXN	Benzene	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	Ethylbenzene	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	Toluene	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	Xylene (m & p)	µg/L	2	<2.0	<2.0	0	<2.0	<2.0	0	<2.0	<2.0	0	<2.0	<2.0	0	<2.0	-	-
	Xylene (o)	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	C6-C10 less BTEX (F1)	mg/l	0.01	<0.01	<0.01	0	<0.01	<0.01	0	<0.01	<0.01	0	<0.01	<0.01	0	<0.01	-	-
VOCs	1,1,1,2-tetrachloroethane	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	1,1,1-trichloroethane	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	1,1,2,2-tetrachloroethane	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	1,1,2-trichloroethane	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	1,1-dichloroethane	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	1,1-dichloroethene	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	1,1-dichloropropene	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	1,2,3-trichloropropane	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	1,2-dibromo-3-chloropropane	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	1,2-dichloroethane	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	1,2-dichloropropane	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	1,3-dichloropropane	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	2,2-dichloropropane	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	Bromochloromethane	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	Bromodichloromethane	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	Bromoform	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	Carbon tetrachloride	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	Chlorodibromomethane	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	Chloroethane	µg/L	10	<10.0	<10.0	0	<10.0	<10.0	0	<10.0	<10.0	0	<10.0	<10.0	0	<10.0	-	-
	Chloroform	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	Chloromethane	µg/L	10	<10.0	<10.0	0	<10.0	<10.0	0	<10.0	<10.0	0	<10.0	<10.0	0	<10.0	-	-
	cis-1,2-dichloroethene	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	cis-1,3-dichloropropene	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	Dibromomethane	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	Hexachlorobutadiene	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	Trichloroethene	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	Tetrachloroethene	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	trans-1,2-dichloroethene	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	trans-1,3-dichloropropene	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	Vinyl chloride	µg/L	10	<10.0	<10.0	0	<10.0	<10.0	0	<10.0	<10.0	0	<10.0	<10.0	0	<10.0	-	-
	1,2,3-trichlorobenzene	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	1,2,4-trichlorobenzene	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	1,2-dichlorobenzene	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	1,3-dichlorobenzene	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	1,4-dichlorobenzene	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	2-chlorotoluene	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	4-chlorotoluene	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	Bromobenzene	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	Chlorobenzene	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	1,2-dibromoethane	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	Bromomethane	µg/L	10	<10.0	<10.0	0	<10.0	<10.0	0	<10.0	<10.0	0	<10.0	<10.0	0	<10.0	-	-
	Dichlorodifluoromethane	µg/L	10	<10.0	<10.0	0	<10.0	<10.0	0	<10.0	<10.0	0	<10.0	<10.0	0	<10.0	-	-
	Trichlorofluoromethane	µg/L	10	<10.0	<10.0	0	<10.0	<10.0	0	<10.0	<10.0	0	<10.0	<10.0	0	<10.0	-	-
	1,2,4-trimethylbenzene	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	1,3,5-trimethylbenzene	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	Isopropylbenzene	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	n-butylbenzene	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	n-propylbenzene	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	p-isopropyltoluene	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	sec-butylbenzene	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	Styrene	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	tert-butylbenzene	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	Benzene	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	Ethylbenzene	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	Toluene	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	Xylene (m & p)	µg/L	2	<2.0	<2.0	0	<2.0	<2.0	0	<2.0	<2.0	0	<2.0	<2.0	0	<2.0	-	-
	Xylene (o)	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	Cyclohexane	mg/l	0.001	<0.001	<0.001	0	<0.001	<0.001	0	<0.001	<0.001	0	<0.001	<0.001	0	<0.001	-	-
Miscellaneous Inorganics	Alkalinity (Bicarbonate as CaCO3)	mg/l	5	8.0	7.0	13	8.0	7.0	13	<5.0	<5.0	0	<5.0	<5.0	0	8.0	-	-
	Alkalinity (Hydroxide) as CaCO3	µg/l	5000	<5000.0	<5000.0	0	<5000.0	<5000.0	0	<5000.0	<5000.0	0	<5000.0	-	-	<5000.0	-	-
	Alkalinity (total) as CaCO3	mg/l	5	8.0	7.0	13	8.0	7.0	13	<5.0	<5.0	0	<5.0	-	-	8.0	-	-
	Chloride	mg/l	1	93.0	89.0	4	93.0	88.0	6	110.0	110.0	0	110.0	110.0	0	93.0	-	-
	Sodium (Filtered)	mg/l	0.5	140.0	130.0	7	140.0	130.0	7	140.0	140.0	0	140.0	-	-	140.0	-	-
	Sulphate	mg/l	1	110.0	110.0	0	110.0	100.0	10	120.0	120.0	0	120.0	-	-	110.0	-	-
	Cyanide Total	mg/l	0.004	<0.004	<0.004	0	<0.004	<0.004	0	<0.004	<0.004	0	<0.004	-	-	<0.004	-	-
	Fluoride	mg/l	0.1	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	-	-
	pH (Lab)	pH_Units		5.0	4.9	2	5.0	4.9	2	4.4	4.4	0	4.4	4.2	5	5.0	-	-
	TDS	mg/l	5	440.0	420.0	5	440.0	430.0	2	440.0	430.0	2	440.0	370.0	17	440.0	-	-
	Ammonia	mg/l	0.005							<0.005	<0.005	0	<0.005	-	-	-	-	-
	Calcium (Filtered)	mg/l	0.5	4.8	4.8	0	4.8	4.8	0	0.9	0.9	0	0.9	-	-	4.8	-	-
	Magnesium (Filtered)	mg/l	0.5	5.2	4.9	6	5.2	4.7	10	4.8	4.5	6	4.8	-	-	5.2	-	-
	Potassium (Filtered)	mg/l	0.5	2.1	2.0	5	2.1	2.0	5	1.1	1.1	0	1.1	-	-	2.1	-	-
	Chromium (hexavalent) (Filtered)	mg/l	0.005	<0.005	<0.005	0	<0.005	<0.005	0	<0.005	<0.005	0	<0.005	-	-	<0.005	-	-
	Alkalinity (Carbonate)	mg/l	5	<5.0	<5.0	0	<5.0	<5.0	0	<5.0	<5.0	0	<5.0	-	-	<5.0	-	-

Table 23: Groundwater RPDs

Australian Unity Ltd
266 Longueville Road
Lane Cove

			Lab Report #	191604	191604		191604	191604		197675	197675		197675	14401		191604	ES1814906	
			Field ID	GW01	Dup 1	**RPD**	GW01	Split 1	**RPD**	GW01	DUP/03/08/18	**RPD**	GW01	SPLIT/03/08/18	**RPD**	GW01	Split 1	**RPD**
			Sampled Date	14/05/2018	14/05/2018		14/05/2018	14/05/2018		3/08/2018	3/08/2018		3/08/2018	3/08/2018		14/05/2018	14/05/2018	
Heavy Metals	Aluminium (Filtered)	mg/l	0.01	0.19	0.2	5	0.19	0.18	5	0.5	0.41	20	0.5	0.64	25	0.19	-	-
	Antimony (Filtered)	mg/l	0.001	<0.001	<0.001	0	<0.001	<0.001	0	<0.001	<0.001	0	<0.001	<0.001	0	<0.001	-	-
	Arsenic (Filtered)	mg/l	0.001	<0.001	<0.001	0	<0.001	<0.001	0	<0.001	<0.001	0	<0.001	<0.001	0	<0.001	-	-
	Barium (Filtered)	mg/l	0.001	0.036	0.033	9	0.036	0.032	12	0.021	0.022	5	0.021	0.025	17	0.036	-	-
	Beryllium (Filtered)	mg/l	0.0005	0.0005	<0.0005	0	0.0005	<0.0005	0	0.0008	0.0007	13	0.0008	0.0009	12	0.0005	-	-
	Boron (Filtered)	mg/l	0.02	0.09	0.09	0	0.09	0.09	0	0.06	0.06	0	0.06	0.08	29	0.09	-	-
	Cadmium (Filtered)	mg/l	0.0001	<0.0001	<0.0001	0	<0.0001	<0.0001	0	<0.0001	<0.0001	0	<0.0001	<0.0001	0	<0.0001	-	-
	Chromium (III+VI) (Filtered)	mg/l	0.001	<0.001	<0.001	0	<0.001	<0.001	0	0.001	<0.001	0	0.001	0.001	0	<0.001	-	-
	Cobalt (Filtered)	mg/l	0.001	0.011	0.011	0	0.011	0.011	0	0.004	0.004	0	0.004	0.005	22	0.011	-	-
	Copper (Filtered)	mg/l	0.001	**0.019**	**0.007**	**92**	**0.019**	**0.007**	**92**	**0.006**	**0.032**	**137**	0.006	0.007	15	0.019	-	-
	Iron (Filtered)	mg/l	0.01	2.3	2.3	0	2.3	2.2	4	2.4	2.0	18	2.4	2.9	19	2.3	-	-
	Lead (Filtered)	mg/l	0.001	0.001	0.001	0	0.001	0.001	0	0.002	0.004	67	0.002	0.003	40	0.001	-	-
	Manganese (Filtered)	mg/l	0.005	0.22	0.22	0	0.22	0.21	5	0.16	0.15	6	0.16	0.19	17	0.22	-	-
	Mercury (Filtered)	mg/l	0.00005	<0.0001	<0.0001	0	<0.0001	<0.0001	0	<0.0001	<0.0001	0	<0.0001	<0.0001	0	<0.0001	-	-
	Molybdenum (Filtered)	mg/l	0.001	<0.001	<0.001	0	<0.001	<0.001	0	<0.001	<0.001	0	<0.001	<0.001	0	<0.001	-	-
	Nickel (Filtered)	mg/l	0.001	0.012	0.01	18	0.012	0.009	29	0.052	0.054	4	0.052	0.061	16	0.012	-	-
	Selenium (Filtered)	mg/l	0.001	<0.001	<0.001	0	<0.001	<0.001	0	<0.001	<0.001	0	<0.001	<0.001	0	<0.001	-	-
	Silver (Filtered)	mg/l	0.001	<0.001	<0.001	0	<0.001	<0.001	0	<0.001	<0.001	0	<0.001	<0.001	0	<0.001	-	-
	Thallium (Filtered)	mg/l	0.001	<0.001	<0.001	0	<0.001	<0.001	0	<0.001	<0.001	0	<0.001	<0.001	0	<0.001	-	-
	Tin (Filtered)	mg/l	0.001	<0.001	<0.001	0	<0.001	<0.001	0	<0.001	<0.001	0	<0.001	0.001	0	<0.001	-	-
	Vanadium (Filtered)	mg/l	0.001	<0.001	<0.001	0	<0.001	<0.001	0	<0.001	<0.001	0	<0.001	<0.001	0	<0.001	-	-
	Zinc (Filtered)	mg/l	0.001	0.068	0.062	9	0.068	0.061	11	0.22	0.2	10	0.22	0.26	17	0.068	-	-
OCP	4,4-DDE	µg/L	0.2	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	-	-
	a-BHC	µg/L	0.2	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	-	-
	Aldrin	µg/L	0.2	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	-	-
	b-BHC	µg/L	0.2	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	-	-
	Chlordane (cis)	µg/L	0.2	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	-	-
	Chlordane (trans)	µg/L	0.2	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	-	-
	d-BHC	µg/L	0.2	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	-	-
	DDD	µg/L	0.2	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	-	-
	DDT	µg/L	0.2	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	-	-
	Dieldrin	µg/L	0.2	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	-	-
	Endosulfan I	µg/L	0.2	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	-	-
	Endosulfan II	µg/L	0.2	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	-	-
	Endosulfan sulphate	µg/L	0.2	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	-	-
	Endrin	µg/L	0.2	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	-	-
	Endrin aldehyde	µg/L	0.2	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	-	-
	g-BHC (Lindane)	µg/L	0.2	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	-	-
	Heptachlor	µg/L	0.2	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	-	-
	Heptachlor epoxide	µg/L	0.2	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	-	-
	Methoxychlor	µg/L	0.2	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	-	-
	Hexachlorobenzene	µg/L	0.2	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	-	-
PAHs	Acenaphthene	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	Acenaphthylene	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	Anthracene	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	Benz(a)anthracene	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	Benzo(a) pyrene	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	Benzo(g,h,i)perylene	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	Chrysene	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	Dibenz(a,h)anthracene	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	Fluoranthene	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	Fluorene	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	Indeno(1,2,3-c,d)pyrene	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	Naphthalene	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	Naphthalene	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	Phenanthrene	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
	Pyrene	µg/L	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	-	-
Phenols	Phenolics Total	µg/l	50	<50.0	<50.0	0	<50.0	<50.0	0	<50.0	<50.0	0	<50.0	-	-	<50.0	-	-
Phthalates	Bis(2-ethylhexyl) phthalate	µg/L	50	<50.0	<50.0	0	<50.0	<50.0	0	<50.0	<50.0	0	<50.0	<50.0	0	<50.0	-	-
	Butyl benzyl phthalate	µg/L	10	<10.0	<10.0	0	<10.0	<10.0	0	<10.0	<10.0	0	<10.0	<10.0	0	<10.0	-	-
	Diethylphthalate	µg/L	10	<10.0	<10.0	0	<10.0	<10.0	0	<10.0	<10.0	0	<10.0	<10.0	0	<10.0	-	-
	Dimethyl phthalate	µg/L	10	<10.0	<10.0	0	<10.0	<10.0	0	<10.0	<10.0	0	<10.0	<10.0	0	<10.0	-	-
	Di-n-butyl phthalate	µg/L	50	<50.0	<50.0	0	<50.0	<50.0	0	<50.0	<50.0	0	<50.0	<50.0	0	<50.0	-	-
	Di-n-octyl phthalate	µg/L	10	<10.0	<10.0	0	<10.0	<10.0	0	<10.0	<10.0	0	<10.0	<10.0	0	<10.0	-	-
PCBs	Arochlor 1016	µg/L	2	<2.0	<2.0	0	<2.0	<2.0	0	<2.0	<2.0	0	<2.0	<2.0	0	<2.0	-	-
	Arochlor 1221	µg/L	2	<2.0	<2.0	0	<2.0	<2.0	0	<2.0	<2.0	0	<2.0	<2.0	0	<2.0	-	-
	Arochlor 1232	µg/L	2	<2.0	<2.0	0	<2.0	<2.0	0	<2.0	<2.0	0	<2.0	<2.0	0	<2.0	-	-
	Arochlor 1242	µg/L	2	<2.0	<2.0	0	<2.0	<2.0	0	<2.0	<2.0	0	<2.0	<2.0	0	<2.0	-	-
	Arochlor 1248	µg/L	2	<2.0	<2.0	0	<2.0	<2.0	0	<2.0	<2.0	0	<2.0	<2.0	0	<2.0	-	-
	Arochlor 1254	µg/L	2	<2.0	<2.0	0	<2.0	<2.0	0	<2.0	<2.0	0	<2.0	<2.0	0	<2.0	-	-
	Arochlor 1260	µg/L	2	<2.0	<2.0	0	<2.0	<2.0	0	<2.0	<2.0	0	<2.0	<2.0	0	<2.0	-	-
TRHs	C6 - C9	µg/L	10	<10.0	<10.0	0	<10.0	<10.0	0	<10.0	<10.0	0	<10.0	<10.0	0	<10.0	-	-
	C6-C10	mg/l	0.01	<0.01	<0.01	0	<0.01	<0.01	0	<0.01	<0.01	0	<0.01	<0.01	0	<0.01	-	-
	C10-C16	mg/l	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	-	-
	C16-C34	mg/l	0.1	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	-	-
	C34-C40	mg/l	0.1	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	-	-
	F2-NAPHTHALENE	mg/l	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	-	-
	C10 - C14	µg/L	50	<50.0	<50.0	0	<50.0	<50.0	0	<50.0	<50.0	0	<50.0	<50.0	0	<50.0	-	-
	C15 - C28	µg/L	100	<100.0	<100.0	0	<100.0	<100.0	0	<100.0	<100.0	0	<100.0	<100.0	0	<100.0	-	-
	C29-C36	µg/L	100	<100.0	<100.0	0	<100.0	<100.0	0	<100.0	<100.0	0	<100.0	<100.0	0	<100.0	-	-

*RPDs have only been considered where a concentration is greater than 1 times the EQL.
**High RPDs are in bold (Acceptable RPDs for each EQL multiplier range are: 100 (1-10 x EQL); 50 (10-30 x EQL); 30 (> 30 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

Table 24: Soil Field Blanks

Australian Unity Ltd
266 Longueville Road
Lane Cove

			Lab Report #	170939	197675	170939	191466	197675
			Field ID	Rinsate	RB/03/08/18	Trip	Trip 1	TB/03/08/18
			Sampled_Date	6/07/2017	3/08/2018	6/07/2017	10/05/2018	3/08/2018
			Sample Type	Rinsate	Rinsate	Trip_B	Trip_B	Trip_B
Method Type	**Chemical Name**	**Units**	**EQL**					
Heavy Metals	Aluminium (Filtered)	mg/l	0.01	-	<0.01	-	-	-
	Antimony (Filtered)	mg/l	0.001	-	<0.001	-	-	-
	Arsenic (Filtered)	mg/l	0.001	<0.05	<0.001	-	-	-
	Barium (Filtered)	mg/l	0.001	-	<0.001	-	-	-
	Beryllium (Filtered)	mg/l	0.0005	-	<0.0005	-	-	-
	Boron (Filtered)	mg/l	0.02	-	<0.02	-	-	-
	Cadmium (Filtered)	mg/l	0.0001	<0.01	<0.0001	-	-	-
	Chromium (III+VI) (Filtered)	mg/l	0.001	<0.01	<0.001	-	-	-
	Cobalt (Filtered)	mg/l	0.001	-	<0.001	-	-	-
	Copper (Filtered)	mg/l	0.001	<0.01	<0.001	-	-	-
	Iron (Filtered)	mg/l	0.01	-	<0.01	-	-	-
	Lead (Filtered)	mg/l	0.001	<0.03	<0.001	-	-	-
	Manganese (Filtered)	mg/l	0.005	-	<0.005	-	-	-
	Mercury (Filtered)	mg/l	0.00005	<0.0005	<0.00005	-	-	-
	Molybdenum (Filtered)	mg/l	0.001	-	<0.001	-	-	-
	Nickel (Filtered)	mg/l	0.001	<0.02	<0.001	-	-	-
	Selenium (Filtered)	mg/l	0.001	-	<0.001	-	-	-
	Silver (Filtered)	mg/l	0.001	-	<0.001	-	-	-
	Tin (Filtered)	mg/l	0.001	-	<0.001	-	-	-
	Titanium (Filtered)	mg/l	0.001	-	<0.001	-	-	-
	Vanadium (Filtered)	mg/l	0.001	-	<0.001	-	-	-
	Zinc (Filtered)	mg/l	0.001	<0.02	<0.001	-	-	-
PAHs	Acenaphthene	µg/L	1	-	<1	-	-	-
	Acenaphthylene	µg/L	1	-	<1	-	-	-
	Anthracene	µg/L	1	-	<1	-	-	-
	Benz(a)anthracene	µg/L	1	-	<1	-	-	-
	Benzo(a) pyrene	µg/L	1	-	<1	-	-	-
	Benzo(g,h,i)perylene	µg/L	1	-	<1	-	-	-
	Chrysene	µg/L	1	-	<1	-	-	-
	Dibenz(a,h)anthracene	µg/L	1	-	<1	-	-	-
	Fluoranthene	µg/L	1	-	<1	-	-	-
	Fluorene	µg/L	1	-	<1	-	-	-
	Indeno(1,2,3-c,d)pyrene	µg/L	1	-	<1	-	-	-
	Naphthalene	µg/L	1	-	<1	-	-	-
	Phenanthrene	µg/L	1	-	<1	-	-	-
	Pyrene	µg/L	1	-	<1	-	-	-
TRH	C6 - C9	µg/L	10	-	<10	<10	<10	<10
	C6-C10	mg/l	0.01	-	<0.01	<0.01	<0.01	<0.01
	C10-C16	mg/l	0.05	-	<0.05	-	<0.05	-
	C16-C34	mg/l	0.1	-	<0.1	-	<0.1	-
	C34-C40	mg/l	0.1	-	<0.1	-	<0.1	-
	C10 - C14	µg/L	50	-	<50	-	<50	-
	C15 - C28	µg/L	100	-	<100	-	<100	-
	C29-C36	µg/L	100	-	<100	-	<100	-

Table 25: Groundwater Field Blanks

Australian Unity Ltd
266 Longueville Road
Lane Cove

			Lab Report #	197675	191466	197675
			Field ID	RB/03/08/18	Trip 1	TB/03/08/18
			Sampled_Date	3/08/2018	10/05/2018	3/08/2018
			Sample Type	Rinsate	Trip_B	Trip_B
Method Type	**Chemical Name**	**Units**	**EQL**			
Heavy Metals	Aluminium (Filtered)	mg/l	0.01	<0.01	-	-
	Antimony (Filtered)	mg/l	0.001	<0.001	-	-
	Arsenic (Filtered)	mg/l	0.001	<0.001	-	-
	Barium (Filtered)	mg/l	0.001	<0.001	-	-
	Beryllium (Filtered)	mg/l	0.0005	<0.0005	-	-
	Boron (Filtered)	mg/l	0.02	<0.02	-	-
	Cadmium (Filtered)	mg/l	0.0001	<0.0001	-	-
	Chromium (III+VI) (Filtered)	mg/l	0.001	<0.001	-	-
	Cobalt (Filtered)	mg/l	0.001	<0.001	-	-
	Copper (Filtered)	mg/l	0.001	<0.001	-	-
	Iron (Filtered)	mg/l	0.01	<0.01	-	-
	Lead (Filtered)	mg/l	0.001	<0.001	-	-
	Manganese (Filtered)	mg/l	0.005	<0.005	-	-
	Mercury (Filtered)	mg/l	0.00005	<0.00005	-	-
	Molybdenum (Filtered)	mg/l	0.001	<0.001	-	-
	Nickel (Filtered)	mg/l	0.001	<0.001	-	-
	Selenium (Filtered)	mg/l	0.001	<0.001	-	-
	Silver (Filtered)	mg/l	0.001	<0.001	-	-
	Tin (Filtered)	mg/l	0.001	<0.001	-	-
	Titanium (Filtered)	mg/l	0.001	<0.001	-	-
	Vanadium (Filtered)	mg/l	0.001	<0.001	-	-
	Zinc (Filtered)	mg/l	0.001	<0.001	-	-
PAHs	Acenaphthene	µg/L	1	<1	-	-
	Acenaphthylene	µg/L	1	<1	-	-
	Anthracene	µg/L	1	<1	-	-
	Benz(a)anthracene	µg/L	1	<1	-	-
	Benzo(a) pyrene	µg/L	1	<1	-	-
	Benzo(g,h,i)perylene	µg/L	1	<1	-	-
	Chrysene	µg/L	1	<1	-	-
	Dibenz(a,h)anthracene	µg/L	1	<1	-	-
	Fluoranthene	µg/L	1	<1	-	-
	Fluorene	µg/L	1	<1	-	-
	Indeno(1,2,3-c,d)pyrene	µg/L	1	<1	-	-
	Naphthalene	µg/L	1	<1	-	-
	Phenanthrene	µg/L	1	<1	-	-
	Pyrene	µg/L	1	<1	-	-
TRHs	C6 - C9	µg/L	10	<10	<10	<10
	C6-C10	mg/l	0.01	<0.01	<0.01	<0.01
	C10-C16	mg/l	0.05	<0.05	<0.05	-
	C16-C34	mg/l	0.1	<0.1	<0.1	-
	C34-C40	mg/l	0.1	<0.1	<0.1	-
	C10 - C14	µg/L	50	<50	<50	-
	C15 - C28	µg/L	100	<100	<100	-
	C29-C36	µg/L	100	<100	<100	-

APPENDIX E

LABORATORY RESULTS, SRAs AND COC'S

P.O. Box 1237
Carlton VIC 3053
enquiries@lrmglobal.com.au

CHAIN OF CUSTODY

Job Number: 27380

ATTENTION
CLIENT
CLIENT NUMBER
LOCATION Longueville Road Lane Cove

Sheet 1 of 1

	Sample Number	Sample Date	Sample Type	Analysis Required	No. of Containers	Turn-around Time Required
1	Split 1	6/07/2017	Soil	NEPM Suite	1	5 day
2	Split 2	6/07/2017	Soil	Metals	1	5 day
3	Split 3	6/07/2017	Soil	Metals	1	5 day
4	Split 4	6/07/2017	Soil	Metals	1	5 day
					4	

ENVIROLAB
Envirolab Services
14 Dalmore Drive
Caribbean Park
Scoresby VIC 3179
Ph: (03) 9763 2500

Job No: 11218
Date Received 11/7/17
Time Received: 10:35
Received by: MS
Temp: Cool/Ambient 11.5°C
Cooling: Ice/Icepack
Security: Intact/Broken/None

Additional information::

Email Results To	Tick
jon.lawson@lrmglobal.com.au	Yep
kevin.b@lrmglobal.com.au	
ajacob@lrmglobal.com.au	
acampbell@lrmglobal.com.au	
b.paule@lrmglobal.com.au	

Total number of containers 4

Sampled by: JL

Checked by: JL

Additional Comments

170939

Chain of custody must be signed and dated by LRM, courier, and laboratory.

RELINQUISHED BY (Signature)	ORGANISATION	DATE / TIME	RECEIVED BY (Signature)	ORGANISATION	DATE / TIME
	LRM	7/07/2017	M. Sayad	ELS	11/7/17 10:35
RELINQUISHED BY (Signature)	**ORGANISATION**	**DATE / TIME**	**RECEIVED BY (Signature)**	**RECEIVED FOR LABORATORY BY (Signature)**	
		10/7/17			

1 Dalmore Drive, Scoresby, Victoria 3179
tel: +61 3 9763 2500

email: melbourne@envirolab.com.au
envirolab.com.au

Envirolab Services Pty Ltd - Melbourne | ABN 37 112 535 645 - 002

CERTIFICATE OF ANALYSIS 11218

Client:
LRM Global
65 Stubbs Street
Kensington
VIC 3031

Attention: Jon Lawson

Sample log in details:

Your Reference:	**27380 - Longueville Road Lane Cove**
No. of samples:	4 Soils
Date samples received / completed instructions received	11/07/2017 / 11/07/2017

Analysis Details:
Please refer to the following pages for results, methodology summary and quality control data.
Samples were analysed as received from the client. Results relate specifically to the samples as received.
Results are reported on a dry weight basis for solids and on an as received basis for other matrices.
Please refer to the last page of this report for any comments relating to the results.

Report Details:

Date results requested by: / Issue Date:	18/07/17 / 18/07/17
Date of Preliminary Report:	Not Issued

NATA accreditation number 2901. This document shall not be reproduced except in full.
Accredited for compliance with ISO/IEC 17025 - Testing **Tests not covered by NATA are denoted with *.**

Results Approved By:

Pamela Adams
Laboratory Manager

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VOCs in soil Our Reference: Your Reference Date Sampled Type of sample	UNITS ---------- ----------	11218-1 Split 1 06/07/2017 Soil
Date extracted	-	12/07/2017
Date analysed	-	13/07/2017
Dichlorodifluoromethane	mg/kg	<1
Chloromethane	mg/kg	<1
Vinyl Chloride	mg/kg	<1
Bromomethane	mg/kg	<1
Chloroethane	mg/kg	<1
Trichlorofluoromethane	mg/kg	<1
1,1-Dichloroethene	mg/kg	<0.5
trans-1,2-dichloroethene	mg/kg	<0.5
1,1-dichloroethane	mg/kg	<0.5
cis-1,2-dichloroethene	mg/kg	<0.5
bromochloromethane	mg/kg	<0.5
chloroform	mg/kg	<0.5
2,2-dichloropropane	mg/kg	<0.5
1,2-dichloroethane	mg/kg	<0.5
1,1,1-trichloroethane	mg/kg	<0.5
1,1-dichloropropene	mg/kg	<0.5
Cyclohexane	mg/kg	<1
carbon tetrachloride	mg/kg	<0.5
Benzene	mg/kg	<0.2
dibromomethane	mg/kg	<0.5
1,2-dichloropropane	mg/kg	<0.5
trichloroethene	mg/kg	<0.5
bromodichloromethane	mg/kg	<0.5
trans-1,3-dichloropropene	mg/kg	<0.5
cis-1,3-dichloropropene	mg/kg	<0.5
1,1,2-trichloroethane	mg/kg	<0.5
Toluene	mg/kg	<0.5
1,3-dichloropropane	mg/kg	<0.5
dibromochloromethane	mg/kg	<0.5
1,2-dibromoethane	mg/kg	<0.5
Tetrachloroethene	mg/kg	<0.5
1,1,1,2-tetrachloroethane	mg/kg	<0.5
chlorobenzene	mg/kg	<0.5
Ethylbenzene	mg/kg	<0.5
bromoform	mg/kg	<0.5
m+p-xylene	mg/kg	<1
styrene	mg/kg	<0.5
1,1,2,2-tetrachloroethane	mg/kg	<0.5

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VOCs in soil Our Reference: Your Reference Date Sampled Type of sample	UNITS ---------- ----------	11218-1 Split 1 06/07/2017 Soil
o-Xylene	mg/kg	<0.5
1,2,3-trichloropropane	mg/kg	<0.5
isopropylbenzene	mg/kg	<0.5
bromobenzene	mg/kg	<0.5
n-propyl benzene	mg/kg	<0.5
2-chlorotoluene	mg/kg	<0.5
4-chlorotoluene	mg/kg	<0.5
1,3,5-trimethyl benzene	mg/kg	<0.5
tert-butyl benzene	mg/kg	<0.5
1,2,4-trimethyl benzene	mg/kg	<0.5
1,3-dichlorobenzene	mg/kg	<0.5
sec-butyl benzene	mg/kg	<0.5
1,4-dichlorobenzene	mg/kg	<0.5
4-isopropyl toluene	mg/kg	<0.5
1,2-dichlorobenzene	mg/kg	<0.5
n-butyl benzene	mg/kg	<0.5
1,2-dibromo-3-chloropropane	mg/kg	<0.5
1,2,4-trichlorobenzene	mg/kg	<0.5
hexachlorobutadiene	mg/kg	<0.5
1,2,3-trichlorobenzene	mg/kg	<0.5
Surrogate Dibromofluoromethane	%	70
Surrogate aaa-Trifluorotoluene	%	89
Surrogate Toluene-d_8	%	99
Surrogate 4-Bromofluorobenzene	%	96

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vTRH(C6-C10)/BTEXN in Soil		
Our Reference:	UNITS	11218-1
Your Reference	----------	Split 1
Date Sampled	----------	06/07/2017
Type of sample		Soil
Date extracted	-	12/07/2017
Date analysed	-	13/07/2017
vTRH C_6 - C_9	mg/kg	<25
vTRH C_6 - C_{10}	mg/kg	<25
TRH C_6 - C_{10} less BTEX (F1)	mg/kg	<25
Benzene	mg/kg	<0.2
Toluene	mg/kg	<0.5
Ethylbenzene	mg/kg	<1
m+p-xylene	mg/kg	<2
o-Xylene	mg/kg	<1
Naphthalene	mg/kg	<1
Total +ve Xylenes	mg/kg	<1
Surrogate aaa-Trifluorotoluene	%	89

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TRH Soil C10-C40 NEPM		
Our Reference:	UNITS	11218-1
Your Reference	----------	Split 1
Date Sampled	----------	06/07/2017
Type of sample		Soil
Date extracted	-	12/07/2017
Date analysed	-	13/07/2017
TRH C_{10} - C_{14}	mg/kg	<50
TRH C_{15} - C_{28}	mg/kg	<100
TRH C_{29} - C_{36}	mg/kg	<100
Total +ve TRH (C10-C36)	mg/kg	<50
TRH>C_{10}-C_{16}	mg/kg	<50
TRH>C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50
TRH>C_{16}-C_{34}	mg/kg	<100
TRH>C_{34}-C_{40}	mg/kg	<100
Total +ve TRH (>C10-C40)	mg/kg	<50
Surrogate o-Terphenyl	%	95

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PAHs in Soil		
Our Reference:	UNITS	11218-1
Your Reference	----------	Split 1
Date Sampled	----------	06/07/2017
Type of sample		Soil
Date extracted	-	12/07/2017
Date analysed	-	15/07/2017
Naphthalene	mg/kg	<0.1
Acenaphthylene	mg/kg	<0.1
Acenaphthene	mg/kg	<0.1
Fluorene	mg/kg	<0.1
Phenanthrene	mg/kg	<0.1
Anthracene	mg/kg	<0.1
Fluoranthene	mg/kg	<0.1
Pyrene	mg/kg	<0.1
Benzo(a)anthracene	mg/kg	<0.1
Chrysene	mg/kg	<0.1
Benzo(b,j&k)fluoranthene	mg/kg	<0.2
Benzo(a)pyrene	mg/kg	0.08
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1
Total +ve PAH's	mg/kg	0.08
Benzo(a)pyrene TEQ calc (Zero)	mg/kg	<0.5
Benzo(a)pyrene TEQ calc (Half)	mg/kg	<0.5
Benzo(a)pyrene TEQ calc (PQL)	mg/kg	<0.5
Surrogate p-Terphenyl-d_{14}	%	98

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Speciated Phenols in Soil		
Our Reference:	UNITS	11218-1
Your Reference	----------	Split 1
Date Sampled	----------	06/07/2017
Type of sample		Soil
Date extracted	-	12/07/2017
Date analysed	-	15/07/2017
Phenol	mg/kg	<0.2
2-Chlorophenol	mg/kg	<0.2
2-Methylphenol	mg/kg	<0.2
3/4-Methylphenol	mg/kg	<0.4
2-Nitrophenol	mg/kg	<0.2
2,4-Dimethylphenol	mg/kg	<0.2
2,4-Dichlorophenol	mg/kg	<0.2
2,6-Dichlorophenol	mg/kg	<0.2
2,4,5-Trichlorophenol	mg/kg	<0.2
2,4,6-Trichlorophenol	mg/kg	<0.2
2,4-Dinitrophenol	mg/kg	<2
4-Nitrophenol	mg/kg	<4
2,3,4,6-Tetrachlorophenol	mg/kg	<0.2
Pentachlorophenol	mg/kg	<1
4-Chloro-3-Methylphenol	mg/kg	<2
Total +ve Cresols	mg/kg	<0.2
Total +ve Phenols	mg/kg	<0.2
Surrogate Phenol-d_6	%	82

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OCP in Soil - NEPM		
Our Reference:	UNITS	11218-1
Your Reference	----------	Split 1
Date Sampled	----------	06/07/2017
Type of sample		Soil
Date extracted	-	12/07/2017
Date analysed	-	15/07/2017
alpha-BHC	mg/kg	<0.1
Hexachlorobenzene	mg/kg	<0.1
beta-BHC	mg/kg	<0.1
gamma-BHC	mg/kg	<0.1
Heptachlor	mg/kg	<0.1
delta-BHC	mg/kg	<0.1
Aldrin	mg/kg	<0.1
Heptachlor Epoxide	mg/kg	<0.1
gamma-Chlordane	mg/kg	<0.1
alpha-chlordane	mg/kg	<0.1
Endosulfan I	mg/kg	<0.1
pp-DDE	mg/kg	<0.1
Dieldrin	mg/kg	<0.1
Endrin	mg/kg	<0.1
Endosulfan II	mg/kg	<0.1
pp-DDD	mg/kg	<0.1
Endrin Aldehyde	mg/kg	<0.1
pp-DDT	mg/kg	<0.1
Endosulfan Sulphate	mg/kg	<0.1
Methoxychlor	mg/kg	<0.1
Total +ve reported Aldrin + Dieldrin	mg/kg	<0.1
Total +ve reported DDT+DDD+DDE	mg/kg	<0.1
Mirex	mg/kg	<0.5
Toxaphene	mg/kg	<2
Surrogate p-Terphenyl-d_{14}	%	98

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OP in Soil - NEPM		
Our Reference:	UNITS	11218-1
Your Reference	----------	Split 1
Date Sampled	----------	06/07/2017
Type of sample		Soil
Date extracted	-	12/07/2017
Date analysed	-	15/07/2017
Chlorpyrifos	mg/kg	<0.1
Surrogate p-Terphenyl-d_{14}	%	98

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PCBs in Soil		
Our Reference:	UNITS	11218-1
Your Reference	----------	Split 1
Date Sampled	----------	06/07/2017
Type of sample		Soil
Date extracted	-	12/07/2017
Date analysed	-	15/07/2017
Aroclor 1016	mg/kg	<0.1
Aroclor 1221	mg/kg	<0.1
Aroclor 1232	mg/kg	<0.1
Aroclor 1242	mg/kg	<0.1
Aroclor 1248	mg/kg	<0.1
Aroclor 1254	mg/kg	<0.1
Aroclor 1260	mg/kg	<0.1
Total +ve PCBs (1016-1260)	mg/kg	<0.1
Surrogate p-Terphenyl-d_{14}	%	98

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Synthetic Pyrethroids - NEPM		
Our Reference:	UNITS	11218-1
Your Reference	----------	Split 1
Date Sampled	----------	06/07/2017
Type of sample		Soil
Date extracted	-	12/07/2017
Date analysed	-	15/07/2017
Bifenthrin	mg/kg	<0.5

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Triazine Herbicides in Soil		
Our Reference:	UNITS	11218-1
Your Reference	----------	Split 1
Date Sampled	----------	06/07/2017
Type of sample		Soil
Date extracted	-	12/07/2017
Date analysed	-	15/07/2017
Atrazine	mg/kg	<0.5

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Phenoxy Acid Herbicides in Soil		
Our Reference:	UNITS	11218-1
Your Reference	----------	Split 1
Date Sampled	----------	06/07/2017
Type of sample		Soil
Date Extracted	-	14/07/2017
Date analysed	-	14/07/2017
Clopyralid	mg/kg	<0.5
3,5-Dichlorobenzoic acid	mg/kg	<0.5
o-Chlorophenoxy acetic acid	mg/kg	<0.5
4-CPA	mg/kg	<0.5
Dicamba	mg/kg	<0.5
Mecoprop	mg/kg	<0.5
MCPA	mg/kg	<0.5
Dichloroprop	mg/kg	<0.5
2,4-D	mg/kg	<0.5
Bromoxynil	mg/kg	<0.5
Triclopyr	mg/kg	<0.5
2,4,5-TP (Silvex)	mg/kg	<0.5
2,4,5-T	mg/kg	<0.5
MCPB	mg/kg	<0.5
2.4-DB	mg/kg	<0.5
Dinoseb	mg/kg	<1.0
Ioxynil	mg/kg	<1.0
Picloram	mg/kg	<0.5
DCPA (Chlorthal) Diacid	mg/kg	<0.5
Acifluorfen	mg/kg	<2.0
2,4,6-T	mg/kg	<0.5
2,6-D	mg/kg	<0.5
Surrogate: 2,4-DCPA	%	104

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NEPM screen metals in soil Our Reference: Your Reference Date Sampled Type of sample	UNITS ---------- ----------	11218-1 Split 1 06/07/2017 Soil	11218-2 Split 2 06/07/2017 Soil	11218-3 Split 3 06/07/2017 Soil	11218-4 Split 4 06/07/2017 Soil
Date digested	-	13/07/2017	13/07/2017	13/07/2017	13/07/2017
Date analysed	-	13/07/2017	13/07/2017	13/07/2017	13/07/2017
Arsenic	mg/kg	4	4	8	<4
Beryllium	mg/kg	<1	[NA]	[NA]	[NA]
Boron	mg/kg	<3	[NA]	[NA]	[NA]
Cadmium	mg/kg	<0.4	8.2	<0.4	<0.4
Cobalt	mg/kg	<1	[NA]	[NA]	[NA]
Chromium	mg/kg	5	18	14	7
Copper	mg/kg	7	240	30	7
Lead	mg/kg	25	1,200	60	49
Mercury	mg/kg	<0.1	0.2	<0.1	0.1
Manganese	mg/kg	7	[NA]	[NA]	[NA]
Nickel	mg/kg	<1	13	3	2
Selenium	mg/kg	<2	[NA]	[NA]	[NA]
Zinc	mg/kg	32	730	170	71

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TECHNICAL
COMPETENCE

Misc Inorg - soil NEPM		
Our Reference:	UNITS	11218-1
Your Reference	----------	Split 1
Date Sampled	----------	06/07/2017
Type of sample		Soil
Date prepared	-	13/07/2017
Date analysed	-	14/07/2017
Free Cyanide in soil	mg/kg	<0.5
Hexavalent Chromium, Cr^{6+}	mg/kg	<1

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Moisture					
Our Reference:	UNITS	11218-1	11218-2	11218-3	11218-4
Your Reference	----------	Split 1	Split 2	Split 3	Split 4
Date Sampled	----------	06/07/2017	06/07/2017	06/07/2017	06/07/2017
Type of sample		Soil	Soil	Soil	Soil
Date prepared	-	12/07/2017	12/07/2017	12/07/2017	12/07/2017
Date analysed	-	13/07/2017	13/07/2017	13/07/2017	13/07/2017
Moisture	%	11	13	22	16

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Method ID	Methodology Summary
Org-014	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS.
Org-016	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater. Note, the Total +ve Xylene PQL is reflective of the lowest individual PQL and is therefore "Total +ve Xylenes" is simply a sum of the positive individual Xylenes.
Org-003	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis. Note, the Total +ve TRH PQL is reflective of the lowest individual PQL and is therefore "Total +ve TRH" is simply a sum of the positive individual TRH fractions (>C10-C40).
Org-012	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS. Benzo(a)pyrene TEQ as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater - 2013. For soil results:- 1. 'TEQ PQL' values are assuming all contributing PAHs reported as <PQL are actually at the PQL. This is the most conservative approach and can give false positive TEQs given that PAHs that contribute to the TEQ calculation may not be present. 2. 'TEQ zero' values are assuming all contributing PAHs reported as <PQL are zero. This is the least conservative approach and is more susceptible to false negative TEQs when PAHs that contribute to the TEQ calculation are present but below PQL. 3. 'TEQ half PQL' values are assuming all contributing PAHs reported as <PQL are half the stipulated PQL. Hence a mid-point between the most and least conservative approaches above. Note, the Total +ve PAHs PQL is reflective of the lowest individual PQL and is therefore" Total +ve PAHs" is simply a sum of the positive individual PAHs.
Org-012	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS. Note, the Total +ve Cresols or Phenols PQL is reflective of the lowest individual PQL and is therefore" Total +ve Cresols or Phenols" is simply a sum of the positive individual Cresols or Phenols.
Org-012	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS.
Org-012	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS. Note, For OCs the Total +ve reported DDD+DDE+DDT PQL is reflective of the lowest individual PQL and is therefore simply a sum of the positive individually report DDD+DDE+DDT.
Org-012	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD or GC-MS. Note, the Total +ve PCBs PQL is reflective of the lowest individual PQL and is therefore" Total +ve PCBs" is simply a sum of the positive individual PCBs.
Org-012	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS.
ORG-031	Acid herbicides and speciated phenols in soil by DCM:Acetone extraction with derivatisation and determination by GC-MS.

Method ID	Methodology Summary
	Haloacetic acids in waters are derivatised and analysed by GC-ECD. Acid herbicides, speciated phenols, carbamates and ureas in water by DCM extraction with derivatisation and determination by GC-MS. Analysed by MPL, NATA accrediation 2901.
Metals-020 ICP-AES	Determination of various metals by ICP-AES.
Metals-021 CV-AAS	Determination of Mercury by Cold Vapour AAS.
Inorg-013	Cyanide - total determined colourimetrically after distillation, based on APHA latest edition, 4500-CN_C,E. Free cyanide determined colourimetrically after filtration and confirmed by diffusion. Solids are extracted in a caustic media prior to distillation and analysis.
Inorg-024	Hexavalent Chromium (Cr6+) - determined colourimetrically by discrete analyser.
Inorg-008	Moisture content determined by heating at 105 deg C for a minimum of 12 hours.

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QUALITY CONTROL VOCs in soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
Date extracted	-			12/07/2017	11218-1	12/07/2017 || 12/07/2017	LCS-1	12/07/2017
Date analysed	-			12/07/2017	11218-1	13/07/2017 || 14/07/2017	LCS-1	12/07/2017
Dichlorodifluoromethane	mg/kg	1	Org-014	<1	11218-1	<1 || <1	[NR]	[NR]
Chloromethane	mg/kg	1	Org-014	<1	11218-1	<1 || <1	[NR]	[NR]
Vinyl Chloride	mg/kg	1	Org-014	<1	11218-1	<1 || <1	[NR]	[NR]
Bromomethane	mg/kg	1	Org-014	<1	11218-1	<1 || <1	[NR]	[NR]
Chloroethane	mg/kg	1	Org-014	<1	11218-1	<1 || <1	[NR]	[NR]
Trichlorofluoromethane	mg/kg	1	Org-014	<1	11218-1	<1 || <1	[NR]	[NR]
1,1-Dichloroethene	mg/kg	0.5	Org-014	<0.5	11218-1	<0.5 || <0.5	[NR]	[NR]
trans-1,2-dichloroethene	mg/kg	0.5	Org-014	<0.5	11218-1	<0.5 || <0.5	[NR]	[NR]
1,1-dichloroethane	mg/kg	0.5	Org-014	<0.5	11218-1	<0.5 || <0.5	LCS-1	73%
cis-1,2-dichloroethene	mg/kg	0.5	Org-014	<0.5	11218-1	<0.5 || <0.5	[NR]	[NR]
bromochloromethane	mg/kg	0.5	Org-014	<0.5	11218-1	<0.5 || <0.5	[NR]	[NR]
chloroform	mg/kg	0.5	Org-014	<0.5	11218-1	<0.5 || <0.5	LCS-1	74%
2,2-dichloropropane	mg/kg	0.5	Org-014	<0.5	11218-1	<0.5 || <0.5	[NR]	[NR]
1,2-dichloroethane	mg/kg	0.5	Org-014	<0.5	11218-1	<0.5 || <0.5	LCS-1	76%
1,1,1-trichloroethane	mg/kg	0.5	Org-014	<0.5	11218-1	<0.5 || <0.5	LCS-1	76%
1,1-dichloropropene	mg/kg	0.5	Org-014	<0.5	11218-1	<0.5 || <0.5	[NR]	[NR]
Cyclohexane	mg/kg	1	Org-014	<1	11218-1	<1 || <1	[NR]	[NR]
carbon tetrachloride	mg/kg	0.5	Org-014	<0.5	11218-1	<0.5 || <0.5	[NR]	[NR]
Benzene	mg/kg	0.2	Org-014	<0.2	11218-1	<0.2 || <0.2	[NR]	[NR]
dibromomethane	mg/kg	0.5	Org-014	<0.5	11218-1	<0.5 || <0.5	[NR]	[NR]
1,2-dichloropropane	mg/kg	0.5	Org-014	<0.5	11218-1	<0.5 || <0.5	[NR]	[NR]
trichloroethene	mg/kg	0.5	Org-014	<0.5	11218-1	<0.5 || <0.5	LCS-1	79%
bromodichloromethane	mg/kg	0.5	Org-014	<0.5	11218-1	<0.5 || <0.5	LCS-1	78%
trans-1,3-dichloropropene	mg/kg	0.5	Org-014	<0.5	11218-1	<0.5 || <0.5	[NR]	[NR]
cis-1,3-dichloropropene	mg/kg	0.5	Org-014	<0.5	11218-1	<0.5 || <0.5	[NR]	[NR]
1,1,2-trichloroethane	mg/kg	0.5	Org-014	<0.5	11218-1	<0.5 || <0.5	[NR]	[NR]
Toluene	mg/kg	0.5	Org-014	<0.5	11218-1	<0.5 || <0.5	[NR]	[NR]
1,3-dichloropropane	mg/kg	0.5	Org-014	<0.5	11218-1	<0.5 || <0.5	[NR]	[NR]
dibromochloromethane	mg/kg	0.5	Org-014	<0.5	11218-1	<0.5 || <0.5	LCS-1	82%
1,2-dibromoethane	mg/kg	0.5	Org-014	<0.5	11218-1	<0.5 || <0.5	[NR]	[NR]
Tetrachloroethene	mg/kg	0.5	Org-014	<0.5	11218-1	<0.5 || <0.5	LCS-1	78%
1,1,1,2-tetrachloroethane	mg/kg	0.5	Org-014	<0.5	11218-1	<0.5 || <0.5	[NR]	[NR]
chlorobenzene	mg/kg	0.5	Org-014	<0.5	11218-1	<0.5 || <0.5	[NR]	[NR]
Ethylbenzene	mg/kg	0.5	Org-014	<0.5	11218-1	<0.5 || <0.5	[NR]	[NR]
bromoform	mg/kg	0.5	Org-014	<0.5	11218-1	<0.5 || <0.5	[NR]	[NR]
m+p-xylene	mg/kg	1	Org-014	<1	11218-1	<1 || <1	[NR]	[NR]
styrene	mg/kg	0.5	Org-014	<0.5	11218-1	<0.5 || <0.5	[NR]	[NR]
1,1,2,2-tetrachloroethane	mg/kg	0.5	Org-014	<0.5	11218-1	<0.5 || <0.5	[NR]	[NR]

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QUALITY CONTROL VOCs in soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
o-Xylene	mg/kg	0.5	Org-014	<0.5	11218-1	<0.5 || <0.5	[NR]	[NR]
1,2,3-trichloropropane	mg/kg	0.5	Org-014	<0.5	11218-1	<0.5 || <0.5	[NR]	[NR]
isopropylbenzene	mg/kg	0.5	Org-014	<0.5	11218-1	<0.5 || <0.5	[NR]	[NR]
bromobenzene	mg/kg	0.5	Org-014	<0.5	11218-1	<0.5 || <0.5	[NR]	[NR]
n-propyl benzene	mg/kg	0.5	Org-014	<0.5	11218-1	<0.5 || <0.5	[NR]	[NR]
2-chlorotoluene	mg/kg	0.5	Org-014	<0.5	11218-1	<0.5 || <0.5	[NR]	[NR]
4-chlorotoluene	mg/kg	0.5	Org-014	<0.5	11218-1	<0.5 || <0.5	[NR]	[NR]
1,3,5-trimethyl benzene	mg/kg	0.5	Org-014	<0.5	11218-1	<0.5 || <0.5	[NR]	[NR]
tert-butyl benzene	mg/kg	0.5	Org-014	<0.5	11218-1	<0.5 || <0.5	[NR]	[NR]
1,2,4-trimethyl benzene	mg/kg	0.5	Org-014	<0.5	11218-1	<0.5 || <0.5	[NR]	[NR]
1,3-dichlorobenzene	mg/kg	0.5	Org-014	<0.5	11218-1	<0.5 || <0.5	[NR]	[NR]
sec-butyl benzene	mg/kg	0.5	Org-014	<0.5	11218-1	<0.5 || <0.5	[NR]	[NR]
1,4-dichlorobenzene	mg/kg	0.5	Org-014	<0.5	11218-1	<0.5 || <0.5	[NR]	[NR]
4-isopropyl toluene	mg/kg	0.5	Org-014	<0.5	11218-1	<0.5 || <0.5	[NR]	[NR]
1,2-dichlorobenzene	mg/kg	0.5	Org-014	<0.5	11218-1	<0.5 || <0.5	[NR]	[NR]
n-butyl benzene	mg/kg	0.5	Org-014	<0.5	11218-1	<0.5 || <0.5	[NR]	[NR]
1,2-dibromo-3-chloropropane	mg/kg	0.5	Org-014	<0.5	11218-1	<0.5 || <0.5	[NR]	[NR]
1,2,4-trichlorobenzene	mg/kg	0.5	Org-014	<0.5	11218-1	<0.5 || <0.5	[NR]	[NR]
hexachlorobutadiene	mg/kg	0.5	Org-014	<0.5	11218-1	<0.5 || <0.5	[NR]	[NR]
1,2,3-trichlorobenzene	mg/kg	0.5	Org-014	<0.5	11218-1	<0.5 || <0.5	[NR]	[NR]
Surrogate Dibromofluoromethane	%		Org-014	90	11218-1	70 || 68 || RPD: 3	LCS-1	91%
Surrogate aaa-Trifluorotoluene	%		Org-014	90	11218-1	89 || 87 || RPD: 2	LCS-1	92%
Surrogate Toluene-d_8	%		Org-014	100	11218-1	99 || 100 || RPD: 1	LCS-1	100%
Surrogate 4-Bromofluorobenzene	%		Org-014	97	11218-1	96 || 97 || RPD: 1	LCS-1	99%

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QUALITY CONTROL vTRH(C6-C10)/BTEXN in Soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
Date extracted	-			12/07/2017	11218-1	12/07/2017 || 12/07/2017	LCS-1	12/07/2017
Date analysed	-			13/07/2017	11218-1	13/07/2017 || 14/07/2017	LCS-1	13/07/2017
vTRH C_6 - C_9	mg/kg	25	Org-016	<25	11218-1	<25 || <25	LCS-1	93%
vTRH C_6 - C_{10}	mg/kg	25	Org-016	<25	11218-1	<25 || <25	LCS-1	93%
Benzene	mg/kg	0.2	Org-016	<0.2	11218-1	<0.2 || <0.2	LCS-1	90%
Toluene	mg/kg	0.5	Org-016	<0.5	11218-1	<0.5 || <0.5	LCS-1	92%
Ethylbenzene	mg/kg	1	Org-016	<1	11218-1	<1 || <1	LCS-1	96%
m+p-xylene	mg/kg	2	Org-016	<2	11218-1	<2 || <2	LCS-1	94%
o-Xylene	mg/kg	1	Org-016	<1	11218-1	<1 || <1	LCS-1	94%
Naphthalene	mg/kg	1	Org-014	<1	11218-1	<1 || <1	[NR]	[NR]
Surrogate aaa-Trifluorotoluene	%		Org-016	101	11218-1	89 || 89 || RPD: 0	LCS-1	96%

QUALITY CONTROL TRH Soil C10-C40 NEPM	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
Date extracted	-			12/07/2017	11218-1	12/07/2017 || 12/07/2017	LCS-1	12/07/2017
Date analysed	-			13/07/2017	11218-1	13/07/2017 || 13/07/2017	LCS-1	13/07/2017
TRH C_{10} - C_{14}	mg/kg	50	Org-003	<50	11218-1	<50 || <50	LCS-1	91%
TRH C_{15} - C_{28}	mg/kg	100	Org-003	<100	11218-1	<100 || <100	LCS-1	94%
TRH C_{29} - C_{36}	mg/kg	100	Org-003	<100	11218-1	<100 || <100	LCS-1	93%
TRH >C_{10}-C_{16}	mg/kg	50	Org-003	<50	11218-1	<50 || <50	LCS-1	91%
TRH >C_{16}-C_{34}	mg/kg	100	Org-003	<100	11218-1	<100 || <100	LCS-1	94%
TRH >C_{34}-C_{40}	mg/kg	100	Org-003	<100	11218-1	<100 || <100	LCS-1	93%
Surrogate o-Terphenyl	%		Org-003	85	11218-1	95 || 90 || RPD: 5	LCS-1	84%

QUALITY CONTROL PAHs in Soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
Date extracted	-			12/07/2017	11218-1	12/07/2017 || 12/07/2017	LCS-1	12/07/2017
Date analysed	-			15/07/2017	11218-1	15/07/2017 || 15/07/2017	LCS-1	15/07/2017
Naphthalene	mg/kg	0.1	Org-012	<0.1	11218-1	<0.1 || <0.1	LCS-1	84%
Acenaphthylene	mg/kg	0.1	Org-012	<0.1	11218-1	<0.1 || <0.1	LCS-1	88%
Acenaphthene	mg/kg	0.1	Org-012	<0.1	11218-1	<0.1 || <0.1	[NR]	[NR]
Fluorene	mg/kg	0.1	Org-012	<0.1	11218-1	<0.1 || <0.1	LCS-1	84%
Phenanthrene	mg/kg	0.1	Org-012	<0.1	11218-1	<0.1 || <0.1	LCS-1	84%
Anthracene	mg/kg	0.1	Org-012	<0.1	11218-1	<0.1 || <0.1	[NR]	[NR]
Fluoranthene	mg/kg	0.1	Org-012	<0.1	11218-1	<0.1 || <0.1	LCS-1	84%
Pyrene	mg/kg	0.1	Org-012	<0.1	11218-1	<0.1 || <0.1	LCS-1	88%
Benzo(a)anthracene	mg/kg	0.1	Org-012	<0.1	11218-1	<0.1 || <0.1	[NR]	[NR]
Chrysene	mg/kg	0.1	Org-012	<0.1	11218-1	<0.1 || <0.1	LCS-1	102%

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QUALITY CONTROL PAHs in Soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
Benzo (b,j&k)fluoranthene	mg/kg	0.2	Org-012	<0.2	11218-1	<0.2 || <0.2	[NR]	[NR]
Benzo(a)pyrene	mg/kg	0.05	Org-012	<0.05	11218-1	0.08 || 0.09 || RPD: 12	LCS-1	88%
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-012	<0.1	11218-1	<0.1 || <0.1	[NR]	[NR]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-012	<0.1	11218-1	<0.1 || <0.1	[NR]	[NR]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-012	<0.1	11218-1	<0.1 || <0.1	[NR]	[NR]
Surrogate p-Terphenyl-d_{14}	%		Org-012	98	11218-1	98 || 98 || RPD: 0	LCS-1	90%

QUALITY CONTROL Speciated Phenols in Soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
Date extracted	-		Org-012	12/07/2017	11218-1	12/07/2017 || 12/07/2017	LCS-1	12/07/2017
Date analysed	-		Org-012	15/07/2017	11218-1	15/07/2017 || 15/07/2017	LCS-1	15/07/2017
Phenol	mg/kg	0.2	Org-012	<0.2	11218-1	<0.2 || <0.2	LCS-1	96%
2-Chlorophenol	mg/kg	0.2	Org-012	<0.2	11218-1	<0.2 || <0.2	LCS-1	92%
2-Methylphenol	mg/kg	0.2	Org-012	<0.2	11218-1	<0.2 || <0.2	LCS-1	86%
3/4-Methylphenol	mg/kg	0.4	Org-012	<0.4	11218-1	<0.4 || <0.4	[NR]	[NR]
2-Nitrophenol	mg/kg	0.2	Org-012	<0.2	11218-1	<0.2 || <0.2	[NR]	[NR]
2,4-Dimethylphenol	mg/kg	0.2	Org-012	<0.2	11218-1	<0.2 || <0.2	[NR]	[NR]
2,4-Dichlorophenol	mg/kg	0.2	Org-012	<0.2	11218-1	<0.2 || <0.2	[NR]	[NR]
2,6-Dichlorophenol	mg/kg	0.2	Org-012	<0.2	11218-1	<0.2 || <0.2	LCS-1	94%
2,4,5-Trichlorophenol	mg/kg	0.2	Org-012	<0.2	11218-1	<0.2 || <0.2	[NR]	[NR]
2,4,6-Trichlorophenol	mg/kg	0.2	Org-012	<0.2	11218-1	<0.2 || <0.2	[NR]	[NR]
2,4-Dinitrophenol	mg/kg	2	Org-012	<2	11218-1	<2 || <2	[NR]	[NR]
4-Nitrophenol	mg/kg	4	Org-012	<4	11218-1	<4 || <4	[NR]	[NR]
2,3,4,6-Tetrachlorophenol	mg/kg	0.2	Org-012	<0.2	11218-1	<0.2 || <0.2	[NR]	[NR]
Pentachlorophenol	mg/kg	1	Org-012	<1	11218-1	<1 || <1	LCS-1	62%
4-Chloro-3-Methylphenol	mg/kg	2	Org-012	<2	11218-1	<2 || <2	[NR]	[NR]
Surrogate Phenol-d_6	%		Org-012	94	11218-1	82 || 80 || RPD: 2	LCS-1	94%

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QUALITY CONTROL OCP in Soil - NEPM	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
Date extracted	-			12/07/2017	11218-1	12/07/2017 || 12/07/2017	LCS-1	12/07/2017
Date analysed	-			15/07/2017	11218-1	15/07/2017 || 15/07/2017	LCS-1	15/07/2017
alpha-BHC	mg/kg	0.1	Org-012	<0.1	11218-1	<0.1 || <0.1	LCS-1	82%
Hexachlorobenzene	mg/kg	0.1	Org-012	<0.1	11218-1	<0.1 || <0.1	[NR]	[NR]
beta-BHC	mg/kg	0.1	Org-012	<0.1	11218-1	<0.1 || <0.1	LCS-1	82%
gamma-BHC	mg/kg	0.1	Org-012	<0.1	11218-1	<0.1 || <0.1	[NR]	[NR]
Heptachlor	mg/kg	0.1	Org-012	<0.1	11218-1	<0.1 || <0.1	LCS-1	86%
delta-BHC	mg/kg	0.1	Org-012	<0.1	11218-1	<0.1 || <0.1	[NR]	[NR]
Aldrin	mg/kg	0.1	Org-012	<0.1	11218-1	<0.1 || <0.1	LCS-1	82%
Heptachlor Epoxide	mg/kg	0.1	Org-012	<0.1	11218-1	<0.1 || <0.1	LCS-1	86%
gamma-Chlordane	mg/kg	0.1	Org-012	<0.1	11218-1	<0.1 || <0.1	LCS-1	82%
alpha-chlordane	mg/kg	0.1	Org-012	<0.1	11218-1	<0.1 || <0.1	[NR]	[NR]
Endosulfan I	mg/kg	0.1	Org-012	<0.1	11218-1	<0.1 || <0.1	[NR]	[NR]
pp-DDE	mg/kg	0.1	Org-012	<0.1	11218-1	<0.1 || <0.1	LCS-1	82%
Dieldrin	mg/kg	0.1	Org-012	<0.1	11218-1	<0.1 || <0.1	LCS-1	84%
Endrin	mg/kg	0.1	Org-012	<0.1	11218-1	<0.1 || <0.1	[NR]	[NR]
Endosulfan II	mg/kg	0.1	Org-012	<0.1	11218-1	<0.1 || <0.1	[NR]	[NR]
pp-DDD	mg/kg	0.1	Org-012	<0.1	11218-1	<0.1 || <0.1	LCS-1	94%
Endrin Aldehyde	mg/kg	0.1	Org-012	<0.1	11218-1	<0.1 || <0.1	[NR]	[NR]
pp-DDT	mg/kg	0.1	Org-012	<0.1	11218-1	<0.1 || <0.1	[NR]	[NR]
Endosulfan Sulphate	mg/kg	0.1	Org-012	<0.1	11218-1	<0.1 || <0.1	LCS-1	86%
Methoxychlor	mg/kg	0.1	Org-012	<0.1	11218-1	<0.1 || <0.1	[NR]	[NR]
Mirex	mg/kg	0.5	Org-012	<0.5	11218-1	<0.5 || <0.5	[NR]	[NR]
Toxaphene	mg/kg	2	Org-012	<2	11218-1	<2 || <2	[NR]	[NR]
Surrogate p-Terphenyl-d_{14}	%		Org-012	98	11218-1	98 || 98 || RPD: 0	LCS-1	90%

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QUALITY CONTROL OP in Soil - NEPM	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
Date extracted	-			12/07/2017	11218-1	12/07/2017 || 12/07/2017	LCS-1	12/07/2017
Date analysed	-			15/07/2017	11218-1	15/07/2017 || 15/07/2017	LCS-1	15/07/2017
Chlorpyrifos	mg/kg	0.1	Org-012	<0.1	11218-1	<0.1 || <0.1	LCS-1	92%
Surrogate p-Terphenyl-d_{14}	%		Org-012	98	11218-1	98 || 98 || RPD: 0	LCS-1	90%

QUALITY CONTROL PCBs in Soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
Date extracted	-			12/07/2017	11218-1	12/07/2017 || 12/07/2017	LCS-1	12/07/2017
Date analysed	-			15/07/2017	11218-1	15/07/2017 || 15/07/2017	LCS-1	15/07/2017
Aroclor 1016	mg/kg	0.1	Org-012	<0.1	11218-1	<0.1 || <0.1	[NR]	[NR]
Aroclor 1221	mg/kg	0.1	Org-012	<0.1	11218-1	<0.1 || <0.1	[NR]	[NR]
Aroclor 1232	mg/kg	0.1	Org-012	<0.1	11218-1	<0.1 || <0.1	[NR]	[NR]
Aroclor 1242	mg/kg	0.1	Org-012	<0.1	11218-1	<0.1 || <0.1	[NR]	[NR]
Aroclor 1248	mg/kg	0.1	Org-012	<0.1	11218-1	<0.1 || <0.1	[NR]	[NR]
Aroclor 1254	mg/kg	0.1	Org-012	<0.1	11218-1	<0.1 || <0.1	LCS-1	90%
Aroclor 1260	mg/kg	0.1	Org-012	<0.1	11218-1	<0.1 || <0.1	[NR]	[NR]
Surrogate p-Terphenyl-d_{14}	%		Org-012	98	11218-1	98 || 98 || RPD: 0	LCS-1	90%

QUALITY CONTROL Synthetic Pyrethroids - NEPM	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
Date extracted	-			12/07/2017	11218-1	12/07/2017 || 12/07/2017	LCS-1	12/07/2017
Date analysed	-			15/07/2017	11218-1	15/07/2017 || 15/07/2017	LCS-1	15/07/2017
Bifenthrin	mg/kg	0.5	Org-012	<0.5	11218-1	<0.5 || <0.5	LCS-1	102%

QUALITY CONTROL Triazine Herbicides in Soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
Date extracted	-			12/07/2017	11218-1	12/07/2017 || 12/07/2017	LCS-1	12/07/2017
Date analysed	-			15/07/2017	11218-1	15/07/2017 || 15/07/2017	LCS-1	15/07/2017
Atrazine	mg/kg	0.5	Org-012	<0.5	11218-1	<0.5 || <0.5	LCS-1	86%

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QUALITY CONTROL Phenoxy Acid Herbicides in Soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
Clopyralid	mg/kg	0.5	ORG-031	<0.5	[NT]	[NT]	[NR]	[NR]
3,5-Dichlorobenzoic acid	mg/kg	0.5	ORG-031	<0.5	[NT]	[NT]	[NR]	[NR]
o-Chlorophenoxy acetic acid	mg/kg	0.5	ORG-031	<0.5	[NT]	[NT]	[NR]	[NR]
4-CPA	mg/kg	0.5	ORG-031	<0.5	[NT]	[NT]	[NR]	[NR]
Dicamba	mg/kg	0.5	ORG-031	<0.5	[NT]	[NT]	LCS-1	88%
Mecoprop	mg/kg	0.5	ORG-031	<0.5	[NT]	[NT]	LCS-1	86%
MCPA	mg/kg	0.5	ORG-031	<0.5	[NT]	[NT]	LCS-1	84%
Dichloroprop	mg/kg	0.5	ORG-031	<0.5	[NT]	[NT]	[NR]	[NR]
2,4-D	mg/kg	0.5	ORG-031	<0.5	[NT]	[NT]	LCS-1	84%
Bromoxynil	mg/kg	0.5	ORG-031	<0.5	[NT]	[NT]	[NR]	[NR]
Triclopyr	mg/kg	0.5	ORG-031	<0.5	[NT]	[NT]	[NR]	[NR]
2,4,5-TP (Silvex)	mg/kg	0.5	ORG-031	<0.5	[NT]	[NT]	[NR]	[NR]
2,4,5-T	mg/kg	0.5	ORG-031	<0.5	[NT]	[NT]	LCS-1	81%
MCPB	mg/kg	0.5	ORG-031	<0.5	[NT]	[NT]	[NR]	[NR]
2.4-DB	mg/kg	0.5	ORG-031	<0.5	[NT]	[NT]	[NR]	[NR]
Dinoseb	mg/kg	1	ORG-031	<1.0	[NT]	[NT]	[NR]	[NR]
Ioxynil	mg/kg	1	ORG-031	<1.0	[NT]	[NT]	[NR]	[NR]
Picloram	mg/kg	0.5	ORG-031	<0.5	[NT]	[NT]	[NR]	[NR]
DCPA (Chlorthal) Diacid	mg/kg	0.5	ORG-031	<0.5	[NT]	[NT]	[NR]	[NR]
Acifluorfen	mg/kg	2	ORG-031	<2.0	[NT]	[NT]	[NR]	[NR]
2,4,6-T	mg/kg	0.5	ORG-031	<0.5	[NT]	[NT]	[NR]	[NR]
2,6-D	mg/kg	0.5	ORG-031	<0.5	[NT]	[NT]	[NR]	[NR]
Surrogate: 2,4-DCPA	%		ORG-031	102	[NT]	[NT]	LCS-1	106%

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QUALITY CONTROL NEPM screen metals in soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
Date digested	-			13/07/2017	[NT]	[NT]	LCS-1	13/07/2017
Date analysed	-			13/07/2017	[NT]	[NT]	LCS-1	13/07/2017
Arsenic	mg/kg	4	Metals-020 ICP-AES	<4	[NT]	[NT]	LCS-1	103%
Beryllium	mg/kg	1	Metals-020 ICP-AES	<1	[NT]	[NT]	LCS-1	118%
Boron	mg/kg	3	Metals-020 ICP-AES	<3	[NT]	[NT]	LCS-1	105%
Cadmium	mg/kg	0.4	Metals-020 ICP-AES	<0.4	[NT]	[NT]	LCS-1	109%
Cobalt	mg/kg	1	Metals-020 ICP-AES	<1	[NT]	[NT]	LCS-1	102%
Chromium	mg/kg	1	Metals-020 ICP-AES	<1	[NT]	[NT]	LCS-1	108%
Copper	mg/kg	1	Metals-020 ICP-AES	<1	[NT]	[NT]	LCS-1	107%
Lead	mg/kg	1	Metals-020 ICP-AES	<1	[NT]	[NT]	LCS-1	105%
Mercury	mg/kg	0.1	Metals-021 CV-AAS	<0.1	[NT]	[NT]	LCS-1	112%
Manganese	mg/kg	1	Metals-020 ICP-AES	<1	[NT]	[NT]	LCS-1	109%
Nickel	mg/kg	1	Metals-020 ICP-AES	<1	[NT]	[NT]	LCS-1	105%
Selenium	mg/kg	2	Metals-020 ICP-AES	<2	[NT]	[NT]	LCS-1	97%
Zinc	mg/kg	1	Metals-020 ICP-AES	<1	[NT]	[NT]	LCS-1	105%

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QUALITY CONTROL Misc Inorg - soil NEPM	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
Date prepared	-			13/07/2017	[NT]	[NT]	LCS-1	13/07/2017
Date analysed	-			14/07/2017	[NT]	[NT]	LCS-1	14/07/2017
Free Cyanide in soil	mg/kg	0.5	Inorg-013	<0.5	[NT]	[NT]	LCS-1	84%
Hexavalent Chromium, Cr^{6+}	mg/kg	1	Inorg-024	<1	[NT]	[NT]	LCS-1	88%

QUALITY CONTROL Moisture	UNITS	PQL	METHOD	Blank
Date prepared	-			[NT]
Date analysed	-			[NT]
Moisture	%	0.1	Inorg-008	[NT]

QUALITY CONTROL PAHs in Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date extracted	-	[NT]	[NT]	11218-1	12/07/2017
Date analysed	-	[NT]	[NT]	11218-1	15/07/2017
Naphthalene	mg/kg	[NT]	[NT]	11218-1	91%
Acenaphthylene	mg/kg	[NT]	[NT]	11218-1	90%
Acenaphthene	mg/kg	[NT]	[NT]	[NR]	[NR]
Fluorene	mg/kg	[NT]	[NT]	11218-1	93%
Phenanthrene	mg/kg	[NT]	[NT]	11218-1	98%
Anthracene	mg/kg	[NT]	[NT]	[NR]	[NR]
Fluoranthene	mg/kg	[NT]	[NT]	11218-1	97%
Pyrene	mg/kg	[NT]	[NT]	11218-1	104%
Benzo(a)anthracene	mg/kg	[NT]	[NT]	[NR]	[NR]
Chrysene	mg/kg	[NT]	[NT]	11218-1	110%
Benzo(b,j&k)fluoranthene	mg/kg	[NT]	[NT]	[NR]	[NR]
Benzo(a)pyrene	mg/kg	[NT]	[NT]	11218-1	97%
Indeno(1,2,3-c,d)pyrene	mg/kg	[NT]	[NT]	[NR]	[NR]
Dibenzo(a,h)anthracene	mg/kg	[NT]	[NT]	[NR]	[NR]
Benzo(g,h,i)perylene	mg/kg	[NT]	[NT]	[NR]	[NR]
Surrogate p-Terphenyl-d_{14}	%	[NT]	[NT]	11218-1	102%

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QUALITY CONTROL Speciated Phenols in Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date extracted	-	[NT]	[NT]	11218-1	12/07/2017
Date analysed	-	[NT]	[NT]	11218-1	15/07/2017
Phenol	mg/kg	[NT]	[NT]	11218-1	86%
2-Chlorophenol	mg/kg	[NT]	[NT]	11218-1	86%
2-Methylphenol	mg/kg	[NT]	[NT]	11218-1	86%
3/4-Methylphenol	mg/kg	[NT]	[NT]	[NR]	[NR]
2-Nitrophenol	mg/kg	[NT]	[NT]	[NR]	[NR]
2,4-Dimethylphenol	mg/kg	[NT]	[NT]	[NR]	[NR]
2,4-Dichlorophenol	mg/kg	[NT]	[NT]	[NR]	[NR]
2,6-Dichlorophenol	mg/kg	[NT]	[NT]	11218-1	94%
2,4,5-Trichlorophenol	mg/kg	[NT]	[NT]	[NR]	[NR]
2,4,6-Trichlorophenol	mg/kg	[NT]	[NT]	[NR]	[NR]
2,4-Dinitrophenol	mg/kg	[NT]	[NT]	[NR]	[NR]
4-Nitrophenol	mg/kg	[NT]	[NT]	[NR]	[NR]
2,3,4,6-Tetrachlorophenol	mg/kg	[NT]	[NT]	[NR]	[NR]
Pentachlorophenol	mg/kg	[NT]	[NT]	11218-1	64%
4-Chloro-3-Methylphenol	mg/kg	[NT]	[NT]	[NR]	[NR]
Surrogate Phenol-d_6	%	[NT]	[NT]	11218-1	92%

QUALITY CONTROL OCP in Soil - NEPM	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date extracted	-	[NT]	[NT]	11218-1	12/07/2017
Date analysed	-	[NT]	[NT]	11218-1	15/07/2017
alpha-BHC	mg/kg	[NT]	[NT]	11218-1	88%
Hexachlorobenzene	mg/kg	[NT]	[NT]	[NR]	[NR]
beta-BHC	mg/kg	[NT]	[NT]	11218-1	88%
gamma-BHC	mg/kg	[NT]	[NT]	[NR]	[NR]
Heptachlor	mg/kg	[NT]	[NT]	11218-1	89%
delta-BHC	mg/kg	[NT]	[NT]	[NR]	[NR]
Aldrin	mg/kg	[NT]	[NT]	11218-1	89%
Heptachlor Epoxide	mg/kg	[NT]	[NT]	11218-1	98%
gamma-Chlordane	mg/kg	[NT]	[NT]	11218-1	89%
alpha-chlordane	mg/kg	[NT]	[NT]	[NR]	[NR]
Endosulfan I	mg/kg	[NT]	[NT]	[NR]	[NR]
pp-DDE	mg/kg	[NT]	[NT]	11218-1	89%
Dieldrin	mg/kg	[NT]	[NT]	11218-1	91%
Endrin	mg/kg	[NT]	[NT]	[NR]	[NR]
Endosulfan II	mg/kg	[NT]	[NT]	[NR]	[NR]
pp-DDD	mg/kg	[NT]	[NT]	11218-1	107%
Endrin Aldehyde	mg/kg	[NT]	[NT]	[NR]	[NR]
pp-DDT	mg/kg	[NT]	[NT]	[NR]	[NR]

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QUALITY CONTROL OCP in Soil - NEPM	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Endosulfan Sulphate	mg/kg	[NT]	[NT]	11218-1	94%
Methoxychlor	mg/kg	[NT]	[NT]	[NR]	[NR]
Mirex	mg/kg	[NT]	[NT]	[NR]	[NR]
Toxaphene	mg/kg	[NT]	[NT]	[NR]	[NR]
Surrogate p-Terphenyl-d_{14}	%	[NT]	[NT]	11218-1	102%
QUALITY CONTROL OP in Soil - NEPM	**UNITS**	**Dup. Sm#**	**Duplicate Base + Duplicate + %RPD**	**Spike Sm#**	**Spike % Recovery**
Date extracted	-	[NT]	[NT]	11218-1	12/07/2017
Date analysed	-	[NT]	[NT]	11218-1	15/07/2017
Chlorpyrifos	mg/kg	[NT]	[NT]	11218-1	101%
Surrogate p-Terphenyl-d_{14}	%	[NT]	[NT]	11218-1	102%
QUALITY CONTROL PCBs in Soil	**UNITS**	**Dup. Sm#**	**Duplicate Base + Duplicate + %RPD**	**Spike Sm#**	**Spike % Recovery**
Date extracted	-	[NT]	[NT]	11218-1	12/07/2017
Date analysed	-	[NT]	[NT]	11218-1	15/07/2017
Aroclor 1016	mg/kg	[NT]	[NT]	[NR]	[NR]
Aroclor 1221	mg/kg	[NT]	[NT]	[NR]	[NR]
Aroclor 1232	mg/kg	[NT]	[NT]	[NR]	[NR]
Aroclor 1242	mg/kg	[NT]	[NT]	[NR]	[NR]
Aroclor 1248	mg/kg	[NT]	[NT]	[NR]	[NR]
Aroclor 1254	mg/kg	[NT]	[NT]	11218-1	98%
Aroclor 1260	mg/kg	[NT]	[NT]	[NR]	[NR]
Surrogate p-Terphenyl-d_{14}	%	[NT]	[NT]	11218-1	102%
QUALITY CONTROL Synthetic Pyrethroids - NEPM	**UNITS**	**Dup. Sm#**	**Duplicate Base + Duplicate + %RPD**	**Spike Sm#**	**Spike % Recovery**
Date extracted	-	[NT]	[NT]	11218-1	12/07/2017
Date analysed	-	[NT]	[NT]	11218-1	15/07/2017
Bifenthrin	mg/kg	[NT]	[NT]	11218-1	117%
QUALITY CONTROL Triazine Herbicides in Soil	**UNITS**	**Dup. Sm#**	**Duplicate Base + Duplicate + %RPD**	**Spike Sm#**	**Spike % Recovery**
Date extracted	-	[NT]	[NT]	11218-1	12/07/2017
Date analysed	-	[NT]	[NT]	11218-1	15/07/2017
Atrazine	mg/kg	[NT]	[NT]	11218-1	91%

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Report Comments:

Acid Herbicides analysed by MPL. Report number 198166.

Asbestos ID was analysed by Approved Identifier:	Not applicable for this job
Asbestos ID was authorised by Approved Signatory:	Not applicable for this job

INS: Insufficient sample for this test	PQL: Practical Quantitation Limit	NT: Not tested
NR: Test not required	RPD: Relative Percent Difference	NA: Test not required
<: Less than	>: Greater than	LCS: Laboratory Control Sample

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Quality Control Definitions

Blank: This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.

Duplicate: This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.

Matrix Spike : A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.

LCS (Laboratory Control Sample) : This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.

Surrogate Spike: Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batched of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.
Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.
Spikes for Physical and Aggregate Tests are not applicable.
For VOCs in water samples, three vials are required for duplicate or spike analysis.

Duplicates: <5xPQL - any RPD is acceptable; >5xPQL - 0-50% RPD is acceptable.
Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals; 60-140% for organics (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

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

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

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

Measurement Uncertainty estimates are available for most tests upon request.

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LRM GLOBAL

P.O. Box 1237
Carlton VIC 3053
enquiries@lrmglobal.com.au

CHAIN OF CUSTODY

Job Number: 27380

Sheet 1 of 1

ATTENTION	Envirolab
CLIENT	Australian Unity Limited
LOCATION	266 Longueville Rd, Lane Cove

Sample Number	Sample Date	Sample Type	Analysis Required	No. of Containers	Turn-around Time Required
1 GW01	3/08/2018	Water	TRH/BTEX, VOCs, PAHs, Total Phenolics, Phthalates, OCPs, PCBs, TDS, pH, metals (Al, Ag, As, B, Ba, Be, Cd, Cr, Co, Cu, Fe, Pb, Mn, Hg, Mo, Ni, Se, Sb, Sn, Ti, V, Zn), cation/anions, ammonia, flouride, Hexavalent chromium, total cyanide, PFAS & PFOS	9	Standard
2 GW02	3/08/2018	Water	TRH/BTEX, VOCs, PAHs, Total Phenolics, Phthalates, OCPs, PCBs, TDS, pH, metals (Al, Ag, As, B, Ba, Be, Cd, Cr, Co, Cu, Fe, Pb, Mn, Hg, Mo, Ni, Se, Sb, Sn, Ti, V, Zn), cation/anions, ammonia, flouride, Hexavalent chromium, total cyanide, PFAS & PFOS	9	Standard
3 GW03	3/08/2018	Water	TRH/BTEX, VOCs, PAHs, Total Phenolics, Phthalates, OCPs, PCBs, TDS, pH, metals (Al, Ag, As, B, Ba, Be, Cd, Cr, Co, Cu, Fe, Pb, Mn, Hg, Mo, Ni, Se, Sb, Sn, Ti, V, Zn), cation/anions, ammonia, flouride, Hexavalent chromium, total cyanide, PFAS & PFOS	9	Standard
4 DUP/03/08/18	3/08/2018	Water	TRH/BTEX, VOCs, PAHs, Total Phenolics, Phthalates, OCPs, PCBs, TDS, pH, metals (Al, Ag, As, B, Ba, Be, Cd, Cr, Co, Cu, Fe, Pb, Mn, Hg, Mo, Ni, Se, Sb, Sn, Ti, V, Zn), cation/anions, ammonia, flouride, Hexavalent chromium, total cyanide, PFAS & PFOS	9	Standard
1 SPLIT/03/08/18	3/08/2018	Water	TRH/BTEX, VOCs, PAHs, Total Phenolics, Phthalates, OCPs, PCBs, TDS, pH, metals (Al, Ag, As, B, Ba, Be, Cd, Cr, Co, Cu, Fe, Pb, Mn, Hg, Mo, Ni, Se, Sb, Sn, Ti, V, Zn), cation/anions, ammonia, flouride, Hexavalent chromium, total cyanide, PFAS & PFOS	9	Standard
5 RB/03/08/18	3/08/2018	Water	TPH, PAHs, Metals	4	Standard
6 TB/03/08/18	3/08/2018	Water	TPH C6-C9	2	Standard

ENVIROLAB
Envirolab Services
12 Ashley St
Chatswood NSW 2067
Ph: (02) 9910 6200

Job No: 197675
Date Received: 3/8/18
Time Received: 14:30
Received By: MT
Temp: Cool/Ambient 6.9
Cooling: Ice/Icepack
Security: Intact/Broken/None

ENVIROLAB
Envirolab Services
13 Dalmore Drive
Caribbean Park
Scoresby VIC 3179
Ph (03) 9763 2500

Job No: 14401
Date Received: 7/8/18
Time Received: 13:24
Received by: [illegible]
Temp: Cool/Ambient
Cooling: Ice/Icepack
Security: Intact/Broken/None

10.3

Additional information::

Email Results To	Tick
jon.lawson@lrmglobal.com.au	√
acampbell@lrmglobal.com.au	√
ajacob@lrmglobal.com.au	
dyeoh@lrmglobal.com.au	
bpaule@lrmglobal.com.au	

Chain of custody must be signed and dated by LRM, courier, and laboratory.

Total number of containers 51

Sampled by: NM (EP Risk)

Checked by: AJC (LRM)

Additional Comments

Splits to Envirolab (Melb)

RELINQUISHED BY (Signature)	ORGANISATION	DATE / TIME	RECEIVED BY (Signature)	ORGANISATION	DATE / TIME
N. McGuire	EP Risk	3/8/18	MT	ELS	3/8/18 14:30
RELINQUISHED BY (Signature)	ORGANISATION	DATE / TIME	RECEIVED BY (Signature)	RECEIVED FOR LABORATORY BY (Signature)	
JE.	ELS	6/8/18 12:45			

Envirolab Services Pty Ltd
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25 Research Drive Croydon South VIC 3136
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CERTIFICATE OF ANALYSIS 14401

Client Details

Client	LRM Global
Attention	Adam Campbell
Address	65 Stubbs Street, Kensington, VIC, 3031

Sample Details

Your Reference	**27380 - 266 Longueville Rd, Lane Cove**
Number of Samples	1 Water
Date samples received	07/08/2018
Date completed instructions received	07/08/2018

Analysis Details

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

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

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

Report Details

Date results requested by	14/08/2018
Date of Issue	14/08/2018

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Results Approved By
Chris De Luca, Senior Chemist

Authorised By

Pamela Adams, Laboratory Manager

VOCs in water		
Our Reference		14401-1
Your Reference	UNITS	SPLIT/03/08/18
Date Sampled		03/08/2018
Type of sample		Water
Date extracted	-	08/08/2018
Date analysed	-	08/08/2018
Dichlorodifluoromethane	µg/L	<10
Chloromethane	µg/L	<10
Vinyl Chloride	µg/L	<10
Bromomethane	µg/L	<10
Chloroethane	µg/L	<10
Trichlorofluoromethane	µg/L	<10
1,1-Dichloroethene	µg/L	<1
Trans-1,2-dichloroethene	µg/L	<1
1,1-dichloroethane	µg/L	<1
Cis-1,2-dichloroethene	µg/L	<1
Bromochloromethane	µg/L	<1
Chloroform	µg/L	<1
2,2-dichloropropane	µg/L	<1
1,2-dichloroethane	µg/L	<1
1,1,1-trichloroethane	µg/L	<1
1,1-dichloropropene	µg/L	<1
Cyclohexane	µg/L	<1
Carbon tetrachloride	µg/L	<1
Benzene	µg/L	<1
Dibromomethane	µg/L	<1
1,2-dichloropropane	µg/L	<1
Trichloroethene	µg/L	<1
Bromodichloromethane	µg/L	<1
trans-1,3-dichloropropene	µg/L	<1
cis-1,3-dichloropropene	µg/L	<1
1,1,2-trichloroethane	µg/L	<1
Toluene	µg/L	<1
1,3-dichloropropane	µg/L	<1
Dibromochloromethane	µg/L	<1
1,2-dibromoethane	µg/L	<1
Tetrachloroethene	µg/L	<1
1,1,1,2-tetrachloroethane	µg/L	<1
Chlorobenzene	µg/L	<1
Ethylbenzene	µg/L	<1
Bromoform	µg/L	<1

VOCs in water		
Our Reference		14401-1
Your Reference	UNITS	SPLIT/03/08/18
Date Sampled		03/08/2018
Type of sample		Water
m+p-xylene	µg/L	<2
Styrene	µg/L	<1
1,1,2,2-tetrachloroethane	µg/L	<1
o-xylene	µg/L	<1
1,2,3-trichloropropane	µg/L	<1
Isopropylbenzene	µg/L	<1
Bromobenzene	µg/L	<1
n-propyl benzene	µg/L	<1
2-chlorotoluene	µg/L	<1
4-chlorotoluene	µg/L	<1
1,3,5-trimethyl benzene	µg/L	<1
Tert-butyl benzene	µg/L	<1
1,2,4-trimethyl benzene	µg/L	<1
1,3-dichlorobenzene	µg/L	<1
Sec-butyl benzene	µg/L	<1
1,4-dichlorobenzene	µg/L	<1
4-isopropyl toluene	µg/L	<1
1,2-dichlorobenzene	µg/L	<1
n-butyl benzene	µg/L	<1
1,2-dibromo-3-chloropropane	µg/L	<1
1,2,4-trichlorobenzene	µg/L	<1
Hexachlorobutadiene	µg/L	<1
1,2,3-trichlorobenzene	µg/L	<1
Surrogate Dibromofluoromethane	%	93
Surrogate toluene-d8	%	88
Surrogate 4-BFB	%	96

vTRH(C6-C10)/BTEXN in Water		
Our Reference		14401-1
Your Reference	UNITS	SPLIT/03/08/18
Date Sampled		03/08/2018
Type of sample		Water
Date extracted	-	08/08/2018
Date analysed	-	08/08/2018
TRH C_6 - C_9	µg/L	<10
TRH C_6 - C_{10}	µg/L	<10
TRH C_6 - C_{10} less BTEX (F1)	µg/L	<10
Benzene	µg/L	<1
Toluene	µg/L	<1
Ethylbenzene	µg/L	<1
m+p-xylene	µg/L	<2
o-xylene	µg/L	<1
Naphthalene	µg/L	<1
Surrogate Dibromofluoromethane	%	111
Surrogate toluene-d8	%	98
Surrogate 4-BFB	%	98

TRH Water(C10-C40) NEPM		
Our Reference		14401-1
Your Reference	UNITS	SPLIT/03/08/18
Date Sampled		03/08/2018
Type of sample		Water
Date extracted	-	08/08/2018
Date analysed	-	08/08/2018
TRH C_{10} - C_{14}	µg/L	<50
TRH C_{15} - C_{28}	µg/L	<100
TRH C_{29} - C_{36}	µg/L	<100
TRH >C_{10} - C_{16}	µg/L	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	µg/L	<50
TRH >C_{16} - C_{34}	µg/L	<100
TRH >C_{34} - C_{40}	µg/L	<100
Surrogate o-Terphenyl	%	86

PAHs in Water		
Our Reference		14401-1
Your Reference	UNITS	SPLIT/03/08/18
Date Sampled		03/08/2018
Type of sample		Water
Date extracted	-	08/08/2018
Date analysed	-	08/08/2018
Naphthalene	µg/L	<1
Acenaphthylene	µg/L	<1
Acenaphthene	µg/L	<1
Fluorene	µg/L	<1
Phenanthrene	µg/L	<1
Anthracene	µg/L	<1
Fluoranthene	µg/L	<1
Pyrene	µg/L	<1
Benzo(a)anthracene	µg/L	<1
Chrysene	µg/L	<1
Benzo(b,j&k)fluoranthene	µg/L	<2
Benzo(a)pyrene	µg/L	<1
Indeno(1,2,3-c,d)pyrene	µg/L	<1
Dibenzo(a,h)anthracene	µg/L	<1
Benzo(g,h,i)perylene	µg/L	<1
Total +ve PAH's	µg/L	<1
Benzo(a)pyrene TEQ	µg/L	<5
Surrogate p-Terphenyl-d_{14}	%	84

Phthalates in water		
Our Reference		14401-1
Your Reference	UNITS	SPLIT/03/08/18
Date Sampled		03/08/2018
Type of sample		Water
Date extracted	-	08/08/2018
Date analysed	-	14/08/2018
Dimethyl phthalate	µg/L	<10
Diethylphthalate	µg/L	<10
Di-n-butylphthalate	µg/L	<50
Butylbenzylphthalate	µg/L	<10
Bis(2-ethylhexyl) phthalate	µg/L	<50
Di-n-octylphthalate	µg/L	<10
Surrogate p-Terphenyl-d_{14}	%	78

OCP in water		
Our Reference		14401-1
Your Reference	UNITS	SPLIT/03/08/18
Date Sampled		03/08/2018
Type of sample		Water
Date extracted	-	08/08/2018
Date analysed	-	14/08/2018
HCB	µg/L	<0.2
alpha-BHC	µg/L	<0.2
gamma-BHC	µg/L	<0.2
beta-BHC	µg/L	<0.2
Heptachlor	µg/L	<0.2
delta-BHC	µg/L	<0.2
Aldrin	µg/L	<0.2
Heptachlor Epoxide	µg/L	<0.2
gamma-Chlordane	µg/L	<0.2
alpha-Chlordane	µg/L	<0.2
Endosulfan I	µg/L	<0.2
pp-DDE	µg/L	<0.2
Dieldrin	µg/L	<0.2
Endrin	µg/L	<0.2
pp-DDD	µg/L	<0.2
Endosulfan II	µg/L	<0.2
pp-DDT	µg/L	<0.2
Endrin Aldehyde	µg/L	<0.2
Endosulfan Sulphate	µg/L	<0.2
Methoxychlor	µg/L	<0.2
Surrogate p-Terphenyl	%	78

PCBs in Water		
Our Reference		14401-1
Your Reference	UNITS	SPLIT/03/08/18
Date Sampled		03/08/2018
Type of sample		Water
Date extracted	-	08/08/2018
Date analysed	-	14/08/2018
Aroclor 1016	µg/L	<2
Aroclor 1221	µg/L	<2
Aroclor 1232	µg/L	<2
Aroclor 1242	µg/L	<2
Aroclor 1248	µg/L	<2
Aroclor 1254	µg/L	<2
Aroclor 1260	µg/L	<2
Surrogate p-Terphenyl	%	78

All metals in water-dissolved		
Our Reference		14401-1
Your Reference	UNITS	SPLIT/03/08/18
Date Sampled		03/08/2018
Type of sample		Water
Date prepared	-	08/08/2018
Date analysed	-	08/08/2018
Aluminium-Dissolved	µg/L	640
Silver-Dissolved	µg/L	<1
Arsenic-Dissolved	µg/L	<1
Boron-Dissolved	µg/L	80
Barium-Dissolved	µg/L	25
Beryllium-Dissolved	µg/L	0.9
Cadmium-Dissolved	µg/L	<0.1
Chromium-Dissolved	µg/L	1
Cobalt-Dissolved	µg/L	5
Copper-Dissolved	µg/L	7
Iron-Dissolved	µg/L	2,900
Lead-Dissolved	µg/L	3
Manganese-Dissolved	µg/L	190
Mercury-Dissolved	µg/L	<0.05
Molybdenum-Dissolved	µg/L	<1
Nickel-Dissolved	µg/L	61
Selenium-Dissolved	µg/L	<1
Antimony-Dissolved	µg/L	<1
Tin-Dissolved	µg/L	<1
Titanium-Dissolved	µg/L	1
Vanadium-Dissolved	µg/L	<1
Zinc-Dissolved	µg/L	260

Ion Balance		
Our Reference		14401-1
Your Reference	UNITS	SPLIT/03/08/18
Date Sampled		03/08/2018
Type of sample		Water
Date prepared	-	09/08/2018
Date analysed	-	09/08/2018
Calcium - Dissolved	mg/L	0.8
Potassium - Dissolved	mg/L	0.9
Sodium - Dissolved	mg/L	110
Magnesium - Dissolved	mg/L	4.5
Hydroxide Alkalinity (OH^-) as $CaCO_3$	mg/L	<5
Bicarbonate Alkalinity as $CaCO_3$	mg/L	<5
Carbonate Alkalinity as $CaCO_3$	mg/L	<5
Total Alkalinity as $CaCO_3$	mg/L	<5
Sulphate, SO4	mg/L	150
Chloride, Cl	mg/L	110
Hardness	mgCaCO 3 /L	21
Ionic Balance	%	-8.1

Miscellaneous Inorganics		
Our Reference		14401-1
Your Reference	UNITS	SPLIT/03/08/18
Date Sampled		03/08/2018
Type of sample		Water
Date prepared	-	07/08/2018
Date analysed	-	08/08/2018
Ammonia as N in water	mg/L	0.007
Fluoride, F	mg/L	<0.1
Total Dissolved Solids (grav)	mg/L	370
pH	pH Units	4.2

Method ID	Methodology Summary
Inorg-001	pH - Measured using pH meter and electrode in accordance with APHA latest edition, 4500-H+. Please note that the results for water analyses are indicative only as analysis outside of the APHA storage times.
Inorg-006	Alkalinity - determined titrimetrically in accordance with APHA latest edition, 2320-B.
Inorg-018	Total Dissolved Solids - determined gravimetrically. The solids are dried at 180+/-10oC.
Inorg-026	Fluoride determined by ion selective electrode (ISE) in accordance with APHA latest edition, 4500-F-C.
Inorg-040	The concentrations of the major ions (mg/L) are converted to milliequivalents and summed. The ionic balance should be within +/- 10% ie total anions = total cations +/-10%.
Inorg-057	Ammonia - determined colourimetrically based on EPA350.1 and APHA latest edition 4500-NH3 F, Soils are analysed following a KCl extraction.
Inorg-081	Anions - a range of Anions are determined by Ion Chromatography, in accordance with APHA 22nd ED, 4110-B. Alternatively determined by colourimetry/turbidity using Discrete Analyer.
Metals-020 ICP-AES	Determination of various metals by ICP-AES.
Metals-021 CV-AAS	Determination of Mercury by Cold Vapour AAS.
Metals-022 ICP-MS	Determination of various metals by ICP-MS.
Org-003	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis. Note, the Total +ve TRH PQL is reflective of the lowest individual PQL and is therefore "Total +ve TRH" is simply a sum of the positive individual TRH fractions (>C10-C40).
Org-005	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC with dual ECD's.
Org-006	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD.
Org-012	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS.
Org-012	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS. Benzo(a)pyrene TEQ as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater 2013.
Org-013	Water samples are analysed directly by purge and trap GC-MS.
Org-016	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater. Note, the Total +ve Xylene PQL is reflective of the lowest individual PQL and is therefore "Total +ve Xylenes" is simply a sum of the positive individual Xylenes.

QUALITY CONTROL: VOCs in water						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date extracted	-			08/08/2018	[NT]	[NT]	[NT]	[NT]	08/08/2018	[NT]
Date analysed	-			08/08/2018	[NT]	[NT]	[NT]	[NT]	08/08/2018	[NT]
Dichlorodifluoromethane	µg/L	10	Org-013	<10	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Chloromethane	µg/L	10	Org-013	<10	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Vinyl Chloride	µg/L	10	Org-013	<10	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Bromomethane	µg/L	10	Org-013	<10	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Chloroethane	µg/L	10	Org-013	<10	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Trichlorofluoromethane	µg/L	10	Org-013	<10	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
1,1-Dichloroethene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Trans-1,2-dichloroethene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
1,1-dichloroethane	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	85	[NT]
Cis-1,2-dichloroethene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Bromochloromethane	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Chloroform	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	90	[NT]
2,2-dichloropropane	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
1,2-dichloroethane	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	98	[NT]
1,1,1-trichloroethane	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	90	[NT]
1,1-dichloropropene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Cyclohexane	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Carbon tetrachloride	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Benzene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Dibromomethane	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
1,2-dichloropropane	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Trichloroethene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	99	[NT]
Bromodichloromethane	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	93	[NT]
trans-1,3-dichloropropene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
cis-1,3-dichloropropene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
1,1,2-trichloroethane	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Toluene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
1,3-dichloropropane	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Dibromochloromethane	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	93	[NT]
1,2-dibromoethane	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Tetrachloroethene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	91	[NT]
1,1,1,2-tetrachloroethane	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Chlorobenzene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Ethylbenzene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Bromoform	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
m+p-xylene	µg/L	2	Org-013	<2	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Styrene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
1,1,2,2-tetrachloroethane	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
o-xylene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]

QUALITY CONTROL: VOCs in water						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
1,2,3-trichloropropane	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Isopropylbenzene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Bromobenzene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
n-propyl benzene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
2-chlorotoluene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
4-chlorotoluene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
1,3,5-trimethyl benzene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Tert-butyl benzene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
1,2,4-trimethyl benzene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
1,3-dichlorobenzene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Sec-butyl benzene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
1,4-dichlorobenzene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
4-isopropyl toluene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
1,2-dichlorobenzene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
n-butyl benzene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
1,2-dibromo-3-chloropropane	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
1,2,4-trichlorobenzene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Hexachlorobutadiene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
1,2,3-trichlorobenzene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate Dibromofluoromethane	%		Org-013	107	[NT]	[NT]	[NT]	[NT]	93	[NT]
Surrogate toluene-d8	%		Org-013	92	[NT]	[NT]	[NT]	[NT]	102	[NT]
Surrogate 4-BFB	%		Org-013	99	[NT]	[NT]	[NT]	[NT]	99	[NT]

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Water						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date extracted	-			08/08/2018	[NT]	[NT]	[NT]	[NT]	08/08/2018	[NT]
Date analysed	-			08/08/2018	[NT]	[NT]	[NT]	[NT]	08/08/2018	[NT]
TRH C_6 - C_9	µg/L	10	Org-016	<10	[NT]	[NT]	[NT]	[NT]	105	[NT]
TRH C_6 - C_{10}	µg/L	10	Org-016	<10	[NT]	[NT]	[NT]	[NT]	105	[NT]
Benzene	µg/L	1	Org-016	<1	[NT]	[NT]	[NT]	[NT]	115	[NT]
Toluene	µg/L	1	Org-016	<1	[NT]	[NT]	[NT]	[NT]	108	[NT]
Ethylbenzene	µg/L	1	Org-016	<1	[NT]	[NT]	[NT]	[NT]	96	[NT]
m+p-xylene	µg/L	2	Org-016	<2	[NT]	[NT]	[NT]	[NT]	102	[NT]
o-xylene	µg/L	1	Org-016	<1	[NT]	[NT]	[NT]	[NT]	101	[NT]
Naphthalene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	118	[NT]
Surrogate Dibromofluoromethane	%		Org-016	121	[NT]	[NT]	[NT]	[NT]	107	[NT]
Surrogate toluene-d8	%		Org-016	98	[NT]	[NT]	[NT]	[NT]	102	[NT]
Surrogate 4-BFB	%		Org-016	101	[NT]	[NT]	[NT]	[NT]	106	[NT]

QUALITY CONTROL: TRH Water(C10-C40) NEPM						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date extracted	-			08/08/2018	[NT]	[NT]	[NT]	[NT]	09/08/2018	[NT]
Date analysed	-			08/08/2018	[NT]	[NT]	[NT]	[NT]	09/08/2018	[NT]
TRH C_{10} - C_{14}	µg/L	50	Org-003	<50	[NT]	[NT]	[NT]	[NT]	84	[NT]
TRH C_{15} - C_{28}	µg/L	100	Org-003	<100	[NT]	[NT]	[NT]	[NT]	95	[NT]
TRH C_{29} - C_{36}	µg/L	100	Org-003	<100	[NT]	[NT]	[NT]	[NT]	107	[NT]
TRH >C_{10} - C_{16}	µg/L	50	Org-003	<50	[NT]	[NT]	[NT]	[NT]	84	[NT]
TRH >C_{16} - C_{34}	µg/L	100	Org-003	<100	[NT]	[NT]	[NT]	[NT]	95	[NT]
TRH >C_{34} - C_{40}	µg/L	100	Org-003	<100	[NT]	[NT]	[NT]	[NT]	107	[NT]
Surrogate o-Terphenyl	%		Org-003	102	[NT]	[NT]	[NT]	[NT]	89	[NT]

QUALITY CONTROL: PAHs in Water						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date extracted	-			08/08/2018	[NT]	[NT]	[NT]	[NT]	08/08/2018	[NT]
Date analysed	-			08/08/2018	[NT]	[NT]	[NT]	[NT]	08/08/2018	[NT]
Naphthalene	µg/L	1	Org-012	<1	[NT]	[NT]	[NT]	[NT]	84	[NT]
Acenaphthylene	µg/L	1	Org-012	<1	[NT]	[NT]	[NT]	[NT]	88	[NT]
Acenaphthene	µg/L	1	Org-012	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Fluorene	µg/L	1	Org-012	<1	[NT]	[NT]	[NT]	[NT]	88	[NT]
Phenanthrene	µg/L	1	Org-012	<1	[NT]	[NT]	[NT]	[NT]	100	[NT]
Anthracene	µg/L	1	Org-012	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Fluoranthene	µg/L	1	Org-012	<1	[NT]	[NT]	[NT]	[NT]	88	[NT]
Pyrene	µg/L	1	Org-012	<1	[NT]	[NT]	[NT]	[NT]	96	[NT]
Benzo(a)anthracene	µg/L	1	Org-012	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Chrysene	µg/L	1	Org-012	<1	[NT]	[NT]	[NT]	[NT]	100	[NT]
Benzo(b,j&k)fluoranthene	µg/L	2	Org-012	<2	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Benzo(a)pyrene	µg/L	1	Org-012	<1	[NT]	[NT]	[NT]	[NT]	92	[NT]
Indeno(1,2,3-c,d)pyrene	µg/L	1	Org-012	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Dibenzo(a,h)anthracene	µg/L	1	Org-012	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Benzo(g,h,i)perylene	µg/L	1	Org-012	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate p-Terphenyl-d_{14}	%		Org-012	108	[NT]	[NT]	[NT]	[NT]	104	[NT]

QUALITY CONTROL: Phthalates in water						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date extracted	-			08/08/2018	[NT]	[NT]	[NT]	[NT]	08/08/2018	[NT]
Date analysed	-			14/08/2018	[NT]	[NT]	[NT]	[NT]	14/08/2018	[NT]
Dimethyl phthalate	µg/L	10	Org-012	<10	[NT]	[NT]	[NT]	[NT]	107	[NT]
Diethylphthalate	µg/L	10	Org-012	<10	[NT]	[NT]	[NT]	[NT]	115	[NT]
Di-n-butylphthalate	µg/L	50	Org-012	<50	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Butylbenzylphthalate	µg/L	10	Org-012	<10	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Bis(2-ethylhexyl) phthalate	µg/L	50	Org-012	<50	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Di-n-octylphthalate	µg/L	10	Org-012	<10	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate p-Terphenyl-d_{14}	%		Org-012	96	[NT]	[NT]	[NT]	[NT]	92	[NT]

QUALITY CONTROL: OCP in water						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date extracted	-			08/08/2018	[NT]	[NT]	[NT]	[NT]	08/08/2018	[NT]
Date analysed	-			14/08/2018	[NT]	[NT]	[NT]	[NT]	14/08/2018	[NT]
HCB	µg/L	0.2	Org-005	<0.2	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
alpha-BHC	µg/L	0.2	Org-005	<0.2	[NT]	[NT]	[NT]	[NT]	76	[NT]
gamma-BHC	µg/L	0.2	Org-005	<0.2	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
beta-BHC	µg/L	0.2	Org-005	<0.2	[NT]	[NT]	[NT]	[NT]	84	[NT]
Heptachlor	µg/L	0.2	Org-005	<0.2	[NT]	[NT]	[NT]	[NT]	100	[NT]
delta-BHC	µg/L	0.2	Org-005	<0.2	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aldrin	µg/L	0.2	Org-005	<0.2	[NT]	[NT]	[NT]	[NT]	112	[NT]
Heptachlor Epoxide	µg/L	0.2	Org-005	<0.2	[NT]	[NT]	[NT]	[NT]	68	[NT]
gamma-Chlordane	µg/L	0.2	Org-005	<0.2	[NT]	[NT]	[NT]	[NT]	72	[NT]
alpha-Chlordane	µg/L	0.2	Org-005	<0.2	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Endosulfan I	µg/L	0.2	Org-005	<0.2	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
pp-DDE	µg/L	0.2	Org-005	<0.2	[NT]	[NT]	[NT]	[NT]	84	[NT]
Dieldrin	µg/L	0.2	Org-005	<0.2	[NT]	[NT]	[NT]	[NT]	72	[NT]
Endrin	µg/L	0.2	Org-005	<0.2	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
pp-DDD	µg/L	0.2	Org-005	<0.2	[NT]	[NT]	[NT]	[NT]	88	[NT]
Endosulfan II	µg/L	0.2	Org-005	<0.2	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
pp-DDT	µg/L	0.2	Org-005	<0.2	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Endrin Aldehyde	µg/L	0.2	Org-005	<0.2	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Endosulfan Sulphate	µg/L	0.2	Org-005	<0.2	[NT]	[NT]	[NT]	[NT]	88	[NT]
Methoxychlor	µg/L	0.2	Org-005	<0.2	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate p-Terphenyl	%		Org-005	96	[NT]	[NT]	[NT]	[NT]	92	[NT]

QUALITY CONTROL: PCBs in Water						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date extracted	-			08/08/2018	[NT]	[NT]	[NT]	[NT]	08/08/2018	[NT]
Date analysed	-			14/08/2018	[NT]	[NT]	[NT]	[NT]	14/08/2018	[NT]
Aroclor 1016	µg/L	2	Org-006	<2	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1221	µg/L	2	Org-006	<2	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1232	µg/L	2	Org-006	<2	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1242	µg/L	2	Org-006	<2	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1248	µg/L	2	Org-006	<2	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1254	µg/L	2	Org-006	<2	[NT]	[NT]	[NT]	[NT]	65	[NT]
Aroclor 1260	µg/L	2	Org-006	<2	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate p-Terphenyl	%		Org-006	96	[NT]	[NT]	[NT]	[NT]	92	[NT]

QUALITY CONTROL: All metals in water-dissolved						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date prepared	-			08/08/2018	[NT]	[NT]	[NT]	[NT]	08/08/2018	[NT]
Date analysed	-			08/08/2018	[NT]	[NT]	[NT]	[NT]	08/08/2018	[NT]
Aluminium-Dissolved	µg/L	10	Metals-022 ICP-MS	<10	[NT]	[NT]	[NT]	[NT]	119	[NT]
Silver-Dissolved	µg/L	1	Metals-022 ICP-MS	<1	[NT]	[NT]	[NT]	[NT]	96	[NT]
Arsenic-Dissolved	µg/L	1	Metals-022 ICP-MS	<1	[NT]	[NT]	[NT]	[NT]	111	[NT]
Boron-Dissolved	µg/L	20	Metals-022 ICP-MS	<20	[NT]	[NT]	[NT]	[NT]	122	[NT]
Barium-Dissolved	µg/L	1	Metals-022 ICP-MS	<1	[NT]	[NT]	[NT]	[NT]	114	[NT]
Beryllium-Dissolved	µg/L	0.5	Metals-022 ICP-MS	<0.5	[NT]	[NT]	[NT]	[NT]	112	[NT]
Cadmium-Dissolved	µg/L	0.1	Metals-022 ICP-MS	<0.1	[NT]	[NT]	[NT]	[NT]	106	[NT]
Chromium-Dissolved	µg/L	1	Metals-022 ICP-MS	<1	[NT]	[NT]	[NT]	[NT]	109	[NT]
Cobalt-Dissolved	µg/L	1	Metals-022 ICP-MS	<1	[NT]	[NT]	[NT]	[NT]	104	[NT]
Copper-Dissolved	µg/L	1	Metals-022 ICP-MS	<1	[NT]	[NT]	[NT]	[NT]	106	[NT]
Iron-Dissolved	µg/L	10	Metals-022 ICP-MS	<10	[NT]	[NT]	[NT]	[NT]	112	[NT]
Lead-Dissolved	µg/L	1	Metals-022 ICP-MS	<1	[NT]	[NT]	[NT]	[NT]	102	[NT]
Manganese-Dissolved	µg/L	5	Metals-022 ICP-MS	<5	[NT]	[NT]	[NT]	[NT]	111	[NT]
Mercury-Dissolved	µg/L	0.05	Metals-021 CV-AAS	<0.05	[NT]	[NT]	[NT]	[NT]	103	[NT]
Molybdenum-Dissolved	µg/L	1	Metals-022 ICP-MS	<1	[NT]	[NT]	[NT]	[NT]	109	[NT]
Nickel-Dissolved	µg/L	1	Metals-022 ICP-MS	<1	[NT]	[NT]	[NT]	[NT]	106	[NT]
Selenium-Dissolved	µg/L	1	Metals-022 ICP-MS	<1	[NT]	[NT]	[NT]	[NT]	101	[NT]
Antimony-Dissolved	µg/L	1	Metals-022 ICP-MS	<1	[NT]	[NT]	[NT]	[NT]	125	[NT]
Tin-Dissolved	µg/L	1	Metals-022 ICP-MS	<1	[NT]	[NT]	[NT]	[NT]	104	[NT]
Titanium-Dissolved	µg/L	1	Metals-022 ICP-MS	<1	[NT]	[NT]	[NT]	[NT]	115	[NT]

QUALITY CONTROL: All metals in water-dissolved						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Vanadium-Dissolved	µg/L	1	Metals-022 ICP-MS	<1	[NT]	[NT]	[NT]	[NT]	110	[NT]
Zinc-Dissolved	µg/L	1	Metals-022 ICP-MS	<1	[NT]	[NT]	[NT]	[NT]	117	[NT]

QUALITY CONTROL: Ion Balance						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date prepared	-			09/08/2018	[NT]	[NT]	[NT]	[NT]	09/08/2018	[NT]
Date analysed	-			09/08/2018	[NT]	[NT]	[NT]	[NT]	09/08/2018	[NT]
Calcium - Dissolved	mg/L	0.5	Metals-020 ICP-AES	<0.5	[NT]	[NT]	[NT]	[NT]	98	[NT]
Potassium - Dissolved	mg/L	0.5	Metals-020 ICP-AES	<0.5	[NT]	[NT]	[NT]	[NT]	98	[NT]
Sodium - Dissolved	mg/L	0.5	Metals-020 ICP-AES	<0.5	[NT]	[NT]	[NT]	[NT]	96	[NT]
Magnesium - Dissolved	mg/L	0.5	Metals-020 ICP-AES	<0.5	[NT]	[NT]	[NT]	[NT]	98	[NT]
Hydroxide Alkalinity (OH^-) as $CaCO_3$	mg/L	5	Inorg-006	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Bicarbonate Alkalinity as $CaCO_3$	mg/L	5	Inorg-006	<5	[NT]	[NT]	[NT]	[NT]	118	[NT]
Carbonate Alkalinity as $CaCO_3$	mg/L	5	Inorg-006	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Total Alkalinity as $CaCO_3$	mg/L	5	Inorg-006	<5	[NT]	[NT]	[NT]	[NT]	118	[NT]
Sulphate, SO4	mg/L	1	Inorg-081	<1	[NT]	[NT]	[NT]	[NT]	123	[NT]
Chloride, Cl	mg/L	1	Inorg-081	<1	[NT]	[NT]	[NT]	[NT]	123	[NT]
Hardness	mgCaCO 3 /L	3		<3	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]

QUALITY CONTROL: Miscellaneous Inorganics						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date prepared	-			07/08/2018	[NT]	[NT]	[NT]	[NT]	07/08/2018	[NT]
Date analysed	-			08/08/2018	[NT]	[NT]	[NT]	[NT]	08/08/2018	[NT]
Ammonia as N in water	mg/L	0.005	Inorg-057	<0.005	[NT]	[NT]	[NT]	[NT]	101	[NT]
Fluoride, F	mg/L	0.1	Inorg-026	<0.1	[NT]	[NT]	[NT]	[NT]	92	[NT]
Total Dissolved Solids (grav)	mg/L	5	Inorg-018	<5	[NT]	[NT]	[NT]	[NT]	94	[NT]
pH	pH Units		Inorg-001	[NT]	[NT]	[NT]	[NT]	[NT]	99	[NT]

Result Definitions

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

Quality Control Definitions

Blank	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
Duplicate	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
Matrix Spike	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample)	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
Surrogate Spike	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Australian Drinking Water Guidelines recommend that Thermotolerant Coliform, Faecal Enterococci, & E.Coli levels are less than 1cfu/100mL. The recommended maximums are taken from "Australian Drinking Water Guidelines", published by NHMRC & ARMC 2011.

Laboratory Acceptance Criteria

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

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

Spikes for Physical and Aggregate Tests are not applicable.

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

Duplicates: <5xPQL - any RPD is acceptable; >5xPQL - 0-50% RPD is acceptable.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals; 60-140% for organics (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

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

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

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

Measurement Uncertainty estimates are available for most tests upon request.

P.O. Box 1237
Carlton VIC 3053
enquiries@lrmglobal.com.au

CHAIN OF CUSTODY

Job Number: 27380

ATTENTION

CLIENT

CLIENT NUMBER

LOCATION 266 Longueville Road Lane Cove

Sheet 1 of

Additional information::

Email Results To	Tick
jon.lawson@lrmglobal.com.au	Yep
kevin.b@lrmglobal.com.au	
ajacob@lrmglobal.com.au	
acampbell@lrmglobal.com.au	
l.main@lrmglobal.com.au	

Chain of custody must be signed and dated by LRM, courier, and laboratory.

Total number of containers 74

Sampled by: JL

Checked by: JL

Comments

RELINQUISHED BY (Signature)	ORGANISATION	DATE / TIME	RECEIVED BY (Signature)	ORGANISATION	DATE / TIME
	LRM	10/07/2017			

Sample Number	Sample Date	Sample Type	Analysis Required	No. of Containers	Turn-around Time Required
BH16 - 0.1 1	1 6/07/2017	Soil	Metals, PAH, TRH	1	5 day
BH16 - 0.8 2	2 6/07/2017	Soil	Metals, PAH, TRH	1	5 day
BH17 - 0.1 3	3 6/07/2017	Soil	Metals, PAH, TRH	1	5 day
BH17 - 0.7 4	4 6/07/2017	Soil	Metals, PAH, TRH	1	5 day
BH18 - 0.1 5	5 6/07/2017	Soil	Metals, OCP/OPP, pH	1	5 day
BH18 - 0.6 6	6 6/07/2017	Soil	Metals, PAH	1	5 day
BH19 - 0.1 7	7 6/07/2017	Soil	Metals, OCP/OPP, pH	1	5 day
* BH19 - 0.5 66	66 6/07/2017	Soil	NEPM Suite Basic	1	5 day
BH20 - 0.1 8	8 6/07/2017	Soil	Metals, OCP/OPP, pH	1	5 day
BH20 - 1.0 9	9 6/07/2017	Soil	Metals, PAH	1	5 day
BH20 - 1.9 10	10 6/07/2017	Soil	Metals, PAH, PCB	1	5 day
BH21 - 0.1 11	11 6/07/2017	Soil	Metals, OCP/OPP	1	5 day
BH21 - 1.2 12	12 6/07/2017	Soil	Metals, PAH	1	5 day
BH21 - 3.0 13	13 6/07/2017	Soil	Metals, TRH, PCB	1	5 day
* BH21 - 4.0 67	67 6/07/2017	Soil	Metals, PAH	1	5 day
BH22 - 0.1 14	14 6/07/2017	Soil	Metals, OCP, OPP, pH	1	5 day
BH22 - 1.0 15	15 6/07/2017	Soil	Metals, TRH	1	5 day
BH23 - 0.1 16	16 6/07/2017	Soil	Metals, OCP, OPP	1	5 day
BH23 - 1.0 17	17 6/07/2017	Soil	Metals, PAH	1	5 day

ENVIROLAB
Envirolab Services
12 Ashley St
Chatswood NSW 2067
Ph: (02) 9910 6200

Job No: 170939
Date Received: 7/7/2017
Time Received: 10.00
Received by: AR
Temp: Cool/Ambient
Cooling: Ice/Icepack 10.5
Security: Intact/Broken/None

P.O. Box 1237
Carlton VIC 3053
enquiries@lrmglobal.com.au

CHAIN OF CUSTODY

Job Number: 27380

Sheet 1 of

ATTENTION

CLIENT

CLIENT NUMBER

LOCATION 266 Longueville Road Lane Cove

Additional information::

Email Results To	Tick
jon.lawson@lrmglobal.com.au	Yep
kevin.b@lrmglobal.com.au	
ajacob@lrmglobal.com.au	
acampbell@lrmglobal.com.au	
l.main@lrmglobal.com.au	

Chain of custody must be signed and dated by LRM, courier, and laboratory.

Total number of containers 74

Sampled by: JL

Checked by: JL

Comments

RELINQUISHED BY (Signature)	ORGANISATION	DATE / TIME	RECEIVED BY (Signature)	ORGANISATION	DATE / TIME
	LRM	10/07/2017			

Sample Number		Sample Date		Sample Type	Analysis Required	No. of Containers	Turn-around Time Required
BH24 - 0.1	18	18	6/07/2017	Soil	Metals, OCP, OPP, pH, TRH	1	5 day
BH24 - 1.5	19	19	6/07/2017	Soil	Metals, PAH	1	5 day
BH24 - 2.8	20	20	6/07/2017	Soil	Metals, TRH, PCB	1	5 day
BH25 - 0.2	21	21	6/07/2017	Soil	Metals. OCP, OPP	1	5 day
BH26 - 0.2	22	22	6/07/2017	Soil	Metals, OCP, OPP	1	5 day
BH27 - 0.1	23	23	6/07/2017	Soil	Metals, OCP, OPP, pH	1	5 day
BH27 - 1.0	24	24	6/07/2017	Soil	Metals, PAH	1	5 day
BH28 - 0.1	25	25	6/07/2017	Soil	Metals, OCP, OPP	1	5 day
BH28 - 2.0	26	26	6/07/2017	Soil	Metals	1	5 day
BH28 - 3.0	27	27	6/07/2017	Soil	Metals, PAH	1	5 day
BH28 - 4.0	28	28	6/07/2017	Soil	Metals, PCB, TRH	1	5 day
BH29 - 0.1	29	29	6/07/2017	Soil	Metals, OCP, OPP, pH	1	5 day
BH29 - 1.0	30	30	6/07/2017	Soil	Metals, PAH	1	5 day
BH29 - 2.0	31	31	6/07/2017	Soil	Metals	1	5 day
BH29 - 3.0	32	32	6/07/2017	Soil	Metals, PAH	1	5 day
BH29 - 4.0	33	33	6/07/2017	Soil	Metals, PCB	1	5 day
BH29 - 5.0	34	34	6/07/2017	Soil	Metals	1	5 day
* BH29 - 6.0	63	63	6/07/2017	Soil	Metals, PAH		
* BH29 - 7.0	65	65	6/07/2017	Soil	Metals	1	5 day

170939

P.O. Box 1237
Carlton VIC 3053
enquiries@lrmglobal.com.au

CHAIN OF CUSTODY

Job Number: 27380

ATTENTION

CLIENT

CLIENT NUMBER

LOCATION 266 Longueville Road Lane Cove

Sheet 1 of

Additional information::

Email Results To	Tick
jon.lawson@lrmglobal.com.au	Yep
kevin.b@lrmglobal.com.au	
ajacob@lrmglobal.com.au	
acampbell@lrmglobal.com.au	
l.main@lrmglobal.com.au	

Chain of custody must be signed and dated by LRM, courier, and laboratory.

Total number of containers 74

Sampled by: JL

Checked by: JL

Comments

RELINQUISHED BY (Signature)	ORGANISATION	DATE / TIME	RECEIVED BY (Signature)	ORGANISATION	DATE / TIME
	LRM	10/07/2017			

Sample Number	Sample Date	Sample Type	Analysis Required	No. of Containers	Turn-around Time Required
* BH29 - 8.0 - 64	64 6/07/2017	Soil	Metals, TRH		
BH30 - 0.1 35	35 6/07/2017	Soil	Metals, OCP, OPP	1	5 day
BH30 - 1.0 36	36 6/07/2017	Soil	NEPM Suite Basic	1	5 day
BH30 - 2.0 37	37 6/07/2017	Soil	Metals	1	5 day
BH30 - 3.0 38	38 6/07/2017	Soil	Metals, TRH	1	5 day
BH30 - 4.0 39	39 6/07/2017	Soil	Metals, PAH	1	5 day
BH30 - 5.0 40	40 6/07/2017	Soil	Metals	1	5 day
BH30 - 6.0 41	41 6/07/2017	Soil	Metals, PCB	1	5 day
BH30 - 7.0 42	42 6/07/2017	Soil	Metals, TRH	1	5 day
BH31 - 0.1 43	43 6/07/2017	Soil	Metals, OCP, OPP	1	5 day
* BH31 - 1.0 - 71	71 6/07/2017	Soil	Metals, PAH	1	5 day
BH32 - 0.1 44	44 6/07/2017	Soil	Metals, OCP, OPP, pH	1	5 day
BH32 - 1.0 45	45 6/07/2017	Soil	Metals, PAH	1	5 day
BH32 - 2.2 46	46 6/07/2017	Soil	Metals, PAH	1	5 day
BH32 - 3.0 47	47 6/07/2017	Soil	Metals	1	5 day
BH32 - 4.0 48	48 6/07/2017	Soil	Metals, TRH	1	5 day
BH33 - 0.2 49	49 6/07/2017	Soil	Metals, OCP. OPP	1	5 day
BH33 - 1.0 50	50 6/07/2017	Soil	Metals, PAH	1	5 day
BH34 - 0.1 51	51 6/07/2017	Soil	NEPM Suite Basic	1	5 day

170939

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CHAIN OF CUSTODY

Job Number: 27380

ATTENTION

CLIENT

CLIENT NUMBER

LOCATION 266 Longueville Road Lane Cove

Sheet 1 of

Additional information::

Total number of containers 74

Email Results To	Tick
jon.lawson@lrmglobal.com.au	Yep
kevin.b@lrmglobal.com.au	
ajacob@lrmglobal.com.au	
acampbell@lrmglobal.com.au	
l.main@lrmglobal.com.au	

Sampled by: JL

Checked by: JL

Comments

Chain of custody must be signed and dated by LRM, courier, and laboratory.

RELINQUISHED BY (Signature)	ORGANISATION	DATE / TIME	RECEIVED BY (Signature)	ORGANISATION	DATE / TIME
	LRM	10/07/2017			

Sample Number	Sample Date	Sample Type	Analysis Required	No. of Containers	Turn-around Time Required
BH35 - 0.1 52	52 6/07/2017	Soil	Metals,	1	5 day
BH36 - 0.1 53	53 6/07/2017	Soil	Metals	1	5 day
BH37 - 0.1 54	54 6/07/2017	Soil	Metals, PAH	1	5 day
BH38 - 0.1 55	55 6/07/2017	Soil	Metals, PAH	1	5 day
BH39 - 0.1 56	56 6/07/2017	Soil	Metals, TRH	1	5 day
BH40 - 0.1 68	68 6/07/2017	Soil	Metals	1	5 day
BH41 - 0.1 69	69 6/07/2017	Soil	Metals	1	5 day
BH42 - 0.1 70	70 6/07/2017	Soil	Metals, OCP, OPP	1	5 day
Dup 1 57	57 6/07/2017	Soil	NEPM Suite Basic	1	5 day
Dup 2 58	58 6/07/2017	Soil	Metals	1	5 day
Dup 3 59	59 6/07/2017	Soil	Metals	1	5 day
Dup 4 60	60 6/07/2017	Soil	Metals	1	5 day
Split 1	– 6/07/2017	Soil	NEPM Suite Basic	1	5 day
Split 2 MELB	– 6/07/2017	Soil	Metals	1	5 day
Split 3	– 6/07/2017	Soil	Metals	1	5 day
Split 4	– 6/07/2017	Soil	Metals	1	5 day
Trip 61	61 6/07/2017	Water	C6-9	2	5 day
Rinsate 62	62 6/07/2017	Water	Metals	1	5 day

170939

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Envirolab Services Pty Ltd - Sydney | ABN 37 112 535 645

CERTIFICATE OF ANALYSIS 170939

Client:
LRM Global
PO Box 1237
Carlton
VIC 3053

Attention: Jon Lawson

Sample log in details:

Your Reference:	**27380, Lane Cove**
No. of samples:	69 Soils, 2 Waters
Date samples received / completed instructions received	07/07/17 / 10/07/17

Analysis Details:
Please refer to the following pages for results, methodology summary and quality control data.
Samples were analysed as received from the client. Results relate specifically to the samples as received.
Results are reported on a dry weight basis for solids and on an as received basis for other matrices.
Please refer to the last page of this report for any comments relating to the results.

Report Details:

Date results requested by: / Issue Date:	18/07/17 / 18/07/17
Date of Preliminary Report:	Not Issued

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Accredited for compliance with ISO/IEC 17025 - Testing **Tests not covered by NATA are denoted with *.**

Results Approved By:

David Springer
General Manager

vTRH(C6-C10)/BTEXN in Soil						
Our Reference:	UNITS	170939-1	170939-2	170939-3	170939-4	170939-13
Your Reference	---------- -	BH16	BH16	BH17	BH17	BH21
Depth	----------	0.1	0.8	0.1	0.7	3.0
Date Sampled		6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	11/07/2017	11/07/2017	11/07/2017	11/07/2017	11/07/2017
Date analysed	-	12/07/2017	12/07/2017	12/07/2017	12/07/2017	12/07/2017
TRHC_6 - C_9	mg/kg	<25	<25	<25	<25	<25
TRHC_6 - C_{10}	mg/kg	<25	<25	<25	<25	<25
Surrogate aaa-Trifluorotoluene	%	98	97	96	88	95

vTRH(C6-C10)/BTEXN in Soil						
Our Reference:	UNITS	170939-15	170939-18	170939-20	170939-28	170939-36
Your Reference	---------- -	BH22	BH24	BH24	BH28	BH30
Depth	----------	1.0	0.1	2.8	4.0	1.0
Date Sampled		6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	11/07/2017	11/07/2017	11/07/2017	11/07/2017	11/07/2017
Date analysed	-	12/07/2017	12/07/2017	12/07/2017	12/07/2017	12/07/2017
TRHC_6 - C_9	mg/kg	<25	<25	<25	<25	<25
TRHC_6 - C_{10}	mg/kg	<25	<25	<25	<25	<25
vTPHC_6 - C_{10} less BTEX (F1)	mg/kg	[NA]	[NA]	[NA]	[NA]	<25
Benzene	mg/kg	[NA]	[NA]	[NA]	[NA]	<0.2
Toluene	mg/kg	[NA]	[NA]	[NA]	[NA]	<0.5
Ethylbenzene	mg/kg	[NA]	[NA]	[NA]	[NA]	<1
m+p-xylene	mg/kg	[NA]	[NA]	[NA]	[NA]	<2
o-Xylene	mg/kg	[NA]	[NA]	[NA]	[NA]	<1
Total +ve Xylenes	mg/kg	[NA]	[NA]	[NA]	[NA]	<1
naphthalene	mg/kg	[NA]	[NA]	[NA]	[NA]	<1
Surrogate aaa-Trifluorotoluene	%	97	97	91	95	96

vTRH(C6-C10)/BTEXN in Soil						
Our Reference:	UNITS	170939-38	170939-42	170939-48	170939-51	170939-56
Your Reference	---------- -	BH30	BH30	BH32	BH34	BH39
Depth	----------	3.0	7.0	4.0	0.1	0.1
Date Sampled		6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	11/07/2017	11/07/2017	11/07/2017	11/07/2017	11/07/2017
Date analysed	-	12/07/2017	12/07/2017	12/07/2017	12/07/2017	12/07/2017
TRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	[NA]	[NA]	[NA]	<25	[NA]
Benzene	mg/kg	[NA]	[NA]	[NA]	<0.2	[NA]
Toluene	mg/kg	[NA]	[NA]	[NA]	<0.5	[NA]
Ethylbenzene	mg/kg	[NA]	[NA]	[NA]	<1	[NA]
m+p-xylene	mg/kg	[NA]	[NA]	[NA]	<2	[NA]
o-Xylene	mg/kg	[NA]	[NA]	[NA]	<1	[NA]
Total +ve Xylenes	mg/kg	[NA]	[NA]	[NA]	<1	[NA]
naphthalene	mg/kg	[NA]	[NA]	[NA]	<1	[NA]
Surrogate aaa-Trifluorotoluene	%	90	83	103	91	89

vTRH(C6-C10)/BTEXN in Soil				
Our Reference:	UNITS	170939-57	170939-64	170939-66
Your Reference	---------- -	Dup1	BH29	BH19
Depth	----------	-	8.0	0.5
Date Sampled		6/07/2017	6/07/2017	6/07/2017
Type of sample		Soil	Soil	Soil
Date extracted	-	11/07/2017	11/07/2017	11/07/2017
Date analysed	-	12/07/2017	12/07/2017	12/07/2017
TRH C_6 - C_9	mg/kg	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	[NA]	<25
Benzene	mg/kg	<0.2	[NA]	<0.2
Toluene	mg/kg	<0.5	[NA]	<0.5
Ethylbenzene	mg/kg	<1	[NA]	<1
m+p-xylene	mg/kg	<2	[NA]	<2
o-Xylene	mg/kg	<1	[NA]	<1
Total +ve Xylenes	mg/kg	<1	[NA]	<1
naphthalene	mg/kg	<1	[NA]	<1
Surrogate aaa-Trifluorotoluene	%	101	91	102

svTRH (C10-C40) in Soil						
Our Reference:	UNITS	170939-1	170939-2	170939-3	170939-4	170939-13
Your Reference	---------- -	BH16	BH16	BH17	BH17	BH21
Depth	----------	0.1	0.8	0.1	0.7	3.0
Date Sampled		6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	11/07/2017	11/07/2017	11/07/2017	11/07/2017	11/07/2017
Date analysed	-	12/07/2017	12/07/2017	12/07/2017	12/07/2017	12/07/2017
TRHC$_{10}$ - C$_{14}$	mg/kg	<50	<50	<50	<50	<50
TRHC$_{15}$ - C$_{28}$	mg/kg	<100	<100	<100	<100	<100
TRHC$_{29}$ - C$_{36}$	mg/kg	<100	<100	<100	<100	<100
TRH>C$_{10}$-C$_{16}$	mg/kg	<50	<50	<50	<50	<50
TRH>C$_{10}$ - C$_{16}$ less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH>C$_{16}$-C$_{34}$	mg/kg	<100	<100	<100	<100	<100
TRH>C$_{34}$-C$_{40}$	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	110	91	92	91	100

svTRH (C10-C40) in Soil						
Our Reference:	UNITS	170939-15	170939-18	170939-20	170939-28	170939-36
Your Reference	---------- -	BH22	BH24	BH24	BH28	BH30
Depth	----------	1.0	0.1	2.8	4.0	1.0
Date Sampled		6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	11/07/2017	11/07/2017	11/07/2017	11/07/2017	11/07/2017
Date analysed	-	12/07/2017	12/07/2017	12/07/2017	12/07/2017	12/07/2017
TRHC$_{10}$ - C$_{14}$	mg/kg	<50	<50	<50	<50	<50
TRHC$_{15}$ - C$_{28}$	mg/kg	<100	<100	<100	<100	<100
TRHC$_{29}$ - C$_{36}$	mg/kg	<100	<100	<100	<100	<100
TRH>C$_{10}$-C$_{16}$	mg/kg	<50	<50	<50	<50	<50
TRH>C$_{10}$ - C$_{16}$ less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH>C$_{16}$-C$_{34}$	mg/kg	<100	<100	<100	<100	<100
TRH>C$_{34}$-C$_{40}$	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	89	89	89	91	89

svTRH (C10-C40) in Soil						
Our Reference:	UNITS	170939-38	170939-42	170939-48	170939-51	170939-56
Your Reference	---------- -	BH30	BH30	BH32	BH34	BH39
Depth	----------	3.0	7.0	4.0	0.1	0.1
Date Sampled		6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	11/07/2017	11/07/2017	11/07/2017	11/07/2017	11/07/2017
Date analysed	-	12/07/2017	12/07/2017	12/07/2017	12/07/2017	12/07/2017
TRHC$_{10}$ - C$_{14}$	mg/kg	<50	<50	<50	<50	<50
TRHC$_{15}$ - C$_{28}$	mg/kg	<100	<100	<100	<100	360
TRHC$_{29}$ - C$_{36}$	mg/kg	<100	<100	<100	<100	480
TRH>C$_{10}$-C$_{16}$	mg/kg	<50	<50	<50	<50	68
TRH>C$_{10}$ - C$_{16}$ less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	[NT]
TRH>C$_{16}$-C$_{34}$	mg/kg	<100	<100	<100	<100	640
TRH>C$_{34}$-C$_{40}$	mg/kg	<100	<100	<100	<100	370
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	1,100
Surrogate o-Terphenyl	%	88	88	93	94	103

svTRH (C10-C40) in Soil				
Our Reference:	UNITS	170939-57	170939-64	170939-66
Your Reference	---------- -	Dup1	BH29	BH19
Depth	----------	-	8.0	0.5
Date Sampled		6/07/2017	6/07/2017	6/07/2017
Type of sample		Soil	Soil	Soil
Date extracted	-	11/07/2017	11/07/2017	11/07/2017
Date analysed	-	12/07/2017	12/07/2017	12/07/2017
TRHC$_{10}$ - C$_{14}$	mg/kg	<50	<50	<50
TRHC$_{15}$ - C$_{28}$	mg/kg	<100	<100	<100
TRHC$_{29}$ - C$_{36}$	mg/kg	<100	<100	<100
TRH>C$_{10}$-C$_{16}$	mg/kg	<50	<50	<50
TRH>C$_{10}$ - C$_{16}$ less Naphthalene (F2)	mg/kg	<50	<50	<50
TRH>C$_{16}$-C$_{34}$	mg/kg	<100	<100	<100
TRH>C$_{34}$-C$_{40}$	mg/kg	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50
Surrogate o-Terphenyl	%	91	106	91

PAHs in Soil Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ---------- - ---------- -	170939-1 BH16 0.1 6/07/2017 Soil	170939-2 BH16 0.8 6/07/2017 Soil	170939-3 BH17 0.1 6/07/2017 Soil	170939-4 BH17 0.7 6/07/2017 Soil	170939-6 BH18 0.6 6/07/2017 Soil
Date extracted	-	11/07/2017	11/07/2017	11/07/2017	11/07/2017	11/07/2017
Date analysed	-	12/07/2017	12/07/2017	12/07/2017	12/07/2017	12/07/2017
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.5	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	1.3	<0.1	0.1	<0.1	0.1
Pyrene	mg/kg	1.2	<0.1	0.1	<0.1	0.1
Benzo(a)anthracene	mg/kg	0.6	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.6	<0.1	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	1	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	0.67	<0.05	0.08	<0.05	0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	0.5	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	0.6	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene TEQ calc (zero)	mg/kg	0.9	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	0.9	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	0.9	<0.5	<0.5	<0.5	<0.5
Total +ve PAH's	mg/kg	7.1	<0.05	0.4	<0.05	0.3
Surrogate p-Terphenyl-d14	%	91	93	91	89	88

PAHs in Soil Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ---------- - ---------- -	170939-9 BH20 1.0 6/07/2017 Soil	170939-10 BH20 1.9 6/07/2017 Soil	170939-12 BH21 1.2 6/07/2017 Soil	170939-17 BH23 1.0 6/07/2017 Soil	170939-19 BH24 1.5 6/07/2017 Soil
Date extracted	-	11/07/2017	11/07/2017	11/07/2017	11/07/2017	11/07/2017
Date analysed	-	12/07/2017	12/07/2017	12/07/2017	12/07/2017	12/07/2017
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	<0.1	0.2
Pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	0.2
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	0.06	<0.05	0.08
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Total +ve PAH's	mg/kg	<0.05	<0.05	0.06	<0.05	0.4
Surrogate p-Terphenyl-d14	%	84	89	88	88	90

PAHs in Soil Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ---------- - ---------- 	170939-24 BH27 1.0 6/07/2017 Soil	170939-27 BH28 3.0 6/07/2017 Soil	170939-30 BH29 1.0 6/07/2017 Soil	170939-32 BH29 3.0 6/07/2017 Soil	170939-36 BH30 1.0 6/07/2017 Soil
Date extracted	-	11/07/2017	11/07/2017	11/07/2017	11/07/2017	11/07/2017
Date analysed	-	12/07/2017	12/07/2017	12/07/2017	12/07/2017	12/07/2017
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	0.4
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	0.2	<0.1	<0.1	0.9
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	0.4
Fluoranthene	mg/kg	<0.1	0.6	0.2	0.4	3.5
Pyrene	mg/kg	<0.1	0.7	0.2	0.4	3.9
Benzo(a)anthracene	mg/kg	<0.1	0.4	0.1	0.2	2.0
Chrysene	mg/kg	<0.1	0.4	0.1	0.2	2.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	0.7	0.2	0.3	3.4
Benzo(a)pyrene	mg/kg	<0.05	0.4	0.1	0.2	2.2
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	0.3	<0.1	0.1	1.2
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	0.3
Benzo(g,h,i)perylene	mg/kg	<0.1	0.3	0.1	0.2	1.6
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	0.6	<0.5	<0.5	3.2
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	0.6	<0.5	<0.5	3.2
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	0.6	<0.5	<0.5	3.2
Total +ve PAH's	mg/kg	<0.05	4.2	0.97	2.1	22
Surrogate p-Terphenyl-d14	%	90	93	95	94	81

PAHs in Soil Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ---------- - ---------- 	170939-39 BH30 4.0 6/07/2017 Soil	170939-45 BH32 1.0 6/07/2017 Soil	170939-46 BH32 2.2 6/07/2017 Soil	170939-50 BH33 1.0 6/07/2017 Soil	170939-51 BH34 0.1 6/07/2017 Soil
Date extracted	-	11/07/2017	11/07/2017	11/07/2017	11/07/2017	11/07/2017
Date analysed	-	12/07/2017	12/07/2017	12/07/2017	12/07/2017	12/07/2017
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.2	<0.1	0.1	0.8	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	0.2	<0.1
Fluoranthene	mg/kg	0.9	<0.1	0.2	1.5	<0.1
Pyrene	mg/kg	1	<0.1	0.2	1.5	<0.1
Benzo(a)anthracene	mg/kg	0.5	<0.1	<0.1	0.8	<0.1
Chrysene	mg/kg	0.5	<0.1	<0.1	0.9	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	0.8	<0.2	<0.2	3.1	<0.2
Benzo(a)pyrene	mg/kg	0.52	<0.05	0.08	2.2	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	0.3	<0.1	<0.1	1.8	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	0.4	<0.1
Benzo(g,h,i)perylene	mg/kg	0.3	<0.1	<0.1	2.5	<0.1
Benzo(a)pyrene TEQ calc (zero)	mg/kg	0.7	<0.5	<0.5	3.2	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	0.7	<0.5	<0.5	3.2	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	0.7	<0.5	<0.5	3.2	<0.5
Total +ve PAH's	mg/kg	5.1	<0.05	0.51	16	<0.05
Surrogate p-Terphenyl-d14	%	95	91	91	93	81

PAHs in Soil Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ---------- - ---------- 	170939-54 BH37 0.1 6/07/2017 Soil	170939-55 BH38 0.1 6/07/2017 Soil	170939-57 Dup1 - 6/07/2017 Soil	170939-63 BH29 6.0 6/07/2017 Soil	170939-66 BH19 0.5 6/07/2017 Soil
Date extracted	-	11/07/2017	11/07/2017	11/07/2017	11/07/2017	11/07/2017
Date analysed	-	12/07/2017	12/07/2017	12/07/2017	12/07/2017	12/07/2017
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	0.1	<0.1	0.2	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.3	0.4	<0.1	0.5	<0.1
Pyrene	mg/kg	0.3	0.3	<0.1	0.6	<0.1
Benzo(a)anthracene	mg/kg	0.1	0.2	<0.1	0.4	<0.1
Chrysene	mg/kg	0.1	0.2	<0.1	0.4	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	0.3	0.4	<0.2	0.7	<0.2
Benzo(a)pyrene	mg/kg	0.2	0.2	<0.05	0.5	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	0.1	<0.1	0.3	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	0.1	0.2	<0.1	0.3	<0.1
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	0.6	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	0.6	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	0.6	<0.5
Total +ve PAH's	mg/kg	1.7	2.1	<0.05	3.9	<0.05
Surrogate p-Terphenyl-d14	%	91	98	81	94	81

PAHs in Soil Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ---------- - ----------	170939-67 BH21 4.0 6/07/2017 Soil	170939-71 BH31 1.0 6/07/2017 Soil
Date extracted	-	11/07/2017	11/07/2017
Date analysed	-	12/07/2017	12/07/2017
Naphthalene	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+k)fluoranthene	mg/kg	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5
Total +ve PAH's	mg/kg	<0.05	<0.05
Surrogate p-Terphenyl-d14	%	97	99

Acid Extractractable metals in soil						
Our Reference:	UNITS	170939-1	170939-2	170939-3	170939-4	170939-5
Your Reference	---------- -	BH16	BH16	BH17	BH17	BH18
Depth	----------	0.1	0.8	0.1	0.7	0.1
Date Sampled		6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	13/07/2017	13/07/2017	13/07/2017	13/07/2017	13/07/2017
Date analysed	-	13/07/2017	13/07/2017	13/07/2017	13/07/2017	13/07/2017
Arsenic	mg/kg	8	9	5	16	<4
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	12	9	14	7	9
Copper	mg/kg	21	<1	5	4	8
Lead	mg/kg	89	11	11	13	13
Mercury	mg/kg	0.2	<0.1	<0.1	<0.1	3.7
Nickel	mg/kg	9	<1	1	<1	3
Zinc	mg/kg	84	<1	6	2	18

Acid Extractractable metals in soil						
Our Reference:	UNITS	170939-6	170939-7	170939-8	170939-9	170939-10
Your Reference	---------- -	BH18	BH19	BH20	BH20	BH20
Depth	----------	0.6	0.1	0.1	1.0	1.9
Date Sampled		6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	13/07/2017	13/07/2017	13/07/2017	13/07/2017	13/07/2017
Date analysed	-	13/07/2017	13/07/2017	13/07/2017	13/07/2017	13/07/2017
Arsenic	mg/kg	<4	5	<4	<4	<4
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	6	9	9	14	3
Copper	mg/kg	1	8	8	<1	<1
Lead	mg/kg	10	13	14	8	8
Mercury	mg/kg	<0.1	6.4	5.2	<0.1	<0.1
Nickel	mg/kg	<1	2	3	2	<1
Zinc	mg/kg	7	14	17	50	1

Acid Extractractable metals in soil						
Our Reference:	UNITS	170939-11	170939-12	170939-13	170939-14	170939-15
Your Reference	---------- -	BH21	BH21	BH21	BH22	BH22
Depth	----------	0.1	1.2	3.0	0.1	1.0
Date Sampled		6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	13/07/2017	13/07/2017	13/07/2017	13/07/2017	13/07/2017
Date analysed	-	13/07/2017	13/07/2017	13/07/2017	13/07/2017	13/07/2017
Arsenic	mg/kg	<4	<4	9	<4	<4
Cadmium	mg/kg	<0.4	<0.4	1	<0.4	<0.4
Chromium	mg/kg	14	12	23	5	8
Copper	mg/kg	9	3	12	72	16
Lead	mg/kg	12	23	120	230	830
Mercury	mg/kg	2.7	<0.1	<0.1	0.2	0.2
Nickel	mg/kg	4	3	5	17	4
Zinc	mg/kg	19	89	640	110	260

Acid Extractractable metals in soil						
Our Reference:	UNITS	170939-16	170939-17	170939-18	170939-19	170939-20
Your Reference	---------- -	BH23	BH23	BH24	BH24	BH24
Depth	----------	0.1	1.0	0.1	1.5	2.8
Date Sampled		6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	13/07/2017	13/07/2017	13/07/2017	13/07/2017	13/07/2017
Date analysed	-	13/07/2017	13/07/2017	13/07/2017	13/07/2017	13/07/2017
Arsenic	mg/kg	<4	<4	<4	<4	<4
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	7	5	9	9	14
Copper	mg/kg	7	<1	7	3	1
Lead	mg/kg	12	4	11	18	15
Mercury	mg/kg	4.2	<0.1	2.7	<0.1	<0.1
Nickel	mg/kg	3	<1	2	1	<1
Zinc	mg/kg	18	<1	17	14	8

Acid Extractractable metals in soil						
Our Reference:	UNITS	170939-21	170939-22	170939-23	170939-24	170939-25
Your Reference	---------- -	BH25	BH26	BH27	BH27	BH28
Depth	----------	0.2	0.2	0.1	1.0	0.1
Date Sampled		6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	13/07/2017	13/07/2017	13/07/2017	13/07/2017	13/07/2017
Date analysed	-	13/07/2017	13/07/2017	13/07/2017	13/07/2017	13/07/2017
Arsenic	mg/kg	22	<4	8	<4	<4
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	16	4	12	12	7
Copper	mg/kg	15	<1	17	3	7
Lead	mg/kg	87	6	130	34	10
Mercury	mg/kg	0.2	<0.1	0.2	<0.1	4.1
Nickel	mg/kg	3	<1	5	<1	3
Zinc	mg/kg	66	2	140	12	17

Acid Extractractable metals in soil						
Our Reference:	UNITS	170939-26	170939-27	170939-28	170939-29	170939-30
Your Reference	---------- -	BH28	BH28	BH28	BH29	BH29
Depth	----------	2.0	3.0	4.0	0.1	1.0
Date Sampled		6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	13/07/2017	13/07/2017	13/07/2017	13/07/2017	13/07/2017
Date analysed	-	13/07/2017	13/07/2017	13/07/2017	13/07/2017	13/07/2017
Arsenic	mg/kg	<4	5	7	<4	6
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	11	27	14	8	46
Copper	mg/kg	4	21	57	7	6
Lead	mg/kg	52	130	150	9	66
Mercury	mg/kg	<0.1	0.2	<0.1	3.2	0.1
Nickel	mg/kg	1	5	17	3	3
Zinc	mg/kg	28	120	4,600	16	56

Acid Extractractable metals in soil						
Our Reference:	UNITS	170939-31	170939-32	170939-33	170939-34	170939-35
Your Reference	---------- -	BH29	BH29	BH29	BH29	BH30
Depth	----------	2.0	3.0	4.0	5.0	0.1
Date Sampled		6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	13/07/2017	13/07/2017	13/07/2017	13/07/2017	13/07/2017
Date analysed	-	13/07/2017	13/07/2017	13/07/2017	13/07/2017	13/07/2017
Arsenic	mg/kg	5	<4	<4	<4	<4
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	21	4	14	7	6
Copper	mg/kg	21	2	17	16	6
Lead	mg/kg	220	49	790	740	10
Mercury	mg/kg	0.2	<0.1	0.1	0.6	4.4
Nickel	mg/kg	5	<1	11	4	2
Zinc	mg/kg	110	17	170	230	9

Acid Extractractable metals in soil						
Our Reference:	UNITS	170939-36	170939-37	170939-38	170939-39	170939-40
Your Reference	---------- -	BH30	BH30	BH30	BH30	BH30
Depth	----------	1.0	2.0	3.0	4.0	5.0
Date Sampled		6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	13/07/2017	13/07/2017	13/07/2017	13/07/2017	13/07/2017
Date analysed	-	13/07/2017	13/07/2017	13/07/2017	13/07/2017	13/07/2017
Arsenic	mg/kg	5	6	6	<4	<4
Beryllium	mg/kg	<1	[NA]	[NA]	[NA]	[NA]
Boron	mg/kg	<3	[NA]	[NA]	[NA]	[NA]
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	19	17	37	11	6
Cobalt	mg/kg	<1	[NA]	[NA]	[NA]	[NA]
Copper	mg/kg	14	15	14	36	3
Lead	mg/kg	150	53	130	210	130
Manganese	mg/kg	26	[NA]	[NA]	[NA]	[NA]
Mercury	mg/kg	<0.1	0.3	0.3	0.2	<0.1
Nickel	mg/kg	2	6	3	26	4
Selenium	mg/kg	<2	[NA]	[NA]	[NA]	[NA]
Zinc	mg/kg	140	66	110	94	89

Acid Extractractable metals in soil						
Our Reference:	UNITS	170939-41	170939-42	170939-43	170939-44	170939-45
Your Reference	---------- -	BH30	BH30	BH31	BH32	BH32
Depth	----------	6.0	7.0	0.1	0.1	1.0
Date Sampled		6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	13/07/2017	13/07/2017	13/07/2017	13/07/2017	13/07/2017
Date analysed	-	13/07/2017	13/07/2017	13/07/2017	13/07/2017	13/07/2017
Arsenic	mg/kg	<4	<4	32	<4	8
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	79	7	10	4	10
Copper	mg/kg	58	<1	14	36	15
Lead	mg/kg	500	3	55	4	18
Mercury	mg/kg	0.2	<0.1	0.5	0.2	<0.1
Nickel	mg/kg	23	<1	3	34	1
Zinc	mg/kg	180	4	54	27	9

Acid Extractractable metals in soil						
Our Reference:	UNITS	170939-46	170939-47	170939-48	170939-49	170939-50
Your Reference	---------- -	BH32	BH32	BH32	BH33	BH33
Depth	----------	2.2	3.0	4.0	0.2	1.0
Date Sampled		6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	13/07/2017	13/07/2017	13/07/2017	13/07/2017	13/07/2017
Date analysed	-	13/07/2017	13/07/2017	13/07/2017	13/07/2017	13/07/2017
Arsenic	mg/kg	<4	8	<4	<4	<4
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	7	9	14	20	15
Copper	mg/kg	4	11	<1	<1	21
Lead	mg/kg	15	19	6	7	48
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	1	2	<1	<1	2
Zinc	mg/kg	10	9	<1	<1	63

Acid Extractractable metals in soil						
Our Reference:	UNITS	170939-51	170939-52	170939-53	170939-54	170939-55
Your Reference	---------- -	BH34	BH35	BH36	BH37	BH38
Depth	----------	0.1	0.1	0.1	0.1	0.1
Date Sampled		6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	13/07/2017	13/07/2017	13/07/2017	13/07/2017	13/07/2017
Date analysed	-	13/07/2017	13/07/2017	13/07/2017	13/07/2017	13/07/2017
Arsenic	mg/kg	<4	6	7	<4	7
Beryllium	mg/kg	<1	[NA]	[NA]	[NA]	[NA]
Boron	mg/kg	<3	[NA]	[NA]	[NA]	[NA]
Cadmium	mg/kg	<0.4	10	0.5	<0.4	2
Chromium	mg/kg	4	22	12	8	180
Cobalt	mg/kg	<1	[NA]	[NA]	[NA]	[NA]
Copper	mg/kg	2	270	37	8	140
Lead	mg/kg	9	1,300	79	49	150
Manganese	mg/kg	2	[NA]	[NA]	[NA]	[NA]
Mercury	mg/kg	<0.1	0.3	0.1	0.1	1.3
Nickel	mg/kg	<1	16	3	2	93
Selenium	mg/kg	<2	[NA]	[NA]	[NA]	[NA]
Zinc	mg/kg	11	730	230	90	680

Acid Extractractable metals in soil						
Our Reference:	UNITS	170939-56	170939-57	170939-58	170939-59	170939-60
Your Reference	---------- -	BH39	Dup1	Dup2	Dup3	Dup4
Depth	----------	0.1	-	-	-	-
Date Sampled		6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	13/07/2017	13/07/2017	13/07/2017	13/07/2017	13/07/2017
Date analysed	-	13/07/2017	13/07/2017	13/07/2017	13/07/2017	13/07/2017
Arsenic	mg/kg	<4	<4	5	14	<4
Beryllium	mg/kg	[NA]	<1	[NA]	[NA]	[NA]
Boron	mg/kg	[NA]	<3	[NA]	[NA]	[NA]
Cadmium	mg/kg	0.7	<0.4	6.0	0.6	<0.4
Chromium	mg/kg	6	4	18	13	8
Cobalt	mg/kg	[NA]	<1	[NA]	[NA]	[NA]
Copper	mg/kg	30	2	230	47	8
Lead	mg/kg	76	7	1,100	91	53
Manganese	mg/kg	[NA]	2	[NA]	[NA]	[NA]
Mercury	mg/kg	0.2	<0.1	0.2	0.1	0.1
Nickel	mg/kg	6	<1	11	9	2
Selenium	mg/kg	[NA]	<2	[NA]	[NA]	[NA]
Zinc	mg/kg	210	10	650	230	82

Acid Extractractable metals in soil						
Our Reference:	UNITS	170939-63	170939-64	170939-65	170939-66	170939-67
Your Reference	---------- -	BH29	BH29	BH29	BH19	BH21
Depth	----------	6.0	8.0	7.0	0.5	4.0
Date Sampled		6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	13/07/2017	13/07/2017	13/07/2017	13/07/2017	13/07/2017
Date analysed	-	13/07/2017	13/07/2017	13/07/2017	13/07/2017	13/07/2017
Arsenic	mg/kg	<4	4	<4	<4	<4
Beryllium	mg/kg	[NA]	[NA]	[NA]	<1	[NA]
Boron	mg/kg	[NA]	[NA]	[NA]	<3	[NA]
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	12	10	4	8	5
Cobalt	mg/kg	[NA]	[NA]	[NA]	1	[NA]
Copper	mg/kg	11	8	5	2	<1
Lead	mg/kg	260	6,200	540	17	6
Manganese	mg/kg	[NA]	[NA]	[NA]	20	[NA]
Mercury	mg/kg	0.3	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	7	5	2	<1	<1
Selenium	mg/kg	[NA]	[NA]	[NA]	<2	[NA]
Zinc	mg/kg	90	94	190	5	<1

Acid Extractractable metals in soil						
Our Reference:	UNITS	170939-68	170939-69	170939-70	170939-71	170939-72
Your Reference	---------- -	BH40	BH41	BH42	BH31	BH16 - [TRIPLICATE]
Depth	----------	0.1	0.1	0.1	1.0	0.1
Date Sampled		6/07/2017	6/07/2017	6/07/2017	6/07/2017	06/07/2017
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	13/07/2017	13/07/2017	13/07/2017	13/07/2017	13/07/2017
Date analysed	-	13/07/2017	13/07/2017	13/07/2017	13/07/2017	13/07/2017
Arsenic	mg/kg	<4	<4	<4	<4	8
Beryllium	mg/kg	[NA]	[NA]	[NA]	[NA]	<1
Boron	mg/kg	[NA]	[NA]	[NA]	[NA]	<3
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	7	6	12	4	16
Cobalt	mg/kg	[NA]	[NA]	[NA]	[NA]	4
Copper	mg/kg	10	11	9	<1	30
Lead	mg/kg	12	53	11	5	110
Manganese	mg/kg	[NA]	[NA]	[NA]	[NA]	190
Mercury	mg/kg	5.5	4.1	5.2	<0.1	0.2
Nickel	mg/kg	2	2	3	<1	12
Selenium	mg/kg	[NA]	[NA]	[NA]	[NA]	<2
Zinc	mg/kg	14	71	15	<1	130

Acid Extractractable metals in soil			
Our Reference:	UNITS	170939-73	170939-74
Your Reference	---------- -	BH30 - [TRIPLICATE]	BH29 - [TRIPLICATE]
Depth	----------	6.0	8.0
Date Sampled		06/07/2017	06/07/2017
Type of sample		Soil	Soil
Date prepared	-	13/07/2017	13/07/2017
Date analysed	-	13/07/2017	13/07/2017
Arsenic	mg/kg	<4	<4
Cadmium	mg/kg	<0.4	<0.4
Chromium	mg/kg	17	8
Copper	mg/kg	19	6
Lead	mg/kg	490	3,700
Mercury	mg/kg	0.1	<0.1
Nickel	mg/kg	11	3
Zinc	mg/kg	370	79

Moisture						
Our Reference:	UNITS	170939-1	170939-2	170939-3	170939-4	170939-5
Your Reference	---------- -	BH16	BH16	BH17	BH17	BH18
Depth	----------	0.1	0.8	0.1	0.7	0.1
Date Sampled		6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	11/07/2017	11/07/2017	11/07/2017	11/07/2017	11/07/2017
Date analysed	-	12/07/2017	12/07/2017	12/07/2017	12/07/2017	12/07/2017
Moisture	%	11	14	11	9.4	8.5

Moisture						
Our Reference:	UNITS	170939-6	170939-7	170939-8	170939-9	170939-10
Your Reference	---------- -	BH18	BH19	BH20	BH20	BH20
Depth	----------	0.6	0.1	0.1	1.0	1.9
Date Sampled		6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	11/07/2017	11/07/2017	11/07/2017	11/07/2017	11/07/2017
Date analysed	-	12/07/2017	12/07/2017	12/07/2017	12/07/2017	12/07/2017
Moisture	%	7.7	11	11	17	12

Moisture						
Our Reference:	UNITS	170939-11	170939-12	170939-13	170939-14	170939-15
Your Reference	---------- -	BH21	BH21	BH21	BH22	BH22
Depth	----------	0.1	1.2	3.0	0.1	1.0
Date Sampled		6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	11/07/2017	11/07/2017	11/07/2017	11/07/2017	11/07/2017
Date analysed	-	12/07/2017	12/07/2017	12/07/2017	12/07/2017	12/07/2017
Moisture	%	9.8	14	19	9.2	12

Moisture						
Our Reference:	UNITS	170939-16	170939-17	170939-18	170939-19	170939-20
Your Reference	---------- -	BH23	BH23	BH24	BH24	BH24
Depth	----------	0.1	1.0	0.1	1.5	2.8
Date Sampled		6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	11/07/2017	11/07/2017	11/07/2017	11/07/2017	11/07/2017
Date analysed	-	12/07/2017	12/07/2017	12/07/2017	12/07/2017	12/07/2017
Moisture	%	12	9.9	8.4	5.7	16

Moisture						
Our Reference:	UNITS	170939-21	170939-22	170939-23	170939-24	170939-25
Your Reference	---------- -	BH25	BH26	BH27	BH27	BH28
Depth	----------	0.2	0.2	0.1	1.0	0.1
Date Sampled		6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	11/07/2017	11/07/2017	11/07/2017	11/07/2017	11/07/2017
Date analysed	-	12/07/2017	12/07/2017	12/07/2017	12/07/2017	12/07/2017
Moisture	%	13	14	17	7.6	13

Moisture						
Our Reference:	UNITS	170939-26	170939-27	170939-28	170939-29	170939-30
Your Reference	---------- -	BH28	BH28	BH28	BH29	BH29
Depth	----------	2.0	3.0	4.0	0.1	1.0
Date Sampled		6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	11/07/2017	11/07/2017	11/07/2017	11/07/2017	11/07/2017
Date analysed	-	12/07/2017	12/07/2017	12/07/2017	12/07/2017	12/07/2017
Moisture	%	15	16	11	9.7	21

Moisture						
Our Reference:	UNITS	170939-31	170939-32	170939-33	170939-34	170939-35
Your Reference	---------- -	BH29	BH29	BH29	BH29	BH30
Depth	----------	2.0	3.0	4.0	5.0	0.1
Date Sampled		6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	11/07/2017	11/07/2017	11/07/2017	11/07/2017	11/07/2017
Date analysed	-	12/07/2017	12/07/2017	12/07/2017	12/07/2017	12/07/2017
Moisture	%	13	9.7	9.8	12	10

Moisture						
Our Reference:	UNITS	170939-36	170939-37	170939-38	170939-39	170939-40
Your Reference	---------- -	BH30	BH30	BH30	BH30	BH30
Depth	----------	1.0	2.0	3.0	4.0	5.0
Date Sampled		6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	11/07/2017	11/07/2017	11/07/2017	11/07/2017	11/07/2017
Date analysed	-	12/07/2017	12/07/2017	12/07/2017	12/07/2017	12/07/2017
Moisture	%	8.6	9.4	16	6.4	6.9

Moisture						
Our Reference:	UNITS	170939-41	170939-42	170939-43	170939-44	170939-45
Your Reference	---------- -	BH30	BH30	BH31	BH32	BH32
Depth	----------	6.0	7.0	0.1	0.1	1.0
Date Sampled		6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	11/07/2017	11/07/2017	11/07/2017	11/07/2017	11/07/2017
Date analysed	-	12/07/2017	12/07/2017	12/07/2017	12/07/2017	12/07/2017
Moisture	%	7.7	15	16	6.4	15

Moisture						
Our Reference:	UNITS	170939-46	170939-47	170939-48	170939-49	170939-50
Your Reference	---------- -	BH32	BH32	BH32	BH33	BH33
Depth	----------	2.2	3.0	4.0	0.2	1.0
Date Sampled		6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	11/07/2017	11/07/2017	11/07/2017	11/07/2017	11/07/2017
Date analysed	-	12/07/2017	12/07/2017	12/07/2017	12/07/2017	12/07/2017
Moisture	%	9.8	17	13	14	13

Moisture						
Our Reference:	UNITS	170939-51	170939-52	170939-53	170939-54	170939-55
Your Reference	---------- -	BH34	BH35	BH36	BH37	BH38
Depth	----------	0.1	0.1	0.1	0.1	0.1
Date Sampled		6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	11/07/2017	11/07/2017	11/07/2017	11/07/2017	11/07/2017
Date analysed	-	12/07/2017	12/07/2017	12/07/2017	12/07/2017	12/07/2017
Moisture	%	12	15	25	14	25

Moisture						
Our Reference:	UNITS	170939-56	170939-57	170939-58	170939-59	170939-60
Your Reference	---------- -	BH39	Dup1	Dup2	Dup3	Dup4
Depth	----------	0.1	-	-	-	-
Date Sampled		6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	11/07/2017	11/07/2017	11/07/2017	11/07/2017	11/07/2017
Date analysed	-	12/07/2017	12/07/2017	12/07/2017	12/07/2017	12/07/2017
Moisture	%	27	12	13	25	16

Moisture						
Our Reference:	UNITS	170939-63	170939-64	170939-65	170939-66	170939-67
Your Reference	---------- -	BH29	BH29	BH29	BH19	BH21
Depth	----------	6.0	8.0	7.0	0.5	4.0
Date Sampled		6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	11/07/2017	11/07/2017	11/07/2017	11/07/2017	11/07/2017
Date analysed	-	12/07/2017	12/07/2017	12/07/2017	12/07/2017	12/07/2017
Moisture	%	5.5	19	11	12	14

Moisture					
Our Reference:	UNITS	170939-68	170939-69	170939-70	170939-71
Your Reference	---------- -	BH40	BH41	BH42	BH31
Depth	----------	0.1	0.1	0.1	1.0
Date Sampled		6/07/2017	6/07/2017	6/07/2017	6/07/2017
Type of sample		Soil	Soil	Soil	Soil
Date prepared	-	11/07/2017	11/07/2017	11/07/2017	11/07/2017
Date analysed	-	12/07/2017	12/07/2017	12/07/2017	12/07/2017
Moisture	%	7.6	19	10	9.1

Organochlorine Pesticides in soil Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ---------- - ---------- 	170939-5 BH18 0.1 6/07/2017 Soil	170939-7 BH19 0.1 6/07/2017 Soil	170939-8 BH20 0.1 6/07/2017 Soil	170939-11 BH21 0.1 6/07/2017 Soil	170939-14 BH22 0.1 6/07/2017 Soil
Date extracted	-	11/07/2017	11/07/2017	11/07/2017	11/07/2017	11/07/2017
Date analysed	-	11/07/2017	11/07/2017	11/07/2017	11/07/2017	11/07/2017
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
gamma-BHC	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
Heptachlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1	<0.1	0.1	<0.1
alpha-chlordane	mg/kg	0.2	0.1	0.1	0.2	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDT	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
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve DDT+DDD+DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	89	89	90	89	89

Organochlorine Pesticides in soil Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ---------- - ---------- 	170939-16 BH23 0.1 6/07/2017 Soil	170939-18 BH24 0.1 6/07/2017 Soil	170939-21 BH25 0.2 6/07/2017 Soil	170939-22 BH26 0.2 6/07/2017 Soil	170939-23 BH27 0.1 6/07/2017 Soil
Date extracted	-	11/07/2017	11/07/2017	11/07/2017	11/07/2017	11/07/2017
Date analysed	-	11/07/2017	11/07/2017	11/07/2017	11/07/2017	11/07/2017
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
gamma-BHC	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
Heptachlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	0.3	0.1	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDT	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
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve DDT+DDD+DDE	mg/kg	<0.1	0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	91	91	95	94	95

Organochlorine Pesticides in soil Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ---------- - ----------	170939-25 BH28 0.1 6/07/2017 Soil	170939-29 BH29 0.1 6/07/2017 Soil	170939-35 BH30 0.1 6/07/2017 Soil	170939-36 BH30 1.0 6/07/2017 Soil	170939-43 BH31 0.1 6/07/2017 Soil
Date extracted	-	11/07/2017	11/07/2017	11/07/2017	11/07/2017	11/07/2017
Date analysed	-	11/07/2017	11/07/2017	11/07/2017	11/07/2017	11/07/2017
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
gamma-BHC	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
Heptachlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1	0.1	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1	0.1	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDT	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
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve DDT+DDD+DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	93	93	99	102	99

Organochlorine Pesticides in soil Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ---------- - ---------- 	170939-44 BH32 0.1 6/07/2017 Soil	170939-49 BH33 0.2 6/07/2017 Soil	170939-51 BH34 0.1 6/07/2017 Soil	170939-57 Dup1 - 6/07/2017 Soil	170939-66 BH19 0.5 6/07/2017 Soil
Date extracted	-	11/07/2017	11/07/2017	11/07/2017	11/07/2017	11/07/2017
Date analysed	-	11/07/2017	11/07/2017	11/07/2017	14/07/2017	14/07/2017
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
gamma-BHC	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
Heptachlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDT	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
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve DDT+DDD+DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	97	103	106	94	95

Organochlorine Pesticides in soil		
Our Reference:	UNITS	170939-70
Your Reference	---------- -	BH42
Depth	----------	0.1
Date Sampled		6/07/2017
Type of sample		Soil
Date extracted	-	11/07/2017
Date analysed	-	14/07/2017
HCB	mg/kg	<0.1
alpha-BHC	mg/kg	<0.1
gamma-BHC	mg/kg	<0.1
beta-BHC	mg/kg	<0.1
Heptachlor	mg/kg	<0.1
delta-BHC	mg/kg	<0.1
Aldrin	mg/kg	<0.1
Heptachlor Epoxide	mg/kg	<0.1
gamma-Chlordane	mg/kg	<0.1
alpha-chlordane	mg/kg	0.1
Endosulfan I	mg/kg	<0.1
pp-DDE	mg/kg	<0.1
Dieldrin	mg/kg	<0.1
Endrin	mg/kg	<0.1
pp-DDD	mg/kg	<0.1
Endosulfan II	mg/kg	<0.1
pp-DDT	mg/kg	<0.1
Endrin Aldehyde	mg/kg	<0.1
Endosulfan Sulphate	mg/kg	<0.1
Methoxychlor	mg/kg	<0.1
Total +ve DDT+DDD+DDE	mg/kg	<0.1
Surrogate TCMX	%	93

Organophosphorus Pesticides Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ---------- - ----------	170939-5 BH18 0.1 6/07/2017 Soil	170939-7 BH19 0.1 6/07/2017 Soil	170939-8 BH20 0.1 6/07/2017 Soil	170939-11 BH21 0.1 6/07/2017 Soil	170939-14 BH22 0.1 6/07/2017 Soil
Date extracted	-	11/07/2017	11/07/2017	11/07/2017	11/07/2017	11/07/2017
Date analysed	-	11/07/2017	11/07/2017	11/07/2017	11/07/2017	11/07/2017
Azinphos-methyl (Guthion)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos-methyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Diazinon	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dichlorvos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Malathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Parathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	89	89	90	89	89

Organophosphorus Pesticides Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ---------- - ----------	170939-16 BH23 0.1 6/07/2017 Soil	170939-18 BH24 0.1 6/07/2017 Soil	170939-21 BH25 0.2 6/07/2017 Soil	170939-22 BH26 0.2 6/07/2017 Soil	170939-23 BH27 0.1 6/07/2017 Soil
Date extracted	-	11/07/2017	11/07/2017	11/07/2017	11/07/2017	11/07/2017
Date analysed	-	11/07/2017	11/07/2017	11/07/2017	11/07/2017	11/07/2017
Azinphos-methyl (Guthion)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos-methyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Diazinon	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dichlorvos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Malathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Parathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	91	91	95	94	95

Organophosphorus Pesticides Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ---------- - ----------	170939-25 BH28 0.1 6/07/2017 Soil	170939-29 BH29 0.1 6/07/2017 Soil	170939-35 BH30 0.1 6/07/2017 Soil	170939-36 BH30 1.0 6/07/2017 Soil	170939-43 BH31 0.1 6/07/2017 Soil
Date extracted	-	11/07/2017	11/07/2017	11/07/2017	11/07/2017	11/07/2017
Date analysed	-	11/07/2017	11/07/2017	11/07/2017	11/07/2017	11/07/2017
Azinphos-methyl (Guthion)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos-methyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Diazinon	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dichlorvos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Malathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Parathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	93	93	99	102	99

Organophosphorus Pesticides Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ---------- - ----------	170939-44 BH32 0.1 6/07/2017 Soil	170939-49 BH33 0.2 6/07/2017 Soil	170939-51 BH34 0.1 6/07/2017 Soil	170939-57 Dup1 - 6/07/2017 Soil	170939-66 BH19 0.5 6/07/2017 Soil
Date extracted	-	11/07/2017	11/07/2017	11/07/2017	11/07/2017	11/07/2017
Date analysed	-	11/07/2017	11/07/2017	11/07/2017	14/07/2017	14/07/2017
Azinphos-methyl (Guthion)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos-methyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Diazinon	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dichlorvos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Malathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Parathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	97	103	106	94	95

Organophosphorus Pesticides		
Our Reference:	UNITS	170939-70
Your Reference	----------	BH42
	-	
Depth	----------	0.1
Date Sampled		6/07/2017
Type of sample		Soil
Date extracted	-	11/07/2017
Date analysed	-	14/07/2017
Azinphos-methyl (Guthion)	mg/kg	<0.1
Bromophos-ethyl	mg/kg	<0.1
Chlorpyriphos	mg/kg	<0.1
Chlorpyriphos-methyl	mg/kg	<0.1
Diazinon	mg/kg	<0.1
Dichlorvos	mg/kg	<0.1
Dimethoate	mg/kg	<0.1
Ethion	mg/kg	<0.1
Fenitrothion	mg/kg	<0.1
Malathion	mg/kg	<0.1
Parathion	mg/kg	<0.1
Ronnel	mg/kg	<0.1
Surrogate TCMX	%	93

PCBs in Soil						
Our Reference:	UNITS	170939-10	170939-13	170939-20	170939-28	170939-33
Your Reference	----------	BH20	BH21	BH24	BH28	BH29
	-					
Depth	----------	1.9	3.0	2.8	4.0	4.0
Date Sampled		6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	11/07/2017	11/07/2017	11/07/2017	11/07/2017	11/07/2017
Date analysed	-	11/07/2017	11/07/2017	11/07/2017	11/07/2017	11/07/2017
Aroclor 1016	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1221	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1232	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1242	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1248	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1254	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1260	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PCBs (1016-1260)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCLMX	%	89	91	112	108	100

PCBs in Soil						
Our Reference:	UNITS	170939-36	170939-41	170939-51	170939-57	170939-66
Your Reference	----------	BH30	BH30	BH34	Dup1	BH19
	-					
Depth	----------	1.0	6.0	0.1	-	0.5
Date Sampled		6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	11/07/2017	11/07/2017	11/07/2017	11/07/2017	11/07/2017
Date analysed	-	11/07/2017	11/07/2017	11/07/2017	14/07/2017	14/07/2017
Aroclor 1016	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1221	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1232	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1242	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1248	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1254	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1260	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PCBs (1016-1260)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCLMX	%	102	97	106	94	95

Triazine Herbicides in Soil					
Our Reference:	UNITS	170939-36	170939-51	170939-57	170939-66
Your Reference	---------- -	BH30	BH34	Dup1	BH19
Depth	----------	1.0	0.1	-	0.5
Date Sampled		6/07/2017	6/07/2017	6/07/2017	6/07/2017
Type of sample		Soil	Soil	Soil	Soil
Date prepared	-	11/07/2017	11/07/2017	11/07/2017	11/07/2017
Date analysed	-	11/07/2017	11/07/2017	11/07/2017	11/07/2017
Atrazine	mg/kg	<0.5	<0.5	<0.5	<0.5
Ametryn	mg/kg	<0.5	<0.5	<0.5	<0.5
Cyanazine	mg/kg	<0.5	<0.5	<0.5	<0.5
Hexazinone	mg/kg	<0.5	<0.5	<0.5	<0.5
Irgarol	mg/kg	<0.5	<0.5	<0.5	<0.5
Metribuzin	mg/kg	<0.5	<0.5	<0.5	<0.5
Prometryn	mg/kg	<0.5	<0.5	<0.5	<0.5
Propazine	mg/kg	<0.5	<0.5	<0.5	<0.5
Simazine	mg/kg	<0.5	<0.5	<0.5	<0.5
Terbutryn	mg/kg	<0.5	<0.5	<0.5	<0.5
Terbuthylazine	mg/kg	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d_{14}	%	93	92	101	96

Speciated Phenols in Soil Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ---------- - ---------- 	170939-36 BH30 1.0 6/07/2017 Soil	170939-51 BH34 0.1 6/07/2017 Soil	170939-57 Dup1 - 6/07/2017 Soil	170939-66 BH19 0.5 6/07/2017 Soil
Date extracted	-	11/07/2017	11/07/2017	11/07/2017	11/07/2017
Date analysed	-	12/07/2017	12/07/2017	12/07/2017	12/07/2017
Phenol	mg/kg	<0.2	<0.2	<0.2	<0.2
2-Chlorophenol	mg/kg	<0.2	<0.2	<0.2	<0.2
4-Chloro-3-methylphenol	mg/kg	<1	<1	<1	<1
2-Methylphenol (o-cresol)	mg/kg	<0.2	<0.2	<0.2	<0.2
3/4-Methylphenol (m/p-cresol)	mg/kg	<0.4	<0.4	<0.4	<0.4
2-Nitrophenol	mg/kg	<0.2	<0.2	<0.2	<0.2
2,4 -Dimethylphenol	mg/kg	<0.2	<0.2	<0.2	<0.2
2,4-Dichlorophenol	mg/kg	<0.2	<0.2	<0.2	<0.2
2,6-Dichlorophenol	mg/kg	<0.2	<0.2	<0.2	<0.2
2,4,5-Trichlorophenol	mg/kg	<0.2	<0.2	<0.2	<0.2
2,4,6-Trichlorophenol	mg/kg	<0.2	<0.2	<0.2	<0.2
2,4-Dinitrophenol	mg/kg	<4	<4	<4	<4
4-Nitrophenol	mg/kg	<4	<4	<4	<4
2346-Tetrachlorophenol	mg/kg	<0.2	<0.2	<0.2	<0.2
2-methyl-4,6-Dinitrophenol	mg/kg	<2	<2	<2	<2
Pentachlorophenol	mg/kg	<1	<1	<1	<1
Surrogate 2-fluorophenol	%	88	97	96	47
Surrogate Phenol-d_6	%	83	88	88	87
Surrogate 2,4,6-Tribromophenol	%	91	118	125	112
Surrogate p-Terphenyl-d_{14}	%	93	95	97	94

Misc Inorg - Soil						
Our Reference:	UNITS	170939-5	170939-7	170939-8	170939-14	170939-18
Your Reference	---------- -	BH18	BH19	BH20	BH22	BH24
Depth	----------	0.1	0.1	0.1	0.1	0.1
Date Sampled		6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	13/07/2017	13/07/2017	13/07/2017	13/07/2017	13/07/2017
Date analysed	-	13/07/2017	13/07/2017	13/07/2017	13/07/2017	13/07/2017
pH 1:5 soil:water	pH Units	5.8	5.6	5.8	8.4	6.0

Misc Inorg - Soil						
Our Reference:	UNITS	170939-23	170939-29	170939-36	170939-44	170939-51
Your Reference	---------- -	BH27	BH29	BH30	BH32	BH34
Depth	----------	0.1	0.1	1.0	0.1	0.1
Date Sampled		6/07/2017	6/07/2017	6/07/2017	6/07/2017	6/07/2017
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	13/07/2017	13/07/2017	13/07/2017	13/07/2017	13/07/2017
Date analysed	-	13/07/2017	13/07/2017	13/07/2017	13/07/2017	13/07/2017
pH 1:5 soil:water	pH Units	7.9	6.1	8.6	8.0	5.2

Misc Inorg - Soil			
Our Reference:	UNITS	170939-57	170939-66
Your Reference	---------- -	Dup1	BH19
Depth	----------	-	0.5
Date Sampled		6/07/2017	6/07/2017
Type of sample		Soil	Soil
Date prepared	-	13/07/2017	13/07/2017
Date analysed	-	13/07/2017	13/07/2017
pH 1:5 soil:water	pH Units	5.5	5.3

Misc Soil - Inorg					
Our Reference:	UNITS	170939-36	170939-51	170939-57	170939-66
Your Reference	----------	BH30	BH34	Dup1	BH19
	-				
Depth	----------	1.0	0.1	-	0.5
Date Sampled		6/07/2017	6/07/2017	6/07/2017	6/07/2017
Type of sample		Soil	Soil	Soil	Soil
Date prepared	-	14/07/2017	14/07/2017	14/07/2017	14/07/2017
Date analysed	-	14/07/2017	14/07/2017	14/07/2017	14/07/2017
Hexavalent Chromium, Cr^{6+}	mg/kg	<1	<1	<1	<1

Misc Soil - Inorg					
Our Reference:	UNITS	170939-36	170939-51	170939-57	170939-66
Your Reference	----------	BH30	BH34	Dup1	BH19
	-				
Depth	----------	1.0	0.1	-	0.5
Date Sampled		6/07/2017	6/07/2017	6/07/2017	6/07/2017
Type of sample		Soil	Soil	Soil	Soil
Date prepared	-	11/07/2017	11/07/2017	11/07/2017	11/07/2017
Date analysed	-	11/07/2017	11/07/2017	11/07/2017	11/07/2017
Total Phenolics (as Phenol)	mg/kg	<5	<5	<5	<5
Free Cyanide in soil	mg/kg	<0.5	<0.5	<0.5	<0.5

Phenoxy Acid Herbicides in Soil Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ---------- - ----------	170939-36 BH30 1.0 6/07/2017 Soil	170939-51 BH34 0.1 6/07/2017 Soil	170939-57 Dup1 - 6/07/2017 Soil	170939-66 BH19 0.5 6/07/2017 Soil
Date extracted	-	14/07/2017	14/07/2017	14/07/2017	14/07/2017
Date analysed	-	14/07/2017	14/07/2017	14/07/2017	14/07/2017
Clopyralid	mg/kg	<0.5	<0.5	<0.5	<0.5
3,5-Dichlorobenzoic acid	mg/kg	<0.5	<0.5	<0.5	<0.5
o-chlorophenoxy acetic acid	mg/kg	<0.5	<0.5	<0.5	<0.5
4-CPA	mg/kg	<0.5	<0.5	<0.5	<0.5
Dicamba	mg/kg	<0.5	<0.5	<0.5	<0.5
MCPP	mg/kg	<0.5	<0.5	<0.5	<0.5
MCPA	mg/kg	<0.5	<0.5	<0.5	<0.5
Dichlorprop	mg/kg	<0.5	<0.5	<0.5	<0.5
2,4-D	mg/kg	<0.5	<0.5	<0.5	<0.5
Bromoxynil	mg/kg	<0.5	<0.5	<0.5	<0.5
Triclopyr	mg/kg	<0.5	<0.5	<0.5	<0.5
2,4,5-TP	mg/kg	<0.5	<0.5	<0.5	<0.5
2,4,5-T	mg/kg	<0.5	<0.5	<0.5	<0.5
MCPB	mg/kg	<0.5	<0.5	<0.5	<0.5
Dinoseb	mg/kg	<1	<1	<1	<1
2,4-DB	mg/kg	<0.5	<0.5	<0.5	<0.5
Ioxynil	mg/kg	<1	<1	<1	<1
Picloram	mg/kg	<0.5	<0.5	<0.5	<0.5
DCPA (Chlorthal) Diacid	mg/kg	<0.5	<0.5	<0.5	<0.5
Acifluorfen	mg/kg	<2	<2	<2	<2
2,4,6-T	mg/kg	<0.5	<0.5	<0.5	<0.5
2,6-D	mg/kg	<0.5	<0.5	<0.5	<0.5
Surrogate 2.4- DCPA	%	96	98	102	102

Synthetic Pyrethroids in soil					
Our Reference:	UNITS	170939-36	170939-51	170939-57	170939-66
Your Reference	----------	BH30	BH34	Dup1	BH19
	-				
Depth	----------	1.0	0.1	-	0.5
Date Sampled		6/07/2017	6/07/2017	6/07/2017	6/07/2017
Type of sample		Soil	Soil	Soil	Soil
Date extracted	-	13/07/2017	13/07/2017	13/07/2017	13/07/2017
Date analysed	-	14/07/2017	14/07/2017	14/07/2017	14/07/2017
Bifenthrin	mg/kg	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d_{14}	%	114	116	116	112

SVOCs in Soil					
Our Reference:	UNITS	170939-36	170939-51	170939-57	170939-66
Your Reference	----------	BH30	BH34	Dup1	BH19
	-				
Depth	----------	1.0	0.1	-	0.5
Date Sampled		6/07/2017	6/07/2017	6/07/2017	6/07/2017
Type of sample		Soil	Soil	Soil	Soil
Date extracted	-	13/07/2017	13/07/2017	13/07/2017	13/07/2017
Date analysed	-	14/07/2017	14/07/2017	14/07/2017	14/07/2017
Toxaphene*	mg/kg	<2.0	<2.0	<2.0	<2.0
Mirex	mg/kg	<0.5	<0.5	<0.5	<0.5

vTRH in Water (C6-C9) NEPM		
Our Reference:	UNITS	170939-61
Your Reference	----------	Trip
	-	
Depth	----------	-
Date Sampled		6/07/2017
Type of sample		Water
Date extracted	-	11/07/2017
Date analysed	-	12/07/2017
$TRHC_6$ - C_9	µg/L	<10
$TRHC_6$ - C_{10}	µg/L	<10
Surrogate Dibromofluoromethane	%	99
Surrogate toluene-d8	%	90
Surrogate 4-BFB	%	92

Metals in Water - Dissolved		
Our Reference:	UNITS	170939-62
Your Reference	----------	Rinsate
	-	
Depth	----------	-
Date Sampled		6/07/2017
Type of sample		Water
Date digested	-	11/07/2017
Date analysed	-	11/07/2017
Arsenic - Dissolved	mg/L	<0.05
Cadmium - Dissolved	mg/L	<0.01
Chromium - Dissolved	mg/L	<0.01
Copper - Dissolved	mg/L	<0.01
Lead - Dissolved	mg/L	<0.03
Mercury - Dissolved	mg/L	<0.0005
Nickel - Dissolved	mg/L	<0.02
Zinc - Dissolved	mg/L	<0.02

Method ID	Methodology Summary
Org-016	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater.
Org-016	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater. Note, the Total +ve Xylene PQL is reflective of the lowest individual PQL and is therefore "Total +ve Xylenes" is simply a sum of the positive individual Xylenes.
Org-014	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS.
Org-003	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis.
Org-003	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis. Note, the Total +ve TRH PQL is reflective of the lowest individual PQL and is therefore "Total +ve TRH" is simply a sum of the positive individual TRH fractions (>C10-C40).
Org-012	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS. Benzo(a)pyrene TEQ as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater - 2013. For soil results:- 1. 'TEQ PQL' values are assuming all contributing PAHs reported as <PQL are actually at the PQL. This is the most conservative approach and can give false positive TEQs given that PAHs that contribute to the TEQ calculation may not be present. 2. 'TEQ zero' values are assuming all contributing PAHs reported as <PQL are zero. This is the least conservative approach and is more susceptible to false negative TEQs when PAHs that contribute to the TEQ calculation are present but below PQL. 3. 'TEQ half PQL' values are assuming all contributing PAHs reported as <PQL are half the stipulated PQL. Hence a mid-point between the most and least conservative approaches above. Note, the Total +ve PAHs PQL is reflective of the lowest individual PQL and is therefore "Total +ve PAHs" is simply a sum of the positive individual PAHs.
Metals-020	Determination of various metals by ICP-AES.
Metals-021	Determination of Mercury by Cold Vapour AAS.
Inorg-008	Moisture content determined by heating at 105+/-5 °C for a minimum of 12 hours.
Org-005	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC with dual ECD's.
Org-005	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC with dual ECD's. Note, the Total +ve reported DDD+DDE+DDT PQL is reflective of the lowest individual PQL and is therefore simply a sum of the positive individually report DDD+DDE+DDT.
Org-008	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC with dual ECD's.
Org-006	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD.

Method ID	Methodology Summary
Org-006	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD. Note, the Total +ve PCBs PQL is reflective of the lowest individual PQL and is therefore" Total +ve PCBs" is simply a sum of the positive individual PCBs.
Org-012	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS.
Inorg-001	pH - Measured using pH meter and electrode in accordance with APHA latest edition, 4500-H+. Please note that the results for water analyses are indicative only, as analysis outside of the APHA storage times.
Inorg-024	Hexavalent Chromium (Cr6+) - determined colourimetrically.
Inorg-031	Total Phenolics by segmented flow analyser (in line distillation with colourimetric finish). Solids are extracted in a caustic media prior to analysis.
Inorg-014	Cyanide - free, total, weak acid dissociable by segmented flow analyser (in line dialysis with colourimetric finish). Solids are extracted in a caustic media prior to analysis.
Ext-054	Analysed by MPL Envirolab
Org-012VIC	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS. Samples analysed at Envirolab Melbourne, NATA site accreditation no. 21192.
External data	Field data provided by client

QUALITY CONTROL vTRH(C6-C10)/BTEXN in Soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
Date extracted	-			11/07/2017	[NT]	[NT]	LCS-6	11/07/2017
Date analysed	-			12/07/2017	[NT]	[NT]	LCS-6	12/07/2017
TRHC$_6$ - C$_9$	mg/kg	25	Org-016	<25	[NT]	[NT]	LCS-6	113%
TRHC$_6$ - C$_{10}$	mg/kg	25	Org-016	<25	[NT]	[NT]	LCS-6	113%
Benzene	mg/kg	0.2	Org-016	<0.2	[NT]	[NT]	LCS-6	112%
Toluene	mg/kg	0.5	Org-016	<0.5	[NT]	[NT]	LCS-6	111%
Ethylbenzene	mg/kg	1	Org-016	<1	[NT]	[NT]	LCS-6	112%
m+p-xylene	mg/kg	2	Org-016	<2	[NT]	[NT]	LCS-6	116%
o-Xylene	mg/kg	1	Org-016	<1	[NT]	[NT]	LCS-6	115%
naphthalene	mg/kg	1	Org-014	<1	[NT]	[NT]	[NR]	[NR]
Surrogate aaa-Trifluorotoluene	%		Org-016	97	[NT]	[NT]	LCS-6	100%

QUALITY CONTROL svTRH (C10-C40) in Soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
Date extracted	-			11/07/2017	[NT]	[NT]	LCS-6	11/07/2017
Date analysed	-			12/07/2017	[NT]	[NT]	LCS-6	12/07/2017
TRHC$_{10}$ - C$_{14}$	mg/kg	50	Org-003	<50	[NT]	[NT]	LCS-6	114%
TRHC$_{15}$ - C$_{28}$	mg/kg	100	Org-003	<100	[NT]	[NT]	LCS-6	112%
TRHC$_{29}$ - C$_{36}$	mg/kg	100	Org-003	<100	[NT]	[NT]	LCS-6	106%
TRH>C$_{10}$-C$_{16}$	mg/kg	50	Org-003	<50	[NT]	[NT]	LCS-6	114%
TRH>C$_{16}$-C$_{34}$	mg/kg	100	Org-003	<100	[NT]	[NT]	LCS-6	112%
TRH>C$_{34}$-C$_{40}$	mg/kg	100	Org-003	<100	[NT]	[NT]	LCS-6	106%
Surrogate o-Terphenyl	%		Org-003	91	[NT]	[NT]	LCS-6	119%

QUALITY CONTROL PAHs in Soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
Date extracted	-			11/07/2017	[NT]	[NT]	LCS-6	11/07/2017
Date analysed	-			12/07/2017	[NT]	[NT]	LCS-6	12/07/2017
Naphthalene	mg/kg	0.1	Org-012	<0.1	[NT]	[NT]	LCS-6	112%
Acenaphthylene	mg/kg	0.1	Org-012	<0.1	[NT]	[NT]	[NR]	[NR]
Acenaphthene	mg/kg	0.1	Org-012	<0.1	[NT]	[NT]	[NR]	[NR]
Fluorene	mg/kg	0.1	Org-012	<0.1	[NT]	[NT]	LCS-6	100%
Phenanthrene	mg/kg	0.1	Org-012	<0.1	[NT]	[NT]	LCS-6	106%
Anthracene	mg/kg	0.1	Org-012	<0.1	[NT]	[NT]	[NR]	[NR]
Fluoranthene	mg/kg	0.1	Org-012	<0.1	[NT]	[NT]	LCS-6	103%
Pyrene	mg/kg	0.1	Org-012	<0.1	[NT]	[NT]	LCS-6	102%
Benzo(a)anthracene	mg/kg	0.1	Org-012	<0.1	[NT]	[NT]	[NR]	[NR]
Chrysene	mg/kg	0.1	Org-012	<0.1	[NT]	[NT]	LCS-6	123%
Benzo(b,j+k) fluoranthene	mg/kg	0.2	Org-012	<0.2	[NT]	[NT]	[NR]	[NR]

QUALITY CONTROL PAHs in Soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
Benzo(a)pyrene	mg/kg	0.05	Org-012	<0.05	[NT]	[NT]	LCS-6	100%
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-012	<0.1	[NT]	[NT]	[NR]	[NR]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-012	<0.1	[NT]	[NT]	[NR]	[NR]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-012	<0.1	[NT]	[NT]	[NR]	[NR]
Surrogate p-Terphenyl-d14	%		Org-012	84	[NT]	[NT]	LCS-6	118%

QUALITY CONTROL Acid Extractractable metals in soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
Date prepared	-			13/07/2017	170939-1	13/07/2017 || 13/07/2017	LCS-6	13/07/2017
Date analysed	-			13/07/2017	170939-1	13/07/2017 || 13/07/2017	LCS-6	13/07/2017
Arsenic	mg/kg	4	Metals-020	<4	170939-1	8 || 11 || RPD: 32	LCS-6	106%
Beryllium	mg/kg	1	Metals-020	<1	[NT]	[NT]	LCS-6	94%
Boron	mg/kg	3	Metals-020	<3	[NT]	[NT]	LCS-6	101%
Cadmium	mg/kg	0.4	Metals-020	<0.4	170939-1	<0.4 || <0.4	LCS-6	101%
Chromium	mg/kg	1	Metals-020	<1	170939-1	12 || 16 || RPD: 29	LCS-6	105%
Cobalt	mg/kg	1	Metals-020	<1	[NT]	[NT]	LCS-6	99%
Copper	mg/kg	1	Metals-020	<1	170939-1	21 || 36 || RPD: 53	LCS-6	105%
Lead	mg/kg	1	Metals-020	<1	170939-1	89 || 170 || RPD: 63	LCS-6	100%
Manganese	mg/kg	1	Metals-020	<1	[NT]	[NT]	LCS-6	125%
Mercury	mg/kg	0.1	Metals-021	<0.1	170939-1	0.2 || 0.2 || RPD: 0	LCS-6	107%
Nickel	mg/kg	1	Metals-020	<1	170939-1	9 || 15 || RPD: 50	LCS-6	99%
Selenium	mg/kg	2	Metals-020	<2	[NT]	[NT]	LCS-6	98%
Zinc	mg/kg	1	Metals-020	<1	170939-1	84 || 110 || RPD: 27	LCS-6	101%

QUALITY CONTROL Organochlorine Pesticides in soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
Date extracted	-			11/07/2017	[NT]	[NT]	LCS-6	11/07/2017
Date analysed	-			11/07/2017	[NT]	[NT]	LCS-6	11/07/2017
HCB	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NR]	[NR]
alpha-BHC	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	LCS-6	70%
gamma-BHC	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NR]	[NR]
beta-BHC	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	LCS-6	103%
Heptachlor	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	LCS-6	105%
delta-BHC	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NR]	[NR]
Aldrin	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	LCS-6	102%
Heptachlor Epoxide	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	LCS-6	105%
gamma-Chlordane	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NR]	[NR]
alpha-chlordane	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NR]	[NR]
Endosulfan I	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NR]	[NR]
pp-DDE	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	LCS-6	112%
Dieldrin	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	LCS-6	114%
Endrin	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	LCS-6	101%
pp-DDD	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	LCS-6	108%
Endosulfan II	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NR]	[NR]
pp-DDT	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NR]	[NR]
Endrin Aldehyde	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NR]	[NR]
Endosulfan Sulphate	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NR]	[NR]
Methoxychlor	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NR]	[NR]
Surrogate TCMX	%		Org-005	101	[NT]	[NT]	LCS-6	117%

QUALITY CONTROL Organophosphorus Pesticides	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
Date extracted	-			11/07/2017	[NT]	[NT]	LCS-6	11/07/2017
Date analysed	-			11/07/2017	[NT]	[NT]	LCS-6	11/07/2017
Azinphos-methyl (Guthion)	mg/kg	0.1	Org-008	<0.1	[NT]	[NT]	[NR]	[NR]
Bromophos-ethyl	mg/kg	0.1	Org-008	<0.1	[NT]	[NT]	[NR]	[NR]
Chlorpyriphos	mg/kg	0.1	Org-008	<0.1	[NT]	[NT]	LCS-6	87%
Chlorpyriphos-methyl	mg/kg	0.1	Org-008	<0.1	[NT]	[NT]	[NR]	[NR]
Diazinon	mg/kg	0.1	Org-008	<0.1	[NT]	[NT]	[NR]	[NR]
Dichlorvos	mg/kg	0.1	Org-008	<0.1	[NT]	[NT]	LCS-6	80%
Dimethoate	mg/kg	0.1	Org-008	<0.1	[NT]	[NT]	[NR]	[NR]
Ethion	mg/kg	0.1	Org-008	<0.1	[NT]	[NT]	LCS-6	107%
Fenitrothion	mg/kg	0.1	Org-008	<0.1	[NT]	[NT]	LCS-6	83%
Malathion	mg/kg	0.1	Org-008	<0.1	[NT]	[NT]	LCS-6	72%
Parathion	mg/kg	0.1	Org-008	<0.1	[NT]	[NT]	LCS-6	84%
Ronnel	mg/kg	0.1	Org-008	<0.1	[NT]	[NT]	LCS-6	98%
Surrogate TCMX	%		Org-008	101	[NT]	[NT]	LCS-6	95%

QUALITY CONTROL PCBs in Soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
Date extracted	-			11/07/2017	[NT]	[NT]	LCS-6	11/07/2017
Date analysed	-			11/07/2017	[NT]	[NT]	LCS-6	11/07/2017
Aroclor 1016	mg/kg	0.1	Org-006	<0.1	[NT]	[NT]	[NR]	[NR]
Aroclor 1221	mg/kg	0.1	Org-006	<0.1	[NT]	[NT]	[NR]	[NR]
Aroclor 1232	mg/kg	0.1	Org-006	<0.1	[NT]	[NT]	[NR]	[NR]
Aroclor 1242	mg/kg	0.1	Org-006	<0.1	[NT]	[NT]	[NR]	[NR]
Aroclor 1248	mg/kg	0.1	Org-006	<0.1	[NT]	[NT]	[NR]	[NR]
Aroclor 1254	mg/kg	0.1	Org-006	<0.1	[NT]	[NT]	LCS-6	105%
Aroclor 1260	mg/kg	0.1	Org-006	<0.1	[NT]	[NT]	[NR]	[NR]
Surrogate TCLMX	%		Org-006	101	[NT]	[NT]	LCS-6	95%

QUALITY CONTROL Triazine Herbicides in Soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
Date prepared	-			11/07/2017	[NT]	[NT]	LCS-6	11/07/2017
Date analysed	-			11/07/2017	[NT]	[NT]	LCS-6	11/07/2017
Atrazine	mg/kg	0.5	Org-012	<0.5	[NT]	[NT]	LCS-6	92%
Ametryn	mg/kg	0.5	Org-012	<0.5	[NT]	[NT]	[NR]	[NR]
Cyanazine	mg/kg	0.5	Org-012	<0.5	[NT]	[NT]	[NR]	[NR]
Hexazinone	mg/kg	0.5	Org-012	<0.5	[NT]	[NT]	[NR]	[NR]
Irgarol	mg/kg	0.5	Org-012	<0.5	[NT]	[NT]	[NR]	[NR]
Metribuzin	mg/kg	0.5	Org-012	<0.5	[NT]	[NT]	[NR]	[NR]
Prometryn	mg/kg	0.5	Org-012	<0.5	[NT]	[NT]	LCS-6	96%
Propazine	mg/kg	0.5	Org-012	<0.5	[NT]	[NT]	LCS-6	98%
Simazine	mg/kg	0.5	Org-012	<0.5	[NT]	[NT]	[NR]	[NR]
Terbutryn	mg/kg	0.5	Org-012	<0.5	[NT]	[NT]	[NR]	[NR]
Terbuthylazine	mg/kg	0.5	Org-012	<0.5	[NT]	[NT]	[NR]	[NR]
Surrogate p-Terphenyl-d_{14}	%		Org-012	95	[NT]	[NT]	LCS-6	93%

QUALITY CONTROL Speciated Phenols in Soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
Date extracted	-			11/07/2017	[NT]	[NT]	LCS-6	11/07/2017
Date analysed	-			12/07/2017	[NT]	[NT]	LCS-6	12/07/2017
Phenol	mg/kg	0.2	Org-012	<0.2	[NT]	[NT]	LCS-6	72%
2-Chlorophenol	mg/kg	0.2	Org-012	<0.2	[NT]	[NT]	LCS-6	86%
4-Chloro-3-methylphenol	mg/kg	1	Org-012	<1	[NT]	[NT]	[NR]	[NR]
2-Methylphenol (o-cresol)	mg/kg	0.2	Org-012	<0.2	[NT]	[NT]	LCS-6	102%
3/4-Methylphenol (m/p-cresol)	mg/kg	0.4	Org-012	<0.4	[NT]	[NT]	[NR]	[NR]
2-Nitrophenol	mg/kg	0.2	Org-012	<0.2	[NT]	[NT]	[NR]	[NR]
2,4-Dimethylphenol	mg/kg	0.2	Org-012	<0.2	[NT]	[NT]	[NR]	[NR]
2,4-Dichlorophenol	mg/kg	0.2	Org-012	<0.2	[NT]	[NT]	[NR]	[NR]
2,6-Dichlorophenol	mg/kg	0.2	Org-012	<0.2	[NT]	[NT]	LCS-6	98%
2,4,5-Trichlorophenol	mg/kg	0.2	Org-012	<0.2	[NT]	[NT]	[NR]	[NR]
2,4,6-Trichlorophenol	mg/kg	0.2	Org-012	<0.2	[NT]	[NT]	[NR]	[NR]
2,4-Dinitrophenol	mg/kg	4	Org-012	<4	[NT]	[NT]	[NR]	[NR]
4-Nitrophenol	mg/kg	4	Org-012	<4	[NT]	[NT]	LCS-6	100%
2346-Tetrachlorophenol	mg/kg	0.2	Org-012	<0.2	[NT]	[NT]	[NR]	[NR]
2-methyl-4,6-Dinitrophenol	mg/kg	2	Org-012	<2	[NT]	[NT]	[NR]	[NR]
Pentachlorophenol	mg/kg	1	Org-012	<1	[NT]	[NT]	LCS-6	114%
Surrogate 2-fluorophenol	%		Org-012	87	[NT]	[NT]	LCS-6	99%
Surrogate Phenol-d_6	%		Org-012	79	[NT]	[NT]	LCS-6	112%
Surrogate 2,4,6-Tribromophenol	%		Org-012	108	[NT]	[NT]	LCS-6	128%

QUALITY CONTROL Speciated Phenols in Soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
Surrogate p-Terphenyl-d_{14}	%		Org-012	87	[NT]	[NT]	LCS-6	100%
QUALITY CONTROL Misc Inorg - Soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
Date prepared	-			13/07/2017	[NT]	[NT]	LCS-6	13/07/2017
Date analysed	-			13/07/2017	[NT]	[NT]	LCS-6	13/07/2017
pH 1:5 soil:water	pH Units		Inorg-001	[NT]	[NT]	[NT]	LCS-6	101%
QUALITY CONTROL Misc Soil - Inorg	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
Date prepared	-			14/07/2017	[NT]	[NT]	LCS-6	14/07/2017
Date analysed	-			14/07/2017	[NT]	[NT]	LCS-6	14/07/2017
Hexavalent Chromium, Cr^{6+}	mg/kg	1	Inorg-024	<1	[NT]	[NT]	LCS-6	86%
QUALITY CONTROL Misc Soil - Inorg	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
Date prepared	-			11/07/2017	[NT]	[NT]	LCS-6	11/07/2017
Date analysed	-			11/07/2017	[NT]	[NT]	LCS-6	11/07/2017
Total Phenolics (as Phenol)	mg/kg	5	Inorg-031	<5	[NT]	[NT]	LCS-6	97%
Free Cyanide in soil	mg/kg	0.5	Inorg-014	<0.5	[NT]	[NT]	LCS-6	102%

QUALITY CONTROL Phenoxy Acid Herbicides in Soil	UNITS	PQL	METHOD	Blank
Date extracted	-			14/07/2017
Date analysed	-			14/07/2017
Clopyralid	mg/kg	0.5	Ext-054	<0.5
3,5-Dichlorobenzoic acid	mg/kg	0.5	Ext-054	<0.5
o-chlorophenoxy acetic acid	mg/kg	0.5	Ext-054	<0.5
4-CPA	mg/kg	0.5	Ext-054	<0.5
Dicamba	mg/kg	0.5	Ext-054	<0.5
MCPP	mg/kg	0.5	Ext-054	<0.5
MCPA	mg/kg	0.5	Ext-054	<0.5
Dichlorprop	mg/kg	0.5	Ext-054	<0.5
2,4-D	mg/kg	0.5	Ext-054	<0.5
Bromoxynil	mg/kg	0.5	Ext-054	<0.5
Triclopyr	mg/kg	0.5	Ext-054	<0.5
2,4,5-TP	mg/kg	0.5	Ext-054	<0.5

QUALITY CONTROL Phenoxy Acid Herbicides in Soil	UNITS	PQL	METHOD	Blank
2,4,5-T	mg/kg	0.5	Ext-054	<0.5
MCPB	mg/kg	0.5	Ext-054	<0.5
Dinoseb	mg/kg	1	Ext-054	<1
2,4-DB	mg/kg	0.5	Ext-054	<0.5
Ioxynil	mg/kg	1	Ext-054	<1
Picloram	mg/kg	0.5	Ext-054	<0.5
DCPA (Chlorthal) Diacid	mg/kg	0.5	Ext-054	<0.5
Acifluorfen	mg/kg	2	Ext-054	<2
2,4,6-T	mg/kg	0.5	Ext-054	<0.5
2,6-D	mg/kg	0.5	Ext-054	<0.5
Surrogate 2.4- DCPA	%		Ext-054	102
QUALITY CONTROL Synthetic Pyrethroids in soil	**UNITS**	**PQL**	**METHOD**	**Blank**
Date extracted	-		Org-012VIC	13/07/2017
Date analysed	-		Org-012VIC	14/07/2017
Bifenthrin	mg/kg	0.5	Org-012VIC	<0.5
Surrogate p-Terphenyl-d_{14}	%		Org-012	108
QUALITY CONTROL SVOCs in Soil	**UNITS**	**PQL**	**METHOD**	**Blank**
Date extracted	-			13/07/2017
Date analysed	-			14/07/2017
Toxaphene*	mg/kg	2	External data	<2.0
Mirex	mg/kg	0.5	External data	<0.5
QUALITY CONTROL vTRH in Water (C6-C9) NEPM	**UNITS**	**PQL**	**METHOD**	**Blank**
Date extracted	-			11/07/2017
Date analysed	-			12/07/2017
$TRHC_6$ - C_9	µg/L	10	Org-016	<10
$TRHC_6$ - C_{10}	µg/L	10	Org-016	<10
Surrogate Dibromofluoromethane	%		Org-016	97
Surrogate toluene-d8	%		Org-016	91
Surrogate 4-BFB	%		Org-016	94

QUALITY CONTROL Metals in Water - Dissolved	UNITS	PQL	METHOD	Blank
Date digested	-			11/07/2017
Date analysed	-			11/07/2017
Arsenic - Dissolved	mg/L	0.05	Metals-020	<0.05
Cadmium - Dissolved	mg/L	0.01	Metals-020	<0.01
Chromium - Dissolved	mg/L	0.01	Metals-020	<0.01
Copper - Dissolved	mg/L	0.01	Metals-020	<0.01
Lead - Dissolved	mg/L	0.03	Metals-020	<0.03
Mercury - Dissolved	mg/L	0.0005	Metals-021	<0.0005
Nickel - Dissolved	mg/L	0.02	Metals-020	<0.02
Zinc - Dissolved	mg/L	0.02	Metals-020	<0.02

QUALITY CONTROL PAHs in Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date extracted	-	[NT]	[NT]	LCS-7	11/07/2017
Date analysed	-	[NT]	[NT]	LCS-7	12/07/2017
Naphthalene	mg/kg	[NT]	[NT]	LCS-7	112%
Acenaphthylene	mg/kg	[NT]	[NT]	[NR]	[NR]
Acenaphthene	mg/kg	[NT]	[NT]	[NR]	[NR]
Fluorene	mg/kg	[NT]	[NT]	LCS-7	100%
Phenanthrene	mg/kg	[NT]	[NT]	LCS-7	107%
Anthracene	mg/kg	[NT]	[NT]	[NR]	[NR]
Fluoranthene	mg/kg	[NT]	[NT]	LCS-7	105%
Pyrene	mg/kg	[NT]	[NT]	LCS-7	103%
Benzo(a)anthracene	mg/kg	[NT]	[NT]	[NR]	[NR]
Chrysene	mg/kg	[NT]	[NT]	LCS-7	122%
Benzo(b,j+k)fluoranthene	mg/kg	[NT]	[NT]	[NR]	[NR]
Benzo(a)pyrene	mg/kg	[NT]	[NT]	LCS-7	99%
Indeno(1,2,3-c,d)pyrene	mg/kg	[NT]	[NT]	[NR]	[NR]
Dibenzo(a,h)anthracene	mg/kg	[NT]	[NT]	[NR]	[NR]
Benzo(g,h,i)perylene	mg/kg	[NT]	[NT]	[NR]	[NR]
Surrogate p-Terphenyl-d14	%	[NT]	[NT]	LCS-7	120%

QUALITY CONTROL Acid Extractractable metals in soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date prepared	-	170939-11	13/07/2017 || 13/07/2017	LCS-7	13/07/2017
Date analysed	-	170939-11	13/07/2017 || 13/07/2017	LCS-7	13/07/2017
Arsenic	mg/kg	170939-11	<4 || <4	LCS-7	104%
Beryllium	mg/kg	[NT]	[NT]	LCS-7	93%
Boron	mg/kg	[NT]	[NT]	LCS-7	99%
Cadmium	mg/kg	170939-11	<0.4 || <0.4	LCS-7	101%
Chromium	mg/kg	170939-11	14 || 10 || RPD: 33	LCS-7	104%
Cobalt	mg/kg	[NT]	[NT]	LCS-7	98%
Copper	mg/kg	170939-11	9 || 9 || RPD: 0	LCS-7	104%
Lead	mg/kg	170939-11	12 || 10 || RPD: 18	LCS-7	100%
Manganese	mg/kg	[NT]	[NT]	LCS-7	119%
Mercury	mg/kg	170939-11	2.7 || 2.4 || RPD: 12	LCS-7	105%
Nickel	mg/kg	170939-11	4 || 3 || RPD: 29	LCS-7	99%
Selenium	mg/kg	[NT]	[NT]	LCS-7	97%
Zinc	mg/kg	170939-11	19 || 14 || RPD: 30	LCS-7	100%

QUALITY CONTROL Organochlorine Pesticides in soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date extracted	-	[NT]	[NT]	LCS-7	11/07/2017
Date analysed	-	[NT]	[NT]	LCS-7	11/07/2017
HCB	mg/kg	[NT]	[NT]	[NR]	[NR]
alpha-BHC	mg/kg	[NT]	[NT]	LCS-7	82%
gamma-BHC	mg/kg	[NT]	[NT]	[NR]	[NR]
beta-BHC	mg/kg	[NT]	[NT]	LCS-7	108%
Heptachlor	mg/kg	[NT]	[NT]	LCS-7	114%
delta-BHC	mg/kg	[NT]	[NT]	[NR]	[NR]
Aldrin	mg/kg	[NT]	[NT]	LCS-7	105%
Heptachlor Epoxide	mg/kg	[NT]	[NT]	LCS-7	107%
gamma-Chlordane	mg/kg	[NT]	[NT]	[NR]	[NR]
alpha-chlordane	mg/kg	[NT]	[NT]	[NR]	[NR]
Endosulfan I	mg/kg	[NT]	[NT]	[NR]	[NR]
pp-DDE	mg/kg	[NT]	[NT]	LCS-7	109%
Dieldrin	mg/kg	[NT]	[NT]	LCS-7	118%
Endrin	mg/kg	[NT]	[NT]	LCS-7	108%
pp-DDD	mg/kg	[NT]	[NT]	LCS-7	119%
Endosulfan II	mg/kg	[NT]	[NT]	[NR]	[NR]
pp-DDT	mg/kg	[NT]	[NT]	[NR]	[NR]
Endrin Aldehyde	mg/kg	[NT]	[NT]	[NR]	[NR]
Endosulfan Sulphate	mg/kg	[NT]	[NT]	LCS-7	100%
Methoxychlor	mg/kg	[NT]	[NT]	[NR]	[NR]
Surrogate TCMX	%	[NT]	[NT]	LCS-7	118%

QUALITY CONTROL Organophosphorus Pesticides	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date extracted	-	[NT]	[NT]	LCS-7	11/07/2017
Date analysed	-	[NT]	[NT]	LCS-7	11/07/2017
Azinphos-methyl (Guthion)	mg/kg	[NT]	[NT]	[NR]	[NR]
Bromophos-ethyl	mg/kg	[NT]	[NT]	[NR]	[NR]
Chlorpyriphos	mg/kg	[NT]	[NT]	LCS-7	99%
Chlorpyriphos-methyl	mg/kg	[NT]	[NT]	[NR]	[NR]
Diazinon	mg/kg	[NT]	[NT]	[NR]	[NR]
Dichlorvos	mg/kg	[NT]	[NT]	LCS-7	88%
Dimethoate	mg/kg	[NT]	[NT]	[NR]	[NR]
Ethion	mg/kg	[NT]	[NT]	LCS-7	102%
Fenitrothion	mg/kg	[NT]	[NT]	LCS-7	96%
Malathion	mg/kg	[NT]	[NT]	LCS-7	74%
Parathion	mg/kg	[NT]	[NT]	LCS-7	108%
Ronnel	mg/kg	[NT]	[NT]	LCS-7	106%
Surrogate TCMX	%	[NT]	[NT]	LCS-7	102%

QUALITY CONTROL PCBs in Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date extracted	-	[NT]	[NT]	LCS-7	11/07/2017
Date analysed	-	[NT]	[NT]	LCS-7	11/07/2017
Aroclor 1016	mg/kg	[NT]	[NT]	[NR]	[NR]
Aroclor 1221	mg/kg	[NT]	[NT]	[NR]	[NR]
Aroclor 1232	mg/kg	[NT]	[NT]	[NR]	[NR]
Aroclor 1242	mg/kg	[NT]	[NT]	[NR]	[NR]
Aroclor 1248	mg/kg	[NT]	[NT]	[NR]	[NR]
Aroclor 1254	mg/kg	[NT]	[NT]	LCS-7	101%
Aroclor 1260	mg/kg	[NT]	[NT]	[NR]	[NR]
Surrogate TCLMX	%	[NT]	[NT]	LCS-7	102%

QUALITY CONTROL Acid Extractractable metals in soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date prepared	-	170939-21	13/07/2017 || 13/07/2017	LCS-8	13/07/2017
Date analysed	-	170939-21	13/07/2017 || 13/07/2017	LCS-8	13/07/2017
Arsenic	mg/kg	170939-21	22 || 15 || RPD: 38	LCS-8	110%
Beryllium	mg/kg	[NT]	[NT]	LCS-8	96%
Boron	mg/kg	[NT]	[NT]	LCS-8	104%
Cadmium	mg/kg	170939-21	<0.4 || <0.4	LCS-8	105%
Chromium	mg/kg	170939-21	16 || 12 || RPD: 29	LCS-8	110%
Cobalt	mg/kg	[NT]	[NT]	LCS-8	105%
Copper	mg/kg	170939-21	15 || 13 || RPD: 14	LCS-8	109%
Lead	mg/kg	170939-21	87 || 61 || RPD: 35	LCS-8	104%
Manganese	mg/kg	[NT]	[NT]	LCS-8	124%

QUALITY CONTROL Acid Extractractable metals in soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Mercury	mg/kg	170939-21	0.2 || 0.2 || RPD: 0	LCS-8	105%
Nickel	mg/kg	170939-21	3 || 2 || RPD: 40	LCS-8	103%
Selenium	mg/kg	[NT]	[NT]	LCS-8	102%
Zinc	mg/kg	170939-21	66 || 61 || RPD: 8	LCS-8	105%
QUALITY CONTROL Acid Extractractable metals in soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date prepared	-	170939-31	13/07/2017 || 13/07/2017	LCS-9	13/07/2017
Date analysed	-	170939-31	13/07/2017 || 13/07/2017	LCS-9	13/07/2017
Arsenic	mg/kg	170939-31	5 || 4 || RPD: 22	LCS-9	108%
Beryllium	mg/kg	[NT]	[NT]	LCS-9	93%
Boron	mg/kg	[NT]	[NT]	LCS-9	102%
Cadmium	mg/kg	170939-31	<0.4 || <0.4	LCS-9	104%
Chromium	mg/kg	170939-31	21 || 17 || RPD: 21	LCS-9	107%
Cobalt	mg/kg	[NT]	[NT]	LCS-9	102%
Copper	mg/kg	170939-31	21 || 23 || RPD: 9	LCS-9	107%
Lead	mg/kg	170939-31	220 || 200 || RPD: 10	LCS-9	103%
Manganese	mg/kg	[NT]	[NT]	LCS-9	125%
Mercury	mg/kg	170939-31	0.2 || 0.2 || RPD: 0	LCS-9	118%
Nickel	mg/kg	170939-31	5 || 7 || RPD: 33	LCS-9	102%
Selenium	mg/kg	[NT]	[NT]	LCS-9	100%
Zinc	mg/kg	170939-31	110 || 130 || RPD: 17	LCS-9	103%

QUALITY CONTROL vTRH(C6-C10)/BTEXN in Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD
Date extracted	-	170939-36	11/07/2017 || 11/07/2017
Date analysed	-	170939-36	12/07/2017 || 12/07/2017
$TRHC_6$ - C_9	mg/kg	170939-36	<25 || <25
$TRHC_6$ - C_{10}	mg/kg	170939-36	<25 || <25
Benzene	mg/kg	170939-36	<0.2 || <0.2
Toluene	mg/kg	170939-36	<0.5 || <0.5
Ethylbenzene	mg/kg	170939-36	<1 || <1
m+p-xylene	mg/kg	170939-36	<2 || <2
o-Xylene	mg/kg	170939-36	<1 || <1
naphthalene	mg/kg	170939-36	<1 || <1
Surrogate aaa-Trifluorotoluene	%	170939-36	96 || 84 || RPD: 13

QUALITY CONTROL svTRH (C10-C40) in Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD
Date extracted	-	170939-36	11/07/2017 || 11/07/2017
Date analysed	-	170939-36	12/07/2017 || 12/07/2017
TRHC_{10} - C_{14}	mg/kg	170939-36	<50 || <50
TRHC_{15} - C_{28}	mg/kg	170939-36	<100 || <100
TRHC_{29} - C_{36}	mg/kg	170939-36	<100 || <100
TRH>C_{10}-C_{16}	mg/kg	170939-36	<50 || <50
TRH>C_{16}-C_{34}	mg/kg	170939-36	<100 || <100
TRH>C_{34}-C_{40}	mg/kg	170939-36	<100 || <100
Surrogate o-Terphenyl	%	170939-36	89 || 88 || RPD: 1

QUALITY CONTROL PAHs in Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date extracted	-	170939-36	11/07/2017 || 11/07/2017	170939-2	11/07/2017
Date analysed	-	170939-36	12/07/2017 || 12/07/2017	170939-2	12/07/2017
Naphthalene	mg/kg	170939-36	<0.1 || <0.1	170939-2	100%
Acenaphthylene	mg/kg	170939-36	0.4 || 0.1 || RPD: 120	[NR]	[NR]
Acenaphthene	mg/kg	170939-36	<0.1 || <0.1	[NR]	[NR]
Fluorene	mg/kg	170939-36	<0.1 || <0.1	170939-2	91%
Phenanthrene	mg/kg	170939-36	0.9 || 0.8 || RPD: 12	170939-2	108%
Anthracene	mg/kg	170939-36	0.4 || 0.3 || RPD: 29	[NR]	[NR]
Fluoranthene	mg/kg	170939-36	3.5 || 3.4 || RPD: 3	170939-2	109%
Pyrene	mg/kg	170939-36	3.9 || 3.9 || RPD: 0	170939-2	111%
Benzo(a)anthracene	mg/kg	170939-36	2.0 || 2.3 || RPD: 14	[NR]	[NR]
Chrysene	mg/kg	170939-36	2.1 || 2.1 || RPD: 0	170939-2	119%
Benzo(b,j+k)fluoranthene	mg/kg	170939-36	3.4 || 3.7 || RPD: 8	[NR]	[NR]
Benzo(a)pyrene	mg/kg	170939-36	2.2 || 2.4 || RPD: 9	170939-2	105%
Indeno(1,2,3-c,d)pyrene	mg/kg	170939-36	1.2 || 1.4 || RPD: 15	[NR]	[NR]
Dibenzo(a,h)anthracene	mg/kg	170939-36	0.3 || 0.4 || RPD: 29	[NR]	[NR]
Benzo(g,h,i)perylene	mg/kg	170939-36	1.6 || 1.9 || RPD: 17	[NR]	[NR]
Surrogate p-Terphenyl-d14	%	170939-36	81 || 82 || RPD: 1	170939-2	103%

QUALITY CONTROL Acid Extractractable metals in soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date prepared	-	[NT]	[NT]	170939-2	13/07/2017
Date analysed	-	[NT]	[NT]	170939-2	13/07/2017
Arsenic	mg/kg	[NT]	[NT]	170939-2	80%
Beryllium	mg/kg	[NT]	[NT]	[NR]	[NR]
Boron	mg/kg	[NT]	[NT]	[NR]	[NR]
Cadmium	mg/kg	[NT]	[NT]	170939-2	97%
Chromium	mg/kg	[NT]	[NT]	170939-2	101%
Cobalt	mg/kg	[NT]	[NT]	[NR]	[NR]
Copper	mg/kg	[NT]	[NT]	170939-2	102%
Lead	mg/kg	[NT]	[NT]	170939-2	98%
Manganese	mg/kg	[NT]	[NT]	[NR]	[NR]
Mercury	mg/kg	[NT]	[NT]	170939-2	117%
Nickel	mg/kg	[NT]	[NT]	170939-2	95%
Selenium	mg/kg	[NT]	[NT]	[NR]	[NR]
Zinc	mg/kg	[NT]	[NT]	170939-2	96%

QUALITY CONTROL Organochlorine Pesticides in soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD
Date extracted	-	170939-36	11/07/2017 || 11/07/2017
Date analysed	-	170939-36	11/07/2017 || 11/07/2017
HCB	mg/kg	170939-36	<0.1 || <0.1
alpha-BHC	mg/kg	170939-36	<0.1 || <0.1
gamma-BHC	mg/kg	170939-36	<0.1 || <0.1
beta-BHC	mg/kg	170939-36	<0.1 || <0.1
Heptachlor	mg/kg	170939-36	<0.1 || <0.1
delta-BHC	mg/kg	170939-36	<0.1 || <0.1
Aldrin	mg/kg	170939-36	<0.1 || <0.1
Heptachlor Epoxide	mg/kg	170939-36	<0.1 || <0.1
gamma-Chlordane	mg/kg	170939-36	<0.1 || <0.1
alpha-chlordane	mg/kg	170939-36	<0.1 || <0.1
Endosulfan I	mg/kg	170939-36	<0.1 || <0.1
pp-DDE	mg/kg	170939-36	<0.1 || <0.1
Dieldrin	mg/kg	170939-36	<0.1 || <0.1
Endrin	mg/kg	170939-36	<0.1 || <0.1
pp-DDD	mg/kg	170939-36	<0.1 || <0.1
Endosulfan II	mg/kg	170939-36	<0.1 || <0.1
pp-DDT	mg/kg	170939-36	<0.1 || <0.1
Endrin Aldehyde	mg/kg	170939-36	<0.1 || <0.1
Endosulfan Sulphate	mg/kg	170939-36	<0.1 || <0.1
Methoxychlor	mg/kg	170939-36	<0.1 || <0.1
Surrogate TCMX	%	170939-36	102 || 97 || RPD: 5

QUALITY CONTROL Organophosphorus Pesticides	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD
Date extracted	-	170939-36	11/07/2017 || 11/07/2017
Date analysed	-	170939-36	11/07/2017 || 11/07/2017
Azinphos-methyl (Guthion)	mg/kg	170939-36	<0.1 || <0.1
Bromophos-ethyl	mg/kg	170939-36	<0.1 || <0.1
Chlorpyriphos	mg/kg	170939-36	<0.1 || <0.1
Chlorpyriphos-methyl	mg/kg	170939-36	<0.1 || <0.1
Diazinon	mg/kg	170939-36	<0.1 || <0.1
Dichlorvos	mg/kg	170939-36	<0.1 || <0.1
Dimethoate	mg/kg	170939-36	<0.1 || <0.1
Ethion	mg/kg	170939-36	<0.1 || <0.1
Fenitrothion	mg/kg	170939-36	<0.1 || <0.1
Malathion	mg/kg	170939-36	<0.1 || <0.1
Parathion	mg/kg	170939-36	<0.1 || <0.1
Ronnel	mg/kg	170939-36	<0.1 || <0.1
Surrogate TCMX	%	170939-36	102 || 97 || RPD: 5

QUALITY CONTROL PCBs in Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD
Date extracted	-	170939-36	11/07/2017 || 11/07/2017
Date analysed	-	170939-36	11/07/2017 || 11/07/2017
Aroclor 1016	mg/kg	170939-36	<0.1 || <0.1
Aroclor 1221	mg/kg	170939-36	<0.1 || <0.1
Aroclor 1232	mg/kg	170939-36	<0.1 || <0.1
Aroclor 1242	mg/kg	170939-36	<0.1 || <0.1
Aroclor 1248	mg/kg	170939-36	<0.1 || <0.1
Aroclor 1254	mg/kg	170939-36	<0.1 || <0.1
Aroclor 1260	mg/kg	170939-36	<0.1 || <0.1
Surrogate TCLMX	%	170939-36	102 || 97 || RPD: 5

QUALITY CONTROL Triazine Herbicides in Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD
Date prepared	-	170939-36	11/07/2017 || 11/07/2017
Date analysed	-	170939-36	11/07/2017 || 11/07/2017
Atrazine	mg/kg	170939-36	<0.5 || <0.5
Ametryn	mg/kg	170939-36	<0.5 || <0.5
Cyanazine	mg/kg	170939-36	<0.5 || <0.5
Hexazinone	mg/kg	170939-36	<0.5 || <0.5
Irgarol	mg/kg	170939-36	<0.5 || <0.5
Metribuzin	mg/kg	170939-36	<0.5 || <0.5
Prometryn	mg/kg	170939-36	<0.5 || <0.5
Propazine	mg/kg	170939-36	<0.5 || <0.5
Simazine	mg/kg	170939-36	<0.5 || <0.5
Terbutryn	mg/kg	170939-36	<0.5 || <0.5

QUALITY CONTROL Triazine Herbicides in Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD
Terbuthylazine	mg/kg	170939-36	<0.5 || <0.5
Surrogate p-Terphenyl-d_{14}	%	170939-36	93 || 93 || RPD: 0

QUALITY CONTROL Speciated Phenols in Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD
Date extracted	-	170939-36	11/07/2017 || 11/07/2017
Date analysed	-	170939-36	12/07/2017 || 12/07/2017
Phenol	mg/kg	170939-36	<0.2 || <0.2
2-Chlorophenol	mg/kg	170939-36	<0.2 || <0.2
4-Chloro-3-methylphenol	mg/kg	170939-36	<1 || <1
2-Methylphenol (o-cresol)	mg/kg	170939-36	<0.2 || <0.2
3/4-Methylphenol (m/p-cresol)	mg/kg	170939-36	<0.4 || <0.4
2-Nitrophenol	mg/kg	170939-36	<0.2 || <0.2
2,4-Dimethylphenol	mg/kg	170939-36	<0.2 || <0.2
2,4-Dichlorophenol	mg/kg	170939-36	<0.2 || <0.2
2,6-Dichlorophenol	mg/kg	170939-36	<0.2 || <0.2
2,4,5-Trichlorophenol	mg/kg	170939-36	<0.2 || <0.2
2,4,6-Trichlorophenol	mg/kg	170939-36	<0.2 || <0.2
2,4-Dinitrophenol	mg/kg	170939-36	<4 || <4
4-Nitrophenol	mg/kg	170939-36	<4 || <4
2346-Tetrachlorophenol	mg/kg	170939-36	<0.2 || <0.2
2-methyl-4,6-Dinitrophenol	mg/kg	170939-36	<2 || <2
Pentachlorophenol	mg/kg	170939-36	<1 || <1
Surrogate 2-fluorophenol	%	170939-36	88 || 90 || RPD: 2
Surrogate Phenol-d_6	%	170939-36	83 || 86 || RPD: 4
Surrogate 2,4,6-Tribromophenol	%	170939-36	91 || 96 || RPD: 5
Surrogate p-Terphenyl-d_{14}	%	170939-36	93 || 90 || RPD: 3

QUALITY CONTROL Phenoxy Acid Herbicides in Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD
Date extracted	-	170939-36	14/07/2017 || 14/07/2017
Date analysed	-	170939-36	14/07/2017 || 14/07/2017
Clopyralid	mg/kg	170939-36	<0.5 || <0.5
3,5-Dichlorobenzoic acid	mg/kg	170939-36	<0.5 || <0.5
o-chlorophenoxy acetic acid	mg/kg	170939-36	<0.5 || <0.5
4-CPA	mg/kg	170939-36	<0.5 || <0.5
Dicamba	mg/kg	170939-36	<0.5 || <0.5
MCPP	mg/kg	170939-36	<0.5 || <0.5
MCPA	mg/kg	170939-36	<0.5 || <0.5
Dichlorprop	mg/kg	170939-36	<0.5 || <0.5
2,4-D	mg/kg	170939-36	<0.5 || <0.5
Bromoxynil	mg/kg	170939-36	<0.5 || <0.5
Triclopyr	mg/kg	170939-36	<0.5 || <0.5
2,4,5-TP	mg/kg	170939-36	<0.5 || <0.5
2,4,5-T	mg/kg	170939-36	<0.5 || <0.5
MCPB	mg/kg	170939-36	<0.5 || <0.5
Dinoseb	mg/kg	170939-36	<1 || <1
2,4-DB	mg/kg	170939-36	<0.5 || <0.5
Ioxynil	mg/kg	170939-36	<1 || <1
Picloram	mg/kg	170939-36	<0.5 || <0.5
DCPA (Chlorthal) Diacid	mg/kg	170939-36	<0.5 || <0.5
Acifluorfen	mg/kg	170939-36	<2 || <2
2,4,6-T	mg/kg	170939-36	<0.5 || <0.5
2,6-D	mg/kg	170939-36	<0.5 || <0.5
Surrogate 2.4- DCPA	%	170939-36	96 || 100 || RPD: 4

QUALITY CONTROL Acid Extractractable metals in soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date prepared	-	170939-41	13/07/2017 || 13/07/2017	170939-22	13/07/2017
Date analysed	-	170939-41	13/07/2017 || 13/07/2017	170939-22	13/07/2017
Arsenic	mg/kg	170939-41	<4 || <4	170939-22	97%
Beryllium	mg/kg	[NT]	[NT]	[NR]	[NR]
Boron	mg/kg	[NT]	[NT]	[NR]	[NR]
Cadmium	mg/kg	170939-41	<0.4 || <0.4	170939-22	108%
Chromium	mg/kg	170939-41	79 || 67 || RPD: 16	170939-22	107%
Cobalt	mg/kg	[NT]	[NT]	[NR]	[NR]
Copper	mg/kg	170939-41	58 || 33 || RPD: 55	170939-22	110%
Lead	mg/kg	170939-41	500 || 480 || RPD: 4	170939-22	106%
Manganese	mg/kg	[NT]	[NT]	[NR]	[NR]
Mercury	mg/kg	170939-41	0.2 || 0.2 || RPD: 0	170939-22	106%
Nickel	mg/kg	170939-41	23 || 18 || RPD: 24	170939-22	103%
Selenium	mg/kg	[NT]	[NT]	[NR]	[NR]
Zinc	mg/kg	170939-41	180 || 350 || RPD: 64	170939-22	102%

QUALITY CONTROL vTRH(C6-C10)/BTEXN in Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD
Date extracted	-	170939-51	11/07/2017 || 11/07/2017
Date analysed	-	170939-51	12/07/2017 || 12/07/2017
$TRHC_6$ - C_9	mg/kg	170939-51	<25 || <25
$TRHC_6$ - C_{10}	mg/kg	170939-51	<25 || <25
Benzene	mg/kg	170939-51	<0.2 || <0.2
Toluene	mg/kg	170939-51	<0.5 || <0.5
Ethylbenzene	mg/kg	170939-51	<1 || <1
m+p-xylene	mg/kg	170939-51	<2 || <2
o-Xylene	mg/kg	170939-51	<1 || <1
naphthalene	mg/kg	170939-51	<1 || <1
Surrogate aaa-Trifluorotoluene	%	170939-51	91 || 84 || RPD: 8

QUALITY CONTROL svTRH (C10-C40) in Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD
Date extracted	-	170939-51	11/07/2017 || 11/07/2017
Date analysed	-	170939-51	12/07/2017 || 12/07/2017
TRHC_{10} - C_{14}	mg/kg	170939-51	<50 || <50
TRHC_{15} - C_{28}	mg/kg	170939-51	<100 || <100
TRHC_{29} - C_{36}	mg/kg	170939-51	<100 || <100
TRH>C_{10}-C_{16}	mg/kg	170939-51	<50 || <50
TRH>C_{16}-C_{34}	mg/kg	170939-51	<100 || <100
TRH>C_{34}-C_{40}	mg/kg	170939-51	<100 || <100
Surrogate o-Terphenyl	%	170939-51	94 || 95 || RPD: 1

QUALITY CONTROL PAHs in Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD
Date extracted	-	170939-51	11/07/2017 || 11/07/2017
Date analysed	-	170939-51	12/07/2017 || 12/07/2017
Naphthalene	mg/kg	170939-51	<0.1 || <0.1
Acenaphthylene	mg/kg	170939-51	<0.1 || <0.1
Acenaphthene	mg/kg	170939-51	<0.1 || <0.1
Fluorene	mg/kg	170939-51	<0.1 || <0.1
Phenanthrene	mg/kg	170939-51	<0.1 || <0.1
Anthracene	mg/kg	170939-51	<0.1 || <0.1
Fluoranthene	mg/kg	170939-51	<0.1 || <0.1
Pyrene	mg/kg	170939-51	<0.1 || <0.1
Benzo(a)anthracene	mg/kg	170939-51	<0.1 || <0.1
Chrysene	mg/kg	170939-51	<0.1 || <0.1
Benzo(b,j+k)fluoranthene	mg/kg	170939-51	<0.2 || <0.2
Benzo(a)pyrene	mg/kg	170939-51	<0.05 || <0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	170939-51	<0.1 || <0.1
Dibenzo(a,h)anthracene	mg/kg	170939-51	<0.1 || <0.1
Benzo(g,h,i)perylene	mg/kg	170939-51	<0.1 || <0.1
Surrogate p-Terphenyl-d14	%	170939-51	81 || 79 || RPD: 2

QUALITY CONTROL Acid Extractractable metals in soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date prepared	-	170939-51	13/07/2017 || 13/07/2017	170939-42	13/07/2017
Date analysed	-	170939-51	13/07/2017 || 13/07/2017	170939-42	13/07/2017
Arsenic	mg/kg	170939-51	<4 || <4	170939-42	91%
Beryllium	mg/kg	170939-51	<1 || <1	[NR]	[NR]
Boron	mg/kg	170939-51	<3 || <3	[NR]	[NR]
Cadmium	mg/kg	170939-51	<0.4 || <0.4	170939-42	104%
Chromium	mg/kg	170939-51	4 || 4 || RPD: 0	170939-42	107%
Cobalt	mg/kg	170939-51	<1 || <1	[NR]	[NR]
Copper	mg/kg	170939-51	2 || 2 || RPD: 0	170939-42	109%
Lead	mg/kg	170939-51	9 || 9 || RPD: 0	170939-42	103%
Manganese	mg/kg	170939-51	2 || 3 || RPD: 40	[NR]	[NR]
Mercury	mg/kg	170939-51	<0.1 || <0.1	170939-42	98%
Nickel	mg/kg	170939-51	<1 || <1	170939-42	102%
Selenium	mg/kg	170939-51	<2 || <2	[NR]	[NR]
Zinc	mg/kg	170939-51	11 || 12 || RPD: 9	170939-42	100%

QUALITY CONTROL vTRH(C6-C10)/BTEXN in Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date extracted	-	[NT]	[NT]	170939-57	11/07/2017
Date analysed	-	[NT]	[NT]	170939-57	12/07/2017
$TRHC_6$ - C_9	mg/kg	[NT]	[NT]	170939-57	118%
$TRHC_6$ - C_{10}	mg/kg	[NT]	[NT]	170939-57	118%
Benzene	mg/kg	[NT]	[NT]	170939-57	116%
Toluene	mg/kg	[NT]	[NT]	170939-57	117%
Ethylbenzene	mg/kg	[NT]	[NT]	170939-57	117%
m+p-xylene	mg/kg	[NT]	[NT]	170939-57	121%
o-Xylene	mg/kg	[NT]	[NT]	170939-57	121%
naphthalene	mg/kg	[NT]	[NT]	[NR]	[NR]
Surrogate aaa-Trifluorotoluene	%	[NT]	[NT]	170939-57	101%

QUALITY CONTROL svTRH (C10-C40) in Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date extracted	-	[NT]	[NT]	170939-57	11/07/2017
Date analysed	-	[NT]	[NT]	170939-57	12/07/2017
TRHC_{10} - C_{14}	mg/kg	[NT]	[NT]	170939-57	110%
TRHC_{15} - C_{28}	mg/kg	[NT]	[NT]	170939-57	115%
TRHC_{29} - C_{36}	mg/kg	[NT]	[NT]	170939-57	89%
TRH>C_{10}-C_{16}	mg/kg	[NT]	[NT]	170939-57	110%
TRH>C_{16}-C_{34}	mg/kg	[NT]	[NT]	170939-57	115%
TRH>C_{34}-C_{40}	mg/kg	[NT]	[NT]	170939-57	89%
Surrogate o-Terphenyl	%	[NT]	[NT]	170939-57	91%

QUALITY CONTROL PAHs in Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date extracted	-	[NT]	[NT]	170939-57	11/07/2017
Date analysed	-	[NT]	[NT]	170939-57	12/07/2017
Naphthalene	mg/kg	[NT]	[NT]	170939-57	112%
Acenaphthylene	mg/kg	[NT]	[NT]	[NR]	[NR]
Acenaphthene	mg/kg	[NT]	[NT]	[NR]	[NR]
Fluorene	mg/kg	[NT]	[NT]	170939-57	100%
Phenanthrene	mg/kg	[NT]	[NT]	170939-57	101%
Anthracene	mg/kg	[NT]	[NT]	[NR]	[NR]
Fluoranthene	mg/kg	[NT]	[NT]	170939-57	96%
Pyrene	mg/kg	[NT]	[NT]	170939-57	102%
Benzo(a)anthracene	mg/kg	[NT]	[NT]	[NR]	[NR]
Chrysene	mg/kg	[NT]	[NT]	170939-57	120%
Benzo(b,j+k)fluoranthene	mg/kg	[NT]	[NT]	[NR]	[NR]
Benzo(a)pyrene	mg/kg	[NT]	[NT]	170939-57	110%
Indeno(1,2,3-c,d)pyrene	mg/kg	[NT]	[NT]	[NR]	[NR]
Dibenzo(a,h)anthracene	mg/kg	[NT]	[NT]	[NR]	[NR]
Benzo(g,h,i)perylene	mg/kg	[NT]	[NT]	[NR]	[NR]
Surrogate p-Terphenyl-d14	%	[NT]	[NT]	170939-57	117%

QUALITY CONTROL Acid Extractractable metals in soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD
Date prepared	-	170939-60	13/07/2017 || 13/07/2017
Date analysed	-	170939-60	13/07/2017 || 13/07/2017
Arsenic	mg/kg	170939-60	<4 || <4
Beryllium	mg/kg	[NT]	[NT]
Boron	mg/kg	[NT]	[NT]
Cadmium	mg/kg	170939-60	<0.4 || <0.4
Chromium	mg/kg	170939-60	8 || 8 || RPD: 0
Cobalt	mg/kg	[NT]	[NT]
Copper	mg/kg	170939-60	8 || 8 || RPD: 0
Lead	mg/kg	170939-60	53 || 49 || RPD: 8
Manganese	mg/kg	[NT]	[NT]
Mercury	mg/kg	170939-60	0.1 || 0.1 || RPD: 0
Nickel	mg/kg	170939-60	2 || 2 || RPD: 0
Selenium	mg/kg	[NT]	[NT]
Zinc	mg/kg	170939-60	82 || 84 || RPD: 2

QUALITY CONTROL Organochlorine Pesticides in soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date extracted	-	[NT]	[NT]	170939-57	11/07/2017
Date analysed	-	[NT]	[NT]	170939-57	14/07/2017
HCB	mg/kg	[NT]	[NT]	[NR]	[NR]
alpha-BHC	mg/kg	[NT]	[NT]	170939-57	85%
gamma-BHC	mg/kg	[NT]	[NT]	[NR]	[NR]
beta-BHC	mg/kg	[NT]	[NT]	170939-57	101%
Heptachlor	mg/kg	[NT]	[NT]	170939-57	107%
delta-BHC	mg/kg	[NT]	[NT]	[NR]	[NR]
Aldrin	mg/kg	[NT]	[NT]	170939-57	98%
Heptachlor Epoxide	mg/kg	[NT]	[NT]	170939-57	100%
gamma-Chlordane	mg/kg	[NT]	[NT]	[NR]	[NR]
alpha-chlordane	mg/kg	[NT]	[NT]	[NR]	[NR]
Endosulfan I	mg/kg	[NT]	[NT]	[NR]	[NR]
pp-DDE	mg/kg	[NT]	[NT]	170939-57	100%
Dieldrin	mg/kg	[NT]	[NT]	170939-57	110%
Endrin	mg/kg	[NT]	[NT]	170939-57	103%
pp-DDD	mg/kg	[NT]	[NT]	170939-57	109%
Endosulfan II	mg/kg	[NT]	[NT]	[NR]	[NR]
pp-DDT	mg/kg	[NT]	[NT]	[NR]	[NR]
Endrin Aldehyde	mg/kg	[NT]	[NT]	[NR]	[NR]
Endosulfan Sulphate	mg/kg	[NT]	[NT]	170939-57	102%
Methoxychlor	mg/kg	[NT]	[NT]	[NR]	[NR]
Surrogate TCMX	%	[NT]	[NT]	170939-57	115%

QUALITY CONTROL Organophosphorus Pesticides	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date extracted	-	[NT]	[NT]	170939-57	11/07/2017
Date analysed	-	[NT]	[NT]	170939-57	14/07/2017
Azinphos-methyl (Guthion)	mg/kg	[NT]	[NT]	[NR]	[NR]
Bromophos-ethyl	mg/kg	[NT]	[NT]	[NR]	[NR]
Chlorpyriphos	mg/kg	[NT]	[NT]	170939-57	95%
Chlorpyriphos-methyl	mg/kg	[NT]	[NT]	[NR]	[NR]
Diazinon	mg/kg	[NT]	[NT]	[NR]	[NR]
Dichlorvos	mg/kg	[NT]	[NT]	170939-57	88%
Dimethoate	mg/kg	[NT]	[NT]	[NR]	[NR]
Ethion	mg/kg	[NT]	[NT]	170939-57	107%
Fenitrothion	mg/kg	[NT]	[NT]	170939-57	112%
Malathion	mg/kg	[NT]	[NT]	170939-57	81%
Parathion	mg/kg	[NT]	[NT]	170939-57	104%
Ronnel	mg/kg	[NT]	[NT]	170939-57	103%
Surrogate TCMX	%	[NT]	[NT]	170939-57	92%
QUALITY CONTROL PCBs in Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date extracted	-	[NT]	[NT]	170939-57	11/07/2017
Date analysed	-	[NT]	[NT]	170939-57	14/07/2017
Aroclor 1016	mg/kg	[NT]	[NT]	[NR]	[NR]
Aroclor 1221	mg/kg	[NT]	[NT]	[NR]	[NR]
Aroclor 1232	mg/kg	[NT]	[NT]	[NR]	[NR]
Aroclor 1242	mg/kg	[NT]	[NT]	[NR]	[NR]
Aroclor 1248	mg/kg	[NT]	[NT]	[NR]	[NR]
Aroclor 1254	mg/kg	[NT]	[NT]	170939-57	100%
Aroclor 1260	mg/kg	[NT]	[NT]	[NR]	[NR]
Surrogate TCLMX	%	[NT]	[NT]	170939-57	92%
QUALITY CONTROL Triazine Herbicides in Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date prepared	-	[NT]	[NT]	170939-57	11/07/2017
Date analysed	-	[NT]	[NT]	170939-57	11/07/2017
Atrazine	mg/kg	[NT]	[NT]	170939-57	94%
Ametryn	mg/kg	[NT]	[NT]	[NR]	[NR]
Cyanazine	mg/kg	[NT]	[NT]	[NR]	[NR]
Hexazinone	mg/kg	[NT]	[NT]	[NR]	[NR]
Irgarol	mg/kg	[NT]	[NT]	[NR]	[NR]
Metribuzin	mg/kg	[NT]	[NT]	[NR]	[NR]
Prometryn	mg/kg	[NT]	[NT]	170939-57	99%
Propazine	mg/kg	[NT]	[NT]	170939-57	106%
Simazine	mg/kg	[NT]	[NT]	[NR]	[NR]
Terbutryn	mg/kg	[NT]	[NT]	[NR]	[NR]

QUALITY CONTROL Triazine Herbicides in Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Terbuthylazine	mg/kg	[NT]	[NT]	[NR]	[NR]
Surrogate p-Terphenyl-d_{14}	%	[NT]	[NT]	170939-57	81%

QUALITY CONTROL Speciated Phenols in Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date extracted	-	[NT]	[NT]	170939-57	11/07/2017
Date analysed	-	[NT]	[NT]	170939-57	12/07/2017
Phenol	mg/kg	[NT]	[NT]	170939-57	66%
2-Chlorophenol	mg/kg	[NT]	[NT]	170939-57	70%
4-Chloro-3-methylphenol	mg/kg	[NT]	[NT]	[NR]	[NR]
2-Methylphenol (o-cresol)	mg/kg	[NT]	[NT]	170939-57	72%
3/4-Methylphenol (m/p-cresol)	mg/kg	[NT]	[NT]	[NR]	[NR]
2-Nitrophenol	mg/kg	[NT]	[NT]	[NR]	[NR]
2,4-Dimethylphenol	mg/kg	[NT]	[NT]	[NR]	[NR]
2,4-Dichlorophenol	mg/kg	[NT]	[NT]	[NR]	[NR]
2,6-Dichlorophenol	mg/kg	[NT]	[NT]	170939-57	94%
2,4,5-Trichlorophenol	mg/kg	[NT]	[NT]	[NR]	[NR]
2,4,6-Trichlorophenol	mg/kg	[NT]	[NT]	[NR]	[NR]
2,4-Dinitrophenol	mg/kg	[NT]	[NT]	[NR]	[NR]
4-Nitrophenol	mg/kg	[NT]	[NT]	170939-57	52%
2346-Tetrachlorophenol	mg/kg	[NT]	[NT]	[NR]	[NR]
2-methyl-4,6-Dinitrophenol	mg/kg	[NT]	[NT]	[NR]	[NR]
Pentachlorophenol	mg/kg	[NT]	[NT]	170939-57	98%
Surrogate 2-fluorophenol	%	[NT]	[NT]	170939-57	100%
Surrogate Phenol-d_6	%	[NT]	[NT]	170939-57	104%
Surrogate 2,4,6-Tribromophenol	%	[NT]	[NT]	170939-57	117%
Surrogate p-Terphenyl-d_{14}	%	[NT]	[NT]	170939-57	91%

QUALITY CONTROL svTRH (C10-C40) in Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD
Date extracted	-	170939-66	11/07/2017 || 11/07/2017
Date analysed	-	170939-66	12/07/2017 || 12/07/2017
TRHC_{10} - C_{14}	mg/kg	170939-66	<50 || <50
TRHC_{15} - C_{28}	mg/kg	170939-66	<100 || <100
TRHC_{29} - C_{36}	mg/kg	170939-66	<100 || <100
TRH>C_{10}-C_{16}	mg/kg	170939-66	<50 || <50
TRH>C_{16}-C_{34}	mg/kg	170939-66	<100 || <100
TRH>C_{34}-C_{40}	mg/kg	170939-66	<100 || <100
Surrogate o-Terphenyl	%	170939-66	91 || 91 || RPD: 0

QUALITY CONTROL PAHs in Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD
Date extracted	-	170939-66	11/07/2017 || 11/07/2017
Date analysed	-	170939-66	12/07/2017 || 12/07/2017
Naphthalene	mg/kg	170939-66	<0.1 || <0.1
Acenaphthylene	mg/kg	170939-66	<0.1 || <0.1
Acenaphthene	mg/kg	170939-66	<0.1 || <0.1
Fluorene	mg/kg	170939-66	<0.1 || <0.1
Phenanthrene	mg/kg	170939-66	<0.1 || <0.1
Anthracene	mg/kg	170939-66	<0.1 || <0.1
Fluoranthene	mg/kg	170939-66	<0.1 || <0.1
Pyrene	mg/kg	170939-66	<0.1 || <0.1
Benzo(a)anthracene	mg/kg	170939-66	<0.1 || <0.1
Chrysene	mg/kg	170939-66	<0.1 || <0.1
Benzo(b,j+k)fluoranthene	mg/kg	170939-66	<0.2 || <0.2
Benzo(a)pyrene	mg/kg	170939-66	<0.05 || <0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	170939-66	<0.1 || <0.1
Dibenzo(a,h)anthracene	mg/kg	170939-66	<0.1 || <0.1
Benzo(g,h,i)perylene	mg/kg	170939-66	<0.1 || <0.1
Surrogate p-Terphenyl-d14	%	170939-66	81 || 81 || RPD: 0

QUALITY CONTROL Acid Extractractable metals in soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date prepared	-	[NT]	[NT]	170939-63	13/07/2017
Date analysed	-	[NT]	[NT]	170939-63	13/07/2017
Arsenic	mg/kg	[NT]	[NT]	170939-63	98%
Beryllium	mg/kg	[NT]	[NT]	[NR]	[NR]
Boron	mg/kg	[NT]	[NT]	[NR]	[NR]
Cadmium	mg/kg	[NT]	[NT]	170939-63	95%
Chromium	mg/kg	[NT]	[NT]	170939-63	113%
Cobalt	mg/kg	[NT]	[NT]	[NR]	[NR]
Copper	mg/kg	[NT]	[NT]	170939-63	111%
Lead	mg/kg	[NT]	[NT]	170939-63	#
Manganese	mg/kg	[NT]	[NT]	[NR]	[NR]
Mercury	mg/kg	[NT]	[NT]	170939-63	97%
Nickel	mg/kg	[NT]	[NT]	170939-63	86%
Selenium	mg/kg	[NT]	[NT]	[NR]	[NR]
Zinc	mg/kg	[NT]	[NT]	170939-63	123%

QUALITY CONTROL Organochlorine Pesticides in soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD
Date extracted	-	170939-66	11/07/2017 || 11/07/2017
Date analysed	-	170939-66	14/07/2017 || 14/07/2017
HCB	mg/kg	170939-66	<0.1 || <0.1
alpha-BHC	mg/kg	170939-66	<0.1 || <0.1
gamma-BHC	mg/kg	170939-66	<0.1 || <0.1
beta-BHC	mg/kg	170939-66	<0.1 || <0.1
Heptachlor	mg/kg	170939-66	<0.1 || <0.1
delta-BHC	mg/kg	170939-66	<0.1 || <0.1
Aldrin	mg/kg	170939-66	<0.1 || <0.1
Heptachlor Epoxide	mg/kg	170939-66	<0.1 || <0.1
gamma-Chlordane	mg/kg	170939-66	<0.1 || <0.1
alpha-chlordane	mg/kg	170939-66	<0.1 || <0.1
Endosulfan I	mg/kg	170939-66	<0.1 || <0.1
pp-DDE	mg/kg	170939-66	<0.1 || <0.1
Dieldrin	mg/kg	170939-66	<0.1 || <0.1
Endrin	mg/kg	170939-66	<0.1 || <0.1
pp-DDD	mg/kg	170939-66	<0.1 || <0.1
Endosulfan II	mg/kg	170939-66	<0.1 || <0.1
pp-DDT	mg/kg	170939-66	<0.1 || <0.1
Endrin Aldehyde	mg/kg	170939-66	<0.1 || <0.1
Endosulfan Sulphate	mg/kg	170939-66	<0.1 || <0.1
Methoxychlor	mg/kg	170939-66	<0.1 || <0.1
Surrogate TCMX	%	170939-66	95 || 91 || RPD: 4

QUALITY CONTROL Organophosphorus Pesticides	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD
Date extracted	-	170939-66	11/07/2017 || 11/07/2017
Date analysed	-	170939-66	14/07/2017 || 14/07/2017
Azinphos-methyl (Guthion)	mg/kg	170939-66	<0.1 || <0.1
Bromophos-ethyl	mg/kg	170939-66	<0.1 || <0.1
Chlorpyriphos	mg/kg	170939-66	<0.1 || <0.1
Chlorpyriphos-methyl	mg/kg	170939-66	<0.1 || <0.1
Diazinon	mg/kg	170939-66	<0.1 || <0.1
Dichlorvos	mg/kg	170939-66	<0.1 || <0.1
Dimethoate	mg/kg	170939-66	<0.1 || <0.1
Ethion	mg/kg	170939-66	<0.1 || <0.1
Fenitrothion	mg/kg	170939-66	<0.1 || <0.1
Malathion	mg/kg	170939-66	<0.1 || <0.1
Parathion	mg/kg	170939-66	<0.1 || <0.1
Ronnel	mg/kg	170939-66	<0.1 || <0.1
Surrogate TCMX	%	170939-66	95 || 91 || RPD: 4

QUALITY CONTROL PCBs in Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD
Date extracted	-	170939-66	11/07/2017 || 11/07/2017
Date analysed	-	170939-66	14/07/2017 || 14/07/2017
Aroclor 1016	mg/kg	170939-66	<0.1 || <0.1
Aroclor 1221	mg/kg	170939-66	<0.1 || <0.1
Aroclor 1232	mg/kg	170939-66	<0.1 || <0.1
Aroclor 1242	mg/kg	170939-66	<0.1 || <0.1
Aroclor 1248	mg/kg	170939-66	<0.1 || <0.1
Aroclor 1254	mg/kg	170939-66	<0.1 || <0.1
Aroclor 1260	mg/kg	170939-66	<0.1 || <0.1
Surrogate TCLMX	%	170939-66	95 || 91 || RPD: 4

QUALITY CONTROL Acid Extractractable metals in soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD
Date prepared	-	170939-71	13/07/2017 || 13/07/2017
Date analysed	-	170939-71	13/07/2017 || 13/07/2017
Arsenic	mg/kg	170939-71	<4 || <4
Beryllium	mg/kg	[NT]	[NT]
Boron	mg/kg	[NT]	[NT]
Cadmium	mg/kg	170939-71	<0.4 || <0.4
Chromium	mg/kg	170939-71	4 || 3 || RPD: 29
Cobalt	mg/kg	[NT]	[NT]
Copper	mg/kg	170939-71	<1 || <1
Lead	mg/kg	170939-71	5 || 6 || RPD: 18
Manganese	mg/kg	[NT]	[NT]

QUALITY CONTROL Acid Extractractable metals in soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD
Mercury	mg/kg	170939-71	<0.1 || <0.1
Nickel	mg/kg	170939-71	<1 || <1
Selenium	mg/kg	[NT]	[NT]
Zinc	mg/kg	170939-71	<1 || <1

QUALITY CONTROL vTRH in Water (C6-C9) NEPM	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date extracted	-	[NT]	[NT]	LCS-W2	11/07/2017
Date analysed	-	[NT]	[NT]	LCS-W2	12/07/2017
$TRHC_6$ - C_9	µg/L	[NT]	[NT]	LCS-W2	124%
$TRHC_6$ - C_{10}	µg/L	[NT]	[NT]	LCS-W2	124%
Surrogate Dibromofluoromethane	%	[NT]	[NT]	LCS-W2	94%
Surrogate toluene-d8	%	[NT]	[NT]	LCS-W2	96%
Surrogate 4-BFB	%	[NT]	[NT]	LCS-W2	110%

QUALITY CONTROL Misc Inorg - Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD
Date prepared	-	170939-5	13/07/2017 || 13/07/2017
Date analysed	-	170939-5	13/07/2017 || 13/07/2017
pH 1:5 soil:water	pH Units	170939-5	5.8 || 5.8 || RPD: 0

QUALITY CONTROL Metals in Water - Dissolved	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date digested	-	[NT]	[NT]	LCS-W1	11/07/2017
Date analysed	-	[NT]	[NT]	LCS-W1	11/07/2017
Arsenic - Dissolved	mg/L	[NT]	[NT]	LCS-W1	101%
Cadmium - Dissolved	mg/L	[NT]	[NT]	LCS-W1	106%
Chromium - Dissolved	mg/L	[NT]	[NT]	LCS-W1	104%
Copper - Dissolved	mg/L	[NT]	[NT]	LCS-W1	104%
Lead - Dissolved	mg/L	[NT]	[NT]	LCS-W1	102%
Mercury - Dissolved	mg/L	[NT]	[NT]	LCS-W1	96%
Nickel - Dissolved	mg/L	[NT]	[NT]	LCS-W1	102%
Zinc - Dissolved	mg/L	[NT]	[NT]	LCS-W1	103%

QUALITY CONTROL Misc Inorg - Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD
Date prepared	-	170939-57	13/07/2017 || 13/07/2017
Date analysed	-	170939-57	13/07/2017 || 13/07/2017
pH 1:5 soil:water	pH Units	170939-57	5.5 || 5.3 || RPD: 4

QUALITY CONTROL Phenoxy Acid Herbicides in Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date extracted	-	[NT]	[NT]	LCS-1	14/07/2017
Date analysed	-	[NT]	[NT]	LCS-1	14/07/2017
Clopyralid	mg/kg	[NT]	[NT]	[NR]	[NR]
3,5-Dichlorobenzoic acid	mg/kg	[NT]	[NT]	[NR]	[NR]
o-chlorophenoxy acetic acid	mg/kg	[NT]	[NT]	[NR]	[NR]
4-CPA	mg/kg	[NT]	[NT]	[NR]	[NR]
Dicamba	mg/kg	[NT]	[NT]	LCS-1	88%
MCPP	mg/kg	[NT]	[NT]	LCS-1	86%
MCPA	mg/kg	[NT]	[NT]	LCS-1	84%
Dichlorprop	mg/kg	[NT]	[NT]	[NR]	[NR]
2,4-D	mg/kg	[NT]	[NT]	LCS-1	84%
Bromoxynil	mg/kg	[NT]	[NT]	[NR]	[NR]
Triclopyr	mg/kg	[NT]	[NT]	[NR]	[NR]
2,4,5-TP	mg/kg	[NT]	[NT]	[NR]	[NR]
2,4,5-T	mg/kg	[NT]	[NT]	LCS-1	81%
MCPB	mg/kg	[NT]	[NT]	[NR]	[NR]
Dinoseb	mg/kg	[NT]	[NT]	[NR]	[NR]
2,4-DB	mg/kg	[NT]	[NT]	[NR]	[NR]
Ioxynil	mg/kg	[NT]	[NT]	[NR]	[NR]
Picloram	mg/kg	[NT]	[NT]	[NR]	[NR]
DCPA (Chlorthal) Diacid	mg/kg	[NT]	[NT]	[NR]	[NR]
Acifluorfen	mg/kg	[NT]	[NT]	[NR]	[NR]
2,4,6-T	mg/kg	[NT]	[NT]	[NR]	[NR]
2,6-D	mg/kg	[NT]	[NT]	[NR]	[NR]
Surrogate 2.4- DCPA	%	[NT]	[NT]	LCS-1	106%

QUALITY CONTROL Synthetic Pyrethroids in soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date extracted	-	[NT]	[NT]	LCS-1	13/07/2017
Date analysed	-	[NT]	[NT]	LCS-1	14/07/2017
Bifenthrin	mg/kg	[NT]	[NT]	LCS-1	83%
Surrogate p-Terphenyl-d_{14}	%	[NT]	[NT]	LCS-1	106%

QUALITY CONTROL Acid Extractractable metals in soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD
Date prepared	-	170939-64	13/07/2017 || 13/07/2017
Date analysed	-	170939-64	13/07/2017 || 13/07/2017
Arsenic	mg/kg	170939-64	4 || <4
Beryllium	mg/kg	[NT]	[NT]
Boron	mg/kg	[NT]	[NT]
Cadmium	mg/kg	170939-64	<0.4 || <0.4
Chromium	mg/kg	170939-64	10 || 8 || RPD: 22
Cobalt	mg/kg	[NT]	[NT]
Copper	mg/kg	170939-64	8 || 5 || RPD: 46
Lead	mg/kg	170939-64	6200 || 2200 || RPD: 95
Manganese	mg/kg	[NT]	[NT]
Mercury	mg/kg	170939-64	<0.1 || <0.1
Nickel	mg/kg	170939-64	5 || 5 || RPD: 0
Selenium	mg/kg	[NT]	[NT]
Zinc	mg/kg	170939-64	94 || 58 || RPD: 47

Report Comments:

Acid Extractable Metals in Soil: The laboratory RPD acceptance criteria has been exceeded for 170939-1 for Cu, Pb, and Ni. Therefore a triplicate result has been issued as laboratory sample number 170939-72.

Acid Extractable Metals in Soil: The laboratory RPD acceptance criteria has been exceeded for 170939-41 for Cu and Zn. Therefore a triplicate result has been issued as laboratory sample number 170939-73.

Acid Extractable Metals in Soil:
Percent recovery is not possible to report due to the high concentration of the element/s in the sample/s. However an acceptable recovery was obtained for the LCS.

PCBs in soil:
It was noted that PCBs were detected in sample 14.

Acid Extractable Metals in Soil: The laboratory RPD acceptance criteria has been exceeded for 170939-64 for Pb. Therefore a triplicate result has been issued as laboratory sample number 170939-74.

Herbicides, Synthetic Pyrethroids, Toxaphene & Mirex analysed by MPL Laboratories. Report No.198096.

Asbestos ID was analysed by Approved Identifier:	Not applicable for this job
Asbestos ID was authorised by Approved Signatory:	Not applicable for this job

INS: Insufficient sample for this test	PQL: Practical Quantitation Limit	NT: Not tested
NR: Test not required	RPD: Relative Percent Difference	NA: Test not required
<: Less than	>: Greater than	LCS: Laboratory Control Sample

Quality Control Definitions

Blank: This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.

Duplicate: This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.

Matrix Spike : A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.

LCS (Laboratory Control Sample) : This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.

Surrogate Spike: Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.
Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.
Spikes for Physical and Aggregate Tests are not applicable.
For VOCs in water samples, three vials are required for duplicate or spike analysis.

Duplicates: <5xPQL - any RPD is acceptable; >5xPQL - 0-50% RPD is acceptable.
Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals; 60-140% for organics (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

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

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

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

Measurement Uncertainty estimates are available for most tests upon request.

CHAIN OF CUSTODY - Client

ENVIROLAB GROUP - National phone number 1300 424 344

Client: LRM	Client Project Name / Number / Site etc (ie report title):
Contact Person:	
Project Mgr:	PO No.:
Sampler:	Envirolab Quote No. :
Address: Lane Cove.	Date results required: Or choose: standard / same day / 1 day / 2 day / 3 day *Note: Inform lab in advance if urgent turnaround is required - surcharges apply*
Phone: Mob: 0411147722	Additional report format: esdat / equis /
Email: jon.lawson@lrmglobal.com.au	Lab Comments:

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Ph: 02 9910 6200 / sydney@envirolab.com.au

Perth Lab - MPL Laboratories
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Ph: 08 9317 2505 / lab@mpl.com.au

Melbourne Lab - Envirolab Services
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Adelaide Office - Envirolab Services
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Darwin Office - Envirolab Services
Unit 7, 17 Willes Rd, Berrimah, NT 0820
Ph: 08 8967 1201 / darwin@envirolab.com.au

Envirolab Sample ID	Client Sample ID or information	Depth	Date sampled	Type of sample	Metals	TPH	BTEX	PAH	NSW waste disposal screen										Comments
1	BH43 - 6.0		10/5	Soil					✓										
2	BH43 - 6.0				✓	✓	✓	✓											
3	BH43 - 7.0				✓	✓	✓	✓											
4	BH43 - 8.0				✓	✓	✓	✓											
5	BH43 - 9.0								✓										
6	BH44 - 5.0								✓										
7	BH44 - 6.0				✓	✓	✓	✓											
8	BH44 - 7.0				✓	✓	✓	✓											
9	BH44 - 8.0				✓	✓	✓	✓											
10	BH44 - 9.0								✓										
11	BH45 - 7.0								✓										
12	BH45 - 7.8				✓	✓	✓	✓											
13	BH45 - 8.0		✓	✓					✓										

Relinquished by (Company):	Received by (Company): ELS	Lab Use Only	
Print Name:	Print Name: Rebecca	Job number: 191466	Cooling: Ice / Ice pack / None
Date & Time:	Date & Time: 11/5/18 16:00	Temperature:	Security seal: Intact / Broken / None
Signature:	Signature:	TAT Req - SAME day / 1 / 2 / 3 / 4 / STD	

CHAIN OF CUSTODY - Client

ENVIROLAB GROUP - National phone number 1300 424 344

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Client: Kerr	Client Project Name / Number / Site etc (ie report title):
Contact Person:	
Project Mgr:	PO No.:
Sampler:	Envirolab Quote No. :
Address: Lane Cove	Date results required: Or choose: standard / same day / 1 day / 2 day / 3 day *Note: Inform lab in advance if urgent turnaround is required - surcharges apply*
Phone: Mob: 0411147722	Additional report format: esdat / equis /
Email:	Lab Comments:

Sample Information / **Tests Required** / **Comments**

Envirolab Sample ID	Client Sample ID or information	Depth	Date sampled	Type of sample	TRH	BTEX	PAH	NEPM metals	NSW waste disposal screen											Provide as much information about the sample as you can
14	BH46 - 0.2	11/5		Soil					✓											
15	BH46 - 0.5				✓	✓	✓	✓												
16	BH46 - 1.0				✓	✓	✓	✓												
17	BH46 - 2.0				✓	✓	✓	✓												
18	BH46 - 2.3								✓											
19	BH47 - 3.6								✓											
20	BH47 - 5.0				✓	✓	✓	✓												
21	BH47 - 6.0				✓	✓	✓	✓												
22	BH47 - 6.5				✓	✓	✓	✓												
23	BH47 - 7.0								✓											
24	Dup 6	10/5			✓	✓	✓	✓												
25	Dup 7	11/5			✓	✓	✓	✓												
26	Trip 2	10-11/5		Water	✓															

abelled
Dup 5
Dup 6

Relinquished by (Company):	Received by (Company):	**Lab Use Only**	
Print Name:	Print Name:	Job number: 191466	Cooling: Ice / Ice pack / None
Date & Time:	Date & Time: RN 11/5/18	Temperature:	Security seal: Intact / Broken / None
Signature:	Signature:	TAT Req - SAME day / 1 / 2 / 3 / 4 / STD	

CHAIN OF CUSTODY - Client

ENVIROLAB GROUP - National phone number 1300 424 344

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Darwin Office - Envirolab Services
Unit 7, 17 Willes Rd, Berrimah, NT 0820
Ph: 08 8967 1201 / darwin@envirolab.com.au

Client: LRM	Client Project Name / Number / Site etc (ie report title):
Contact Person:	
Project Mgr:	PO No.:
Sampler:	Envirolab Quote No. :
Address: Lane Cove	Date results required:
	Or choose: standard / same day / 1 day / 2 day / 3 day *Note: Inform lab in advance if urgent turnaround is required - surcharges apply*
Phone: Mob: 0411477722	Additional report format: esdat / equis /
Email:	Lab Comments:

Sample Information / **Tests Required** / **Comments**

Envirolab Sample ID	Client Sample ID or information	Depth	Date sampled	Type of sample	Metals Man															Provide as much information about the sample as you can
27	Split 5	1V5		Sal	✓															
28	Split 6.	1V5.		"	✓															

Relinquished by (Company):	Received by (Company):	**Lab Use Only**	
Print Name:	Print Name:	Job number: 191466	Cooling: Ice / Ice pack / None
Date & Time:	Date & Time: RW 11/5/18	Temperature:	Security seal: Intact / Broken /None
Signature:	Signature:	TAT Req - SAME day / 1 / 2 / 3 / 4 / STD	

Envirolab Services Pty Ltd
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CERTIFICATE OF ANALYSIS 191466

Client Details

Client	LRM Global
Attention	Jon Lawson
Address	PO Box 1237, Carlton, VIC, 3053

Sample Details

Your Reference	**Soil & Water Analysis**
Number of Samples	27 Soil, 1 Water
Date samples received	11/05/2018
Date completed instructions received	11/05/2018

Analysis Details

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

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

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

Please refer to the last page of this report for any comments relating to the results.

Report Details

Date results requested by	18/05/2018
Date of Issue	23/05/2018

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Accredited for compliance with ISO/IEC 17025 - Testing. **Tests not covered by NATA are denoted with ***

Results Approved By
Dragana Tomas, Senior Chemist
Giovanni Agosti, Group Technical Manager
Nancy Zhang, Assistant Lab Manager
Nick Sarlamis, Inorganics Supervisor
Steven Luong, Senior Chemist

Authorised By

Jacinta Hurst, Laboratory Manager

VOCs in soil						
Our Reference		191466-1	191466-5	191466-6	191466-10	191466-11
Your Reference	UNITS	BH43_5.0	BH43_9.0	BH44_5.0	BH44_9.0	BH45_7.0
Date Sampled		10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	15/05/2018	15/05/2018	15/05/2018	15/05/2018	15/05/2018
Date analysed	-	16/05/2018	16/05/2018	16/05/2018	16/05/2018	16/05/2018
Dichlorodifluoromethane	mg/kg	<1	<1	<1	<1	<1
Chloromethane	mg/kg	<1	<1	<1	<1	<1
Vinyl Chloride	mg/kg	<1	<1	<1	<1	<1
Bromomethane	mg/kg	<1	<1	<1	<1	<1
Chloroethane	mg/kg	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	<1	<1	<1	<1	<1
1,1-Dichloroethene	mg/kg	<1	<1	<1	<1	<1
trans-1,2-dichloroethene	mg/kg	<1	<1	<1	<1	<1
1,1-dichloroethane	mg/kg	<1	<1	<1	<1	<1
cis-1,2-dichloroethene	mg/kg	<1	<1	<1	<1	<1
bromochloromethane	mg/kg	<1	<1	<1	<1	<1
chloroform	mg/kg	<1	<1	<1	<1	<1
2,2-dichloropropane	mg/kg	<1	<1	<1	<1	<1
1,2-dichloroethane	mg/kg	<1	<1	<1	<1	<1
1,1,1-trichloroethane	mg/kg	<1	<1	<1	<1	<1
1,1-dichloropropene	mg/kg	<1	<1	<1	<1	<1
Cyclohexane	mg/kg	<1	<1	<1	<1	<1
carbon tetrachloride	mg/kg	<1	<1	<1	<1	<1
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
dibromomethane	mg/kg	<1	<1	<1	<1	<1
1,2-dichloropropane	mg/kg	<1	<1	<1	<1	<1
trichloroethene	mg/kg	<1	<1	<1	<1	<1
bromodichloromethane	mg/kg	<1	<1	<1	<1	<1
trans-1,3-dichloropropene	mg/kg	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	<1	<1	<1	<1	<1
1,1,2-trichloroethane	mg/kg	<1	<1	<1	<1	<1
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
1,3-dichloropropane	mg/kg	<1	<1	<1	<1	<1
dibromochloromethane	mg/kg	<1	<1	<1	<1	<1
1,2-dibromoethane	mg/kg	<1	<1	<1	<1	<1
tetrachloroethene	mg/kg	<1	<1	<1	<1	<1
1,1,1,2-tetrachloroethane	mg/kg	<1	<1	<1	<1	<1
chlorobenzene	mg/kg	<1	<1	<1	<1	<1
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
bromoform	mg/kg	<1	<1	<1	<1	<1

VOCs in soil						
Our Reference		191466-1	191466-5	191466-6	191466-10	191466-11
Your Reference	UNITS	BH43_5.0	BH43_9.0	BH44_5.0	BH44_9.0	BH45_7.0
Date Sampled		10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
styrene	mg/kg	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	mg/kg	<1	<1	<1	<1	<1
o-Xylene	mg/kg	<1	<1	<1	<1	<1
1,2,3-trichloropropane	mg/kg	<1	<1	<1	<1	<1
isopropylbenzene	mg/kg	<1	<1	<1	<1	<1
bromobenzene	mg/kg	<1	<1	<1	<1	<1
n-propyl benzene	mg/kg	<1	<1	<1	<1	<1
2-chlorotoluene	mg/kg	<1	<1	<1	<1	<1
4-chlorotoluene	mg/kg	<1	<1	<1	<1	<1
1,3,5-trimethyl benzene	mg/kg	<1	<1	<1	<1	<1
tert-butyl benzene	mg/kg	<1	<1	<1	<1	<1
1,2,4-trimethyl benzene	mg/kg	<1	<1	<1	<1	<1
1,3-dichlorobenzene	mg/kg	<1	<1	<1	<1	<1
sec-butyl benzene	mg/kg	<1	<1	<1	<1	<1
1,4-dichlorobenzene	mg/kg	<1	<1	<1	<1	<1
4-isopropyl toluene	mg/kg	<1	<1	<1	<1	<1
1,2-dichlorobenzene	mg/kg	<1	<1	<1	<1	<1
n-butyl benzene	mg/kg	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	mg/kg	<1	<1	<1	<1	<1
1,2,4-trichlorobenzene	mg/kg	<1	<1	<1	<1	<1
hexachlorobutadiene	mg/kg	<1	<1	<1	<1	<1
1,2,3-trichlorobenzene	mg/kg	<1	<1	<1	<1	<1
Surrogate Dibromofluorometha	%	99	100	69	100	101
Surrogate aaa-Trifluorotoluene	%	85	89	95	84	88
Surrogate Toluene-d_8	%	99	100	100	99	100
Surrogate 4-Bromofluorobenzene	%	97	96	93	96	98

VOCs in soil						
Our Reference		191466-13	191466-14	191466-18	191466-19	191466-23
Your Reference	UNITS	BH45_8.0	BH46_0.2	BH46_2.3	BH47_3.6	BH47_7.0
Date Sampled		10/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	15/05/2018	15/05/2018	15/05/2018	15/05/2018	16/05/2018
Date analysed	-	16/05/2018	16/05/2018	16/05/2018	16/05/2018	17/05/2018
Dichlorodifluoromethane	mg/kg	<1	<1	<1	<1	<1
Chloromethane	mg/kg	<1	<1	<1	<1	<1
Vinyl Chloride	mg/kg	<1	<1	<1	<1	<1
Bromomethane	mg/kg	<1	<1	<1	<1	<1
Chloroethane	mg/kg	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	<1	<1	<1	<1	<1
1,1-Dichloroethene	mg/kg	<1	<1	<1	<1	<1
trans-1,2-dichloroethene	mg/kg	<1	<1	<1	<1	<1
1,1-dichloroethane	mg/kg	<1	<1	<1	<1	<1
cis-1,2-dichloroethene	mg/kg	<1	<1	<1	<1	<1
bromochloromethane	mg/kg	<1	<1	<1	<1	<1
chloroform	mg/kg	<1	<1	<1	<1	<1
2,2-dichloropropane	mg/kg	<1	<1	<1	<1	<1
1,2-dichloroethane	mg/kg	<1	<1	<1	<1	<1
1,1,1-trichloroethane	mg/kg	<1	<1	<1	<1	<1
1,1-dichloropropene	mg/kg	<1	<1	<1	<1	<1
Cyclohexane	mg/kg	<1	<1	<1	<1	<1
carbon tetrachloride	mg/kg	<1	<1	<1	<1	<1
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
dibromomethane	mg/kg	<1	<1	<1	<1	<1
1,2-dichloropropane	mg/kg	<1	<1	<1	<1	<1
trichloroethene	mg/kg	<1	<1	<1	<1	<1
bromodichloromethane	mg/kg	<1	<1	<1	<1	<1
trans-1,3-dichloropropene	mg/kg	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	<1	<1	<1	<1	<1
1,1,2-trichloroethane	mg/kg	<1	<1	<1	<1	<1
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
1,3-dichloropropane	mg/kg	<1	<1	<1	<1	<1
dibromochloromethane	mg/kg	<1	<1	<1	<1	<1
1,2-dibromoethane	mg/kg	<1	<1	<1	<1	<1
tetrachloroethene	mg/kg	<1	<1	<1	<1	<1
1,1,1,2-tetrachloroethane	mg/kg	<1	<1	<1	<1	<1
chlorobenzene	mg/kg	<1	<1	<1	<1	<1
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
bromoform	mg/kg	<1	<1	<1	<1	<1

VOCs in soil						
Our Reference		191466-13	191466-14	191466-18	191466-19	191466-23
Your Reference	UNITS	BH45_8.0	BH46_0.2	BH46_2.3	BH47_3.6	BH47_7.0
Date Sampled		10/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
styrene	mg/kg	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	mg/kg	<1	<1	<1	<1	<1
o-Xylene	mg/kg	<1	<1	<1	<1	<1
1,2,3-trichloropropane	mg/kg	<1	<1	<1	<1	<1
isopropylbenzene	mg/kg	<1	<1	<1	<1	<1
bromobenzene	mg/kg	<1	<1	<1	<1	<1
n-propyl benzene	mg/kg	<1	<1	<1	<1	<1
2-chlorotoluene	mg/kg	<1	<1	<1	<1	<1
4-chlorotoluene	mg/kg	<1	<1	<1	<1	<1
1,3,5-trimethyl benzene	mg/kg	<1	<1	<1	<1	<1
tert-butyl benzene	mg/kg	<1	<1	<1	<1	<1
1,2,4-trimethyl benzene	mg/kg	<1	<1	<1	<1	<1
1,3-dichlorobenzene	mg/kg	<1	<1	<1	<1	<1
sec-butyl benzene	mg/kg	<1	<1	<1	<1	<1
1,4-dichlorobenzene	mg/kg	<1	<1	<1	<1	<1
4-isopropyl toluene	mg/kg	<1	<1	<1	<1	<1
1,2-dichlorobenzene	mg/kg	<1	<1	<1	<1	<1
n-butyl benzene	mg/kg	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	mg/kg	<1	<1	<1	<1	<1
1,2,4-trichlorobenzene	mg/kg	<1	<1	<1	<1	<1
hexachlorobutadiene	mg/kg	<1	<1	<1	<1	<1
1,2,3-trichlorobenzene	mg/kg	<1	<1	<1	<1	<1
Surrogate Dibromofluorometha	%	100	101	100	103	101
Surrogate aaa-Trifluorotoluene	%	96	88	89	90	91
Surrogate Toluene-d_8	%	98	99	98	100	98
Surrogate 4-Bromofluorobenzene	%	97	96	95	94	94

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		191466-1	191466-2	191466-3	191466-4	191466-5
Your Reference	UNITS	BH43_5.0	BH43_6.0	BH43_7.0	BH43_8.0	BH43_9.0
Date Sampled		10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	15/05/2018	15/05/2018	15/05/2018	16/05/2018	15/05/2018
Date analysed	-	16/05/2018	16/05/2018	16/05/2018	17/05/2018	16/05/2018
TRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	[NA]	<25	<25	<25	[NA]
Benzene	mg/kg	[NA]	<0.2	<0.2	<0.2	[NA]
Toluene	mg/kg	[NA]	<0.5	<0.5	<0.5	[NA]
Ethylbenzene	mg/kg	[NA]	<1	<1	<1	[NA]
m+p-xylene	mg/kg	[NA]	<2	<2	<2	[NA]
o-Xylene	mg/kg	[NA]	<1	<1	<1	[NA]
naphthalene	mg/kg	[NA]	<1	<1	<1	[NA]
Total +ve Xylenes	mg/kg	[NA]	<1	<1	<1	[NA]
Surrogate aaa-Trifluorotoluene	%	76	85	85	92	80

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		191466-6	191466-7	191466-8	191466-9	191466-10
Your Reference	UNITS	BH44_5.0	BH44_6.0	BH44_7.0	BH44_8.0	BH44_9.0
Date Sampled		10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	15/05/2018	16/05/2018	16/05/2018	16/05/2018	15/05/2018
Date analysed	-	16/05/2018	17/05/2018	17/05/2018	17/05/2018	16/05/2018
TRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	[NA]	<25	<25	<25	[NA]
Benzene	mg/kg	[NA]	<0.2	<0.2	<0.2	[NA]
Toluene	mg/kg	[NA]	<0.5	<0.5	<0.5	[NA]
Ethylbenzene	mg/kg	[NA]	<1	<1	<1	[NA]
m+p-xylene	mg/kg	[NA]	<2	<2	<2	[NA]
o-Xylene	mg/kg	[NA]	<1	<1	<1	[NA]
naphthalene	mg/kg	[NA]	<1	<1	<1	[NA]
Total +ve Xylenes	mg/kg	[NA]	<1	<1	<1	[NA]
Surrogate aaa-Trifluorotoluene	%	84	95	92	92	75

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		191466-11	191466-12	191466-13	191466-14	191466-15
Your Reference	UNITS	BH45_7.0	BH45_7.8	BH45_8.0	BH46_0.2	BH46_0.5
Date Sampled		10/05/2018	10/05/2018	10/05/2018	11/05/2018	11/05/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	15/05/2018	16/05/2018	15/05/2018	15/05/2018	16/05/2018
Date analysed	-	16/05/2018	17/05/2018	16/05/2018	16/05/2018	17/05/2018
TRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	[NA]	<25	[NA]	[NA]	<25
Benzene	mg/kg	[NA]	<0.2	[NA]	[NA]	<0.2
Toluene	mg/kg	[NA]	<0.5	[NA]	[NA]	<0.5
Ethylbenzene	mg/kg	[NA]	<1	[NA]	[NA]	<1
m+p-xylene	mg/kg	[NA]	<2	[NA]	[NA]	<2
o-Xylene	mg/kg	[NA]	<1	[NA]	[NA]	<1
naphthalene	mg/kg	[NA]	<1	[NA]	[NA]	<1
Total +ve Xylenes	mg/kg	[NA]	<1	[NA]	[NA]	<1
Surrogate aaa-Trifluorotoluene	%	78	91	85	79	92

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		191466-16	191466-17	191466-18	191466-19	191466-20
Your Reference	UNITS	BH46_1.0	BH46_2.0	BH46_2.3	BH47_3.6	BH47_5.0
Date Sampled		11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	16/05/2018	16/05/2018	15/05/2018	15/05/2018	16/05/2018
Date analysed	-	17/05/2018	17/05/2018	16/05/2018	16/05/2018	17/05/2018
TRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	[NA]	[NA]	<25
Benzene	mg/kg	<0.2	<0.2	[NA]	[NA]	<0.2
Toluene	mg/kg	<0.5	<0.5	[NA]	[NA]	<0.5
Ethylbenzene	mg/kg	<1	<1	[NA]	[NA]	<1
m+p-xylene	mg/kg	<2	<2	[NA]	[NA]	<2
o-Xylene	mg/kg	<1	<1	[NA]	[NA]	<1
naphthalene	mg/kg	<1	<1	[NA]	[NA]	<1
Total +ve Xylenes	mg/kg	<1	<1	[NA]	[NA]	<1
Surrogate aaa-Trifluorotoluene	%	92	92	79	80	95

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		191466-21	191466-22	191466-23	191466-24	191466-25
Your Reference	UNITS	BH47_6.0	BH47_6.5	BH47_7.0	Dup 6	Dup 7
Date Sampled		11/05/2018	11/05/2018	11/05/2018	10/05/2018	11/05/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	16/05/2018	16/05/2018	16/05/2018	16/05/2018	16/05/2018
Date analysed	-	17/05/2018	17/05/2018	17/05/2018	17/05/2018	17/05/2018
TRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	[NA]	<25	<25
Benzene	mg/kg	<0.2	<0.2	[NA]	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	[NA]	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	[NA]	<1	<1
m+p-xylene	mg/kg	<2	<2	[NA]	<2	<2
o-Xylene	mg/kg	<1	<1	[NA]	<1	<1
naphthalene	mg/kg	<1	<1	[NA]	<1	<1
Total +ve Xylenes	mg/kg	<1	<1	[NA]	<1	<1
Surrogate aaa-Trifluorotoluene	%	94	86	81	90	94

svTRH (C10-C40) in Soil						
Our Reference		191466-1	191466-2	191466-3	191466-4	191466-5
Your Reference	UNITS	BH43_5.0	BH43_6.0	BH43_7.0	BH43_8.0	BH43_9.0
Date Sampled		10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	15/05/2018	15/05/2018	15/05/2018	15/05/2018	15/05/2018
Date analysed	-	15/05/2018	15/05/2018	15/05/2018	15/05/2018	16/05/2018
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	[NA]	<50	<50	<50	[NA]
TRH >C_{16} -C_{34}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	71	71	72	71	70

svTRH (C10-C40) in Soil						
Our Reference		191466-6	191466-7	191466-8	191466-9	191466-10
Your Reference	UNITS	BH44_5.0	BH44_6.0	BH44_7.0	BH44_8.0	BH44_9.0
Date Sampled		10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	15/05/2018	15/05/2018	15/05/2018	15/05/2018	15/05/2018
Date analysed	-	16/05/2018	16/05/2018	16/05/2018	16/05/2018	16/05/2018
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	[NA]	<50	<50	<50	[NA]
TRH >C_{16} -C_{34}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	70	71	70	70	69

svTRH (C10-C40) in Soil						
Our Reference		191466-11	191466-12	191466-13	191466-14	191466-15
Your Reference	UNITS	BH45_7.0	BH45_7.8	BH45_8.0	BH46_0.2	BH46_0.5
Date Sampled		10/05/2018	10/05/2018	10/05/2018	11/05/2018	11/05/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	15/05/2018	15/05/2018	15/05/2018	15/05/2018	15/05/2018
Date analysed	-	16/05/2018	16/05/2018	16/05/2018	16/05/2018	16/05/2018
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	[NA]	<50	[NA]	[NA]	<50
TRH >C_{16} -C_{34}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	70	67	69	70	70

svTRH (C10-C40) in Soil						
Our Reference		191466-16	191466-17	191466-18	191466-19	191466-20
Your Reference	UNITS	BH46_1.0	BH46_2.0	BH46_2.3	BH47_3.6	BH47_5.0
Date Sampled		11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	15/05/2018	15/05/2018	15/05/2018	15/05/2018	15/05/2018
Date analysed	-	16/05/2018	16/05/2018	16/05/2018	16/05/2018	16/05/2018
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	[NA]	[NA]	<50
TRH >C_{16} -C_{34}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	70	70	70	69	69

svTRH (C10-C40) in Soil						
Our Reference		191466-21	191466-22	191466-23	191466-24	191466-25
Your Reference	UNITS	BH47_6.0	BH47_6.5	BH47_7.0	Dup 6	Dup 7
Date Sampled		11/05/2018	11/05/2018	11/05/2018	10/05/2018	11/05/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	15/05/2018	15/05/2018	15/05/2018	15/05/2018	15/05/2018
Date analysed	-	16/05/2018	16/05/2018	16/05/2018	16/05/2018	16/05/2018
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	[NA]	<50	<50
TRH >C_{16} -C_{34}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	95	95	97	99	96

PAHs in Soil						
Our Reference		191466-1	191466-2	191466-3	191466-4	191466-5
Your Reference	UNITS	BH43_5.0	BH43_6.0	BH43_7.0	BH43_8.0	BH43_9.0
Date Sampled		10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	15/05/2018	15/05/2018	15/05/2018	15/05/2018	15/05/2018
Date analysed	-	16/05/2018	16/05/2018	16/05/2018	16/05/2018	16/05/2018
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	97	94	95	99	97

PAHs in Soil						
Our Reference		191466-6	191466-7	191466-8	191466-9	191466-10
Your Reference	UNITS	BH44_5.0	BH44_6.0	BH44_7.0	BH44_8.0	BH44_9.0
Date Sampled		10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	15/05/2018	15/05/2018	15/05/2018	15/05/2018	15/05/2018
Date analysed	-	16/05/2018	16/05/2018	16/05/2018	16/05/2018	16/05/2018
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	0.2	<0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	0.2	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	0.09	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	0.65	<0.05	<0.05	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	98	97	100	100	100

PAHs in Soil						
Our Reference		191466-11	191466-12	191466-13	191466-14	191466-15
Your Reference	UNITS	BH45_7.0	BH45_7.8	BH45_8.0	BH46_0.2	BH46_0.5
Date Sampled		10/05/2018	10/05/2018	10/05/2018	11/05/2018	11/05/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	15/05/2018	15/05/2018	15/05/2018	15/05/2018	15/05/2018
Date analysed	-	16/05/2018	16/05/2018	16/05/2018	16/05/2018	16/05/2018
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	96	97	96	98	97

PAHs in Soil						
Our Reference		191466-16	191466-17	191466-18	191466-19	191466-20
Your Reference	UNITS	BH46_1.0	BH46_2.0	BH46_2.3	BH47_3.6	BH47_5.0
Date Sampled		11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	15/05/2018	15/05/2018	15/05/2018	15/05/2018	15/05/2018
Date analysed	-	16/05/2018	16/05/2018	16/05/2018	16/05/2018	16/05/2018
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	0.2	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	0.4	0.2
Pyrene	mg/kg	<0.1	<0.1	<0.1	0.5	0.3
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	0.2	0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	0.2	0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	0.4	0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05	0.2	0.1
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	0.2	<0.1
Total +ve PAH's	mg/kg	<0.05	<0.05	<0.05	2.4	1.1
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	96	100	99	97	98

PAHs in Soil						
Our Reference		191466-21	191466-22	191466-23	191466-24	191466-25
Your Reference	UNITS	BH47_6.0	BH47_6.5	BH47_7.0	Dup 6	Dup 7
Date Sampled		11/05/2018	11/05/2018	11/05/2018	10/05/2018	11/05/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	15/05/2018	15/05/2018	15/05/2018	15/05/2018	15/05/2018
Date analysed	-	16/05/2018	16/05/2018	16/05/2018	16/05/2018	16/05/2018
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1	0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	0.06	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	<0.05	0.3	<0.05	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	95	97	97	96	98

Organochlorine Pesticides in soil						
Our Reference		191466-1	191466-5	191466-6	191466-10	191466-11
Your Reference	UNITS	BH43_5.0	BH43_9.0	BH44_5.0	BH44_9.0	BH45_7.0
Date Sampled		10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	15/05/2018	15/05/2018	15/05/2018	15/05/2018	15/05/2018
Date analysed	-	16/05/2018	16/05/2018	16/05/2018	16/05/2018	16/05/2018
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
gamma-BHC	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
Heptachlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDT	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
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve DDT+DDD+DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	103	102	102	102	101

Organochlorine Pesticides in soil						
Our Reference		191466-13	191466-14	191466-18	191466-19	191466-23
Your Reference	UNITS	BH45_8.0	BH46_0.2	BH46_2.3	BH47_3.6	BH47_7.0
Date Sampled		10/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	15/05/2018	15/05/2018	15/05/2018	15/05/2018	15/05/2018
Date analysed	-	16/05/2018	16/05/2018	16/05/2018	16/05/2018	16/05/2018
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
gamma-BHC	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
Heptachlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDT	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
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve DDT+DDD+DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	101	106	103	99	98

Organophosphorus Pesticides						
Our Reference		191466-1	191466-5	191466-6	191466-10	191466-11
Your Reference	UNITS	BH43_5.0	BH43_9.0	BH44_5.0	BH44_9.0	BH45_7.0
Date Sampled		10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	15/05/2018	15/05/2018	15/05/2018	15/05/2018	15/05/2018
Date analysed	-	16/05/2018	16/05/2018	16/05/2018	16/05/2018	16/05/2018
Azinphos-methyl (Guthion)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos-methyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Diazinon	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dichlorvos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Malathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Parathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	103	102	102	102	101

Organophosphorus Pesticides						
Our Reference		191466-13	191466-14	191466-18	191466-19	191466-23
Your Reference	UNITS	BH45_8.0	BH46_0.2	BH46_2.3	BH47_3.6	BH47_7.0
Date Sampled		10/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	15/05/2018	15/05/2018	15/05/2018	15/05/2018	15/05/2018
Date analysed	-	16/05/2018	16/05/2018	16/05/2018	16/05/2018	16/05/2018
Azinphos-methyl (Guthion)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos-methyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Diazinon	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dichlorvos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Malathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Parathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	101	106	103	99	98

Acid Extractable metals in soil						
Our Reference		191466-1	191466-2	191466-3	191466-4	191466-5
Your Reference	UNITS	BH43_5.0	BH43_6.0	BH43_7.0	BH43_8.0	BH43_9.0
Date Sampled		10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	15/05/2018	15/05/2018	15/05/2018	15/05/2018	15/05/2018
Date analysed	-	15/05/2018	15/05/2018	15/05/2018	15/05/2018	15/05/2018
Arsenic	mg/kg	<4	<4	<4	<4	<4
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Copper	mg/kg	4	6	5	5	4
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Molybdenum	mg/kg	<1	<1	<1	<1	<1
Nickel	mg/kg	2	2	3	2	2
Lead	mg/kg	5	7	6	5	4
Selenium	mg/kg	<2	<2	<2	<2	<2
Silver	mg/kg	<1	<1	<1	<1	<1
Tin	mg/kg	<1	<1	<1	<1	<1
Chromium	mg/kg	5	7	7	7	7

Acid Extractable metals in soil						
Our Reference		191466-6	191466-7	191466-8	191466-9	191466-10
Your Reference	UNITS	BH44_5.0	BH44_6.0	BH44_7.0	BH44_8.0	BH44_9.0
Date Sampled		10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	15/05/2018	15/05/2018	15/05/2018	15/05/2018	15/05/2018
Date analysed	-	15/05/2018	15/05/2018	15/05/2018	15/05/2018	15/05/2018
Arsenic	mg/kg	<4	8	<4	<4	<4
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Copper	mg/kg	1	3	4	5	3
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Molybdenum	mg/kg	<1	<1	<1	<1	<1
Nickel	mg/kg	<1	1	2	5	3
Lead	mg/kg	4	12	4	3	4
Selenium	mg/kg	<2	<2	<2	<2	<2
Silver	mg/kg	<1	<1	<1	<1	<1
Tin	mg/kg	<1	<1	<1	<1	<1
Chromium	mg/kg	4	15	12	16	13

Acid Extractable metals in soil						
Our Reference		191466-11	191466-12	191466-13	191466-14	191466-15
Your Reference	UNITS	BH45_7.0	BH45_7.8	BH45_8.0	BH46_0.2	BH46_0.5
Date Sampled		10/05/2018	10/05/2018	10/05/2018	11/05/2018	11/05/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	15/05/2018	15/05/2018	15/05/2018	15/05/2018	15/05/2018
Date analysed	-	15/05/2018	15/05/2018	15/05/2018	15/05/2018	15/05/2018
Arsenic	mg/kg	<4	<4	<4	<4	<4
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Copper	mg/kg	4	2	6	<1	<1
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Molybdenum	mg/kg	<1	<1	<1	<1	<1
Nickel	mg/kg	3	1	3	<1	<1
Lead	mg/kg	10	16	19	6	7
Selenium	mg/kg	<2	<2	<2	<2	<2
Silver	mg/kg	<1	<1	<1	<1	<1
Tin	mg/kg	<1	<1	<1	<1	<1
Chromium	mg/kg	9	9	12	5	5

Acid Extractable metals in soil						
Our Reference		191466-16	191466-17	191466-18	191466-19	191466-20
Your Reference	UNITS	BH46_1.0	BH46_2.0	BH46_2.3	BH47_3.6	BH47_5.0
Date Sampled		11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	15/05/2018	15/05/2018	15/05/2018	15/05/2018	15/05/2018
Date analysed	-	15/05/2018	15/05/2018	15/05/2018	15/05/2018	15/05/2018
Arsenic	mg/kg	<4	<4	<4	4	<4
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Copper	mg/kg	<1	<1	<1	4	3
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Molybdenum	mg/kg	<1	1	1	<1	<1
Nickel	mg/kg	<1	<1	<1	2	3
Lead	mg/kg	7	6	5	25	14
Selenium	mg/kg	<2	<2	<2	<2	<2
Silver	mg/kg	<1	<1	<1	<1	<1
Tin	mg/kg	<1	<1	<1	<1	<1
Chromium	mg/kg	3	9	10	9	9

Acid Extractable metals in soil						
Our Reference		191466-21	191466-22	191466-23	191466-24	191466-25
Your Reference	UNITS	BH47_6.0	BH47_6.5	BH47_7.0	Dup 6	Dup 7
Date Sampled		11/05/2018	11/05/2018	11/05/2018	10/05/2018	11/05/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	15/05/2018	15/05/2018	15/05/2018	15/05/2018	15/05/2018
Date analysed	-	15/05/2018	15/05/2018	15/05/2018	15/05/2018	15/05/2018
Arsenic	mg/kg	4	<4	<4	<4	<4
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Copper	mg/kg	6	5	2	5	<1
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Molybdenum	mg/kg	<1	1	<1	<1	1
Nickel	mg/kg	1	1	1	2	<1
Lead	mg/kg	14	13	8	5	6
Selenium	mg/kg	<2	<2	<2	<2	<2
Silver	mg/kg	<1	<1	<1	<1	<1
Tin	mg/kg	<1	<1	<1	<1	<1
Chromium	mg/kg	10	9	6	6	10

Acid Extractable metals in soil			
Our Reference		191466-27	191466-28
Your Reference	UNITS	Split 5	Spilt 6
Date Sampled		11/05/2018	11/05/2018
Type of sample		Soil	Soil
Date prepared	-	15/05/2018	15/05/2018
Date analysed	-	15/05/2018	15/05/2018
Arsenic	mg/kg	<4	<4
Cadmium	mg/kg	<0.4	<0.4
Copper	mg/kg	5	<1
Mercury	mg/kg	<0.1	<0.1
Molybdenum	mg/kg	<1	2
Nickel	mg/kg	2	<1
Lead	mg/kg	4	6
Selenium	mg/kg	<2	<2
Silver	mg/kg	<1	<1
Tin	mg/kg	<1	<1
Chromium	mg/kg	6	9

Misc Inorg - Soil						
Our Reference		191466-1	191466-5	191466-6	191466-10	191466-11
Your Reference	UNITS	BH43_5.0	BH43_9.0	BH44_5.0	BH44_9.0	BH45_7.0
Date Sampled		10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	16/05/2018	16/05/2018	16/05/2018	16/05/2018	16/05/2018
Date analysed	-	16/05/2018	16/05/2018	16/05/2018	16/05/2018	16/05/2018
Free Cyanide in soil	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Total Cyanide	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Hexavalent Chromium, Cr^{6+}	mg/kg	<1	<1	<1	<1	<1
Total Fluoride	mg/kg	<50	<50	<50	<50	<50

Misc Inorg - Soil						
Our Reference		191466-13	191466-14	191466-18	191466-19	191466-23
Your Reference	UNITS	BH45_8.0	BH46_0.2	BH46_2.3	BH47_3.6	BH47_7.0
Date Sampled		10/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	16/05/2018	16/05/2018	16/05/2018	16/05/2018	16/05/2018
Date analysed	-	16/05/2018	16/05/2018	16/05/2018	16/05/2018	16/05/2018
Free Cyanide in soil	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Total Cyanide	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Hexavalent Chromium, Cr^{6+}	mg/kg	<1	<1	<1	<1	<1
Total Fluoride	mg/kg	<50	<50	<50	<50	<50

Moisture						
Our Reference		191466-1	191466-2	191466-3	191466-4	191466-5
Your Reference	UNITS	BH43_5.0	BH43_6.0	BH43_7.0	BH43_8.0	BH43_9.0
Date Sampled		10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	15/05/2018	15/05/2018	15/05/2018	15/05/2018	15/05/2018
Date analysed	-	16/05/2018	16/05/2018	16/05/2018	16/05/2018	16/05/2018
Moisture	%	8.5	10	16	13	11

Moisture						
Our Reference		191466-6	191466-7	191466-8	191466-9	191466-10
Your Reference	UNITS	BH44_5.0	BH44_6.0	BH44_7.0	BH44_8.0	BH44_9.0
Date Sampled		10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	15/05/2018	15/05/2018	15/05/2018	15/05/2018	15/05/2018
Date analysed	-	16/05/2018	16/05/2018	16/05/2018	16/05/2018	16/05/2018
Moisture	%	5.1	6.8	6.5	6.3	7.2

Moisture						
Our Reference		191466-11	191466-12	191466-13	191466-14	191466-15
Your Reference	UNITS	BH45_7.0	BH45_7.8	BH45_8.0	BH46_0.2	BH46_0.5
Date Sampled		10/05/2018	10/05/2018	10/05/2018	11/05/2018	11/05/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	15/05/2018	15/05/2018	15/05/2018	15/05/2018	15/05/2018
Date analysed	-	16/05/2018	16/05/2018	16/05/2018	16/05/2018	16/05/2018
Moisture	%	7.1	6.3	7.4	3.8	4.5

Moisture						
Our Reference		191466-16	191466-17	191466-18	191466-19	191466-20
Your Reference	UNITS	BH46_1.0	BH46_2.0	BH46_2.3	BH47_3.6	BH47_5.0
Date Sampled		11/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	15/05/2018	15/05/2018	15/05/2018	15/05/2018	15/05/2018
Date analysed	-	16/05/2018	16/05/2018	16/05/2018	16/05/2018	16/05/2018
Moisture	%	4.3	4.2	3.9	11	11

Moisture						
Our Reference		191466-21	191466-22	191466-23	191466-24	191466-25
Your Reference	UNITS	BH47_6.0	BH47_6.5	BH47_7.0	Dup 6	Dup 7
Date Sampled		11/05/2018	11/05/2018	11/05/2018	10/05/2018	11/05/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	15/05/2018	15/05/2018	15/05/2018	15/05/2018	15/05/2018
Date analysed	-	16/05/2018	16/05/2018	16/05/2018	16/05/2018	16/05/2018
Moisture	%	6.9	17	15	8.5	4.5

Moisture			
Our Reference		191466-27	191466-28
Your Reference	UNITS	Split 5	Spilt 6
Date Sampled		11/05/2018	11/05/2018
Type of sample		Soil	Soil
Date prepared	-	15/05/2018	15/05/2018
Date analysed	-	16/05/2018	16/05/2018
Moisture	%	8.3	4.3

SVOCs in Soil						
Our Reference		191466-1	191466-5	191466-6	191466-10	191466-11
Your Reference	UNITS	BH43_5.0	BH43_9.0	BH44_5.0	BH44_9.0	BH45_7.0
Date Sampled		10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	18/05/2018	18/05/2018	18/05/2018	18/05/2018	18/05/2018
Date analysed	-	18/05/2018	18/05/2018	18/05/2018	18/05/2018	18/05/2018
Nitrobenzene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
2,4-Dintrotoluene	mg/kg	<1	<1	<1	<1	<1

SVOCs in Soil						
Our Reference		191466-13	191466-14	191466-18	191466-19	191466-23
Your Reference	UNITS	BH45_8.0	BH46_0.2	BH46_2.3	BH47_3.6	BH47_7.0
Date Sampled		10/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	18/05/2018	18/05/2018	18/05/2018	18/05/2018	18/05/2018
Date analysed	-	18/05/2018	18/05/2018	18/05/2018	18/05/2018	18/05/2018
Nitrobenzene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
2,4-Dintrotoluene	mg/kg	<1	<1	<1	<1	<1

Speciated Phenols in Soil						
Our Reference		191466-1	191466-5	191466-6	191466-10	191466-11
Your Reference	UNITS	BH43_5.0	BH43_9.0	BH44_5.0	BH44_9.0	BH45_7.0
Date Sampled		10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	18/05/2018	18/05/2018	18/05/2018	18/05/2018	18/05/2018
Date analysed	-	19/05/2018	19/05/2018	19/05/2018	19/05/2018	19/05/2018
Phenol	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
2-Chlorophenol	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
4-Chloro-3-methylphenol	mg/kg	<5	<5	<5	<5	<5
2-Methylphenol (o-cresol)	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
3/4-Methylphenol (m/p-cresol)	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
2-Nitrophenol	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
2,4 -Dimethylphenol	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
2,4-Dichlorophenol	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
2,6-Dichlorophenol	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
2,4,5-Trichlorophenol	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
2,4,6-Trichlorophenol	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
2,4-Dinitrophenol	mg/kg	<4	<4	<4	<4	<4
4-Nitrophenol	mg/kg	<4	<4	<4	<4	<4
2346-Tetrachlorophenol	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
2-methyl-4,6-Dinitrophenol	mg/kg	<10	<10	<10	<10	<10
Pentachlorophenol	mg/kg	<5	<5	<5	<5	<5
Surrogate Phenol-d_6	%	94	96	94	96	96

Speciated Phenols in Soil						
Our Reference		191466-13	191466-14	191466-18	191466-19	191466-23
Your Reference	UNITS	BH45_8.0	BH46_0.2	BH46_2.3	BH47_3.6	BH47_7.0
Date Sampled		10/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	18/05/2018	18/05/2018	18/05/2018	18/05/2018	18/05/2018
Date analysed	-	19/05/2018	19/05/2018	19/05/2018	19/05/2018	19/05/2018
Phenol	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
2-Chlorophenol	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
4-Chloro-3-methylphenol	mg/kg	<5	<5	<5	<5	<5
2-Methylphenol (o-cresol)	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
3/4-Methylphenol (m/p-cresol)	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
2-Nitrophenol	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
2,4 -Dimethylphenol	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
2,4-Dichlorophenol	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
2,6-Dichlorophenol	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
2,4,5-Trichlorophenol	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
2,4,6-Trichlorophenol	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
2,4-Dinitrophenol	mg/kg	<4	<4	<4	<4	<4
4-Nitrophenol	mg/kg	<4	<4	<4	<4	<4
2346-Tetrachlorophenol	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
2-methyl-4,6-Dinitrophenol	mg/kg	<10	<10	<10	<10	<10
Pentachlorophenol	mg/kg	<5	<5	<5	<5	<5
Surrogate Phenol-d_6	%	95	95	95	95	96

Phenoxy Acid Herbicides in Soil						
Our Reference		191466-1	191466-5	191466-6	191466-10	191466-11
Your Reference	UNITS	BH43_5.0	BH43_9.0	BH44_5.0	BH44_9.0	BH45_7.0
Date Sampled		10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	22/05/2018	22/05/2018	22/05/2018	22/05/2018	22/05/2018
Date analysed	-	22/05/2018	22/05/2018	22/05/2018	22/05/2018	22/05/2018
Clopyralid	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
3,5-Dichlorobenzoic acid	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
o-chlorophenoxy acetic acid	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
4-CPA	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Dicamba	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
MCPP	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
MCPA	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Dichlorprop	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-D	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoxynil	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Triclopyr	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,5-TP	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,5-T	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
MCPB	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Dinoseb	mg/kg	<1	<1	<1	<1	<1
2,4-DB	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ioxynil	mg/kg	<1	<1	<1	<1	<1
Picloram	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
DCPA (Chlorthal) Diacid	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Acifluorfen	mg/kg	<2	<2	<2	<2	<2
2,4,6-T	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-D	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate 2.4- DCPA	%	100	87	95	93	88

Phenoxy Acid Herbicides in Soil						
Our Reference		191466-13	191466-14	191466-18	191466-19	191466-23
Your Reference	UNITS	BH45_8.0	BH46_0.2	BH46_2.3	BH47_3.6	BH47_7.0
Date Sampled		10/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	22/05/2018	22/05/2018	22/05/2018	22/05/2018	22/05/2018
Date analysed	-	22/05/2018	22/05/2018	22/05/2018	22/05/2018	22/05/2018
Clopyralid	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
3,5-Dichlorobenzoic acid	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
o-chlorophenoxy acetic acid	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
4-CPA	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Dicamba	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
MCPP	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
MCPA	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Dichlorprop	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-D	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoxynil	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Triclopyr	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,5-TP	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,5-T	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
MCPB	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Dinoseb	mg/kg	<1	<1	<1	<1	<1
2,4-DB	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ioxynil	mg/kg	<1	<1	<1	<1	<1
Picloram	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
DCPA (Chlorthal) Diacid	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Acifluorfen	mg/kg	<2	<2	<2	<2	<2
2,4,6-T	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-D	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate 2.4- DCPA	%	95	95	95	95	96

Phthalates in Soil						
Our Reference		191466-1	191466-5	191466-6	191466-10	191466-11
Your Reference	UNITS	BH43_5.0	BH43_9.0	BH44_5.0	BH44_9.0	BH45_7.0
Date Sampled		10/05/2018	10/05/2018	10/05/2018	10/05/2018	10/05/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	18/05/2018	18/05/2018	18/05/2018	18/05/2018	18/05/2018
Date analysed	-	18/05/2018	18/05/2018	18/05/2018	18/05/2018	18/05/2018
Dimethylphthalate	mg/kg	<1	<1	<1	<1	<1
diethylphthalate	mg/kg	<1	<1	<1	<1	<1
di-n-butylphthalate	mg/kg	<5	<5	<5	<5	<5
butylbenzylphthalate	mg/kg	<1	<1	<1	<1	<1
bis(2-ethylhexyl)phthalate	mg/kg	<5	<5	<5	<5	<5
di-n-octylphthalate	mg/kg	<1	<1	<1	<1	<1
Surrogate p-Terphenyl-d_{14}	%	93	92	95	89	99

Phthalates in Soil						
Our Reference		191466-13	191466-14	191466-18	191466-19	191466-23
Your Reference	UNITS	BH45_8.0	BH46_0.2	BH46_2.3	BH47_3.6	BH47_7.0
Date Sampled		10/05/2018	11/05/2018	11/05/2018	11/05/2018	11/05/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	18/05/2018	18/05/2018	18/05/2018	18/05/2018	18/05/2018
Date analysed	-	18/05/2018	18/05/2018	18/05/2018	18/05/2018	18/05/2018
Dimethylphthalate	mg/kg	<1	<1	<1	<1	<1
diethylphthalate	mg/kg	<1	<1	<1	<1	<1
di-n-butylphthalate	mg/kg	<5	<5	<5	<5	<5
butylbenzylphthalate	mg/kg	<1	<1	<1	<1	<1
bis(2-ethylhexyl)phthalate	mg/kg	<5	<5	<5	<5	<5
di-n-octylphthalate	mg/kg	<1	<1	<1	<1	<1
Surrogate p-Terphenyl-d_{14}	%	92	93	94	96	94

vTRH in Water (C6-C9) NEPM		
Our Reference		191466-26
Your Reference	UNITS	Trip 1
Date Sampled		10/05/2018
Type of sample		Water
Date extracted	-	15/05/2018
Date analysed	-	16/05/2018
TRH C_6 - C_9	µg/L	<10
TRH C_6 - C_{10}	µg/L	<10
Surrogate Dibromofluoromethane	%	100
Surrogate toluene-d8	%	98
Surrogate 4-BFB	%	99

svTRH (C10-C40) in Water		
Our Reference		191466-26
Your Reference	UNITS	Trip 1
Date Sampled		10/05/2018
Type of sample		Water
Date extracted	-	15/05/2018
Date analysed	-	15/05/2018
TRH C_{10} - C_{14}	µg/L	<50
TRH C_{15} - C_{28}	µg/L	<100
TRH C_{29} - C_{36}	µg/L	<100
TRH >C_{10} - C_{16}	µg/L	<50
TRH >C_{16} - C_{34}	µg/L	<100
TRH >C_{34} - C_{40}	µg/L	<100
Surrogate o-Terphenyl	%	81

Method ID	Methodology Summary
Ext-054	Analysed by MPL Envirolab
Inorg-008	Moisture content determined by heating at 105+/-5 °C for a minimum of 12 hours.
Inorg-014	Cyanide - free, total, weak acid dissociable by segmented flow analyser (in line dialysis with colourimetric finish). Solids are extracted in a caustic media prior to analysis.
Inorg-024	Hexavalent Chromium (Cr6+) - determined colourimetrically.
Inorg-026/53	Fluoride by caustic fusion and determined by ion selective electrode (ISE) analysis.
Metals-020	Determination of various metals by ICP-AES.
Metals-021	Determination of Mercury by Cold Vapour AAS.
Org-003	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis.
Org-003	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis. Note, the Total +ve TRH PQL is reflective of the lowest individual PQL and is therefore "Total +ve TRH" is simply a sum of the positive individual TRH fractions (>C10-C40).
Org-005	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC with dual ECD's.
Org-005	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC with dual ECD's. Note, the Total +ve reported DDD+DDE+DDT PQL is reflective of the lowest individual PQL and is therefore simply a sum of the positive individually report DDD+DDE+DDT.
Org-008	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC with dual ECD's.
Org-012	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS.

Method ID	Methodology Summary
Org-012	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS. Benzo(a)pyrene TEQ as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater - 2013. For soil results:- 1. 'EQ PQL'values are assuming all contributing PAHs reported as <PQL are actually at the PQL. This is the most conservative approach and can give false positive TEQs given that PAHs that contribute to the TEQ calculation may not be present. 2. 'EQ zero'values are assuming all contributing PAHs reported as <PQL are zero. This is the least conservative approach and is more susceptible to false negative TEQs when PAHs that contribute to the TEQ calculation are present but below PQL. 3. 'EQ half PQL'values are assuming all contributing PAHs reported as <PQL are half the stipulated PQL. Hence a mid-point between the most and least conservative approaches above. Note, the Total +ve PAHs PQL is reflective of the lowest individual PQL and is therefore "Total +ve PAHs" is simply a sum of the positive individual PAHs.
Org-014	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS.
Org-016	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater.
Org-016	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater. Note, the Total +ve Xylene PQL is reflective of the lowest individual PQL and is therefore "Total +ve Xylenes" is simply a sum of the positive individual Xylenes.

QUALITY CONTROL: VOCs in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-3	191466-5
Date extracted	-			16/05/2018	1	15/05/2018	15/05/2018		15/05/2018	15/05/2018
Date analysed	-			17/05/2018	1	16/05/2018	16/05/2018		16/05/2018	16/05/2018
Dichlorodifluoromethane	mg/kg	1	Org-014	<1	1	<1	<1	0	[NT]	[NT]
Chloromethane	mg/kg	1	Org-014	<1	1	<1	<1	0	[NT]	[NT]
Vinyl Chloride	mg/kg	1	Org-014	<1	1	<1	<1	0	[NT]	[NT]
Bromomethane	mg/kg	1	Org-014	<1	1	<1	<1	0	[NT]	[NT]
Chloroethane	mg/kg	1	Org-014	<1	1	<1	<1	0	[NT]	[NT]
Trichlorofluoromethane	mg/kg	1	Org-014	<1	1	<1	<1	0	[NT]	[NT]
1,1-Dichloroethene	mg/kg	1	Org-014	<1	1	<1	<1	0	[NT]	[NT]
trans-1,2-dichloroethene	mg/kg	1	Org-014	<1	1	<1	<1	0	[NT]	[NT]
1,1-dichloroethane	mg/kg	1	Org-014	<1	1	<1	<1	0	81	86
cis-1,2-dichloroethene	mg/kg	1	Org-014	<1	1	<1	<1	0	[NT]	[NT]
bromochloromethane	mg/kg	1	Org-014	<1	1	<1	<1	0	[NT]	[NT]
chloroform	mg/kg	1	Org-014	<1	1	<1	<1	0	81	85
2,2-dichloropropane	mg/kg	1	Org-014	<1	1	<1	<1	0	[NT]	[NT]
1,2-dichloroethane	mg/kg	1	Org-014	<1	1	<1	<1	0	73	78
1,1,1-trichloroethane	mg/kg	1	Org-014	<1	1	<1	<1	0	80	85
1,1-dichloropropene	mg/kg	1	Org-014	<1	1	<1	<1	0	[NT]	[NT]
Cyclohexane	mg/kg	1	Org-014	<1	1	<1	<1	0	[NT]	[NT]
carbon tetrachloride	mg/kg	1	Org-014	<1	1	<1	<1	0	[NT]	[NT]
Benzene	mg/kg	0.2	Org-014	<0.2	1	<0.2	<0.2	0	[NT]	[NT]
dibromomethane	mg/kg	1	Org-014	<1	1	<1	<1	0	[NT]	[NT]
1,2-dichloropropane	mg/kg	1	Org-014	<1	1	<1	<1	0	[NT]	[NT]
trichloroethene	mg/kg	1	Org-014	<1	1	<1	<1	0	77	82
bromodichloromethane	mg/kg	1	Org-014	<1	1	<1	<1	0	80	85
trans-1,3-dichloropropene	mg/kg	1	Org-014	<1	1	<1	<1	0	[NT]	[NT]
cis-1,3-dichloropropene	mg/kg	1	Org-014	<1	1	<1	<1	0	[NT]	[NT]
1,1,2-trichloroethane	mg/kg	1	Org-014	<1	1	<1	<1	0	[NT]	[NT]
Toluene	mg/kg	0.5	Org-014	<0.5	1	<0.5	<0.5	0	[NT]	[NT]
1,3-dichloropropane	mg/kg	1	Org-014	<1	1	<1	<1	0	[NT]	[NT]
dibromochloromethane	mg/kg	1	Org-014	<1	1	<1	<1	0	99	105
1,2-dibromoethane	mg/kg	1	Org-014	<1	1	<1	<1	0	[NT]	[NT]
tetrachloroethene	mg/kg	1	Org-014	<1	1	<1	<1	0	81	85
1,1,1,2-tetrachloroethane	mg/kg	1	Org-014	<1	1	<1	<1	0	[NT]	[NT]
chlorobenzene	mg/kg	1	Org-014	<1	1	<1	<1	0	[NT]	[NT]
Ethylbenzene	mg/kg	1	Org-014	<1	1	<1	<1	0	[NT]	[NT]
bromoform	mg/kg	1	Org-014	<1	1	<1	<1	0	[NT]	[NT]
m+p-xylene	mg/kg	2	Org-014	<2	1	<2	<2	0	[NT]	[NT]
styrene	mg/kg	1	Org-014	<1	1	<1	<1	0	[NT]	[NT]
1,1,2,2-tetrachloroethane	mg/kg	1	Org-014	<1	1	<1	<1	0	[NT]	[NT]
o-Xylene	mg/kg	1	Org-014	<1	1	<1	<1	0	[NT]	[NT]

QUALITY CONTROL: VOCs in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-3	191466-5
1,2,3-trichloropropane	mg/kg	1	Org-014	<1	1	<1	<1	0	[NT]	[NT]
isopropylbenzene	mg/kg	1	Org-014	<1	1	<1	<1	0	[NT]	[NT]
bromobenzene	mg/kg	1	Org-014	<1	1	<1	<1	0	[NT]	[NT]
n-propyl benzene	mg/kg	1	Org-014	<1	1	<1	<1	0	[NT]	[NT]
2-chlorotoluene	mg/kg	1	Org-014	<1	1	<1	<1	0	[NT]	[NT]
4-chlorotoluene	mg/kg	1	Org-014	<1	1	<1	<1	0	[NT]	[NT]
1,3,5-trimethyl benzene	mg/kg	1	Org-014	<1	1	<1	<1	0	[NT]	[NT]
tert-butyl benzene	mg/kg	1	Org-014	<1	1	<1	<1	0	[NT]	[NT]
1,2,4-trimethyl benzene	mg/kg	1	Org-014	<1	1	<1	<1	0	[NT]	[NT]
1,3-dichlorobenzene	mg/kg	1	Org-014	<1	1	<1	<1	0	[NT]	[NT]
sec-butyl benzene	mg/kg	1	Org-014	<1	1	<1	<1	0	[NT]	[NT]
1,4-dichlorobenzene	mg/kg	1	Org-014	<1	1	<1	<1	0	[NT]	[NT]
4-isopropyl toluene	mg/kg	1	Org-014	<1	1	<1	<1	0	[NT]	[NT]
1,2-dichlorobenzene	mg/kg	1	Org-014	<1	1	<1	<1	0	[NT]	[NT]
n-butyl benzene	mg/kg	1	Org-014	<1	1	<1	<1	0	[NT]	[NT]
1,2-dibromo-3-chloropropane	mg/kg	1	Org-014	<1	1	<1	<1	0	[NT]	[NT]
1,2,4-trichlorobenzene	mg/kg	1	Org-014	<1	1	<1	<1	0	[NT]	[NT]
hexachlorobutadiene	mg/kg	1	Org-014	<1	1	<1	<1	0	[NT]	[NT]
1,2,3-trichlorobenzene	mg/kg	1	Org-014	<1	1	<1	<1	0	[NT]	[NT]
Surrogate Dibromofluorometha	%		Org-014	99	1	99	100	1	100	101
Surrogate aaa-Trifluorotoluene	%		Org-014	86	1	85	82	4	88	89
Surrogate Toluene-d_8	%		Org-014	100	1	99	101	2	102	101
Surrogate 4-Bromofluorobenzene	%		Org-014	97	1	97	95	2	99	97

QUALITY CONTROL: VOCs in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	11	15/05/2018	15/05/2018		[NT]	[NT]
Date analysed	-			[NT]	11	16/05/2018	16/05/2018		[NT]	[NT]
Dichlorodifluoromethane	mg/kg	1	Org-014	[NT]	11	<1	<1	0	[NT]	[NT]
Chloromethane	mg/kg	1	Org-014	[NT]	11	<1	<1	0	[NT]	[NT]
Vinyl Chloride	mg/kg	1	Org-014	[NT]	11	<1	<1	0	[NT]	[NT]
Bromomethane	mg/kg	1	Org-014	[NT]	11	<1	<1	0	[NT]	[NT]
Chloroethane	mg/kg	1	Org-014	[NT]	11	<1	<1	0	[NT]	[NT]
Trichlorofluoromethane	mg/kg	1	Org-014	[NT]	11	<1	<1	0	[NT]	[NT]
1,1-Dichloroethene	mg/kg	1	Org-014	[NT]	11	<1	<1	0	[NT]	[NT]
trans-1,2-dichloroethene	mg/kg	1	Org-014	[NT]	11	<1	<1	0	[NT]	[NT]
1,1-dichloroethane	mg/kg	1	Org-014	[NT]	11	<1	<1	0	[NT]	[NT]
cis-1,2-dichloroethene	mg/kg	1	Org-014	[NT]	11	<1	<1	0	[NT]	[NT]
bromochloromethane	mg/kg	1	Org-014	[NT]	11	<1	<1	0	[NT]	[NT]
chloroform	mg/kg	1	Org-014	[NT]	11	<1	<1	0	[NT]	[NT]
2,2-dichloropropane	mg/kg	1	Org-014	[NT]	11	<1	<1	0	[NT]	[NT]
1,2-dichloroethane	mg/kg	1	Org-014	[NT]	11	<1	<1	0	[NT]	[NT]
1,1,1-trichloroethane	mg/kg	1	Org-014	[NT]	11	<1	<1	0	[NT]	[NT]
1,1-dichloropropene	mg/kg	1	Org-014	[NT]	11	<1	<1	0	[NT]	[NT]
Cyclohexane	mg/kg	1	Org-014	[NT]	11	<1	<1	0	[NT]	[NT]
carbon tetrachloride	mg/kg	1	Org-014	[NT]	11	<1	<1	0	[NT]	[NT]
Benzene	mg/kg	0.2	Org-014	[NT]	11	<0.2	<0.2	0	[NT]	[NT]
dibromomethane	mg/kg	1	Org-014	[NT]	11	<1	<1	0	[NT]	[NT]
1,2-dichloropropane	mg/kg	1	Org-014	[NT]	11	<1	<1	0	[NT]	[NT]
trichloroethene	mg/kg	1	Org-014	[NT]	11	<1	<1	0	[NT]	[NT]
bromodichloromethane	mg/kg	1	Org-014	[NT]	11	<1	<1	0	[NT]	[NT]
trans-1,3-dichloropropene	mg/kg	1	Org-014	[NT]	11	<1	<1	0	[NT]	[NT]
cis-1,3-dichloropropene	mg/kg	1	Org-014	[NT]	11	<1	<1	0	[NT]	[NT]
1,1,2-trichloroethane	mg/kg	1	Org-014	[NT]	11	<1	<1	0	[NT]	[NT]
Toluene	mg/kg	0.5	Org-014	[NT]	11	<0.5	<0.5	0	[NT]	[NT]
1,3-dichloropropane	mg/kg	1	Org-014	[NT]	11	<1	<1	0	[NT]	[NT]
dibromochloromethane	mg/kg	1	Org-014	[NT]	11	<1	<1	0	[NT]	[NT]
1,2-dibromoethane	mg/kg	1	Org-014	[NT]	11	<1	<1	0	[NT]	[NT]
tetrachloroethene	mg/kg	1	Org-014	[NT]	11	<1	<1	0	[NT]	[NT]
1,1,1,2-tetrachloroethane	mg/kg	1	Org-014	[NT]	11	<1	<1	0	[NT]	[NT]
chlorobenzene	mg/kg	1	Org-014	[NT]	11	<1	<1	0	[NT]	[NT]
Ethylbenzene	mg/kg	1	Org-014	[NT]	11	<1	<1	0	[NT]	[NT]
bromoform	mg/kg	1	Org-014	[NT]	11	<1	<1	0	[NT]	[NT]
m+p-xylene	mg/kg	2	Org-014	[NT]	11	<2	<2	0	[NT]	[NT]
styrene	mg/kg	1	Org-014	[NT]	11	<1	<1	0	[NT]	[NT]
1,1,2,2-tetrachloroethane	mg/kg	1	Org-014	[NT]	11	<1	<1	0	[NT]	[NT]
o-Xylene	mg/kg	1	Org-014	[NT]	11	<1	<1	0	[NT]	[NT]

QUALITY CONTROL: VOCs in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
1,2,3-trichloropropane	mg/kg	1	Org-014	[NT]	11	<1	<1	0	[NT]	[NT]
isopropylbenzene	mg/kg	1	Org-014	[NT]	11	<1	<1	0	[NT]	[NT]
bromobenzene	mg/kg	1	Org-014	[NT]	11	<1	<1	0	[NT]	[NT]
n-propyl benzene	mg/kg	1	Org-014	[NT]	11	<1	<1	0	[NT]	[NT]
2-chlorotoluene	mg/kg	1	Org-014	[NT]	11	<1	<1	0	[NT]	[NT]
4-chlorotoluene	mg/kg	1	Org-014	[NT]	11	<1	<1	0	[NT]	[NT]
1,3,5-trimethyl benzene	mg/kg	1	Org-014	[NT]	11	<1	<1	0	[NT]	[NT]
tert-butyl benzene	mg/kg	1	Org-014	[NT]	11	<1	<1	0	[NT]	[NT]
1,2,4-trimethyl benzene	mg/kg	1	Org-014	[NT]	11	<1	<1	0	[NT]	[NT]
1,3-dichlorobenzene	mg/kg	1	Org-014	[NT]	11	<1	<1	0	[NT]	[NT]
sec-butyl benzene	mg/kg	1	Org-014	[NT]	11	<1	<1	0	[NT]	[NT]
1,4-dichlorobenzene	mg/kg	1	Org-014	[NT]	11	<1	<1	0	[NT]	[NT]
4-isopropyl toluene	mg/kg	1	Org-014	[NT]	11	<1	<1	0	[NT]	[NT]
1,2-dichlorobenzene	mg/kg	1	Org-014	[NT]	11	<1	<1	0	[NT]	[NT]
n-butyl benzene	mg/kg	1	Org-014	[NT]	11	<1	<1	0	[NT]	[NT]
1,2-dibromo-3-chloropropane	mg/kg	1	Org-014	[NT]	11	<1	<1	0	[NT]	[NT]
1,2,4-trichlorobenzene	mg/kg	1	Org-014	[NT]	11	<1	<1	0	[NT]	[NT]
hexachlorobutadiene	mg/kg	1	Org-014	[NT]	11	<1	<1	0	[NT]	[NT]
1,2,3-trichlorobenzene	mg/kg	1	Org-014	[NT]	11	<1	<1	0	[NT]	[NT]
Surrogate Dibromofluorometha	%		Org-014	[NT]	11	101	101	0	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-014	[NT]	11	88	90	2	[NT]	[NT]
Surrogate Toluene-d_8	%		Org-014	[NT]	11	100	98	2	[NT]	[NT]
Surrogate 4-Bromofluorobenzene	%		Org-014	[NT]	11	98	94	4	[NT]	[NT]

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-3	191466-5
Date extracted	-			16/05/2018	1	15/05/2018	15/05/2018		15/05/2018	15/05/2018
Date analysed	-			17/05/2018	1	16/05/2018	16/05/2018		16/05/2018	16/05/2018
TRH C_6 - C_9	mg/kg	25	Org-016	<25	1	<25	<25	0	88	85
TRH C_6 - C_{10}	mg/kg	25	Org-016	<25	1	<25	<25	0	88	85
Benzene	mg/kg	0.2	Org-016	<0.2	21	<0.2	<0.2	0	84	83
Toluene	mg/kg	0.5	Org-016	<0.5	21	<0.5	<0.5	0	93	85
Ethylbenzene	mg/kg	1	Org-016	<1	21	<1	<1	0	90	86
m+p-xylene	mg/kg	2	Org-016	<2	21	<2	<2	0	87	85
o-Xylene	mg/kg	1	Org-016	<1	21	<1	<1	0	85	87
naphthalene	mg/kg	1	Org-014	<1	21	<1	<1	0	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-016	100	1	76	73	4	86	79

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	11	15/05/2018	15/05/2018		[NT]	[NT]
Date analysed	-			[NT]	11	16/05/2018	16/05/2018		[NT]	[NT]
TRH C_6 - C_9	mg/kg	25	Org-016	[NT]	11	<25	<25	0	[NT]	[NT]
TRH C_6 - C_{10}	mg/kg	25	Org-016	[NT]	11	<25	<25	0	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-016	[NT]	11	78	80	3	[NT]	[NT]

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	21	16/05/2018	16/05/2018		[NT]	[NT]
Date analysed	-			[NT]	21	17/05/2018	17/05/2018		[NT]	[NT]
TRH C_6 - C_9	mg/kg	25	Org-016	[NT]	21	<25	<25	0	[NT]	[NT]
TRH C_6 - C_{10}	mg/kg	25	Org-016	[NT]	21	<25	<25	0	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-016	[NT]	21	94	99	5	[NT]	[NT]

QUALITY CONTROL: svTRH (C10-C40) in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-3	191466-5
Date extracted	-			15/05/2018	1	15/05/2018	15/05/2018		15/05/2018	15/05/2018
Date analysed	-			16/05/2018	1	15/05/2018	15/05/2018		15/05/2018	16/05/2018
TRH C_{10} - C_{14}	mg/kg	50	Org-003	<50	1	<50	<50	0	92	94
TRH C_{15} - C_{28}	mg/kg	100	Org-003	<100	1	<100	<100	0	83	83
TRH C_{29} - C_{36}	mg/kg	100	Org-003	<100	1	<100	<100	0	77	71
TRH >C_{10} -C_{16}	mg/kg	50	Org-003	<50	1	<50	<50	0	92	94
TRH >C_{16} -C_{34}	mg/kg	100	Org-003	<100	1	<100	<100	0	83	83
TRH >C_{34} -C_{40}	mg/kg	100	Org-003	<100	1	<100	<100	0	77	71
Surrogate o-Terphenyl	%		Org-003	99	1	71	72	1	81	70

QUALITY CONTROL: svTRH (C10-C40) in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-4	191466-22
Date extracted	-			[NT]	11	15/05/2018	15/05/2018		15/05/2018	15/05/2018
Date analysed	-			[NT]	11	16/05/2018	16/05/2018		16/05/2018	16/05/2018
TRH C_{10} - C_{14}	mg/kg	50	Org-003	[NT]	11	<50	<50	0	100	104
TRH C_{15} - C_{28}	mg/kg	100	Org-003	[NT]	11	<100	<100	0	80	81
TRH C_{29} - C_{36}	mg/kg	100	Org-003	[NT]	11	<100	<100	0	77	71
TRH >C_{10} -C_{16}	mg/kg	50	Org-003	[NT]	11	<50	<50	0	100	104
TRH >C_{16} -C_{34}	mg/kg	100	Org-003	[NT]	11	<100	<100	0	80	81
TRH >C_{34} -C_{40}	mg/kg	100	Org-003	[NT]	11	<100	<100	0	77	71
Surrogate o-Terphenyl	%		Org-003	[NT]	11	70	70	0	81	95

QUALITY CONTROL: PAHs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-3	191466-5
Date extracted	-			15/05/2018	1	15/05/2018	15/05/2018		15/05/2018	15/05/2018
Date analysed	-			16/05/2018	1	16/05/2018	16/05/2018		16/05/2018	16/05/2018
Naphthalene	mg/kg	0.1	Org-012	<0.1	1	<0.1	<0.1	0	89	84
Acenaphthylene	mg/kg	0.1	Org-012	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-012	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Fluorene	mg/kg	0.1	Org-012	<0.1	1	<0.1	<0.1	0	93	89
Phenanthrene	mg/kg	0.1	Org-012	<0.1	1	<0.1	<0.1	0	94	91
Anthracene	mg/kg	0.1	Org-012	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-012	<0.1	1	<0.1	<0.1	0	97	96
Pyrene	mg/kg	0.1	Org-012	<0.1	1	<0.1	<0.1	0	93	94
Benzo(a)anthracene	mg/kg	0.1	Org-012	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-012	<0.1	1	<0.1	<0.1	0	88	83
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-012	<0.2	1	<0.2	<0.2	0	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-012	<0.05	1	<0.05	<0.05	0	87	79
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-012	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-012	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-012	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-012	105	1	97	97	0	120	124

QUALITY CONTROL: PAHs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-4	191466-22
Date extracted	-			[NT]	11	15/05/2018	15/05/2018		15/05/2018	15/05/2018
Date analysed	-			[NT]	11	16/05/2018	16/05/2018		16/05/2018	16/05/2018
Naphthalene	mg/kg	0.1	Org-012	[NT]	11	<0.1	<0.1	0	89	89
Acenaphthylene	mg/kg	0.1	Org-012	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-012	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Fluorene	mg/kg	0.1	Org-012	[NT]	11	<0.1	<0.1	0	93	92
Phenanthrene	mg/kg	0.1	Org-012	[NT]	11	<0.1	<0.1	0	95	92
Anthracene	mg/kg	0.1	Org-012	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-012	[NT]	11	<0.1	<0.1	0	97	96
Pyrene	mg/kg	0.1	Org-012	[NT]	11	<0.1	<0.1	0	94	92
Benzo(a)anthracene	mg/kg	0.1	Org-012	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-012	[NT]	11	<0.1	<0.1	0	88	87
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-012	[NT]	11	<0.2	<0.2	0	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-012	[NT]	11	<0.05	<0.05	0	87	82
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-012	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-012	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-012	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-012	[NT]	11	96	96	0	120	117

QUALITY CONTROL: PAHs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	21	15/05/2018	15/05/2018		[NT]	[NT]
Date analysed	-			[NT]	21	16/05/2018	16/05/2018		[NT]	[NT]
Naphthalene	mg/kg	0.1	Org-012	[NT]	21	<0.1	<0.1	0	[NT]	[NT]
Acenaphthylene	mg/kg	0.1	Org-012	[NT]	21	<0.1	<0.1	0	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-012	[NT]	21	<0.1	<0.1	0	[NT]	[NT]
Fluorene	mg/kg	0.1	Org-012	[NT]	21	<0.1	<0.1	0	[NT]	[NT]
Phenanthrene	mg/kg	0.1	Org-012	[NT]	21	<0.1	<0.1	0	[NT]	[NT]
Anthracene	mg/kg	0.1	Org-012	[NT]	21	<0.1	<0.1	0	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-012	[NT]	21	<0.1	<0.1	0	[NT]	[NT]
Pyrene	mg/kg	0.1	Org-012	[NT]	21	<0.1	<0.1	0	[NT]	[NT]
Benzo(a)anthracene	mg/kg	0.1	Org-012	[NT]	21	<0.1	<0.1	0	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-012	[NT]	21	<0.1	<0.1	0	[NT]	[NT]
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-012	[NT]	21	<0.2	<0.2	0	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-012	[NT]	21	<0.05	<0.05	0	[NT]	[NT]
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-012	[NT]	21	<0.1	<0.1	0	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-012	[NT]	21	<0.1	<0.1	0	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-012	[NT]	21	<0.1	<0.1	0	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-012	[NT]	21	95	97	2	[NT]	[NT]

QUALITY CONTROL: Organochlorine Pesticides in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-3	191466-5
Date extracted	-			15/05/2018	1	15/05/2018	15/05/2018		15/05/2018	15/05/2018
Date analysed	-			16/05/2018	1	16/05/2018	16/05/2018		16/05/2018	16/05/2018
HCB	mg/kg	0.1	Org-005	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
alpha-BHC	mg/kg	0.1	Org-005	<0.1	1	<0.1	<0.1	0	101	104
gamma-BHC	mg/kg	0.1	Org-005	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
beta-BHC	mg/kg	0.1	Org-005	<0.1	1	<0.1	<0.1	0	90	92
Heptachlor	mg/kg	0.1	Org-005	<0.1	1	<0.1	<0.1	0	95	95
delta-BHC	mg/kg	0.1	Org-005	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aldrin	mg/kg	0.1	Org-005	<0.1	1	<0.1	<0.1	0	98	100
Heptachlor Epoxide	mg/kg	0.1	Org-005	<0.1	1	<0.1	<0.1	0	92	94
gamma-Chlordane	mg/kg	0.1	Org-005	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
alpha-chlordane	mg/kg	0.1	Org-005	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Endosulfan I	mg/kg	0.1	Org-005	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
pp-DDE	mg/kg	0.1	Org-005	<0.1	1	<0.1	<0.1	0	101	103
Dieldrin	mg/kg	0.1	Org-005	<0.1	1	<0.1	<0.1	0	105	107
Endrin	mg/kg	0.1	Org-005	<0.1	1	<0.1	<0.1	0	92	93
pp-DDD	mg/kg	0.1	Org-005	<0.1	1	<0.1	<0.1	0	100	102
Endosulfan II	mg/kg	0.1	Org-005	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
pp-DDT	mg/kg	0.1	Org-005	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Endrin Aldehyde	mg/kg	0.1	Org-005	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Endosulfan Sulphate	mg/kg	0.1	Org-005	<0.1	1	<0.1	<0.1	0	83	90
Methoxychlor	mg/kg	0.1	Org-005	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-005	102	1	103	106	3	123	123

QUALITY CONTROL: Organochlorine Pesticides in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	11	15/05/2018	15/05/2018		[NT]	[NT]
Date analysed	-			[NT]	11	16/05/2018	16/05/2018		[NT]	[NT]
HCB	mg/kg	0.1	Org-005	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
alpha-BHC	mg/kg	0.1	Org-005	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
gamma-BHC	mg/kg	0.1	Org-005	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
beta-BHC	mg/kg	0.1	Org-005	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Heptachlor	mg/kg	0.1	Org-005	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
delta-BHC	mg/kg	0.1	Org-005	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Aldrin	mg/kg	0.1	Org-005	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Heptachlor Epoxide	mg/kg	0.1	Org-005	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
gamma-Chlordane	mg/kg	0.1	Org-005	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
alpha-chlordane	mg/kg	0.1	Org-005	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Endosulfan I	mg/kg	0.1	Org-005	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
pp-DDE	mg/kg	0.1	Org-005	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Dieldrin	mg/kg	0.1	Org-005	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Endrin	mg/kg	0.1	Org-005	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
pp-DDD	mg/kg	0.1	Org-005	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Endosulfan II	mg/kg	0.1	Org-005	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
pp-DDT	mg/kg	0.1	Org-005	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Endrin Aldehyde	mg/kg	0.1	Org-005	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Endosulfan Sulphate	mg/kg	0.1	Org-005	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Methoxychlor	mg/kg	0.1	Org-005	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-005	[NT]	11	101	103	2	[NT]	[NT]

QUALITY CONTROL: Organophosphorus Pesticides						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-3	191466-5
Date extracted	-			15/05/2018	1	15/05/2018	15/05/2018		15/05/2018	15/05/2018
Date analysed	-			16/05/2018	1	16/05/2018	16/05/2018		16/05/2018	16/05/2018
Azinphos-methyl (Guthion)	mg/kg	0.1	Org-008	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Bromophos-ethyl	mg/kg	0.1	Org-008	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Chlorpyriphos	mg/kg	0.1	Org-008	<0.1	1	<0.1	<0.1	0	99	100
Chlorpyriphos-methyl	mg/kg	0.1	Org-008	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Diazinon	mg/kg	0.1	Org-008	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Dichlorvos	mg/kg	0.1	Org-008	<0.1	1	<0.1	<0.1	0	101	103
Dimethoate	mg/kg	0.1	Org-008	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Ethion	mg/kg	0.1	Org-008	<0.1	1	<0.1	<0.1	0	95	95
Fenitrothion	mg/kg	0.1	Org-008	<0.1	1	<0.1	<0.1	0	99	97
Malathion	mg/kg	0.1	Org-008	<0.1	1	<0.1	<0.1	0	103	104
Parathion	mg/kg	0.1	Org-008	<0.1	1	<0.1	<0.1	0	118	116
Ronnel	mg/kg	0.1	Org-008	<0.1	1	<0.1	<0.1	0	104	105
Surrogate TCMX	%		Org-008	102	1	103	106	3	102	100

QUALITY CONTROL: Organophosphorus Pesticides						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	11	15/05/2018	15/05/2018		[NT]	[NT]
Date analysed	-			[NT]	11	16/05/2018	16/05/2018		[NT]	[NT]
Azinphos-methyl (Guthion)	mg/kg	0.1	Org-008	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Bromophos-ethyl	mg/kg	0.1	Org-008	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Chlorpyriphos	mg/kg	0.1	Org-008	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Chlorpyriphos-methyl	mg/kg	0.1	Org-008	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Diazinon	mg/kg	0.1	Org-008	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Dichlorvos	mg/kg	0.1	Org-008	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Dimethoate	mg/kg	0.1	Org-008	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Ethion	mg/kg	0.1	Org-008	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Fenitrothion	mg/kg	0.1	Org-008	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Malathion	mg/kg	0.1	Org-008	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Parathion	mg/kg	0.1	Org-008	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Ronnel	mg/kg	0.1	Org-008	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-008	[NT]	11	101	103	2	[NT]	[NT]

QUALITY CONTROL: Acid Extractable metals in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-3	191466-5
Date prepared	-			15/05/2018	1	15/05/2018	15/05/2018		15/05/2018	15/05/2018
Date analysed	-			15/05/2018	1	15/05/2018	15/05/2018		15/05/2018	15/05/2018
Arsenic	mg/kg	4	Metals-020	<4	1	<4	<4	0	116	98
Cadmium	mg/kg	0.4	Metals-020	<0.4	1	<0.4	<0.4	0	106	103
Copper	mg/kg	1	Metals-020	<1	1	4	4	0	111	103
Mercury	mg/kg	0.1	Metals-021	<0.1	1	<0.1	<0.1	0	106	122
Molybdenum	mg/kg	1	Metals-020	<1	1	<1	<1	0	107	107
Nickel	mg/kg	1	Metals-020	<1	1	2	2	0	104	100
Lead	mg/kg	1	Metals-020	<1	1	5	5	0	104	100
Selenium	mg/kg	2	Metals-020	<2	1	<2	<2	0	107	98
Silver	mg/kg	1	Metals-020	<1	1	<1	<1	0	105	98
Tin	mg/kg	1	Metals-020	<1	1	<1	<1	0	103	104
Chromium	mg/kg	1	Metals-020	<1	1	5	5	0	111	101

QUALITY CONTROL: Acid Extractable metals in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-4	191466-22
Date prepared	-			[NT]	11	15/05/2018	15/05/2018		15/05/2018	15/05/2018
Date analysed	-			[NT]	11	15/05/2018	15/05/2018		15/05/2018	15/05/2018
Arsenic	mg/kg	4	Metals-020	[NT]	11	<4	<4	0	110	96
Cadmium	mg/kg	0.4	Metals-020	[NT]	11	<0.4	<0.4	0	102	98
Copper	mg/kg	1	Metals-020	[NT]	11	4	4	0	106	101
Mercury	mg/kg	0.1	Metals-021	[NT]	11	<0.1	<0.1	0	116	114
Molybdenum	mg/kg	1	Metals-020	[NT]	11	<1	<1	0	103	105
Nickel	mg/kg	1	Metals-020	[NT]	11	3	2	40	100	96
Lead	mg/kg	1	Metals-020	[NT]	11	10	12	18	99	96
Selenium	mg/kg	2	Metals-020	[NT]	11	<2	<2	0	102	93
Silver	mg/kg	1	Metals-020	[NT]	11	<1	<1	0	101	99
Tin	mg/kg	1	Metals-020	[NT]	11	<1	<1	0	98	101
Chromium	mg/kg	1	Metals-020	[NT]	11	9	9	0	106	99

QUALITY CONTROL: Acid Extractable metals in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date prepared	-			[NT]	21	15/05/2018	15/05/2018		[NT]	[NT]
Date analysed	-			[NT]	21	15/05/2018	15/05/2018		[NT]	[NT]
Arsenic	mg/kg	4	Metals-020	[NT]	21	4	6	40	[NT]	[NT]
Cadmium	mg/kg	0.4	Metals-020	[NT]	21	<0.4	<0.4	0	[NT]	[NT]
Copper	mg/kg	1	Metals-020	[NT]	21	6	6	0	[NT]	[NT]
Mercury	mg/kg	0.1	Metals-021	[NT]	21	<0.1	<0.1	0	[NT]	[NT]
Molybdenum	mg/kg	1	Metals-020	[NT]	21	<1	<1	0	[NT]	[NT]
Nickel	mg/kg	1	Metals-020	[NT]	21	1	1	0	[NT]	[NT]
Lead	mg/kg	1	Metals-020	[NT]	21	14	16	13	[NT]	[NT]
Selenium	mg/kg	2	Metals-020	[NT]	21	<2	<2	0	[NT]	[NT]
Silver	mg/kg	1	Metals-020	[NT]	21	<1	<1	0	[NT]	[NT]
Tin	mg/kg	1	Metals-020	[NT]	21	<1	<1	0	[NT]	[NT]
Chromium	mg/kg	1	Metals-020	[NT]	21	10	10	0	[NT]	[NT]

QUALITY CONTROL: Misc Inorg - Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	191466-5
Date prepared	-			16/05/2018	1	16/05/2018	16/05/2018		16/05/2018	16/05/2018
Date analysed	-			16/05/2018	1	16/05/2018	16/05/2018		16/05/2018	16/05/2018
Free Cyanide in soil	mg/kg	0.5	Inorg-014	<0.5	1	<0.5	<0.5	0	105	96
Total Cyanide	mg/kg	0.5	Inorg-014	<0.5	1	<0.5	<0.5	0	92	95
Hexavalent Chromium, Cr^{6+}	mg/kg	1	Inorg-024	<1	1	<1	<1	0	102	104
Total Fluoride	mg/kg	50	Inorg-026/53	<50	1	<50	<50	0	82	77

QUALITY CONTROL: SVOCs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			18/05/2018	13	18/05/2018	18/05/2018		[NT]	[NT]
Date analysed	-			18/05/2018	13	18/05/2018	18/05/2018		[NT]	[NT]
Nitrobenzene	mg/kg	0.1	Org-012	<0.1	13	<0.1	<0.1	0	[NT]	[NT]
2,4-Dintrotoluene	mg/kg	1	Org-012	<1	13	<1	<1	0	[NT]	[NT]

QUALITY CONTROL: Speciated Phenols in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date extracted	-			18/05/2018	13	18/05/2018	18/05/2018		18/05/2018	[NT]
Date analysed	-			19/05/2018	13	19/05/2018	19/05/2018		19/05/2018	[NT]
Phenol	mg/kg	0.2	Org-012	<0.2	13	<0.2	<0.2	0	106	[NT]
2-Chlorophenol	mg/kg	0.2	Org-012	<0.2	13	<0.2	<0.2	0	101	[NT]
4-Chloro-3-methylphenol	mg/kg	5	Org-012	<5	13	<5	<5	0	[NT]	[NT]
2-Methylphenol (o-cresol)	mg/kg	0.2	Org-012	<0.2	13	<0.2	<0.2	0	98	[NT]
3/4-Methylphenol (m/p-cresol)	mg/kg	0.4	Org-012	<0.4	13	<0.4	<0.4	0	[NT]	[NT]
2-Nitrophenol	mg/kg	0.2	Org-012	<0.2	13	<0.2	<0.2	0	[NT]	[NT]
2,4 -Dimethylphenol	mg/kg	0.2	Org-012	<0.2	13	<0.2	<0.2	0	[NT]	[NT]
2,4-Dichlorophenol	mg/kg	0.2	Org-012	<0.2	13	<0.2	<0.2	0	[NT]	[NT]
2,6-Dichlorophenol	mg/kg	0.2	Org-012	<0.2	13	<0.2	<0.2	0	102	[NT]
2,4,5-Trichlorophenol	mg/kg	0.2	Org-012	<0.2	13	<0.2	<0.2	0	[NT]	[NT]
2,4,6-Trichlorophenol	mg/kg	0.2	Org-012	<0.2	13	<0.2	<0.2	0	[NT]	[NT]
2,4-Dinitrophenol	mg/kg	4	Org-012	<4	13	<4	<4	0	[NT]	[NT]
4-Nitrophenol	mg/kg	4	Org-012	<4	13	<4	<4	0	[NT]	[NT]
2346-Tetrachlorophenol	mg/kg	0.2	Org-012	<0.2	13	<0.2	<0.2	0	[NT]	[NT]
2-methyl-4,6-Dinitrophenol	mg/kg	10	Org-012	<10	13	<10	<10	0	[NT]	[NT]
Pentachlorophenol	mg/kg	5	Org-012	<5	13	<5	<5	0	[NT]	[NT]
Surrogate Phenol-d_6	%		Org-012	99	13	95	96	1	93	[NT]

QUALITY CONTROL: Phenoxy Acid Herbicides in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date extracted	-			22/05/2018	6	22/05/2018	22/05/2018		22/05/2018	[NT]
Date analysed	-			22/05/2018	6	22/05/2018	22/05/2018		22/05/2018	[NT]
Clopyralid	mg/kg	0.5	Ext-054	<0.5	6	<0.5	<0.5	0	[NT]	[NT]
3,5-Dichlorobenzoic acid	mg/kg	0.5	Ext-054	<0.5	6	<0.5	<0.5	0	[NT]	[NT]
o-chlorophenoxy acetic acid	mg/kg	0.5	Ext-054	<0.5	6	<0.5	<0.5	0	[NT]	[NT]
4-CPA	mg/kg	0.5	Ext-054	<0.5	6	<0.5	<0.5	0	[NT]	[NT]
Dicamba	mg/kg	0.5	Ext-054	<0.5	6	<0.5	<0.5	0	97	[NT]
MCPP	mg/kg	0.5	Ext-054	<0.5	6	<0.5	<0.5	0	99	[NT]
MCPA	mg/kg	0.5	Ext-054	<0.5	6	<0.5	<0.5	0	99	[NT]
Dichlorprop	mg/kg	0.5	Ext-054	<0.5	6	<0.5	<0.5	0	[NT]	[NT]
2,4-D	mg/kg	0.5	Ext-054	<0.5	6	<0.5	<0.5	0	94	[NT]
Bromoxynil	mg/kg	0.5	Ext-054	<0.5	6	<0.5	<0.5	0	[NT]	[NT]
Triclopyr	mg/kg	0.5	Ext-054	<0.5	6	<0.5	<0.5	0	[NT]	[NT]
2,4,5-TP	mg/kg	0.5	Ext-054	<0.5	6	<0.5	<0.5	0	[NT]	[NT]
2,4,5-T	mg/kg	0.5	Ext-054	<0.5	6	<0.5	<0.5	0	90	[NT]
MCPB	mg/kg	0.5	Ext-054	<0.5	6	<0.5	<0.5	0	[NT]	[NT]
Dinoseb	mg/kg	1	Ext-054	<1	6	<1	<1	0	[NT]	[NT]
2,4-DB	mg/kg	0.5	Ext-054	<0.5	6	<0.5	<0.5	0	[NT]	[NT]
Ioxynil	mg/kg	1	Ext-054	<1	6	<1	<1	0	[NT]	[NT]
Picloram	mg/kg	0.5	Ext-054	<0.5	6	<0.5	<0.5	0	[NT]	[NT]
DCPA (Chlorthal) Diacid	mg/kg	0.5	Ext-054	<0.5	6	<0.5	<0.5	0	[NT]	[NT]
Acifluorfen	mg/kg	2	Ext-054	<2	6	<2	<2	0	[NT]	[NT]
2,4,6-T	mg/kg	0.5	Ext-054	<0.5	6	<0.5	<0.5	0	[NT]	[NT]
2,6-D	mg/kg	0.5	Ext-054	<0.5	6	<0.5	<0.5	0	[NT]	[NT]
Surrogate 2.4- DCPA	%		Ext-054	[NT]	6	95	86	10	98	[NT]

QUALITY CONTROL: Phthalates in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date extracted	-			18/05/2018	13	18/05/2018	18/05/2018		18/05/2018	[NT]
Date analysed	-			18/05/2018	13	18/05/2018	18/05/2018		18/05/2018	[NT]
Dimethylphthalate	mg/kg	1	Org-012	<1	13	<1	<1	0	92	[NT]
diethylphthalate	mg/kg	1	Org-012	<1	13	<1	<1	0	[NT]	[NT]
di-n-butylphthalate	mg/kg	5	Org-012	<5	13	<5	<5	0	94	[NT]
butylbenzylphthalate	mg/kg	1	Org-012	<1	13	<1	<1	0	[NT]	[NT]
bis(2-ethylhexyl)phthalate	mg/kg	5	Org-012	<5	13	<5	<5	0	[NT]	[NT]
di-n-octylphthalate	mg/kg	1	Org-012	<1	13	<1	<1	0	[NT]	[NT]
Surrogate p-Terphenyl-d_{14}	%		Org-012	93	13	92	95	3	99	[NT]

QUALITY CONTROL: vTRH in Water (C6-C9) NEPM						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W1	[NT]
Date extracted	-			15/05/2018	[NT]	[NT]	[NT]	[NT]	15/05/2018	[NT]
Date analysed	-			16/05/2018	[NT]	[NT]	[NT]	[NT]	16/05/2018	[NT]
TRH C_6 - C_9	µg/L	10	Org-016	<10	[NT]	[NT]	[NT]	[NT]	108	[NT]
TRH C_6 - C_{10}	µg/L	10	Org-016	<10	[NT]	[NT]	[NT]	[NT]	108	[NT]
Surrogate Dibromofluoromethane	%		Org-016	105	[NT]	[NT]	[NT]	[NT]	104	[NT]
Surrogate toluene-d8	%		Org-016	97	[NT]	[NT]	[NT]	[NT]	99	[NT]
Surrogate 4-BFB	%		Org-016	95	[NT]	[NT]	[NT]	[NT]	101	[NT]

QUALITY CONTROL: svTRH (C10-C40) in Water						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W1	[NT]
Date extracted	-			15/05/2018	[NT]	[NT]	[NT]	[NT]	15/05/2018	[NT]
Date analysed	-			15/05/2018	[NT]	[NT]	[NT]	[NT]	15/05/2018	[NT]
TRH C_{10} - C_{14}	µg/L	50	Org-003	<50	[NT]	[NT]	[NT]	[NT]	106	[NT]
TRH C_{15} - C_{28}	µg/L	100	Org-003	<100	[NT]	[NT]	[NT]	[NT]	105	[NT]
TRH C_{29} - C_{36}	µg/L	100	Org-003	<100	[NT]	[NT]	[NT]	[NT]	110	[NT]
TRH >C_{10} - C_{16}	µg/L	50	Org-003	<50	[NT]	[NT]	[NT]	[NT]	106	[NT]
TRH >C_{16} - C_{34}	µg/L	100	Org-003	<100	[NT]	[NT]	[NT]	[NT]	105	[NT]
TRH >C_{34} - C_{40}	µg/L	100	Org-003	<100	[NT]	[NT]	[NT]	[NT]	110	[NT]
Surrogate o-Terphenyl	%		Org-003	84	[NT]	[NT]	[NT]	[NT]	97	[NT]

Result Definitions

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

Quality Control Definitions

Blank	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
Duplicate	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
Matrix Spike	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample)	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
Surrogate Spike	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Australian Drinking Water Guidelines recommend that Thermotolerant Coliform, Faecal Enterococci, & E.Coli levels are less than 1cfu/100mL. The recommended maximums are taken from "Australian Drinking Water Guidelines", published by NHMRC & ARMC 2011.

Laboratory Acceptance Criteria

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

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

Spikes for Physical and Aggregate Tests are not applicable.

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

Duplicates: <5xPQL - any RPD is acceptable; >5xPQL - 0-50% RPD is acceptable.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals; 60-140% for organics (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

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

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

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

Measurement Uncertainty estimates are available for most tests upon request.

Report Comments

vTRH in Water (C6-C9) NEPM - Subsampled from plastic bottle.

Nitrobenzene, 2,4-Dinitrotoluene, Speciated Phenols, Phthalates & Herbicides in soil analysed by MPL Laboratories. Report No.210781.

COC received at 18:50.

P.O. Box 1237
Carlton VIC 3053
enquiries@lrmglobal.com.au

CHAIN OF CUSTODY

Job Number: 27380

Sheet 1 of 1

ATTENTION

CLIENT

CLIENT NUMBER

LOCATION 266 Longueville Road Lane Cove

Envirolab Services
12 Ashley St
Chatswood NSW 2067
Ph: (02) 9910 6200

Job No: 191604

Total number of containers: 20

Additional information::

Email Results To	Tick
jon.lawson@lrmglobal.com.au	Yep
kevin.b@lrmglobal.com.au	
ajacob@lrmglobal.com.au	
acampbell@lrmglobal.com.au	
l.main@lrmglobal.com.au	

Sampled by: JL

Checked by: JL

Date Received: 14/5/18
Time Received: 14:00
Received By: [illegible]
Temp: Cool/Ambient
Cooling: Ice/Icepack
Security: Intact/Broken/None

Comments

Chain of custody must be signed and dated by LRM, courier, and laboratory.

RELINQUISHED BY (Signature)	ORGANISATION	DATE / TIME	RECEIVED BY (Signature)	ORGANISATION	DATE / TIME
	LRM	14/05/2018			

	Sample Number	Sample Date	Sample Type	Analysis Required	No. of Containers	Turn-around Time Required
1	GW01	14/05/2018	Water	NEPM HIL Screen, TDS, Cations / Anions, pH	5	Standard
2	GW02	14/05/2018	Water	NEPM HIL Screen, TDS, Cations / Anions, pH	5	Standard
3	Dup 1	14/05/2018	Water	NEPM HIL Screen, TDS, Cations / Anions, pH	5	Standard
4	Split 1	14/05/2018	Water	NEPM HIL Screen, TDS, Cations / Anions, pH	5	Standard

5. TB (Fax(ca) kevin)

Envirolab Services Pty Ltd
ABN 37 112 535 645
12 Ashley St Chatswood NSW 2067
ph 02 9910 6200 fax 02 9910 6201
customerservice@envirolab.com.au
www.envirolab.com.au

CERTIFICATE OF ANALYSIS 191604

Client Details

Client	LRM Global
Attention	Jon Lawson
Address	PO Box 1237, Carlton, VIC, 3053

Sample Details

Your Reference	**27380**
Number of Samples	4 Water, 1 Soil
Date samples received	14/05/2018
Date completed instructions received	14/05/2018

Analysis Details

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

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

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

Please refer to the last page of this report for any comments relating to the results.

Report Details

Date results requested by	21/05/2018
Date of Issue	21/05/2018

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Accredited for compliance with ISO/IEC 17025 - Testing. **Tests not covered by NATA are denoted with ***

Results Approved By
Alexander Mitchell Maclean, Senior Chemist
Jeremy Faircloth, Organics Supervisor
Nancy Zhang, Assistant Lab Manager
Nick Sarlamis, Inorganics Supervisor
Priya Samarawickrama, Senior Chemist
Steven Luong, Senior Chemist

Authorised By

Jacinta Hurst, Laboratory Manager

VOCs in water					
Our Reference		191604-1	191604-2	191604-3	191604-4
Your Reference	UNITS	GW01	GW02	Dup 1	Split 1
Date Sampled		14/05/2018	14/05/2018	14/05/2018	14/05/2018
Type of sample		Water	Water	Water	Water
Date extracted	-	18/05/2018	18/05/2018	18/05/2018	18/05/2018
Date analysed	-	21/05/2018	21/05/2018	21/05/2018	21/05/2018
Dichlorodifluoromethane	µg/L	<10	<10	<10	<10
Chloromethane	µg/L	<10	<10	<10	<10
Vinyl Chloride	µg/L	<10	<10	<10	<10
Bromomethane	µg/L	<10	<10	<10	<10
Chloroethane	µg/L	<10	<10	<10	<10
Trichlorofluoromethane	µg/L	<10	<10	<10	<10
1,1-Dichloroethene	µg/L	<1	<1	<1	<1
Trans-1,2-dichloroethene	µg/L	<1	<1	<1	<1
1,1-dichloroethane	µg/L	<1	<1	<1	<1
Cis-1,2-dichloroethene	µg/L	<1	<1	<1	<1
Bromochloromethane	µg/L	<1	<1	<1	<1
Chloroform	µg/L	<1	<1	<1	<1
2,2-dichloropropane	µg/L	<1	<1	<1	<1
1,2-dichloroethane	µg/L	<1	<1	<1	<1
1,1,1-trichloroethane	µg/L	<1	<1	<1	<1
1,1-dichloropropene	µg/L	<1	<1	<1	<1
Cyclohexane	µg/L	<1	<1	<1	<1
Carbon tetrachloride	µg/L	<1	<1	<1	<1
Benzene	µg/L	<1	<1	<1	<1
Dibromomethane	µg/L	<1	<1	<1	<1
1,2-dichloropropane	µg/L	<1	<1	<1	<1
Trichloroethene	µg/L	<1	<1	<1	<1
Bromodichloromethane	µg/L	<1	<1	<1	<1
trans-1,3-dichloropropene	µg/L	<1	<1	<1	<1
cis-1,3-dichloropropene	µg/L	<1	<1	<1	<1
1,1,2-trichloroethane	µg/L	<1	<1	<1	<1
Toluene	µg/L	<1	<1	<1	<1
1,3-dichloropropane	µg/L	<1	<1	<1	<1
Dibromochloromethane	µg/L	<1	<1	<1	<1
1,2-dibromoethane	µg/L	<1	<1	<1	<1
Tetrachloroethene	µg/L	<1	<1	<1	<1
1,1,1,2-tetrachloroethane	µg/L	<1	<1	<1	<1
Chlorobenzene	µg/L	<1	<1	<1	<1
Ethylbenzene	µg/L	<1	<1	<1	<1
Bromoform	µg/L	<1	<1	<1	<1

VOCs in water					
Our Reference		191604-1	191604-2	191604-3	191604-4
Your Reference	UNITS	GW01	GW02	Dup 1	Split 1
Date Sampled		14/05/2018	14/05/2018	14/05/2018	14/05/2018
Type of sample		Water	Water	Water	Water
m+p-xylene	µg/L	<2	<2	<2	<2
Styrene	µg/L	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	µg/L	<1	<1	<1	<1
o-xylene	µg/L	<1	<1	<1	<1
1,2,3-trichloropropane	µg/L	<1	<1	<1	<1
Isopropylbenzene	µg/L	<1	<1	<1	<1
Bromobenzene	µg/L	<1	<1	<1	<1
n-propyl benzene	µg/L	<1	<1	<1	<1
2-chlorotoluene	µg/L	<1	<1	<1	<1
4-chlorotoluene	µg/L	<1	<1	<1	<1
1,3,5-trimethyl benzene	µg/L	<1	<1	<1	<1
Tert-butyl benzene	µg/L	<1	<1	<1	<1
1,2,4-trimethyl benzene	µg/L	<1	<1	<1	<1
1,3-dichlorobenzene	µg/L	<1	<1	<1	<1
Sec-butyl benzene	µg/L	<1	<1	<1	<1
1,4-dichlorobenzene	µg/L	<1	<1	<1	<1
4-isopropyl toluene	µg/L	<1	<1	<1	<1
1,2-dichlorobenzene	µg/L	<1	<1	<1	<1
n-butyl benzene	µg/L	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	µg/L	<1	<1	<1	<1
1,2,4-trichlorobenzene	µg/L	<1	<1	<1	<1
Hexachlorobutadiene	µg/L	<1	<1	<1	<1
1,2,3-trichlorobenzene	µg/L	<1	<1	<1	<1
Surrogate Dibromofluoromethane	%	97	95	96	98
Surrogate toluene-d8	%	100	99	100	99
Surrogate 4-BFB	%	96	95	94	96

vTRH(C6-C10)/BTEXN in Water					
Our Reference		191604-1	191604-2	191604-3	191604-4
Your Reference	UNITS	GW01	GW02	Dup 1	Split 1
Date Sampled		14/05/2018	14/05/2018	14/05/2018	14/05/2018
Type of sample		Water	Water	Water	Water
Date extracted	-	18/05/2018	18/05/2018	18/05/2018	18/05/2018
Date analysed	-	21/05/2018	21/05/2018	21/05/2018	21/05/2018
TRH C_6 - C_9	µg/L	<10	<10	<10	<10
TRH C_6 - C_{10}	µg/L	<10	<10	<10	<10
TRH C_6 - C_{10} less BTEX (F1)	µg/L	<10	<10	<10	<10
Benzene	µg/L	<1	<1	<1	<1
Toluene	µg/L	<1	<1	<1	<1
Ethylbenzene	µg/L	<1	<1	<1	<1
m+p-xylene	µg/L	<2	<2	<2	<2
o-xylene	µg/L	<1	<1	<1	<1
Naphthalene	µg/L	<1	<1	<1	<1
Surrogate Dibromofluoromethane	%	97	95	96	98
Surrogate toluene-d8	%	100	99	100	99
Surrogate 4-BFB	%	96	95	94	96

svTRH (C10-C40) in Water					
Our Reference		191604-1	191604-2	191604-3	191604-4
Your Reference	UNITS	GW01	GW02	Dup 1	Split 1
Date Sampled		14/05/2018	14/05/2018	14/05/2018	14/05/2018
Type of sample		Water	Water	Water	Water
Date extracted	-	16/05/2018	16/05/2018	16/05/2018	16/05/2018
Date analysed	-	16/05/2018	17/05/2018	17/05/2018	17/05/2018
TRH C_{10} - C_{14}	µg/L	<50	<50	<50	<50
TRH C_{15} - C_{28}	µg/L	<100	<100	<100	<100
TRH C_{29} - C_{36}	µg/L	<100	<100	<100	<100
TRH >C_{10} - C_{16}	µg/L	<50	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	µg/L	<50	<50	<50	<50
TRH >C_{16} - C_{34}	µg/L	<100	<100	<100	<100
TRH >C_{34} - C_{40}	µg/L	<100	<100	<100	<100
Surrogate o-Terphenyl	%	91	106	78	105

PAHs in Water					
Our Reference		191604-1	191604-2	191604-3	191604-4
Your Reference	UNITS	GW01	GW02	Dup 1	Split 1
Date Sampled		14/05/2018	14/05/2018	14/05/2018	14/05/2018
Type of sample		Water	Water	Water	Water
Date extracted	-	16/05/2018	16/05/2018	16/05/2018	16/05/2018
Date analysed	-	17/05/2018	17/05/2018	17/05/2018	17/05/2018
Naphthalene	µg/L	<1	<1	<1	<1
Acenaphthylene	µg/L	<1	<1	<1	<1
Acenaphthene	µg/L	<1	<1	<1	<1
Fluorene	µg/L	<1	<1	<1	<1
Phenanthrene	µg/L	<1	<1	<1	<1
Anthracene	µg/L	<1	<1	<1	<1
Fluoranthene	µg/L	<1	<1	<1	<1
Pyrene	µg/L	<1	<1	<1	<1
Benzo(a)anthracene	µg/L	<1	<1	<1	<1
Chrysene	µg/L	<1	<1	<1	<1
Benzo(b,j+k)fluoranthene	µg/L	<2	<2	<2	<2
Benzo(a)pyrene	µg/L	<1	<1	<1	<1
Indeno(1,2,3-c,d)pyrene	µg/L	<1	<1	<1	<1
Dibenzo(a,h)anthracene	µg/L	<1	<1	<1	<1
Benzo(g,h,i)perylene	µg/L	<1	<1	<1	<1
Benzo(a)pyrene TEQ	µg/L	<5	<5	<5	<5
Total +ve PAH's	µg/L	NIL (+)VE	NIL (+)VE	NIL (+)VE	NIL (+)VE
Surrogate p-Terphenyl-d14	%	106	120	89	118

Total Phenolics in Water					
Our Reference		191604-1	191604-2	191604-3	191604-4
Your Reference	UNITS	GW01	GW02	Dup 1	Split 1
Date Sampled		14/05/2018	14/05/2018	14/05/2018	14/05/2018
Type of sample		Water	Water	Water	Water
Date extracted	-	16/05/2018	16/05/2018	16/05/2018	16/05/2018
Date analysed	-	16/05/2018	16/05/2018	16/05/2018	16/05/2018
Total Phenolics (as Phenol)	mg/L	<0.05	<0.05	<0.05	<0.05

OCP in water					
Our Reference		191604-1	191604-2	191604-3	191604-4
Your Reference	UNITS	GW01	GW02	Dup 1	Split 1
Date Sampled		14/05/2018	14/05/2018	14/05/2018	14/05/2018
Type of sample		Water	Water	Water	Water
Date extracted	-	16/05/2018	16/05/2018	16/05/2018	16/05/2018
Date analysed	-	17/05/2018	17/05/2018	17/05/2018	17/05/2018
HCB	µg/L	<0.2	<0.2	<0.2	<0.2
alpha-BHC	µg/L	<0.2	<0.2	<0.2	<0.2
gamma-BHC	µg/L	<0.2	<0.2	<0.2	<0.2
beta-BHC	µg/L	<0.2	<0.2	<0.2	<0.2
Heptachlor	µg/L	<0.2	<0.2	<0.2	<0.2
delta-BHC	µg/L	<0.2	<0.2	<0.2	<0.2
Aldrin	µg/L	<0.2	<0.2	<0.2	<0.2
Heptachlor Epoxide	µg/L	<0.2	<0.2	<0.2	<0.2
gamma-Chlordane	µg/L	<0.2	<0.2	<0.2	<0.2
alpha-Chlordane	µg/L	<0.2	<0.2	<0.2	<0.2
Endosulfan I	µg/L	<0.2	<0.2	<0.2	<0.2
pp-DDE	µg/L	<0.2	<0.2	<0.2	<0.2
Dieldrin	µg/L	<0.2	<0.2	<0.2	<0.2
Endrin	µg/L	<0.2	<0.2	<0.2	<0.2
pp-DDD	µg/L	<0.2	<0.2	<0.2	<0.2
Endosulfan II	µg/L	<0.2	<0.2	<0.2	<0.2
pp-DDT	µg/L	<0.2	<0.2	<0.2	<0.2
Endrin Aldehyde	µg/L	<0.2	<0.2	<0.2	<0.2
Endosulfan Sulphate	µg/L	<0.2	<0.2	<0.2	<0.2
Methoxychlor	µg/L	<0.2	<0.2	<0.2	<0.2
Surrogate TCMX	%	113	127	87	125

PCBs in Water					
Our Reference		191604-1	191604-2	191604-3	191604-4
Your Reference	UNITS	GW01	GW02	Dup 1	Split 1
Date Sampled		14/05/2018	14/05/2018	14/05/2018	14/05/2018
Type of sample		Water	Water	Water	Water
Date extracted	-	16/05/2018	16/05/2018	16/05/2018	16/05/2018
Date analysed	-	17/05/2018	17/05/2018	17/05/2018	17/05/2018
Aroclor 1016	µg/L	<2	<2	<2	<2
Aroclor 1221	µg/L	<2	<2	<2	<2
Aroclor 1232	µg/L	<2	<2	<2	<2
Aroclor 1242	µg/L	<2	<2	<2	<2
Aroclor 1248	µg/L	<2	<2	<2	<2
Aroclor 1254	µg/L	<2	<2	<2	<2
Aroclor 1260	µg/L	<2	<2	<2	<2
Surrogate TCLMX	%	113	127	87	125

Phthalates in water					
Our Reference		191604-1	191604-2	191604-3	191604-4
Your Reference	UNITS	GW01	GW02	Dup 1	Split 1
Date Sampled		14/05/2018	14/05/2018	14/05/2018	14/05/2018
Type of sample		Water	Water	Water	Water
Date extracted	-	16/05/2018	16/05/2018	16/05/2018	16/05/2018
Date analysed	-	17/05/2018	17/05/2018	17/05/2018	17/05/2018
Bis(2-ethylhexyl) phthalate	µg/L	<50	<50	<50	<50
Butylbenzylphthalate	µg/L	<10	<10	<10	<10
Diethylphthalate	µg/L	<10	<10	<10	<10
Dimethyl phthalate	µg/L	<10	<10	<10	<10
Di-n-butylphthalate	µg/L	<50	<50	<50	<50
Di-n-octylphthalate	µg/L	<10	<10	<10	<10
Surrogate Nitrobenzene-d_5	%	64	84	71	78
Surrogate 2-fluorobiphenyl	%	59	75	61	70
Surrogate 2,4,6-Tribromophenol	%	40	54	44	52
Surrogate *p*-Terphenyl-d_{14}	%	112	129	99	130

HM in water - dissolved					
Our Reference		191604-1	191604-2	191604-3	191604-4
Your Reference	UNITS	GW01	GW02	Dup 1	Split 1
Date Sampled		14/05/2018	14/05/2018	14/05/2018	14/05/2018
Type of sample		Water	Water	Water	Water
Date prepared	-	16/05/2018	16/05/2018	16/05/2018	16/05/2018
Date analysed	-	16/05/2018	16/05/2018	16/05/2018	16/05/2018
Aluminium-Dissolved	µg/L	190	120	200	180
Silver-Dissolved	µg/L	<1	<1	<1	<1
Arsenic-Dissolved	µg/L	<1	<1	<1	<1
Boron-Dissolved	µg/L	90	100	90	90
Barium-Dissolved	µg/L	36	56	33	32
Beryllium-Dissolved	µg/L	0.5	<0.5	<0.5	<0.5
Cadmium-Dissolved	µg/L	<0.1	0.3	<0.1	<0.1
Chromium-Dissolved	µg/L	<1	<1	<1	<1
Cobalt-Dissolved	µg/L	11	18	11	11
Copper-Dissolved	µg/L	19	12	7	7
Iron-Dissolved	µg/L	2,300	6,100	2,300	2,200
Lead-Dissolved	µg/L	1	<1	1	1
Manganese-Dissolved	µg/L	220	270	220	210
Mercury-Dissolved	µg/L	<0.05	<0.05	<0.05	<0.05
Molybdenum-Dissolved	µg/L	<1	<1	<1	<1
Nickel-Dissolved	µg/L	12	37	10	9
Selenium-Dissolved	µg/L	<1	<1	<1	<1
Antimony-Dissolved	µg/L	<1	<1	<1	<1
Tin-Dissolved	µg/L	<1	<1	<1	<1
Thallium-Dissolved	µg/L	<1	<1	<1	<1
Vanadium-Dissolved	µg/L	<1	<1	<1	<1
Zinc-Dissolved	µg/L	68	120	62	61

Miscellaneous Inorganics					
Our Reference		191604-1	191604-2	191604-3	191604-4
Your Reference	UNITS	GW01	GW02	Dup 1	Split 1
Date Sampled		14/05/2018	14/05/2018	14/05/2018	14/05/2018
Type of sample		Water	Water	Water	Water
Date prepared	-	14/05/2018	14/05/2018	14/05/2018	14/05/2018
Date analysed	-	14/05/2018	14/05/2018	14/05/2018	14/05/2018
pH	pH Units	5.0	5.1	4.9	4.9
Total Cyanide	mg/L	<0.004	<0.004	<0.004	<0.004
Hexavalent Chromium, Cr^{6+}	mg/L	<0.005	<0.005	<0.005	<0.005
Fluoride, F	mg/L	<0.1	<0.1	<0.1	<0.1
Total Dissolved Solids (grav)	mg/L	440	230	420	430

Ion Balance					
Our Reference		191604-1	191604-2	191604-3	191604-4
Your Reference	UNITS	GW01	GW02	Dup 1	Split 1
Date Sampled		14/05/2018	14/05/2018	14/05/2018	14/05/2018
Type of sample		Water	Water	Water	Water
Date prepared	-	14/05/2018	14/05/2018	14/05/2018	14/05/2018
Date analysed	-	14/05/2018	14/05/2018	14/05/2018	14/05/2018
Calcium - Dissolved	mg/L	4.8	11	4.8	4.8
Potassium - Dissolved	mg/L	2.1	8.3	2.0	2.0
Sodium - Dissolved	mg/L	140	32	130	130
Magnesium - Dissolved	mg/L	5.2	5.7	4.9	4.7
Hydroxide Alkalinity (OH^-) as $CaCO_3$	mg/L	<5	<5	<5	<5
Bicarbonate Alkalinity as $CaCO_3$	mg/L	8	7	7	7
Carbonate Alkalinity as $CaCO_3$	mg/L	<5	<5	<5	<5
Total Alkalinity as $CaCO_3$	mg/L	8	7	7	7
Sulphate, SO4	mg/L	110	59	110	100
Chloride, Cl	mg/L	93	39	89	88
Ionic Balance	%	13	4.0	13	13

Method ID	Methodology Summary
Inorg-001	pH - Measured using pH meter and electrode in accordance with APHA latest edition, 4500-H+. Please note that the results for water analyses are indicative only, as analysis outside of the APHA storage times.
Inorg-006	Alkalinity - determined titrimetrically in accordance with APHA latest edition, 2320-B.
Inorg-014	Cyanide - free, total, weak acid dissociable by segmented flow analyser (in line dialysis with colourimetric finish). Solids are extracted in a caustic media prior to analysis.
Inorg-018	Total Dissolved Solids - determined gravimetrically. The solids are dried at 180+/-10°C.
Inorg-024	Hexavalent Chromium (Cr6+) - determined colourimetrically.
Inorg-026	Fluoride determined by ion selective electrode (ISE) in accordance with APHA latest edition, 4500-F-C.
Inorg-031	Total Phenolics by segmented flow analyser (in line distillation with colourimetric finish). Solids are extracted in a caustic media prior to analysis.
Inorg-040	The concentrations of the major ions (mg/L) are converted to milliequivalents and summed. The ionic balance should be within +/- 10% ie total anions = total cations +/-10%.
Inorg-081	Anions - a range of Anions are determined by Ion Chromatography, in accordance with APHA latest edition, 4110-B. Alternatively determined by colourimetry/turbidity using Discrete Analyer.
Metals-020	Determination of various metals by ICP-AES.
Metals-021	Determination of Mercury by Cold Vapour AAS.
Metals-022	Determination of various metals by ICP-MS.
Org-003	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis.
Org-005	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC with dual ECD's.
Org-006	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD.
Org-012	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS.
Org-012	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS. Benzo(a)pyrene TEQ as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater - 2013.
Org-013	Water samples are analysed directly by purge and trap GC-MS.
Org-016	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater.

QUALITY CONTROL: VOCs in water						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W1	[NT]
Date extracted	-			18/05/2018	[NT]	[NT]	[NT]	[NT]	18/05/2018	[NT]
Date analysed	-			21/05/2018	[NT]	[NT]	[NT]	[NT]	21/05/2018	[NT]
Dichlorodifluoromethane	µg/L	10	Org-013	<10	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Chloromethane	µg/L	10	Org-013	<10	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Vinyl Chloride	µg/L	10	Org-013	<10	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Bromomethane	µg/L	10	Org-013	<10	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Chloroethane	µg/L	10	Org-013	<10	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Trichlorofluoromethane	µg/L	10	Org-013	<10	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
1,1-Dichloroethene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Trans-1,2-dichloroethene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
1,1-dichloroethane	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	105	[NT]
Cis-1,2-dichloroethene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Bromochloromethane	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Chloroform	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	107	[NT]
2,2-dichloropropane	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
1,2-dichloroethane	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	114	[NT]
1,1,1-trichloroethane	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	108	[NT]
1,1-dichloropropene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Cyclohexane	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Carbon tetrachloride	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Benzene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Dibromomethane	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
1,2-dichloropropane	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Trichloroethene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	108	[NT]
Bromodichloromethane	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	109	[NT]
trans-1,3-dichloropropene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
cis-1,3-dichloropropene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
1,1,2-trichloroethane	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Toluene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
1,3-dichloropropane	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Dibromochloromethane	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	107	[NT]
1,2-dibromoethane	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Tetrachloroethene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	98	[NT]
1,1,1,2-tetrachloroethane	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Chlorobenzene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Ethylbenzene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Bromoform	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
m+p-xylene	µg/L	2	Org-013	<2	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Styrene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
1,1,2,2-tetrachloroethane	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
o-xylene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]

QUALITY CONTROL: VOCs in water						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W1	[NT]
1,2,3-trichloropropane	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Isopropylbenzene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Bromobenzene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
n-propyl benzene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
2-chlorotoluene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
4-chlorotoluene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
1,3,5-trimethyl benzene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Tert-butyl benzene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
1,2,4-trimethyl benzene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
1,3-dichlorobenzene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Sec-butyl benzene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
1,4-dichlorobenzene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
4-isopropyl toluene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
1,2-dichlorobenzene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
n-butyl benzene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
1,2-dibromo-3-chloropropane	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
1,2,4-trichlorobenzene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Hexachlorobutadiene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
1,2,3-trichlorobenzene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate Dibromofluoromethane	%		Org-013	107	[NT]	[NT]	[NT]	[NT]	103	[NT]
Surrogate toluene-d8	%		Org-013	99	[NT]	[NT]	[NT]	[NT]	99	[NT]
Surrogate 4-BFB	%		Org-013	91	[NT]	[NT]	[NT]	[NT]	99	[NT]

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Water						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W1	[NT]
Date extracted	-			18/05/2018	[NT]	[NT]	[NT]	[NT]	18/05/2018	[NT]
Date analysed	-			21/05/2018	[NT]	[NT]	[NT]	[NT]	21/05/2018	[NT]
TRH C_6 - C_9	µg/L	10	Org-016	<10	[NT]	[NT]	[NT]	[NT]	116	[NT]
TRH C_6 - C_{10}	µg/L	10	Org-016	<10	[NT]	[NT]	[NT]	[NT]	116	[NT]
Benzene	µg/L	1	Org-016	<1	[NT]	[NT]	[NT]	[NT]	115	[NT]
Toluene	µg/L	1	Org-016	<1	[NT]	[NT]	[NT]	[NT]	115	[NT]
Ethylbenzene	µg/L	1	Org-016	<1	[NT]	[NT]	[NT]	[NT]	118	[NT]
m+p-xylene	µg/L	2	Org-016	<2	[NT]	[NT]	[NT]	[NT]	117	[NT]
o-xylene	µg/L	1	Org-016	<1	[NT]	[NT]	[NT]	[NT]	117	[NT]
Naphthalene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate Dibromofluoromethane	%		Org-016	107	[NT]	[NT]	[NT]	[NT]	103	[NT]
Surrogate toluene-d8	%		Org-016	97	[NT]	[NT]	[NT]	[NT]	102	[NT]
Surrogate 4-BFB	%		Org-016	95	[NT]	[NT]	[NT]	[NT]	100	[NT]

QUALITY CONTROL: svTRH (C10-C40) in Water						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W2	[NT]
Date extracted	-			16/05/2018	1	16/05/2018	16/05/2018		16/05/2018	[NT]
Date analysed	-			17/05/2018	1	16/05/2018	17/05/2018		17/05/2018	[NT]
TRH C_{10} - C_{14}	µg/L	50	Org-003	<50	1	<50	<50	0	104	[NT]
TRH C_{15} - C_{28}	µg/L	100	Org-003	<100	1	<100	<100	0	99	[NT]
TRH C_{29} - C_{36}	µg/L	100	Org-003	<100	1	<100	<100	0	120	[NT]
TRH >C_{10} - C_{16}	µg/L	50	Org-003	<50	1	<50	<50	0	104	[NT]
TRH >C_{16} - C_{34}	µg/L	100	Org-003	<100	1	<100	<100	0	99	[NT]
TRH >C_{34} - C_{40}	µg/L	100	Org-003	<100	1	<100	<100	0	120	[NT]
Surrogate o-Terphenyl	%		Org-003	111	1	91	85	7	114	[NT]

QUALITY CONTROL: PAHs in Water						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W2	[NT]
Date extracted	-			16/05/2018	1	16/05/2018	16/05/2018		16/05/2018	[NT]
Date analysed	-			17/05/2018	1	17/05/2018	17/05/2018		17/05/2018	[NT]
Naphthalene	µg/L	1	Org-012	<1	1	<1	<1	0	70	[NT]
Acenaphthylene	µg/L	1	Org-012	<1	1	<1	<1	0	[NT]	[NT]
Acenaphthene	µg/L	1	Org-012	<1	1	<1	<1	0	[NT]	[NT]
Fluorene	µg/L	1	Org-012	<1	1	<1	<1	0	76	[NT]
Phenanthrene	µg/L	1	Org-012	<1	1	<1	<1	0	88	[NT]
Anthracene	µg/L	1	Org-012	<1	1	<1	<1	0	[NT]	[NT]
Fluoranthene	µg/L	1	Org-012	<1	1	<1	<1	0	81	[NT]
Pyrene	µg/L	1	Org-012	<1	1	<1	<1	0	79	[NT]
Benzo(a)anthracene	µg/L	1	Org-012	<1	1	<1	<1	0	[NT]	[NT]
Chrysene	µg/L	1	Org-012	<1	1	<1	<1	0	71	[NT]
Benzo(b,j+k)fluoranthene	µg/L	2	Org-012	<2	1	<2	<2	0	[NT]	[NT]
Benzo(a)pyrene	µg/L	1	Org-012	<1	1	<1	<1	0	76	[NT]
Indeno(1,2,3-c,d)pyrene	µg/L	1	Org-012	<1	1	<1	<1	0	[NT]	[NT]
Dibenzo(a,h)anthracene	µg/L	1	Org-012	<1	1	<1	<1	0	[NT]	[NT]
Benzo(g,h,i)perylene	µg/L	1	Org-012	<1	1	<1	<1	0	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-012	100	1	106	108	2	86	[NT]

QUALITY CONTROL: Total Phenolics in Water						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W2	[NT]
Date extracted	-			16/05/2018	1	16/05/2018	16/05/2018		16/05/2018	[NT]
Date analysed	-			16/05/2018	1	16/05/2018	16/05/2018		16/05/2018	[NT]
Total Phenolics (as Phenol)	mg/L	0.05	Inorg-031	<0.05	1	<0.05	<0.05	0	100	[NT]

QUALITY CONTROL: OCP in water						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W1	[NT]
Date extracted	-			16/05/2018	1	16/05/2018	16/05/2018		16/05/2018	[NT]
Date analysed	-			17/05/2018	1	17/05/2018	17/05/2018		17/05/2018	[NT]
HCB	µg/L	0.2	Org-005	<0.2	1	<0.2	<0.2	0	[NT]	[NT]
alpha-BHC	µg/L	0.2	Org-005	<0.2	1	<0.2	<0.2	0	110	[NT]
gamma-BHC	µg/L	0.2	Org-005	<0.2	1	<0.2	<0.2	0	[NT]	[NT]
beta-BHC	µg/L	0.2	Org-005	<0.2	1	<0.2	<0.2	0	99	[NT]
Heptachlor	µg/L	0.2	Org-005	<0.2	1	<0.2	<0.2	0	108	[NT]
delta-BHC	µg/L	0.2	Org-005	<0.2	1	<0.2	<0.2	0	[NT]	[NT]
Aldrin	µg/L	0.2	Org-005	<0.2	1	<0.2	<0.2	0	108	[NT]
Heptachlor Epoxide	µg/L	0.2	Org-005	<0.2	1	<0.2	<0.2	0	101	[NT]
gamma-Chlordane	µg/L	0.2	Org-005	<0.2	1	<0.2	<0.2	0	[NT]	[NT]
alpha-Chlordane	µg/L	0.2	Org-005	<0.2	1	<0.2	<0.2	0	[NT]	[NT]
Endosulfan I	µg/L	0.2	Org-005	<0.2	1	<0.2	<0.2	0	[NT]	[NT]
pp-DDE	µg/L	0.2	Org-005	<0.2	1	<0.2	<0.2	0	112	[NT]
Dieldrin	µg/L	0.2	Org-005	<0.2	1	<0.2	<0.2	0	116	[NT]
Endrin	µg/L	0.2	Org-005	<0.2	1	<0.2	<0.2	0	105	[NT]
pp-DDD	µg/L	0.2	Org-005	<0.2	1	<0.2	<0.2	0	111	[NT]
Endosulfan II	µg/L	0.2	Org-005	<0.2	1	<0.2	<0.2	0	[NT]	[NT]
pp-DDT	µg/L	0.2	Org-005	<0.2	1	<0.2	<0.2	0	[NT]	[NT]
Endrin Aldehyde	µg/L	0.2	Org-005	<0.2	1	<0.2	<0.2	0	[NT]	[NT]
Endosulfan Sulphate	µg/L	0.2	Org-005	<0.2	1	<0.2	<0.2	0	110	[NT]
Methoxychlor	µg/L	0.2	Org-005	<0.2	1	<0.2	<0.2	0	[NT]	[NT]
Surrogate TCMX	%		Org-005	118	1	113	103	9	115	[NT]

QUALITY CONTROL: PCBs in Water						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W1	[NT]
Date extracted	-			16/05/2018	1	16/05/2018	16/05/2018		16/05/2018	[NT]
Date analysed	-			17/05/2018	1	17/05/2018	17/05/2018		17/05/2018	[NT]
Aroclor 1016	µg/L	2	Org-006	<2	1	<2	<2	0	[NT]	[NT]
Aroclor 1221	µg/L	2	Org-006	<2	1	<2	<2	0	[NT]	[NT]
Aroclor 1232	µg/L	2	Org-006	<2	1	<2	<2	0	[NT]	[NT]
Aroclor 1242	µg/L	2	Org-006	<2	1	<2	<2	0	[NT]	[NT]
Aroclor 1248	µg/L	2	Org-006	<2	1	<2	<2	0	[NT]	[NT]
Aroclor 1254	µg/L	2	Org-006	<2	1	<2	<2	0	99	[NT]
Aroclor 1260	µg/L	2	Org-006	<2	1	<2	<2	0	[NT]	[NT]
Surrogate TCLMX	%		Org-006	118	1	113	103	9	119	[NT]

QUALITY CONTROL: Phthalates in water						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W2	[NT]
Date extracted	-			16/05/2018	1	16/05/2018	16/05/2018		16/05/2018	[NT]
Date analysed	-			17/05/2018	1	17/05/2018	17/05/2018		17/05/2018	[NT]
Bis(2-ethylhexyl) phthalate	µg/L	50	Org-012	<50	1	<50	<50	0	[NT]	[NT]
Butylbenzylphthalate	µg/L	10	Org-012	<10	1	<10	<10	0	[NT]	[NT]
Diethylphthalate	µg/L	10	Org-012	<10	1	<10	<10	0	71	[NT]
Dimethyl phthalate	µg/L	10	Org-012	<10	1	<10	<10	0	76	[NT]
Di-n-butylphthalate	µg/L	50	Org-012	<50	1	<50	<50	0	[NT]	[NT]
Di-n-octylphthalate	µg/L	10	Org-012	<10	1	<10	<10	0	[NT]	[NT]
Surrogate Nitrobenzene-d_5	%		Org-012	87	1	64	81	23	69	[NT]
Surrogate 2-fluorobiphenyl	%		Org-012	71	1	59	69	16	59	[NT]
Surrogate 2,4,6-Tribromophenol	%		Org-012	51	1	40	52	26	66	[NT]
Surrogate p-Terphenyl-d_{14}	%		Org-012	102	1	112	110	2	81	[NT]

QUALITY CONTROL: HM in water - dissolved						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W2	191604-2
Date prepared	-			16/05/2018	1	16/05/2018	16/05/2018		16/05/2018	16/05/2018
Date analysed	-			16/05/2018	1	16/05/2018	16/05/2018		16/05/2018	16/05/2018
Aluminium-Dissolved	µg/L	10	Metals-022	<10	1	190	180	5	103	97
Silver-Dissolved	µg/L	1	Metals-022	<1	1	<1	<1	0	105	104
Arsenic-Dissolved	µg/L	1	Metals-022	<1	1	<1	<1	0	103	100
Boron-Dissolved	µg/L	20	Metals-022	<20	1	90	80	12	109	106
Barium-Dissolved	µg/L	1	Metals-022	<1	1	36	35	3	94	102
Beryllium-Dissolved	µg/L	0.5	Metals-022	<0.5	1	0.5	0.5	0	101	98
Cadmium-Dissolved	µg/L	0.1	Metals-022	<0.1	1	<0.1	<0.1	0	101	103
Chromium-Dissolved	µg/L	1	Metals-022	<1	1	<1	<1	0	95	89
Cobalt-Dissolved	µg/L	1	Metals-022	<1	1	11	11	0	105	100
Copper-Dissolved	µg/L	1	Metals-022	<1	1	19	18	5	100	96
Iron-Dissolved	µg/L	10	Metals-022	<10	1	2300	2300	0	102	#
Lead-Dissolved	µg/L	1	Metals-022	<1	1	1	1	0	100	99
Manganese-Dissolved	µg/L	5	Metals-022	<5	1	220	220	0	102	92
Mercury-Dissolved	µg/L	0.05	Metals-021	<0.05	1	<0.05	[NT]		99	[NT]
Molybdenum-Dissolved	µg/L	1	Metals-022	<1	1	<1	<1	0	94	99
Nickel-Dissolved	µg/L	1	Metals-022	<1	1	12	12	0	101	95
Selenium-Dissolved	µg/L	1	Metals-022	<1	1	<1	<1	0	98	102
Antimony-Dissolved	µg/L	1	Metals-022	<1	1	<1	<1	0	104	107
Tin-Dissolved	µg/L	1	Metals-022	<1	1	<1	<1	0	111	117
Thallium-Dissolved	µg/L	1	Metals-022	<1	1	<1	<1	0	101	97
Vanadium-Dissolved	µg/L	1	Metals-022	<1	1	<1	<1	0	97	91
Zinc-Dissolved	µg/L	1	Metals-022	<1	1	68	67	1	101	98

QUALITY CONTROL: Miscellaneous Inorganics						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W2	[NT]
Date prepared	-			14/05/2018	1	14/05/2018	14/05/2018		14/05/2018	[NT]
Date analysed	-			14/05/2018	1	14/05/2018	14/05/2018		14/05/2018	[NT]
pH	pH Units		Inorg-001	[NT]	1	5.0	[NT]		102	[NT]
Total Cyanide	mg/L	0.004	Inorg-014	<0.004	1	<0.004	<0.004	0	95	[NT]
Hexavalent Chromium, Cr^{6+}	mg/L	0.005	Inorg-024	<0.005	1	<0.005	[NT]		91	[NT]
Fluoride, F	mg/L	0.1	Inorg-026	<0.1	1	<0.1	[NT]		98	[NT]
Total Dissolved Solids (grav)	mg/L	5	Inorg-018	<5	1	440	[NT]		103	[NT]

QUALITY CONTROL: Ion Balance						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W1	[NT]
Date prepared	-			14/05/2018	[NT]	[NT]	[NT]	[NT]	14/05/2018	[NT]
Date analysed	-			14/05/2018	[NT]	[NT]	[NT]	[NT]	14/05/2018	[NT]
Calcium - Dissolved	mg/L	0.5	Metals-020	<0.5	[NT]	[NT]	[NT]	[NT]	106	[NT]
Potassium - Dissolved	mg/L	0.5	Metals-020	<0.5	[NT]	[NT]	[NT]	[NT]	118	[NT]
Sodium - Dissolved	mg/L	0.5	Metals-020	<0.5	[NT]	[NT]	[NT]	[NT]	106	[NT]
Magnesium - Dissolved	mg/L	0.5	Metals-020	<0.5	[NT]	[NT]	[NT]	[NT]	106	[NT]
Hydroxide Alkalinity (OH^-) as $CaCO_3$	mg/L	5	Inorg-006	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Bicarbonate Alkalinity as $CaCO_3$	mg/L	5	Inorg-006	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Carbonate Alkalinity as $CaCO_3$	mg/L	5	Inorg-006	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Total Alkalinity as $CaCO_3$	mg/L	5	Inorg-006	<5	[NT]	[NT]	[NT]	[NT]	97	[NT]
Sulphate, SO4	mg/L	1	Inorg-081	<1	[NT]	[NT]	[NT]	[NT]	88	[NT]
Chloride, Cl	mg/L	1	Inorg-081	<1	[NT]	[NT]	[NT]	[NT]	118	[NT]

Result Definitions

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

Quality Control Definitions

Blank	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
Duplicate	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
Matrix Spike	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample)	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
Surrogate Spike	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Australian Drinking Water Guidelines recommend that Thermotolerant Coliform, Faecal Enterococci, & E.Coli levels are less than 1cfu/100mL. The recommended maximums are taken from "Australian Drinking Water Guidelines", published by NHMRC & ARMC 2011.

Laboratory Acceptance Criteria

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

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

Spikes for Physical and Aggregate Tests are not applicable.

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

Duplicates: <5xPQL - any RPD is acceptable; >5xPQL - 0-50% RPD is acceptable.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals; 60-140% for organics (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

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

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

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

Measurement Uncertainty estimates are available for most tests upon request.

Report Comments

Dissolved Metals: The preserved sample provided was not identified as either total or dissolved, therefore the unpreserved sample was filtered through 0.45 µm filter at the lab.
Note: there is a possibility some elements may be underestimated.

HM in water - dissolved - # Percent recovery is not possible to report due to the high concentration of the element/s in the sample/s. However an acceptable recovery was obtained for the LCS.

LRM GLOBAL
P.O. Box 1237
Carlton VIC 3053
enquiries@lrmglobal.com.au

CHAIN OF CUSTODY

Job Number: 27380

ATTENTION	Envirolab
CLIENT	Australian Unity Limited
LOCATION	266 Longueville Rd, Lane Cove

Sheet 1 of 1

	Sample Number	Sample Date	Sample Type	Analysis Required	No. of Containers	Turn-around Time Required
1	GW01	3/08/2018	Water	TRH/BTEX, VOCs, PAHs, Total Phenolics, Phthalates, OCPs, PCBs, TDS, pH, metals (Al, Ag, As, B, Ba, Be, Cd, Cr, Co, Cu, Fe, Pb, Mn, Hg, Mo, Ni, Se, Sb, Sn, Ti, V, Zn), cation/anions, ammonia, flouride, Hexavalent chromium, total cyanide, PFAS & PFOS	9	Standard
2	GW02	3/08/2018	Water	TRH/BTEX, VOCs, PAHs, Total Phenolics, Phthalates, OCPs, PCBs, TDS, pH, metals (Al, Ag, As, B, Ba, Be, Cd, Cr, Co, Cu, Fe, Pb, Mn, Hg, Mo, Ni, Se, Sb, Sn, Ti, V, Zn), cation/anions, ammonia, flouride, Hexavalent chromium, total cyanide, PFAS & PFOS	9	Standard
3	GW03	3/08/2018	Water	TRH/BTEX, VOCs, PAHs, Total Phenolics, Phthalates, OCPs, PCBs, TDS, pH, metals (Al, Ag, As, B, Ba, Be, Cd, Cr, Co, Cu, Fe, Pb, Mn, Hg, Mo, Ni, Se, Sb, Sn, Ti, V, Zn), cation/anions, ammonia, flouride, Hexavalent chromium, total cyanide, PFAS & PFOS	9	Standard
4	DUP/03/08/18	3/08/2018	Water	TRH/BTEX, VOCs, PAHs, Total Phenolics, Phthalates, OCPs, PCBs, TDS, pH, metals (Al, Ag, As, B, Ba, Be, Cd, Cr, Co, Cu, Fe, Pb, Mn, Hg, Mo, Ni, Se, Sb, Sn, Ti, V, Zn), cation/anions, ammonia, flouride, Hexavalent chromium, total cyanide, PFAS & PFOS	9	Standard
	SPLIT/03/08/18	3/08/2018	Water	TRH/BTEX, VOCs, PAHs, Total Phenolics, Phthalates, OCPs, PCBs, TDS, pH, metals (Al, Ag, As, B, Ba, Be, Cd, Cr, Co, Cu, Fe, Pb, Mn, Hg, Mo, Ni, Se, Sb, Sn, Ti, V, Zn), cation/anions, ammonia, flouride, Hexavalent chromium, total cyanide, PFAS & PFOS	9	Standard
5	RB/03/08/18	3/08/2018	Water	TPH, PAHs, Metals	4	Standard
6	TB/03/08/18	3/08/2018	Water	TPH C6-C9	2	Standard
						-
						-
						-
						-
						-
						-
						-

ENVIROLAB
Envirolab Services
12 Ashley St
Chatswood NSW 2067
Ph: (02) 9910 6200

Job No: 197675
Date Received: 3/8/18
Time Received: 14:30
Received By: MT
Temp: Cool/Ambient 6.9
Cooling: Ice/Icepack
Security: Intact/Broken/None

Total number of containers 51

Additional Information::

Email Results To	Tick
jon.lawson@lrmglobal.com.au	√
acampbell@lrmglobal.com.au	√
ajacob@lrmglobal.com.au	
dyeoh@lrmglobal.com.au	
bpaule@lrmglobal.com.au	

Chain of custody must be signed and dated by LRM, courier, and laboratory.

Sampled by: NM (EP Risk)

Checked by: AJC (LRM)

Additional Comments

Splits to Envirolab (Melb)

RELINQUISHED BY (Signature)	ORGANISATION	DATE / TIME	RECEIVED BY (Signature)	ORGANISATION	DATE / TIME
N. M. [illegible]	EP Risk	3/8/18	MT	EL	3/8/18 14:30
RELINQUISHED BY (Signature)	**ORGANISATION**	**DATE / TIME**	**RECEIVED BY (Signature)**	**RECEIVED FOR LABORATORY BY (Signature)**	

Envirolab Services Pty Ltd
ABN 37 112 535 645
12 Ashley St Chatswood NSW 2067
ph 02 9910 6200 fax 02 9910 6201
customerservice@envirolab.com.au
www.envirolab.com.au

SAMPLE RECEIPT ADVICE

Client Details

Client	LRM Global
Attention	Adam Campbell, Jon Lawson

Sample Login Details

Your reference	27380, 266 Longueville Rd, Lane Cove
Envirolab Reference	197675
Date Sample Received	03/08/2018
Date Instructions Received	03/08/2018
Date Results Expected to be Reported	10/08/2018

Sample Condition

Samples received in appropriate condition for analysis	YES
No. of Samples Provided	6 Water
Turnaround Time Requested	Standard
Temperature on Receipt (°C)	6.9
Cooling Method	Ice
Sampling Date Provided	YES

Comments

Nil

Please direct any queries to:

Aileen Hie	Jacinta Hurst
Phone: 02 9910 6200	**Phone: 02 9910 6200**
Fax: 02 9910 6201	**Fax: 02 9910 6201**
Email: ahie@envirolab.com.au	**Email: jhurst@envirolab.com.au**

Analysis Underway, details on the following page:

Envirolab Services Pty Ltd
ABN 37 112 535 645
12 Ashley St Chatswood NSW 2067
ph 02 9910 6200 fax 02 9910 6201
customerservice@envirolab.com.au
www.envirolab.com.au

Sample ID	VOCs in water	vTRH(C6-C10)/BTEXN in Water	svTRH (C10-C40) in Water	PAHsin Water	OCP in water	PCBs in Water	All metals in water-dissolved	Total Phenolicsin Water	Phthalates in water	Total Dissolved Solids(grav)	pH	Ammonia as N in water	Fluoride, F	Hexavalent Chromium, Cr6+	Total Cyanide	Calcium - Dissolved	Potassium - Dissolved	Sodium - Dissolved	Magnesium - Dissolved	Hydroxide Alkalinity (OH-) as CaCO3	Bicarbonate Alkalinity as CaCO3	Carbonate Alkalinity as CaCO3	Total Alkalinity as CaCO3	Sulphate, SO4	Chloride, Cl	Ionic Balance	PFAS in Waters Short
GW01	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
GW02	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
GW03	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
DUP/03/08/18	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
RB/03/08/18		✓	✓	✓			✓																				
TB/03/08/18		✓																									

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

Additional Info

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

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

Envirolab Services Pty Ltd
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12 Ashley St Chatswood NSW 2067
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www.envirolab.com.au

CERTIFICATE OF ANALYSIS 197675

Client Details

Client	LRM Global
Attention	Adam Campbell, Jon Lawson
Address	PO Box 1237, Carlton, VIC, 3053

Sample Details

Your Reference	**27380, 266 Longueville Rd, Lane Cove**
Number of Samples	6 Water
Date samples received	03/08/2018
Date completed instructions received	03/08/2018

Analysis Details

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

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

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

Please refer to the last page of this report for any comments relating to the results.

Report Details

Date results requested by	10/08/2018
Date of Issue	10/08/2018

NATA Accreditation Number 2901. This document shall not be reproduced except in full.

Accredited for compliance with ISO/IEC 17025 - Testing. **Tests not covered by NATA are denoted with ***

Results Approved By
Jeremy Faircloth, Organics Supervisor
Nick Sarlamis, Inorganics Supervisor
Phalak Inthakesone, Organics Development Manager, Sydney
Simon Mills, Group R&D Manager
Steven Luong, Senior Chemist

Authorised By

Jacinta Hurst, Laboratory Manager

VOCs in water					
Our Reference		197675-1	197675-2	197675-3	197675-4
Your Reference	UNITS	GW01	GW02	GW03	DUP/03/08/18
Date Sampled		03/08/2018	03/08/2018	03/08/2018	03/08/2018
Type of sample		Water	Water	Water	Water
Date extracted	-	03/08/2018	03/08/2018	03/08/2018	03/08/2018
Date analysed	-	06/08/2018	06/08/2018	06/08/2018	06/08/2018
Dichlorodifluoromethane	µg/L	<10	<10	<10	<10
Chloromethane	µg/L	<10	<10	<10	<10
Vinyl Chloride	µg/L	<10	<10	<10	<10
Bromomethane	µg/L	<10	<10	<10	<10
Chloroethane	µg/L	<10	<10	<10	<10
Trichlorofluoromethane	µg/L	<10	<10	<10	<10
1,1-Dichloroethene	µg/L	<1	<1	<1	<1
Trans-1,2-dichloroethene	µg/L	<1	<1	<1	<1
1,1-dichloroethane	µg/L	<1	<1	<1	<1
Cis-1,2-dichloroethene	µg/L	<1	<1	<1	<1
Bromochloromethane	µg/L	<1	<1	<1	<1
Chloroform	µg/L	<1	<1	<1	<1
2,2-dichloropropane	µg/L	<1	<1	<1	<1
1,2-dichloroethane	µg/L	<1	<1	<1	<1
1,1,1-trichloroethane	µg/L	<1	<1	<1	<1
1,1-dichloropropene	µg/L	<1	<1	<1	<1
Cyclohexane	µg/L	<1	<1	<1	<1
Carbon tetrachloride	µg/L	<1	<1	<1	<1
Benzene	µg/L	<1	<1	<1	<1
Dibromomethane	µg/L	<1	<1	<1	<1
1,2-dichloropropane	µg/L	<1	<1	<1	<1
Trichloroethene	µg/L	<1	<1	<1	<1
Bromodichloromethane	µg/L	<1	<1	<1	<1
trans-1,3-dichloropropene	µg/L	<1	<1	<1	<1
cis-1,3-dichloropropene	µg/L	<1	<1	<1	<1
1,1,2-trichloroethane	µg/L	<1	<1	<1	<1
Toluene	µg/L	<1	<1	<1	<1
1,3-dichloropropane	µg/L	<1	<1	<1	<1
Dibromochloromethane	µg/L	<1	<1	<1	<1
1,2-dibromoethane	µg/L	<1	<1	<1	<1
Tetrachloroethene	µg/L	<1	<1	<1	<1
1,1,1,2-tetrachloroethane	µg/L	<1	<1	<1	<1
Chlorobenzene	µg/L	<1	<1	<1	<1
Ethylbenzene	µg/L	<1	<1	<1	<1
Bromoform	µg/L	<1	<1	<1	<1

VOCs in water					
Our Reference		197675-1	197675-2	197675-3	197675-4
Your Reference	UNITS	GW01	GW02	GW03	DUP/03/08/18
Date Sampled		03/08/2018	03/08/2018	03/08/2018	03/08/2018
Type of sample		Water	Water	Water	Water
m+p-xylene	µg/L	<2	<2	<2	<2
Styrene	µg/L	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	µg/L	<1	<1	<1	<1
o-xylene	µg/L	<1	<1	<1	<1
1,2,3-trichloropropane	µg/L	<1	<1	<1	<1
Isopropylbenzene	µg/L	<1	<1	<1	<1
Bromobenzene	µg/L	<1	<1	<1	<1
n-propyl benzene	µg/L	<1	<1	<1	<1
2-chlorotoluene	µg/L	<1	<1	<1	<1
4-chlorotoluene	µg/L	<1	<1	<1	<1
1,3,5-trimethyl benzene	µg/L	<1	<1	<1	<1
Tert-butyl benzene	µg/L	<1	<1	<1	<1
1,2,4-trimethyl benzene	µg/L	<1	<1	<1	<1
1,3-dichlorobenzene	µg/L	<1	<1	<1	<1
Sec-butyl benzene	µg/L	<1	<1	<1	<1
1,4-dichlorobenzene	µg/L	<1	<1	<1	<1
4-isopropyl toluene	µg/L	<1	<1	<1	<1
1,2-dichlorobenzene	µg/L	<1	<1	<1	<1
n-butyl benzene	µg/L	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	µg/L	<1	<1	<1	<1
1,2,4-trichlorobenzene	µg/L	<1	<1	<1	<1
Hexachlorobutadiene	µg/L	<1	<1	<1	<1
1,2,3-trichlorobenzene	µg/L	<1	<1	<1	<1
Surrogate Dibromofluoromethane	%	85	90	88	88
Surrogate toluene-d8	%	80	81	80	79
Surrogate 4-BFB	%	94	94	95	95

vTRH(C6-C10)/BTEXN in Water						
Our Reference		197675-1	197675-2	197675-3	197675-4	197675-5
Your Reference	UNITS	GW01	GW02	GW03	DUP/03/08/18	RB/03/08/18
Date Sampled		03/08/2018	03/08/2018	03/08/2018	03/08/2018	03/08/2018
Type of sample		Water	Water	Water	Water	Water
Date extracted	-	03/08/2018	03/08/2018	03/08/2018	03/08/2018	03/08/2018
Date analysed	-	06/08/2018	06/08/2018	06/08/2018	06/08/2018	06/08/2018
TRH C_6 - C_9	µg/L	<10	<10	<10	<10	<10
TRH C_6 - C_{10}	µg/L	<10	<10	<10	<10	<10
TRH C_6 - C_{10} less BTEX (F1)	µg/L	<10	<10	<10	<10	[NA]
Benzene	µg/L	<1	<1	<1	<1	[NA]
Toluene	µg/L	<1	<1	<1	<1	[NA]
Ethylbenzene	µg/L	<1	<1	<1	<1	[NA]
m+p-xylene	µg/L	<2	<2	<2	<2	[NA]
o-xylene	µg/L	<1	<1	<1	<1	[NA]
Naphthalene	µg/L	<1	<1	<1	<1	[NA]
Surrogate Dibromofluoromethane	%	85	90	88	88	108
Surrogate toluene-d8	%	80	81	80	79	96
Surrogate 4-BFB	%	94	94	95	95	101

vTRH(C6-C10)/BTEXN in Water		
Our Reference		197675-6
Your Reference	UNITS	TB/03/08/18
Date Sampled		03/08/2018
Type of sample		Water
Date extracted	-	03/08/2018
Date analysed	-	06/08/2018
TRH C_6 - C_9	µg/L	<10
TRH C_6 - C_{10}	µg/L	<10
Surrogate Dibromofluoromethane	%	104
Surrogate toluene-d8	%	96
Surrogate 4-BFB	%	100

svTRH (C10-C40) in Water						
Our Reference		197675-1	197675-2	197675-3	197675-4	197675-5
Your Reference	UNITS	GW01	GW02	GW03	DUP/03/08/18	RB/03/08/18
Date Sampled		03/08/2018	03/08/2018	03/08/2018	03/08/2018	03/08/2018
Type of sample		Water	Water	Water	Water	Water
Date extracted	-	08/08/2018	08/08/2018	08/08/2018	08/08/2018	08/08/2018
Date analysed	-	09/08/2018	08/08/2018	09/08/2018	09/08/2018	09/08/2018
TRH C_{10} - C_{14}	µg/L	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	µg/L	<100	<100	<100	<100	<100
TRH C_{29} - C_{36}	µg/L	<100	<100	<100	<100	<100
TRH >C_{10} - C_{16}	µg/L	<50	<50	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	µg/L	<50	<50	<50	<50	[NT]
TRH >C_{16} - C_{34}	µg/L	<100	<100	<100	<100	<100
TRH >C_{34} - C_{40}	µg/L	<100	<100	<100	<100	<100
Surrogate o-Terphenyl	%	112	114	135	115	115

PAHs in Water						
Our Reference		197675-1	197675-2	197675-3	197675-4	197675-5
Your Reference	UNITS	GW01	GW02	GW03	DUP/03/08/18	RB/03/08/18
Date Sampled		03/08/2018	03/08/2018	03/08/2018	03/08/2018	03/08/2018
Type of sample		Water	Water	Water	Water	Water
Date extracted	-	08/08/2018	08/08/2018	09/08/2018	09/08/2018	09/08/2018
Date analysed	-	09/08/2018	09/08/2018	10/08/2018	10/08/2018	10/08/2018
Naphthalene	µg/L	<1	<1	<1	<1	<1
Acenaphthylene	µg/L	<1	<1	<1	<1	<1
Acenaphthene	µg/L	<1	<1	<1	<1	<1
Fluorene	µg/L	<1	<1	<1	<1	<1
Phenanthrene	µg/L	<1	<1	<1	<1	<1
Anthracene	µg/L	<1	<1	<1	<1	<1
Fluoranthene	µg/L	<1	<1	<1	<1	<1
Pyrene	µg/L	<1	<1	<1	<1	<1
Benzo(a)anthracene	µg/L	<1	<1	<1	<1	<1
Chrysene	µg/L	<1	<1	<1	<1	<1
Benzo(b,j+k)fluoranthene	µg/L	<2	<2	<2	<2	<2
Benzo(a)pyrene	µg/L	<1	<1	<1	<1	<1
Indeno(1,2,3-c,d)pyrene	µg/L	<1	<1	<1	<1	<1
Dibenzo(a,h)anthracene	µg/L	<1	<1	<1	<1	<1
Benzo(g,h,i)perylene	µg/L	<1	<1	<1	<1	<1
Benzo(a)pyrene TEQ	µg/L	<5	<5	<5	<5	<5
Total +ve PAH's	µg/L	NIL (+)VE	NIL (+)VE	NIL (+)VE	NIL (+)VE	NIL (+)VE
Surrogate p-Terphenyl-d14	%	129	130	124	123	122

OCP in water					
Our Reference		197675-1	197675-2	197675-3	197675-4
Your Reference	UNITS	GW01	GW02	GW03	DUP/03/08/18
Date Sampled		03/08/2018	03/08/2018	03/08/2018	03/08/2018
Type of sample		Water	Water	Water	Water
Date extracted	-	08/08/2018	08/08/2018	08/08/2018	08/08/2018
Date analysed	-	08/08/2018	08/08/2018	09/08/2018	09/08/2018
HCB	µg/L	<0.2	<0.2	<0.2	<0.2
alpha-BHC	µg/L	<0.2	<0.2	<0.2	<0.2
gamma-BHC	µg/L	<0.2	<0.2	<0.2	<0.2
beta-BHC	µg/L	<0.2	<0.2	<0.2	<0.2
Heptachlor	µg/L	<0.2	<0.2	<0.2	<0.2
delta-BHC	µg/L	<0.2	<0.2	<0.2	<0.2
Aldrin	µg/L	<0.2	<0.2	<0.2	<0.2
Heptachlor Epoxide	µg/L	<0.2	<0.2	<0.2	<0.2
gamma-Chlordane	µg/L	<0.2	<0.2	<0.2	<0.2
alpha-Chlordane	µg/L	<0.2	<0.2	<0.2	<0.2
Endosulfan I	µg/L	<0.2	<0.2	<0.2	<0.2
pp-DDE	µg/L	<0.2	<0.2	<0.2	<0.2
Dieldrin	µg/L	<0.2	<0.2	<0.2	<0.2
Endrin	µg/L	<0.2	<0.2	<0.2	<0.2
pp-DDD	µg/L	<0.2	<0.2	<0.2	<0.2
Endosulfan II	µg/L	<0.2	<0.2	<0.2	<0.2
pp-DDT	µg/L	<0.2	<0.2	<0.2	<0.2
Endrin Aldehyde	µg/L	<0.2	<0.2	<0.2	<0.2
Endosulfan Sulphate	µg/L	<0.2	<0.2	<0.2	<0.2
Methoxychlor	µg/L	<0.2	<0.2	<0.2	<0.2
Surrogate TCMX	%	110	108	108	102

PCBs in Water					
Our Reference		197675-1	197675-2	197675-3	197675-4
Your Reference	UNITS	GW01	GW02	GW03	DUP/03/08/18
Date Sampled		03/08/2018	03/08/2018	03/08/2018	03/08/2018
Type of sample		Water	Water	Water	Water
Date extracted	-	08/08/2018	08/08/2018	08/08/2018	08/08/2018
Date analysed	-	08/08/2018	08/08/2018	09/08/2018	09/08/2018
Aroclor 1016	µg/L	<2	<2	<2	<2
Aroclor 1221	µg/L	<2	<2	<2	<2
Aroclor 1232	µg/L	<2	<2	<2	<2
Aroclor 1242	µg/L	<2	<2	<2	<2
Aroclor 1248	µg/L	<2	<2	<2	<2
Aroclor 1254	µg/L	<2	<2	<2	<2
Aroclor 1260	µg/L	<2	<2	<2	<2
Surrogate TCLMX	%	110	108	108	102

All metals in water-dissolved						
Our Reference		197675-1	197675-2	197675-3	197675-4	197675-5
Your Reference	UNITS	GW01	GW02	GW03	DUP/03/08/18	RB/03/08/18
Date Sampled		03/08/2018	03/08/2018	03/08/2018	03/08/2018	03/08/2018
Type of sample		Water	Water	Water	Water	Water
Date prepared	-	06/08/2018	06/08/2018	06/08/2018	06/08/2018	06/08/2018
Date analysed	-	06/08/2018	06/08/2018	06/08/2018	06/08/2018	06/08/2018
Aluminium-Dissolved	µg/L	500	1,700	10	410	<10
Silver-Dissolved	µg/L	<1	<1	<1	<1	<1
Arsenic-Dissolved	µg/L	<1	<1	<1	<1	<1
Boron-Dissolved	µg/L	60	40	100	60	<20
Barium-Dissolved	µg/L	21	59	94	22	<1
Beryllium-Dissolved	µg/L	0.8	<0.5	<0.5	0.7	<0.5
Cadmium-Dissolved	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Chromium-Dissolved	µg/L	1	2	1	<1	<1
Cobalt-Dissolved	µg/L	4	1	5	4	<1
Copper-Dissolved	µg/L	6	18	9	32	<1
Iron-Dissolved	µg/L	2,400	920	240	2,000	<10
Lead-Dissolved	µg/L	2	5	1	4	<1
Manganese-Dissolved	µg/L	160	36	180	150	<5
Mercury-Dissolved	µg/L	<0.05	<0.05	0.05	<0.05	<0.05
Molybdenum-Dissolved	µg/L	<1	<1	1	<1	<1
Nickel-Dissolved	µg/L	52	63	35	54	<1
Selenium-Dissolved	µg/L	<1	<1	<1	<1	<1
Antimony-Dissolved	µg/L	<1	<1	<1	<1	<1
Tin-Dissolved	µg/L	<1	<1	<1	<1	<1
Titanium-Dissolved	µg/L	<1	<1	<1	<1	<1
Vanadium-Dissolved	µg/L	<1	<1	1	<1	<1
Zinc-Dissolved	µg/L	220	230	56	200	<1

Total Phenolics in Water					
Our Reference		197675-1	197675-2	197675-3	197675-4
Your Reference	UNITS	GW01	GW02	GW03	DUP/03/08/18
Date Sampled		03/08/2018	03/08/2018	03/08/2018	03/08/2018
Type of sample		Water	Water	Water	Water
Date extracted	-	06/08/2018	06/08/2018	06/08/2018	06/08/2018
Date analysed	-	06/08/2018	06/08/2018	06/08/2018	06/08/2018
Total Phenolics (as Phenol)	mg/L	<0.05	<0.05	<0.05	<0.05

Phthalates in water					
Our Reference		197675-1	197675-2	197675-3	197675-4
Your Reference	UNITS	GW01	GW02	GW03	DUP/03/08/18
Date Sampled		03/08/2018	03/08/2018	03/08/2018	03/08/2018
Type of sample		Water	Water	Water	Water
Date extracted	-	09/08/2018	09/08/2018	09/08/2018	09/08/2018
Date analysed	-	09/08/2018	09/08/2018	09/08/2018	09/08/2018
Bis(2-ethylhexyl) phthalate	µg/L	<50	<50	<50	<50
Butylbenzylphthalate	µg/L	<10	<10	<10	<10
Diethylphthalate	µg/L	<10	<10	<10	<10
Dimethyl phthalate	µg/L	<10	<10	<10	<10
Di-n-butylphthalate	µg/L	<50	<50	<50	<50
Di-n-octylphthalate	µg/L	<10	<10	<10	<10
Surrogate Nitrobenzene-d_5	%	86	87	104	89
Surrogate 2-fluorobiphenyl	%	89	94	106	89
Surrogate 2,4,6-Tribromophenol	%	79	85	92	80
Surrogate p-Terphenyl-d_{14}	%	79	90	120	83

Miscellaneous Inorganics					
Our Reference		197675-1	197675-2	197675-3	197675-4
Your Reference	UNITS	GW01	GW02	GW03	DUP/03/08/18
Date Sampled		03/08/2018	03/08/2018	03/08/2018	03/08/2018
Type of sample		Water	Water	Water	Water
Date prepared	-	03/08/2018	03/08/2018	03/08/2018	03/08/2018
Date analysed	-	03/08/2018	03/08/2018	03/08/2018	03/08/2018
Total Dissolved Solids (grav)	mg/L	440	180	470	430
pH	pH Units	4.4	4.2	6.8	4.4
Ammonia as N in water	mg/L	<0.005	0.041	0.34	<0.005
Fluoride, F	mg/L	<0.1	<0.1	<0.1	<0.1
Hexavalent Chromium, Cr^{6+}	mg/L	<0.005	<0.005	<0.005	<0.005
Total Cyanide	mg/L	<0.004	<0.004	<0.004	<0.004

Ion Balance					
Our Reference		197675-1	197675-2	197675-3	197675-4
Your Reference	UNITS	GW01	GW02	GW03	DUP/03/08/18
Date Sampled		03/08/2018	03/08/2018	03/08/2018	03/08/2018
Type of sample		Water	Water	Water	Water
Date prepared	-	03/08/2018	03/08/2018	03/08/2018	03/08/2018
Date analysed	-	03/08/2018	03/08/2018	03/08/2018	03/08/2018
Calcium - Dissolved	mg/L	0.9	2.0	100	0.9
Potassium - Dissolved	mg/L	1.1	1	9.3	1.1
Sodium - Dissolved	mg/L	140	33	16	140
Magnesium - Dissolved	mg/L	4.8	6.3	9.3	4.5
Hydroxide Alkalinity (OH^-) as $CaCO_3$	mg/L	<5	<5	<5	<5
Bicarbonate Alkalinity as $CaCO_3$	mg/L	<5	<5	230	<5
Carbonate Alkalinity as $CaCO_3$	mg/L	<5	<5	<5	<5
Total Alkalinity as $CaCO_3$	mg/L	<5	<5	230	<5
Sulphate, SO4	mg/L	120	47	98	120
Chloride, Cl	mg/L	110	48	30	110
Ionic Balance	%	9.0	-6.0	-4.0	8.0

PFAS in Waters Short					
Our Reference		197675-1	197675-2	197675-3	197675-4
Your Reference	UNITS	GW01	GW02	GW03	DUP/03/08/18
Date Sampled		03/08/2018	03/08/2018	03/08/2018	03/08/2018
Type of sample		Water	Water	Water	Water
Date prepared	-	06/08/2018	06/08/2018	06/08/2018	06/08/2018
Date analysed	-	06/08/2018	06/08/2018	06/08/2018	06/08/2018
Perfluorohexanesulfonic acid - PFHxS	µg/L	0.02	0.01	<0.01	0.03
Perfluorooctanesulfonic acid PFOS	µg/L	<0.01	<0.01	<0.01	<0.01
Perfluorooctanoic acid PFOA	µg/L	<0.01	<0.01	<0.01	<0.01
6:2 FTS	µg/L	<0.01	<0.01	<0.01	<0.01
8:2 FTS	µg/L	<0.01	<0.01	<0.01	<0.01
Surrogate $^{13}C_8$ *PFOS*	%	91	79	111	89
Surrogate $^{13}C_2$ *PFOA*	%	96	104	101	100
Extracted ISTD $^{18}O_2$ *PFHxS*	%	86	81	75	72
Extracted ISTD $^{13}C_4$ *PFOS*	%	82	89	77	82
Extracted ISTD $^{13}C_4$ *PFOA*	%	110	103	110	105
Extracted ISTD $^{13}C_2$ *6:2FTS*	%	87	94	87	86
Extracted ISTD $^{13}C_2$ *8:2FTS*	%	68	67	75	61
Total Positive PFHxS & PFOS	µg/L	0.02	0.01	<0.01	0.03
Total Positive PFOA & PFOS	µg/L	<0.01	<0.01	<0.01	<0.01
Total Positive PFAS	µg/L	0.02	0.01	<0.01	0.03

Method ID	Methodology Summary
Inorg-001	pH - Measured using pH meter and electrode in accordance with APHA latest edition, 4500-H+. Please note that the results for water analyses are indicative only, as analysis outside of the APHA storage times.
Inorg-006	Alkalinity - determined titrimetrically in accordance with APHA latest edition, 2320-B.
Inorg-014	Cyanide - free, total, weak acid dissociable by segmented flow analyser (in line dialysis with colourimetric finish). Solids are extracted in a caustic media prior to analysis.
Inorg-018	Total Dissolved Solids - determined gravimetrically. The solids are dried at 180+/-10°C.
Inorg-024	Hexavalent Chromium (Cr6+) - determined colourimetrically.
Inorg-026	Fluoride determined by ion selective electrode (ISE) in accordance with APHA latest edition, 4500-F-C.
Inorg-031	Total Phenolics by segmented flow analyser (in line distillation with colourimetric finish). Solids are extracted in a caustic media prior to analysis.
Inorg-040	The concentrations of the major ions (mg/L) are converted to milliequivalents and summed. The ionic balance should be within +/- 10% ie total anions = total cations +/-10%.
Inorg-057	Ammonia - determined colourimetrically, based on APHA latest edition 4500-NH3 F. Soils are analysed following a KCl extraction.
Inorg-081	Anions - a range of Anions are determined by Ion Chromatography, in accordance with APHA latest edition, 4110-B. Alternatively determined by colourimetry/turbidity using Discrete Analyer.
Metals-020	Determination of various metals by ICP-AES.
Metals-021	Determination of Mercury by Cold Vapour AAS.
Metals-022	Determination of various metals by ICP-MS.
Org-003	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis.
Org-005	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC with dual ECD's.
Org-006	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD.
Org-012	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS.
Org-012	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS. Benzo(a)pyrene TEQ as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater - 2013.
Org-013	Water samples are analysed directly by purge and trap GC-MS.
Org-016	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater.

Method ID	Methodology Summary
Org-035	Soil samples are extracted with basified Methanol. Waters and soil extracts are directly injected and/or concentrated/extracted using SPE. Analysis is undertaken with LC-MS/MS. PFAS results include the sum of branched and linear isomers where applicable. Please note that PFAS results are corrected for Extracted Internal Standards (QSM 5.1 Table B-15 terminology), which are mass labelled analytes added prior to sample preparation to assess matrix effects and verify processing of the sample. PFAS analytes without a commercially available mass labelled analogue are corrected vs a closely eluting mass labelled PFAS compound. Surrogates are also reported, in this context they are mass labelled PFAS compounds added prior to extraction but are used as monitoring compounds only (not used for result correction). Envicarb (or similar) is used discretionally to remove interfering matrix components. Please contact the laboratory if estimates of Measurement Uncertainty are required as per WA DER.
Org-035E	Soil samples are extracted with basified Methanol. Waters and soil extracts are directly injected and/or concentrated/extracted using SPE. Analysis is undertaken with LC-MS/MS. PFAS results include the sum of branched and linear isomers where applicable. Please note that PFAS results are corrected for Extracted Internal Standards (QSM 5.1 Table B-15 terminology), which are mass labelled analytes added prior to sample preparation to assess matrix effects and verify processing of the sample. PFAS analytes without a commercially available mass labelled analogue are corrected vs a closely eluting mass labelled PFAS compound. Surrogates are also reported, in this context they are mass labelled PFAS compounds added prior to extraction but are used as monitoring compounds only (not used for result correction). Envicarb (or similar) is used discretionally to remove interfering matrix components. Please contact the laboratory if estimates of Measurement Uncertainty are required as per WA DER.
Org-035E_2	Soil samples are extracted with basified Methanol. Waters and soil extracts are directly injected and/or concentrated/extracted using SPE. Analysis is undertaken with LC-MS/MS. PFAS results include the sum of branched and linear isomers where applicable. Please note that PFAS results are corrected for Extracted Internal Standards (QSM 5.1 Table B-15 terminology), which are mass labelled analytes added prior to sample preparation to assess matrix effects and verify processing of the sample. PFAS analytes without a commercially available mass labelled analogue are corrected vs a closely eluting mass labelled PFAS compound. Surrogates are also reported, in this context they are mass labelled PFAS compounds added prior to extraction but are used as monitoring compounds only (not used for result correction). Envicarb (or similar) is used discretionally to remove interfering matrix components. Please contact the laboratory if estimates of Measurement Uncertainty are required as per WA DER.

QUALITY CONTROL: VOCs in water						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W2	[NT]
Date extracted	-			03/08/2018	[NT]	[NT]	[NT]	[NT]	03/08/2018	[NT]
Date analysed	-			06/08/2018	[NT]	[NT]	[NT]	[NT]	06/08/2018	[NT]
Dichlorodifluoromethane	µg/L	10	Org-013	<10	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Chloromethane	µg/L	10	Org-013	<10	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Vinyl Chloride	µg/L	10	Org-013	<10	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Bromomethane	µg/L	10	Org-013	<10	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Chloroethane	µg/L	10	Org-013	<10	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Trichlorofluoromethane	µg/L	10	Org-013	<10	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
1,1-Dichloroethene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Trans-1,2-dichloroethene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
1,1-dichloroethane	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	79	[NT]
Cis-1,2-dichloroethene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Bromochloromethane	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Chloroform	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	87	[NT]
2,2-dichloropropane	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
1,2-dichloroethane	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	90	[NT]
1,1,1-trichloroethane	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	92	[NT]
1,1-dichloropropene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Cyclohexane	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Carbon tetrachloride	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Benzene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Dibromomethane	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
1,2-dichloropropane	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Trichloroethene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	92	[NT]
Bromodichloromethane	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	88	[NT]
trans-1,3-dichloropropene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
cis-1,3-dichloropropene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
1,1,2-trichloroethane	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Toluene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
1,3-dichloropropane	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Dibromochloromethane	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	91	[NT]
1,2-dibromoethane	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Tetrachloroethene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	100	[NT]
1,1,1,2-tetrachloroethane	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Chlorobenzene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Ethylbenzene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Bromoform	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
m+p-xylene	µg/L	2	Org-013	<2	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Styrene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
1,1,2,2-tetrachloroethane	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
o-xylene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]

QUALITY CONTROL: VOCs in water					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W2	[NT]
1,2,3-trichloropropane	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Isopropylbenzene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Bromobenzene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
n-propyl benzene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
2-chlorotoluene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
4-chlorotoluene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
1,3,5-trimethyl benzene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Tert-butyl benzene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
1,2,4-trimethyl benzene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
1,3-dichlorobenzene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Sec-butyl benzene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
1,4-dichlorobenzene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
4-isopropyl toluene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
1,2-dichlorobenzene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
n-butyl benzene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
1,2-dibromo-3-chloropropane	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
1,2,4-trichlorobenzene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Hexachlorobutadiene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
1,2,3-trichlorobenzene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate Dibromofluoromethane	%		Org-013	118	[NT]	[NT]	[NT]	[NT]	101	[NT]
Surrogate toluene-d8	%		Org-013	89	[NT]	[NT]	[NT]	[NT]	97	[NT]
Surrogate 4-BFB	%		Org-013	99	[NT]	[NT]	[NT]	[NT]	107	[NT]

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Water					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W2	[NT]
Date extracted	-			03/08/2018	[NT]	[NT]	[NT]	[NT]	03/08/2018	[NT]
Date analysed	-			06/08/2018	[NT]	[NT]	[NT]	[NT]	06/08/2018	[NT]
TRH C_6 - C_9	µg/L	10	Org-016	<10	[NT]	[NT]	[NT]	[NT]	90	[NT]
TRH C_6 - C_{10}	µg/L	10	Org-016	<10	[NT]	[NT]	[NT]	[NT]	90	[NT]
Benzene	µg/L	1	Org-016	<1	[NT]	[NT]	[NT]	[NT]	100	[NT]
Toluene	µg/L	1	Org-016	<1	[NT]	[NT]	[NT]	[NT]	97	[NT]
Ethylbenzene	µg/L	1	Org-016	<1	[NT]	[NT]	[NT]	[NT]	92	[NT]
m+p-xylene	µg/L	2	Org-016	<2	[NT]	[NT]	[NT]	[NT]	94	[NT]
o-xylene	µg/L	1	Org-016	<1	[NT]	[NT]	[NT]	[NT]	96	[NT]
Naphthalene	µg/L	1	Org-013	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate Dibromofluoromethane	%		Org-016	118	[NT]	[NT]	[NT]	[NT]	102	[NT]
Surrogate toluene-d8	%		Org-016	89	[NT]	[NT]	[NT]	[NT]	97	[NT]
Surrogate 4-BFB	%		Org-016	99	[NT]	[NT]	[NT]	[NT]	107	[NT]

QUALITY CONTROL: svTRH (C10-C40) in Water						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W2	[NT]
Date extracted	-			09/08/2018	[NT]	[NT]	[NT]	[NT]	09/08/2018	[NT]
Date analysed	-			09/08/2018	[NT]	[NT]	[NT]	[NT]	09/08/2018	[NT]
TRH C_{10} - C_{14}	µg/L	50	Org-003	<50	[NT]	[NT]	[NT]	[NT]	130	[NT]
TRH C_{15} - C_{28}	µg/L	100	Org-003	<100	[NT]	[NT]	[NT]	[NT]	130	[NT]
TRH C_{29} - C_{36}	µg/L	100	Org-003	<100	[NT]	[NT]	[NT]	[NT]	100	[NT]
TRH >C_{10} - C_{16}	µg/L	50	Org-003	<50	[NT]	[NT]	[NT]	[NT]	130	[NT]
TRH >C_{16} - C_{34}	µg/L	100	Org-003	<100	[NT]	[NT]	[NT]	[NT]	130	[NT]
TRH >C_{34} - C_{40}	µg/L	100	Org-003	<100	[NT]	[NT]	[NT]	[NT]	100	[NT]
Surrogate o-Terphenyl	%		Org-003	116	[NT]	[NT]	[NT]	[NT]	126	[NT]

QUALITY CONTROL: PAHs in Water						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W2	[NT]
Date extracted	-			09/08/2018	[NT]	[NT]	[NT]	[NT]	09/08/2018	[NT]
Date analysed	-			10/08/2018	[NT]	[NT]	[NT]	[NT]	10/08/2018	[NT]
Naphthalene	µg/L	1	Org-012	<1	[NT]	[NT]	[NT]	[NT]	86	[NT]
Acenaphthylene	µg/L	1	Org-012	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Acenaphthene	µg/L	1	Org-012	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Fluorene	µg/L	1	Org-012	<1	[NT]	[NT]	[NT]	[NT]	92	[NT]
Phenanthrene	µg/L	1	Org-012	<1	[NT]	[NT]	[NT]	[NT]	86	[NT]
Anthracene	µg/L	1	Org-012	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Fluoranthene	µg/L	1	Org-012	<1	[NT]	[NT]	[NT]	[NT]	85	[NT]
Pyrene	µg/L	1	Org-012	<1	[NT]	[NT]	[NT]	[NT]	86	[NT]
Benzo(a)anthracene	µg/L	1	Org-012	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Chrysene	µg/L	1	Org-012	<1	[NT]	[NT]	[NT]	[NT]	85	[NT]
Benzo(b,j+k)fluoranthene	µg/L	2	Org-012	<2	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Benzo(a)pyrene	µg/L	1	Org-012	<1	[NT]	[NT]	[NT]	[NT]	89	[NT]
Indeno(1,2,3-c,d)pyrene	µg/L	1	Org-012	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Dibenzo(a,h)anthracene	µg/L	1	Org-012	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Benzo(g,h,i)perylene	µg/L	1	Org-012	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-012	102	[NT]	[NT]	[NT]	[NT]	88	[NT]

QUALITY CONTROL: OCP in water						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W1	[NT]
Date extracted	-			08/08/2018	[NT]	[NT]	[NT]	[NT]	08/08/2018	[NT]
Date analysed	-			08/08/2018	[NT]	[NT]	[NT]	[NT]	08/08/2018	[NT]
HCB	µg/L	0.2	Org-005	<0.2	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
alpha-BHC	µg/L	0.2	Org-005	<0.2	[NT]	[NT]	[NT]	[NT]	95	[NT]
gamma-BHC	µg/L	0.2	Org-005	<0.2	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
beta-BHC	µg/L	0.2	Org-005	<0.2	[NT]	[NT]	[NT]	[NT]	82	[NT]
Heptachlor	µg/L	0.2	Org-005	<0.2	[NT]	[NT]	[NT]	[NT]	85	[NT]
delta-BHC	µg/L	0.2	Org-005	<0.2	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aldrin	µg/L	0.2	Org-005	<0.2	[NT]	[NT]	[NT]	[NT]	83	[NT]
Heptachlor Epoxide	µg/L	0.2	Org-005	<0.2	[NT]	[NT]	[NT]	[NT]	86	[NT]
gamma-Chlordane	µg/L	0.2	Org-005	<0.2	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
alpha-Chlordane	µg/L	0.2	Org-005	<0.2	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Endosulfan I	µg/L	0.2	Org-005	<0.2	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
pp-DDE	µg/L	0.2	Org-005	<0.2	[NT]	[NT]	[NT]	[NT]	94	[NT]
Dieldrin	µg/L	0.2	Org-005	<0.2	[NT]	[NT]	[NT]	[NT]	100	[NT]
Endrin	µg/L	0.2	Org-005	<0.2	[NT]	[NT]	[NT]	[NT]	98	[NT]
pp-DDD	µg/L	0.2	Org-005	<0.2	[NT]	[NT]	[NT]	[NT]	88	[NT]
Endosulfan II	µg/L	0.2	Org-005	<0.2	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
pp-DDT	µg/L	0.2	Org-005	<0.2	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Endrin Aldehyde	µg/L	0.2	Org-005	<0.2	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Endosulfan Sulphate	µg/L	0.2	Org-005	<0.2	[NT]	[NT]	[NT]	[NT]	93	[NT]
Methoxychlor	µg/L	0.2	Org-005	<0.2	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate TCMX	%		Org-005	87	[NT]	[NT]	[NT]	[NT]	96	[NT]

QUALITY CONTROL: PCBs in Water						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W1	[NT]
Date extracted	-			08/08/2018	[NT]	[NT]	[NT]	[NT]	08/08/2018	[NT]
Date analysed	-			08/08/2018	[NT]	[NT]	[NT]	[NT]	08/08/2018	[NT]
Aroclor 1016	µg/L	2	Org-006	<2	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1221	µg/L	2	Org-006	<2	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1232	µg/L	2	Org-006	<2	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1242	µg/L	2	Org-006	<2	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1248	µg/L	2	Org-006	<2	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1254	µg/L	2	Org-006	<2	[NT]	[NT]	[NT]	[NT]	83	[NT]
Aroclor 1260	µg/L	2	Org-006	<2	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate TCLMX	%		Org-006	87	[NT]	[NT]	[NT]	[NT]	99	[NT]

QUALITY CONTROL: All metals in water-dissolved						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W1	197675-2
Date prepared	-			06/08/2018	1	06/08/2018	06/08/2018		06/08/2018	06/08/2018
Date analysed	-			06/08/2018	1	06/08/2018	06/08/2018		06/08/2018	06/08/2018
Aluminium-Dissolved	µg/L	10	Metals-022	<10	1	500	[NT]		117	[NT]
Silver-Dissolved	µg/L	1	Metals-022	<1	1	<1	[NT]		106	[NT]
Arsenic-Dissolved	µg/L	1	Metals-022	<1	1	<1	[NT]		105	[NT]
Boron-Dissolved	µg/L	20	Metals-022	<20	1	60	[NT]		109	[NT]
Barium-Dissolved	µg/L	1	Metals-022	<1	1	21	[NT]		109	[NT]
Beryllium-Dissolved	µg/L	0.5	Metals-022	<0.5	1	0.8	[NT]		114	[NT]
Cadmium-Dissolved	µg/L	0.1	Metals-022	<0.1	1	<0.1	[NT]		105	[NT]
Chromium-Dissolved	µg/L	1	Metals-022	<1	1	1	[NT]		120	[NT]
Cobalt-Dissolved	µg/L	1	Metals-022	<1	1	4	[NT]		118	[NT]
Copper-Dissolved	µg/L	1	Metals-022	<1	1	6	[NT]		104	[NT]
Iron-Dissolved	µg/L	10	Metals-022	<10	1	2400	[NT]		111	[NT]
Lead-Dissolved	µg/L	1	Metals-022	<1	1	2	[NT]		105	[NT]
Manganese-Dissolved	µg/L	5	Metals-022	<5	1	160	[NT]		105	[NT]
Mercury-Dissolved	µg/L	0.05	Metals-021	<0.05	1	<0.05	<0.05	0	98	103
Molybdenum-Dissolved	µg/L	1	Metals-022	<1	1	<1	[NT]		106	[NT]
Nickel-Dissolved	µg/L	1	Metals-022	<1	1	52	[NT]		105	[NT]
Selenium-Dissolved	µg/L	1	Metals-022	<1	1	<1	[NT]		103	[NT]
Antimony-Dissolved	µg/L	1	Metals-022	<1	1	<1	[NT]		112	[NT]
Tin-Dissolved	µg/L	1	Metals-022	<1	1	<1	[NT]		99	[NT]
Titanium-Dissolved	µg/L	1	Metals-022	<1	1	<1	[NT]		104	[NT]
Vanadium-Dissolved	µg/L	1	Metals-022	<1	1	<1	[NT]		114	[NT]
Zinc-Dissolved	µg/L	1	Metals-022	<1	1	220	[NT]		101	[NT]

QUALITY CONTROL: Total Phenolics in Water						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W1	197675-2
Date extracted	-			06/08/2018	1	06/08/2018	06/08/2018		06/08/2018	06/08/2018
Date analysed	-			06/08/2018	1	06/08/2018	06/08/2018		06/08/2018	06/08/2018
Total Phenolics (as Phenol)	mg/L	0.05	Inorg-031	<0.05	1	<0.05	<0.05	0	101	92

QUALITY CONTROL: Phthalates in water						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W1	[NT]
Date extracted	-			09/08/2018	[NT]	[NT]	[NT]	[NT]	09/08/2018	[NT]
Date analysed	-			09/08/2018	[NT]	[NT]	[NT]	[NT]	09/08/2018	[NT]
Bis(2-ethylhexyl) phthalate	µg/L	50	Org-012	<50	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Butylbenzylphthalate	µg/L	10	Org-012	<10	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Diethylphthalate	µg/L	10	Org-012	<10	[NT]	[NT]	[NT]	[NT]	94	[NT]
Dimethyl phthalate	µg/L	10	Org-012	<10	[NT]	[NT]	[NT]	[NT]	91	[NT]
Di-n-butylphthalate	µg/L	50	Org-012	<50	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Di-n-octylphthalate	µg/L	10	Org-012	<10	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate Nitrobenzene-d_5	%		Org-012	65	[NT]	[NT]	[NT]	[NT]	82	[NT]
Surrogate 2-fluorobiphenyl	%		Org-012	77	[NT]	[NT]	[NT]	[NT]	76	[NT]
Surrogate 2,4,6-Tribromophenol	%		Org-012	61	[NT]	[NT]	[NT]	[NT]	76	[NT]
Surrogate p-Terphenyl-d_{14}	%		Org-012	127	[NT]	[NT]	[NT]	[NT]	86	[NT]

QUALITY CONTROL: Miscellaneous Inorganics						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W1	197675-2
Date prepared	-			03/08/2018	1	03/08/2018	03/08/2018		03/08/2018	03/08/2018
Date analysed	-			03/08/2018	1	03/08/2018	03/08/2018		03/08/2018	03/08/2018
Total Dissolved Solids (grav)	mg/L	5	Inorg-018	<5	1	440	[NT]		91	[NT]
pH	pH Units		Inorg-001	[NT]	1	4.4	[NT]		101	[NT]
Ammonia as N in water	mg/L	0.005	Inorg-057	<0.005	1	<0.005	[NT]		94	[NT]
Fluoride, F	mg/L	0.1	Inorg-026	<0.1	1	<0.1	[NT]		98	85
Hexavalent Chromium, Cr^{6+}	mg/L	0.005	Inorg-024	<0.005	1	<0.005	[NT]		90	[NT]
Total Cyanide	mg/L	0.004	Inorg-014	<0.004	1	<0.004	<0.004	0	112	95

QUALITY CONTROL: Ion Balance						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W2	[NT]
Date prepared	-			03/08/2018	[NT]	[NT]	[NT]	[NT]	03/08/2018	[NT]
Date analysed	-			03/08/2018	[NT]	[NT]	[NT]	[NT]	03/08/2018	[NT]
Calcium - Dissolved	mg/L	0.5	Metals-020	<0.5	[NT]	[NT]	[NT]	[NT]	97	[NT]
Potassium - Dissolved	mg/L	0.5	Metals-020	<0.5	[NT]	[NT]	[NT]	[NT]	116	[NT]
Sodium - Dissolved	mg/L	0.5	Metals-020	<0.5	[NT]	[NT]	[NT]	[NT]	120	[NT]
Magnesium - Dissolved	mg/L	0.5	Metals-020	<0.5	[NT]	[NT]	[NT]	[NT]	96	[NT]
Hydroxide Alkalinity (OH^-) as $CaCO_3$	mg/L	5	Inorg-006	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Bicarbonate Alkalinity as $CaCO_3$	mg/L	5	Inorg-006	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Carbonate Alkalinity as $CaCO_3$	mg/L	5	Inorg-006	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Total Alkalinity as $CaCO_3$	mg/L	5	Inorg-006	<5	[NT]	[NT]	[NT]	[NT]	102	[NT]
Sulphate, SO4	mg/L	1	Inorg-081	<1	[NT]	[NT]	[NT]	[NT]	95	[NT]
Chloride, Cl	mg/L	1	Inorg-081	<1	[NT]	[NT]	[NT]	[NT]	95	[NT]

QUALITY CONTROL: PFAS in Waters Short						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W1	197675-2
Date prepared	-			06/08/2018	1	06/08/2018	06/08/2018		06/08/2018	06/08/2018
Date analysed	-			06/08/2018	1	06/08/2018	06/08/2018		06/08/2018	06/08/2018
Perfluorohexanesulfonic acid - PFHxS	µg/L	0.01	Org-035E	<0.01	1	0.02	0.02	0	103	92
Perfluorooctanesulfonic acid PFOS	µg/L	0.01	Org-035E	<0.01	1	<0.01	<0.01	0	98	102
Perfluorooctanoic acid PFOA	µg/L	0.01	Org-035E	<0.01	1	<0.01	<0.01	0	89	81
6:2 FTS	µg/L	0.01	Org-035E	<0.01	1	<0.01	<0.01	0	91	86
8:2 FTS	µg/L	0.01	Org-035E	<0.01	1	<0.01	<0.01	0	107	102
Surrogate $^{13}C_8$ PFOS	%		Org-035E	104	1	91	91	0	99	87
Surrogate $^{13}C_2$ PFOA	%		Org-035E_2	97	1	96	106	10	101	99
Extracted ISTD $^{18}O_2$ PFHxS	%		Org-035	90	1	86	80	7	96	84
Extracted ISTD $^{13}C_4$ PFOS	%		Org-035	100	1	82	93	13	104	80
Extracted ISTD $^{13}C_4$ PFOA	%		Org-035	115	1	110	103	7	113	104
Extracted ISTD $^{13}C_2$ 6:2FTS	%		Org-035	104	1	87	85	2	106	91
Extracted ISTD $^{13}C_2$ 8:2FTS	%		Org-035	97	1	68	68	0	87	72

Result Definitions

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

Quality Control Definitions

Blank	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
Duplicate	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
Matrix Spike	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample)	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
Surrogate Spike	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Australian Drinking Water Guidelines recommend that Thermotolerant Coliform, Faecal Enterococci, & E.Coli levels are less than 1cfu/100mL. The recommended maximums are taken from "Australian Drinking Water Guidelines", published by NHMRC & ARMC 2011.

Laboratory Acceptance Criteria

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

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

Spikes for Physical and Aggregate Tests are not applicable.

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

Duplicates: <5xPQL - any RPD is acceptable; >5xPQL - 0-50% RPD is acceptable.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals; 60-140% for organics (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

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

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

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

Measurement Uncertainty estimates are available for most tests upon request.

Report Comments

TRH Water(C10-C40) NEPM - (3-5 SURROGATE)# Percent recovery is not possible to report as the high concentration of analytes in the sample/s
have caused interference.

Sample data for Metals has been confirmed for samples 1 and 4.

P.O. Box 1237
Carlton VIC 3053
enquiries@lrmglobal.com.au

CHAIN OF CUSTODY

Job Number: 27380

ATTENTION

Sheet 1 of

CLIENT

CLIENT NUMBER

LOCATION 266 Longueville Road Lane Cove

Additional information::

Total number of containers 74

Email Results To	Tick
jon.lawson@lrmglobal.com.au	Yep
kevin.b@lrmglobal.com.au	
ajacob@lrmglobal.com.au	
acampbell@lrmglobal.com.au	
l.main@lrmglobal.com.au	

Sampled by: JL

Checked by: JL

Comments

Chain of custody must be signed and dated by LRM, courier, and laboratory.

RELINQUISHED BY (Signature)	ORGANISATION	DATE / TIME	RECEIVED BY (Signature)	ORGANISATION	DATE / TIME
	LRM	10/07/2017			

Sample Number	Sample Date	Sample Type	Analysis Required	No. of Containers	Turn-around Time Required
BH16 - 0.1	6/07/2017	Soil	Metals, PAH, TRH	1	5 day
BH16 - 0.8	6/07/2017	Soil	Metals, PAH, TRH	1	5 day
BH17 - 0.1	6/07/2017	Soil	Metals, PAH, TRH	1	5 day
BH17 - 0.7	6/07/2017	Soil	Metals, PAH, TRH	1	5 day
BH18 - 0.1	6/07/2017	Soil	Metals, OCP/OPP, pH	1	5 day
BH18 - 0.6	6/07/2017	Soil	Metals, PAH	1	5 day
BH19 - 0.1	6/07/2017	Soil	Metals, OCP/OPP, pH	1	5 day
BH19 - 0.5	6/07/2017	Soil	NEPM Suite Basic	1	5 day
BH20 - 0.1	6/07/2017	Soil	Metals, OCP/OPP, pH	1	5 day
BH20 - 1.0	6/07/2017	Soil	Metals, PAH	1	5 day
BH20 - 1.9	6/07/2017	Soil	Metals, PAH, PCB	1	5 day
BH21 - 0.1	6/07/2017	Soil	Metals, OCP/OPP	1	5 day
BH21 - 1.2	6/07/2017	Soil	Metals, PAH	1	5 day
BH21 - 3.0	6/07/2017	Soil	Metals, TRH, PCB	1	5 day
BH21 - 4.0	6/07/2017	Soil	Metals, PAH	1	5 day
BH22 - 0.1	6/07/2017	Soil	Metals, OCP, OPP, pH	1	5 day
BH22 - 1.0	6/07/2017	Soil	Metals, TRH	1	5 day
BH23 - 0.1	6/07/2017	Soil	Metals, OCP, OPP	1	5 day
BH23 - 1.0	6/07/2017	Soil	Metals, PAH	1	5 day

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CHAIN OF CUSTODY

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acampbell@lrmglobal.com.au	
l.main@lrmglobal.com.au	

Sampled by: JL

Checked by: JL

Comments

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RELINQUISHED BY (Signature)	ORGANISATION	DATE / TIME	RECEIVED BY (Signature)	ORGANISATION	DATE / TIME
	LRM	10/07/2017			

Sample Number	Sample Date	Sample Type	Analysis Required	No. of Containers	Turn-around Time Required
BH24 - 0.1	6/07/2017	Soil	Metals, OCP, OPP, pH, TRH	1	5 day
BH24 - 1.5	6/07/2017	Soil	Metals, PAH	1	5 day
BH24 - 2.8	6/07/2017	Soil	Metals, TRH, PCB	1	5 day
BH25 - 0.2	6/07/2017	Soil	Metals. OCP, OPP	1	5 day
BH26 - 0.2	6/07/2017	Soil	Metals, OCP, OPP	1	5 day
BH27 - 0.1	6/07/2017	Soil	Metals, OCP, OPP, pH	1	5 day
BH27 - 1.0	6/07/2017	Soil	Metals, PAH	1	5 day
BH28 - 0.1	6/07/2017	Soil	Metals, OCP, OPP	1	5 day
BH28 - 2.0	6/07/2017	Soil	Metals	1	5 day
BH28 - 3.0	6/07/2017	Soil	Metals, PAH	1	5 day
BH28 - 4.0	6/07/2017	Soil	Metals, PCB, TRH	1	5 day
BH29 - 0.1	6/07/2017	Soil	Metals, OCP, OPP, pH	1	5 day
BH29 - 1.0	6/07/2017	Soil	Metals, PAH	1	5 day
BH29 - 2.0	6/07/2017	Soil	Metals	1	5 day
BH29 - 3.0	6/07/2017	Soil	Metals, PAH	1	5 day
BH29 - 4.0	6/07/2017	Soil	Metals, PCB	1	5 day
BH29 - 5.0	6/07/2017	Soil	Metals	1	5 day
BH29 - 6.0	6/07/2017	Soil	Metals, PAH		
BH29 - 7.0	6/07/2017	Soil	Metals	1	5 day

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Sheet 1 of

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LOCATION 266 Longueville Road Lane Cove

Additional information::

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ajacob@lrmglobal.com.au	
acampbell@lrmglobal.com.au	
l.main@lrmglobal.com.au	

Sampled by: JL

Checked by: JL

Comments

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RELINQUISHED BY (Signature)	ORGANISATION	DATE / TIME	RECEIVED BY (Signature)	ORGANISATION	DATE / TIME
	LRM	10/07/2017			

Sample Number	Sample Date	Sample Type	Analysis Required	No. of Containers	Turn-around Time Required
BH29 - 8.0	6/07/2017	Soil	Metals, TRH		
BH30 - 0.1	6/07/2017	Soil	Metals, OCP, OPP	1	5 day
BH30 - 1.0	6/07/2017	Soil	NEPM Suite Basic	1	5 day
BH30 - 2.0	6/07/2017	Soil	Metals	1	5 day
BH30 - 3.0	6/07/2017	Soil	Metals, TRH	1	5 day
BH30 - 4.0	6/07/2017	Soil	Metals, PAH	1	5 day
BH30 - 5.0	6/07/2017	Soil	Metals	1	5 day
BH30 - 6.0	6/07/2017	Soil	Metals, PCB	1	5 day
BH30 - 7.0	6/07/2017	Soil	Metals, TRH	1	5 day
BH31 - 0.1	6/07/2017	Soil	Metals, OCP, OPP	1	5 day
BH31 - 1.0	6/07/2017	Soil	Metals, PAH	1	5 day
BH32 - 0.1	6/07/2017	Soil	Metals, OCP, OPP, pH	1	5 day
BH32 - 1.0	6/07/2017	Soil	Metals, PAH	1	5 day
BH32 - 2.2	6/07/2017	Soil	Metals, PAH	1	5 day
BH32 - 3.0	6/07/2017	Soil	Metals	1	5 day
BH32 - 4.0	6/07/2017	Soil	Metals, TRH	1	5 day
BH33 - 0.2	6/07/2017	Soil	Metals, OCP. OPP	1	5 day
BH33 - 1.0	6/07/2017	Soil	Metals, PAH	1	5 day
BH34 - 0.1	6/07/2017	Soil	NEPM Suite Basic	1	5 day

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CHAIN OF CUSTODY

Job Number: 27380

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Sheet 1 of

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LOCATION 266 Longueville Road Lane Cove

Additional information::

Total number of containers 74

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ajacob@lrmglobal.com.au	
acampbell@lrmglobal.com.au	
l.main@lrmglobal.com.au	

Sampled by: JL

Checked by: JL

Comments

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RELINQUISHED BY (Signature)	ORGANISATION	DATE / TIME	RECEIVED BY (Signature)	ORGANISATION	DATE / TIME
	LRM	10/07/2017			

Sample Number	Sample Date	Sample Type	Analysis Required	No. of Containers	Turn-around Time Required
BH35 - 0.1	6/07/2017	Soil	Metals,	1	5 day
BH36 - 0.1	6/07/2017	Soil	Metals	1	5 day
BH37 - 0.1	6/07/2017	Soil	Metals, PAH	1	5 day
BH38 - 0.1	6/07/2017	Soil	Metals, PAH	1	5 day
BH39 - 0.1	6/07/2017	Soil	Metals, TRH	1	5 day
BH40 - 0.1	6/07/2017	Soil	Metals	1	5 day
BH41 - 0.1	6/07/2017	Soil	Metals	1	5 day
BH42 - 0.1	6/07/2017	Soil	Metals, OCP, OPP	1	5 day
Dup 1	6/07/2017	Soil	NEPM Suite Basic	1	5 day
Dup 2	6/07/2017	Soil	Metals	1	5 day
Dup 3	6/07/2017	Soil	Metals	1	5 day
Dup 4	6/07/2017	Soil	Metals	1	5 day
Split 1	6/07/2017	Soil	NEPM Suite Basic	1	5 day
Split 2	6/07/2017	Soil	Metals	1	5 day
Split 3	6/07/2017	Soil	Metals	1	5 day
Split 4	6/07/2017	Soil	Metals	1	5 day
Trip	6/07/2017	Water	C6-9	2	5 day
Rinsate	6/07/2017	Water	Metals	1	5 day

COC received at 18:50.

Environmental Division
Sydney
Work Order Reference
ES1814906

Telephone : +61-2-8784 8555

P.O. Box 1237
Carlton VIC 3053
enquiries@lrmglobal.com.au

CHAIN OF CUSTODY

Job Number: 27380

Sheet 1 of 1

ATTENTION

CLIENT

CLIENT NUMBER

LOCATION 266 Longueville Road Lane Cove

Envirolab Services
12 Ashley St
Chatswood NSW 2067
Ph: (02) 9910 6200

Total number of containers: 20

Job No: 191604

Sampled by: JL

Checked by: JL

Date Received: 14/5/18
Time Received: 14:00
Received By: [illegible]
Temp: Cool/Ambient
Cooling: Ice/Icepack
Security: Intact/Broken/None

Additional information::

Email Results To	Tick
jon.lawson@lrmglobal.com.au	Yep
kevin.b@lrmglobal.com.au	
ajacob@lrmglobal.com.au	
acampbell@lrmglobal.com.au	
l.main@lrmglobal.com.au	

Chain of custody must be signed and dated by LRM, courier, and laboratory.

Comments

RELINQUISHED BY (Signature)	ORGANISATION	DATE / TIME	RECEIVED BY (Signature)	ORGANISATION	DATE / TIME
	LRM	14/05/2018			

	Sample Number	Sample Date	Sample Type	Analysis Required	No. of Containers	Turn-around Time Required
1	GW01	14/05/2018	Water	NEPM HIL Screen, TDS, Cations / Anions, pH	5	Standard
2	GW02	14/05/2018	Water	NEPM HIL Screen, TDS, Cations / Anions, pH	5	Standard
3	Dup 1	14/05/2018	Water	NEPM HIL Screen, TDS, Cations / Anions, pH	5	Standard
4	Split 1	14/05/2018	Water	NEPM HIL Screen, ~~TDS, Cations / Anions, pH~~	5	Standard

5. TB (Ex(ca) kevin)

See attached for testing

Relin: ELS JACK EMBLEN
22/5/18 13:20

Rec: [illegible]
22/5/18 1737 8-K

ES1814906

Nancy Zhang

From: Jon Lawson <jon.lawson@lrmglobal.com.au>
Sent: Tuesday, 22 May 2018 9:17 AM
To: Nancy Zhang
Subject: SPlit
Attachments: 191604-[R00].pdf

Hi, also was there enough remaining sample from the Split to be able to send to say ALS for a metals screen?
Cheers.

Jon Lawson
Principal Consultant
LRM Global Pty Ltd
T: (03) 9371 3400
M: 04111 477 22

www.lrmglobal.com.au

LRM Global Pty Ltd
65 Stubbs Street
Kensington VIC 3031
PO Box 1237
Carlton VIC 3053

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Fe
Pb
Mn
Hg
Mo
Ni
Se
Sb
Sn
Tl

Relin: ELS JACK EMBLEN
22/5/18 13:20

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **ES1814906**	Page	: 1 of 3
Client	: **LRM GLOBAL**	Laboratory	: Environmental Division Sydney
Contact	: MR JON LAWSON	Contact	: Larissa Burns
Address	: P.BOX.1237 CARLTON VIC 3053	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61-2-8784 8555
Project	: ----	Date Samples Received	: 22-May-2018 17:37
Order number	:	Date Analysis Commenced	: 24-May-2018
C-O-C number	: ----	Issue Date	: 28-May-2018 15:54
Sampler	: ----		
Site	: ----		
Quote number	: MEBQ/251/17 Primaary Work Only		
No. of samples received	: 1		
No. of samples analysed	: 1		

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. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Ivan Taylor	Analyst	Sydney Inorganics, Smithfield, NSW

General Comments

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by 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 Contact 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.

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Client sample ID	Split 1	----	----	----	----
			Client sampling date / time	14-May-2018 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit	ES1814906-001	--------	--------	--------	--------
				Result	----	----	----	----
EG020T: Total Metals by ICP-MS								
Aluminium	7429-90-5	0.01	mg/L	**1.09**	----	----	----	----
Antimony	7440-36-0	0.001	mg/L	<0.001	----	----	----	----
Arsenic	7440-38-2	0.001	mg/L	<0.001	----	----	----	----
Beryllium	7440-41-7	0.001	mg/L	<0.001	----	----	----	----
Barium	7440-39-3	0.001	mg/L	**0.041**	----	----	----	----
Cadmium	7440-43-9	0.0001	mg/L	<0.0001	----	----	----	----
Chromium	7440-47-3	0.001	mg/L	**0.002**	----	----	----	----
Cobalt	7440-48-4	0.001	mg/L	**0.011**	----	----	----	----
Copper	7440-50-8	0.001	mg/L	**0.035**	----	----	----	----
Lead	7439-92-1	0.001	mg/L	**0.002**	----	----	----	----
Manganese	7439-96-5	0.001	mg/L	**0.210**	----	----	----	----
Molybdenum	7439-98-7	0.001	mg/L	<0.001	----	----	----	----
Nickel	7440-02-0	0.001	mg/L	**0.014**	----	----	----	----
Selenium	7782-49-2	0.01	mg/L	<0.01	----	----	----	----
Silver	7440-22-4	0.001	mg/L	<0.001	----	----	----	----
Thallium	7440-28-0	0.001	mg/L	<0.001	----	----	----	----
Tin	7440-31-5	0.001	mg/L	<0.001	----	----	----	----
Boron	7440-42-8	0.05	mg/L	**0.08**	----	----	----	----
Iron	7439-89-6	0.05	mg/L	**2.61**	----	----	----	----
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.0001	mg/L	<0.0001	----	----	----	----

ALS Environmental

QUALITY CONTROL REPORT

Work Order	: **ES1814906**	Page	: 1 of 5
Client	: **LRM GLOBAL**	Laboratory	: Environmental Division Sydney
Contact	: MR JON LAWSON	Contact	: Larissa Burns
Address	: P.BOX.1237 CARLTON VIC 3053	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61-2-8784 8555
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Sampler	: ----		
Site	: ----		
Quote number	: MEBQ/251/17 Primaary Work Only		
No. of samples received	: 1		
No. of samples analysed	: 1		

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. 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*
Ivan Taylor	Analyst	Sydney Inorganics, Smithfield, NSW

General Comments

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by 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

Key : Anonymous = Refers to samples which are not specifically part of this work order but formed part of the QC process lot
CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
RPD = Relative Percentage Difference
# = Indicates failed QC

Laboratory Duplicate (DUP) Report

The quality control term Laboratory Duplicate refers to a randomly selected intralaboratory split. Laboratory duplicates provide information regarding method precision and sample heterogeneity. The permitted ranges for the Relative Percent Deviation (RPD) of Laboratory Duplicates are specified in ALS Method QWI-EN/38 and are dependent on the magnitude of results in comparison to the level of reporting: Result < 10 times LOR: No Limit; Result between 10 and 20 times LOR: 0% - 50%; Result > 20 times LOR: 0% - 20%.

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EG020T: Total Metals by ICP-MS (QC Lot: 1672027)									
ES1814273-001	Anonymous	EG020B-T: Silver	7440-22-4	0.001	mg/L	<0.001	<0.001	0.00	No Limit
ES1814906-001	Split 1	EG020B-T: Silver	7440-22-4	0.001	mg/L	<0.001	<0.001	0.00	No Limit
EG020T: Total Metals by ICP-MS (QC Lot: 1672029)									
ES1814906-001	Split 1	EG020A-T: Copper	7440-50-8	0.001	mg/L	0.035	0.035	0.00	0% - 20%
EW1802118-004	Anonymous	EG020A-T: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	0.00	No Limit
		EG020A-T: Antimony	7440-36-0	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-T: Arsenic	7440-38-2	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-T: Beryllium	7440-41-7	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-T: Barium	7440-39-3	0.001	mg/L	0.036	0.035	2.85	0% - 20%
		EG020A-T: Chromium	7440-47-3	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-T: Cobalt	7440-48-4	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-T: Copper	7440-50-8	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-T: Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-T: Manganese	7439-96-5	0.001	mg/L	0.115	0.113	2.11	0% - 20%
		EG020A-T: Molybdenum	7439-98-7	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-T: Nickel	7440-02-0	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-T: Thallium	7440-28-0	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-T: Tin	7440-31-5	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-T: Aluminium	7429-90-5	0.01	mg/L	0.04	0.03	0.00	No Limit
		EG020A-T: Selenium	7782-49-2	0.01	mg/L	<0.01	<0.01	0.00	No Limit
		EG020A-T: Boron	7440-42-8	0.05	mg/L	<0.05	<0.05	0.00	No Limit
		EG020A-T: Iron	7439-89-6	0.05	mg/L	0.77	0.76	2.27	0% - 50%
ES1814906-001	Split 1	EG020A-T: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	0.00	No Limit
		EG020A-T: Antimony	7440-36-0	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-T: Arsenic	7440-38-2	0.001	mg/L	<0.001	<0.001	0.00	No Limit

Sub-Matrix: **WATER**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EG020T: Total Metals by ICP-MS (QC Lot: 1672029) - continued									
ES1814906-001	Split 1	EG020A-T: Beryllium	7440-41-7	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-T: Barium	7440-39-3	0.001	mg/L	0.041	0.042	0.00	0% - 20%
		EG020A-T: Chromium	7440-47-3	0.001	mg/L	0.002	0.002	0.00	No Limit
		EG020A-T: Cobalt	7440-48-4	0.001	mg/L	0.011	0.011	0.00	0% - 50%
		EG020A-T: Lead	7439-92-1	0.001	mg/L	0.002	0.004	47.0	No Limit
		EG020A-T: Manganese	7439-96-5	0.001	mg/L	0.210	0.211	0.00	0% - 20%
		EG020A-T: Molybdenum	7439-98-7	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-T: Nickel	7440-02-0	0.001	mg/L	0.014	0.015	0.00	0% - 50%
		EG020A-T: Thallium	7440-28-0	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-T: Tin	7440-31-5	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-T: Aluminium	7429-90-5	0.01	mg/L	1.09	1.18	7.70	0% - 20%
		EG020A-T: Selenium	7782-49-2	0.01	mg/L	<0.01	<0.01	0.00	No Limit
		EG020A-T: Boron	7440-42-8	0.05	mg/L	0.08	0.08	0.00	No Limit
		EG020A-T: Iron	7439-89-6	0.05	mg/L	2.61	2.66	1.82	0% - 20%
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 1672988)									
EP1806290-014	Anonymous	EG035T: Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	0.00	No Limit
ES1814871-002	Anonymous	EG035T: Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	0.00	No Limit

Method Blank (MB) and Laboratory Control Spike (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 Spike (LCS) refers to a certified reference material, or a known interference free matrix spiked with target analytes. The purpose of this QC parameter is to monitor method precision and accuracy independent of sample matrix. Dynamic Recovery Limits are based on statistical evaluation of processed LCS.

Sub-Matrix: **WATER**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	Low	High
EG020T: Total Metals by ICP-MS (QCLot: 1672027)								
EG020B-T: Silver	7440-22-4	0.001	mg/L	<0.001	----	----	----	----
EG020T: Total Metals by ICP-MS (QCLot: 1672029)								
EG020A-T: Aluminium	7429-90-5	0.01	mg/L	<0.01	0.5 mg/L	94.3	82	120
EG020A-T: Antimony	7440-36-0	0.001	mg/L	<0.001	----	----	----	----
EG020A-T: Arsenic	7440-38-2	0.001	mg/L	<0.001	0.1 mg/L	90.1	82	114
EG020A-T: Beryllium	7440-41-7	0.001	mg/L	<0.001	0.1 mg/L	94.7	79	119
EG020A-T: Barium	7440-39-3	0.001	mg/L	<0.001	0.1 mg/L	90.4	84	116
EG020A-T: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	0.1 mg/L	90.8	84	112
EG020A-T: Chromium	7440-47-3	0.001	mg/L	<0.001	0.1 mg/L	94.2	86	116
EG020A-T: Cobalt	7440-48-4	0.001	mg/L	<0.001	0.1 mg/L	90.5	84	116
EG020A-T: Copper	7440-50-8	0.001	mg/L	<0.001	0.1 mg/L	90.7	83	118
EG020A-T: Lead	7439-92-1	0.001	mg/L	<0.001	0.1 mg/L	91.4	85	115
EG020A-T: Manganese	7439-96-5	0.001	mg/L	<0.001	0.1 mg/L	95.4	85	113
EG020A-T: Molybdenum	7439-98-7	0.001	mg/L	<0.001	0.1 mg/L	95.5	83	121
EG020A-T: Nickel	7440-02-0	0.001	mg/L	<0.001	0.1 mg/L	90.2	84	116
EG020A-T: Selenium	7782-49-2	0.01	mg/L	<0.01	0.1 mg/L	91.4	68	126
EG020A-T: Thallium	7440-28-0	0.001	mg/L	<0.001	0.1 mg/L	91.6	87	117
EG020A-T: Tin	7440-31-5	0.001	mg/L	<0.001	0.1 mg/L	94.0	83	123
EG020A-T: Boron	7440-42-8	0.05	mg/L	<0.05	0.5 mg/L	103	75	129
EG020A-T: Iron	7439-89-6	0.05	mg/L	<0.05	0.5 mg/L	93.3	85	117
EG035T: Total Recoverable Mercury by FIMS (QCLot: 1672988)								
EG035T: Mercury	7439-97-6	0.0001	mg/L	<0.0001	0.01 mg/L	91.4	77	111

Matrix Spike (MS) Report

The quality control term Matrix Spike (MS) refers to an intralaboratory split sample spiked with a representative set of target analytes. The purpose of this QC parameter is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

Sub-Matrix: **WATER**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EG020T: Total Metals by ICP-MS (QCLot: 1672029)							
ES1814912-001	Anonymous	EG020A-T: Arsenic	7440-38-2	1 mg/L	94.9	70	130
		EG020A-T: Beryllium	7440-41-7	1 mg/L	96.6	70	130
		EG020A-T: Barium	7440-39-3	1 mg/L	93.9	70	130

Sub-Matrix: **WATER**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EG020T: Total Metals by ICP-MS (QCLot: 1672029) - continued							
ES1814912-001	Anonymous	EG020A-T: Cadmium	7440-43-9	0.25 mg/L	94.7	70	130
		EG020A-T: Chromium	7440-47-3	1 mg/L	94.1	70	130
		EG020A-T: Cobalt	7440-48-4	1 mg/L	94.6	70	130
		EG020A-T: Copper	7440-50-8	1 mg/L	94.4	70	130
		EG020A-T: Lead	7439-92-1	1 mg/L	95.4	70	130
		EG020A-T: Manganese	7439-96-5	1 mg/L	92.1	70	130
		EG020A-T: Nickel	7440-02-0	1 mg/L	95.8	70	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 1672988)							
ES1814675-001	Anonymous	EG035T: Mercury	7439-97-6	0.01 mg/L	96.0	70	130

ALS Environmental

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **ES1814906**	Page	: 1 of 4
Client	: **LRM GLOBAL**	Laboratory	: Environmental Division Sydney
Contact	: MR JON LAWSON	Telephone	: +61-2-8784 8555
Project	: ----	Date Samples Received	: 22-May-2018
Site	: ----	Issue Date	: 28-May-2018
Sampler	: ----	No. of samples received	: 1
Order number	:	No. of samples analysed	: 1

This report is automatically generated by the ALS LIMS through interpretation of the ALS Quality Control Report and several Quality Assurance parameters measured by ALS. This automated reporting highlights any non-conformances, facilitates faster and more accurate data validation and is designed to assist internal expert and external Auditor review. Many components of this report contribute to the overall DQO assessment and reporting for guideline compliance.

Brief method summaries and references are also provided to assist in traceability.

Summary of Outliers

Outliers : Quality Control Samples

This report highlights outliers flagged in the Quality Control (QC) Report.

- **NO Method Blank value outliers occur.**
- **NO Duplicate outliers occur.**
- **NO Laboratory Control outliers occur.**
- **NO Matrix Spike outliers occur.**
- **For all regular sample matrices, NO surrogate recovery outliers occur.**

Outliers : Analysis Holding Time Compliance

- **NO Analysis Holding Time Outliers exist.**

Outliers : Frequency of Quality Control Samples

- **Quality Control Sample Frequency Outliers exist - please see following pages for full details.**

Outliers : Frequency of Quality Control Samples

Matrix: **WATER**

Quality Control Sample Type	Count		Rate (%)		Quality Control Specification
Method	QC	Regular	Actual	Expected	
Laboratory Control Samples (LCS)					
Total Metals by ICP-MS - Suite B	0	8	0.00	5.00	NEPM 2013 B3 & ALS QC Standard

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: **WATER**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / *Container / Client Sample ID(s)*	*Sample Date*	*Extraction / Preparation*			*Analysis*		
		Date extracted	*Due for extraction*	*Evaluation*	*Date analysed*	*Due for analysis*	*Evaluation*
EG020T: Total Metals by ICP-MS							
Clear Plastic Bottle - Nitric Acid; Unspecified (EG020B-T)							
Split 1	**14-May-2018**	**24-May-2018**	10-Nov-2018	✓	**24-May-2018**	10-Nov-2018	✓
EG035T: Total Recoverable Mercury by FIMS							
Clear Plastic Bottle - Nitric Acid; Unspecified (EG035T)							
Split 1	**14-May-2018**	**----**	----	----	**24-May-2018**	11-Jun-2018	✓

Quality Control Parameter Frequency Compliance

The following report summarises the frequency of laboratory QC samples analysed within the analytical lot(s) in which the submitted sample(s) was(were) processed. Actual rate should be greater than or equal to the expected rate. A listing of breaches is provided in the Summary of Outliers.

Matrix: **WATER**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Duplicates (DUP)							
Total Mercury by FIMS	EG035T	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-MS - Suite A	EG020A-T	3	14	**21.43**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-MS - Suite B	EG020B-T	2	8	**25.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Total Mercury by FIMS	EG035T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-MS - Suite A	EG020A-T	1	14	**7.14**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-MS - Suite B	EG020B-T	0	8	**0.00**	**5.00**	×	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Total Mercury by FIMS	EG035T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-MS - Suite A	EG020A-T	1	14	**7.14**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-MS - Suite B	EG020B-T	1	8	**12.50**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Total Mercury by FIMS	EG035T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-MS - Suite A	EG020A-T	1	14	**7.14**	**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
Total Metals by ICP-MS - Suite A	EG020A-T	WATER	In house: Referenced to APHA 3125; USEPA SW846 - 6020, ALS QWI-EN/EG020. The ICPMS technique utilizes a highly efficient argon plasma to ionize selected elements. Ions are then passed into a high vacuum mass spectrometer, which separates the analytes based on their distinct mass to charge ratios prior to their measurement by a discrete dynode ion detector.
Total Metals by ICP-MS - Suite B	EG020B-T	WATER	In house: Referenced to APHA 3125; USEPA SW846 - 6020, ALS QWI-EN/EG020. The ICPMS technique utilizes a highly efficient argon plasma to ionize selected elements. Ions are then passed into a high vacuum mass spectrometer, which separates the analytes based on their distinct mass to charge ratios prior to their measurement by a discrete dynode ion detector.
Total Mercury by FIMS	EG035T	WATER	In house: Referenced to AS 3550, APHA 3112 Hg - B (Flow-injection (SnCl2)(Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. A bromate/bromide reagent is used to oxidise any organic mercury compounds in the unfiltered sample. The ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM (2013) Schedule B(3)

Preparation Methods	Method	Matrix	Method Descriptions
Digestion for Total Recoverable Metals	EN25	WATER	In house: Referenced to USEPA SW846-3005. Method 3005 is a Nitric/Hydrochloric acid digestion procedure used to prepare surface and ground water samples for analysis by ICPAES or ICPMS. This method is compliant with NEPM (2013) Schedule B(3)

APPENDIX F

HISTORICAL REPORT EXTRACTS AND SAQPs

SMEC Testing Services Pty Ltd
ACN 101 164 792 ABN 22 101 164 792
CONSULTING GEOTECHNICAL & ENVIRONMENTAL ENGINEERS
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WETHERILL PARK
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Wetherill Park
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January 31, 2012
Project No. 18435/1177C
Report No. 12/0113
DWY

Mr Simon Fenton
Lane Cove Council
48 Longueville Road
LANE COVE NSW 2066

SUBJECT: SOIL SAMPLING AND CLASSIFICATION PROGRAM, LAND AT 266 LONGUEVILLE ROAD, LANE COVE, NEW SOUTH WALES

Dear Simon,

Introduction and Background

In December 2011 SMEC Australia Pty Ltd (SMEC) completed a combined environmental and geotechnical investigation of the property at 266 Longueville Road, Lane Cove, NSW (the 'site'). The purpose of the investigation was to provide advice on the sub-surface conditions of the land that may be relevant to future redevelopment and also to assess the potential for human-health and environmental exposures at the property due to chemical contaminants in the soil. The scope of the environmental component of the investigation included a site inspection and a review of the land use history, as well as a preliminary soil sampling program.

The results of the investigation showed that the concentrations of chemical contaminants measured in the soil samples retrieved from the site are generally low and below criteria that are protective of human-health for recreational and also standard and high-density residential land use settings. However, the fill in the east of the site below 1.5 m depth was found to be impacted with lead and polycyclic aromatic hydrocarbons (PAHs) at concentrations which exceed the relevant health-based criteria. That is, the site could present a potential risk to human-health for these land use settings where exposure pathways exist.

As the contaminated soil is located at a depth which would render it generally inaccessible to site users, the site would not present an unacceptable risk to human-health provided that the existing land surface levels are retained and that an Environmental Management Plan (EMP) is also prepared to ensure that the lead and PAH remains appropriately contained in the long term. Alternatively, the risks posed by the lead and PAH contamination would need to be negated by undertaking active remedial works to remove the chemically impacted fill from the site. We understand that this approach is favoured by Council, as the site may need to be completely stripped of fill during future redevelopment.

Given that the fill on the site is impacted with elevated levels of chemical contaminants and was also observed to contain appreciable quantities of anthropogenic wastes, the fill could not be beneficially reused as clean fill. That is, if fill was required to be removed from the site it would need to be classified as a waste in accordance with the Office of Environment and Heritage (OEH) *Waste Classification Guidelines, Part 1, Classifying Waste, April 2008* (Waste Guidelines) and disposed of to landfill. This report documents the results of the waste classification of the fill based on the results of the December 2011 investigation and the additional analysis of soil samples which was performed in January 2012 specifically for the purposes of the waste classification.

Scope of Works

The scope of work was as follows:

- Appraisal of the results of the December 2011 investigation with regard to criteria outlined in the Waste Guidelines;
- Additional leachability testing on selected samples retrieved during the 2011 investigation;
- Appraisal of site geology;
- Assessment of the quality of the soils on the site, and classification of the soil in accordance with OEH guidelines; and
- Preparation of a report to Lane Cove Council detailing the findings of the soil sampling and classification program.

Sampling Procedures

The soil samples were collected from a total of 15 boreholes drilled at evenly spaced locations across the site in November 2011. The soil sampling locations are shown on Figure 3 from SMEC's December 2001 report, which is attached to this report, and the soil profile logs providing a description of the fill encountered and soil samples collected is provided in Appendix A. The methodology by which the samples were collected is described in SMEC's December 2011 report.

The soil samples collected were initially analysed for a broad screen of potential chemical contaminants including heavy metals, polycyclic aromatic hydrocarbons (PAH), total petroleum hydrocarbons (TPH), monocyclic aromatic hydrocarbons (BTEX), polychlorinated biphenyls (PCB), organochlorine pesticides (OCP), organophosphorus pesticides (OPP), phenolic compounds, fluoride, cyanide and asbestos. However, in order to appropriately classify the soil selected samples were subsequently tested for leachable lead, nickel and PAHs in January 2012.

The analytical program for the soil samples is outlined in the COC documentation, which is provided in Appendix B. Labmark was selected as the primary laboratory to undertake the analyses, and ALS Sydney was selected as the secondary laboratory for the implementation of the field quality control program. Both Labmark and ALS are NATA accredited for the analyses performed.

Site Geology

The Geological Survey of NSW 1:100,000 Sydney Geological Map (Sheet 9130) shows that the site is underlain by the Middle Triassic Age 'Hawkesbury Sandstone' which comprises medium to coarse grained quartz sandstone with minor shale and laminate lenses.

The natural soils encountered during the investigation comprised silty sand topsoil overlying silty and sandy clay subsoil, which are consistent with in-situ weathered soils derived from the Hawkesbury Sandstone formation. Sandstone bedrock was also encountered in each of the 15 boreholes at depths of between 0.2 m and 8.6 m below the ground surface, and depth to bedrock was greatest in the eastern portion of the site.

A layer of fill material between 0.2 m and 8.6 m in thickness was also observed at each sample location. The fill is heterogeneous, comprising sands, gravels and clays, and fragments of anthropogenic wastes including bricks, ash, ceramics and glass were observed in the fill at a number of borehole locations.

Our review of the Acid Sulfate Soil (ASS) risk maps provided on the OEH NSW Natural Resource Atlas (NR Atlas) also shows that the site is located on land that is not expected to be affected by ASSs. This is supported by the geology and geomorphology of the site.

Assessment Criteria

In order to classify the soil, the relevant sampling results have been compared to the threshold values for the classification of non-liquid wastes presented in OEH's Waste Guidelines. The results for the soil samples have been compared with the contaminated threshold (CT) values only, with the exception of lead, nickel and PAH species benzo(a)pyrene in selected samples which are compared with the combined total concentration (SCC) and leachable concentration (TCLP) criteria.

Results

The results of the soil sample analyses are compared to the above criteria in Table A, and the analytical laboratory reports for the testing performed are provided in Appendix C.

The results show that the concentrations of chemical contaminants in the fill are below the CT1 values for General Solid Waste, with the exception of lead, nickel and benzo(a)pyrene. However, leachability testing subsequently performed on the samples has shown that the concentrations of these contaminants are below the maximum threshold values for General Solid Waste (SCC1 and TCLP values) when used together, although the concentration of both total and leachable lead in one sample retrieved from a depth of approximately 4.5 m in borehole BH13 positioned in the east of the site exceeded its criteria for General Solid Waste.

Further, whilst the concentration of leachable lead in this sample is below the maximum allowable TCLP criterion for Restricted Solid Waste, the total lead concentration is above the SCC1 threshold for Restricted Solid Waste. Therefore, the soils across the majority of the site are classified as General Solid Waste for the purposes of landfill disposal, whilst the discrete 'hotspot' of soil in the vicinity of location BH13 is classed as Hazardous Waste based on the Waste Guidelines criteria.

However, given that the elevated levels of lead in the soil at BH13 are expected to be due to metallurgical furnace residues (ash and slag), the soil would satisfy the conditions of General Immobilisation Approval 2009/07 under the provisions of the *Protection of the Environment Operations (Waste) Regulation 1996*. Under this approval soil which is impacted with chemical contaminants (including lead) that are the result of metallurgical residues can be classified based on their leachable concentrations alone. Therefore, the soil in the vicinity of BH13 could be classified as Restricted Solid Waste by invoking the abovementioned General Immobilisation Approval.

Quality Assurance/Quality Control Program

As part of the 2011 investigation, a quality assurance program was implemented in order to confirm the accuracy and precision of the analytical data, and included the collection and analysis of one intra-laboratory and one inter-laboratory field duplicate sample. The results of the duplicate sample analyses are provided in Table B.

The results of the field intra and inter-laboratory duplicate sample analyses are compared to those of the corresponding primary samples in Table B. The results show that the variations between the primary and duplicate sample results are below the allowable Relative Percentage Difference (RPD) criteria of 50% for inorganic species and 70% for organic analytes in all but four of the 67 comparable data sets, which is an acceptable rate of correlation.

The discrepancies encountered are expected to be due to the heterogeneous distribution of the contaminants within fill material. Further, the contaminant concentrations in both the primary and duplicate samples have been used in the data set from which our conclusions have been made. Therefore, the RPD discrepancies do not affect the outcome of the assessment.

Further, our review of the laboratory's internal QC program has shown that the majority of internal duplicate samples, spike recoveries, surrogate standards and laboratory blanks were within the laboratories' recommended range for acceptable reproducibility. Therefore, STS considers the laboratory data obtained in the sampling program to be of acceptable precision, accuracy and reliability and representative of the site conditions encountered.

Conclusions and Recommendations

Based on the results of the soil sampling and analyses performed, the soil on the site at 266 Longueville Road, Lane Cove, is classified as General Solid Waste with the exception of a small 'hotspot' area of soil in the east of the site which would be classed a Restricted Solid Waste under the provisions of General Immobilisation Approval 2009/07.

Preliminary 'worst case' estimates suggest that up to approximately 6 000 m^3 of fill in the east of the site may be classed as Restricted Solid Waste, however, further soil sampling to delineate the extent of the 'hotspot' area could be undertaken to provide a more accurate estimate of Restricted Solid Waste volumes. Should bulk removal of the fill from the site be proposed, we would recommend that the 'hotspot' of lead impacted soil be excavated and disposed of initially. Following validation sampling to confirm that all soil classed as Restricted Solid Waste has been removed, the larger soil mass could then be disposed of to landfill as General Solid Waste. This would be the most cost effective approach to removing the fill from the site.

Limitations

SMEC Testing Services Pty Limited has performed its services for this project in accordance with its current professional standards. Laboratory analyses were undertaken as part of this investigation by ALS which is NATA accredited for the analyses performed.

When assessing the extent of contamination from a soil sampling program there is the possibility that variations may occur between sample locations. The actual presence of contaminated material at the site may differ from this inferred herein, since no sampling program, no matter how comprehensive, can reveal all anomalies and hot spots that may be present.

Regulatory evaluation criteria are constantly changing and as a consequence, the concentrations of contaminants in the soil subject to this sampling program may fall under different regulatory standards that could alter the soil classification.

Opinions and judgements expressed herein, which are based on our understanding and interpretation of current regulatory standards, should not be construed as legal opinions.

This document and the information herein have been prepared solely for the use of Lane Cove Council for the purposes nominated in this report. No person or organisation other than Lane Cove Council is entitled to rely on any part of the report without the prior written consent of STS. Any third party relying on this report shall have no legal recourse against STS or its parent organisations or subsidiaries and shall indemnify and defend them from all an against all claims arising out of, or in conjunctions with such use or reliance.

David Yonge (BSc, MSc)
Environmental Manager,
SMEC Testing Services Pty Limited

Mr Karlis Kambala
Development Manager
Australian Unity Limited
114 Albert Rd, South Melbourne,
VIC 3205
Reference: P16503_L01_R2

29/05/2017

Proposal for Land Restoration Services at 266 Longueville Rd, Lane Cove, NSW

Dear Karlis,

Introduction

Arcadis Australia Pacific Pty Ltd (Arcadis) is pleased to provide this proposal to undertake environmental site assessment, waste management and land restoration services as part of the development of 266 Longueville Rd, Lane Cove, NSW (the Site) on behalf of Australian Unity Limited. Arcadis is a global specialist in site assessment, decommissioning and land restoration.

Arcadis (previously Environmental Strategies Pty Ltd) has previously undertaken a review of available site data and provided continued land restoration advice to Australian Unity with respect to developing the Site since project inception in 2016.

As part of a program of works for the Site, Arcadis has attended numerous (6 plus) project planning meetings, prepared remedial planning and estimation scenarios and ecologically sustainable development (ES) advice. This led to Australian Unity being awarded tender by Lane Cove Council to develop the Site as a retirement village (i.e. medium density residential with car parking. The advice provided is also relevant to the current Development Application (DA) process.

Previous Arcadis correspondence relevant to this proposal and project that has been prepared for Australian Unity is listed below and is presented again in **Attachment B**:

- *Indicative Remedial Cost Scenarios, 266 Longueville Rd, Lane Cove dated 18 August 2016*
- *CLM Advice - Ecologically Sustainable Development (ESD) Tender Schedule Input - Australian Unity, 266 Longueville Rd, Lane Cove NSW dated 30 August 2016*
- *Proposal for Land Restoration Services at 266 Longueville Rd, Lane Cove, NSW P16503_L01_R1 dated 19 December 2016*. **(Superseded by this proposal.)**

Our advice has been primarily based on our understanding of Site details documented in the following reports:

- *SMEC Holdings Geotechnical and Environmental Investigation Report' dated 22 December 2011 (Ref: 30011131) and;*

- *SMEC Testing Services 'Soil Sampling and Classification Program' dated 31 January 2012 (Ref 18435/1177C/Report No. 12/0113)*
- *Calibre Consulting Draft Preliminary Bulk Excavation Plan dated 12 August 2016*
- *Calibre Consulting Preliminary Earthworks Volume Estimates in email dated 12 August 2016*
- *Thomson Adsett Preliminary Architectural Drawings Rev B dated 10 August 2016*
- *Lane Cove Council Development Application Consent Conditions*
- *Minutes of previous project meetings*

This proposal outlines a staged process to meet Lane Cove Council's DA conditions of consent as provided to Arcadis by Australian Unity.

Council's requirements specifically include provision of:

- *A detailed environmental site assessment report (Phase 2 ESA); and a*
- *Remedial Action Plan (RAP)*
- *Review of all site works by an accredited NSW EPA Site Auditor. A Site Audit Statement and Site Audit Report will be required to determine the suitability of the site for its intended use in accordance with the NSW DEC (2006) Auditor Guidelines*.

These documents are to be prepared by a suitably qualified person in accordance with NSW EPA endorsed contaminated land guidelines.

In accordance with Australian Unity's current development proposal, the Site assessment must allow for insitu classification of waste materials to allow for expedited offsite disposal and/or beneficial reuse of materials in accordance with the NSW EPA waste management and minimisation hierarchy. In addition, an ecologically sustainable site remediation and validation program is required in accordance with the original ESD tender submission, this should include early determination of appropriately licensed fill sites that have authority and sufficient capacity to receive any Excavated Natural Material (ENM) and Virgin Excavated Natural Material (VENM) generated from the Site.

1.1 Background

An historical third party environmental report (2012) for the Site has indicated the presence of polyaromatic hydrocarbons (benzo-a-pyrene) and heavy metal (lead and nickel) contamination on the Site associated with historic filling that has a reported preliminary waste classifications of General Solid Waste (estimate 11,350m^3) and Restricted Waste (estimate 6000m^3) which could potentially result in very high material disposal costs if not further assessed and managed.

Arcadis (incorporating Environmental Strategies) has presented a technical approach in consultation with Australian Unity to achieve project objectives. The technical approach supporting this proposal has been summarised in detail in Environmental Strategies letter dated 18 August 2016 (Reference 16171_L01) in accordance with the tender proposal.

This proposal outlines the environmental services required to achieve the key goals of assessing and managing soil waste generation during construction and ultimately making the Site suitable for its intended use in accordance with Land Cove Council development application conditions. The services Arcadis consider will be required on this project are listed below:

Prior to Development Application (DA) submission:

- Environmental site investigation of fill materials on the Site to determine material handling, management and disposal requirements prior to excavation;
- Preparation of a Remedial Action Plan (RAP) to clearly document the Site remediation, waste management and validation strategy for the site.

Further to DA consent from Lane Cove Council:

- Review of suitable material receiving locations prior to the transport and disposal of excavated materials by Australian Unity;
- Supervision by a suitably qualified Arcadis environmental scientist during site excavation to oversee and control the excavation and separation of waste and natural material streams marked for offsite disposal; and
- Site validation reporting (required in accordance with the RAP.)

A Site Audit Statement (SAS) will required by Council from a NSW EPA Accredited Site Auditor. A separate proposal should therefore be sought from a preferred Auditor by Australian Unity. Please refer to our advice in the Audit advice section below.

Background

A summary of the property is provided as follows

Table 1: Background

Site Address	Area and notes
266 Longueville Rd, Lane Cove, NSW	An approximate 9000m^2 site with two disused bowling greens and one site building. There is currently historic fill material present on the Site representing an insitu volume of approximately 17,350m^2 which requires waste classification prior to offsite disposal or potential onsite containment in accordance with the NSW EPA Waste Guidelines. Previous preliminary sample data (SMEC Testing, 2012) indicated the presence of lead, nickel and PAH species B(a)P in site fill. A preliminary waste assessment of the Site fill material was undertaken indicating the presence of General Solid Waste with up to 6000m^3 of Restricted Solid Waste in the east of the site. Without conducting an additional waste assessment at the site, offsite waste disposal costs using the current (2012) preliminary waste classification data have been estimated to be in excess of $7.2M based on current landfill levies. The two former bowling greens have been historically infilled with material comprising sands, gravels and clays, and fragments of anthropogenic wastes including bricks, ash, ceramics and glass at increasing depth from west to east across the site. Arcadis as summarised the site geology from 15 boreholes that were advanced to the top of the bedrock on the site by SMEC (2011 and 2012) as follows: Topsoil – Silty sand at depth 0 to 0.2mBGL (brown)

Site Address	Area and notes
	Fill –Comprising sands, gravels and clays, and fragments of anthropogenic wastes encountered at depth 0.2 m and 8.6 m below ground surface (brown, pale brown to grey) Natural/Residual Soils - Comprising silty and sandy clay subsoil approximately 0.4 to 1.4m thick above the bedrock encountered at depths 0.6 to 3.4mBGL (grey or orange brown) Bedrock - 'Hawkesbury Sandstone' which comprised medium to coarse grained quartz sandstone with minor shale and laminate lenses encountered between 0.2 m and 8.6 mBGL. Depth to bedrock was greatest in the eastern portion of the site.

Objectives

Arcadis has identified the following objectives that will be relevant to achieving successful outcomes on this project:

- Undertaking a site contamination investigation to assess the condition of soil on the Site including the nature and anticipated volume of wastes and materials to be generated prior to their proposed excavation and expedited disposal
- Development of a suitable remediation strategy, environmental management and planning in accordance with Council requirements and the ESD principles submitted as part of the tender.
- Supervision of remediation activities by a suitably qualified person on the Site
- Disposal of all wastes to suitably licensed facilities in a cost-effective manner
- Reporting of site remediation and validation activities to document the site's suitability for its intended use.
- Liaison with a NSW EPA Accredited Site Auditor in a manner that e

Scope of Works

Arcadis propose to undertake the following scope of work to achieve the project objectives.

Prior to Development Application (DA) submission:

1. **Field Work**

   To estimate waste volumes on the Site and expedite offsite disposa during planned excavation, a targeted environmental site investigation (ESI) will be undertaken, it will include:

   - Site inspection, marking of sample locations, field preparation and works scheduling
   - Underground services clearance at each sample location (proposed borehole plan to be provided) prior to drilling
   - On site drilling of 15 soil bores (2 days total on site) to natural ground using a ute mounted rig to delineate impacts to the Site fill in the vicinity of hotspot locations (BH11, BH12, BH13 and BH15) situated on the historic bowling

greens, also adjacent to the existing site building and on the access road in sandy clay with ash fill;

- Collection of approximately 45 primary soil samples, and 7 Quality Control samples i.e. inter and intra laboratory samples (at a rate of 1 in 20 samples) and rinsate samples (2);
- Submission of soil samples to a NATA accredited laboratory for analysis (total 52 samples) - heavy metals (M8), EC, pH, PAH, BTEX, TPH C_{10}-C_{36} and 15 samples for leachability testing (TCLP.)

2. Insitu Waste Assessment and Reporting

- Undertake a waste assessment of insitu fill sample results in accordance with the *NSW EPA 2014 Waste Guidelines* and *NSW EPA Resource Recovery Order under Part 9, Clause 93 of the POEO (Waste) Regulation 2014 The Excavated Natural Material Order 2014* to identify the extent of Virgin Excavated Natural Material (VENM), Excavated Natural Material (ENM), Exempted Materials under General Immobilisation Approvals 1999/05 and 2009/07, General Solid Waste (GSW), Restricted Waste (RW) and/or Hazardous Waste (HW) in fill on the Site prior to excavation.
- Preparation of an ESI report that summarises the results of the insitu waste assessment in general accordance with *NSW EPA 2011 Guidelines for Consultants Reporting on Contaminated Sites*. The report will include waste or material classification certificates for each waste stream identified and an insitu volume estimation prior to excavation for expedited disposal.

3. Remediation Planning

- Preparation of a Remedial Action Plan (RAP) in accordance with the *NSW EPA 2011 Guidelines for Consultants Reporting on Contaminated Sites*. The RAP will outline the remedial strategy, excavation staging, waste handling and management process and proposed validation program for the Site and inform the Construction Environmental Management Plan (CEMP) where required.

Further to DA consent from Lane Cove Council:

4. Review of Suitable Soil Waste Disposal Sites

- The ESI report will also include the results of a review that will identify available waste disposal locations in Sydney (i.e. licensed material receiving sites) to ensure that soil materials are transported and disposed offsite cost effectively. Data to be reviewed will include current locations, current owners, primary access routes, status of approvals, hours of operation, current quantities required by the sites, competing spoil transporters and approximate timing of material transport on the Lane Cove Project. This task allows for a maximum of 25 hours of review time for the Arcadis Project Manager.

5. Remediation Supervision

- Supervision of remedial excavations for a maximum of 3 working days on site for one suitably qualified Arcadis field scientist to remove soil contamination previously identified at BH11, BH12, BH13 and BH15 in the east of the Site (an approximate best case 350m^2 area).

6. Site Validation

- Preparation of a validation report that summarises remediation activities, the process of waste removal to assess site suitability in accordance with *NSW EPA 2011 Guidelines for Consultants Reporting on Contaminated Sites*.

Allowance has also been made for one day on site to visually inspect the bedrock interface after bulk excavation and limited soil sampling and analysis (a total of 5 primary samples) of remaining fill using a hand auger above the bedrock in the eastern portion of the site.

Optional works (outside scope)

Optional works relevant to the project which have been excluded from our current scope are outlined below. Arcadis would prepare a proposal and seek authorisation from Australian Unity before proceeding with any additional or optional works.

1. **Management of the remediation works contract**
   - The project requires demolition of above ground structures (building, slabs, old services) and removal of identified soil waste from the site. Arcadis has strong capability in remediation of similar sites and would be happy to prepare a separate proposal for this component upon request.
2. **Disposal of Waste at rates**
   - Environmental Strategies has previously provided Australian Unity with a best-case disposal cost estimate (excluding transport) based on insitu volume estimates of 1500m^3 and 400m^3 of GSW and RSW respectively (Environmental Strategies, 18 August 2016 Ref 16171_L01). Arcadis would need to confirm the volume of waste materials before confirming the costs for disposal, however we can offer very competitive rates.
3. **Track and report the transport and disposal of excavated material**
   - Arcadis would be happy to oversee the process of waste material volume tracking during remediation and collect waste disposal dockets from the waste contractor or licensed receiving sites upon request and in accordance with the proposed bulk excavation plan presented by Calibre (August 2016) and the Arcadis ESI report.
4. **Additional assessment** of waste materials where they are stockpiled on site prior to offsite disposal;
5. **Assessment of imported soil materials or additional advice** for proposed reuse or management of fill onsite.

Audit advice

Arcadis has previously worked with numerous NSW EPA Accredited Auditors. We also have two in house Senior Auditors for future audit work required by Australian Unity.

Based on our understanding, Australian Unity require an independent Auditor on this project and we know of the following external Auditors with current availability:

Mrs Julie Evans
Ramboll Environ Pty Ltd
Level 3, 100 Pacific Hwy
North Sydney NSW 2060
Phone (02) 9954 8100
Email jevans@ramboll.com

The costs for a statutory audit (includes Site Audit Statement and Site Audit Report) typically range from approximately $15,000 for a simple audit to approximately $25,000.

Budget Estimate

Arcadis proposes to complete the scope of works for the cost estimate outlined below.

Table 2: Budget Estimate Breakdown

Item	Item Description	Cost (ex GST)
Required for DA Submission (August 2017)		
1	ESI Field Work (2 days on site) – assumes completion of field work in June as per scope to meet Council condition	$25, 100
2	Preparation of Insitu Waste Assessment and ESI Report - as per scope to meet Council condition	$9, 900
3	Preparation of Remediation Action Plan (RAP) – to meet Council condition	$9, 900
Sub Total		**$44,900**
Further to DA consent – during construction		
4	Review of Suitable Waste Disposal Sites (Arcadis is aware of multiple Sydney receiving sites that are potentially available – we recommend checking availability, licenses and scheduling prior to construction.)	$4, 750
5	On site Remediation Supervision (assumes a total of three (3) days on site for one suitably qualified environmental scientist to supervise excavation and stockpiling of impacted material, visual inspection of exposed bedrock. No allowance for additional sampling.)	$7, 800
6	Site Validation reporting (as per RAP) to meet Council condition	$9, 900
7	Project Management Meetings (assumes attendance at (3) two hour meetings for Ben Munro ($270/hr), travel and preparation.)	$3, 500
Sub Total		**$25, 950**
Total **(ex GST)**		**$70, 850**

Project Timing

We can commence work in the week commencing 5 June, 2017 assuming receipt of a signed 'Authorisation to Proceed' form prior to this date. An Authorisation to Proceed form accompanies this proposal (Attachment B).

The ESI and RAP reports can be prepared within approximately three to four (3-4) weeks of receipt of the laboratory reports. Assuming authorisation to proceed is received from Australian Unity as a matter of priority, Arcadis will resource the project to meet a proposed report submission deadline of end July.

Australian Unity will have an opportunity to review and provide one round of comments on the report. Once comments are received the report can be finalised within three days.

Assumptions and Allowances

The above cost estimate in Table 2 is based on the following assumptions and allowances:

- All costs presented in this proposal are exclusive of GST.
- Any additional works outside the scope of work presented in Section 1 would be charged based on our standard schedule of rates with your prior authorisation.
- Arcadis has applied a mark-up of 15% on all sub-contractor costs and consumables.
- Arcadis has assumed that access to the Site will be unimpeded and that all areas targeted for investigation will be accessible at the time of drilling.
- Arcadis has assumed use of a versatile track mounted rig with push tube and split spoon facility for advancement of 50mm soil boreholes. Based on site information, Arcadis has not allowed for groundwater or surface water investigation.
- Arcadis has not allowed for additional validation sampling given that the current design plan assumes bulk excavation of all fill material to bedrock. Site Validation – includes visual inspection of bedrock with an additional allowance for XRF hire (a hand held metal analyser) to be charged on a weekly basis to minimise the total cost of sampling and analysis required to validate remedial excavations. ES propose to obtain Auditor approval to apply this method when preparing the RAP.
- All laboratory analysis will have a standard turnaround of 7 working days. Faster turnaround times will incur additional surcharges (1 day – 50%, 2 day – 25%, 3 day – 12.5%).
- Arcadis has assumed that an electronic copy of the report will be provided to the client and allowed for one round of revisions only.
- Arcadis has allowed for only one revision of key deliverable reports following review by a third party Auditor. Any additional reviews will be considered a variation to the scope.
- Although it is unlikely, if a change in the number of boreholes and/or depth is required, drilling technique or additional time or additional mobilisation is required to complete the works, then Arcadis will consider this a variation to the budget estimate and charge the client a variation to complete the works;
- Costs have been prepared based on the remedial strategy and data review presented in Sections 2.2 and 3 and as per the statistical outputs shown in Attachment 1 of Environmental Strategies letter dated 18 August 2016 16171-L01-Rev2.

- All works are proposed to be undertaken under our standard terms of trade (Attachment A).

Invoicing and Limitations

Invoices will be issued at the end of each month. Our payment terms are strictly 30 days. This proposal is valid for 60 days from date of submission to the Client.

The findings of the report will be based on the Scope of Work outlined above. Arcadis will perform services in a manner consistent with the normal level of care and expertise exercised by members of the environmental assessment profession. No warranties express or implied, are made.

Subject to the Scope of Work, Arcadis' assessment will be limited strictly to identifying typical environmental conditions associated with the subject property area and does not include evaluation of any other issues.

The absence of any identified hazardous or toxic materials on the subject property should not be interpreted as a guarantee that such materials do not exist on the site. Arcadis will not investigate any waste materials from the property that may have been disposed of off the site, nor related waste management practices.

The results of this assessment will be based upon the Site inspection and the sampling specified above conducted by Arcadis personnel and information from the Client, regulatory agencies and Council. All conclusions and recommendations regarding the property area will be the professional opinions of the Arcadis personnel involved with the project, subject to the qualifications made above.

While normal assessments of data reliability will be made, Arcadis will not assume responsibility or liability for errors in any data obtained from regulatory agencies, statements from sources outside of Arcadis, or developments resulting from situations outside the scope of this project.

Insurance

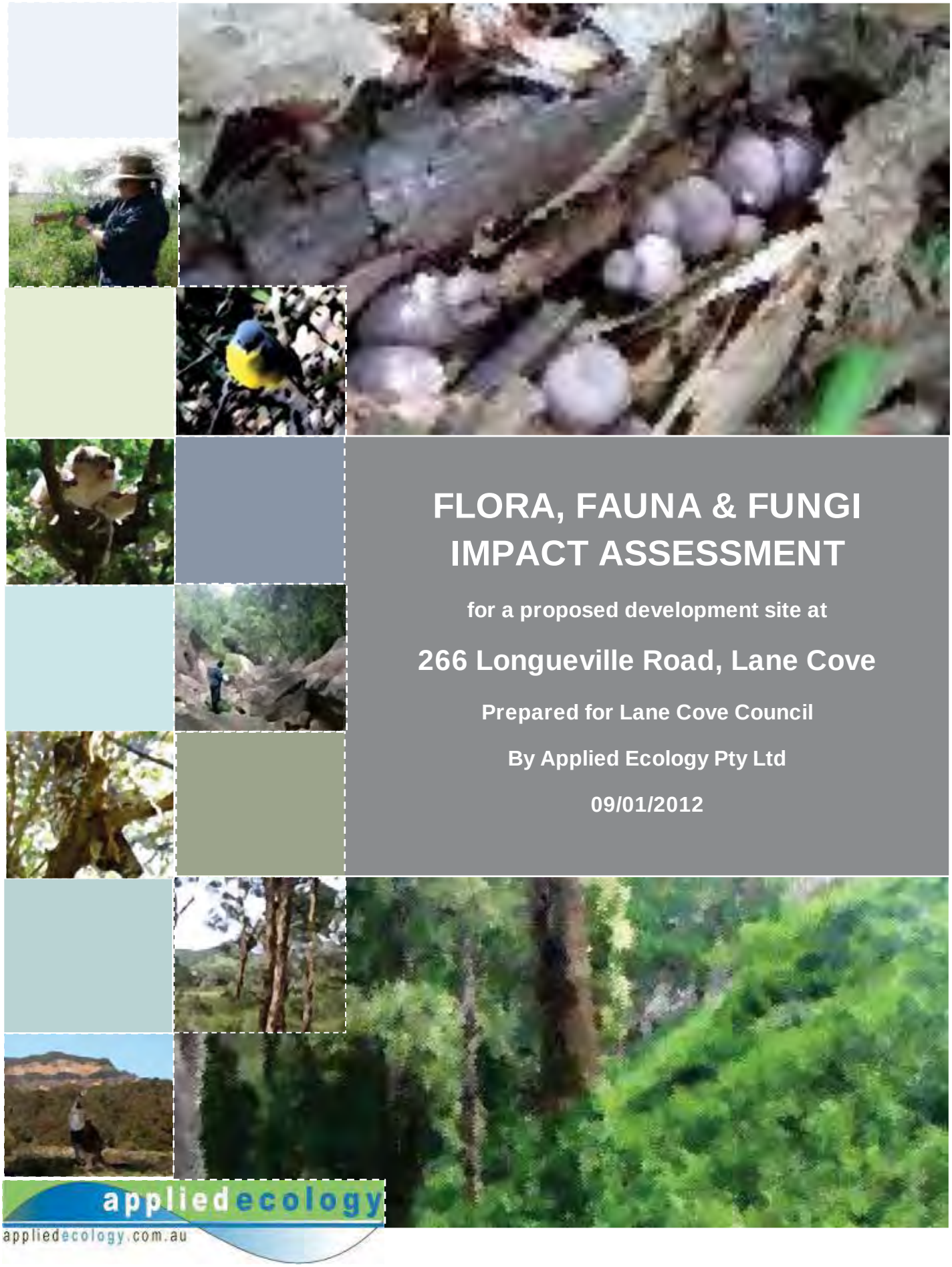
Arcadis maintains up to $10 million of Professional Indemnity and $20 million of Public Liability and maintains all requisite insurances.

Conclusion

Arcadis has the capacity and capability to commence the job in early June 2017 subject to authorisation. I trust that this proposal meets your immediate requirements and we look forward to working with you on this project. Should you have any questions regarding this proposal, please contact me on 0419 283 941.

Yours sincerely

Ben Munro
Principal Environmental Consultant, Arcadis
M 0419 283 941



FLORA, FAUNA & FUNGI IMPACT ASSESSMENT

for a proposed development site at

266 Longueville Road, Lane Cove

Prepared for Lane Cove Council

By Applied Ecology Pty Ltd

09/01/2012

appliedecology

appliedecology.com.au

Applied Ecology Pty Limited reserves all legal rights and remedies in relation to any infringement of its rights in respect of its confidential information.

DOCUMENT VERIFICATION

Project Title	FLORA, FAUNA & FUNGI IMPACT ASSESSMENT for a proposed development site at 266 Longueville Road, Lane Cove
Document Title	As above
Client	Lane Cove Council
Client contact	Simon Fenton

Revision	Prepared by	Reviewed by	Date
Draft (D)	MB	AC	January 2011

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ACKNOWLEDGMENTS

APPLIED ECOLOGY Pty Limited wishes to thank all representing organisations and individuals who assisted with fieldwork and contributed to the production or commented on the content of this report, including:

Ray Kearney	Sydney Fungal Studies Group
Elma Kearney	Sydney Fungal Studies Groupc
Simon Fenton	Lane Cove Council
Kerry Heatley	Lane Cove Council

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PROJECT BACKGROUND & SITE CONTEXT

The site of the former Ladies Bowling Greens at 266 Longueville Road, Lane Cove are being considered for redevelopment by Lane Cove City Council. The proposed development site covers an area of approximately 1.5 hectares and is bounded by Longueville Road, to the north by adjacent private properties fronting Richardson Street West, to the east by McMahons Road easement which is part of the Lane Cove Country Club, and to the south by a strata property as well as bushland owned by Lane Cove Council.

The old bowling greens are located on the east of the site with easy access from Longueville Road. The site is forested on the lower slopes to the east, leading down to golf greens and fairways associated with the Lane Cove Country Club that are part. To the immediate east and southeast of the development site is land owned by Council and is part of the Lane Cove Country Club. These sites also contain remnant Coastal Enriched Sandstone Moist Forest vegetation.

Figure 1. The development site location overview (red outline).

Figure 2. The development site

An apartment development is being considered for the western part of 266 Longueville Road (Figure 2). No apartment development will extend down the wooded slopes and the golf course on the eastern part of the site. As part of any development, Council is investigating a new walking track through existing bushland (Figure 2) to link this site with the Lane Cove Country Club. Prior to development of the proposl, Council needs to understand the ecological attributes of the immediate area.

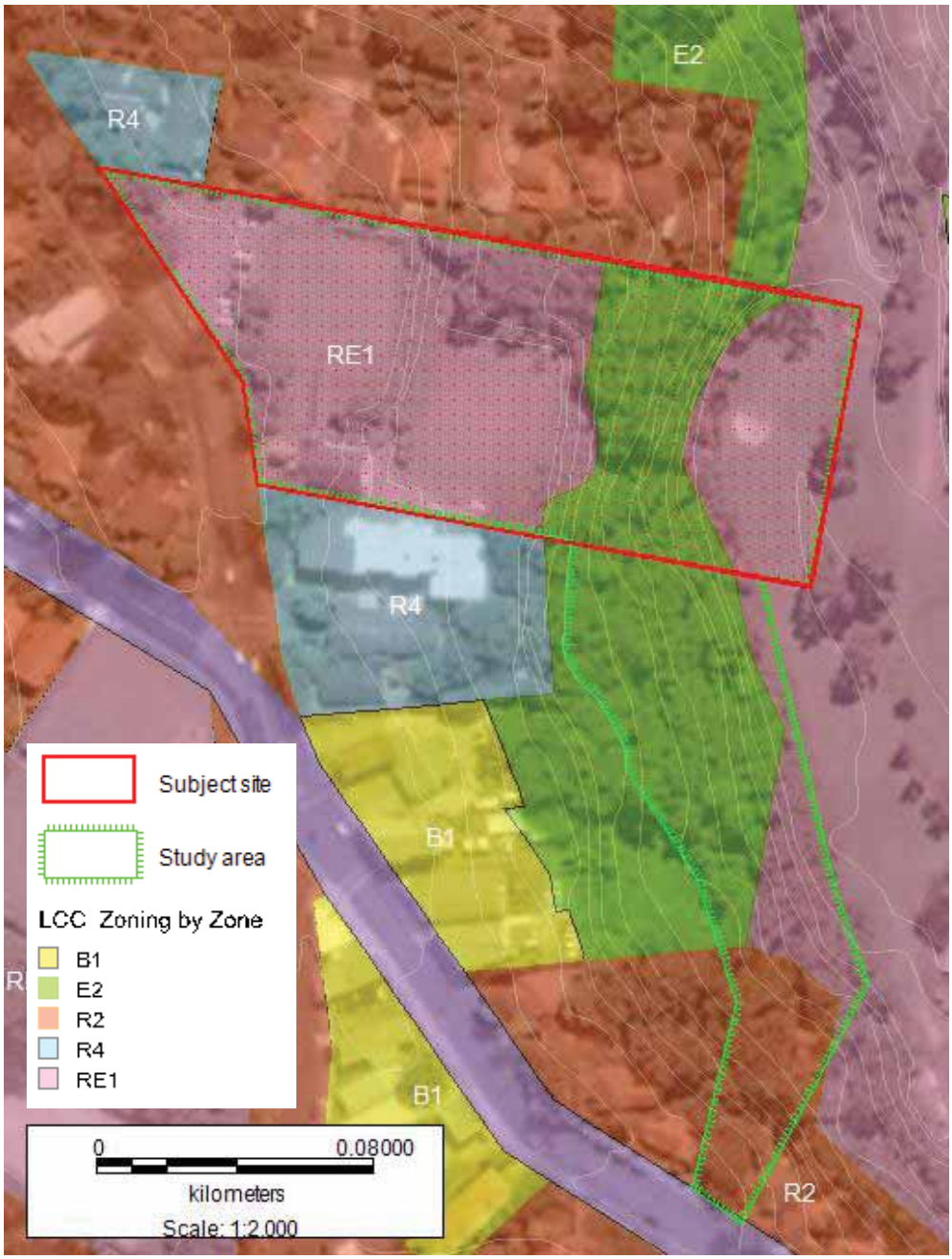
The subject site is currently zoned RE1- Public Recreation and E2 - Environmental Conservation under the Lane Cove Local Environment Plan 2009 (LCC LEP). R4 - High Density Residential abuts the subject site on the southern and north east boundary with R2 Low Density Residential along the northern boundary. The eastern portion of the subject site and adjacent areas are also zoned RE1 and form part of the Golf course.

The proposed development would occur in the portion of the lot zoned RE1. From the LCC LEP the objectives of this zoning are:

- To enable land to be used for public open space or recreational purposes.
- To provide a range of recreational settings and activities and compatible land uses.
- To protect and enhance the natural environment for recreational purposes.
- To make provision for rights of public access to more foreshore land and to link existing open space areas.

Environmental protection works are permitted without consent and Child care centres; Community facilities; Environmental facilities; Kiosks; Marinas; Mooring pens; Recreation areas; Recreation facilities (indoor); Recreation facilities (outdoor); Respite day care centres; Restaurants or cafes; Roads; Signage; Take away food and drink premises are permiteed with consent. Any other development is prohibited.

Figure 3 Zoning



The subject site would require rezoning for the proposal to proceed.

The remnant forest is mapped as Coastal Enriched Sandstone Moist Forest (SMCMA/DECCW 2009) and forms part of a larger 4 hectare patch of this community on adjoining lots (see Figure 20). This community forms a patchy yet contiguous canopy with Coastal Shale Sandstone forest along the southern boundary of the golf course to provide linkages to Land Cove Bushland Park to the east. The Coastal Enriched Sandstone Moist Forest presents a low fire risk according to Council's Bush Fire Prone Land mapping (2010).

Figure 4 Recreation of Council's Bush Fire Prone Land - Rural Fires and Environmental Assessment Legislation Amendment Act 2002 map.

PROJECT OBJECTIVES

The key outputs of the flora, fauna and fungi assessment include:

- A review of any existing literature and information available for the development site and the general locality to determine issues for consideration
- A flora survey to identify species and vegetation communities present on the development site and, as a minimum extent, any present on the adjacent sites.
- A fauna survey to identify species present on the subject site and, as a minimum extent, any present on the adjacent sites.
- A fungi survey to identify species present on the subject site and, as a minimum extent, any present on the adjacent sites.
- An assessment of the conservation value of the species and communities recorded or identified with potential to occur on the subject site. This includes assessment of the condition of vegetation communities and the value of the subject site as fauna habitat.
- An analysis of the likely significance of the impacts of a future residential development in accordance with Commonwealth and State legislation requirements and local guidelines.
- The identification of specific measures that may be incorporated into the design of any future development to ameliorate any likely impacts upon the native flora and fauna on in the immediate area.

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Mobile: 04111 477 22

31st May 2017

Karlis Kambala
Australian Unity Ltd
114 Albert Road
South Melbourne VIC 3205

Re: Detailed Environmental Site Audit Assessment Works at 266 Longueville Road, Lane Cove NSW.

Please find attached our proposal for the Detailed Environmental Site Assessment works for Audit assessment report and soil classification for Australian Unity Limited at 266 Longueville Road, Lane Cove, NSW.

If any further information is required or if you have any queries regarding this information please do not hesitate to contact us on 04111 477 22.

Yours faithfully,
LRM GLOBAL PTY LTD

Jon Lawson
Environmental Consultant

DETAILED ENVIRONAMENTAL SITE ASSESSMENT PROPOSAL

PROVIDED BY:

LRM GLOBAL PTY LTD

LIABILITY & RISK MANAGEMENT CONSULTING

FOR WORKS:

266 Longueville Road, Lane Cove, NSW

FOR:

AUSTRALIAN UNITY LIMITED

MAY 2017

CONFIDENTIAL

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1.0 INTRODUCTION

Australian Unity Ltd has invited LRM Global Pty Ltd to undertake a Detailed Environmental Site Assessment (ESA) for Audit at 266 Longueville Road, Lane Cove.

The current scope of work proposed outlines LRM's suggested approach to the work and tasks involved.

We acknowledge that given the potential for uncontrolled landfilling to have occurred that drill locations and samples analysis suites may significantly change based on site observations and the potential for drilling refusal.

2.0 OBJECTIVES

The objectives of these works are to characterize site subsurface conditions. The eventual aim is to satisfy the requirements so that an environmental audit for the site can be completed so that a Site Audit Statement can be issued for the site, allowing for site development for an aged care facility with a single underground basement (high density residential land use). It is understood that the basement excavation will extend vertically to a maximum depth of approximately 9.0 meters below ground level and will cover the majority of the site. Open paved/ landscaped areas are planned for portions of the site - refer to the attached extracts of the development plans.

The objectives of this investigation are as follows:

- Characterise site soil and groundwater conditions and flow direction;
- Provide all analytical data in groundwater tables and provide all other relevant data in the form of a detailed environmental site assessment report for the environmental auditor to consider as part of their audit of the site.
- The development of an appropriate waste classification for excavated soils in accordance with NSW EPA Waste Classification Guidelines -Part 1: Classifying waste.

3.0 SCOPE OF WORK

A summary of the scope of work to be undertaken by LRM to achieve the objectives listed above would include the following components:

- Site service location and clearance;
- Drilling and installation of 3 monitoring wells on-site – at a later stage following excavation
- Soil sampling at 23 locations to bring in line with the sample density requirements for the development site area of approximately 1.0 hectare as detailed within Australian standard AS4482.1-2005 and NEPM Guidelines for assessing contaminated sites;
- Collection of soil samples from fill and natural material encountered during drilling;
- Logging of soil bores;
- All samples will be couriered, on ice and under COC documentation to NATA accredited laboratories for analysis.
- Completion of detailed environmental site assessment and soil disposal classification reports.

4.0 CONCEPTUAL SITE MODEL

The conceptual site model is derived from the findings of the preliminary site assessment report for the site completed by SMEC dated December 2011 which should be read in conjunction with this SAQP.

4.1 SOURCES

Potential sources of contamination and COPC's (contaminants of potential concern) identified at the site by the preliminary site assessment are detailed in the following table:

Table 6: Potential Sources and Contaminants of Concern

Source	Location	Contaminants of Concern	Media	Comments / Risk Potential
Imported Fill Material – 1950 – 1970	Entire site (levelling)	Various (commonly PAHs and heavy metals), TRH, OPP/ OCP	Soil/ Groundwater	High – Based on PSI soil assessment works.
Former bowling green 1950 – 1970 onward	Entire site	OCPs, OPPs Methyl-mercury	Soil/Groundwater	High - near surface soils
Service Station	South 50m	TRH, BTEX, SVOC, VOC, Lead	Groundwater	Low Down/cross gradient

4.2 DATA GAP ASSESSMENT

Soils at the site are currently characterized by 15 soil sample locations from the preliminary site assessment. Not all samples have been analysed for all identified COPC's. The identified depth of fill across the site extends from 0.3 to 8+ mbgl increasing in thickness toward the south east of site. Further sampling and analysis of the sites soils and representative geologies to project RL depth of 3.0 mbgl is required to determine if the site subsurface has been contaminated as a result of historic activities at the site and from surrounds and to determine the depth and extent of fill material across the previously inaccessible areas of the site. Additional data is also required to determine an offsite waste disposal classification for the materials as per the planned basement excavation.

Groundwater at the site has yet to be characterized. The proposed monitoring well network is required to determine the groundwater flow direction, elevation and to assess the quality of groundwater as it enters and leaves the site to determine if historic site or offsite activities have resulted in groundwater pollution or pose a health risk to future site occupants.

There are no current plans to assess soil vapor at the site given that significant excavation will occur removing the imported fill layer.

4.3 PATHWAYS

Geology

The main geological units encountered at the site, in order of stratigraphic sequence from youngest to oldest include:

- Fill material (entire site) generally silty sands or sandy clays sometimes containing gravel, glass fragments, ash and organic material including roots – expected to be permeable.
- Natural – residual sandy soil overlying medium to coarse grained quartz sandstone.

The key transport mechanisms for soil contaminants include mobilisation via surface water flow and infiltration and to a lesser extent through windborne dust.

Groundwater

Groundwater provides a key transport mechanism for contaminants through horizontal and vertical migration of contaminated surface water/stormwater/groundwater through site soils (into the underlying aquifer), and then possible migration of the impact via advection and dispersion toward the canal/ bay. There is a high potential for vertical migration of contaminated groundwater beyond the fill as subsurface materials are predominantly sands, which generally have high permeability.

Surface water

Surface water drainage over the site is judged to be predominantly via surface run-off directed towards offsite municipal storm water drains, Gore Creek and Tambourine Creek, Lane Cove River and Woodford Bay, Parramatta River and ultimately Botany Bay. The majority of the site is unsealed and grassed and most surface water is expected to drain into the municipal storm water drainage system. Surface water is considered unlikely to act as a potential transport mechanism at the site considering the extent of hardstand and grass coverage over the site.

Exposure Pathways

Based on the identified receptors and the release, fate, and transport characteristics of the CoPC, pathways through which receptors may become exposed include inhalation, ingestion and dermal absorption. These are discussed briefly below in the context of the site setting:

- Inhalation Exposure Pathway: There is low potential for inhalation of fumes from potential soil and groundwater contamination as no volatile substances have been identified as COPC or from previous testing. There is also the potential for creation of dust during disturbance of soils and infrastructure. Risk of potential inhalation of contaminated dusts during future site works.
- Ingestion Exposure Pathway: Ingestion of contaminants by current and future site occupants may occur through day-to-day activities and direct contact with contaminated soils or surface water.
- Groundwater: A risk to human health exposure from groundwater in the area is associated domestic purposes are considered unlikely due to the availability of a reticulated water supply. A risk from irrigation activities is possible due to the presence of the golf course to the south east of site. A risk to ecological receptors as groundwater is likely to discharge to Gore Creek and subsequently to the Lane cove river.
- Dermal Exposure Pathway: Exposure may occur via sorption through biological membranes such as skin. This pathway may be a concern whenever contaminated soil; surface water or groundwater comes into direct contact with a biological membrane. This pathway could also be a concern if contaminated surface water (runoff from the site) was to come into direct

contact with benthic and aquatic flora and fauna within off-site surface water receiving environments.

4.3 PATHWAYS

The preliminary site investigation identified a number of potential human and environmental receptors of contamination provided an exposure pathway exists. The identified receptors are listed below:

Human Health Receptors:

- Current and future site workers including construction workers during site development and current and future tenants;
- Future aged care residents and workers;
- Offsite receptors including residents and workers on neighboring properties and recreational users of nearby water courses.

Environmental receptors:

- Onsite flora and fauna;
- Offsite ecosystems including down-gradient surface water environments including Gore Creek to the east and Woodford Bay/ Lane Cove River to the south;
- Groundwater beneath the site.

5.0 DATA QUALITY OBJECTIVES

5.1 OVERVIEW

The Data Quality Objective (DQO) process will be applied to the investigations as described below, to ensure that data collection activities are appropriate and achieve the stated objectives.

A process for establishing data quality objectives for an investigation-site has been defined by the NSW DEC *Guidelines for the NSW Site Auditor Scheme (2nd edition,* 2006). The Data Quality Objective (DQO) process will be applied to the validation program, as described below, to ensure that data collection activities are appropriate and achieve the project objectives. The DQO process involves seven steps as follows:

- Step 1: State the problem
- Step 2: Identification of the Assessment Decisions/ Goals
- Step 3: Identification of Decision Inputs
- Step 4: Definition of Study Boundaries
- Step 5: Decision Rules
- Step 6: Limits on Decision Errors
- Step 7: Optimise the design for obtaining data

The seven DQO steps for this project are defined as follows:

5.2 STEP 1: State the Problem

The client wishes to develop the site for an aged care facility with a single basement level extending to a depth of 9 meters below ground level.

The site has historically been used for potentially contaminating activities including imported fill for levelling during its development and operation as a bowling green.

The site and surrounds have been subjected to historical infilling of potentially contaminated material.

The problem is soil at the site has undergone limited assessment in 2011 as part of the preliminary site assessment however further assessment of both soil and groundwater is required to close out existing data gaps and to confirm the findings of the preliminary assessment to determine the sites suitability for the proposed use, the necessity for a remedial action plan, and an offsite soil disposal classification.

5.2 STEP 2: Identification of the Assessment Decisions/ Goals

Additional data is required to be collected to address the problem described in “Step 1”

- Is the site suitable for the proposed aged care facility/ high density residential land use in respect to CoPC from historical use and filling?
- Is there any impact from potential adjoining off-site contamination that would pose a potential risk to on-site receptors?

- Does residual contamination on the site have the potential to cause unacceptable risks to off-site receptors in the future?
- What is the waste classification of soils that may require off-site disposal?
- Is further assessment (including further assessment of soils required following demolition of existing structures) or remediation/management/validation required?

5.3 STEP 3: Identification of Decision Inputs

Data inputs to the decision making process will include:

- Existing data collected from the preliminary site assessment desktop and intrusive studies.
- Quantitative data gained through further soil and groundwater intrusive assessment works and laboratory analysis.
- Adopted Assessment Criteria as detailed in section 6

5.4 STEP 4: Definition of Study Boundaries

The site boundary is depicted within attached Figures 1 and 2. The vertical boundaries of the study are as follows:

- Soil Investigation – where possible the soil investigation shall extend to the proposed project excavation depth of 9.0 mbgl.

Temporal Boundaries – while no temporal boundaries exist as such the client has expressed a wish that the works are executed promptly.

5.5 STEP 5: Decision Rules

In order to decide whether the data obtained is precise, accurate, reliable and reproducible for the site at the time of the investigation, field and laboratory quality control and quality assurance (QA/QC) procedures will be utilised throughout the sampling programs and all sampling work will be carried out in accordance with LRM's Standard Field Operating Procedures, which are based on standard industry practices. QA/QC results will be compared to nominal acceptance limits (as outlined in Section 7).

Project analytical data will be compared to NSW EPA made or approved guidelines. The nominated site assessment criteria are presented in Section 6. On the basis of this initial comparison, a decision will be made as to whether or not the contamination may pose a potential risk (environmental or health based), warranting further assessment.

5.6 STEP 6: Limits on Decision Errors

Two types of decision errors are possible:

- False Negative - The site (or areas of the site) may be considered 'uncontaminated' when in fact it is contaminated.
- False Positive - The site (or areas of the site) may be considered 'contaminated' when in fact it is not contaminated.

The implications of the first decision error are considered less acceptable than the second, as the first error could involve unacceptable risk to health and/or the environment, and potentially future costs including possible litigation if the site is found to be unsuitable in the future. The

risks associated with the second error are primarily limited to unwarranted remediation costs. The limits on the first decision error are therefore addressed by use of conservative investigation criteria (which incorporate a factor of safety) and by analysing any data exceeding these criteria on the basis of the 95% upper confidence level (UCL) of the average concentrations. In accordance with the NEPM, secondary criteria apply as follows:

- The standard deviation of the results should be less than 50% of the relevant investigation or screening level.
- No single value should exceed 250% of the relevant investigation or screening level.

The risk of the second decision error occurring will be will minimised by minimising the potential for unrepresentative data which could arise from the following causes:

- Sampling errors which occur when the sampling program does not adequately detect the variability of a contaminant from point to point across the Site, (i.e. the samples collected are not representative of the Site conditions).
- Measurement errors which occur during sample collection, handling preparation, analysis and data reduction.

To minimise the potential for unrepresentative data Data Quality Indicators (DQIs) will be evaluated. The DQIs for sampling techniques and laboratory analysis of collected samples will be based on those listed in Appendix V of the NSW EPA Auditor Guidelines (DEC 2006). Step 5 and Step 6 of the data quality objectives will be assessed by reference to data quality indicators as follows:

Completeness – is a measure of the amount of useable data (expressed as %) from data collection activities. The completeness goal is set at there being sufficient valid data generated during the study. If there is insufficient valid data, then additional data are required to be collected. Completeness can be influenced by field issues such as access for sampling or by laboratory issues such as adherence to sample holding times.

Comparability – the confidence (expressed qualitatively) that data may be considered to be equivalent for each sampling and analytical event. Comparability is achieved through adopting consistent sampling techniques and ensuring laboratories use consistent analysis techniques.

Representativeness - expresses the degree to which sample data accurately represents each media present on the site. Representativeness is achieved by collecting samples in an appropriate pattern across the site, by using a sufficient number of sampling locations to characterise the site and by using consistent, repeatable and appropriate methodologies.

Precision - measures the reproducibility or variation of data. The precision of the data is assessed by calculating the Relative Percent Difference (RPD) between primary and duplicate/ inter-lab split samples

LRM will adopt nominal acceptance criteria of 30% RPD for duplicates and splits for inorganics, and nominal acceptance criteria of 50% RPD for field duplicates and splits for organic compounds. It is noted that this will not always be achieved, particularly in heterogeneous media such as imported fill material or disturbed natural materials, or at low analyte concentrations.

Accuracy (bias) - measures quantitatively the closeness of the reported data to the true value. Bias can be introduced during sample collection through cross contamination from contaminated equipment, during sample preservation and transport and from laboratory sample handling, preparation and analysis techniques. Accuracy is assessed by reference to the analytical results of laboratory internal QA/QC samples including spikes, blanks and reference standards.

The nominal “acceptance limits” on laboratory control samples are defined as follows:

Laboratory spikes – 70-130% for metals/inorganics 60-140% for organics.
Laboratory duplicates - <30% for metals/inorganics, <50% for organics.
Laboratory blanks - <practical quantitation limit.

Accuracy of field works is assessed by examining the level of contamination detected in field and rinsate blanks. Blanks should return concentrations of all organic analytes as being less than the practical quantitation limit of the testing laboratory. The individual testing laboratories will conduct an assessment of the internal laboratory QA/QC program however the results will also be independently reviewed and assessed by LRM

5.7 STEP 7: Optimise the Design for Obtaining Data

The sampling program has been designed to provide sufficient information to allow a sound scientific and statistical evaluation of the questions set out in Step 2.

To optimise the design of the investigations, this SAQP has been prepared in consultation with the client, site occupants and the Site Auditor and giving consideration to previous investigations. The SAQP will be reviewed and refined as necessary during the assessment by evaluating field observations and analytical results.

6.0 METHODOLOGY AND APPROACH

The approach used by LRM in undertaking these investigation works is based on recognised guidelines for the assessment of potentially contaminated sites, published in:

- AS 4482.1 – 2005 *Guide to investigation and sampling of potentially contaminated soil, Part 1: Non- Volatile and semi-volatile compounds;*
- AS 4482.2 – 1999 *Guide to sampling and investigation of potentially contaminated soil, Part 2: Volatile substances;*
- *The National Environment Protection (Assessment of Site Contamination) Measure 1999*, as ammended 2013.
- *Australian and New Zealand Guidelines for Fresh and Marine Water Quality*, ANZECC / ARMCANZ 1992.
- *Australian and New Zealand Guidelines for Fresh and Marine Water Quality*, ANZECC / ARMCANZ 2000.
- NSW EPA Sampling and design Guidelines (September 1995);
- *Guidelines for consultants reporting on contaminated sites (August 2011);*
- *Guideline for the Assessment and management of Groundwater (March 2007);*
- *AS/NZS 5667.11 1998, Water Quality – Sampling – Guidance on sampling groundwaters;*
- NSW Environment, Climate Change and Water 2010, Vapour intrusion: Technical Note;
- *NSW DECC 2009, Waste Classification Guidelines – Part 1;Classifying Waste;*
- *NSW EPA The Excavated Natural Material Order, 2014.*

The works need to be completed so that the Auditor can successfully complete the assessment in accordance with the Environmental Auditor (Contaminated Land) Guidelines for Issue of an Environmental Audit Statement.

6.1 Soil Investigation

Our methodology for the Soil Assessment is described as follows:

1. Field personnel will be suitably experienced and qualified to undertake and document the assessment tasks.
2. Field observations will be logged in accordance with Australian Standard 1726 and the Unified Soil Classification system. Notes will include the location and extent of fill and features such as seepage, moisture, water bearing zones, depth of groundwater tables, discolouration, staining, odours and other indications of contamination. This information will be recorded on the field borehole log and photographed.
3. Soil samples will be collected during monitoring well installation. Where possible, this will be via push-tube methodology prior to the use of solid stem augurs or hammering.
4. Sampling equipment shall be subjected to a three stage decontamination process using Decon 90/tap water, tap water and DI water prior to sampling at each location. Rinsate blanks shall be collected from the third stage.
5. All samples will be collected in clean, lab supplied, sample jars and placed immediately in a sample chest with ice or similar to attempt to reduce sample temperature.
6. Initially, three samples (one from the fill, one from the natural interface and one from the project basement excavation level) from each location shall be tested with the other (intervening samples) held pending initial results review.
7. Sample locations are indicated on the attached plan.
8. Soil sampling will be undertaken at 23 locations (15 drilled and 8 hand auger) to bring in line with the sample density requirements for the development site area of approximately 1.0

hectare as detailed within Australian standard AS4482.1-2005 and NEPM Guidelines for assessing contaminated sites;

9. Sample depths will be subject to local geological conditions, i.e. depth of any fill and natural soil. The sample depths are likely to represent fill or disturbed soil at the surface, soil profile interface point and natural soil at depth with an event total of 23 samples of fill material analysed, 10 samples of surface for herbicides and pesticides and 15 samples of natural material excluding QA/QC samples.
10. Should site observations reveal different layers of fill, or should fill extend further than envisaged, or where other evidence of contamination (such as discoloration or odour) is observed, there may be a need to collect further samples at the consultants' discretion.
11. Should adverse conditions be encountered onsite such as shallow refusal or where hand auguring is required due to access restrictions samples will be collected as outlined above however the deepest natural sample collected above the point of refusal will be analysed in lieu of the project RL sample. Should shallow refusal be encountered the location will be slightly repositioned and given an A/B designation.
12. Soil samples collected will be tested on-site for volatile hydrocarbons with a photoionization detector (PID) every meter or change in soil type or upon olfactory or visual detection of contamination.
13. Observations of the presence or absence of asbestos will be undertaken during field works and included within bore-logs and the DESI report.
14. The laboratory will be instructed via chain of custody documentation to analyse all samples on a normal 5-day turn-around time.
15. Samples will be collected from both the fill and natural soil profiles and will be analysed for contaminants of concern for the site, as identified in the preliminary site assessment as per Table 1 below.
16. Leachability analysis may also be undertaken pending receipt and review of initial soil sample results for off-site disposal classification purposes.
17. An allowance for quality control/ quality assurance (QA/QC) samples has been made in the current works plan in accordance with AS4482.1-2005. The QA/QC samples will comprise of blind replicate samples, inter-laboratory split samples and trip and rinsate blanks. The frequency of QA/QC field samples is presented within Table 3 below. Other samples such as field blanks may also be collected at the discretion of the environmental assessor.
18. All samples will be collected in clean, lab supplied, sample jars and placed immediately in a sample chest with ice or similar to attempt to reduce sample temperature.

The proposed sampling plan reflects the requirements of Table A - NSW EPA 1995 which describes the minimum sampling points for site characterisation, assuming circular hotspots, The adopted sampling pattern is based on the site history and associated data gaps relating to the location of contaminating site activities. The proposed sampling density allows for the detection with 95% confidence of circular contamination hotspots of up to 25.7 meters in diameter indicating that residual hotspots of a lesser diameter may remain undetected.

Table 1: Proposed Soil Analytical Suite

Sample Location	Sample Target/ Expected Depth	# Samples Analysed/ Collected	Analyte
10 Locations - Surface Fill on bowling greens	0.1-0.2	10/10	OCP/OPP, methyl-mercury
23 Locations – Fill	0.5 – 8m within fill material	23/23	Metals, PAHs (polycyclic aromatic hydrocarbons), TRHs (Total recoverable hydrocarbons) & BTEX, OCP/OPP
15 Locations Deeper natural project depth - Natural	Excavation RL (1.0 - 9.0 mbgl) varying with site cut	15/15	Metals, PAHs (polycyclic aromatic hydrocarbons), TRHs (Total recoverable hydrocarbons) & BTEX, or on hold pending initial data review

6.2 Groundwater Investigation

Stage 2 following excavation works.

Our methodology for the further groundwater sampling is proposed as the following:

1. Installation of three groundwater monitoring wells;
2. Development of monitoring wells by removal of between 3 and 5 well volumes from each newly installed monitoring well a minimum of 1 day after installation in line with the minimum requirements as described within the NEPM schedule B2 section 8.2.3.5 to allow for bentonite seals to fully hydrate and for grout to cure.
3. Surveying of all monitoring wells by a licensed surveyor.
4. Field personnel will be suitably experienced and qualified to undertake and document the assessment tasks.
5. All groundwater monitoring wells will be gauged prior to purging and sampling a minimum of 1 day following development in line with the minimum requirements as described within the NEPM schedule B2 section 8.2.3.5 and considering the highly permeable nature of the subject aquifer allowing for a total of 2 days for the wells to equilibrate following installation.
6. Groundwater samples will be collected using Low-Flow MicroPurge sampling technique or similar, while monitoring field stabilization criteria and minimizing drawdown to ensure that representative groundwater samples are collected.
7. Field notes to be recorded and stabilisation criteria are detailed on the attached sample field sheets.
8. Groundwater sampling equipment shall be subjected to a three stage decontamination process using Decon 90/tap water, tap water and DI water prior to sampling at each location. Rinsate blanks shall be collected from the third stage.
9. All samples will be collected in clean, lab supplied, sample jars and placed immediately in a sample chest with ice or similar to attempt to reduce sample temperature.
10. Table 2 below details the groundwater samples to be collected for the investigation at the site.
11. The laboratory will be instructed via chain of custody documentation to analyse all samples on a normal 5-day turn-around time.

Table 2: Proposed Groundwater Analytical Suite

Sample Location	Analyte
All Locations	NEPM HIL Screens

The QA/QC program for the groundwater monitoring will consist of an inter-laboratory and intra-laboratory duplicate samples as well as rinsate and trip blanks (as detailed in Table 3 below).

6.3 Laboratory Selection

Envirolab Sydney will serve as the primary laboratory for the purposes of this assessment and Eurofins-MGT will serve as the secondary laboratory for the analyses of inter-laboratory split samples.

The Laboratory Limits of Reporting will be below relevant site criteria.

6.3 Assessment Criteria

Site Soil Investigation:

In assessing any soil contamination present on this site, and considering the purpose of this assessment, the data will be evaluated against the levels that are given in the NEPM Schedule B (1) Guidelines on the Investigation Levels for Soil and Groundwater [National Environment Protection (Assessment of Site Contamination) Measure 2013].

Human health risk - Given the proposed use of this site, as an 'Aged care facility' development with no opportunities for soil access, the NEPM HIL/HSL Setting B criteria will be the primary assessment tools for analytical results comparison. Results will also be compared against HIL A and HIL C criteria levels.

Ecological risk - The data will also be compared with the NEPM Ecological Investigation/Screening Levels (EIL's/ESLs) criteria as per Schedule B(1), Appendix A, adopting Urban Residential/ Public Open Space.

Waste Classification - The criteria detailed within the NSW EPA Waste Classification Guidelines 2008 will be used to classify soils for future disposal off-site.

Site Groundwater Investigation:

In assessing any groundwater contamination present on this site, and considering the purpose of this assessment, the data will be evaluated against the levels that are given in the NEPM Schedule B (1) Guidelines on the Investigation Levels for Soil and Groundwater [National Environment Protection (Assessment of Site Contamination) Measure 2013].

The Groundwater Investigation Levels (GILs) from the NEPM are based on the Australian Water Quality Guidelines 2000 (AWQG), the Australian Drinking Water Guidelines (ADWG), and the Guidelines for Managing Risk in Recreational Waters 2008 (GMRRW). The GILs are adopted in the NEPM as investigation levels in the context of the framework for risk-based assessment of groundwater contamination i.e. levels above which further assessment is required. Trigger

values for slightly to moderately disturbed marine ecosystems (95% level of protection) have been adopted based on the likely discharge point of groundwater at the site to Gore Creek and subsequently Lane Cove River.

The AWQG provide tabulated values based on percentage species protection for various aquatic environments and water uses. The appropriate settings for current and potential uses of groundwater need to be identified for the aquifer undergoing assessment. The guideline documents should be consulted for appropriate interpretation of guideline values, in consultation with relevant regulatory authorities if necessary.

The GILs define acceptable water quality for various contaminants at the point of use and provide frequently used values for drinking water and protection of fresh water ecosystems. The GMRRW recommend applying a multiplication factor of 10 to 20 to the ADWG for assessment of the acceptability of recreational water quality. GILs for other receptors should be obtained directly from the 'primary industries' section of the AWQG where relevant. Note that the recreational and aesthetics sections of the AWQG have been superseded by the GMRRW.

7.0 Quality Assurance / Quality Control and Data Validation

The objective of the QA/QC will be to undertake methods and procedures of sample collection and analysis to be used to ensure quality, accuracy, precision and completeness of data generated. The primary focus is on the acquisition of environmental data that is scientifically sound and defensible and can be used to fulfill the overall project objectives. The following will be undertaken:

- The number of quality control samples to be collected and analysed is presented in Table 3 below. This is in accordance with the requirements of the Australian Standard AS4482.1.
- All samples will be analysed by NATA-accredited laboratories namely Eurofins and Envirolab. Each laboratory will follow internal quality control procedures, e.g. routine analysis of standard solutions / reference materials, reagent blanks, laboratory duplicates and spiked samples.
- The quality control program will consist of LRM submitting field duplicates and inter-lab split samples to a primary and secondary laboratory for analysis. The quality assurance program will also consisted of LRM submitting equipment rinsate and Trip blanks for analysis. These results will be used to gauge the potential for cross contamination during sampling and transportation.
- Relative Percent Differences will be calculated from Primary and Duplicate/Split samples to confirm repeatability of sample results.

Table 3: QA/QC – Frequency of QA/QC Requirements

Quality Control Samples	Minimum Number of QA/QC Samples Required	Actual No. Required – LRM Assessment works		Analytical suite
		Soil	Groundwater	
Duplicate Sample	1 in 20	3	1	Metals, PAH(Soil),
Split Sample	1 in 20	3	1	Metals, PAH(Soil)
Rinsate Blank	1 / equipment / day	1	1	TRH/BTEX
Trip Blank	1/day/ eskie	1	1	BTEX

Following completion of the field programs, all of the information collected will be checked, data will be collated, calculations completed and results summarised in tabular form.

9.0 CLOSURE

I trust this Sample Analysis Plan is in line with your expectations. If you have any suggestions or inclusions that are required as part of these fieldworks, please do not hesitate to contact me on 042 418 2787.

Yours faithfully,
LRM GLOBAL PTY LTD

Jon Lawson
Environmental Consultant

FIGURES:

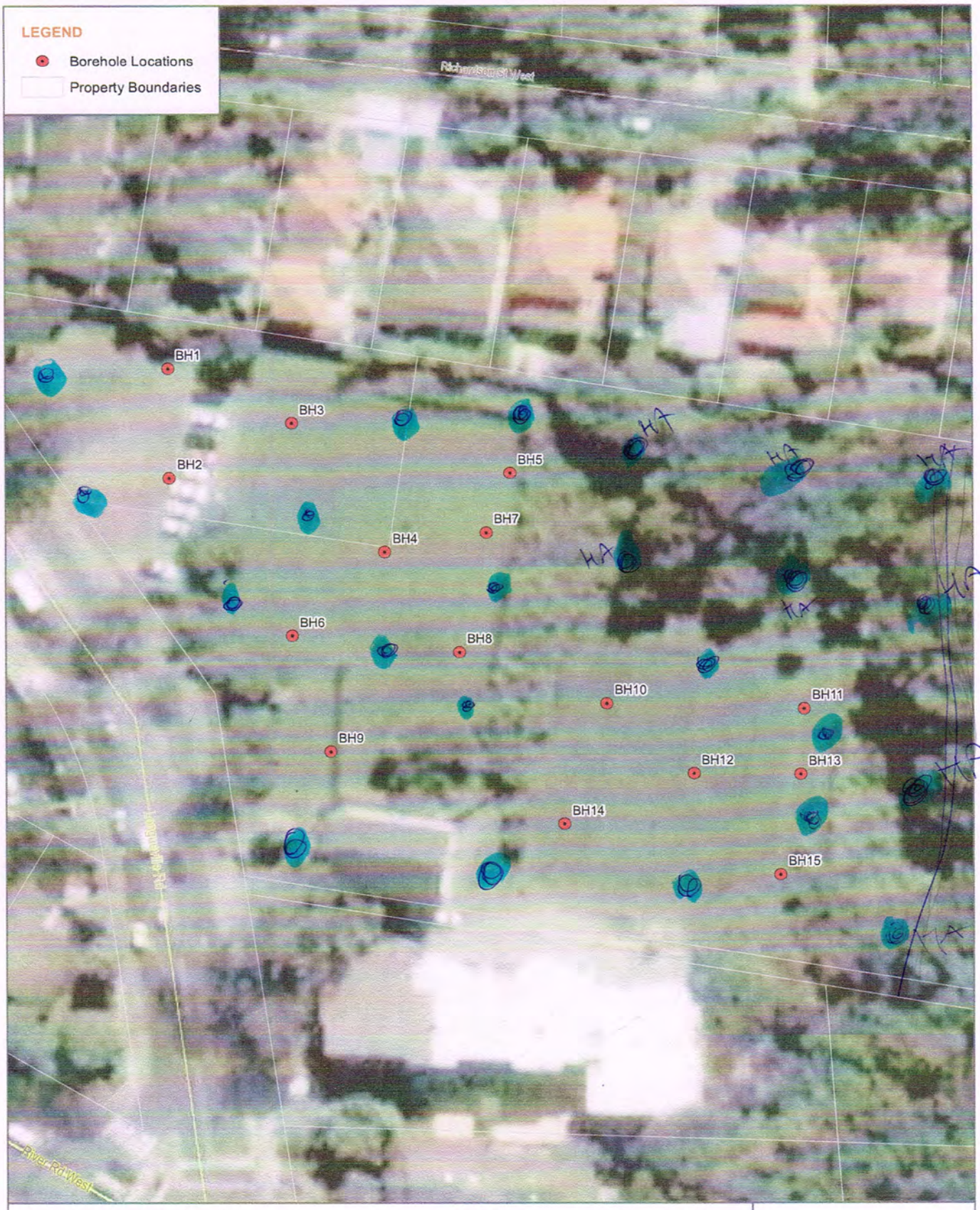

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FIG NO. 3

FIGURE TITLE Borehole Plan

PROJECT NO. 30011131

PROJECT TITLE 266 Longueville Road GI

CREATED BY PR11334

SOURCES Vector Backdrop - Roadnet © Map Data Services 2011.
Aerial Imagery © Bing 2011.

SMEC

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27th February 20178

Tm Miller
Australian Unity Ltd
114 Albert Road
South Melbourne VIC 3205

Re: Initial Groundwater Assessment Works at 266 Longueville Road, Lane Cove NSW.

Please find attached our proposal for initial Groundwater Assessment works for Audit assessment report for Australian Unity Limited at 266 Longueville Road, Lane Cove, NSW.

If any further information is required or if you have any queries regarding this information please do not hesitate to contact us on 04111 477 22.

Yours faithfully,
LRM GLOBAL PTY LTD

JON LAWSON
Environmental Consultant

INITIAL GROUNDWATER ASSESSMENT AND SUPPLIMENTARY SOILS PROPOSAL

PROVIDED BY:

LRM GLOBAL PTY LTD

LIABILITY & RISK MANAGEMENT CONSULTING

FOR WORKS:

266 Longueville Road, Lane Cove, NSW

FOR:

AUSTRALIAN UNITY LIMITED

FEBRUARY 2018

CONFIDENTIAL

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Attachments: Proposed Sample Locations

1.0 INTRODUCTION

Australian Unity Ltd has invited LRM Global Pty Ltd to undertake an initial Groundwater Assessment (ESA) and supplementary soil delineation at depth for Audit at 266 Longueville Road, Lane Cove.

The current scope of work proposed outlines LRM's suggested approach to the work and tasks involved.

2.0 OBJECTIVES

The objectives of these works are to further characterize site subsurface conditions. The eventual aim is to satisfy the requirements so that an environmental audit for the site can be completed so that a Site Audit Statement can be issued for the site, allowing for site development for an aged care facility with a single underground basement (high density residential land use). It is understood that the basement excavation will extend vertically to a maximum depth of approximately 12.0 meters below ground level and will cover the majority of the site. Open paved/ landscaped areas are planned for portions of the site - refer to the attached extracts of the development plans.

The objectives of this investigation are as follows:

- Characterise site groundwater conditions and flow direction;
- Provide all analytical data in groundwater tables and provide all other relevant data in the form of a detailed environmental site assessment report for the environmental auditor to consider as part of their audit of the site.
- The development of a more accurate waste classification for excavated soils in accordance with NSW EPA Waste Classification Guidelines -Part 1: Classifying waste.

3.0 SCOPE OF WORK

A summary of the scope of work to be undertaken by LRM to achieve the objectives listed above would include the following components:

- Site service location and clearance;
- Drilling and installation of 3 monitoring wells on-site;
- Soil sampling at 5 locations, target depth 12.5m (3 converted to wells);
- Collection of soil samples from fill and natural material encountered during drilling;
- Logging of soil and groundwater construction bores;
- All samples will be couriered, on ice and under COC documentation to NATA accredited laboratories for analysis;
- Completion of detailed environmental site assessment;

5.0 DATA QUALITY OBJECTIVES

5.1 OVERVIEW

The Data Quality Objective (DQO) process will be applied to the investigations as described below, to ensure that data collection activities are appropriate and achieve the stated objectives.

A process for establishing data quality objectives for an investigation-site has been defined by the NSW DEC *Guidelines for the NSW Site Auditor Scheme (2nd edition,* 2006). The Data Quality Objective (DQO) process will be applied to the validation program, as described below, to ensure that data collection activities are appropriate and achieve the project objectives. The DQO process involves seven steps as follows:

- Step 1: State the problem
- Step 2: Identification of the Assessment Decisions/ Goals
- Step 3: Identification of Decision Inputs
- Step 4: Definition of Study Boundaries
- Step 5: Decision Rules
- Step 6: Limits on Decision Errors
- Step 7: Optimise the design for obtaining data

The seven DQO steps for this project are defined as follows:

5.2 STEP 1: State the Problem

The client wishes to develop the site for an aged care facility with basement levels extending to a depth of 12 meters below ground level.

The site has historically been used for potentially contaminating activities including imported fill for levelling during its development and operation as a bowling green.

The site and surrounds have been subjected to historical infilling of potentially contaminated material.

The problem is soil at the site has undergone limited assessment in 2011 and again in 2017 as part of the preliminary site assessment however further assessment of both soil and groundwater is required to close out existing data gaps and to confirm the findings of the preliminary assessment to determine the sites suitability for the proposed use, the necessity for a remedial action plan, and an offsite soil disposal classification.

5.2 STEP 2: Identification of the Assessment Decisions/ Goals

Additional data is required to be collected to address the problem described in “Step 1”

- Is the site suitable for the proposed aged care facility/ high density residential land use in respect to CoPC from historical use and filling?
- Is there any impact from potential adjoining off-site contamination that would pose a potential risk to on-site receptors?

- Does residual contamination on the site have the potential to cause unacceptable risks to off-site receptors in the future?
- What is the waste classification of soils that may require off-site disposal?
- Is further assessment (including further assessment of soils required following demolition of existing structures) or remediation/management/validation required?

5.3 STEP 3: Identification of Decision Inputs

Data inputs to the decision making process will include:

- Existing data collected from the preliminary site assessment desktop and intrusive studies.
- Quantitative data gained through further soil and groundwater intrusive assessment works and laboratory analysis.
- Adopted Assessment Criteria as detailed in section 6

5.4 STEP 4: Definition of Study Boundaries

The site boundary is depicted within attached Figure 1. The vertical boundaries of the study are as follows:

- Soil Investigation – where possible the soil investigation shall extend to the proposed project excavation depth of 12.5 mbgl.
- Groundwater Investigation – Three wells to be installed within the site title boundaries, to represent up-gradient, site derived and down-gradient groundwater conditions.

Temporal Boundaries – while no temporal boundaries exist as such the client has expressed a wish that the works are executed promptly.

5.5 STEP 5: Decision Rules

In order to decide whether the data obtained is precise, accurate, reliable and reproducible for the site at the time of the investigation, field and laboratory quality control and quality assurance (QA/QC) procedures will be utilised throughout the sampling programs and all sampling work will be carried out in accordance with LRM's Standard Field Operating Procedures, which are based on standard industry practices. QA/QC results will be compared to nominal acceptance limits (as outlined in Section 7).

Project analytical data will be compared to NSW EPA made or approved guidelines. The nominated site assessment criteria are presented in Section 6. On the basis of this initial comparison, a decision will be made as to whether or not the contamination may pose a potential risk (environmental or health based), warranting further assessment.

5.6 STEP 6: Limits on Decision Errors

Two types of decision errors are possible:

- False Negative - The site (or areas of the site) may be considered 'uncontaminated' when in fact it is contaminated.
- False Positive - The site (or areas of the site) may be considered 'contaminated' when in fact it is not contaminated.

The implications of the first decision error are considered less acceptable than the second, as the first error could involve unacceptable risk to health and/or the environment, and potentially future costs including possible litigation if the site is found to be unsuitable in the future. The risks associated with the second error are primarily limited to unwarranted remediation costs. The limits on the first decision error are therefore addressed by use of conservative investigation criteria (which incorporate a factor of safety) and by analysing any data exceeding these criteria on the basis of the 95% upper confidence level (UCL) of the average concentrations. In accordance with the NEPM, secondary criteria apply as follows:

- The standard deviation of the results should be less than 50% of the relevant investigation or screening level.
- No single value should exceed 250% of the relevant investigation or screening level.

The risk of the second decision error occurring will be will minimised by minimising the potential for unrepresentative data which could arise from the following causes:

- Sampling errors which occur when the sampling program does not adequately detect the variability of a contaminant from point to point across the Site, (i.e. the samples collected are not representative of the Site conditions).
- Measurement errors which occur during sample collection, handling preparation, analysis and data reduction.

To minimise the potential for unrepresentative data Data Quality Indicators (DQIs) will be evaluated. The DQIs for sampling techniques and laboratory analysis of collected samples will be based on those listed in Appendix V of the NSW EPA Auditor Guidelines (DEC 2006). Step 5 and Step 6 of the data quality objectives will be assessed by reference to data quality indicators as follows:

Completeness – is a measure of the amount of useable data (expressed as %) from data collection activities. The completeness goal is set at there being sufficient valid data generated during the study. If there is insufficient valid data, then additional data are required to be collected. Completeness can be influenced by field issues such as access for sampling or by laboratory issues such as adherence to sample holding times.

Comparability – the confidence (expressed qualitatively) that data may be considered to be equivalent for each sampling and analytical event. Comparability is achieved through adopting consistent sampling techniques and ensuring laboratories use consistent analysis techniques.

Representativeness - expresses the degree to which sample data accurately represents each media present on the site. Representativeness is achieved by collecting samples in an appropriate pattern across the site, by using a sufficient number of sampling locations to characterise the site and by using consistent, repeatable and appropriate methodologies.

Precision - measures the reproducibility or variation of data. The precision of the data is assessed by calculating the Relative Percent Difference (RPD) between primary and duplicate/ inter-lab split samples

LRM will adopt nominal acceptance criteria of 30% RPD for duplicates and splits for inorganics, and nominal acceptance criteria of 50% RPD for field duplicates and splits for organic compounds. It is noted that this will not always be achieved, particularly in heterogeneous media such as imported fill material or disturbed natural materials, or at low analyte concentrations.

Accuracy (bias) - measures quantitatively the closeness of the reported data to the true value. Bias can be introduced during sample collection through cross contamination from contaminated equipment, during sample preservation and transport and from laboratory sample

handling, preparation and analysis techniques. Accuracy is assessed by reference to the analytical results of laboratory internal QA/QC samples including spikes, blanks and reference standards.

The nominal “acceptance limits” on laboratory control samples are defined as follows:

Laboratory spikes – 70-130% for metals/inorganics 60-140% for organics.
Laboratory duplicates - <30% for metals/inorganics, <50% for organics.
Laboratory blanks - <practical quantitation limit.

Accuracy of field works is assessed by examining the level of contamination detected in field and rinsate blanks. Blanks should return concentrations of all organic analytes as being less than the practical quantitation limit of the testing laboratory. The individual testing laboratories will conduct an assessment of the internal laboratory QA/QC program however the results will also be independently reviewed and assessed by LRM

5.7 STEP 7: Optimise the Design for Obtaining Data

The sampling program has been designed to provide sufficient information to allow a sound scientific and statistical evaluation of the questions set out in Step 2.

To optimise the design of the investigations, this SAQP has been prepared in consultation with the client, site occupants and the Site Auditor and giving consideration to previous investigations. The SAQP will be reviewed and refined as necessary during the assessment by evaluating field observations and analytical results.

6.0 METHODOLOGY AND APPROACH

The approach used by LRM in undertaking these investigation works is based on recognised guidelines for the assessment of potentially contaminated sites, published in:

- AS 4482.1 – 2005 *Guide to investigation and sampling of potentially contaminated soil, Part 1: Non- Volatile and semi-volatile compounds;*
- AS 4482.2 – 1999 *Guide to sampling and investigation of potentially contaminated soil, Part 2: Volatile substances;*
- *The National Environment Protection (Assessment of Site Contamination) Measure 1999*, as ammended 2013.
- *Australian and New Zealand Guidelines for Fresh and Marine Water Quality*, ANZECC / ARMCANZ 1992.
- *Australian and New Zealand Guidelines for Fresh and Marine Water Quality*, ANZECC / ARMCANZ 2000.
- NSW EPA Sampling and design Guidelines (September 1995);
- *Guidelines for consultants reporting on contaminated sites (August 2011);*
- *Guideline for the Assessment and management of Groundwater (March 2007);*
- *AS/NZS 5667.11 1998, Water Quality – Sampling – Guidance on sampling groundwaters;*
- NSW Environment, Climate Change and Water 2010, Vapour intrusion: Technical Note;
- *NSW DECC 2009, Waste Classification Guidelines – Part 1;Classifying Waste;*
- *NSW EPA The Excavated Natural Material Order, 2014.*

The works need to be completed so that the Auditor can successfully rely upon the data to assist with completing the assessment in accordance with the Environmental Auditor (Contaminated Land) Guidelines for Issue of an Environmental Audit Statement.

6.1 Soil Investigation

Our methodology for the Soil Assessment is described as follows:

1. Field personnel will be suitably experienced and qualified to undertake and document the assessment tasks.
2. Field observations will be logged in accordance with Australian Standard 1726 and the Unified Soil Classification system. Notes will include the location and extent of fill and features such as seepage, moisture, water bearing zones, depth of groundwater tables, discolouration, staining, odours and other indications of contamination. This information will be recorded on the field borehole log and photographed.
3. Soil samples will be collected during monitoring well installation. Note that this will be by solid stem augurs;
4. Sampling equipment shall be subjected to a three stage decontamination process using Decon 90/tap water, tap water and DI water prior to sampling at each location. Rinsate blanks shall be collected from the third stage.
5. All samples will be collected in clean, lab supplied, sample jars and placed immediately in a sample chest with ice or similar to attempt to reduce sample temperature.
6. Initially, three samples (one from the fill, one from the natural interface and one from the project basement excavation level) from each location shall be tested with the other (intervening samples) held pending initial results review.
7. Sample locations are indicated on the attached plan.
8. Soil sampling will be undertaken at 5 locations;

9. Sample depths will be subject to local geological conditions, i.e. depth of any fill and natural soil. The sample depths are likely to represent fill or disturbed soil at the surface, soil profile interface point and natural soil (current targeted profile) at depth with an event total of 25 samples of fill material analysed excluding QA/QC samples.
10. Should site observations reveal different layers of fill, or should fill extend further than envisaged, or where other evidence of contamination (such as discoloration or odour) is observed, there may be a need to collect further samples at the consultants' discretion.
11. Soil samples collected will be tested on-site for volatile hydrocarbons with a photoionization detector (PID) every meter or change in soil type or upon olfactory or visual detection of contamination.
12. Observations of the presence or absence of asbestos will be undertaken during field works and included within bore-logs and the DESI report.
13. The laboratory will be instructed via chain of custody documentation to analyse all samples on a normal 5-day turn-around time.
14. Samples will be collected from both the fill and natural soil profiles and will be analysed for contaminants of concern for the site, as identified in the preliminary site assessment as per Table 1 below.
15. Leachability analysis may also be undertaken pending receipt and review of initial soil sample results for off-site disposal classification purposes.
16. An allowance for quality control/ quality assurance (QA/QC) samples has been made in the current works plan in accordance with AS4482.1-2005. The QA/QC samples will comprise of blind replicate samples, inter-laboratory split samples and trip and rinsate blanks. The frequency of QA/QC field samples is presented within Table 3 below. Other samples such as field blanks may also be collected at the discretion of the environmental assessor.
17. All samples will be collected in clean, lab supplied, sample jars and placed immediately in a sample chest with ice or similar to attempt to reduce sample temperature.

The proposed sampling plan reflects the requirements of Table A - NSW EPA 1995 which describes the minimum sampling points for site characterisation, assuming circular hotspots, The adopted sampling pattern is based on the site history and associated data gaps relating to the location of contaminating site activities. The proposed sampling density allows for the detection with 95% confidence of circular contamination hotspots of up to 25.7 meters in diameter indicating that residual hotspots of a lesser diameter may remain undetected.

Table 1: Proposed Soil Analytical Suite

Sample Location	Sample Target/ Expected Depth	# Samples Analysed/ Collected	Analyte
5 Locations Deeper natural project depth - Natural	Excavation RL (12 mbgl) varying with site cut	25/25	NSW Waste Disposal Screen x 10 TRH, BTEX, PAH, Metals x 25

6.2 Groundwater Investigation

Our methodology for the further groundwater sampling is proposed as the following:

1. Installation of three groundwater monitoring wells;
2. Development of monitoring wells by removal of between 3 and 5 well volumes from each newly installed monitoring well a minimum of 1 day after installation in line with the minimum requirements as described within the NEPM schedule B2 section 8.2.3.5 to allow for bentonite seals to fully hydrate and for grout to cure.
3. Surveying of all monitoring wells by a licensed surveyor.
4. Field personnel will be suitably experienced and qualified to undertake and document the assessment tasks.

5. All groundwater monitoring wells will be gauged prior to purging and sampling a minimum of 1 day following development in line with the minimum requirements as described within the NEPM schedule B2 section 8.2.3.5 and considering the highly permeable nature of the subject aquifer allowing for a total of 3 days for the wells to equilibrate following installation.
6. Groundwater samples will be collected using Low-Flow MicroPurge sampling technique or similar, while monitoring field stabilization criteria and minimizing drawdown to ensure that representative groundwater samples are collected.
7. Field notes to be recorded and stabilisation criteria are detailed on the attached sample field sheets.
8. Groundwater sampling equipment shall be subjected to a three stage decontamination process using Decon 90/tap water, tap water and DI water prior to sampling at each location. Rinsate blanks shall be collected from the third stage.
9. All samples will be collected in clean, lab supplied, sample jars and placed immediately in a sample chest with ice or similar to attempt to reduce sample temperature.
10. Table 2 below details the groundwater samples to be collected for the investigation at the site.
11. The laboratory will be instructed via chain of custody documentation to analyse all samples on a normal 5-day turn-around time.

Table 2: Proposed Groundwater Analytical Suite

Sample Location	Analyte
All Locations	NEPM HIL Screens, TDS, pH, Cations, Anions (Any additional analytes impacts identified from soil will be added)

The QA/QC program for the groundwater monitoring will consist of an inter-laboratory and intra-laboratory duplicate samples as well as rinsate and trip blanks (as detailed in Table 3 below).

6.3 Laboratory Selection

Envirolab Sydney will serve as the primary laboratory for the purposes of this assessment and Eurofins-MGT will serve as the secondary laboratory for the analyses of inter-laboratory split samples.

The Laboratory Limits of Reporting will be below relevant site criteria.

6.3 Assessment Criteria

Site Soil Investigation:

In assessing any soil contamination present on this site, and considering the purpose of this assessment, the data will be evaluated against the levels that are given in the NEPM Schedule B (1) Guidelines on the Investigation Levels for Soil and Groundwater [National Environment Protection (Assessment of Site Contamination) Measure 2013].

Human health risk - Given the proposed use of this site, as an ‘Aged care facility’ development with no opportunities for soil access, the NEPM HIL/HSL Setting B criteria will be the primary assessment tools for analytical results comparison. Results will also be compared against HIL A and HIL C criteria levels.

Ecological risk - The data will also be compared with the NEPM Ecological Investigation/Screening Levels (EIL's/ESLs) criteria as per Schedule B(1), Appendix A, adopting Urban Residential/ Public Open Space.

Waste Classification - The criteria detailed within the NSW EPA Waste Classification Guidelines 2008 will be used to classify soils for future disposal off-site.

Site Groundwater Investigation:

In assessing any groundwater contamination present on this site, and considering the purpose of this assessment, the data will be evaluated against the levels that are given in the NEPM Schedule B (1) Guidelines on the Investigation Levels for Soil and Groundwater [National Environment Protection (Assessment of Site Contamination) Measure 2013].

The Groundwater Investigation Levels (GILs) from the NEPM are based on the Australian Water Quality Guidelines 2000 (AWQG), the Australian Drinking Water Guidelines (ADWG), and the Guidelines for Managing Risk in Recreational Waters 2008 (GMRRW). The GILs are adopted in the NEPM as investigation levels in the context of the framework for risk-based assessment of groundwater contamination i.e. levels above which further assessment is required. Trigger values for slightly to moderately disturbed marine ecosystems (95% level of protection) have been adopted based on the likely discharge point of groundwater at the site to Gore Creek and subsequently Lane Cove River.

The AWQG provide tabulated values based on percentage species protection for various aquatic environments and water uses. The appropriate settings for current and potential uses of groundwater need to be identified for the aquifer undergoing assessment. The guideline documents should be consulted for appropriate interpretation of guideline values, in consultation with relevant regulatory authorities if necessary.

The GILs define acceptable water quality for various contaminants at the point of use and provide frequently used values for drinking water and protection of fresh water ecosystems. The GMRRW recommend applying a multiplication factor of 10 to 20 to the ADWG for assessment of the acceptability of recreational water quality. GILs for other receptors should be obtained directly from the 'primary industries' section of the AWQG where relevant. Note that the recreational and aesthetics sections of the AWQG have been superseded by the GMRRW.

7.0 Quality Assurance / Quality Control and Data Validation

The objective of the QA/QC will be to undertake methods and procedures of sample collection and analysis to be used to ensure quality, accuracy, precision and completeness of data generated. The primary focus is on the acquisition of environmental data that is scientifically sound and defensible and can be used to fulfill the overall project objectives. The following will be undertaken:

- The number of quality control samples to be collected and analysed is presented in Table 3 below. This is in accordance with the requirements of the Australian Standard AS4482.1.
- All samples will be analysed by NATA-accredited laboratories namely Eurofins and Envirolab. Each laboratory will follow internal quality control procedures, e.g. routine analysis of standard solutions / reference materials, reagent blanks, laboratory duplicates and spiked samples.
- The quality control program will consist of LRM submitting field duplicates and inter-lab split samples to a primary and secondary laboratory for analysis. The quality assurance program will also consisted of LRM submitting equipment rinsate and Trip blanks for analysis. These results will be used to gauge the potential for cross contamination during sampling and transportation.
- Relative Percent Differences will be calculated from Primary and Duplicate/Split samples to confirm repeatability of sample results.

Table 3: QA/QC – Frequency of QA/QC Requirements

Quality Control Samples	Minimum Number of QA/QC Samples Required	Actual No. Required – LRM Assessment works		Analytical suite
		Soil	Groundwater	
Duplicate Sample	1 in 20	2	1	Metals, PAH(Soil),
Split Sample	1 in 20	2	1	Metals, PAH(Soil)
Rinsate Blank	1 / equipment / day	2	1	TRH/BTEX
Trip Blank	1/day/ eskie	2	1	BTEX

Following completion of the field programs, all of the information collected will be checked, data will be collated, calculations completed and results summarised in tabular form.

9.0 CLOSURE AND COSTINGS

All works inclusive of service scanning, surveying, drilling, groundwater well installation, soil sampling, well development, groundwater sampling, NATA laboratory analysis, data tabulation, figures and reporting for auditor review.

I trust this Sample Analysis Plan is in line with your expectations. If you have any suggestions or inclusions that are required as part of these fieldworks, please do not hesitate to contact me on 04111 477 22.

Yours faithfully,
LRM GLOBAL PTY LTD

Jon Lawson
Environmental Consultant

FIGURES:

Preliminary Environmental Site Assessment		Address: 266 Longueville Road Lane Cove		
Prepared for: **Australian Unity Limited P/L**	Prepared by: **LRM Global Pty Ltd**	**Figure 1 – Proposed GW Locations**	Date: **19/02/2018**	Source: NearMap